EAU NOVEMBER 2023

PROJECT ID: 7170-00-76
WITH: N/A

COUNTY: BUFFALO & PEPIN

ORDER OF SHEETS

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

TOTAL SHEETS = 192

37

N

DESIGN DESIGNATION

A.A.D.T.	2027	=	2,520
A.A.D.T.	2047	=	2,710
D.H.V.		=	330
D.D.		=	60/40
T.		=	28.6%
DESIGN SPEED		=	55 MPH
ESALS		=	1,270,000

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- EXISTING RIGHT OF WAY
- PROPOSED OR NEW R/W LINE
- SLOPE INTERCEPT
- REFERENCE LINE (300'ES')
- 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

WABASHA - DURAND

STH 35 NORTH TO PLEASANT RIDGE RD

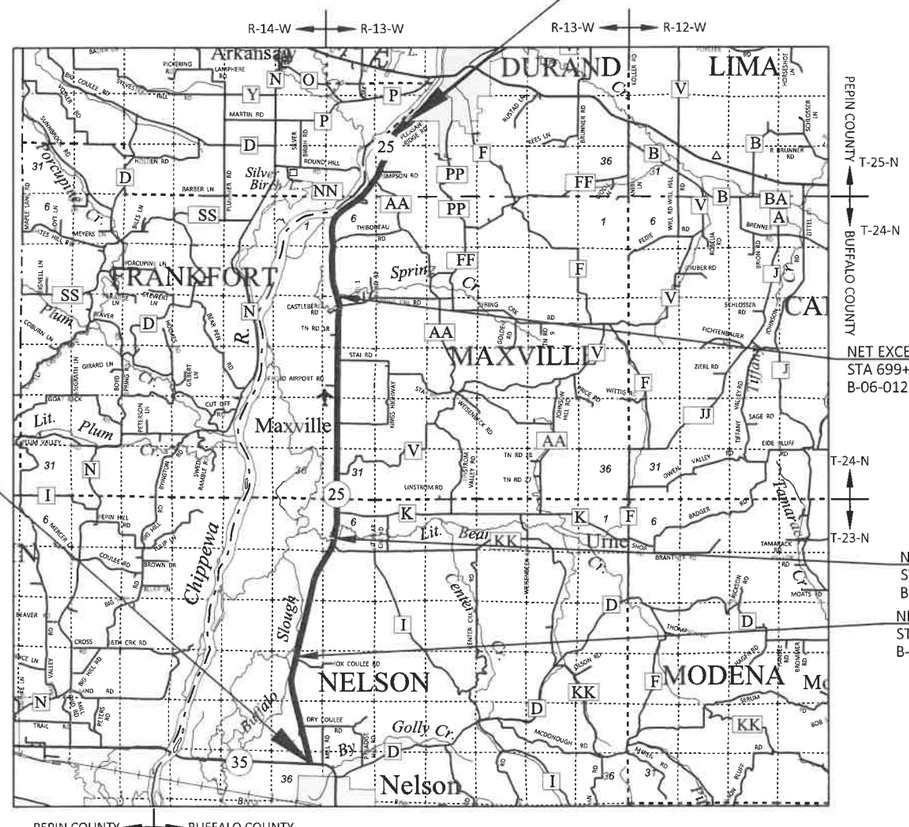
STH 25

BUFFALO & PEPIN COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
7170-00-76	WISC 2024038	1

STATE PROJECT NUMBER
7170-00-76

END PROJECT
STA 910+95.11



BEGIN PROJECT
STA 200+83.25
Y = 347,342.918
X = 517,023.394

NET EXCEPTION TO CL LENGTH
STA 699+62.65 - STA 700+82.39
B-06-0122

NET EXCEPTION TO CL LENGTH
STA 445+85.32 - STA 447+63.77
B-06-0299

NET EXCEPTION TO CL LENGTH
STA 315+80.16 - STA 316+32.76
B-06-0185

PEPIN COUNTY ◄► BUFFALO COUNTY

LAYOUT
SCALE 0 3 MI

TOTAL NET LENGTH OF CENTERLINE = 13.383 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), BUFFALO AND PEPIN COUNTIES, NAD83 (1991), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

ORIGINAL PLANS PREPARED BY

ISG

WISCONSIN
WILLIAM A. KRATT
E-40457
LA CROSSE, WISC.
PROFESSIONAL ENGINEER

DATE: 7/27/23 William A. Kratt
(Professional Engineer Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	I&S GROUP, INC
Designer	I&S GROUP, INC
Project Manager	PAUL BRAUER
Regional Examiner	
Regional Supervisor	DAN SEGERSTROM

APPROVED FOR THE DEPARTMENT
DATE: 7/27/2023 Paul Brauer, P.E.
(Signature)

E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\010101-TI.DWG PLOT DATE : 7/26/2023 5:32 PM PLOT BY : CORONA WOYCHIK PLOT NAME :

GENERAL NOTES

- THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
- SEED WITHIN DISTURBED AREAS OF WETLANDS SHALL BE SEEDING NURSE CROP AND SEEDING NO 75. ALL OTHER SEED SHALL BE SEEDING NO 20.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY ANY OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS AT THE CONTRACTOR EXPENSE.
- FERTILIZER SHALL NOT BE USED NEAR NAVIGABLE WATERWAYS, IN WETLANDS, OR WITHIN 20 FEET OF WETLANDS.
- PLACE ALL SALVAGED TOPSOIL IN ALL GRASSED AREAS DESIGNATED BY THE ENGINEER IMMEDIATELY AFTER GRADING HAS BEEN COMPLETED. SEED, MULCH AND FERTILIZE ALL AREAS 5 DAYS AFTER PLACEMENT OF TOPSOIL.
- THE EROSION CONTROL FEATURES AS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. EXACT LOCATION WILL BE DETERMINED BY THE ENGINEER.
- HERP FENCING SHOWN IN PLAN TO BE INSTALLED BY OTHERS. CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF HERP FENCE, PAID UNDER "SILT FENCE MAINTENANCE" BID ITEM. SEE CONSTRUCTION DETAIL FOR HERP FENCE.
- PRIOR TO THE PLACEMENT OF GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.
- HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.
- PWL DENSITY WILL APPLY TO BOTH HMA LAYERS, REFER TO MISCELLANEOUS QUANTITIES.
- AFTER PAVING, EXISTING BEAMGUARD WITH A TOP OF RAIL HEIGHT LESS THAN 27 $\frac{3}{4}$" OR GREATER THAN 29" REQUIRES ADJUSTING STEEL PLATE BEAM GUARD

DNR LIAISON

AMY LESIK
DEPARTMENT OF NATURAL RESOURCES
1300 W. CLAIREMONT AVE
EAU CLAIRE, WI 54701
(715) 495-1903
AMY.LESIK@WISCONSIN.GOV

COUNTY HIGHWAY COMMISSIONERS

BUFFALO

ROBERT PLATTETER
S1672 STATE ROAD 37
ALMA, WI 54610
(608) 685-6227
BOB.PLATTETER@CO.BUFFALO.WI.US

PEPIN

KRIS QUANDT
312 10TH AVE E
PO BOX 6
DURAND, WI 54736-0006
(715) 672-8171
KQUANDT@CO.PEPIN.WI.US

DESIGN CONTACTS

PAUL BRAUER, P.E.
WISDOT PROJECT MANAGER
944 VANDERPERREN WAY
GREEN BAY, WI 54304
(920) 366-1097
PAUL.BRAUER@DOT.WI.GOV

CORONA WOYCHIK, P.E.
CONSULTANT PROJECT MANAGER
201 MAIN STREET, SUITE 1020
LA CROSSE, WI 54601
(608) 789-2034
CORONA.WOYCHIK@ISGINC.COM

UTILITY CONTACTS

ELECTRIC

BRAD RISTOW
PIERCE PEPIN COOPERATIVE SERVICES
W7725 US HWY 10
P.O. BOX 420
ELLSWORTH, WI 54011-0420
(715) 273-2473
BRISTOW@PIERCEPEPIN.COOP

ELECTRIC

ROB MALY
DAIRYLAND POWER COOPERATIVE
3200 EAST AVE S
P.O. BOX 817
LA CROSSE, WI 54602-0817
(608) 788-4000
ROB.MALY@DAIRYLANDPOWER.COM

ELECTRIC

TIM HOLTAN
RIVERLAND ENERGY COOPERATIVE
N28988 STATE ROAD 93
P.O. BOX 277
ARCADIA, WI 54612-0277
(608) 323-3381
THOLTAN@RIVERLANDENERGY.COM

COMMUNICATIONS

MATT HOYT
CHIPPEWA VALLEY CABLE, INC.
318 3RD AVE W
DURAND, WI 54736
(715) 672-4204
MATT@NTEC.NET

ELECTRIC

MEGAN BOLDIG
XCEL ENERGY - ELECTRICITY
320 HELLER ROAD
MENOMONIE, WI 54751
(715) 308-6211
MEGAN.M.BOLDIG@XCELENERGY.COM

GAS

JOHN DELASKE
NORTHERN NATURAL GAS COMPANY
4685 212TH STREET W
FARMINGTON, MN 55024
(402) 530-3420
JOHN.DELASKE@NNGCO.COM

COMMUNICATIONS

MATT HOYT
NTEC
318 3RD AVE W
DURAND, WI 54736
(715) 672-4204
MATT@NTEC.NET

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

ORDER OF SECTION 2 DETAIL SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
CURB RAMP DETAILS
EROSION CONTROL
CULVERT PIPE PROFILES
PAVEMENT MARKING
TRAFFIC CONTROL

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 = 52.47 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.58 ACRES

2

2

N

PEPIN TOWNSHIP

FRANKFORT TOWNSHIP

WATERVILLE TOWNSHIP

PEPIN COUNTY
BUFFALO COUNTY

CHIPPEWA RIVER

STH 35

BEGIN PROJECT
STA 200+83.25
Y=347,342.918
X=517,023.394

BUFFALO COUNTY COORDINATES

NET EXCEPTION TO CL LENGTH
STA 315+80.16 - STA 316+32.76
B-06-0185

NET EXCEPTION TO CL LENGTH
STA 445+85.32 - STA 447+63.77
B-06-0299

NET EXCEPTION TO CL LENGTH
STA 699+62.65 - STA 700+82.39
B-06-0122

250 300 350 400 450 500 550 600 650 700 750 800 850 900

PINE RD

DRY COULEE RD

FOX COULEE RD

MISHA MOKWA LN

AIRPORT RD

CASTLEBERG RD

USH 10

C-46-3
STA 842+30

HIGHLAND DR

CTH AA

SIMPSON LN

STH 25

END PROJECT
STA 910+95.11

PLEASANT RIDGE LN

VILLAGE OF NELSON

CTH KK

CTH K

CTH V

KINGS HWY

STAI COULEE RD

STUMP LAKE RD

SPRING CREEK RD

THIBODEAU RD

DURAND

BUFFALO-PEPIN COUNTY LINE
BUFFALO COUNTY COORDINATES STA 819+31.79
Y=406,687.953
X=522,332.575

PEPIN COUNTY COORDINATES STA 819+31.79
Y=267,998.650
X=609,493.528

MAXVILLE TOWNSHIP

NELSON TOWNSHIP

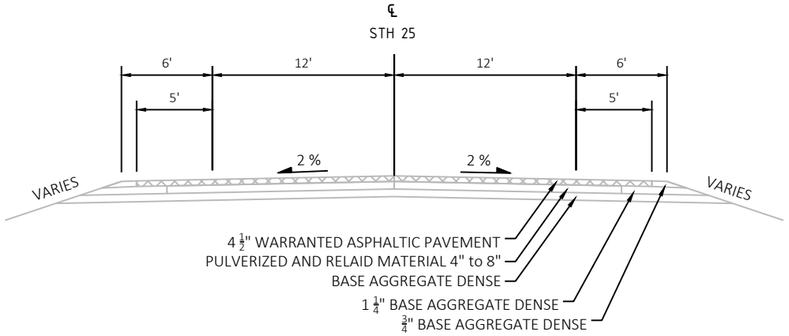
DURAND TOWNSHIP

PEPIN COUNTY
BUFFALO COUNTY

STH 85

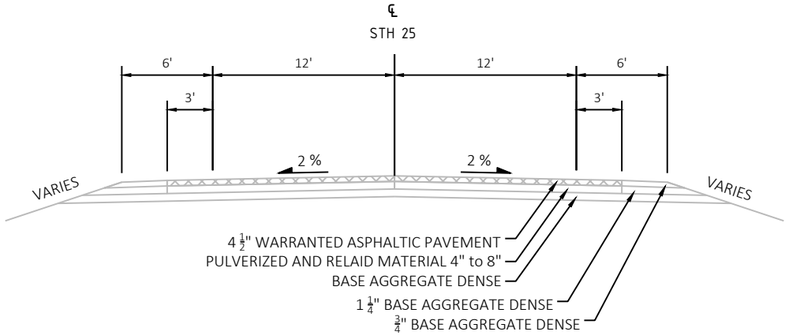
USH 10

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO & PEPIN	PROJECT OVERVIEW	SHEET 3	E



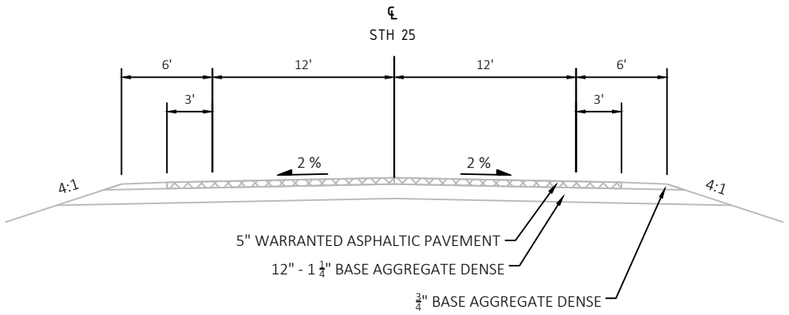
EXISTING TYPICAL SECTION

STA 200+83 - 241+44
STA 839+00 - 910+95



EXISTING TYPICAL SECTION

STA 241+44 - 676+00
STA 699+94 - 839+00

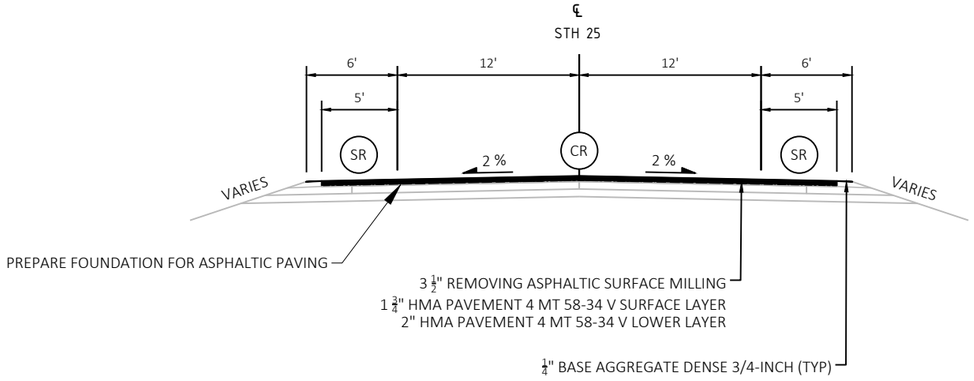


EXISTING TYPICAL SECTION

STA 676+00 - 699+94

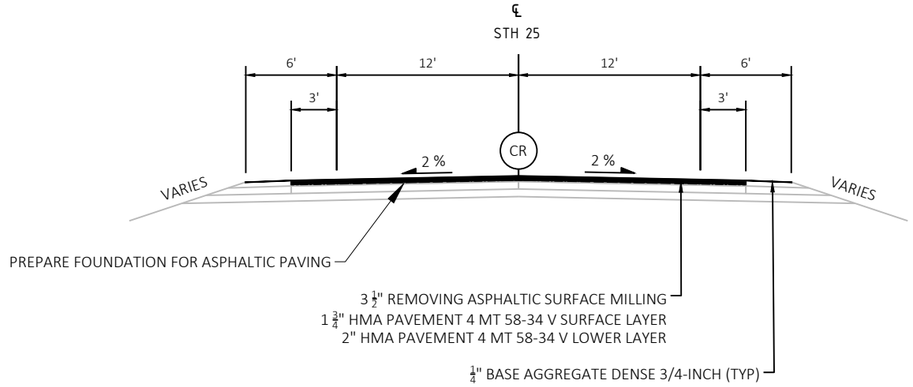
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	TYPICAL SECTIONS	SHEET 4	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020301-ts
PLOT DATE : 8/1/2023 7:38 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:10 FT



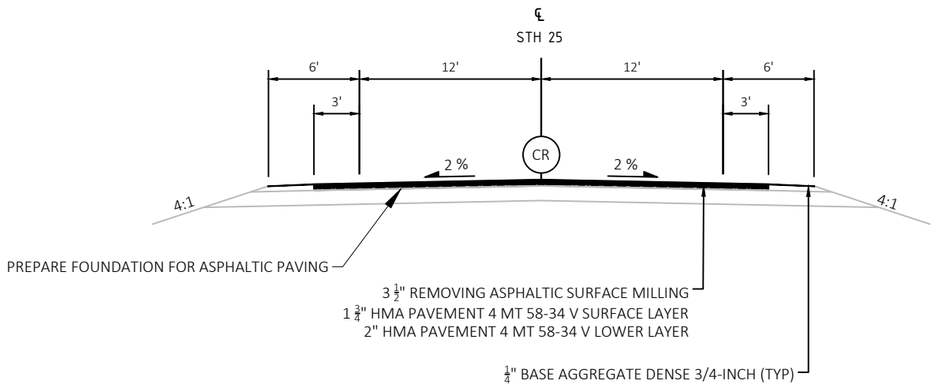
PROPOSED TYPICAL SECTION

STA 200+83 - 241+44
STA 839+00 - 910+95



PROPOSED TYPICAL SECTION

STA 241+44 - 676+00
STA 699+94 - 839+00



PROPOSED TYPICAL SECTION

STA 676+00 - 699+94

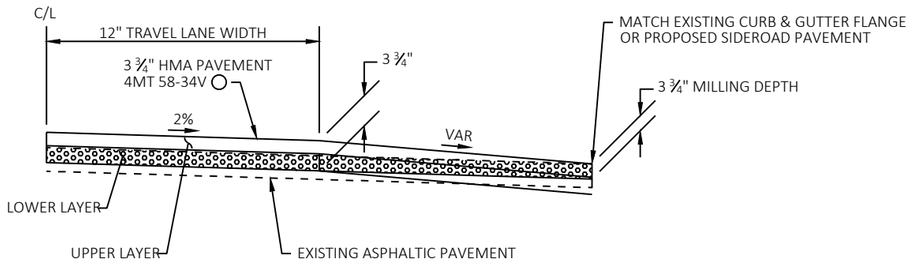
CR ASPHALTIC RUMBLE STRIPS, CENTERLINE

SR ASPHALTIC RUMBLE STRIPS, SHOULDER

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	TYPICAL SECTIONS	SHEET 5	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\020301-TS.DWG
LAYOUT NAME - 020302-ts

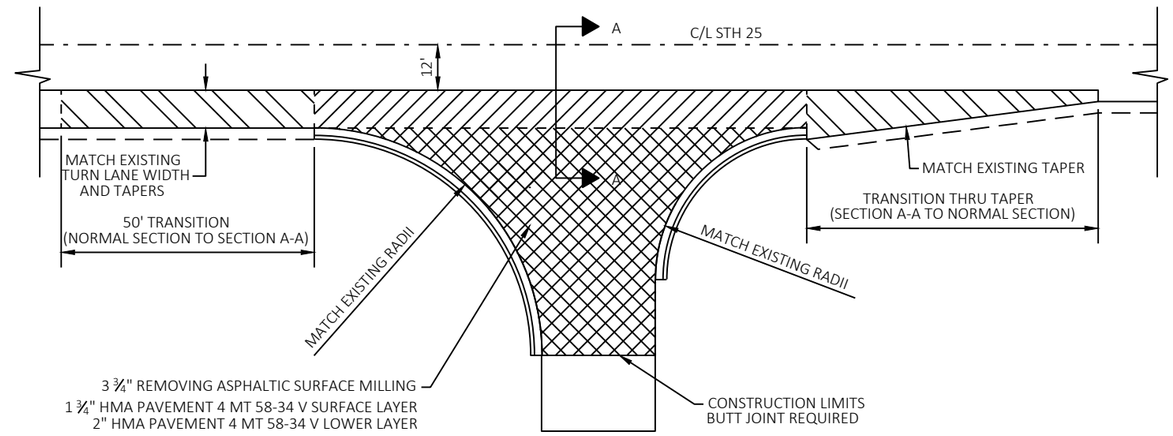
PLOT DATE : 8/30/2023 2:20 PM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:10 FT



REMOVING ASPHALTIC SURFACE, MILLING

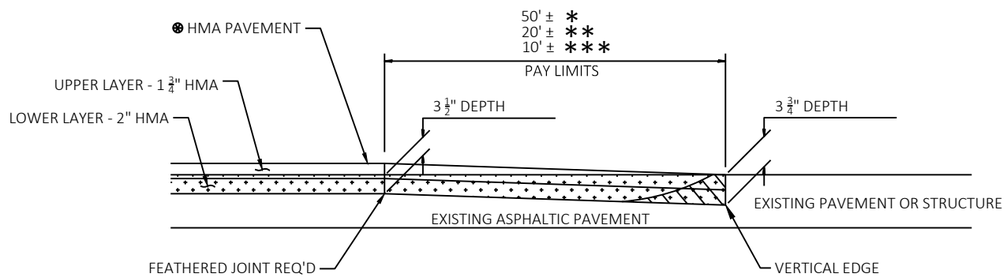
SEE TYPICAL SECTIONS FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

SECTION A-A



PLAN VIEW

TYPICAL SIDE ROAD DETAIL



REMOVING ASPHALTIC SURFACE, MILLING

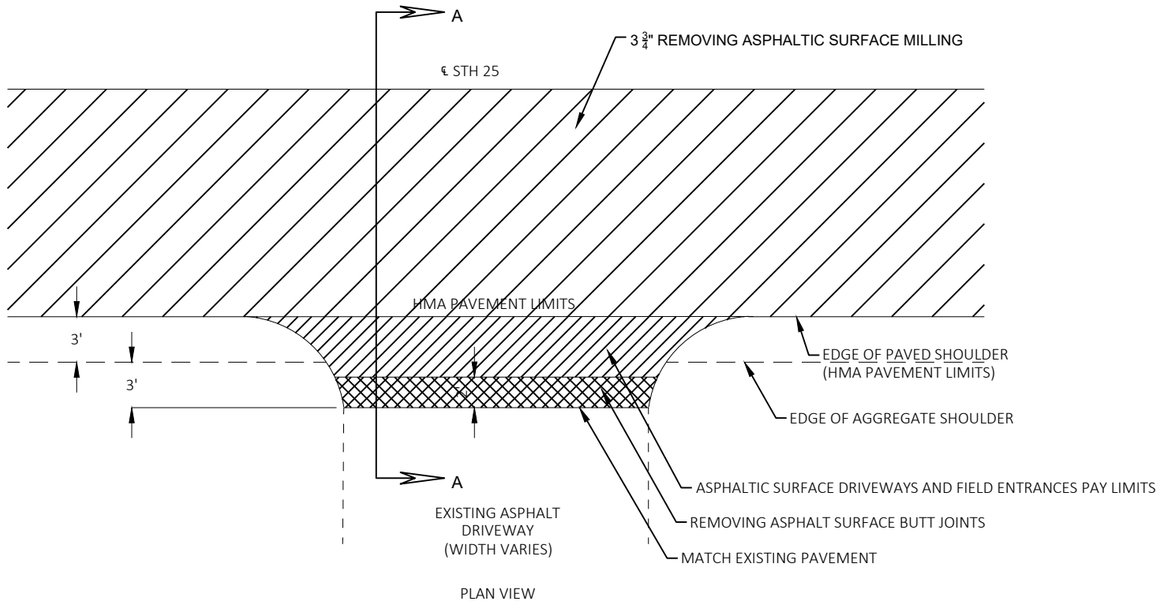
REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

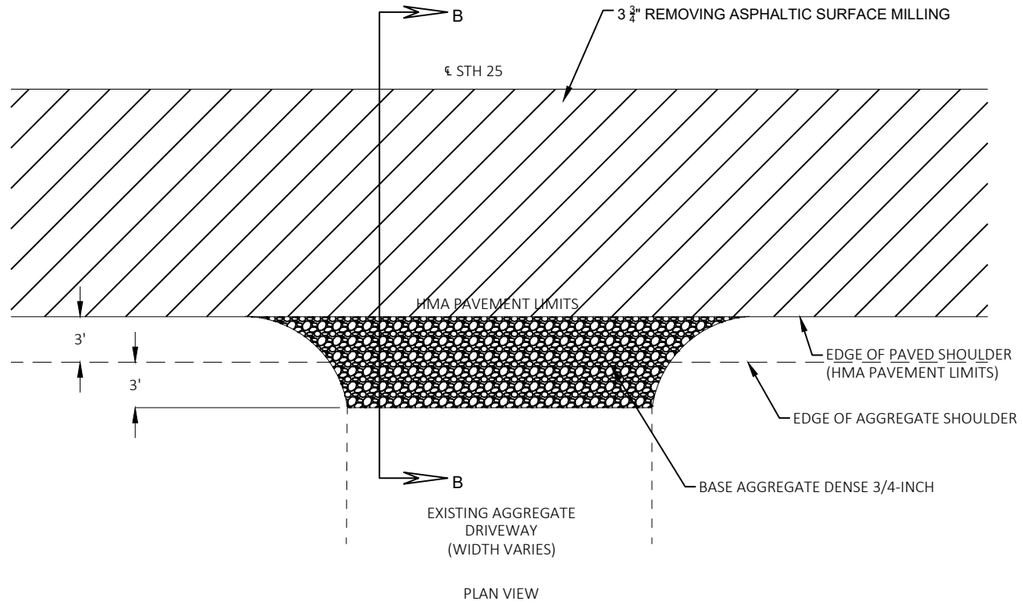
BUTT JOINT DETAIL FOR MILLED ASPHALTIC PAVEMENTS (PROFILE CHANGE)

* MAINLINE
** SIDEROADS
*** PRIVATE ENTRANCES

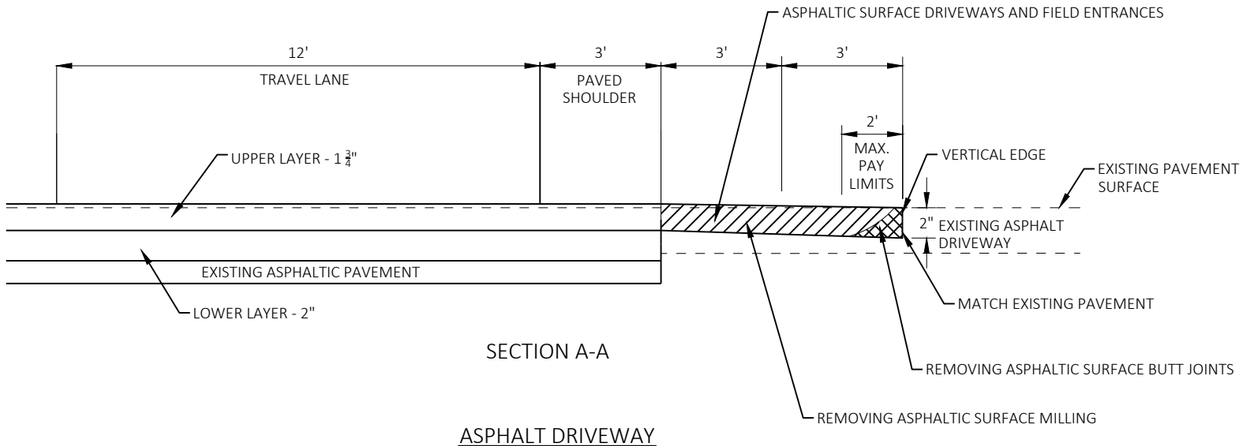
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CONSTRUCTION DETAILS	SHEET 6	E



PLAN VIEW

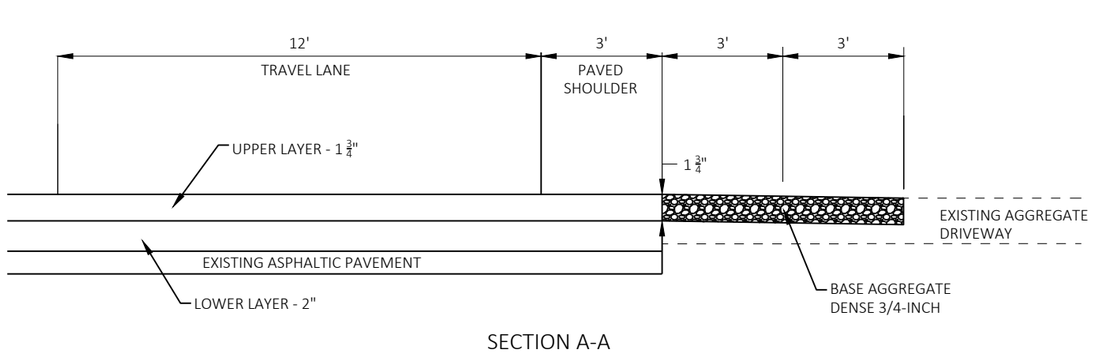


PLAN VIEW



SECTION A-A

ASPHALT DRIVEWAY



SECTION A-A

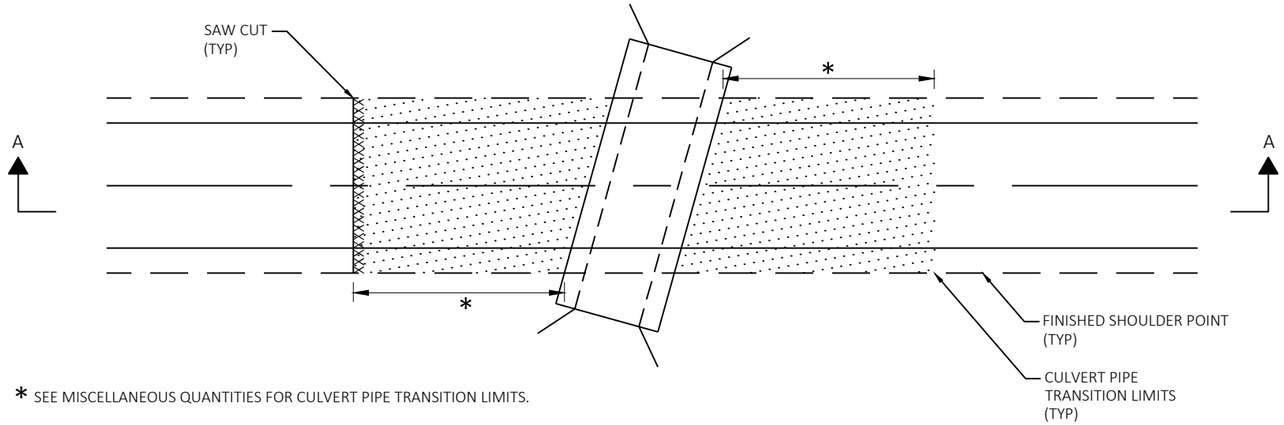
ASPHALT DRIVEWAY

NOTE: MATCH EXISTING DRIVEWAY SURFACE AND WIDTH

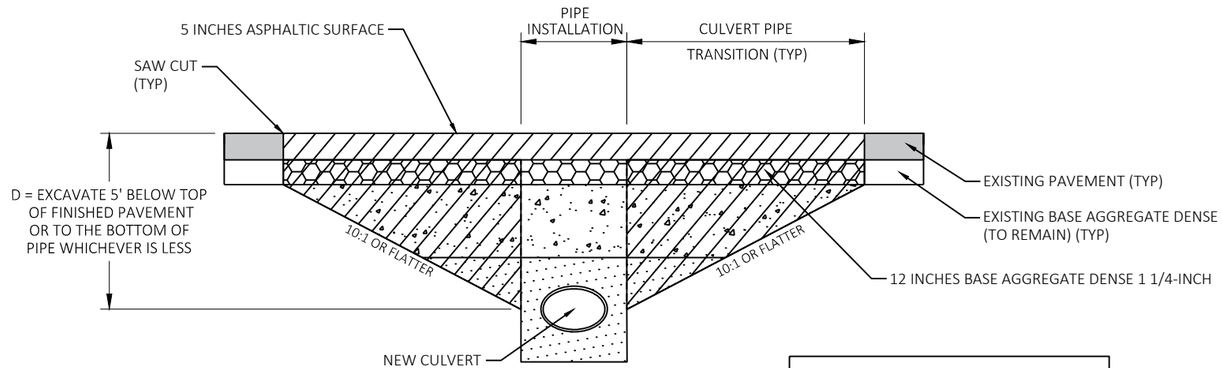
RURAL DRIVEWAY DETAIL

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CONSTRUCTION DETAILS	SHEET 7	E

2



* SEE MISCELLANEOUS QUANTITIES FOR CULVERT PIPE TRANSITION LIMITS.



SECTION A-A

BASE AGGREGATE DENSE 1 1/4-INCH

TRANSITION CUT

TRENCH BACKFILL

FOUNDATION BACKFILL

CULVERT PIPES TO BE REPLACED PRIOR TO MAINLINE MILLING AND PAVING OPERATIONS

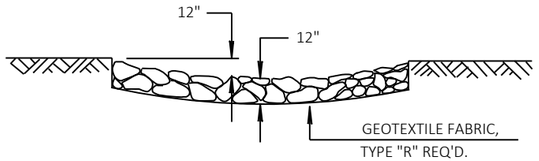
TRANSITION CUT IS PAID AS EXCAVATION COMMON.

CULVERT TRENCH EXCAVATION IS INCIDENTAL TO CULVERT PIPE ITEMS.

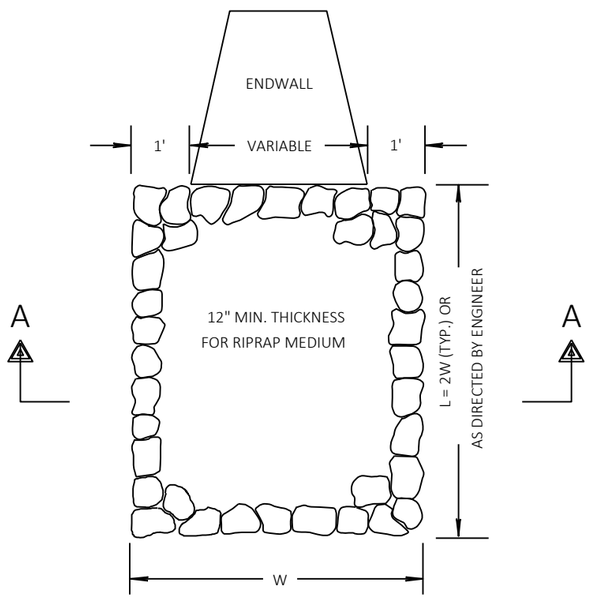
BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.

PAVEMENT SAW CUT TO BE PERPENDICULAR TO ROADWAY ALIGNMENT.

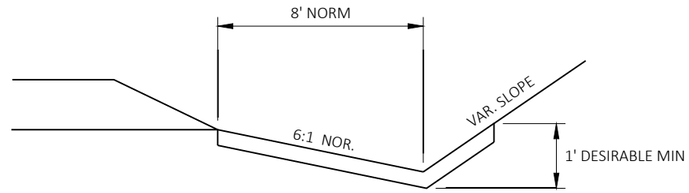
CULVERT PIPES WITH TRANSITION



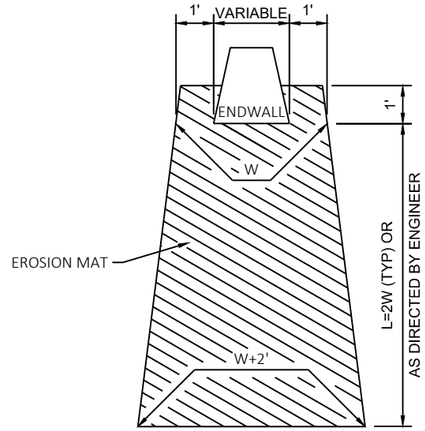
SECTION A-A



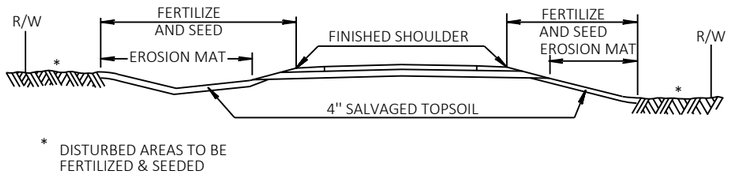
RIPRAP TREATMENT AT CULVERTS



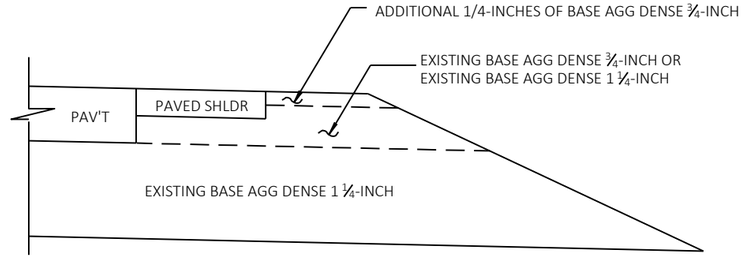
EROSION MAT DETAIL FOR DITCHES



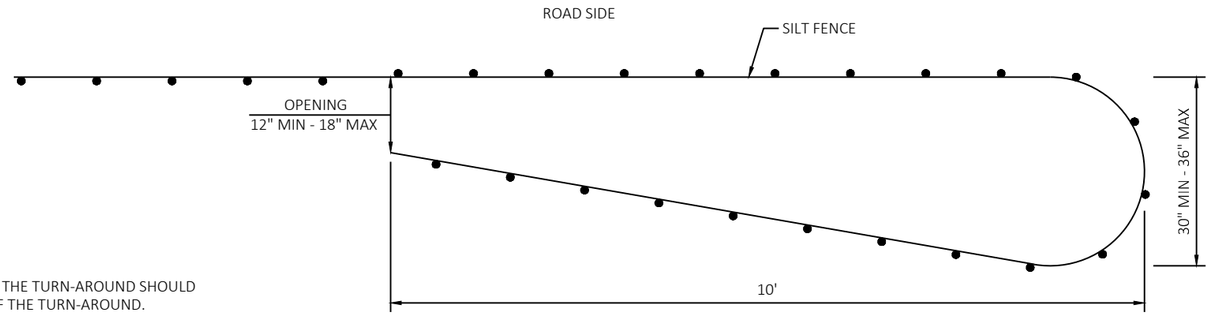
EROSION MAT TREATMENT AT CULVERTS



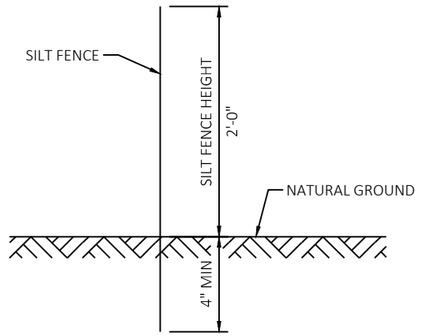
DETAIL FOR FINISHING ITEMS



BASE AGG DENSE 3/4-INCH REQUIRED



PLAN VIEW



SIDE VIEW

NOTES:
SILT FENCE POSTS FOR THE TURN-AROUND SHOULD BE ON THE OUTSIDE OF THE TURN-AROUND.

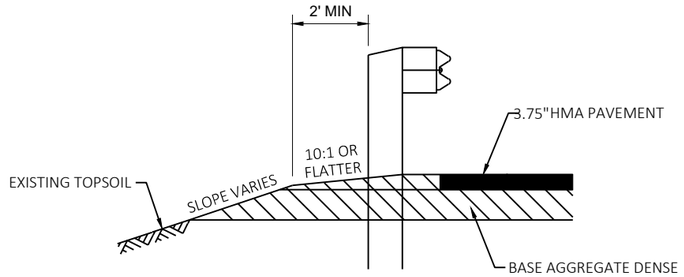
HERP FENCE TO BE INSTALLED BY OTHERS. USE THIS DETAIL FOR MAINTAINING HERP FENCE. MAINTAINING HERP FENCE PAID UNDER "SILT FENCE MAINTENANCE" BID ITEM.

HERP FENCE DETAIL

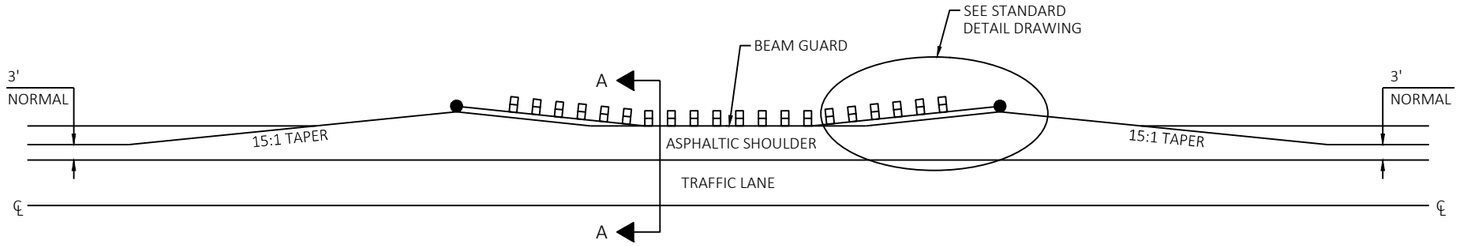
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CONSTRUCTION DETAILS	SHEET 10	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\021001-CD.DWG
LAYOUT NAME - 021005-cd
PLOT DATE : 8/1/2023 7:39 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



SECTION A-A



DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

C/L STH 25

202+00 204+00 205+00 206+00 208+00 210+00 212+00 214+00 215+00 216

STH 25

BEGIN PROJECT
STA 200+83.25
Y=347,342.918
X=517,023.394

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

MATCH LINE - STA. 216+00

2

MATCH LINE - STA. 216+00

N

C/L STH 25

+00 218+00 220+00 222+00 224+00 225+00 226+00 228+00 230+00

STH 25

NTEC

FO FO FO FO FO FO

NTEC

MATCH LINE - STA. 231+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 12	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022001-ec

PLOT DATE : 8/1/2023 7:40 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- CULVERT PIPE CHECK
- SILT FENCE
- A — INLET PROTECTION TYPE A

N

MATCH LINE - STA. 231+25

C/L STH 25

232+00 234+00 235+00 236+00 238+00 240+00 242+00 244+00 245+00 246+00

STH 25

NTEC

DRY COULEE RD

RIVERLAND ENERGY COOPERATIVE

MATCH LINE - STA. 246+50

2

MATCH LINE - STA. 246+50

N

RIVERLAND ENERGY COOPERATIVE

NTEC

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

C/L STH 25

248+00 250+00 252+00 254+00 255+00 256+00 258+00 260+00

STH 25

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

NTEC

MATCH LINE - STA. 261+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 13	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022002-ec
PLOT DATE : 8/1/2023 7:40 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

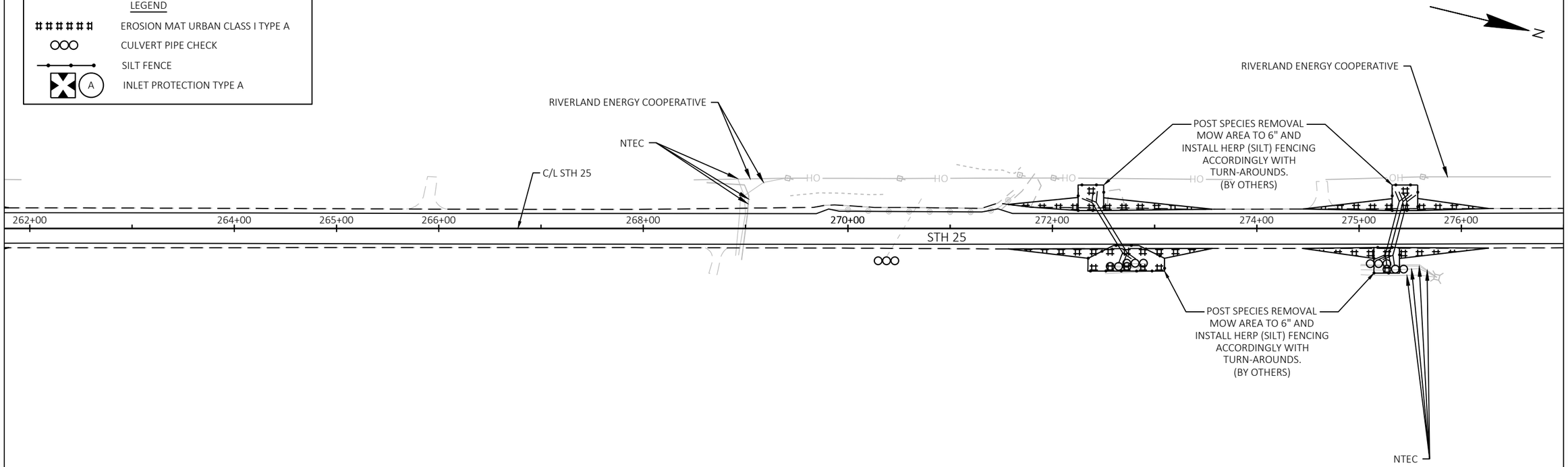
LEGEND

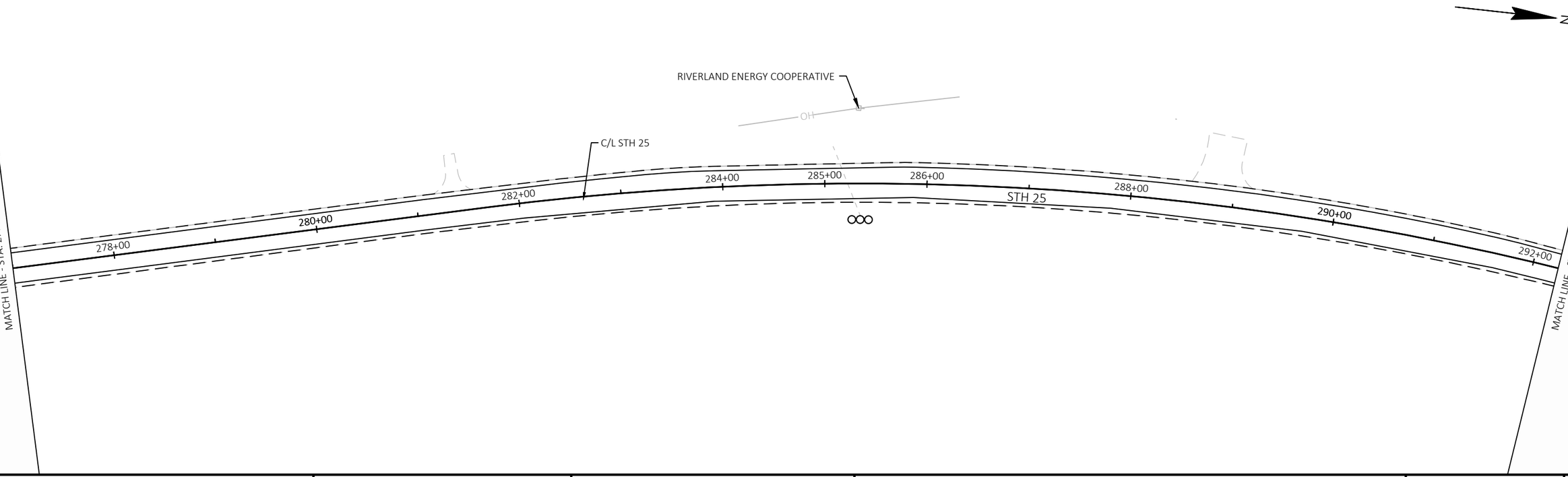
EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A





PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 14	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022003-ec

PLOT DATE : 8/1/2023 7:40 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

RIVERLAND ENERGY COOPERATIVE

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

HO

294+00 295+00 296+00 298+00 300+00 302+00 304+00 305+00 306+00

STH 25

PINE RD

MATCH LINE - STA. 292+25

MATCH LINE - STA. 307+50

2

N

RIVERLAND ENERGY COOPERATIVE

HO

C/L STH 25

308+00 310+00 312+00 314+00 315+00 316+00 318+00 320+00 322+00

STH 25

FOX COULEE RD

MATCH LINE - STA. 307+50

MATCH LINE - STA. 322+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 15	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022004-ec

PLOT DATE : 8/1/2023 7:40 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

MATCH LINE - STA. 322+75

C/L STH 25

324+00 325+00 326+00 328+00 330+00 332+00 334+00 335+00 336+00 338

STH 25

MATCH LINE - STA. 338+00

2

N

MATCH LINE - STA. 338+00

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

RIVERLAND ENERGY COOPERATIVE

HO

+00 340+00 342+00 344+00 345+00 346+00 348+00 350+00 352+00

STH 25

NTEC

MATCH LINE - STA. 353+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 16	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022005-ec

PLOT DATE : 8/1/2023 7:40 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- CULVERT PIPE CHECK
- SILT FENCE
- A — INLET PROTECTION TYPE A

N

MATCH LINE - STA. 353+25

RIVERLAND ENERGY COOPERATIVE

OH

C/L STH 25

RIVERLAND ENERGY COOPERATIVE

OH

354+00 355+00 356+00 358+00 360+00 362+00 364+00 365+00 366+00 368+00

STH 25

NTEC

NTEC

MATCH LINE - STA. 368+50

2

N

MATCH LINE - STA. 368+50

C/L STH 25

RIVERLAND ENERGY COOPERATIVE

OH

370+00 372+00 374+00 375+00 376+00 378+00 380+00 382+00

STH 25

NTEC

MATCH LINE - STA. 383+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 17	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022006-ec
PLOT DATE : 8/1/2023 7:40 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

RIVERLAND ENERGY COOPERATIVE

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

OH

384+00 385+00 386+00 388+00 390+00 392+00 394+00 395+00 396+00 398+00

STH 25

NTEC

MATCH LINE - STA. 383+75

MATCH LINE - STA. 399+00

2

N

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

RIVERLAND ENERGY COOPERATIVE

OH

400+00 402+00 404+00 405+00 406+00 408+00 410+00 412+00 414+00

STH 25

MATCH LINE - STA. 399+00

MATCH LINE - STA. 414+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 18	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022007-ec

PLOT DATE : 8/1/2023 7:40 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

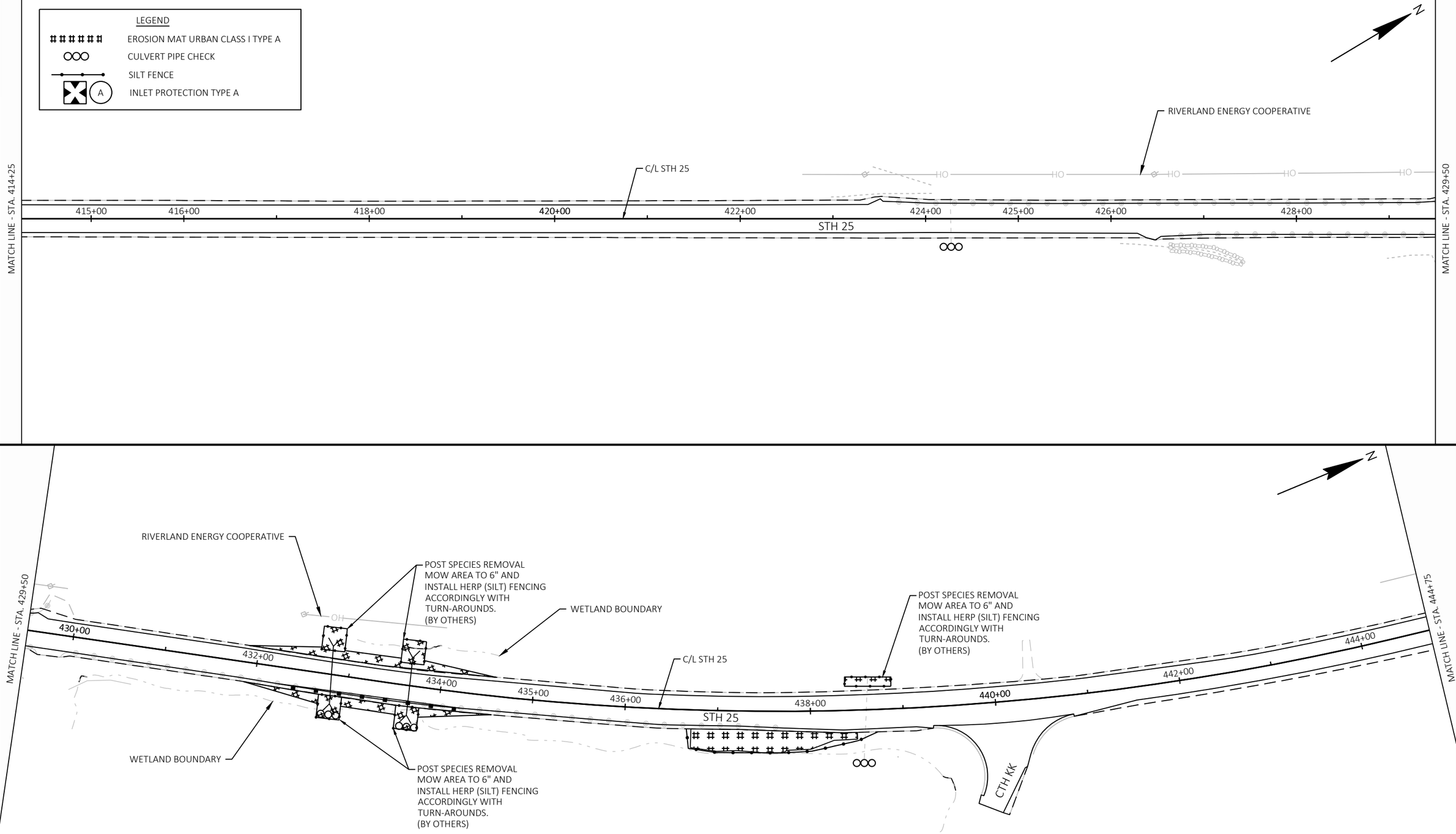
LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 19	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022008-ec

PLOT DATE : 8/1/2023 7:40 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

MATCH LINE - STA. 444+75

NTEC

MISHA MOKWA LN

RIVERLAND ENERGY COOPERATIVE

DAIRYLAND POWER COOPERATIVE

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

C/L STH 25

445+00 446+00 448+00 450+00 452+00 454+00 455+00 456+00 458+00 460

STH 25

NTEC

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

MATCH LINE - STA. 460+00

2

N

MATCH LINE - STA. 460+00

RIVERLAND ENERGY COOPERATIVE

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

460+00 462+00 464+00 465+00 466+00 468+00 470+00 472+00 474+00 475+00

STH 25

CTH K

MATCH LINE - STA. 475+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 20	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022009-ec

PLOT DATE : 8/1/2023 7:40 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

MATCH LINE - STA. 475+25

RIVERLAND ENERGY COOPERATIVE

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

476+00 478+00 480+00 482+00 484+00 485+00 486+00 488+00 490+00

STH 25

NTEC

MATCH LINE - STA. 490+50

2

N

MATCH LINE - STA. 490+50

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

492+00 494+00 495+00 496+00 498+00 500+00 502+00 504+00 505+00

STH 25

NTEC

MATCH LINE - STA. 505+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 21	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022010-ec

PLOT DATE : 8/1/2023 7:40 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

MATCH LINE - STA. 505+75

RIVERLAND ENERGY COOPERATIVE

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

C/L STH 25

506+00 508+00 510+00 512+00 514+00 515+00 516+00 518+00 520+00

STH 25

CTH V

NTEC

MATCH LINE - STA. 521+00

MATCH LINE - STA. 521+00

N

C/L STH 25

522+00 524+00 525+00 526+00 528+00 530+00 532+00 534+00 535+00 536+00

STH 25

MATCH LINE - STA. 536+25

2

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 22	E

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

MATCH LINE - STA. 536+25

C/L STH 25

538+00 540+00 542+00 544+00 545+00 546+00 548+00 550+00

STH 25

MATCH LINE - STA. 551+50

2

N

MATCH LINE - STA. 551+50

NTEC

POST SPECIES REMOVAL
MOW AREA TO 6" AND
INSTALL HERP (SILT) FENCING
ACCORDINGLY WITH
TURN-AROUNDS.
(BY OTHERS)

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

RIVERLAND ENERGY COOPERATIVE

552+00 554+00 555+00 556+00 558+00 560+00 562+00 564+00 565+00 566+00

STH 25

MATCH LINE - STA. 566+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 23	E

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

MATCH LINE - STA. 566+75

C/L STH 25

568+00 570+00 572+00 574+00 575+00 576+00 578+00 580+00 582

STH 25

KINGS HWY

MATCH LINE - STA. 582+00

2

N

MATCH LINE - STA. 582+00

POST SPECIES REMOVAL
MOW AREA TO 6" AND
INSTALL HERP (SILT) FENCING
ACCORDINGLY WITH
TURN-AROUNDS.
(BY OTHERS)

RIVERLAND ENERGY COOPERATIVE

NTEC

C/L STH 25

FO FO FO FO FO FO

OH OH OH OH OH OH

+00 584+00 585+00 586+00 588+00 590+00 592+00 594+00 595+00 596+00

STH 25

MATCH LINE - STA. 597+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 24	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022013-ec

PLOT DATE : 8/1/2023 7:41 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

AIRPORT RD

C/L STH 25

598+00 600+00 602+00 604+00 605+00 606+00 608+00 610+00 612+00

STH 25

MATCH LINE - STA. 597+25

MATCH LINE - STA. 612+50

2

N

NTEC

FO

FO

RIVERLAND ENERGY COOPERATIVE

C/L STH 25

OH

OH

614+00 615+00 616+00 618+00 620+00 622+00 624+00 625+00 626+00

STH 25

MATCH LINE - STA. 612+50

MATCH LINE - STA. 627+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 25	E

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

MATCH LINE - STA. 627+75

C/L STH 25

628+00 630+00 632+00 634+00 635+00 636+00 638+00 640+00 642+00

STH 25

STAI COULEE RD

MATCH LINE - STA. 643+00

2

N

MATCH LINE - STA. 643+00

C/L STH 25

644+00 645+00 646+00 648+00 650+00 652+00 654+00 655+00 656+00 658+00

STH 25

MATCH LINE - STA. 658+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 26	E

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

NTEC

RIVERLAND ENERGY COOPERATIVE

FO

OH

C/L STH 25

660+00 662+00 664+00 665+00 666+00 668+00 670+00 672+00

STH 25

MATCH LINE - STA. 658+25

MATCH LINE - STA. 673+50

2

N

CASTLEBERG RD

C/L STH 25

674+00 675+00 676+00 678+00 680+00 682+00 684+00 685+00 686+00 688+00

STH 25

MATCH LINE - STA. 673+50

MATCH LINE - STA. 688+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 27	E

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

RIVERLAND ENERGY COOPERATIVE

OH OH

NTEC

FO FO

MATCH LINE - STA. 688+75

690+00 692+00 694+00 695+00 696+00 698+00 700+00 702+00 704

C/L STH 25

STH 25

SPRING CREEK RD

MATCH LINE - STA. 704+00

2

N

RIVERLAND ENERGY COOPERATIVE

NTEC

OH OH OH FO OH FO OH

MATCH LINE - STA. 704+00

+00 705+00 706+00 708+00 710+00 712+00 714+00 715+00 716+00 718+00

C/L STH 25

STH 25

MATCH LINE - STA. 719+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 28	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022017-ec

PLOT DATE : 8/1/2023 7:41 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

WETLAND BOUNDARY

RIVERLAND ENERGY COOPERATIVE

NTEC

RIVERLAND ENERGY COOPERATIVE

NTEC

FO OH FO OH FO OH FO OH

MATCH LINE - STA. 719+25

720+00 722+00 724+00 725+00 726+00 728+00 730+00 732+00 734+00

STH 25

C/L STH 25

MATCH LINE - STA. 734+50

2

N

NTEC

NTEC

POST SPECIES REMOVAL
MOW AREA TO 6" AND
INSTALL HERP (SILT) FENCING
ACCORDINGLY WITH
TURN-AROUNDS.
(BY OTHERS)

C/L STH 25

MATCH LINE - STA. 734+50

735+00 736+00 738+00 740+00 742+00 744+00 745+00 746+00 748+00

STH 25

POST SPECIES REMOVAL
MOW AREA TO 6" AND
INSTALL HERP (SILT) FENCING
ACCORDINGLY WITH
TURN-AROUNDS.
(BY OTHERS)

MATCH LINE - STA. 749+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 29	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022018-ec

PLOT DATE : 8/1/2023 7:41 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

MATCH LINE - STA. 749+75

750+00

752+00

754+00

755+00

756+00

758+00

C/L STH 25

760+00

762+00

764+00

765

STH 25

THIBODEAU RD

MATCH LINE - STA. 765+00

2

N

NTEC

C/L STH 25

MATCH LINE - STA. 765+00

766+00

768+00

770+00

772+00

774+00

775+00

776+00

778+00

780+00

STH 25

MATCH LINE - STA. 780+25

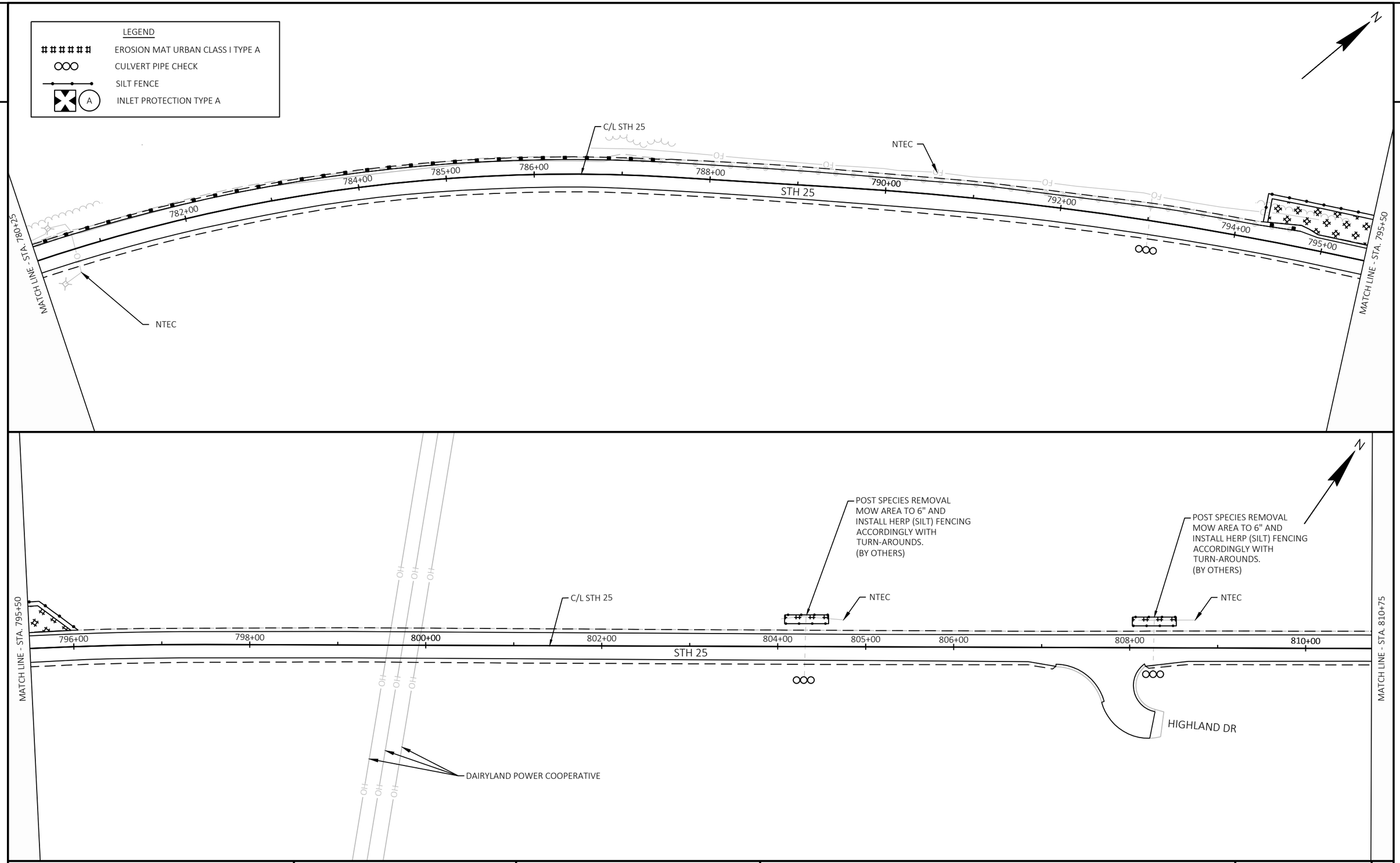
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 30	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022019-ec

PLOT DATE : 8/1/2023 7:41 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- CULVERT PIPE CHECK
- SILT FENCE
- A — INLET PROTECTION TYPE A



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 31	E

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- CULVERT PIPE CHECK
- SILT FENCE
- A — INLET PROTECTION TYPE A

MATCH LINE - STA. 810+75

NTEC

C/L STH 25

812+00 814+00 815+00 816+00 818+00 820+00 822+00 824+00 825+00 826

STH 25

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

NTEC

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

MATCH LINE - STA. 826+00

PEPIN COUNTY
BUFFALO COUNTY

2

+00 828+00 830+00 832+00 834+00 835+00 836+00 838+00 840+00

C/L STH 25

STH 25

NTEC

EQ

CTH AA

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 32	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022021-ec
PLOT DATE : 8/1/2023 7:41 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

2

LEGEND

EROSION MAT URBAN CLASS I TYPE A

CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A

N

NTEC

FO

842+00

844+00

845+00

846+00

848+00

C/L STH 25

850+00

852+00

854+00

855+00

856+00

STH 25

XCEL ENERGY

NORTHERN NATURAL GAS COMPANY

2

N

NTEC

858+00

860+00

862+00

SIMPSON LN

864+00

865+00

866+00

STH 25

C/L STH 25

POST SPECIES REMOVAL MOW AREA TO 6" AND INSTALL HERP (SILT) FENCING ACCORDINGLY WITH TURN-AROUNDS. (BY OTHERS)

NTEC

868+00

870+00

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 33	E

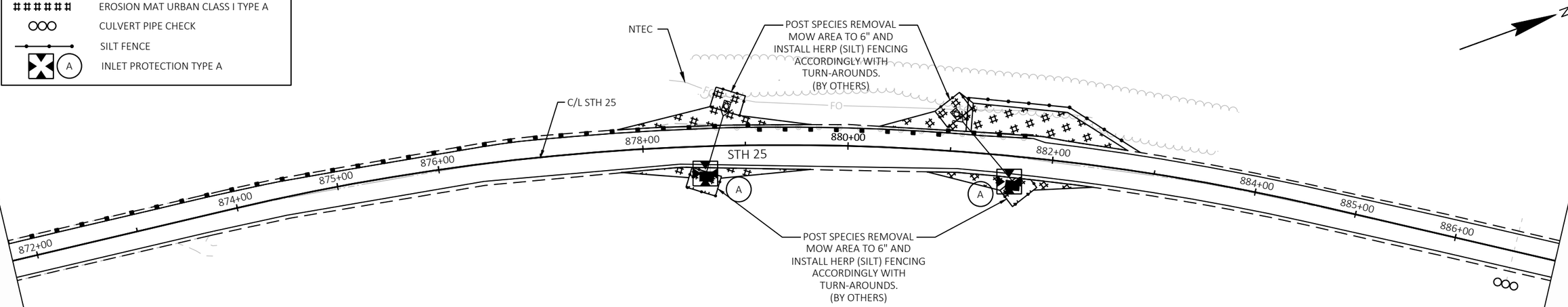
FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022022-ec

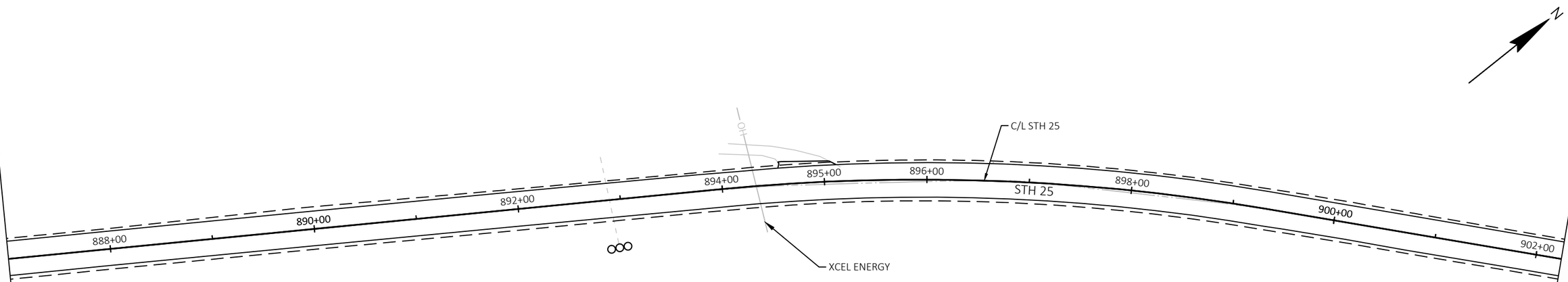
PLOT DATE : 8/1/2023 7:41 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

LEGEND

- EROSION MAT URBAN CLASS I TYPE A
- CULVERT PIPE CHECK
- SILT FENCE
- A — INLET PROTECTION TYPE A





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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 34	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022023-ec

PLOT DATE : 8/1/2023 7:41 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

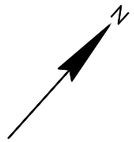
LEGEND

EROSION MAT URBAN CLASS I TYPE A

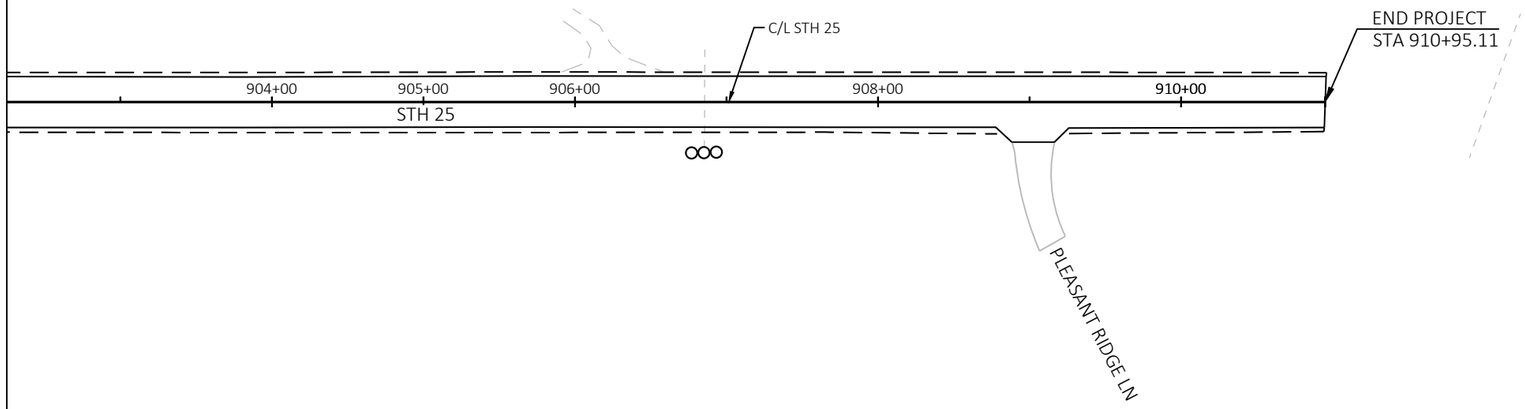
CULVERT PIPE CHECK

SILT FENCE

A INLET PROTECTION TYPE A



MATCH LINE - STA. 902+25



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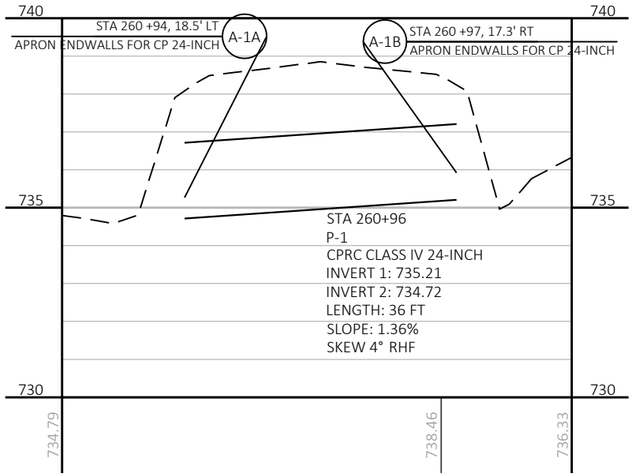
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	EROSION CONTROL PLANS	SHEET 35	E

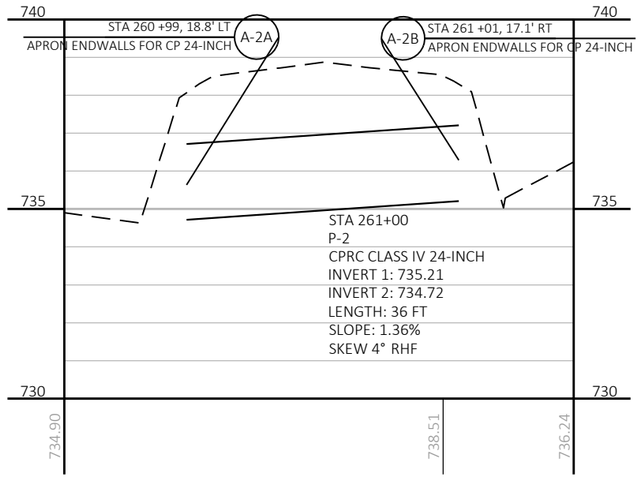
FILE NAME : W:\71700076\C3D\SHEETSPLAN\022001-EC.DWG
LAYOUT NAME - 022024-ec

PLOT DATE : 8/1/2023 7:41 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

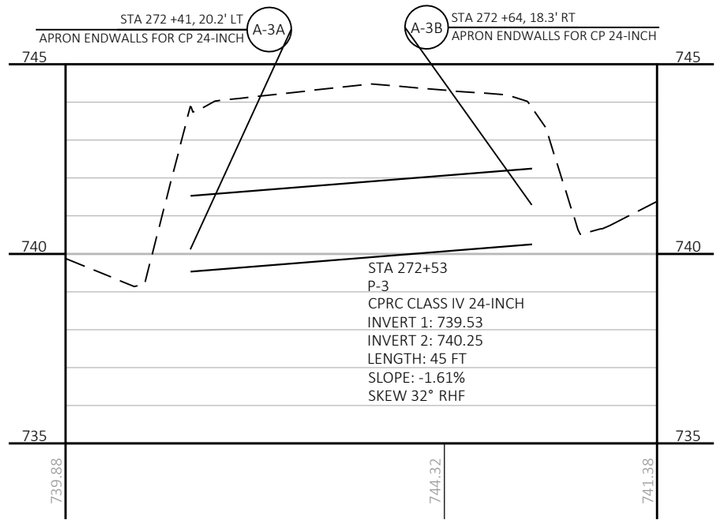
WISDOT/CADDS SHEET 44



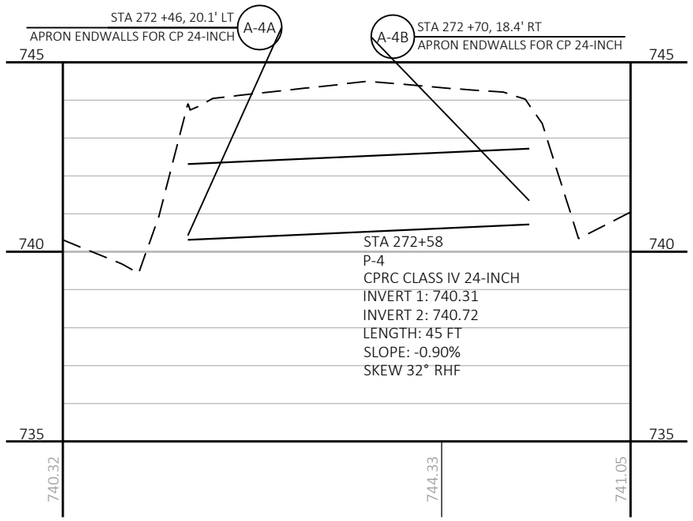
PIPE AT STA 260+96



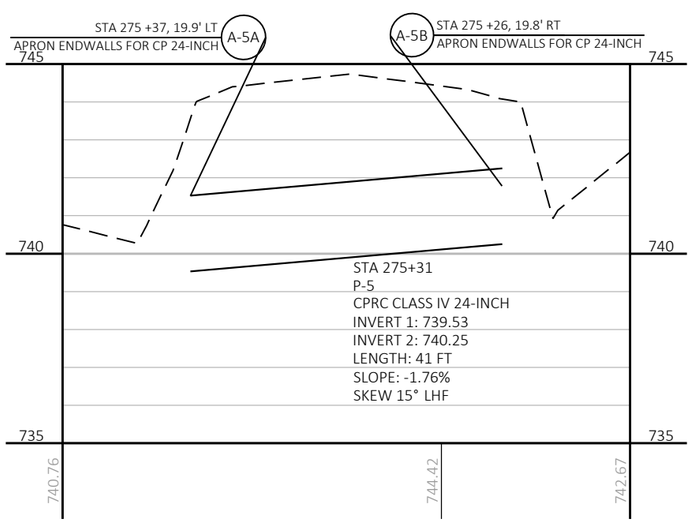
PIPE AT STA 261+00



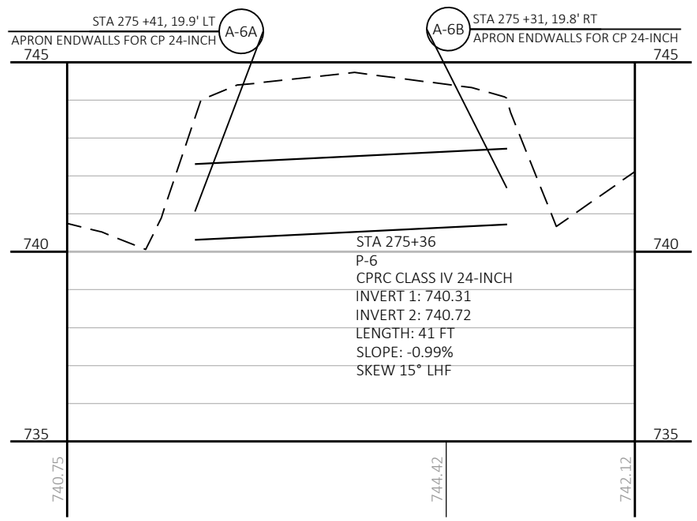
PIPE AT STA 272+53



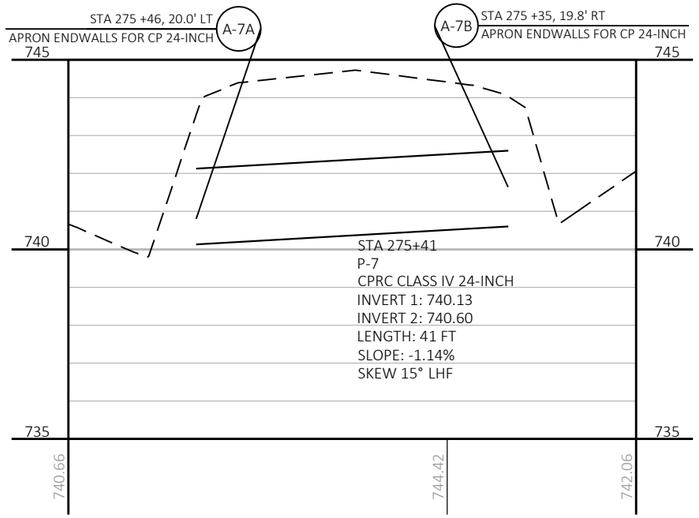
PIPE AT STA 272+58



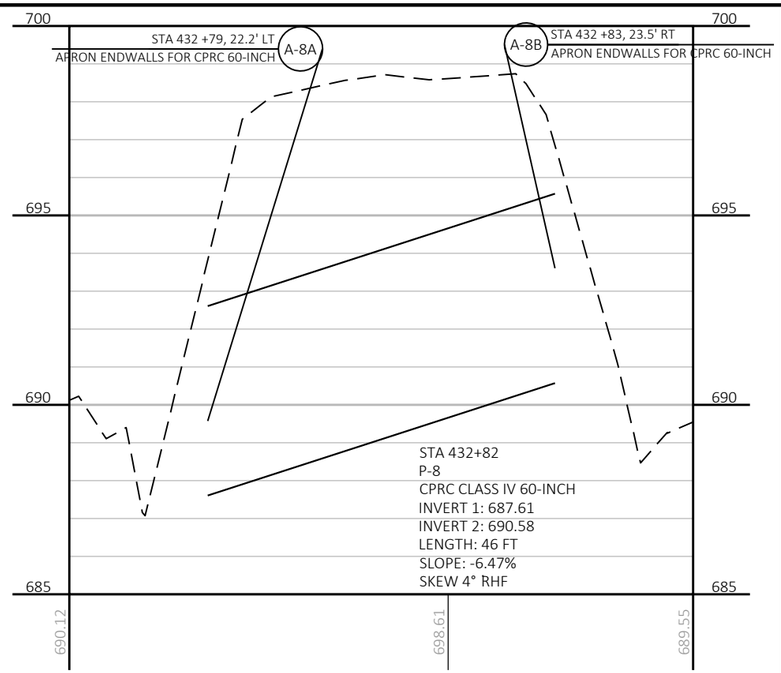
PIPE AT STA 275+31



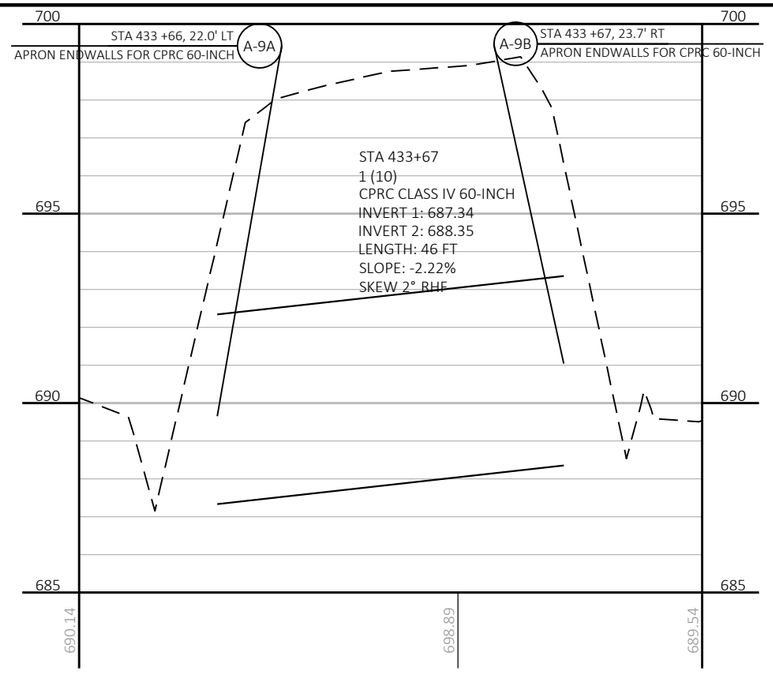
PIPE AT STA 275+36



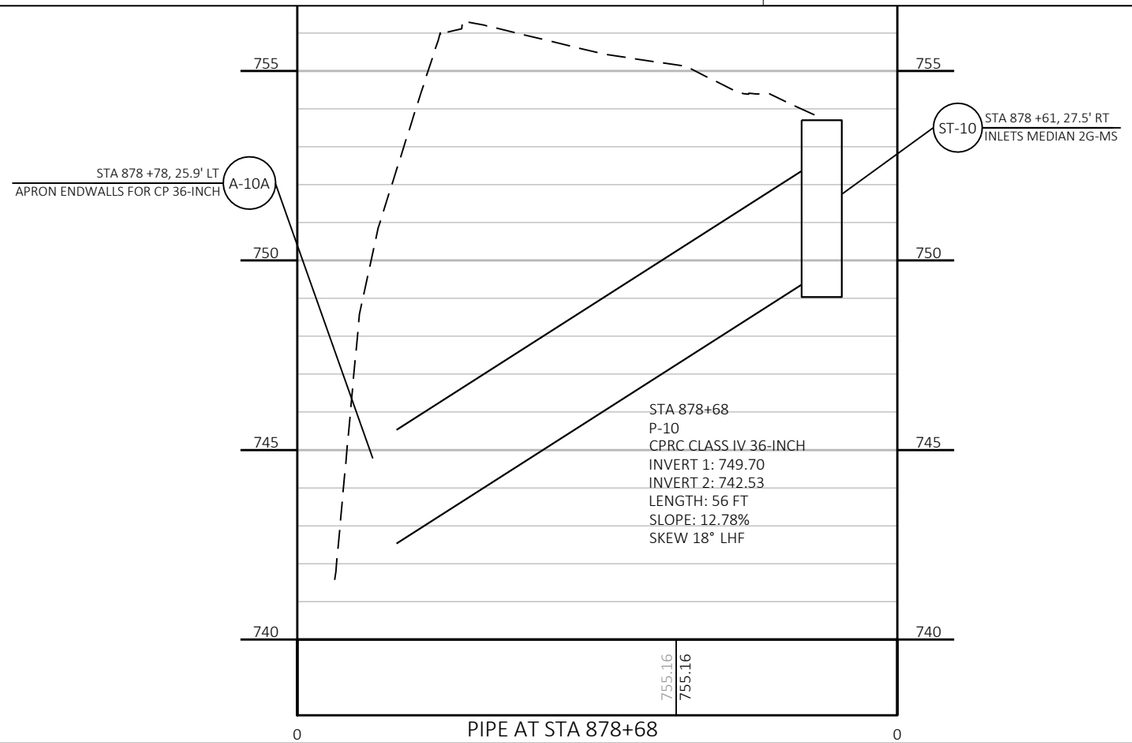
PIPE AT STA 275+41



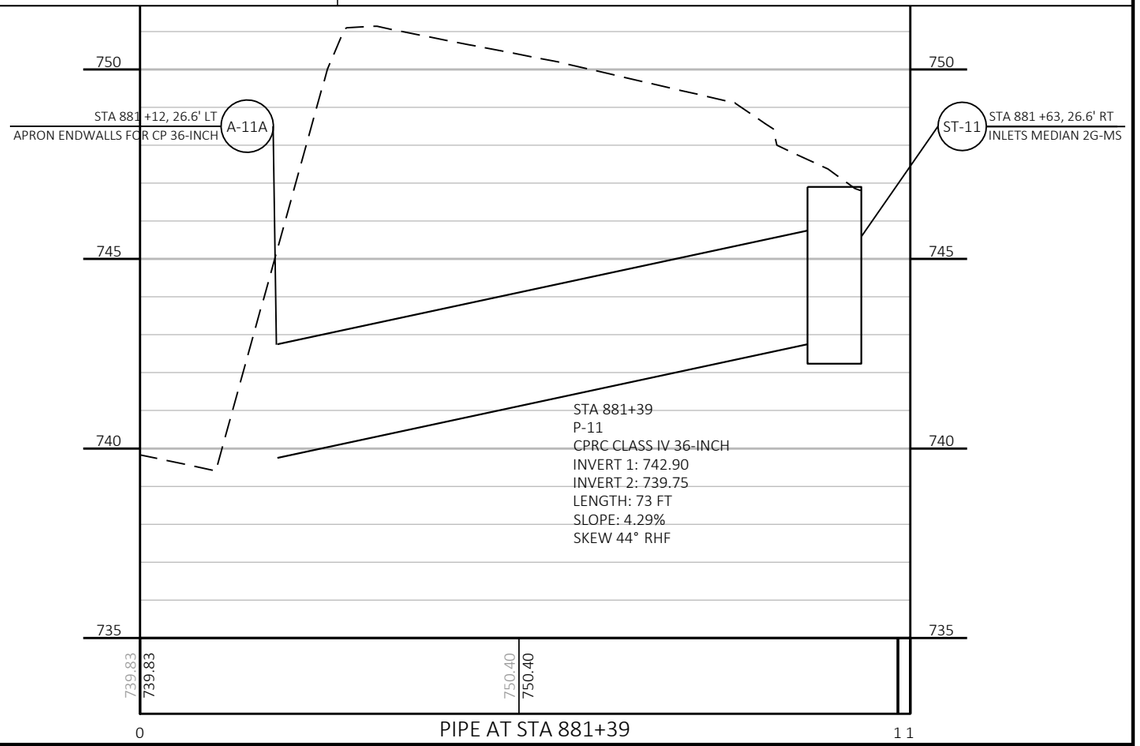
PIPE AT STA 432+82



PIPE AT STA 433+67

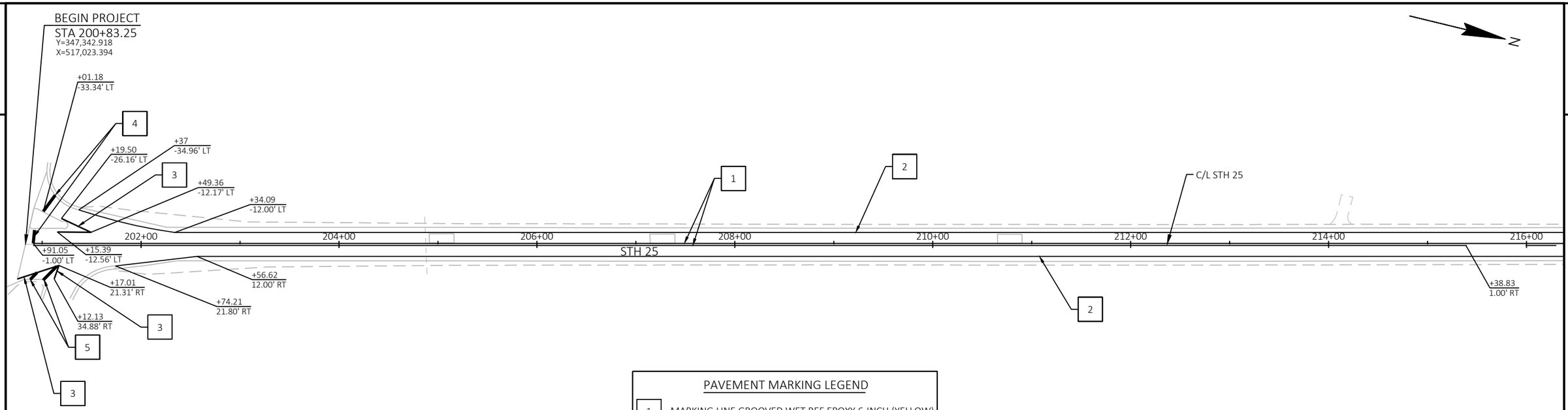


PIPE AT STA 878+68



PIPE AT STA 881+39

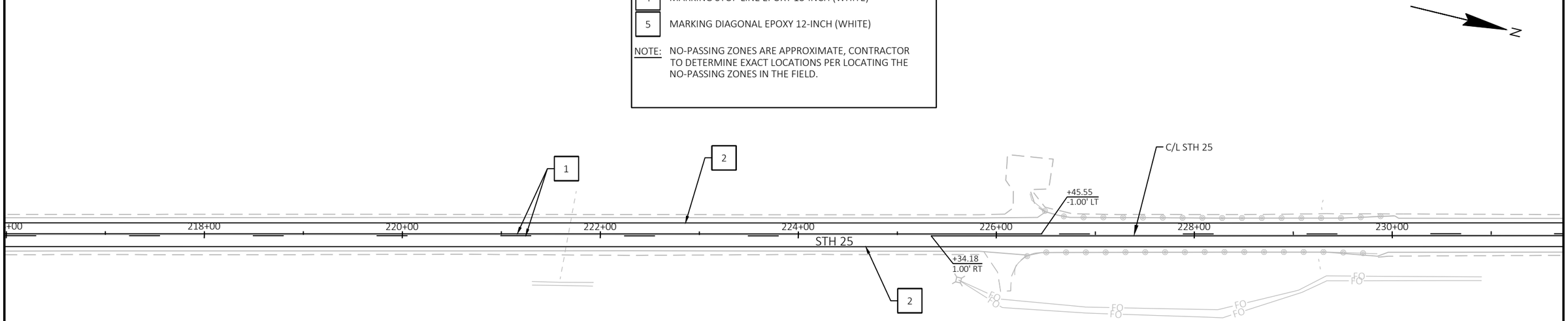
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CULVERT PIPE PROFILES	SHEET 37 E



PAVEMENT MARKING LEGEND

1	MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW)
2	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
3	MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
4	MARKING STOP LINE EPOXY 18-INCH (WHITE)
5	MARKING DIAGONAL EPOXY 12-INCH (WHITE)

NOTE: NO-PASSING ZONES ARE APPROXIMATE, CONTRACTOR TO DETERMINE EXACT LOCATIONS PER LOCATING THE NO-PASSING ZONES IN THE FIELD.



NOTES
- SEE SDD 15C08-A LONGITUDINAL MARKING (MAINLINE) FOR ALL PERMANENT PAVEMENT MARKINGS ELSEWHERE ON THE PROJECT

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PAVEMENT MARKING	SHEET 38	E

7170-00-76

Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	3.000	3.000
0004	203.0100	Removing Small Pipe Culverts	EACH	10.000	10.000
0006	203.0220	Removing Structure (structure) 01. 60-Inch Culvert	EACH	2.000	2.000
0008	204.0110	Removing Asphaltic Surface	SY	113.000	113.000
0010	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,910.000	2,910.000
0012	204.0120	Removing Asphaltic Surface Milling	SY	252,400.000	252,400.000
0014	204.0165	Removing Guardrail	LF	4,814.000	4,814.000
0016	204.0185	Removing Masonry	CY	20.000	20.000
0018	204.0220	Removing Inlets	EACH	1.000	1.000
0020	205.0100	Excavation Common	CY	2,373.000	2,373.000
0022	206.5001	Cofferdams (structure) 01. C-46-3	EACH	1.000	1.000
0024	208.1500.S	Temporary Lane Shift During Culvert Work	EACH	12.000	12.000
0026	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 7170-00-76	EACH	1.000	1.000
0028	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	28.000	28.000
0030	213.0100	Finishing Roadway (project) 01. 7170-00-76	EACH	1.000	1.000
0032	305.0110	Base Aggregate Dense 3/4-Inch	TON	723.000	723.000
0034	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,480.000	2,480.000
0036	450.4000	HMA Cold Weather Paving	TON	13,871.000	13,871.000
0038	455.0605	Tack Coat	GAL	35,330.000	35,330.000
0040	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0042	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0044	460.2005	Incentive Density PWL HMA Pavement	DOL	40,100.000	40,100.000
0046	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	28,270.000	28,270.000
0048	460.2010	Incentive Air Voids HMA Pavement	DOL	55,480.000	55,480.000
0050	460.6644	HMA Pavement 4 MT 58-34 V	TON	55,480.000	55,480.000
0052	460.9000.S	Material Transfer Vehicle 01. 7170-00-76	EACH	1.000	1.000
0054	465.0105	Asphaltic Surface	TON	103.000	103.000
0056	465.0110	Asphaltic Surface Patching	TON	300.000	300.000
0058	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	965.000	965.000
0060	465.0310	Asphaltic Curb	LF	2,646.000	2,646.000
0062	465.0315	Asphaltic Flumes	SY	54.000	54.000
0064	465.0520	Asphaltic Rumble Strips, Shoulder	LF	22,512.000	22,512.000
0066	465.0560	Asphaltic Rumble Strips, Centerline	LF	70,651.000	70,651.000
0068	509.1500	Concrete Surface Repair	SF	75.000	75.000
0070	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	14.000	14.000
0072	520.1036	Apron Endwalls for Culvert Pipe 36-Inch	EACH	2.000	2.000
0074	520.8700	Cleaning Culvert Pipes	EACH	27.000	27.000
0076	522.0424	Culvert Pipe Reinforced Concrete Class IV 24-Inch	LF	285.000	285.000
0078	522.0436	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	129.000	129.000
0080	522.0460	Culvert Pipe Reinforced Concrete Class IV 60-Inch	LF	92.000	92.000
0082	522.1060	Apron Endwalls for Culvert Pipe Reinforced Concrete 60-Inch	EACH	4.000	4.000
0084	606.0200	Riprap Medium	CY	39.000	39.000
0086	611.0642	Inlet Covers Type MS	EACH	4.000	4.000
0088	611.3902	Inlets Median 2 Grate	EACH	2.000	2.000
0090	614.0010	Barrier System Grading Shaping Finishing	EACH	17.000	17.000
0092	614.0305	Steel Plate Beam Guard Class A	LF	300.000	300.000
0094	614.0345	Steel Plate Beam Guard Short Radius	LF	276.000	276.000
0096	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	7.000	7.000
0098	614.0390	Steel Plate Beam Guard Short Radius Terminal	EACH	3.000	3.000

7170-00-76

Line	Item	Item Description	Unit	Total	Qty
0100	614.0400	Adjusting Steel Plate Beam Guard	LF	7,039.000	7,039.000
0102	614.0515	Guardrail Stiffened LHW	LF	4,106.000	4,106.000
0104	614.0950	Replacing Guardrail Posts and Blocks	EACH	14.000	14.000
0106	614.2300	MGS Guardrail 3	LF	100.000	100.000
0108	614.2330	MGS Guardrail 3 K	LF	3,298.000	3,298.000
0110	614.2350	MGS Guardrail Short Radius	LF	107.000	107.000
0112	614.2610	MGS Guardrail Terminal EAT	EACH	6.000	6.000
0114	614.2630	MGS Guardrail Short Radius Terminal	EACH	2.000	2.000
0116	618.0100	Maintenance And Repair of Haul Roads (project) 01. 7170-00-76	EACH	1.000	1.000
0118	619.1000	Mobilization	EACH	1.000	1.000
0120	624.0100	Water	MGAL	25.000	25.000
0122	625.0500	Salvaged Topsoil	SY	3,750.000	3,750.000
0124	628.1504	Silt Fence	LF	3,375.000	3,375.000
0126	628.1520	Silt Fence Maintenance	LF	6,745.000	6,745.000
0128	628.1905	Mobilizations Erosion Control	EACH	3.000	3.000
0130	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0132	628.2006	Erosion Mat Urban Class I Type A	SY	3,750.000	3,750.000
0134	628.7005	Inlet Protection Type A	EACH	2.000	2.000
0136	628.7504	Temporary Ditch Checks	LF	310.000	310.000
0138	628.7555	Culvert Pipe Checks	EACH	273.000	273.000
0140	629.0210	Fertilizer Type B	CWT	2.900	2.900
0142	630.0120	Seeding Mixture No. 20	LB	100.000	100.000
0144	630.0175	Seeding Mixture No. 75	LB	2.000	2.000
0146	630.0400	Seeding Nurse Crop	LB	2.000	2.000
0148	630.0500	Seed Water	MGAL	104.200	104.200
0150	633.5200	Markers Culvert End	EACH	51.000	51.000
0152	642.5001	Field Office Type B	EACH	1.000	1.000
0154	643.0300	Traffic Control Drums	DAY	330.000	330.000
0156	643.0410	Traffic Control Barricades Type II	DAY	12.000	12.000
0158	643.0900	Traffic Control Signs	DAY	3,241.000	3,241.000
0160	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0162	643.3165	Temporary Marking Line Paint 6-Inch	LF	139,692.000	139,692.000
0164	643.5000	Traffic Control	EACH	1.000	1.000
0166	645.0130	Geotextile Type R	SY	156.000	156.000
0168	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	218,472.000	218,472.000
0170	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	501.000	501.000
0172	646.6120	Marking Stop Line Epoxy 18-Inch	LF	34.000	34.000
0174	646.7120	Marking Diagonal Epoxy 12-Inch	LF	30.000	30.000
0176	650.6000	Construction Staking Pipe Culverts	EACH	13.000	13.000
0178	650.8000	Construction Staking Resurfacing Reference	LF	71,600.000	71,600.000
0180	650.9911	Construction Staking Supplemental Control (project) 01. 7170-00-76	EACH	1.000	1.000
0182	650.9920	Construction Staking Slope Stakes	LF	5,050.000	5,050.000
0184	690.0150	Sawing Asphalt	LF	1,291.000	1,291.000
0186	740.0440	Incentive IRI Ride	DOL	53,520.000	53,520.000
0188	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	2,400.000	2,400.000
0190	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	1,380.000	1,380.000
0192	SPV.0060	Special 01. Cleaning Ditch	EACH	12.000	12.000
0194	SPV.0060	Special 02. Replacing Guardrail Posts and Blocks - EAT	EACH	26.000	26.000
0196	SPV.0060	Special 03. Steel Plate Beam Guard Connection	EACH	1.000	1.000

7170-00-76

Line	Item	Item Description	Unit	Total	Qty
0198	SPV.0090	Special 01. Polyurethane Foam Crack or Joint Filling	LF	23.000	23.000
0200	SPV.0165	Special 01. Concrete Surface Repair Full-Depth	SF	55.000	55.000

3

GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0205 GRUBBING STA	REMARKS
0010	880+92		883+26	LT	3	GRADING AT EAT
				TOTAL 0010	3	

REMOVING INLETS

CATEGORY	STATION	LOCATION	204.0220 REMOVING INLETS EACH
0010	843+39	LT	1
		TOTAL 0010	1

REMOVING MASONRY

CATEGORY	STATION	LOCATION	204.0185 REMOVING MASONRY CY
0010	878+70	RT	10
0010	881+38	RT	10
		TOTAL 0010	20

REMOVING SMALL CULVERT PIPES

CATEGORY	STATION	LOCATION	203.0100 REMOVING SMALL CULVERT PIPES EACH	203.0220 REMOVING STRUCTURE (60-INCH CULVERT) EACH	205.0100 EXCAVATION COMMON CY	208.1500.S TEMPORARY LANE SHIFT DURING CULVERT WORK EACH	TRANSITION LIMITS	REMARKS
0010	260+97	STH 25	1	-	150	2	50' SOUTH	24" CMCP
0010	261+00	STH 25	1	-	142	-	50' NORTH	24" CMCP
0010	272+54	STH 25	1	-	165	2	50' SOUTH	24" CMCP
0010	272+58	STH 25	1	-	163	-	50' NORTH	24" CMCP
0010	275+33	STH 25	1	-	152	2	50' SOUTH	24" CMCP
0010	275+36	STH 25	1	-	-	-		24" CMCP
0010	275+40	STH 25	1	-	157	-	50' NORTH	24" CMCP
0010	432+81	STH 25	-	1	327	2	50' SOUTH	60"CMCP
0010	433+66	STH 25	-	1	327	-	50' NORTH	60" CMCP
0010	843+39	STH 25	1	-	-	-		18" CMCP
0010	878+70	STH 25	1	-	422	2	50' SOUTH, 50' NORTH	36" CMCP
0010	881+38	STH 25	1	-	368	2	50' SOUTH, 50' NORTH	36" CMCP
		TOTAL 0010	10	2	2,373	12		

REMOVING ASPHALTIC SURFACE

CATEGORY	STATION	TO	STATION	LOCATION	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	REMARKS
0010	200+83	-	315+80	STH 25	-	830	42,400	
0010	316+33	-	445+86	STH 25	-	470	45,300	
0010	447+64	-	699+85	STH 25	-	930	88,900	
0010	450+94	-	451+47	STH 25	3	-	-	BEAMGUARD EXTENSIONS
0010	622+81	-	623+43	STH 25	6	-	-	BEAMGUARD EXTENSIONS
0010	698+82	-	699+40	STH 25	7	-	-	BEAMGUARD EXTENSIONS
0010	700+65	-	910+95	STH 25	-	680	75,800	
0010	724+17	-	724+73	STH 25	6	-	-	BEAMGUARD EXTENSIONS
0010	770+24	-	770+82	STH 25	6	-	-	BEAMGUARD EXTENSIONS
0010	780+16	-	780+76	STH 25	10	-	-	BEAMGUARD EXTENSIONS
0010	786+88	-	787+50	STH 25	9	-	-	BEAMGUARD EXTENSIONS
0010	840+74	-	841+28	STH 25	6	-	-	BEAMGUARD EXTENSIONS
0010	846+44	-	847+04	STH 25	9	-	-	BEAMGUARD EXTENSIONS
0010	850+79	-	851+38	STH 25	9	-	-	BEAMGUARD EXTENSIONS
0010	858+98	-	859+58	STH 25	9	-	-	BEAMGUARD EXTENSIONS
0010	864+26	-	864+97	STH 25	12	-	-	BEAMGUARD EXTENSIONS
0010	870+03	-	870+79	STH 25	12	-	-	BEAMGUARD EXTENSIONS
0010	878+14	-	878+82	STH 25	9	-	-	BEAMGUARD EXTENSIONS
				TOTAL 0010	113	2,910	252,400	

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

CATEGORY	STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDER STA
0010	623+37	-	625+26	STH 25 LT	2
0010	696+33	-	698+92	STH 25 RT	3
0010	761+20	-	770+24	STH 25 LT	10
0010	780+76	-	786+88	STH 25 LT	7
0010	835+01	-	840+74	STH 25 LT	6
				TOTAL 0010	28

FINISHING ROADWAY

CATEGORY	STATION	TO	STATION	LOCATION	213.0100 FINISHING ROADWAY (PROJECT) (01. 7170-00-76) EACH
0010	200+83	-	910+95	STH 25	1
				TOTAL 0010	1

PREPARE FOUNDATION FOR ASPHALTIC PAVING

CATEGORY	STATION	TO	STATION	LOCATION	211.0101.01 PREPARE FOUNDATION FOR ASPHALTIC PAVING (PROJECT) (01. 7170-00-76) EACH
0010	200+83	-	910+95	STH 25	1
				TOTAL 0010	1

3

BASE AGGREGATE DENSE 3/4-INCH

CATEGORY	STATION	TO	STATION	LOCATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.012 BASE AGGREGATE DENSE 1 1/4-INCH TON	624.0100 WATER MGAL	REMARKS
0010	200+83	-	241+44	STH 25	20	--	--	
0010	241+44	-	676+00	STH 25	430	--	--	
0010	260+90	-	261+06	STH 25	--	130	1.3	CULVERT REPLACEMENT
0010	272+48	-	272+64	STH 25	--	160	1.6	CULVERT REPLACEMENT
0010	275+26	-	275+46	STH 25	--	140	1.4	CULVERT REPLACEMENT
0010	432+74	-	432+89	STH 25	--	420	4.2	CULVERT REPLACEMENT
0010	433+59	-	433+74	STH 25	--	490	4.9	CULVERT REPLACEMENT
0010	450+94	-	451+47	STH 25	1.0	--	--	BEAMGUARD EXTENSIONS
0010	622+81	-	623+43	STH 25	1.8	--	--	BEAMGUARD EXTENSIONS
0010	676+00	-	699+94	STH 25	30	--	--	
0010	698+82	-	699+40	STH 25	2.2	--	--	BEAMGUARD EXTENSIONS
0010	724+17	-	724+73	STH 25	1.6	--	--	BEAMGUARD EXTENSIONS
0010	770+24	-	770+82	STH 25	1.7	--	--	BEAMGUARD EXTENSIONS
0010	780+16	-	780+76	STH 25	3.0	--	--	BEAMGUARD EXTENSIONS
0010	786+88	-	787+50	STH 25	2.5	--	--	BEAMGUARD EXTENSIONS
0010	840+74	-	841+28	STH 25	1.7	--	--	BEAMGUARD EXTENSIONS
0010	846+44	-	847+04	STH 25	2.7	--	--	BEAMGUARD EXTENSIONS
0010	850+79	-	851+38	STH 25	2.5	--	--	BEAMGUARD EXTENSIONS
0010	858+98	-	859+58	STH 25	2.7	--	--	BEAMGUARD EXTENSIONS
0010	864+26	-	864+97	STH 25	3.6	--	--	BEAMGUARD EXTENSIONS
0010	870+03	-	870+79	STH 25	3.5	--	--	BEAMGUARD EXTENSIONS
0010	878+14	-	878+82	STH 25	2.8	--	--	BEAMGUARD EXTENSIONS
0010	878+65	-	878+75	STH 25	--	630	6.3	CULVERT REPLACEMENT
0010	881+33	-	881+43	STH 25	--	510	5.1	CULVERT REPLACEMENT
0010	699+94	-	910+95	STH 25	210	--	--	
				TOTAL 0010	723	2,480	25	

HMA ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	455.0605 TACK COAT GAL	450.4000 HMA COLD WEATHER PAVING TON	460.6644 HMA PAVEMENT 4 MT 58-34 V TON	465.0105 ASPHALTIC SURFACE TON	465.0110 ASPHALTIC SURFACE PATCHING TON	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	465.0310 ASPHALTIC CURB LF	465.0315 ASPHALTIC FLUMES SY	REMARKS
0010	200+83	-	315+80	STH 25	5,940	2,328	9,310	-	-	110	-	-	
0010	260+47	-	261+55	STH 25	-	-	-	16	-	-	-	-	CULVERT REPLACEMENT
0010	267+55	-	277+63	STH 25	-	-	-	16	-	-	-	-	CULVERT REPLACEMENT
0010	270+28	-	280+45	STH 25	-	-	-	19	-	-	-	-	CULVERT REPLACEMENT
0010	316+33	-	445+86	STH 25	6,340	2,490	9,960	-	-	80	-	-	
0010	424+27	-	424+27	STH 25 LT	-	-	-	-	-	-	-	6	
0010	432+76	-	432+86	STH 25	-	-	-	16	-	-	-	-	CULVERT REPLACEMENT
0010	433+61	-	433+71	STH 25	-	-	-	16	-	-	-	-	CULVERT REPLACEMENT
0010	447+64	-	699+85	STH 25	12,440	4,888	19,550	-	-	575	-	-	
0010	451+97	-	458+59	STH 25 LT	-	-	-	-	-	-	662	-	
0010	453+74	-	458+18	STH 25 RT	-	-	-	-	-	-	444	-	
0010	456+35	-	456+35	STH 25 LT	-	-	-	-	-	-	-	6	
0010	456+51	-	456+51	STH 25 RT	-	-	-	-	-	-	-	6	
0010	620+64	-	620+64	STH 25 LT	-	-	-	-	-	-	-	6	
0010	620+68	-	620+68	STH 25 RT	-	-	-	-	-	-	-	6	
0010	620+69	-	622+81	STH 25 LT	-	-	-	-	-	-	212	-	
0010	620+71	-	622+47	STH 25 RT	-	-	-	-	-	-	177	-	
0010	668+63	-	668+63	STH 25 LT	-	-	-	-	-	-	-	6	
0010	668+67	-	669+91	STH 25 LT	-	-	-	-	-	-	124	-	
0010	669+95	-	669+95	STH 25 LT	-	-	-	-	-	-	-	6	
0010	700+65	-	910+95	STH 25	10,610	4,165	16,660	-	-	200	-	-	
0010	841+28	-	846+43	STH 25 LT	-	-	-	-	-	-	515	-	
0010	843+39	-	843+39	STH 25 LT	-	-	-	-	-	-	-	6	
0010	864+97	-	870+09	STH 25 LT	-	-	-	-	-	-	512	-	
0010	866+37	-	866+37	STH 25 LT	-	-	-	-	-	-	-	6	
0010	878+06	-	879+34	STH 25	-	-	-	11	-	-	-	-	CULVERT REPLACEMENT
0010	880+74	-	882+02	STH 25	-	-	-	11	-	-	-	-	CULVERT REPLACEMENT
0010	200+83	-	910+95	PROJECT	-	-	-	-	200	-	-	-	FOR MINOR REPAIRS DURING FOUNDATION PREPARATION
0010	200+83	-	910+95	PROJECT	-	-	-	-	100	-	-	-	FOR SPOT REPAIR AREAS OF PAVEMENT WEAKNESS
				TOTAL 0010	35,330	13,871	55,480	103	300	965	2,646	54	

MATERIAL TRANSFER VEHICLE

CATEGORY	STATION	TO	STATION	LOCATION	460.9000.S MATERIAL TRANSFER VEHICLE (PROJECT) (01. 7170-00-76) EACH
0010	200+83	-	910+95	STH 25	1
				TOTAL 0010	1

3

PWL MIXTURE TABLE

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

LOCATION	STATION	BID ITEM	MIXTURE USE	UNDERLAYING SURFACE	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	200+83 - 315+80, 316+33 - 445+86, 447+64 - 699+85, 700+65 - 910+95	4 MT 58-34 V	UPPER LAYER	4 MT 58-34 V	18470	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005 HMA PAVEMENT LOGITUDINAL JOINT DENSITY 460.2007 (141,325 LF)
12 FOOT DRIVING LANE	200+83 - 315+80, 316+33 - 445+86, 447+64 - 699+85, 700+65 - 910+95	4 MT 58-34 V	LOWER LAYER	MILLED EXISTING ASPHALT SURFACE	23000	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005 HMA PAVEMENT LOGITUDINAL JOINT DENSITY 460.2007 (141,325 LF)
5 FOOT SHOULDER	200+83 - 241+44, 839+00 - 910+95	4 MT 58-34 V	UPPER LAYER	4 MT 58-34 V	1280	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
5 FOOT SHOULDER	200+83 - 241+44, 839+00 - 910+95	4 MT 58-34 V	LOWER LAYER	MILLED EXISTING ASPHALT SURFACE	1580	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FOOT SHOULDER	241+44 - 893+00	4 MT 58-34 V	UPPER LAYER	4 MT 58-34 V	4380	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
3 FOOT SHOULDER	241+44 - 893+00	4 MT 58-34 V	LOWER LAYER	MILLED EXISTING ASPHALT SURFACE	5470	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
INTERSECTIONS	VAR.	4 MT 58-34 V	UPPER LAYER	4 MT 58-34 V	580	1 3/4"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
INTERSECTIONS	VAR.	4 MT 58-34 V	LOWER LAYER	MILLED EXISTING ASPHALT SURFACE	720	2"	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE

RUMBLE STRIPS

CATEGORY	STATION	TO	STATION	LOCATION	465.0520 ASPHALTIC RUMBLE STRIPS, SHOULDER LF	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF
0010	200+83	-	241+44	STH 25 L/R	8,122	-
0010	201+33	-	315+80	STH 25	-	11,447
0010	316+33	-	445+86	STH 25	-	12,953
0010	447+64	-	699+85	STH 25	-	25,221
0010	700+65	-	910+95	STH 25	-	21,030
0010	839+00	-	910+95	STH 25 L/R	14,390	-
				TOTAL 0010	22,512	70,651

INLET ITEMS

CATEGORY	STATION	LOCATION	RIM ELEV	INVERT ELEV	611.0642 INLET COVERS TYPE MS EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	COMMENTS
0010	878+61	27.5' RT	753.70	749.70	2	1	2 SLOPE INLET
0010	881+63	26.6' RT	746.90	742.90	2	1	2 SLOPE INLET
		TOTAL 0010			4	2	

NOTES

1) STATION AND OFF SETS ARE TO THE CENTER OF STRUCTURE.

CLEANING CULVERT PIPES

CATEGORY	STATION	LOCATION	520.8700 CLEANING CULVERT PIPES EACH	REMARKS
0010	221+68	STH 25	1	
0010	240+36	STH 25	1	
0010	285+22	STH 25	1	
0010	296+17	STH 25	1	
0010	306+73	STH 25	1	
0010	350+20	STH 25	1	
0010	357+24	STH 25	1	
0010	376+34	STH 25	1	
0010	376+38	STH 25	1	
0010	388+66	STH 25	1	
0010	388+69	STH 25	1	
0010	398+65	STH 25	1	
0010	398+69	STH 25	1	
0010	408+58	STH 25	1	
0010	424+27	STH 25	1	
0010	438+60	STH 25	1	
0010	469+94	STH 25	1	
0010	482+20	STH 25	1	
0010	495+48	STH 25	1	
0010	584+49	STH 25	1	
0010	589+35	STH 25	1	
0010	730+14	STH 25	1	
0010	739+04	STH 25	1	
0010	739+15	STH 25	1	
0010	746+59	STH 25	1	
0010	820+53	STH 25	1	
0010	886+65	STH 25	1	
		TOTAL 0010	27	

CULVERT PIPE REINFORCED CONCRETE ITEMS

CATEGORY	STATION	LOCATION	INLET END STA	INLET END OFFSET	INLET END ELEV	DISCHARGE END STA	DISCHARGE END OFFSET	DISCHARGE END ELEV	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	520.1036 APRON ENDWALLS FOR CULVERT PIPE 36-INCH EACH	522.0424 CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	522.0436 CULVERT PIPE REINFORCED CONCRETE CLASS IV 36-INCH LF	522.0460 CULVERT PIPE REINFORCED CONCRETE CLASS IV 60-INCH LF	522.1060 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 60-INCH EACH
0010	260+96	STH 25	260+97	17.3' RT	735.21	260+94	18.5' LT	734.72	2	-	36	-	-	-
0010	261+00	STH 25	261+01	17.1' RT	735.21	260+99	18.8' LT	734.72	2	-	36	-	-	-
0010	272+53	STH 25	272+64	18.3' RT	740.25	272+41	20.2' LT	739.53	2	-	45	-	-	-
0010	272+58	STH 25	272+70	18.4' RT	740.72	272+46	20.1' LT	740.31	2	-	45	-	-	-
0010	275+31	STH 25	275+26	19.8' RT	740.25	275+37	19.9' LT	739.53	2	-	41	-	-	-
0010	275+36	STH 25	275+31	19.8' RT	740.72	275+41	19.9' LT	740.31	2	-	41	-	-	-
0010	275+41	STH 25	275+35	19.8' RT	740.60	275+46	20.0' LT	740.13	2	-	41	-	-	-
0010	432+82	STH 25	432+83	23.5' RT	690.58	432+79	22.2' LT	687.61	-	-	-	-	46	2
0010	433+67	STH 25	433+67	23.7' RT	688.35	433+66	22.0' LT	687.34	-	-	-	-	46	2
0010	878+68	STH 25	878+61	27.5' RT	749.70	878+78	25.9' LT	742.53	-	1	-	56	-	-
0010	881+39	STH 25	881+63	26.6' RT	742.90	881+12	26.6'LT	739.75	-	1	-	73	-	-
		TOTAL 0010							14	2	285	129	92	4

NOTES

1) STATION, OFF SETS, AND ELEVATIONS SHOWN ARE TO THE END OF THE PIPE OR EDGE OF STRUCTURE, NOT THE APRON END OF ENDWALLS.

2) JOINT TIES FOR THE CONCRETE PIPE SHALL BE PROVIDED AND INSTALLED AT THE APRON ENDWALLS AND ALL PIPE JOINTS. THE COST OF THESE TIES SHALL BE INCIDENTAL TO THE COST OF THE PIPE.

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BEAMGUARD RESTORATION

CATEGORY	STATION	TO	STATION	LOCATION	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	FILL CY	SALVAGED TOPSOIL SY	EROSION MAT URBAN CLASS I TYPE A SY	FERTILIZER TYPE B CWT	SEEDING MIXTURE NO. 20 LB	SEED WATER MGAL
					*	*	*	*	*	*	
0010	304+01	-	305+65	LT	1	60	375	375	0.3	10	10.4
0010	340+10	-	342+62	LT	1	82	335	335	0.3	10	9.3
0010	436+71	-	438+65	RT	1	98	375	375	0.3	10	10.4
0010	447+91	-	448+91	LT	1	50	250	250	0.2	8	7.0
0010	619+73	-	620+57	LT	1	149	300	300	0.2	6	8.3
0010	622+36	-	623+70	RT	1	74	375	375	0.3	10	10.4
0010	624+61	-	626+09	LT	1	50	250	250	0.2	8	7.0
0010	667+48	-	668+75	LT	1	107	265	265	0.2	5	7.4
0010	669+91	-	670+41	LT	1	72	265	265	0.2	5	7.4
0010	696+17	-	697+25	RT	1	13	255	255	0.2	5	7.1
0010	715+09	-	716+24	LT	1	137	290	290	0.3	6	8.1
0010	724+17	-	727+32	LT	1	197	580	580	0.5	18	16.1
0010	760+50	-	762+00	LT	1	33	460	460	0.4	11	12.8
0010	794+34	-	795+97	LT	1	117	460	460	0.4	11	12.8
0010	834+50	-	836+00	LT	1	28	260	260	0.2	5	7.2
0010	840+22	-	841+25	RT	1	103	490	490	0.5	16	13.6
0010	881+18	-	882+70	LT	1	331	650	650	0.6	20	18.1
				TOTAL 0010	17	1,701	6,235	6,235	5	164	173

* FOR INFORMATIONAL PURPOSES ONLY, INCIDENTAL TO BID ITEM 614.0010

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BEAM GUARD ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS LF	614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL EACH	614.0390 STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL EACH	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	614.0515 GUARDRAIL STIFFENED LHW LF	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS EACH	SPV.0060.02 REPLACING GUARDRAIL POSTS AND BLOCKS - EAT EACH	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2350 MGS GUARDRAIL SHORT RADIUS LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH	SPV.0060.03 STEEL PLATE BEAM GUARD CONNECTION EACH
0010	226+40	-	229+50	LT	--	--	--	--	--	300	--	--	2	--	--	--	--	--	--
0010	226+50	-	228+00	RT	--	--	--	--	--	150	--	--	--	--	--	--	--	--	--
0010	269+85	-	271+60	LT	--	--	--	--	--	175	--	8	--	--	--	--	--	--	--
0010	305+15	-	306+00	LT	--	--	--	--	--	75	--	--	2	--	--	--	--	--	--
0010	310+00	-	313+00	LT	--	--	--	--	--	300	--	--	--	--	--	--	--	--	--
0010	321+11	-	322+51	LT	--	--	--	--	--	150	--	--	2	--	--	--	--	--	--
0010	321+73	-	322+23	RT	--	--	--	--	--	50	--	--	2	--	--	--	--	--	--
0010	323+83	-	324+83	LT	--	--	--	--	--	100	--	--	--	--	--	--	--	--	--
0010	326+36	-	328+86	RT	--	--	--	--	--	250	--	--	2	--	--	--	--	--	--
0010	338+50	-	341+65	LT	--	--	--	--	--	315	--	--	2	--	--	--	--	--	--
0010	428+45	-	429+70	LT	--	--	--	--	--	125	--	--	--	--	--	--	--	--	--
0010	426+54	-	432+25	RT	--	--	--	--	--	575	--	--	2	--	--	--	--	--	--
0010	432+25	-	434+25	RT	200	200	--	--	--	--	--	--	--	--	--	--	--	--	--
0010	434+25	-	437+70	RT	--	--	--	--	--	345	--	--	2	--	--	--	--	--	--
0010	445+20	-	445+85	LT	--	--	--	--	--	67	--	--	--	--	--	--	--	--	--
0010	445+25	-	445+85	RT	--	--	--	--	--	67	--	2	--	--	--	--	--	--	--
0010	447+63	-	448+42	LT	--	--	--	--	--	79	--	--	2	--	--	--	--	--	--
0010	447+64	-	453+22	RT	--	--	--	--	--	100	--	--	--	--	--	--	--	--	--
0010	450+34	-	451+47	LT	50	--	150	--	1	--	--	--	--	--	--	--	--	--	--
0010	451+22	-	458+59	LT	737	--	--	--	--	--	737	--	--	--	--	--	--	--	--
0010	453+74	-	458+18	RT	450	--	--	--	--	--	450	--	--	--	--	--	--	--	--
0010	458+18	-	460+10	RT	--	--	--	--	--	200	--	--	2	--	--	--	--	--	--
0010	458+59	-	460+35	LT	--	--	--	--	--	176	--	--	2	--	--	--	--	--	--
0010	619+87	-	620+71	RT	--	--	--	--	--	84	--	--	--	--	--	--	--	--	--
0010	620+19	-	625+11	LT	500	--	--	--	--	--	--	--	--	--	400	--	2	--	--
0010	620+71	-	622+47	RT	175	--	--	--	--	--	175	--	--	--	--	--	--	--	--
0010	622+47	-	622+97	RT	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
0010	668+17	-	670+40	LT	225	--	--	--	--	--	--	--	--	--	125	--	2	--	--
				SUBTOTAL 0010	2,337	200	150	1	1	3,683	1362	10	22	0	525	0	4	0	0

BEAM GUARD ITEMS (CONTINUED)

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	614.0305 STEEL PLATE BEAM GUARD CLASS A LF	614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS LF	614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL EACH	614.0390 STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL EACH	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	614.0515 GUARDRAIL STIFFENED LHW LF	614.0950 REPLACING GUARDRAIL POSTS AND BLOCKS EACH	SPV.0060.02 REPLACING GUARDRAIL POSTS AND BLOCKS- EAT EACH	614.2300 MGS GUARDRAIL 3 LF	614.2330 MGS GUARDRAIL 3 K LF	614.2350 MGS GUARDRAIL SHORT RADIUS LF	614.2610 MGS GUARDRAIL TERMINAL EAT EACH	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH	SPV.0060.03 STEEL PLATE BEAM GUARD CONNECTION EACH
0010	696+75	-	697+25	RT	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
0010	697+25	-	699+41	RT	50	--	--	--	--	--	215	--	--	--	--	--	--	--	--
0010	698+90	-	699+73	LT	--	--	--	--	--	83	--	--	2	--	--	--	--	--	--
0010	699+41	-	699+73	RT	--	--	--	--	--	32	--	--	--	--	--	--	--	--	--
0010	700+77	-	701+60	LT	--	--	--	--	--	83	--	--	--	--	--	--	--	--	--
0010	700+77	-	701+60	RT	--	--	--	--	--	83	--	--	--	--	--	--	--	--	--
0010	715+82	-	716+32	LT	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
0010	717+07	-	718+07	LT	--	--	--	--	--	25	--	--	--	--	--	--	--	--	--
0010	719+67	-	724+17	LT	--	--	--	--	--	200	--	--	--	--	--	--	--	--	--
0010	724+17	-	725+67	LT	50	--	--	--	--	--	150	--	--	--	--	--	--	--	--
0010	725+67	-	726+17	LT	--	--	--	1	--	--	--	--	--	--	--	--	--	--	--
0010	761+47	-	770+82	LT	100	--	--	1	--	--	885	--	--	--	--	--	--	--	--
0010	770+82	-	771+82	LT	--	--	--	--	--	100	--	--	--	--	--	--	--	--	--
0010	773+58	-	774+08	LT	--	--	--	--	--	50	--	--	--	--	--	--	--	--	--
0010	775+15	-	780+16	LT	--	--	--	--	--	500	--	--	--	--	--	--	--	--	--
0010	780+16	-	787+50	LT	100	--	--	--	--	--	734	--	--	--	--	--	--	--	1
0010	787+50	-	788+50	LT	--	--	--	--	--	100	--	--	--	--	--	--	--	--	--
0010	789+25	-	789+75	LT	--	--	--	--	--	50	--	--	--	--	--	--	--	--	--
0010	790+73	-	794+73	LT	--	--	--	1	--	350	--	--	--	--	--	--	--	--	--
0010	835+41	-	835+94	LT	--	--	--	--	--	--	--	--	--	--	--	--	1	--	--
0010	835+94	-	847+04	LT	615	--	--	--	--	--	--	--	--	--	1,110	--	--	--	--
0010	847+04	-	847+36	LT	--	--	--	--	--	--	--	--	--	--	--	46	--	1	--
0010	841+00	-	843+98	RT	--	--	--	1	--	100	--	--	--	--	--	--	--	--	--
0010	850+71	-	850+96	LT	--	--	52	--	1	--	--	--	--	--	--	--	--	--	--
0010	850+96	-	851+38	LT	50	--	--	--	--	--	42	--	--	--	--	--	--	--	--
0010	851+38	-	858+98	LT	--	--	--	--	--	750	--	--	--	--	--	--	--	--	--
0010	858+98	-	863+03	LT	50	--	74	--	1	--	368	--	--	--	--	--	--	--	--
0010	863+29	-	863+65	LT	--	--	--	--	--	--	--	--	--	--	--	61	--	1	--
0010	863+35	-	863+85	RT	--	--	--	--	--	50	--	--	--	--	--	--	--	--	--
0010	863+65	-	878+30	LT	612	--	--	--	--	--	--	--	--	--	1,463	--	--	--	--
0010	878+30	-	881+83	LT	350	--	--	--	--	--	--	--	--	100	200	--	1	--	--
				UNDISTRIBUTED	500	100	0	0	0	800	350	4	2	0	0	0	0	0	0
			SUBTOTAL 0010 (FROM PREVIOUS SHEET)		2,337	200	150	1	1	3,683	1,362	10	22	0	525	0	4	0	0
				SUBTOTAL 0010	2,477	100	126	6	2	3,356	2,744	4	4	100	2,773	107	2	2	1
				TOTAL 0010	4,814	300	276	7	3	7,039	4,106	14	26	100	3,298	107	6	2	1

EROSION CONTROL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	REMARKS
0010	204+87	-	204+87	STH 25 L/R	-	240	-	-	-	-	2	SEE NOTE (1)
0010	221+67	-	221+67	STH 25 R	-	-	-	-	-	-	2	
0010	240+35	-	240+35	STH 25 R	-	-	-	-	-	-	2	
0010	255+10	-	255+10	STH 25 R	-	-	-	-	-	-	8	
0010	260+95	-	261+00	STH 25 L/R	-	280	-	-	-	20	4	SEE NOTE (1)
0010	270+55	-	270+55	STH 25 L/R	-	-	-	-	-	-	3	
0010	272+51	-	272+59	STH 25 L/R	-	280	-	-	-	20	4	SEE NOTE (1)
0010	275+31	-	275+41	STH 25 L/R	-	200	-	-	-	20	6	SEE NOTE (1)
0010	285+22	-	285+22	STH 25 R	-	-	-	-	-	-	3	
0010	296+18	-	296+18	STH 25 R	-	-	-	-	-	-	2	
0010	303+75	-	305+72	STH 25 L	240	240	-	-	-	10	-	
0010	306+72	-	306+72	STH 25 R	-	-	-	-	-	-	2	
0010	326+70	-	326+70	STH 25 R	-	-	-	-	-	-	10	
0010	339+50	-	339+50	STH 25 R	-	-	-	-	-	-	3	
0010	341+07	-	342+79	STH 25 L	210	210	-	-	-	10	-	
0010	350+19	-	350+19	STH 25 R	-	-	-	-	-	-	2	
0010	357+24	-	357+24	STH 25 R	-	-	-	-	-	-	4	
0010	365+02	-	365+02	STH 25 R	-	-	-	-	-	-	4	
0010	376+33	-	376+38	STH 25 R	-	-	-	-	-	-	6	
0010	381+28	-	381+28	STH 25 R	-	-	-	-	-	-	3	
0010	388+64	-	388+73	STH 25 R	-	-	-	-	-	-	4	
0010	398+63	-	398+71	STH 25 R	-	-	-	-	-	-	4	
0010	408+58	-	408+58	STH 25 R	-	-	-	-	-	-	4	
0010	424+27	-	424+27	STH 25 R	-	-	-	-	-	-	2	
0010	432+81	-	432+81	STH 25 L/R	-	200	-	-	-	-	10	SEE NOTE (1)
0010	433+66	-	433+66	STH 25 L/R	-	200	-	-	-	-	10	SEE NOTE (1)
0010	436+60	-	438+65	STH 25 L/R	255	375	-	-	-	10	3	SEE NOTE (1)
0010	447+85	-	449+02	STH 25 L	160	160	-	-	-	10	-	
0010	451+94	-	451+94	STH 25 R	-	-	-	-	-	-	6	
0010	456+26	-	456+62	STH 25 L/R	-	175	-	-	-	-	-	SEE NOTE (1)
0010	459+32	-	459+32	STH 25 R	-	-	-	-	-	-	2	
0010	469+93	-	469+93	STH 25 R	-	-	-	-	-	-	2	
0010	474+18	-	474+18	STH 25 R	-	-	-	-	-	-	2	
0010	482+20	-	482+20	STH 25 R	-	-	-	-	-	-	2	
0010	489+54	-	489+54	STH 25 R	-	-	-	-	-	-	2	
0010	495+48	-	495+48	STH 25 R	-	-	-	-	-	-	2	
0010	505+88	-	505+88	STH 25 R	-	-	-	-	-	-	6	
0010	512+16	-	512+16	STH 25 L/R	-	180	-	-	-	-	6	SEE NOTE (1)
0010	557+52	-	557+52	STH 25 R	-	-	-	-	-	-	6	
0010	560+33	-	560+33	STH 25 L	-	180	-	-	-	-	6	SEE NOTE (1)
				SUB TOTAL 0010	865	2,920	0	0	0	100	149	

(1) MAINTAIN SILT FENCE PER HERP FENCE DETAIL

EROSION CONTROL ITEMS (CONTINUED)

CATEGORY	STATION	TO	STATION	LOCATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF	628.1905 MOBILIZATIONS EROSION CONTROL EACH	628.1910 MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	628.7005 INLET PROTECTION TYPE A EACH	628.7504 TEMPORARY DITCH CHECKS LF	628.7555 CULVERT PIPE CHECKS EACH	REMARKS
0010	584+50	-	584+50	STH 25 L/R	-	75	-	-	-	-	2	SEE NOTE (1)
0010	589+35	-	589+35	STH 25 R	-	-	-	-	-	-	2	
0010	619+66	-	620+70	STH 25 L/R	235	235	-	-	-	10	-	
0010	621+75	-	621+75	STH 25 R	-	-	-	-	-	-	10	
0010	622+31	-	626+09	STH 25 L/R	405	405	-	-	-	20	-	
0010	649+41	-	649+41	STH 25 R	-	-	-	-	-	-	6	
0010	662+45	-	662+45	STH 25 R	-	-	-	-	-	-	6	
0010	667+37	-	668+73	STH 25 L	185	185	-	-	-	10	-	
0010	669+33	-	669+33	STH 25 R	-	-	-	-	-	-	10	
0010	669+80	-	671+18	STH 25 L	175	175	-	-	-	10	-	
0010	696+17	-	697+25	STH 25 R	165	165	-	-	-	10	-	
0010	714+97	-	716+29	STH 25 L	175	175	-	-	-	10	-	
0010	718+86	-	718+86	STH 25 R	-	-	-	-	-	-	4	
0010	721+31	-	721+31	STH 25 R	-	-	-	-	-	-	3	
0010	724+17	-	727+32	STH 25 L	370	370	-	-	-	20	-	
0010	730+14	-	730+14	STH 25 R	-	-	-	-	-	-	4	
0010	735+21	-	735+21	STH 25 R	-	-	-	-	-	-	6	
0010	739+03	-	739+14	STH 25 R	-	-	-	-	-	-	12	
0010	746+59	-	746+59	STH 25 L/R	-	240	-	-	-	10	3	SEE NOTE (1)
0010	760+28	-	762+88	STH 25 L	205	205	-	-	-	10	-	
0010	771+16	-	771+16	STH 25 R	-	-	-	-	-	-	3	
0010	793+02	-	793+02	STH 25 R	-	-	-	-	-	-	3	
0010	794+31	-	796+09	STH 25 L	225	225	-	-	-	10	-	
0010	804+31	-	804+31	STH 25 L/R	-	120	-	-	-	10	3	SEE NOTE (1)
0010	808+26	-	808+26	STH 25 L/R	-	120	-	-	-	10	3	SEE NOTE (1)
0010	813+63	-	813+63	STH 25 L/R	-	120	-	-	-	10	2	SEE NOTE (1)
0010	820+52	-	820+52	STH 25 L/R	-	120	-	-	-	10	2	SEE NOTE (1)
0010	822+89	-	822+89	STH 25 R	-	-	-	-	-	-	6	
0010	834+50	-	836+00	STH 25 L	215	215	-	-	-	10	-	
0010	840+22	-	841+25	STH 25 R	155	155	-	-	-	10	-	
0010	861+14	-	861+14	STH 25 R	-	-	-	-	-	-	3	
0010	863+78	-	863+78	STH 25 R	-	-	-	-	-	-	4	
0010	866+64	-	866+64	STH 25 L/R	-	120	-	-	-	10	4	SEE NOTE (1)
0010	878+69	-	878+69	STH 25 L/R	-	200	-	-	1	10	-	SEE NOTE (1)
0010	881+38	-	881+38	STH 25 L/R	-	200	-	-	1	10	-	SEE NOTE (1)
0010	886+57	-	886+57	STH 25 R	-	-	-	-	-	-	3	
0010	892+89	-	892+89	STH 25 R	-	-	-	-	-	-	10	
0010	906+85	-	906+85	STH 25 R	-	-	-	-	-	-	10	
0010	200+83	-	910+95	STH 25	-	-	3	3	-	-	-	
				SUB TOTAL 0010	2,510	3,825	3	3	2	210	124	
				TOTAL 0010	3,375	6,745	3	3	2	310	273	

(1) MAINTAIN SILT FENCE PER HERP FENCE DETAIL

FINISHING MATERIALS

CATEGORY	STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	628.2006 EROSION MAT URBAN CLASS I TYPE A SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	630.0175 SEEDING MIXTURE NO. 75 LB	630.0400 SEEDING NURSE CROP LB	630.0500 SEED WATER MGAL
0010	204+63	-	205+13	LT & RT	160	160	0.1	4	--	--	4.4
0010	260+17	-	261+80	LT	165	165	0.1	4	--	--	4.6
0010	260+95	-	261+00	RT	220	220	0.1	6	--	--	6.1
0010	271+55	-	273+57	LT	195	195	0.1	5	--	--	5.4
0010	272+51	-	272+59	RT	260	260	0.2	7	--	--	7.2
0010	274+45	-	276+27	RT	165	165	0.1	4	--	--	4.6
0010	274+45	-	276+27	LT	175	175	0.1	5	--	--	4.9
0010	431+88	-	434+58	RT	295	295	0.2	7	1	1	8.2
0010	431+89	-	434+58	LT	335	335	0.2	8	1	1	9.3
0010	438+37	-	438+87	LT & RT	110	110	0.1	3	--	--	3.1
0010	456+26	-	456+62	LT & RT	150	150	0.1	4	--	--	4.2
0010	511+75	-	512+53	LT	150	150	0.1	4	--	--	4.2
0010	559+95	-	560+75	LT	150	150	0.1	4	--	--	4.2
0010	584+50	-	584+50	LT	30	30	0.1	1	--	--	0.8
0010	620+65	-	620+65	RT	55	55	0.1	1	--	--	1.5
0010	746+25	-	746+75	LT & RT	110	110	0.1	3	--	--	3.1
0010	804+08	-	804+58	LT	55	55	0.1	2	--	--	1.5
0010	808+03	-	808+53	LT	55	55	0.1	2	--	--	1.5
0010	813+38	-	813+88	RT	55	55	0.1	2	--	--	1.5
0010	820+28	-	820+78	LT	55	55	0.1	2	--	--	1.5
0010	866+42	-	866+92	LT	55	55	0.1	2	--	--	1.5
0010	877+76	-	879+64	LT	240	240	0.2	6	--	--	6.7
0010	877+77	-	879+67	RT	170	170	0.1	5	--	--	4.7
0010	880+30	-	881+19	LT	175	175	0.1	5	--	--	4.9
0010	880+78	-	882+43	RT	165	165	0.1	4	--	--	4.6
				TOTAL 0010	3,750	3,750	2.9	100	2	2	104.2

RIPRAP & GEOTEXTILE FABRIC

CATEGORY	STATION	TO	STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0130 GEOTEXTILE TYPE R SY
0010	456+35	-	456+35	STH 25 LT	3	12
0010	456+51	-	456+51	STH 25 RT	3	12
0010	620+64	-	620+64	STH 25 LT	3	12
0010	620+68	-	620+68	STH 25 RT	3	12
0010	668+63	-	668+63	STH 25 LT	3	12
0010	669+95	-	669+95	STH 25 LT	3	12
0010	813+63	-	813+65	STH 25 LT	3	12
0010	843+39	-	843+39	STH 25 LT	3	12
0010	863+00	-	863+61	STH 25 LT	6	24
0010	866+37	-	866+37	STH 25 LT	3	12
0010	878+70	-	878+70	STH 25 RT	3	12
0010	881+38	-	881+38	STH 25 RT	3	12
				TOTAL 0010	39	156

TRAFFIC CONTROL

CATEGORY	LOCATION	643.5000 TRAFFIC CONTROL EACH
0010	PROJECT	1
	TOTAL	1

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	WORK DAYS	643.0300 TRAFFIC CONTROL DRUMS EACH	643.0300 TRAFFIC CONTROL DRUMS DAY	643.0410 TRAFFIC CONTROL BARRICADES TYPE III EACH	643.0410 TRAFFIC CONTROL BARRICADES TYPE III DAY	643.0900 TRAFFIC CONTROL SIGNS EACH	643.0900 TRAFFIC CONTROL SIGNS DAY	643.1050 TRAFFIC CONTROL SIGNS PCMS EACH	643.1050 TRAFFIC CONTROL SIGNS PCMS DAY	REMARKS
0010	PROJECT	9	20	180	--	--	5	45	--	--	SHOULDER CLOSURE FOR HERP FENCE INSTALLATION
0010	PROJECT	7	--	--	--	--	--	--	2	14	ONE WEEK PRIOR TO CONSTRUCTION
0010	PROJECT	6	25	150	2	12	--	--	--	--	CULVERT REPLACEMENTS
0010	PROJECT	68	--	--	--	--	47	3,196	--	--	
		TOTAL 0010		330		12		3,241		14	

MARKERS CULVERT END

CATEGORY	STATION	LOCATION	633.5200 MARKERS CULVERT END EACH
0010	255+10	STH 25 RT	1
0010	261+00	STH 25 LT/RT	2
0010	270+55	STH 25 LT/RT	2
0010	272+58	STH 25 LT/RT	2
0010	275+40	STH 25 LT/RT	2
0010	285+22	STH 25 RT	1
0010	339+50	STH 25 RT	1
0010	350+20	STH 25 LT/RT	2
0010	424+27	STH 25 LT	1
0010	432+81	STH 25 LT/RT	2
0010	433+66	STH 25 LT/RT	2
0010	438+60	STH 25 LT	1
0010	459+32	STH 25 LT/RT	2
0010	473+74	STH 25 RT	1
0010	482+20	STH 25 RT	1
0010	489+52	STH 25 LT/RT	2
0010	495+48	STH 25 LT/RT	2
0010	505+88	STH 25 RT	1
0010	512+17	STH 25 RT	1
0010	584+49	STH 25 LT/RT	2
0010	589+35	STH 25 RT	1
0010	721+32	STH 25 RT	1
0010	730+14	STH 25 LT/RT	2
0010	746+59	STH 25 RT	1
0010	771+16	STH 25 RT	1
0010	793+02	STH 25 LT/RT	2
0010	804+31	STH 25 RT	1
0010	808+27	STH 25 LT	1
0010	822+90	STH 25 LT/RT	2
0010	863+79	STH 25 LT/RT	2
0010	878+70	STH 25 LT/RT	2
0010	881+38	STH 25 LT/RT	2
0010	892+89	STH 25 LT	1
0010	906+86	STH 25 LT	1
		TOTAL 0010	51

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PAVEMENT MARKING

CATEGORY	STATION	TO	STATION	LOCATION	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (YELLOW) LF	646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) LF	646.4040 MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE) LF	646.6120 MARKING STOP LINE EPOXY 18-INCH (WHITE) LF	646.7120 MARKING DIAGONAL EPOXY 12-INCH (WHITE) LF	# 643.3165 TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) LF	REMARKS
0010	200+83	-	201+49	CL	--	--	126	34	30	--	
0010	200+91	-	910+95	CL	78,225	--	--	--	--	139,692	
0010	201+37	-	241+04	LT	--	3,970	--	--	--	--	
0010	201+74	-	241+00	RT	--	3,926	--	--	--	--	
0010	241+70	-	300+04	RT	--	5,829	--	--	--	--	
0010	241+92	-	449+75	LT	--	20,788	--	--	--	--	
0010	300+77	-	312+82	RT	--	1,205	--	--	--	--	
0010	313+47	-	439+32	RT	--	12,586	--	--	--	--	
0010	438+20	-	439+32	RT	--	--	112	--	--	--	
0010	440+83	-	473+00	RT	--	3,222	--	--	--	--	
0010	450+54	-	606+12	LT	--	15,557	--	--	--	--	
0010	472+12	-	473+00	RT	--	--	89	--	--	--	
0010	474+27	-	514+20	RT	--	3,993	--	--	--	--	
0010	515+17	-	566+49	RT	--	5,133	--	--	--	--	
0010	567+81	-	632+86	RT	--	6,505	--	--	--	--	
0010	606+79	-	684+71	LT	--	7,794	--	--	--	--	
0010	633+67	-	689+35	RT	--	5,571	--	--	--	--	
0010	685+62	-	910+95	LT	--	22,542	--	--	--	--	
0010	687+62	-	689+35	RT	--	--	174	--	--	--	
0010	690+56	-	756+22	RT	--	6,567	--	--	--	--	
0010	757+37	-	807+16	RT	--	4,966	--	--	--	--	
0010	808+17	-	838+76	RT	--	3,064	--	--	--	--	
0010	839+68	-	860+03	RT	--	2,037	--	--	--	--	
0010	860+56	-	908+83	RT	--	4,823	--	--	--	--	
0010	909+26	-	910+95	RT	--	169	--	--	--	--	
				SUBTOTAL	78,225	140,247	501	34	30	139,692	
				PROJECT TOTAL	218,472		501	34	30	139,692	

- FOR APPLICATION OF CENTERLINE ON LOWER LAYER OF HMA BEFORE UPPER LAYER OF HMA IS PAVED AND FOR APPLICATION OF CENTERLINE ON UPPER LAYER OF HMA PRIOR TO CENTERLINE RUMBLESTRIP INSTALLATION

3

CONSTRUCTION STAKING

CATEGORY	STATION	TO	STATION	LOCATION	650.6000 CONSTRUCTION STAKING PIPE CULVERTS EACH	650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE LF	650.9911 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (PROJECT) (01. 1540-02-76) EACH	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF
0010	200+83	-	910+95	STH 25	13	71,600	1	5,050
				TOTAL 0010	13	71,600	1	5,050

SAWING ASPHALT

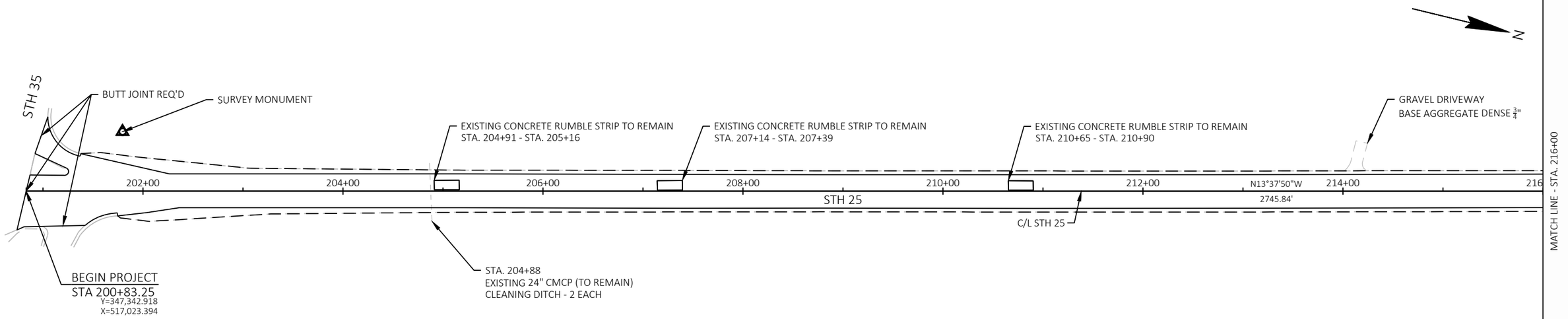
CATEGORY	STATION	TO	STATION	LOCATION	690.0150 SAWING ASPHALT LF
0010	260+97	-	261+00	STH 25	60
0010	272+54	-	272+58	STH 25	60
0010	275+33	-	275+40	STH 25	60
0010	432+81	-	432+81	STH 25	60
0010	433+66	-	433+66	STH 25	60
0010	450+94	-	451+47	STH 25	54
0010	622+81	-	623+43	STH 25	56
0010	698+82	-	699+40	STH 25	58
0010	724+17	-	724+73	STH 25	57
0010	770+24	-	770+82	STH 25	58
0010	780+16	-	780+76	STH 25	60
0010	786+88	-	787+50	STH 25	62
0010	840+74	-	841+28	STH 25	54
0010	846+44	-	847+04	STH 25	59
0010	850+79	-	851+38	STH 25	59
0010	858+98	-	859+58	STH 25	60
0010	864+26	-	864+97	STH 25	70
0010	870+03	-	870+79	STH 25	76
0010	878+14	-	878+82	STH 25	69
0010	878+70	-	878+70	STH 25	70
0010	881+38	-	881+38	STH 25	70
				TOTAL 0010	1,291

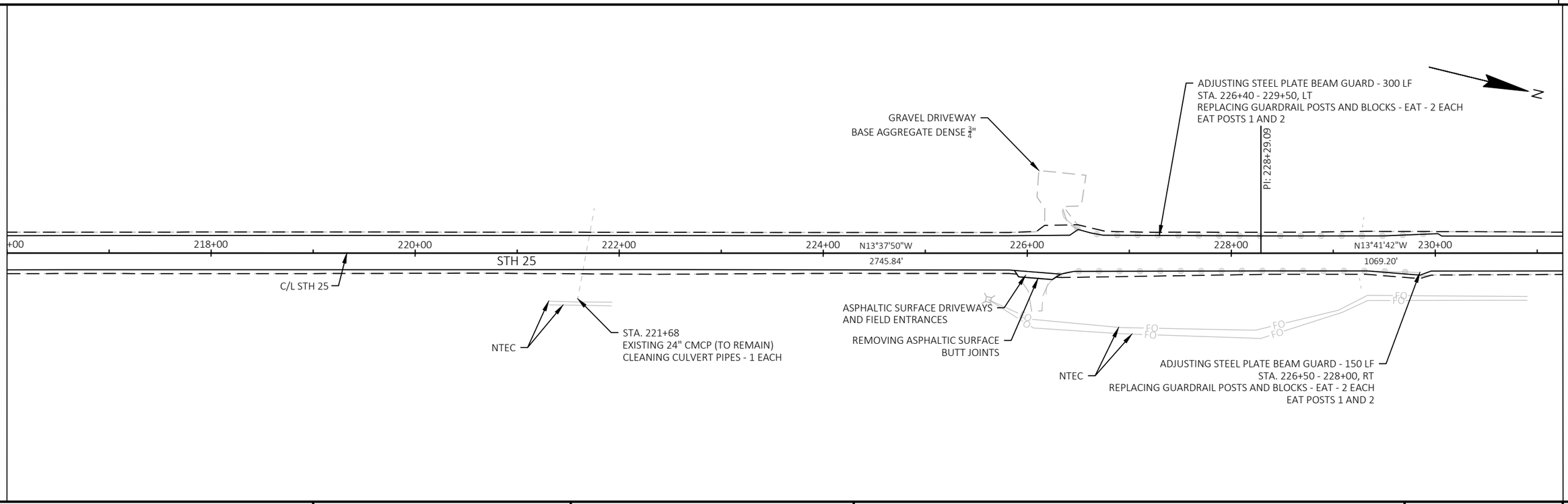
CLEANING DITCH

CATEGORY	STATION	LOCATION	SPV.0060 SPECIAL (01. CLEANING DITCH) EACH
0010	204+88	STH 25 LT/RT	2
0010	260+97	STH 25 RT	1
0010	272+58	STH 25 RT	1
0010	438+60	STH 25 LT	1
0010	746+59	STH 25 LT/RT	2
0010	804+31	STH 25 LT	1
0010	808+27	STH 25 LT	1
0010	813+63	STH 25 RT	1
0010	820+53	STH 25 LT	1
0010	866+65	STH 25 LT	1
		TOTAL 0010	12

LEGEND

GRADING AT BEAMGUARD EAT





PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 55	E

LEGEND

GRADING AT BEAMGUARD EAT

MATCH LINE - STA. 231+25

MATCH LINE - STA. 246+50

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STA. 240+36
EXISTING 24" CMCP (TO REMAIN)
CLEANING CULVERT PIPES - 1 EACH

REMOVING ASPHALTIC SURFACE BUTT JOINTS, 37' LT

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

C/L STH 25

232+00 234+00 N13°41'42"W 1069.20' 236+00 238+00 240+00 242+00 244+00 N13°34'51"W 949.92' 246+00

STH 25

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

REMOVING ASPHALTIC SURFACE BUTT JOINTS

PI: 238+98.29

NTEC

RIVERLAND ENERGY COOPERATIVE

REMOVING ASPHALTIC SURFACE BUTT JOINTS, 141' RT, MATCH EXISTING JOINT

DRY COULEE RD

5

5

MATCH LINE - STA. 246+50

MATCH LINE - STA. 261+75

RIVERLAND ENERGY COOPERATIVE

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

NTEC

PI: 260+24.85

PI: 248+48.21

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

C/L STH 25

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

N13°34'51"W 248+00 250+00 252+00 N13°46'48"W 254+00 256+00 258+00 260+00 N13°34'51"W

949.92' STH 25 1176.64' 2184.63'

STA. 255+10
EXISTING 54" CMCP CONNECTED TO BOX (TO REMAIN)
MARKERS CULVERT END - 1 EACH (RT)

STA. 260+97
EXISTING 24" CMCP
REMOVE SMALL PIPE CULVERTS - 1 EACH
CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH - 36 LF
APRON ENDWALLS FOR CULVERT PIPE 24-INCH - 2 EACH
CLEANING DITCH - 1 EACH (RT)
JOINT TIES ON ALL JOINTS OF CONCRETE PIPE

NTEC

STA. 261+00
EXISTING 24" CMCP
REMOVE SMALL PIPE CULVERTS - 1 EACH
CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH - 36 LF
APRON ENDWALLS FOR CULVERT PIPE 24-INCH - 2 EACH
MARKERS CULVERT END - 2 EACH
JOINT TIES ON ALL JOINTS OF CONCRETE PIPE

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 56	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050102-pn

PLOT DATE : 8/1/2023 9:25 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

LEGEND

GRADING AT BEAMGUARD EAT

MATCH LINE - STA. 261+75

MATCH LINE - STA. 277+00

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

RIVERLAND ENERGY COOPERATIVE

NTEC

REPLACING GUARDRAIL POSTS AND BLOCKS - 8 EACH
ADJUSTING STEEL PLATE BEAM GUARD - 175 LF
STA. 269+85 - 271+60, LT

STA. 272+53
EXISTNG 24" CMCP
REMOVE SMALL PIPE CULVERTS - 1 EACH
CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH - 45 LF
APRON ENDWALLS FOR CULVERT PIPE 24-INCH - 2 EACH
JOINT TIES ON ALL JOINTS OF CONCRETE PIPE

STA. 275+36
EXISTING 24" CMCP
REMOVE SMALL PIPE CULVERTS - 1 EACH
CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH - 41 LF
APRON ENDWALLS FOR CULVERT PIPE 24-INCH - 2 EACH
JOINT TIES ON ALL JOINTS OF CONCRETE PIPE

262+00 264+00 266+00 268+00 270+00 272+00 274+00 276+00

N13°38'34"W
2144.63'

STH 25

C/L STH 25

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

STA. 270+55
EXISTING 30" CMCP (TO REMAIN)
MARKERS CULVERT END - 2 EACH

STA. 272+58
EXISTING 24" CMCP
REMOVE SMALL PIPE CULVERTS - 1 EACH
CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH - 45 LF
APRON ENDWALLS FOR CULVERT PIPE 24-INCH - 2 EACH
CLEANING DITCH - 1 EACH (RT)
MARKERS CULVERT END - 2 EACH
JOINT TIES ON ALL JOINTS OF CONCRETE PIPE

STA. 275+31
EXISTING 24" CMCP
REMOVE SMALL PIPE CULVERTS - 1 EACH
CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH - 41 LF
APRON ENDWALLS FOR CULVERT PIPE 24-INCH - 2 EACH
JOINT TIES ON ALL JOINTS OF CONCRETE PIPE

STA. 275+41
EXISTING 24" CMCP
REMOVE SMALL PIPE CULVERTS - 1 EACH
CULVERT PIPE REINFORCED CONCRETE CLASS IV 24-INCH - 41 LF
APRON ENDWALLS FOR CULVERT PIPE 24-INCH - 2 EACH
MARKERS CULVERT END - 2 EACH
JOINT TIES ON ALL JOINTS OF CONCRETE PIPE

NTEC

N

PI: 288+48.33

RIVERLAND ENERGY COOPERATIVE

PC: 281+69.48

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

C/L STH 25

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

278+00 280+00 282+00 284+00 286+00 288+00 290+00 292+00

N13°38'34"W
2144.63'

STH 25

STA. 285+22
EXISTING 30" CMCP (TO REMAIN)
CLEANING CULVERT PIPES - 1 EACH
MARKERS CULVERT END - 1 EACH (RT)

CURVE 1

CURVE 1
PI STA = 288+48.33
Y = 355860.176
X = 514953.876
DELTA = 26°39'45" RT
D = 2°00'00"
T = 678.86'
L = 1333.12'
R = 2864.79'
PC STA = 281+69.48
Y = 355200.475
X = 515113.997
PT STA = 295+02.60
Y = 356521.580
X = 515106.811
DB = N13°38'34"W
DA = N13°01'10"E

MATCH LINE - STA. 277+00

MATCH LINE - STA. 292+25

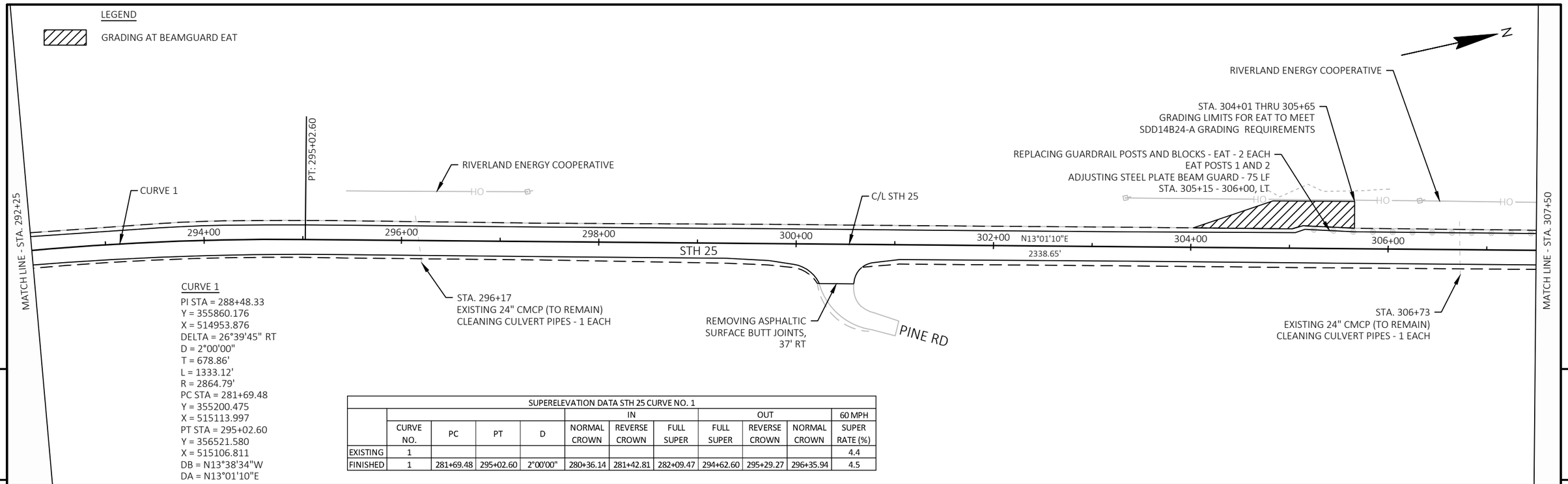
SUPERELEVATION DATA STH 25 CURVE NO. 1												
					IN			OUT				60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN		SUPER RATE (%)
EXISTING	1											4.4
FINISHED	1	281+69.48	295+02.60	2°00'00"	280+36.14	281+42.81	282+09.47	294+62.60	295+29.27	296+35.94		4.5

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 57	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050103-pn

PLOT DATE : 8/1/2023 9:26 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

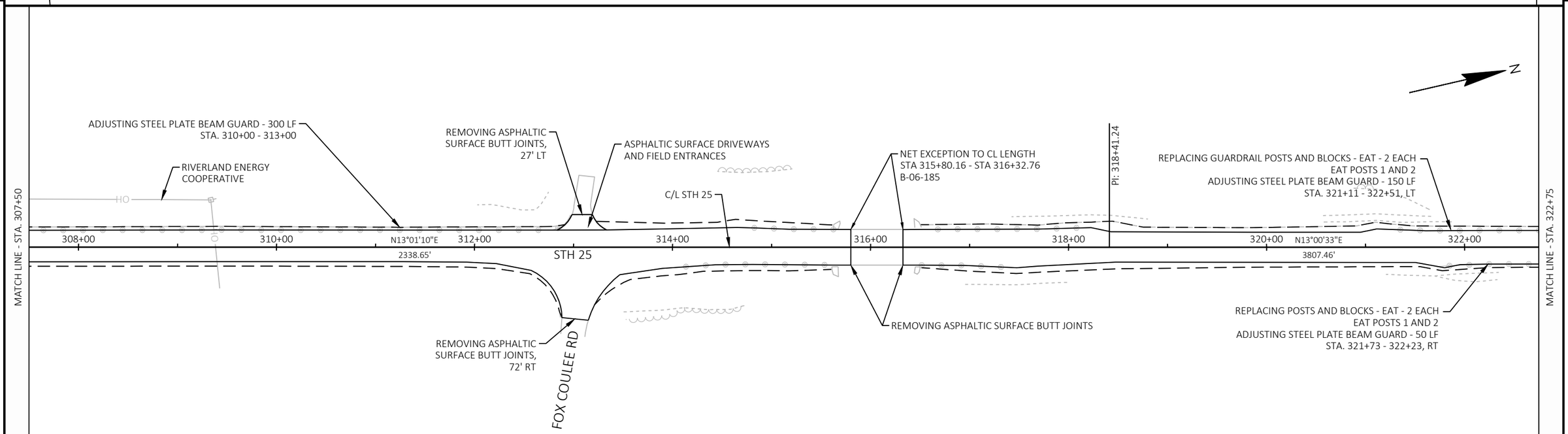


CURVE 1

PI STA = 288+48.33
Y = 355860.176
X = 514953.876
DELTA = 26°39'45" RT
D = 2°00'00"
T = 678.86'
L = 1333.12'
R = 2864.79'
PC STA = 281+69.48
Y = 355200.475
X = 515113.997
PT STA = 295+02.60
Y = 356521.580
X = 515106.811
DB = N13°38'34"W
DA = N13°01'10"E

SUPERELEVATION DATA STH 25 CURVE NO. 1

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	1										4.4
FINISHED	1	281+69.48	295+02.60	2°00'00"	280+36.14	281+42.81	282+09.47	294+62.60	295+29.27	296+35.94	4.5



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 58	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050104-pn
PLOT DATE : 8/1/2023 9:26 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

GRADING AT BEAMGUARD EAT

MATCH LINE - STA. 322+75

ADJUSTING STEEL PLATE BEAM GUARD - 100 LF
STA. 323+83 - 324+83, LT

324+00 326+00 328+00 330+00 332+00 334+00 336+00 338

C/L STH 25

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

REMOVING ASPHALTIC SURFACE BUTT JOINTS

N13°00'33"E 3807.46'

STH 25

STA. 326+71
EXISTING 72" CMCP (TO REMAIN)

REPLACING GUARDRAIL POSTS AND BLOCKS - EAT - 2 EACH
ADJUSTING STEEL PLATE BEAM GUARD - 250 LF
STA. 326+36 - 328+86, RT

MATCH LINE - STA. 338+00

5

5

MATCH LINE - STA. 338+00

REPLACING GUARDRAIL POSTS AND BLOCKS - EAT - 2 EACH
EAT POSTS 1 AND 2
ADJUSTING STEEL PLATE BEAM GUARD - 315 LF
STA. 338+50 - 341+65, LT

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

STA. 341+10 - 342+62
GRADING LIMITS FOR EAT TO MEET
SDD14B24-A GRADING REQUIREMENTS

RIVERLAND ENERGY COOPERATIVE

RIVERLAND ENERGY COOPERATIVE

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

REMOVING ASPHALTIC SURFACE BUTT JOINTS

HO

C/L STH 25

+00 340+00 342+00 344+00 346+00 348+00 350+00 352+00

N13°00'33"E 3807.46'

STH 25

STA. 339+50
EXISTING 30" CMCP (TO REMAIN)
MARKERS CULVERT END - 1 EACH (RT)

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

STA. 350+20
EXISTING 24" CMCP (TO REMAIN)
MARKERS CULVERT END - 2 EACH
CLEANING CULVERT PIPES - 1 EACH

NTEC

MATCH LINE - STA. 353+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 59	E

LEGEND

GRADING AT BEAMGUARD EAT

N

MATCH LINE - STA. 353+25

PI: 356+48.70

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

RIVERLAND ENERGY COOPERATIVE

OH

C/L STH 25

RIVERLAND ENERGY COOPERATIVE

OH

354+00 N13°00'33"E 356+00 358+00 360+00 362+00 364+00 366+00 N13°03'29"E 368+00

3807.46' 2808.31'

STH 25

NTEC

STA. 357+24
EXISTING 36" CMCP (TO REMAIN)
CLEANING CULVERT PIPES - 1 EACH

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

REMOVING ASPHALTIC
SURFACE BUTT JOINTS

STA. 365+03
EXISTING 36" CMCP (TO REMAIN)

NTEC

MATCH LINE - STA. 368+50

5

5

N

MATCH LINE - STA. 368+50

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

C/L STH 25

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

RIVERLAND ENERGY COOPERATIVE

OH

370+00 N13°03'29"E 372+00 374+00 376+00 378+00 380+00 382+00

2808.31'

STH 25

STA. 376+34
EXISTING 30" CMCP (TO REMAIN)
CLEANING CULVERT PIPES - 1 EACH

STA. 376+38
EXISTING 30" CMCP (TO REMAIN)
CLEANING CULVERT PIPES - 1 EACH

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

NTEC

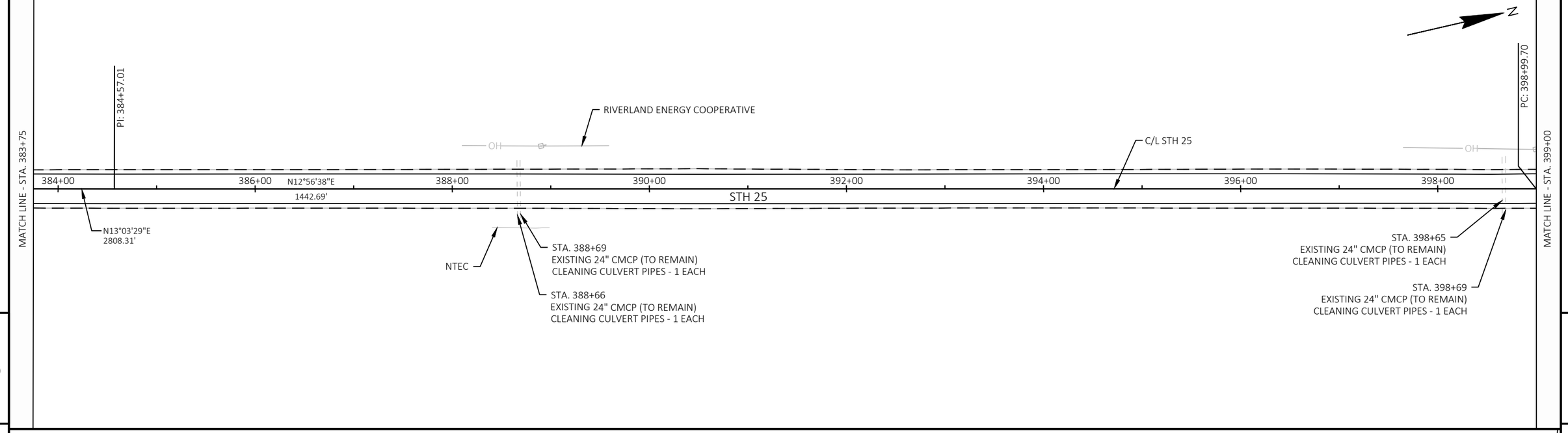
STA. 381+28
EXISTING 30" CMCP (TO REMAIN)

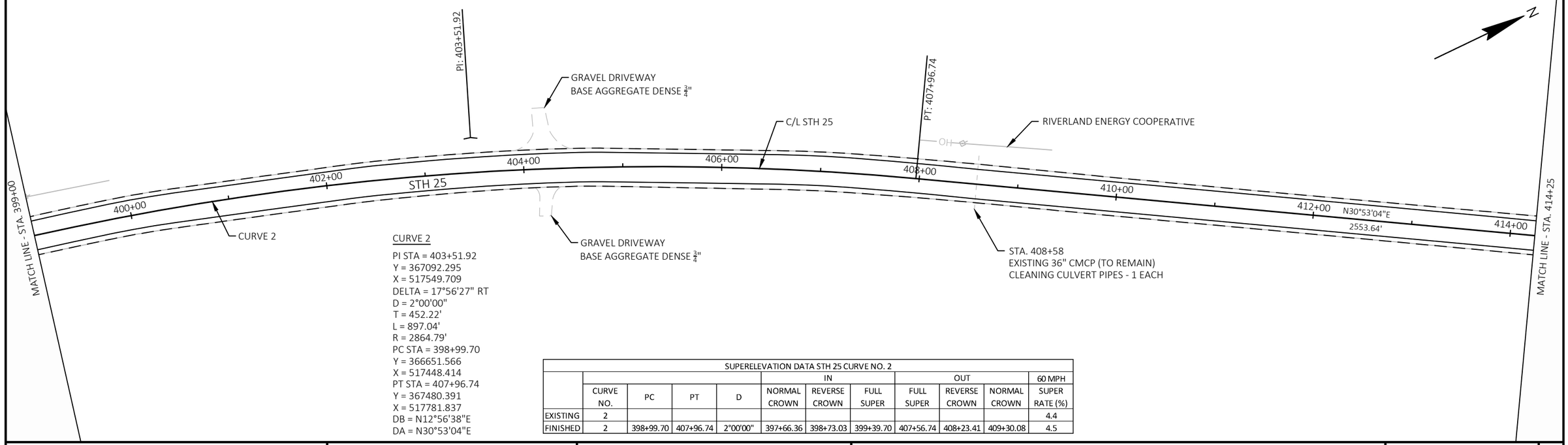
MATCH LINE - STA. 383+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 60	E

LEGEND

GRADING AT BEAMGUARD EAT





CURVE 2

PI STA = 403+51.92
Y = 367092.295
X = 517549.709
DELTA = 17°56'27" RT
D = 2°00'00"
T = 452.22'
L = 897.04'
R = 2864.79'
PC STA = 398+99.70
Y = 366651.566
X = 517448.414
PT STA = 407+96.74
Y = 367480.391
X = 517781.837
DB = N12°56'38"E
DA = N30°53'04"E

SUPERELEVATION DATA STH 25 CURVE NO. 2											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	2										4.4
FINISHED	2	398+99.70	407+96.74	2°00'00"	397+66.36	398+73.03	399+39.70	407+56.74	408+23.41	409+30.08	4.5

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 61	E

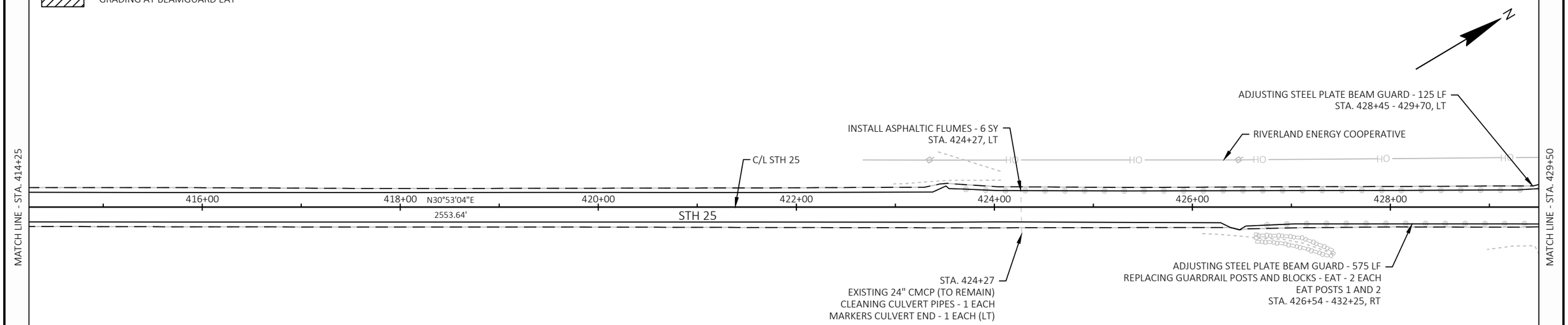
FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050107-pn

PLOT DATE : 8/1/2023 9:26 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

GRADING AT BEAMGUARD EAT

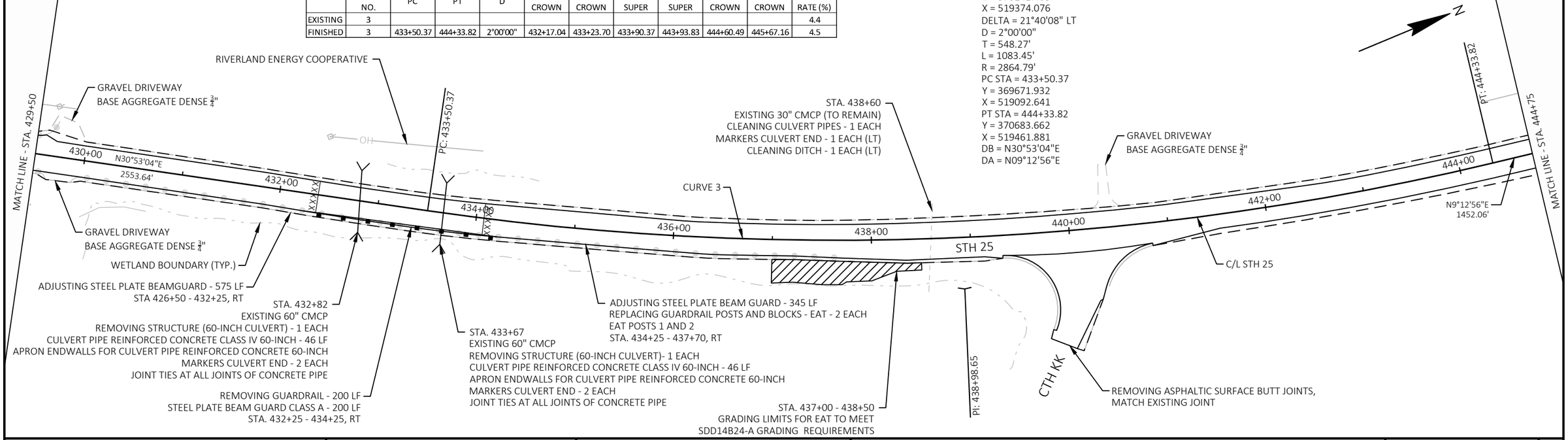


5

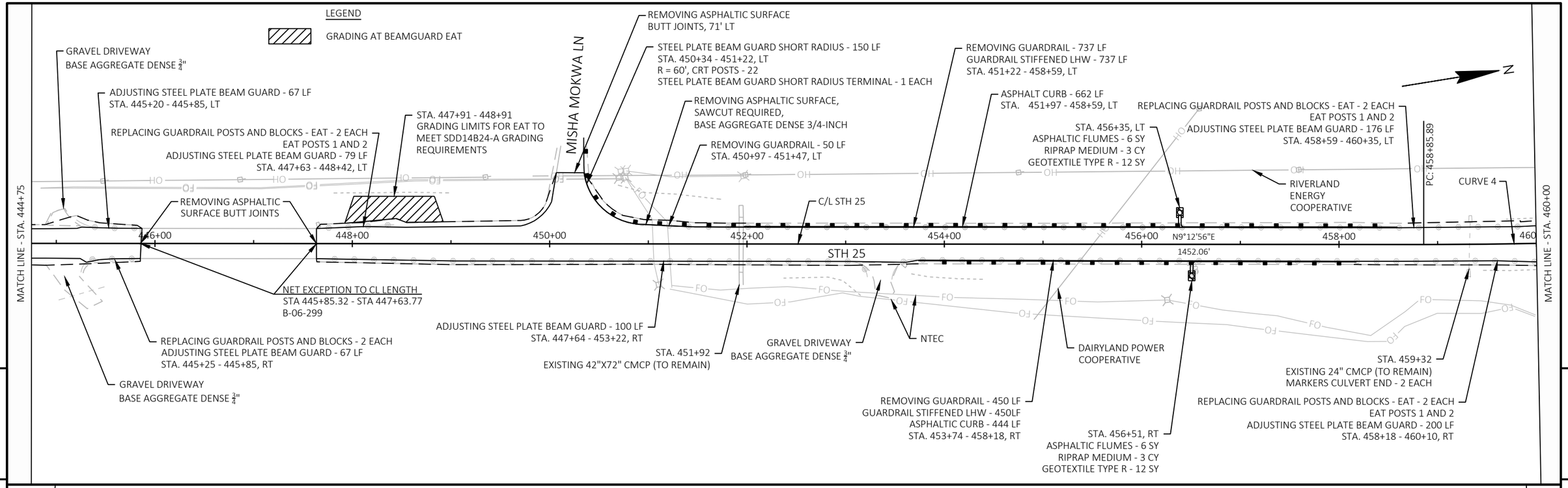
5

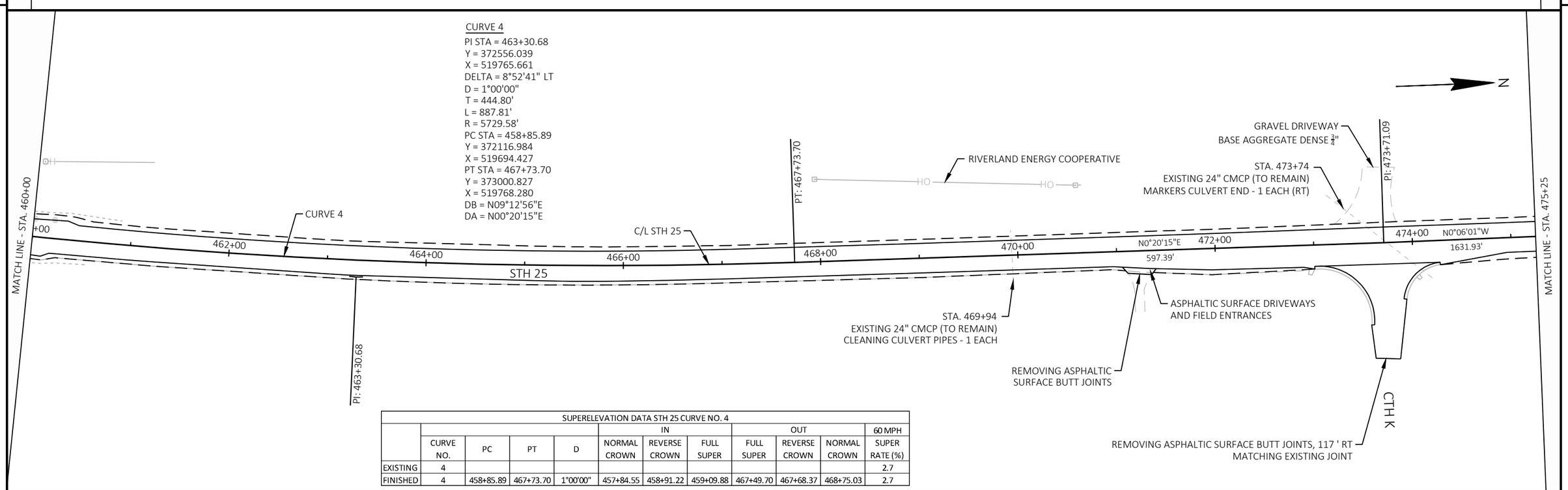
SUPERELEVATION DATA STH 25 CURVE NO. 3											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	3										4.4
FINISHED	3	433+50.37	444+33.82	2°00'00"	432+17.04	433+23.70	433+90.37	443+93.83	444+60.49	445+67.16	4.5

CURVE 3
PI STA = 438+98.65
Y = 370142.463
X = 519374.076
DELTA = 21°40'08" LT
D = 2°00'00"
T = 548.27'
L = 1083.45'
R = 2864.79'
PC STA = 433+50.37
Y = 369671.932
X = 519092.641
PT STA = 444+33.82
Y = 370683.662
X = 519461.881
DB = N30°53'04"E
DA = N09°12'56"E



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 62	E





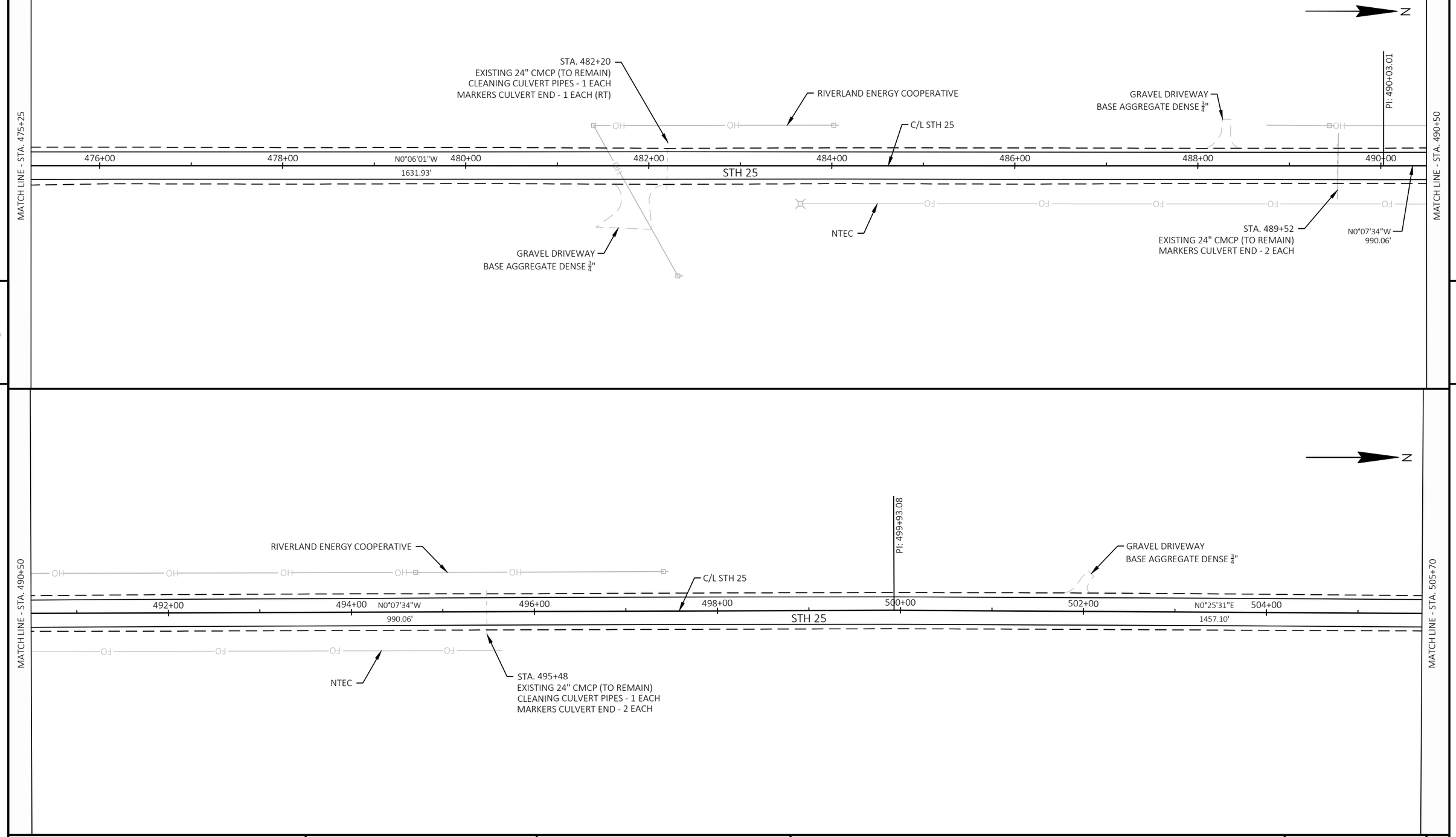
SUPERELEVATION DATA STH 25 CURVE NO. 4											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	4										2.7
FINISHED	4	458+85.89	467+73.70	1°00'00"	457+84.55	458+91.22	459+09.88	467+49.70	467+68.37	468+75.03	2.7

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 63	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050109-pn
PLOT DATE : 8/1/2023 9:26 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44

LEGEND

GRADING AT BEAMGUARD EAT



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 64	E

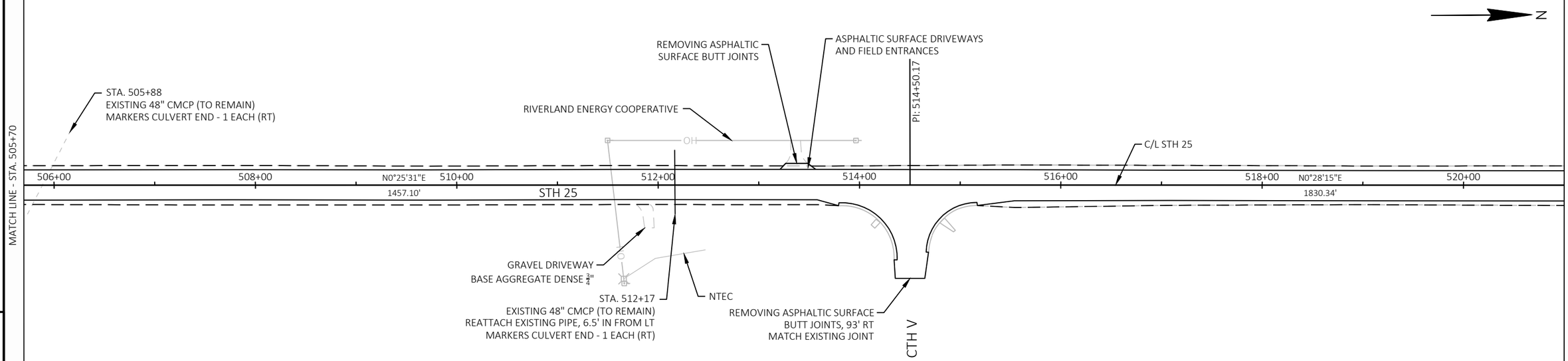
FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050110-pn

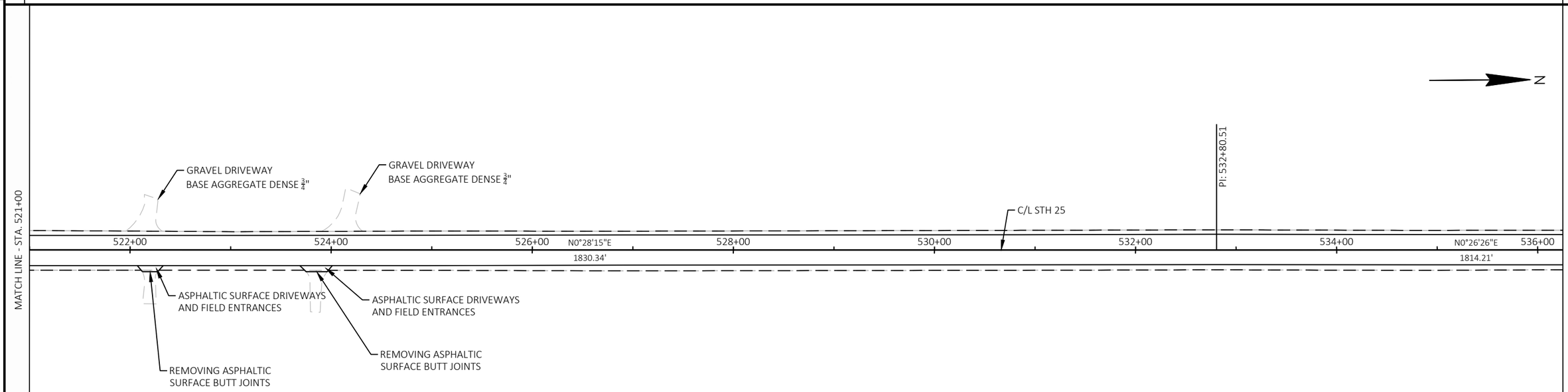
PLOT DATE : 8/1/2023 9:26 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

GRADING AT BEAMGUARD EAT

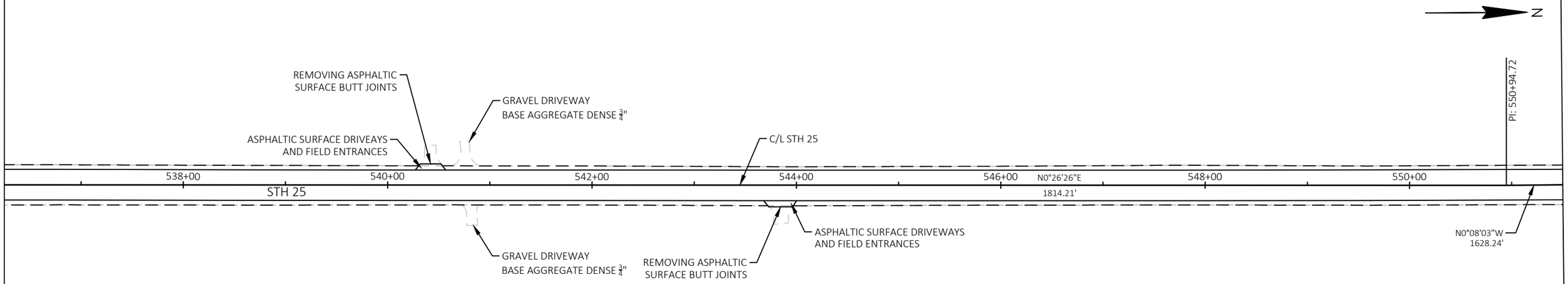


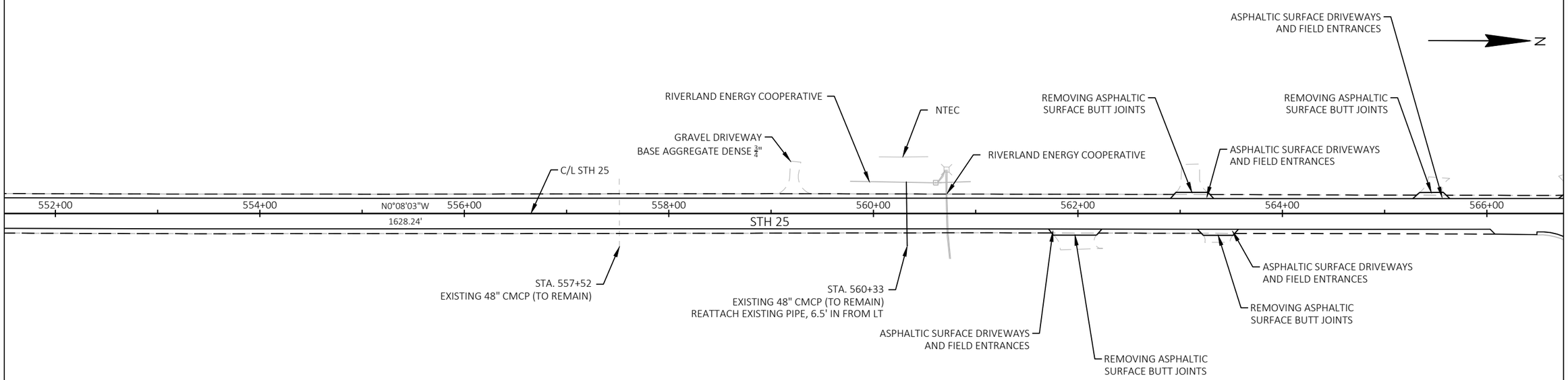


PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 65	E

LEGEND

GRADING AT BEAMGUARD EAT





PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 66	E

LEGEND

GRADING AT BEAMGUARD EAT

N

REMOVING ASPHALTIC SURFACE BUTT JOINTS

PI: 567+22.96

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

PI: 581+25.66

C/L STH 25

MATCH LINE - STA. 566+75

568+00 | 570+00 | 572+00 | N0°06'16"E 1402.70' | 574+00 | 576+00 | 578+00 | 580+00 | 582

STH 25

MATCH LINE - STA. 582+00

N0°08'03"W 1628.24'

GRAVEL DRIVEWAY BASE AGGREGATE DENSE $\frac{3}{4}$"

N0°24'02"E 786.20'

GRAVEL DRIVEWAY BASE AGGREGATE DENSE $\frac{3}{4}$"

KINGS HWY

REMOVING ASPHALTIC SURFACE BUTT JOINTS, 112' RT MATCH EXISTING JOINT

SENSITIVE AREA, ARCHAEOLOGICAL PROTECTION PRECAUTION REQUIRED

5

5

N

STA. 584+49
EXISTING 20"X27" CMCP
REMOVE 10' FROM LEFT SIDE
REATTACH EXISTING PIPE, 6.5' IN FROM LT
CLEANING CULVERT PIPES - 1 EACH
MARKERS CULVERT END - 2 EACH

RIVERLAND ENERGY COOPERATIVE

NTEC

PI: 589+11.86

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

C/L STH 25

MATCH LINE - STA. 582+00

+00 | N0°24'02"E 786.20' | 584+00 | 586+00 | 588+00 | 590+00 | 592+00 | 594+00 | N0°33'25"E 1739.40' | 596+00

STH 25

MATCH LINE - STA. 597+25

STA. 589+35
EXISTING 20"X27" CMCP (TO REMAIN)
MARKERS CULVERT END - 1 EACH (RT)
CLEANING CULVERT PIPES - 1 EACH

SENSITIVE AREA, ARCHAEOLOGICAL PROTECTION PRECAUTION REQUIRED

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 67	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050113-pn

PLOT DATE : 8/23/2023 8:58 AM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

LEGEND

GRADING AT BEAMGUARD EAT

N

AIRPORT RD

REMOVING ASPHALTIC SURFACE BUTT JOINTS, 56' LT

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

C/L STH 25

MATCH LINE - STA. 597+25

598+00 600+00 602+00 N0°33'25"E 604+00 606+00 608+00 610+00 N0°30'21"E 612+00

STH 25

1739.40' 1377.98'

PI: 606+51.26

GRAVEL DRIVEWAY BASE AGGREGATE DENSE $\frac{3}{4}$"

MATCH LINE - STA. 612+50

5

5

STA. 620+19 - 625+11, LT
REMOVING GUARDRAIL - 500 LF
MGS GUARDRAIL 3 K - 400 LF
ASPHALT CURB - 212 LF
MGS GUARDRAIL TERMINAL EAT - 2 EACH

REMOVE ASPHALTIC SURFACE, SAWCUT REQUIRED
BASE AGGREGATE DENSE 3/4-INCH

N

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

REMOVING ASPHALTIC SURFACE BUTT JOINTS

ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES

STA. 619+73 - 620+57
GRADING LIMITS FOR EAT TO MEET SDD14B44-A GRADING REQUIREMENTS

STA. 620+64, LT
ASPHALTIC FLUMES - 6 SY
RIPRAP MEDIUM - 3 CY
GEOTEXTILE TYPE R - 12 SY

PI: 620+29.23

NTEC

RIVERLAND ENERGY COOPERATIVE

STA. 624+61 - 626+09
GRADING LIMITS FOR EAT TO MEET SDD14B44-A GRADING REQUIREMENTS

C/L STH 25

MATCH LINE - STA. 612+50

614+00 616+00 N0°30'21"E 618+00 620+00 622+00 624+00 626+00 N0°33'33"E

STH 25

1377.98' 1284.21'

MATCH LINE - STA. 627+75

ADJUSTING STEEL PLATE BEAM GUARD - 84 LF
STA. 619+87 - 620+71, RT

STA. 620+68, RT
ASPHALTIC FLUMES - 6 SY
RIPRAP MEDIUM - 3 CY
GEOTEXTILE TYPE R - 12 SY

REMOVING GUARDRAIL - 175 LF
GUARDRAIL STIFFENED LHW - 175 LF
ASPHALT CURB - 177 LF
STA. 620+71 - 622+47, RT

STA. 621+75
EXISTING 72" CMCP
(TO REMAIN)

STA. 622+36 - 623+70
GRADING LIMITS FOR EAT TO MEET SDD14B24-A GRADING REQUIREMENTS

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL - 1 EACH
STA. 622+47 - 622+97, RT

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 68	E

LEGEND

GRADING AT BEAMGUARD EAT

N

MATCH LINE - STA. 627+75

PI: 633+13.44

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

C/L STH 25

PI: 642+06.53

628+00 630+00 632+00 634+00 636+00 638+00 640+00 642+00

N0°33'33"E 1284.21'

N0°33'22"E 893.08'

N0°42'27"E 2056.63'

STH 25

REMOVING ASPHALTIC
SURFACE BUTT
JOINTS, 37' RT

STAI COULEE RD

MATCH LINE - STA. 643+00

5

5

N

MATCH LINE - STA. 643+00

GRAVEL DRIVEWAY
BASE AGGREGATE DENSE $\frac{3}{4}$"

C/L STH 25

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

644+00 646+00 648+00 650+00 652+00 654+00 656+00 658+00

N0°42'27"E 2056.63'

STH 25

REMOVING ASPHALTIC
SURFACE BUTT JOINT

ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

STA. 649+41
EXISTING 48" CMCP (TO REMAIN)

REMOVING ASPHALTIC
SURFACE BUTT JOINT

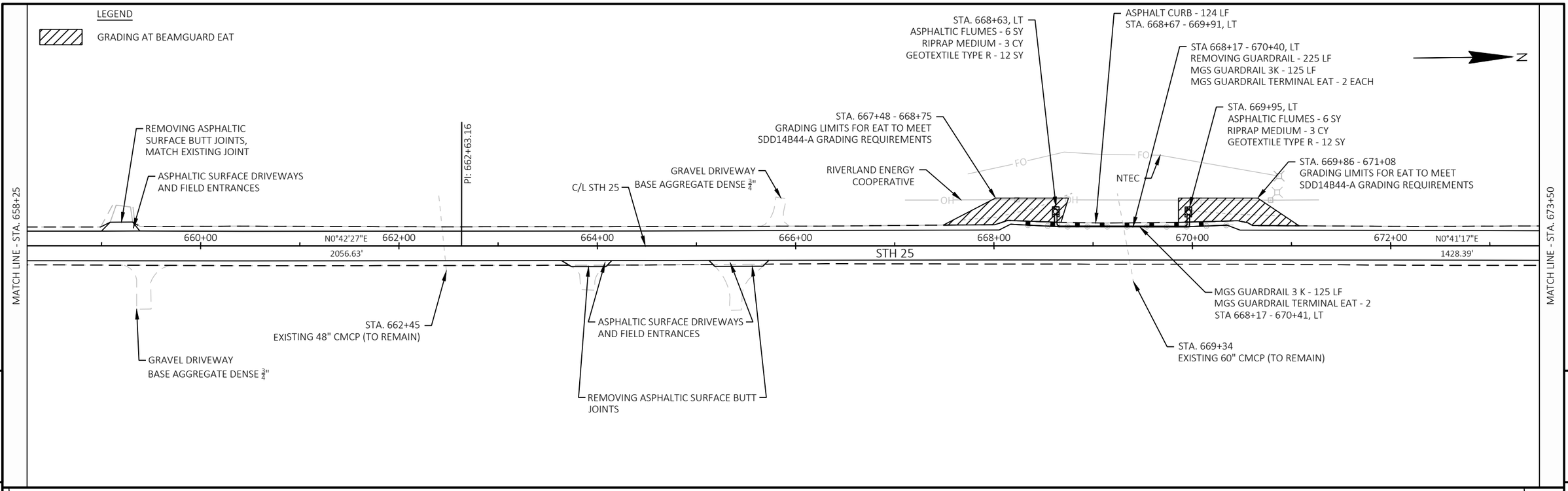
ASPHALTIC SURFACE DRIVEWAYS
AND FIELD ENTRANCES

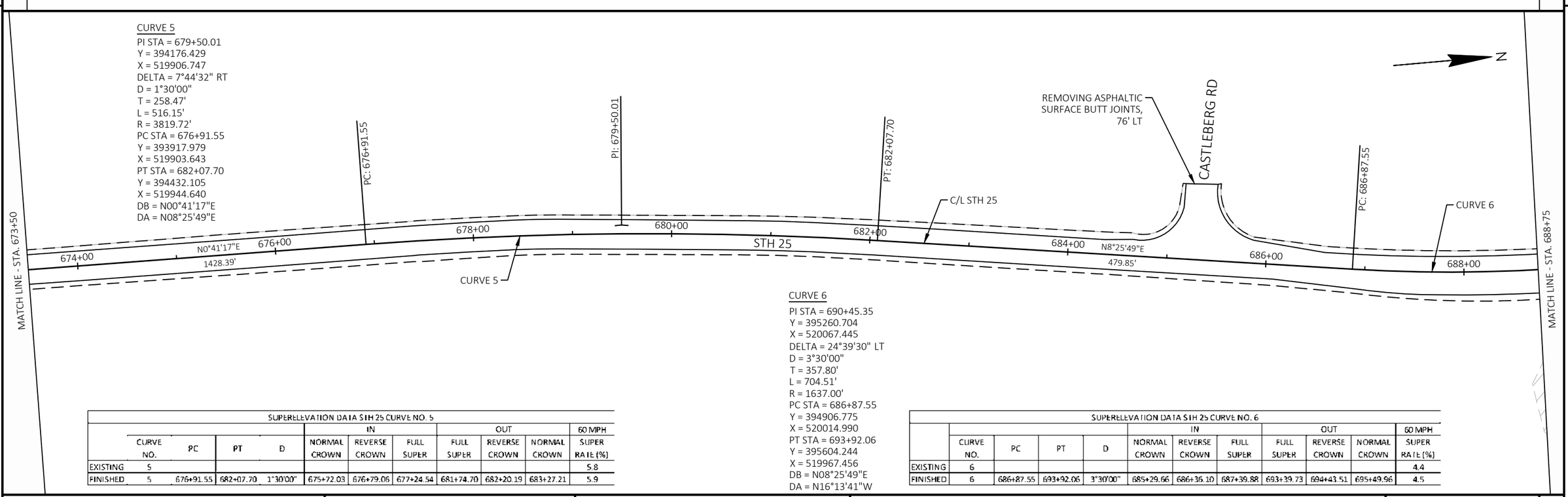
REMOVING ASPHALTIC
SURFACE BUTT JOINT

REMOVING ASPHALTIC
SURFACE BUTT JOINT

MATCH LINE - STA. 658+25

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 69	E





CURVE 6
PI STA = 690+45.35
Y = 395260.704
X = 520067.445
DELTA = 24°39'30" LT
D = 3°30'00"
T = 357.80'
L = 704.51'
R = 1637.00'
PC STA = 686+87.55
Y = 394906.775
X = 520014.990
PT STA = 693+92.06
Y = 395604.244
X = 519967.456
DB = N08°25'49"E
DA = N16°13'41"W

SUPERELLEVATION DATA STH 25 CURVE NO. 5

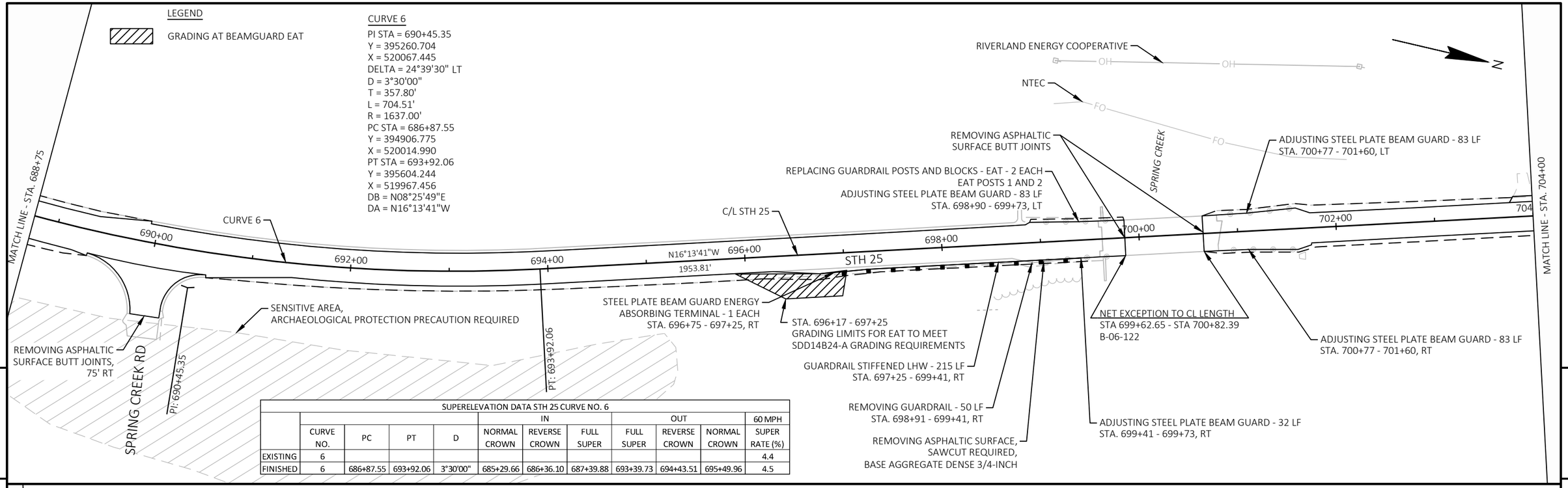
	CURVE NO.	PC	PT	D	IN: NORMAL CROWN	IN: REVERSE CROWN	IN: FULL SUPER	OUT: FULL SUPER	OUT: REVERSE CROWN	OUT: NORMAL CROWN	60 MPH SUPER RATE (%)
EXISTING	5										5.8
FINISHED	5	676+91.55	682+07.70	1°30'00"	675+72.03	676+79.06	677+24.54	681+74.70	682+20.19	683+27.21	5.9

SUPERELLEVATION DATA STH 25 CURVE NO. 6

	CURVE NO.	PC	PT	D	IN: NORMAL CROWN	IN: REVERSE CROWN	IN: FULL SUPER	OUT: FULL SUPER	OUT: REVERSE CROWN	OUT: NORMAL CROWN	60 MPH SUPER RATE (%)
EXISTING	6										4.4
FINISHED	6	686+87.55	693+92.06	3°30'00"	685+29.66	686+36.10	687+39.88	693+39.73	694+43.51	695+49.96	4.5

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 70 E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050116-pn
PLOT DATE : 8/23/2023 8:58 AM
PLOT BY : CORONA WOYCHIK
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



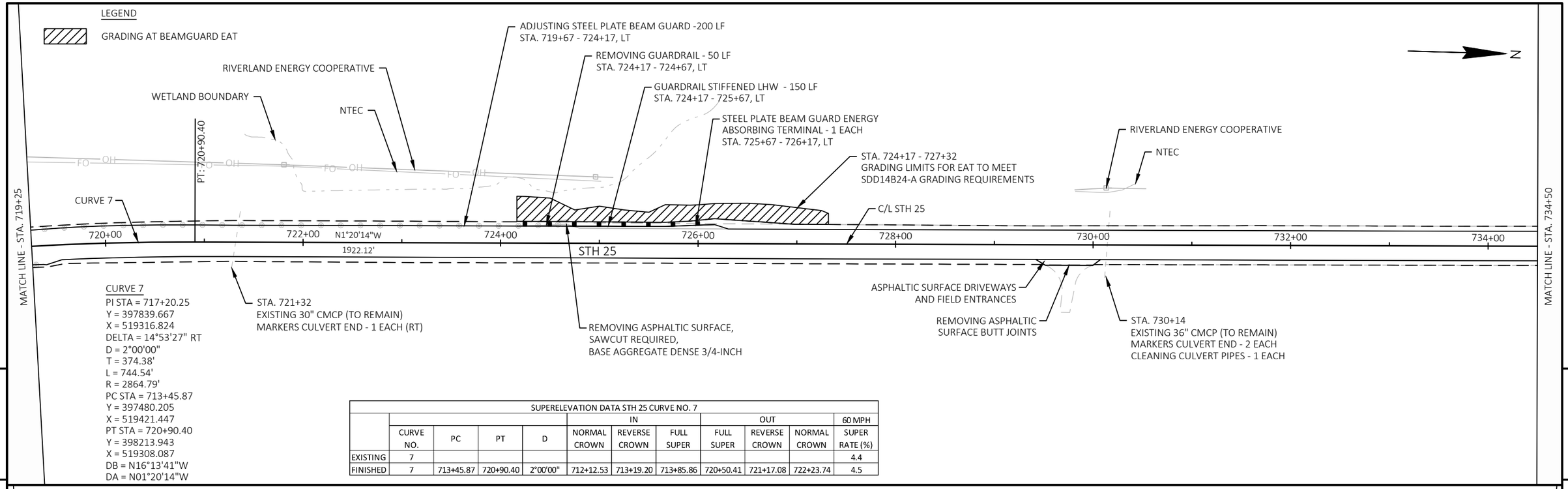
SUPERELEVATION DATA STH 25 CURVE NO. 6

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	6										4.4
FINISHED	6	686+87.55	693+92.06	3°30'00"	685+29.66	686+36.10	687+39.88	693+39.73	694+43.51	695+49.96	4.5

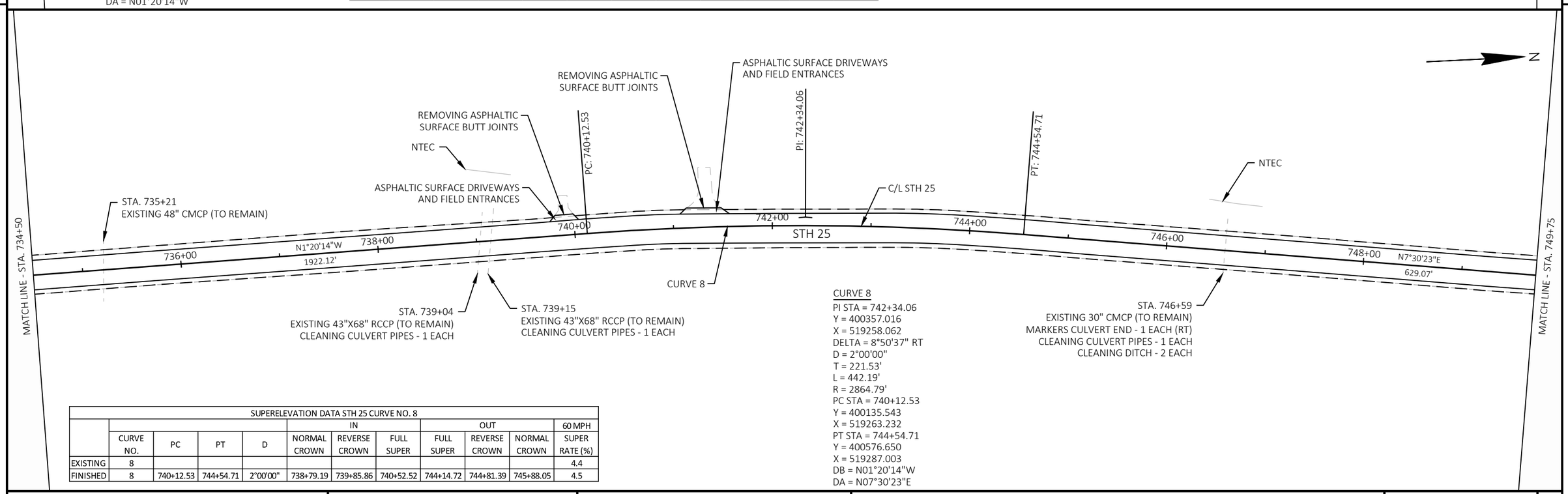
SUPERELEVATION DATA STH 25 CURVE NO. 7

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	7										4.4
FINISHED	7	713+45.87	720+90.40	2°00'00"	712+12.53	713+19.20	713+85.86	720+50.41	721+17.08	722+23.74	4.5

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 71	E



SUPERELEVATION DATA STH 25 CURVE NO. 7											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	7										4.4
FINISHED	7	713+45.87	720+90.40	2°00'00"	712+12.53	713+19.20	713+85.86	720+50.41	721+17.08	722+23.74	4.5

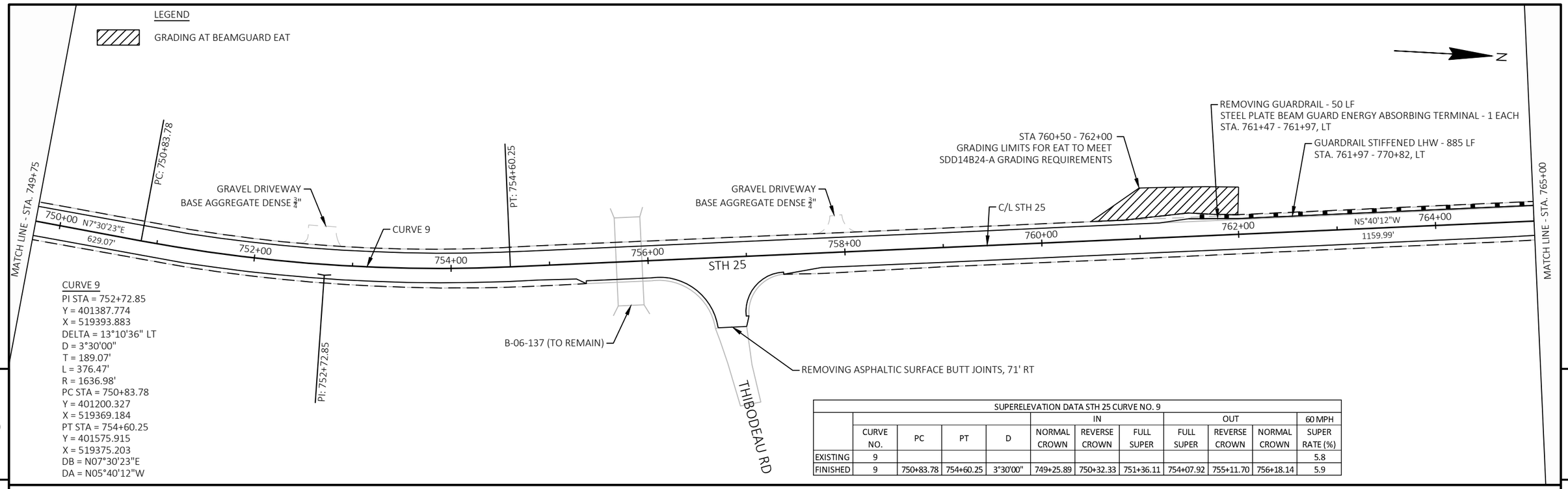


SUPERELEVATION DATA STH 25 CURVE NO. 8											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	8										4.4
FINISHED	8	740+12.53	744+54.71	2°00'00"	738+79.19	739+85.86	740+52.52	744+14.72	744+81.39	745+88.05	4.5

CURVE 8
PI STA = 742+34.06
Y = 400357.016
X = 519258.062
DELTA = 8°50'37" RT
D = 2°00'00"
T = 221.53'
L = 442.19'
R = 2864.79'
PC STA = 740+12.53
Y = 400135.543
X = 519263.232
PT STA = 744+54.71
Y = 400576.650
X = 519287.003
DB = N01°20'14"W
DA = N07°30'23"E

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 72	E

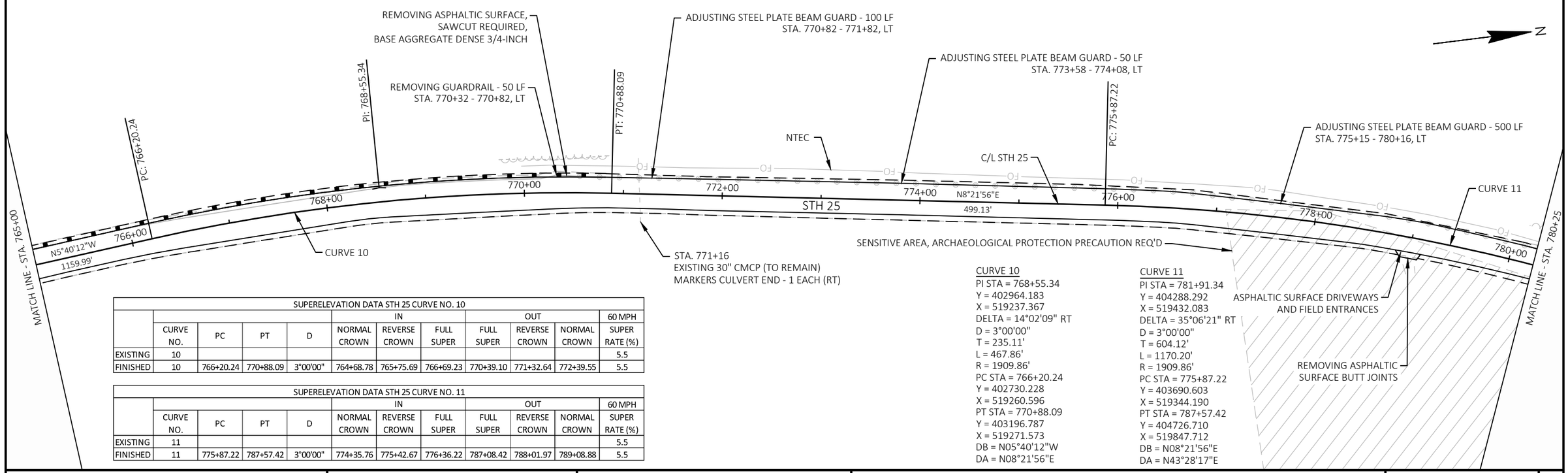
FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050118-pn
PLOT DATE : 8/1/2023 9:27 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



CURVE 9
PI STA = 752+72.85
Y = 401387.774
X = 519393.883
DELTA = 13°10'36" LT
D = 3°30'00"
T = 189.07'
L = 376.47'
R = 1636.98'
PC STA = 750+83.78
Y = 401200.327
X = 519369.184
PT STA = 754+60.25
Y = 401575.915
X = 519375.203
DB = N07°30'23"E
DA = N05°40'12"W

SUPERELEVATION DATA STH 25 CURVE NO. 9

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	9										5.8
FINISHED	9	750+83.78	754+60.25	3°30'00"	749+25.89	750+32.33	751+36.11	754+07.92	755+11.70	756+18.14	5.9



SUPERELEVATION DATA STH 25 CURVE NO. 10

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	10										5.5
FINISHED	10	766+20.24	770+88.09	3°00'00"	764+68.78	765+75.69	766+69.23	770+39.10	771+32.64	772+39.55	5.5

SUPERELEVATION DATA STH 25 CURVE NO. 11

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	11										5.5
FINISHED	11	775+87.22	787+57.42	3°00'00"	774+35.76	775+42.67	776+36.22	787+08.42	788+01.97	789+08.88	5.5

CURVE 10
PI STA = 768+55.34
Y = 402964.183
X = 519237.367
DELTA = 14°02'09" RT
D = 3°00'00"
T = 235.11'
L = 467.86'
R = 1909.86'
PC STA = 766+20.24
Y = 402730.228
X = 519260.596
PT STA = 770+88.09
Y = 403196.787
X = 519271.573
DB = N05°40'12"W
DA = N08°21'56"E

CURVE 11
PI STA = 781+91.34
Y = 404288.292
X = 519432.083
DELTA = 35°06'21" RT
D = 3°00'00"
T = 604.12'
L = 1170.20'
R = 1909.86'
PC STA = 775+87.22
Y = 403690.603
X = 519344.190
PT STA = 787+57.42
Y = 404726.710
X = 519847.712
DB = N08°21'56"E
DA = N43°28'17"E

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 73	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050119-pn
PLOT DATE : 8/23/2023 8:59 AM
PLOT BY : CORONA WOYCHIK
PLOT NAME :
PLOT SCALE : 1 IN:100 FT

LEGEND

GRADING AT BEAMGUARD EAT

PI: 781+91.34

REMOVING GUARDRAIL - 50 LF
STA. 780+16 - 780+66, LT

REMOVING ASPHALTIC SURFACE,
SAWCUT REQUIRED,
BASE AGGREGATE DENSE 3/4-INCH

GUARDRAIL STIFFENED LHW - 734 LF
STA. 780+16 - 787+50, LT

ADJUSTING STEEL PLATE BEAM GUARD - 50 LF
STA. 789+25 - 789+75, LT

ADJUSTING STEEL PLATE BEAM GUARD - 100 LF
STA. 787+50 - 788+50, LT

REMOVING GUARDRAIL - 50 LF
STA. 787+00 - 787+50, LT

PC: 789+50.84

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL - 1 EACH
STA. 794+23 - 794+73, LT

ADJUSTING STEEL PLATE BEAM GUARD - 350 LF
STA. 790+73 - 794+23, LT

PI: 793+51.36

NTEC

782+00 784+00 786+00 788+00 790+00 792+00 794+00

STH 25

N43°28'17"E
193.42'

MATCH LINE - STA. 780+25

CURVE 11

NTEC

REMOVING ASPHALTIC SURFACE,
SAWCUT REQUIRED,
BASE AGGREGATE DENSE 3/4-INCH

STEEL PLATE BEAM GUARD CONNECTION

PT: 787+57.42

C/L STH 25

SENSITIVE AREA,
ARCHAEOLOGICAL
PROTECTION
PRECAUTION REQ'D

STA. 793+02
EXISTING 30" CMCP (TO REMAIN)
MARKERS CULVERT END - 2 EACH

CURVE 12

MATCH LINE - STA. 795+50

SUPERELEVATION DATA STH 25 CURVE NO. 11

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	11										5.5
FINISHED	11	775+87.22	787+57.42	3°00'00"	774+35.76	775+42.67	776+36.22	787+08.42	788+01.97	789+08.88	5.5

SUPERELEVATION DATA STH 25 CURVE NO. 12

					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	12										3.7
FINISHED	12	789+50.84	797+48.97	1°30'00"	788+31.32	789+38.35	789+83.83	797+15.97	797+61.46	798+68.49	3.7

CURVE 11
PI STA = 781+91.34
Y = 404288.292
X = 519432.083
DELTA = 35°06'21" RT
D = 3°00'00"
T = 604.12'
L = 1170.20'
R = 1909.86'
PC STA = 775+87.22
Y = 403690.603
X = 519344.190
PT STA = 787+57.42
Y = 404726.710
X = 519847.712
DB = N08°21'56"E
DA = N43°28'17"E

CURVE 12
PI STA = 793+51.36
Y = 405157.746
X = 520256.342
DELTA = 11°58'19" RT
D = 1°30'00"
T = 400.53'
L = 798.13'
R = 3819.72'
PC STA = 789+50.84
Y = 404867.077
X = 519980.783
PT STA = 797+48.97
Y = 405384.931
X = 520586.202
DB = N43°28'17"E
DA = N55°26'37"E

PT: 797+48.97

STA. 794+34 - 795+97
GRADING LIMITS FOR EAT TO
MEET SDD14B24-A GRADING
REQUIREMENTS

MATCH LINE - STA. 795+50

796+00 798+00 800+00 802+00 804+00 806+00 808+00 810+00

STH 25

N55°26'37"E
1371.31'

C/L STH 25

NTEC

CURVE 12

STA. 804+31
EXISTING 30" CMCP (TO REMAIN)
MARKERS CULVERT END - 1 EACH (RT)
CLEANING DITCH - 1 EACH (LT)

STA. 808+27
EXISTING 30" CMCP (TO REMAIN)
MARKERS CULVERT END - 2 EACH
CLEANING DITCH - 1 EACH (LT)

HIGHLAND DR

REMOVING ASPHALTIC SURFACE BUTT JOINTS,
MATCH AT END OF CURB RADII

DAIRYLAND POWER COOPERATIVE

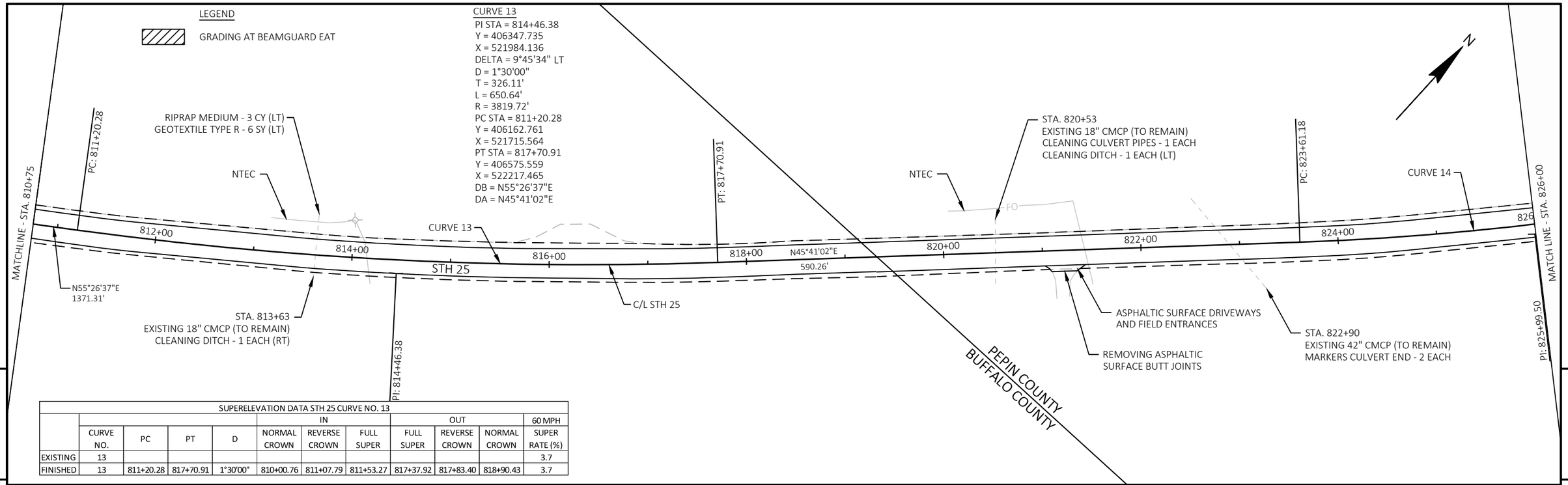
MATCH LINE - STA. 810+75

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO COUNTY	SHEET 74	E

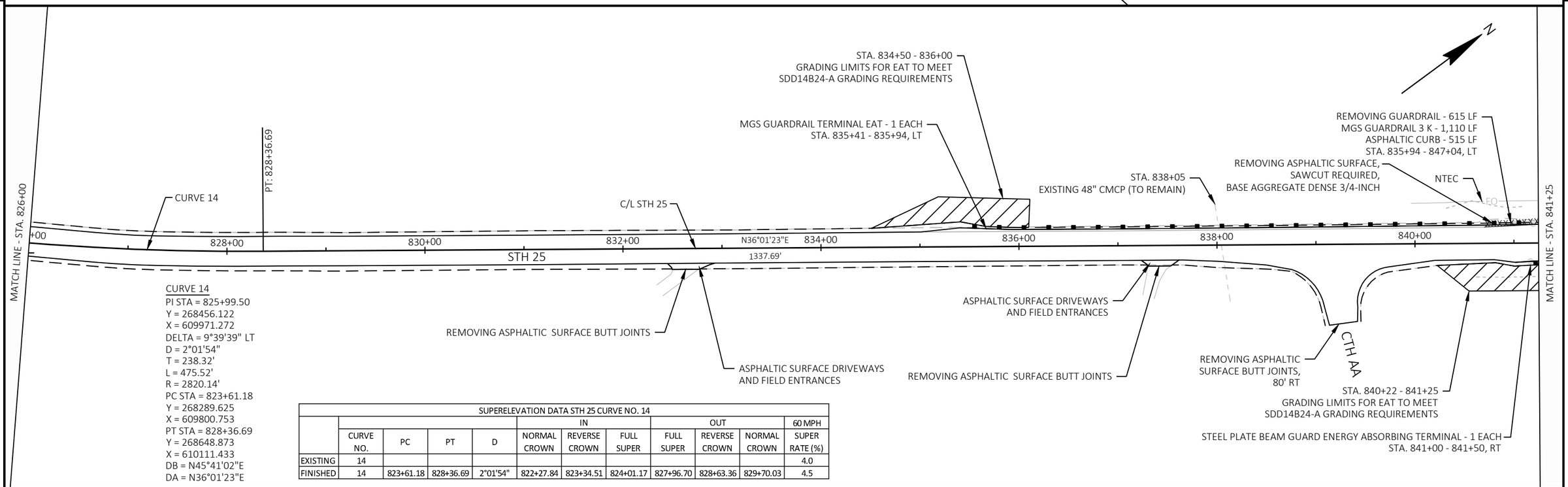
FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050120-pn

PLOT DATE : 8/23/2023 9:00 AM PLOT BY : CORONA WOYCHIK PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44



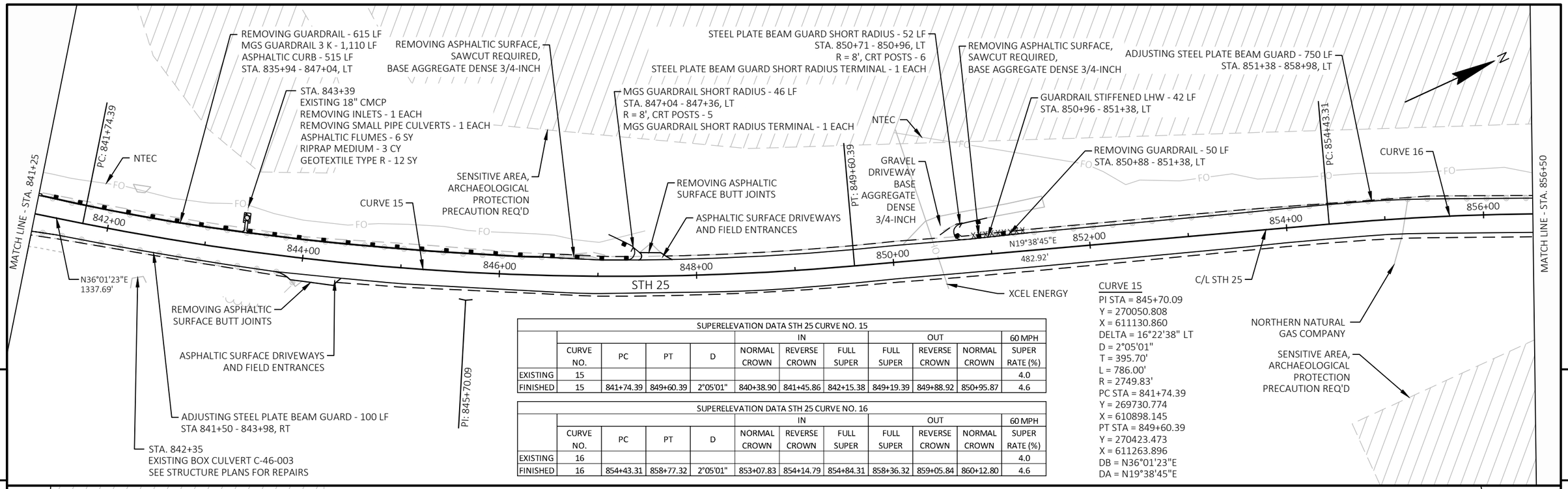
SUPERELEVATION DATA STH 25 CURVE NO. 13											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	13										3.7
FINISHED	13	811+20.28	817+70.91	1°30'00"	810+00.76	811+07.79	811+53.27	817+37.92	817+83.40	818+90.43	3.7



SUPERELEVATION DATA STH 25 CURVE NO. 14											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	14										4.0
FINISHED	14	823+61.18	828+36.69	2°01'54"	822+27.84	823+34.51	824+01.17	827+96.70	828+63.36	829+70.03	4.5

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - BUFFALO & PEPIN COUNTY	SHEET 75	E

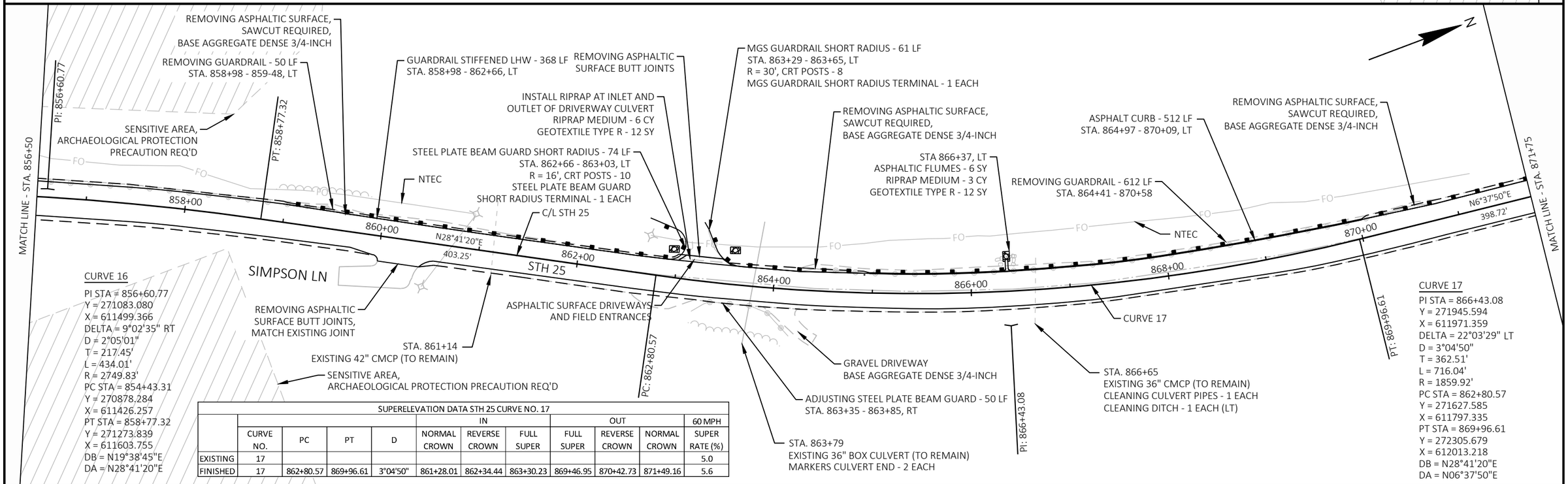
FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050121-pn
PLOT DATE : 8/1/2023 9:27 AM
PLOT BY : BENJAMIN CARLSON
PLOT NAME :
PLOT SCALE : 1 IN:100 FT



SUPERELEVATION DATA STH 25 CURVE NO. 15											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	15										4.0
FINISHED	15	841+74.39	849+60.39	2°05'01"	840+38.90	841+45.86	842+15.38	849+19.39	849+88.92	850+95.87	4.6

SUPERELEVATION DATA STH 25 CURVE NO. 16											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	16										4.0
FINISHED	16	854+43.31	858+77.32	2°05'01"	853+07.83	854+14.79	854+84.31	858+36.32	859+05.84	860+12.80	4.6

CURVE 15
PI STA = 845+70.09
Y = 270050.808
X = 611130.860
DELTA = 16°22'38" LT
D = 2°05'01"
T = 395.70'
L = 786.00'
R = 2749.83'
PC STA = 841+74.39
Y = 269730.774
X = 610898.145
PT STA = 849+60.39
Y = 270423.473
X = 611263.896
DB = N36°01'23"E
DA = N19°38'45"E



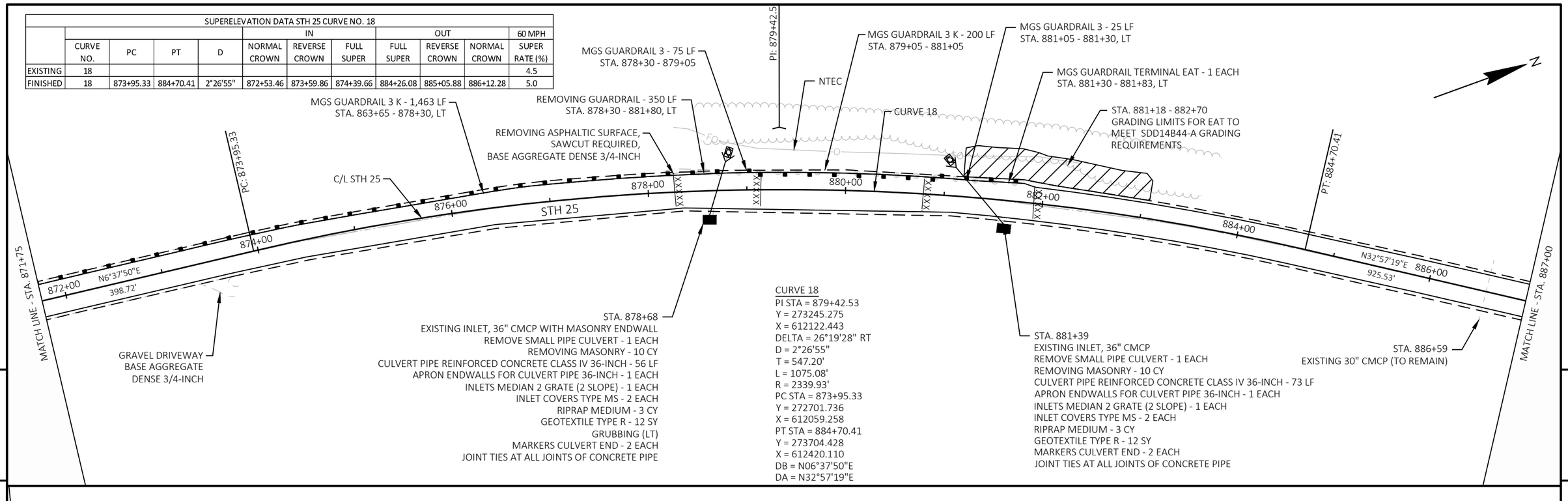
SUPERELEVATION DATA STH 25 CURVE NO. 17											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	17										5.0
FINISHED	17	862+80.57	869+96.61	3°04'50"	861+28.01	862+34.44	863+30.23	869+46.95	870+42.73	871+49.16	5.6

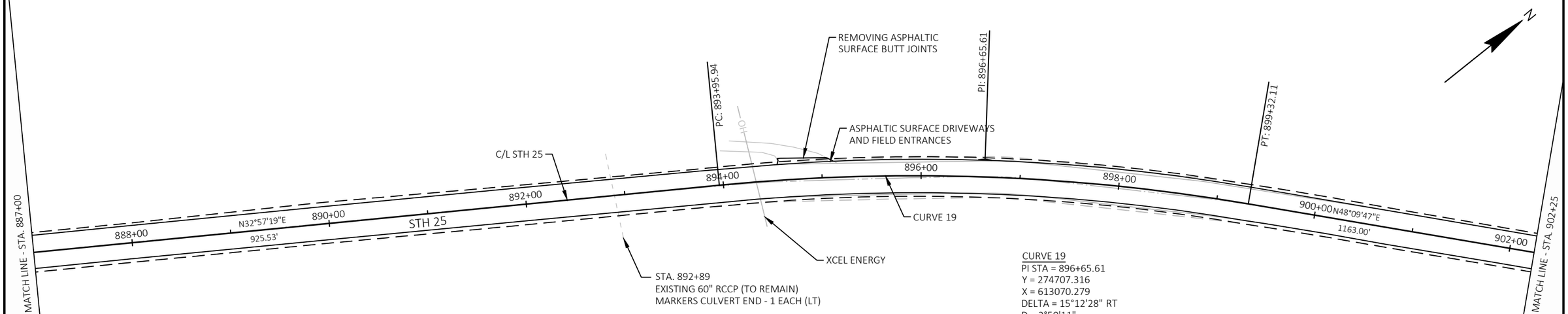
CURVE 16
PI STA = 856+60.77
Y = 271083.080
X = 611499.366
DELTA = 9°02'35" RT
D = 2°05'01"
T = 217.45'
L = 434.01'
R = 2749.83'
PC STA = 854+43.31
Y = 270878.284
X = 611426.257
PT STA = 858+77.32
Y = 271273.839
X = 611603.755
DB = N19°38'45"E
DA = N28°41'20"E

CURVE 17
PI STA = 866+43.08
Y = 271945.594
X = 611971.359
DELTA = 22°03'29" LT
D = 3°04'50"
T = 362.51'
L = 716.04'
R = 1859.92'
PC STA = 862+80.57
Y = 271627.585
X = 611797.335
PT STA = 869+96.61
Y = 272305.679
X = 612013.218
DB = N28°41'20"E
DA = N06°37'50"E

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - PEPIN COUNTY	SHEET 76	E

SUPERELEVATION DATA STH 25 CURVE NO. 18											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	18										4.5
FINISHED	18	873+95.33	884+70.41	2°26'55"	872+53.46	873+59.86	874+39.66	884+26.08	885+05.88	886+12.28	5.0

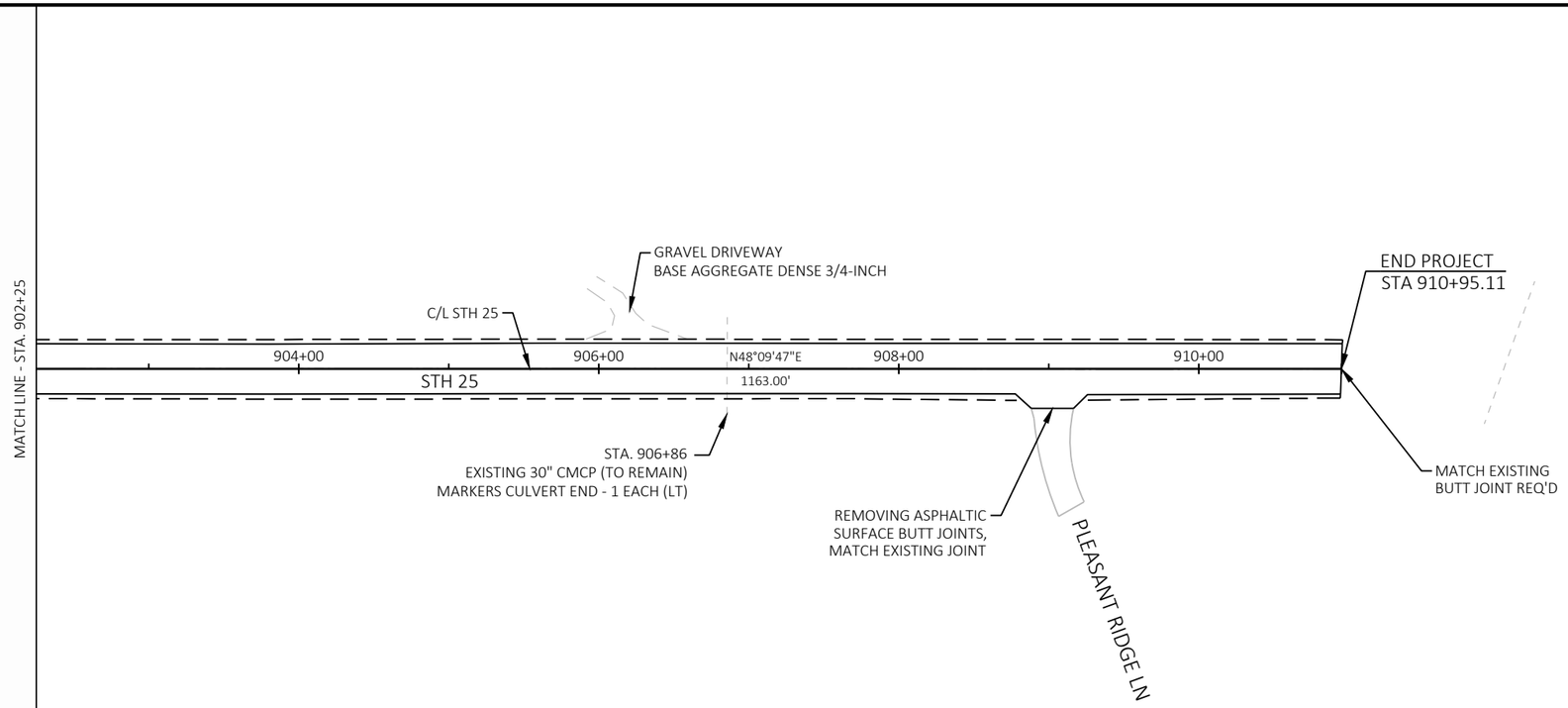


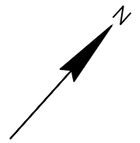


SUPERELEVATION DATA STH 25 CURVE NO. 19											
					IN			OUT			60 MPH
	CURVE NO.	PC	PT	D	NORMAL CROWN	REVERSE CROWN	FULL SUPER	FULL SUPER	REVERSE CROWN	NORMAL CROWN	SUPER RATE (%)
EXISTING	19										5.0
FINISHED	19	893+95.94	899+32.11	2°50'11"	892+46.61	893+53.27	894+43.94	898+84.12	899+74.78	900+81.45	5.4

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - PEPIN COUNTY	SHEET 77 E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050123-pn
PLOT DATE : 8/23/2023 9:09 AM
PLOT BY : CORONA WOYCHIK
PLOT NAME :
PLOT SCALE : 1 IN:100 FT
WISDOT/CADDS SHEET 44





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5

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	PLAN - PEPIN COUNTY	SHEET 78	E

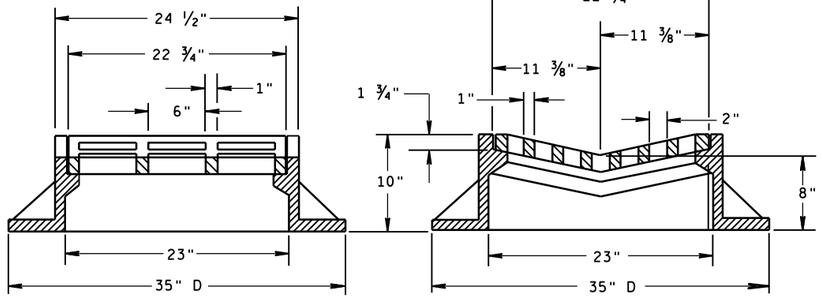
FILE NAME : W:\71700076\C3D\SHEETSPLAN\050101-PN.DWG
LAYOUT NAME - 050124-pn

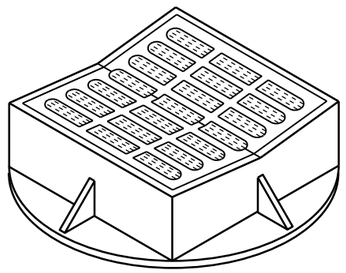
PLOT DATE : 8/1/2023 9:27 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:100 FT

Standard Detail Drawing List

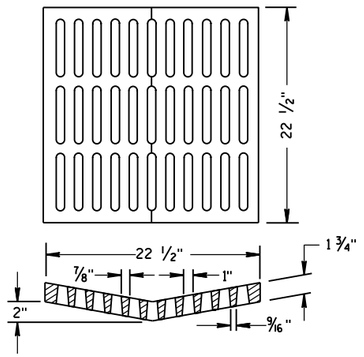
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A10-03A	SHOULDER RUMBLE STRIPS - ASPHALT
13A10-03G	SHOULDER AND EDGE LINE RUMBLE STRIPS - CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS
13A10-03H	SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAILROADS
13B01-11B	TYPICAL SECTIONS FOR RAILWAY APPROACH
13C19-03	HMA LONGITUDINAL JOINTS
14B15-11A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-11C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-09A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-09C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
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
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
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
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D48-01	TRAFFIC CONTROL, LANE SHIFT IN FLAGGING OPERATION
15D51-01	TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

6



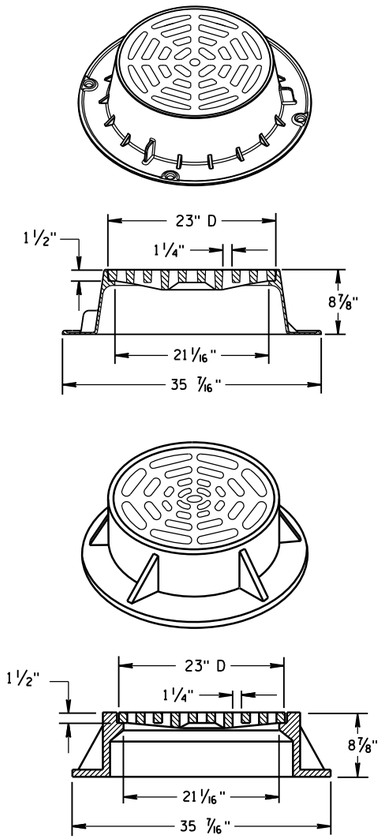


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

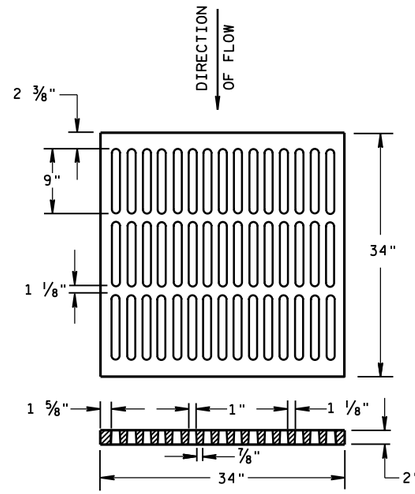
NOTE: EITHER CASTING IS ACCEPTABLE

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.

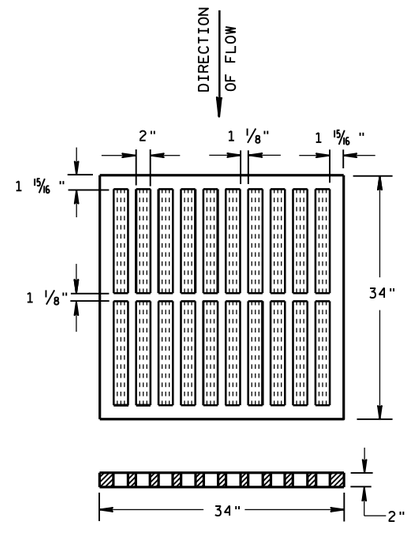
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.



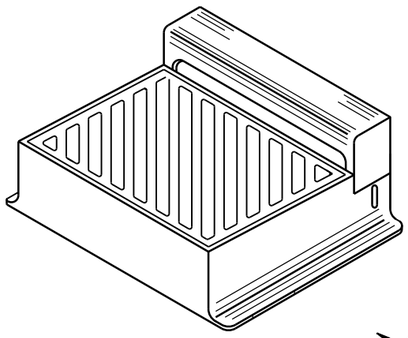
ALTERNATIVE TYPE "MS"

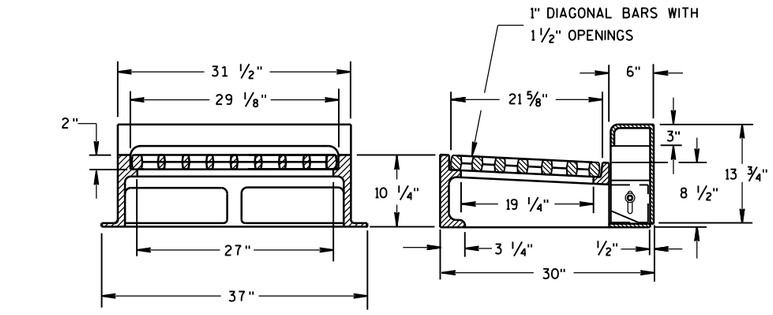
USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE



TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE





NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

DIRECTION OF FLOW

DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.

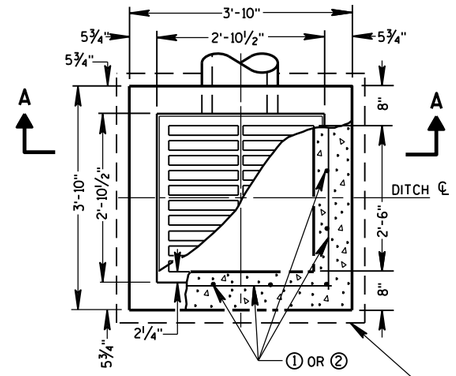
INLET COVERS
TYPE B, B-A, C, MS, MS-A, & WM

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

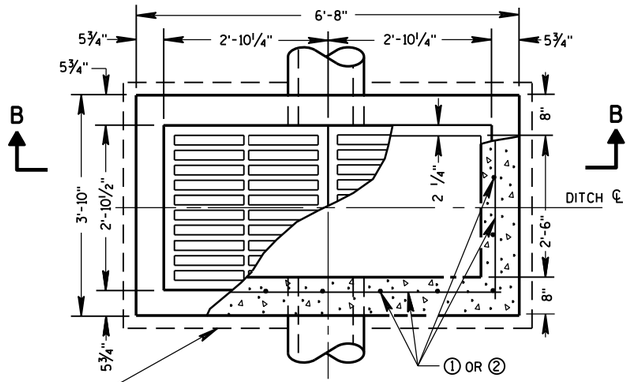
APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 A 5-19b

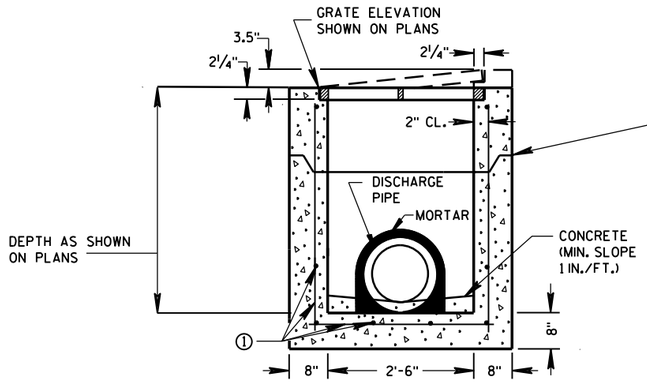


PLAN VIEW

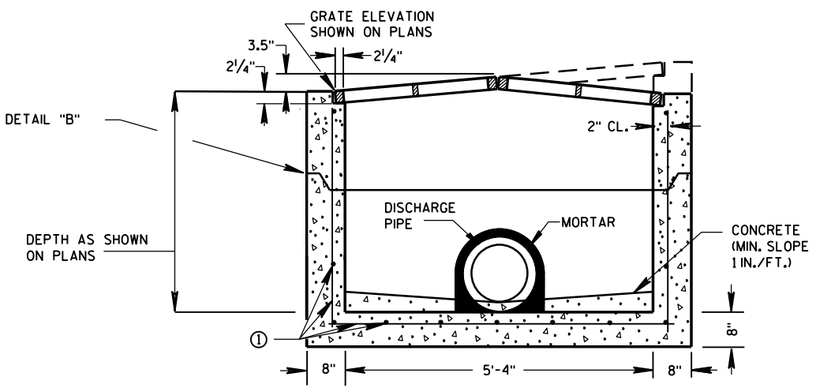


PLAN VIEW

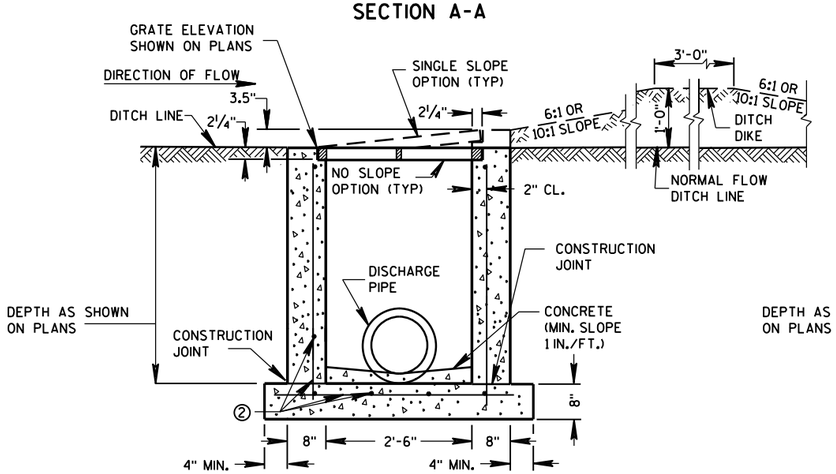
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



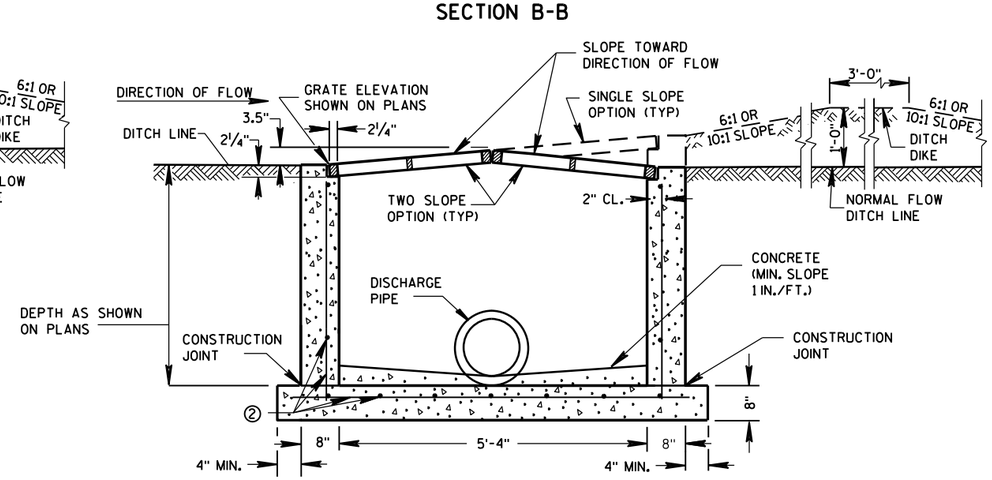
PRECAST REINFORCED CONCRETE SECTION A-A



PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 1 GRATE

INLETS MEDIAN 2 GRATE

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 INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, IG-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF FOUNDATION BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

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

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

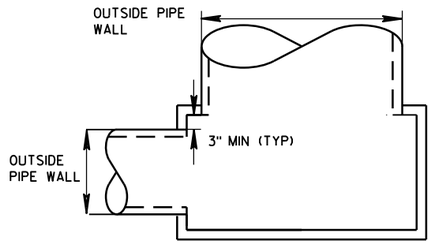
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

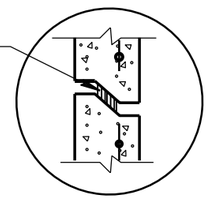
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

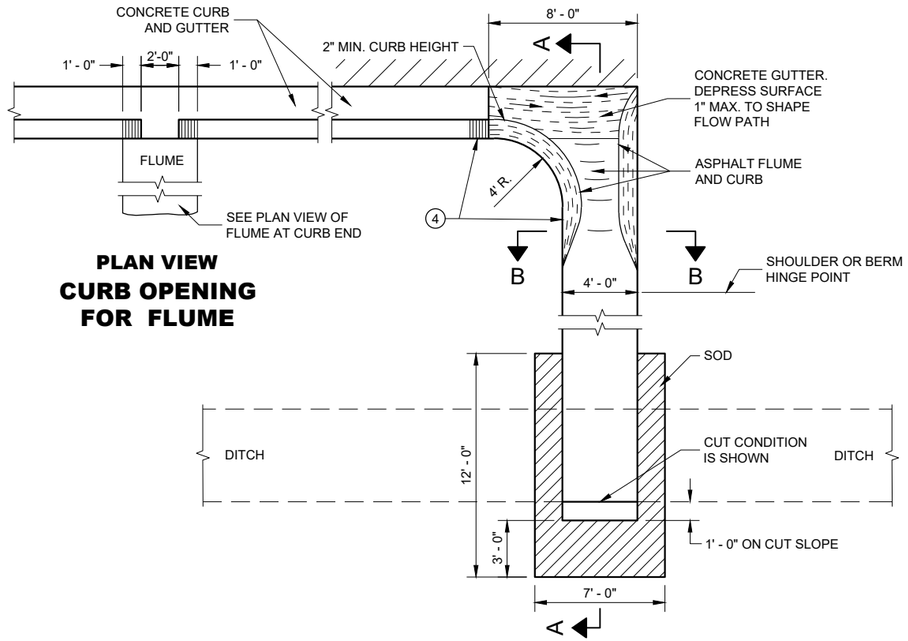
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI ENT
FHWA

6
S.D.D. 8 C 8-2

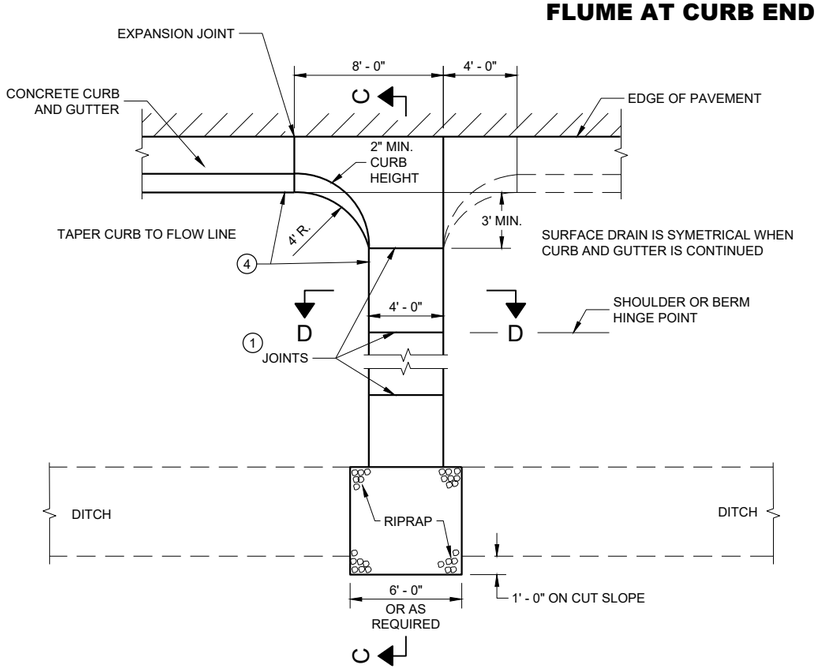
NOTE: TAPER CURB ENDS TO GUTTER IN 1' - 0"

ASPHALTIC FLUME



PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



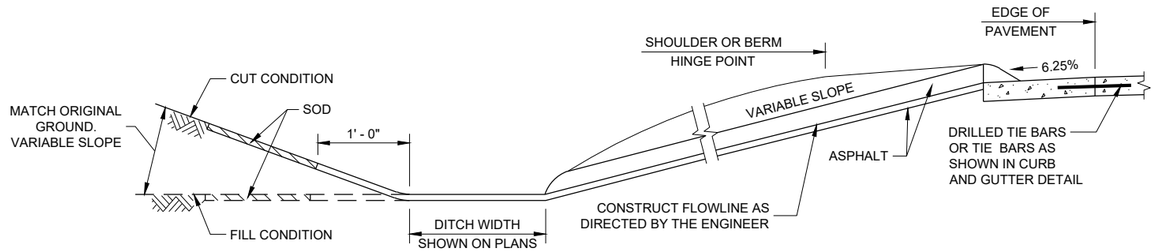
PLAN VIEW
CONCRETE SURFACE DRAIN

GENERAL NOTES

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

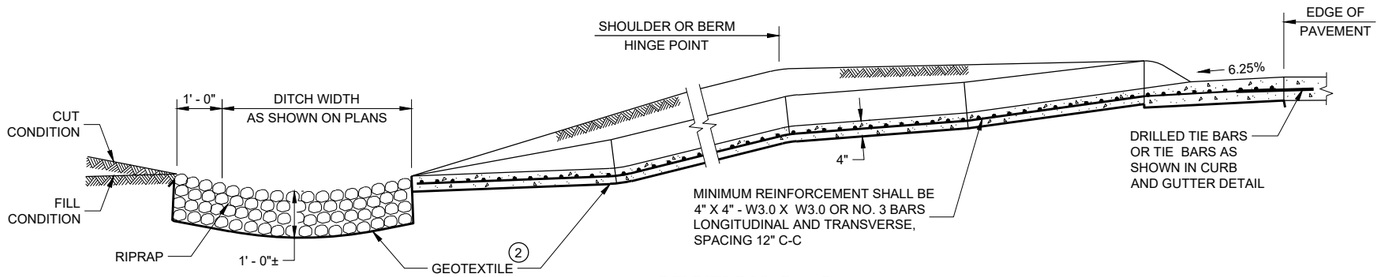
4" X 4" - W3.0 X W3.0 CONCRETE REINFORCEMENT SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

1. JOINTS SHALL BE ⅛" TO ¼" WIDE BY 1½" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
2. GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
3. CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
4. ANGLE OF FLUME IN RELATION TO BACK OF CURB TO BE CONSTRUCTED PER THE PLAN DETAILS OR AS DIRECTED BY THE ENGINEER. ANGLE OF FLUME MAY BE OTHER THAN 90 DEGREES AS SHOWN.

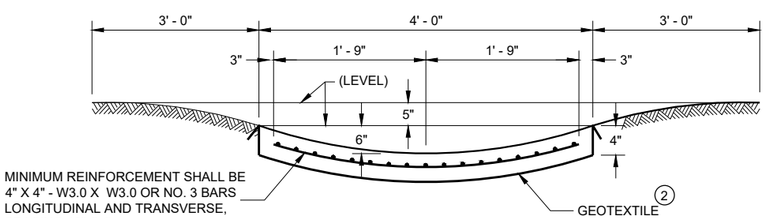


SECTION A - A

SECTION B - B



SECTION C - C



SECTION D - D

CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE ENGINEER

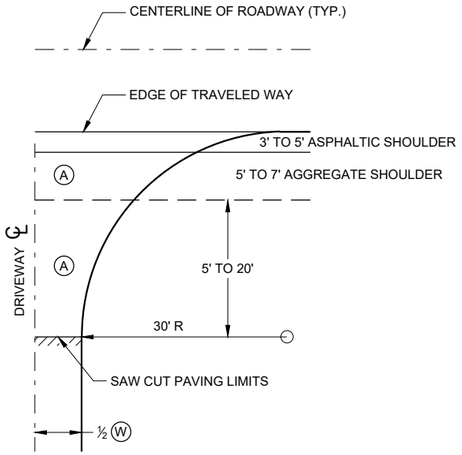
FHWA

6

SDD 08D04 - 07

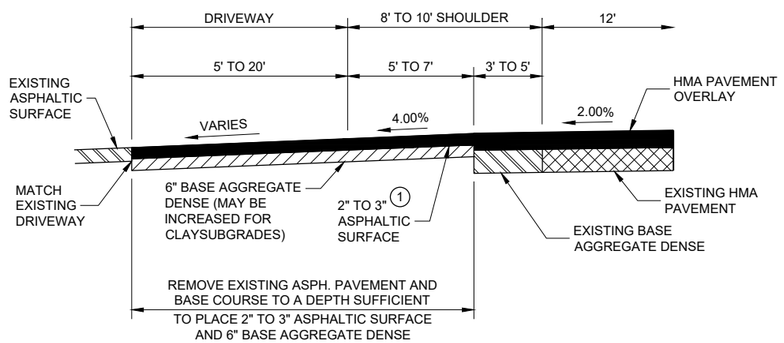
GENERAL NOTES

(1) DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.



PLAN VIEW

HALF SECTION



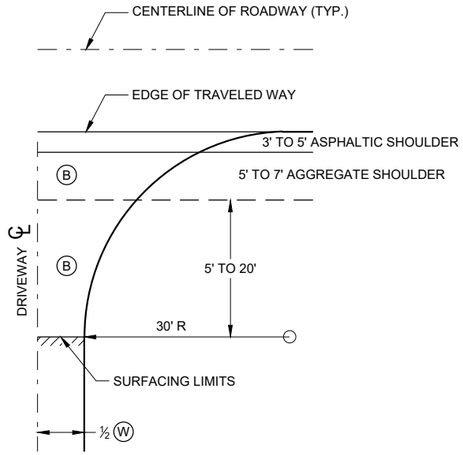
PROFILE VIEW

RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS

(A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)

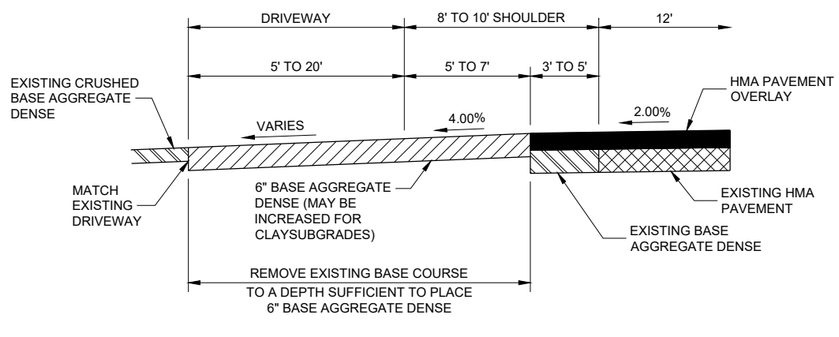
(B) : PAID FOR AS BASE AGGREGATE DENSE 1 ¼" (TON)

(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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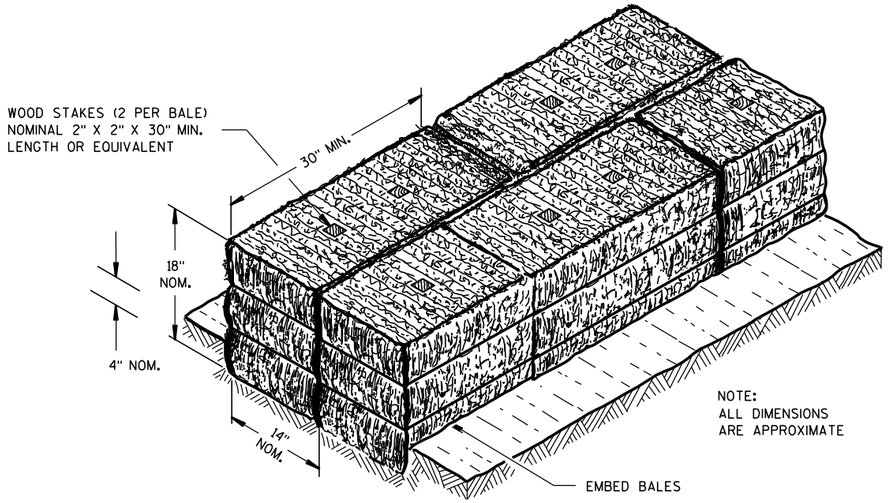
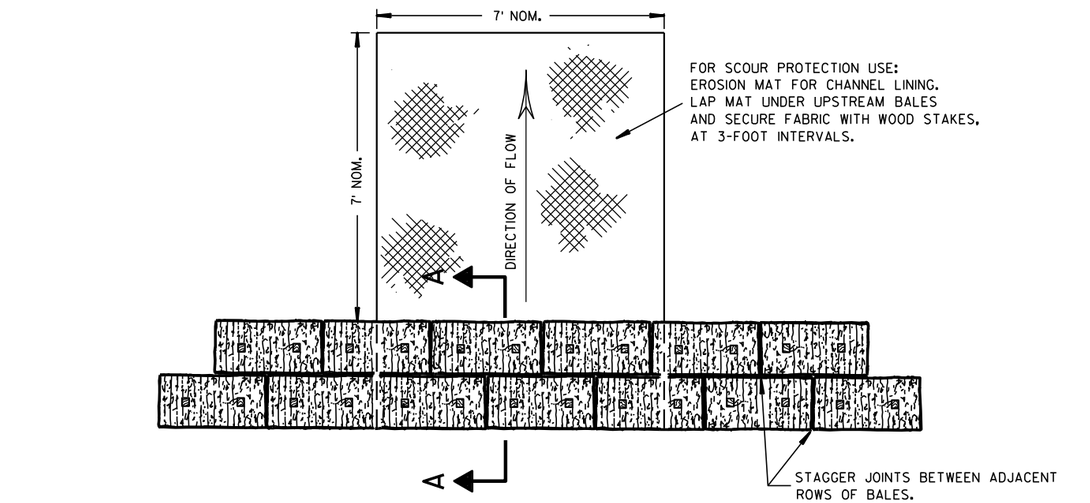
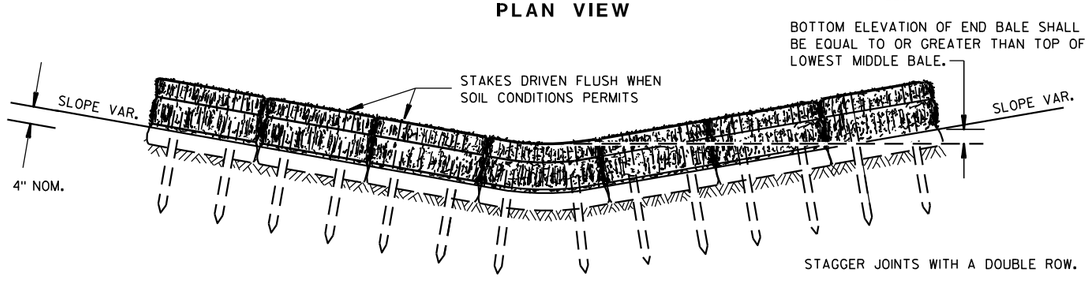
SDD 08D22 - 01



SECTION A-A



PLAN VIEW



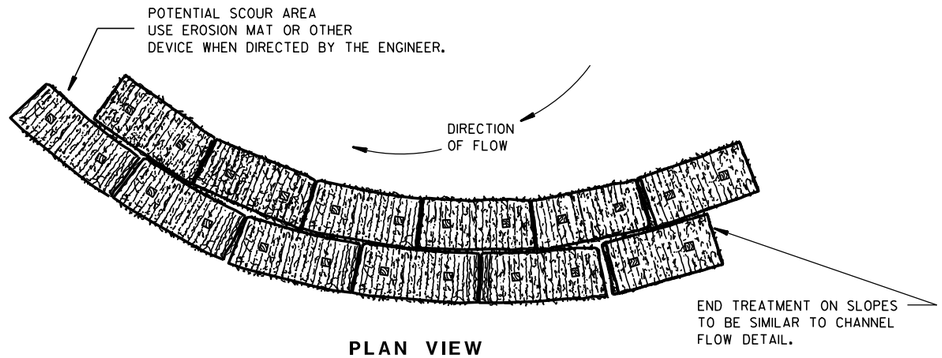
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

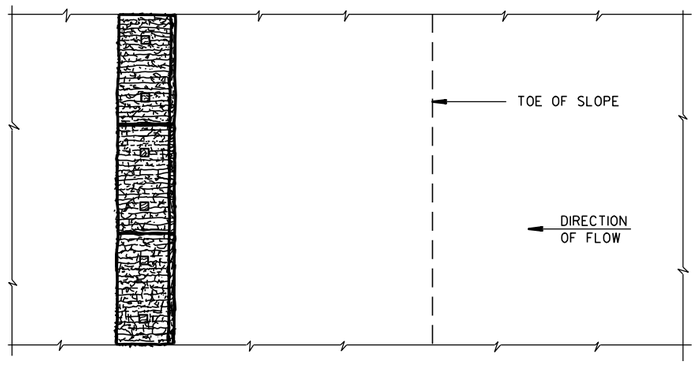
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

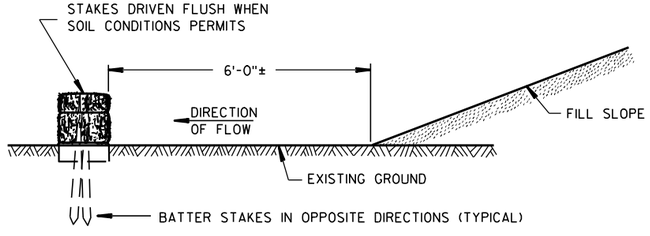


PLAN VIEW

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

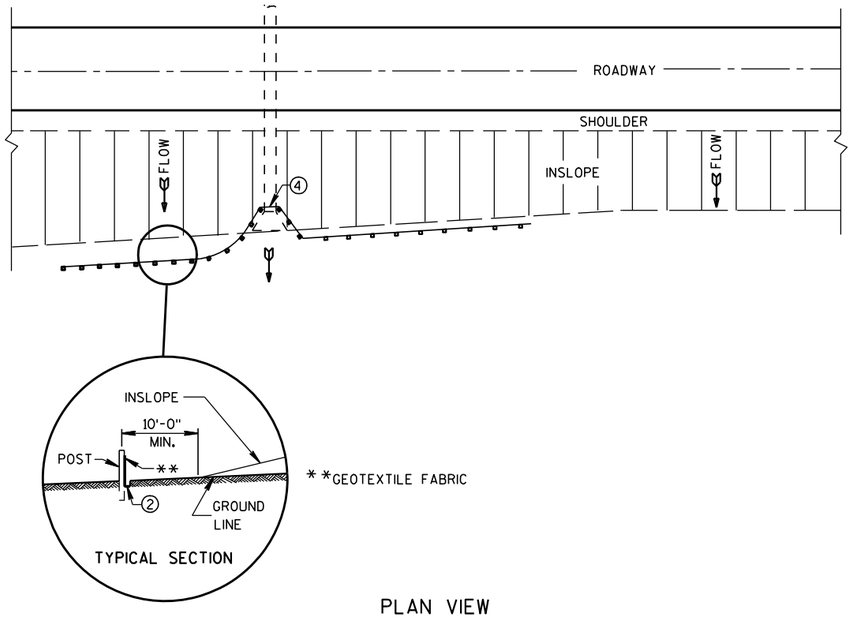
6/04/02 — DATE

/S/ Beth Cannestra — CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA

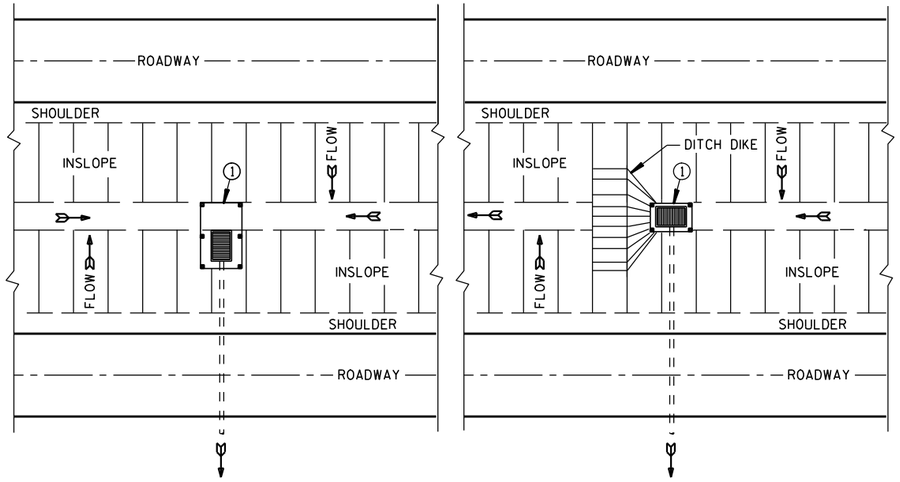
6

S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



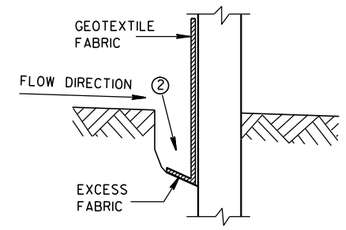
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

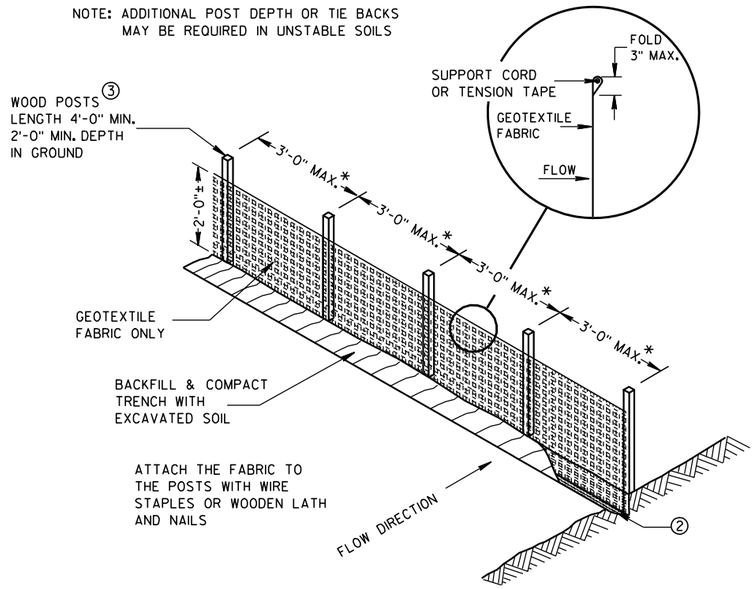
GENERAL NOTES

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

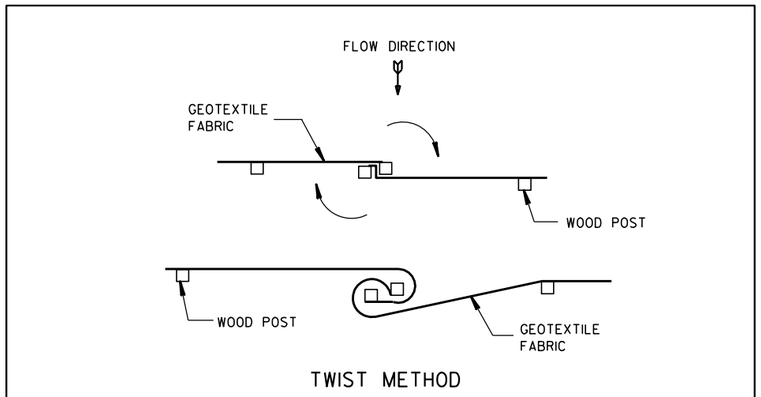
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" OF OAK OR HICKORY.
4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



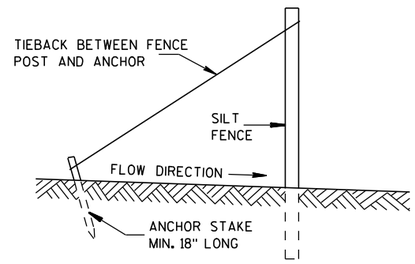
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

6

S.D.D. 8 E 9-6

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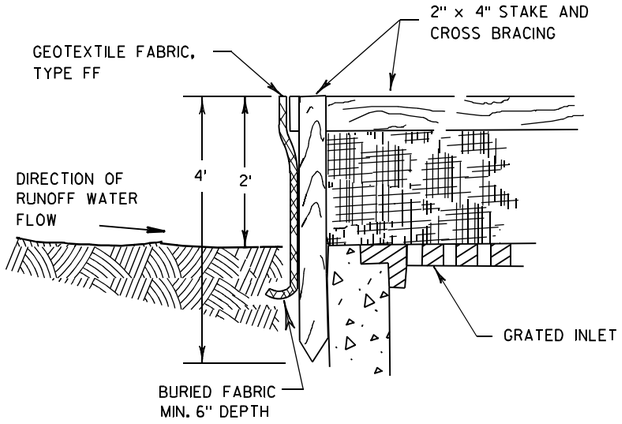
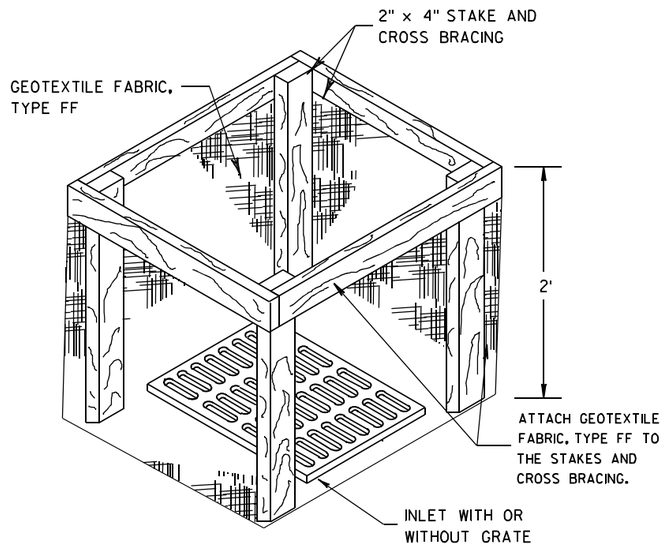
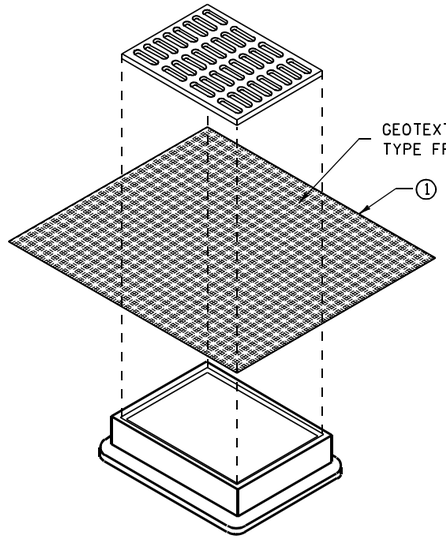
S.D.D. 8 E 9-6



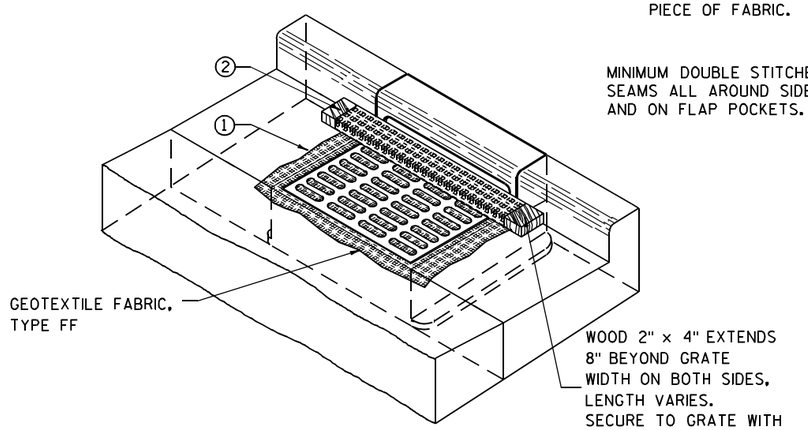


INLET PROTECTION, TYPE A

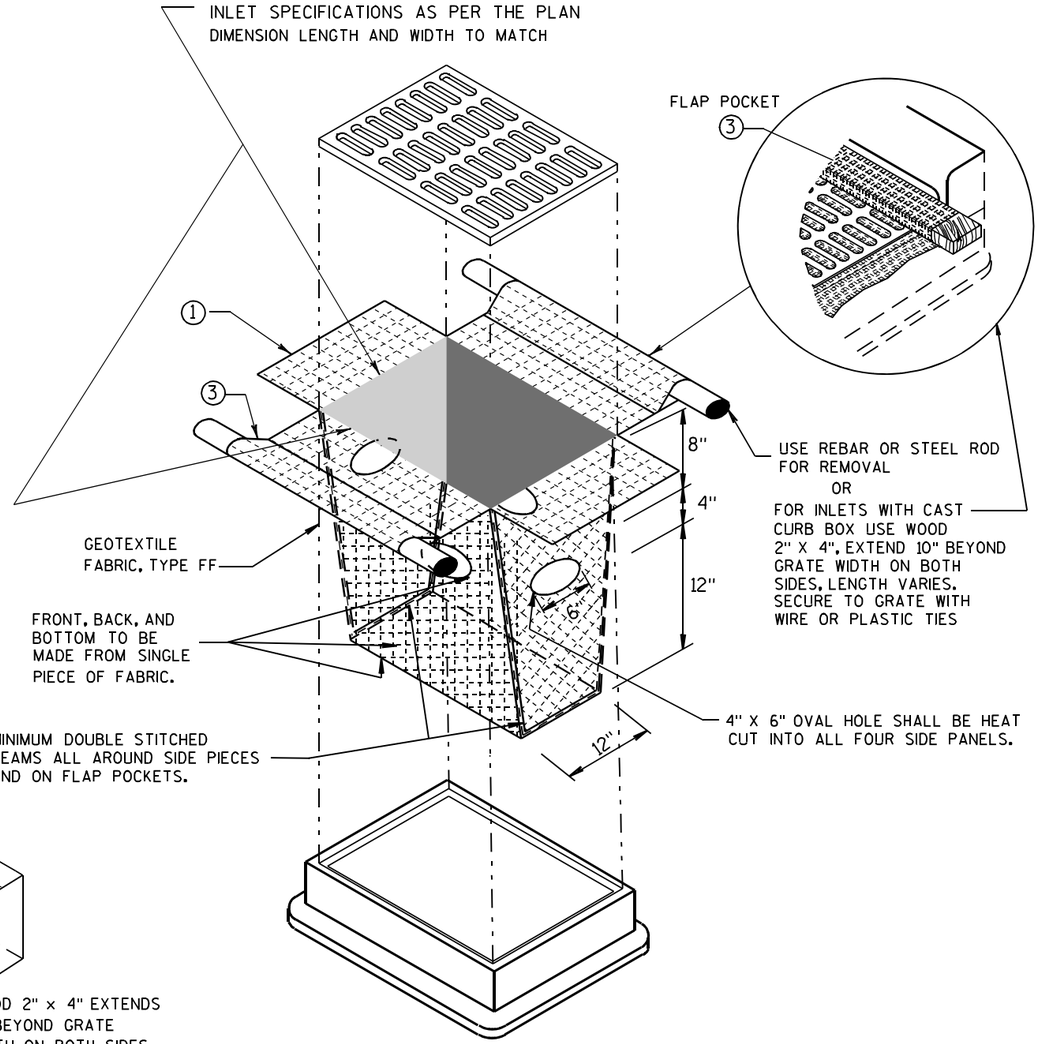


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

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

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

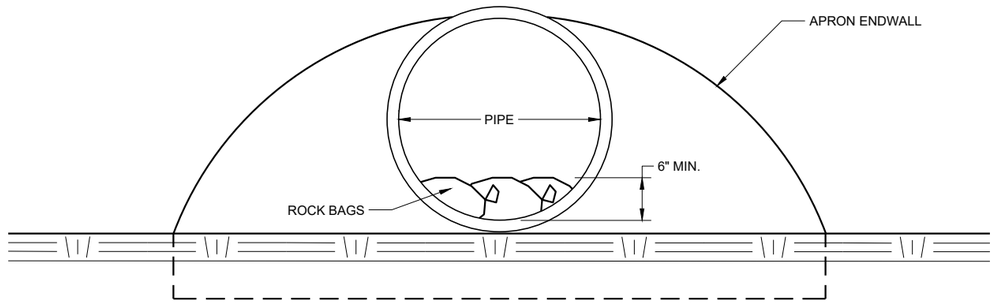
10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

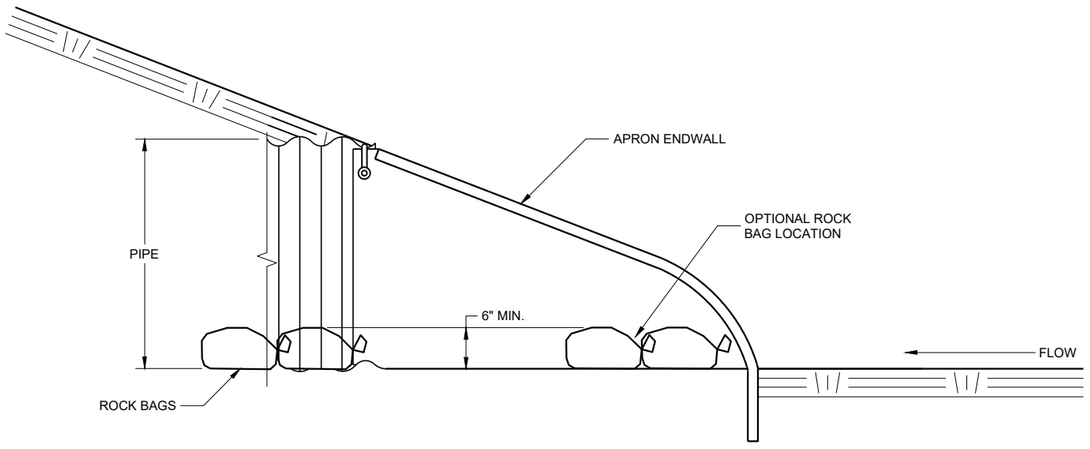
FHWA

6

S.D.D. 8 E 10-2



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

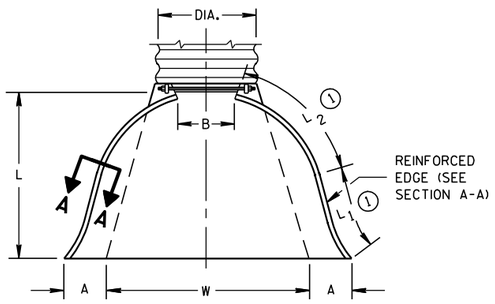
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4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

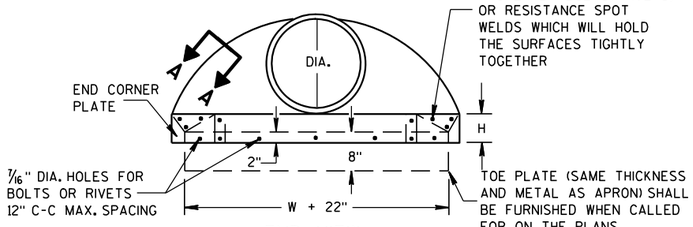
REINFORCED CONCRETE APRON ENDWALLS

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

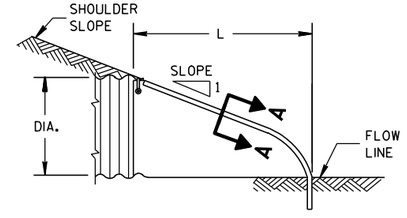
*MINIMUM
**MAXIMUM



PLAN VIEW

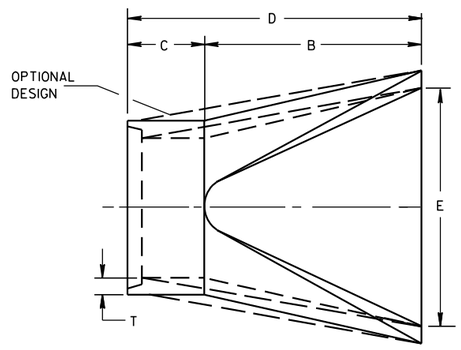


END VIEW

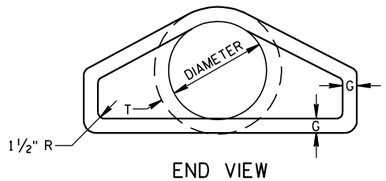


SIDE ELEVATION

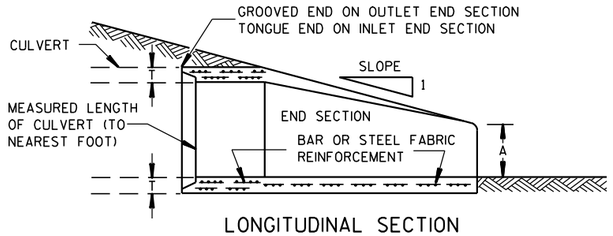
METAL ENDWALLS



PLAN

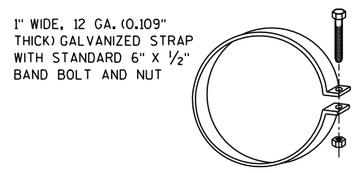


END VIEW



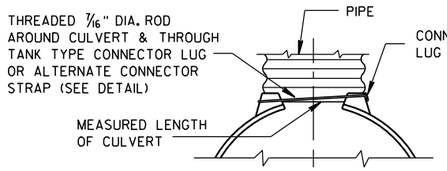
LONGITUDINAL SECTION

CONCRETE ENDWALLS

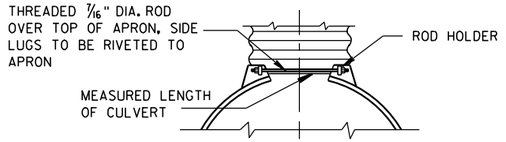


ALTERNATE FOR TYPE 1 CONNECTION

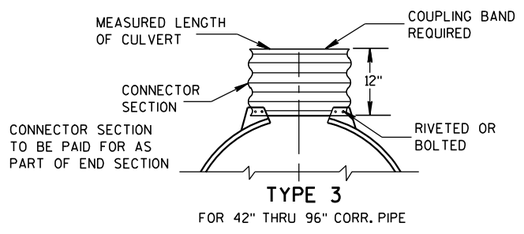
END SECTION CONNECTOR STRAP



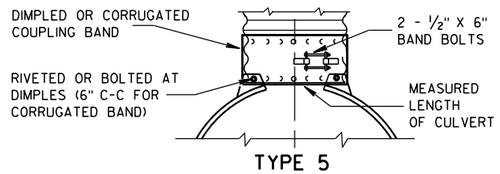
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

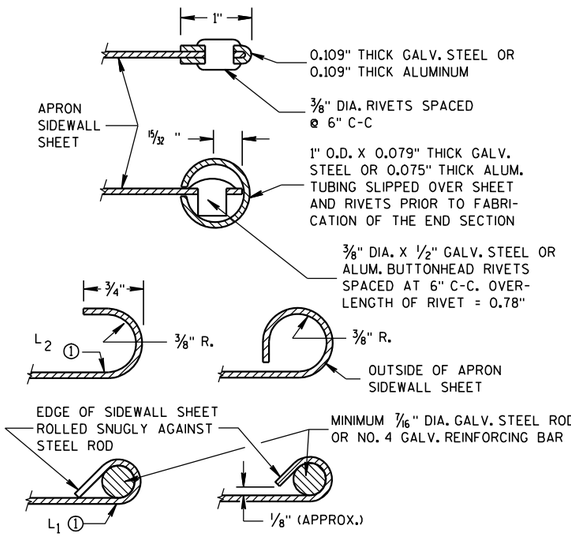
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

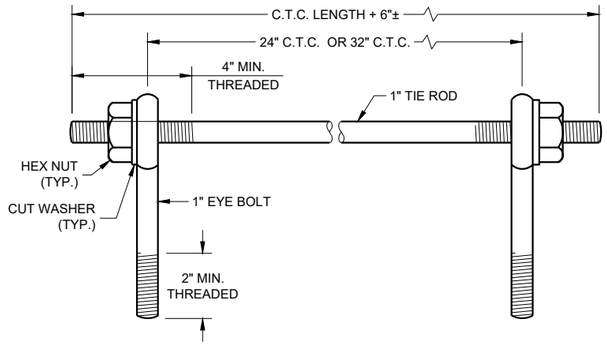
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

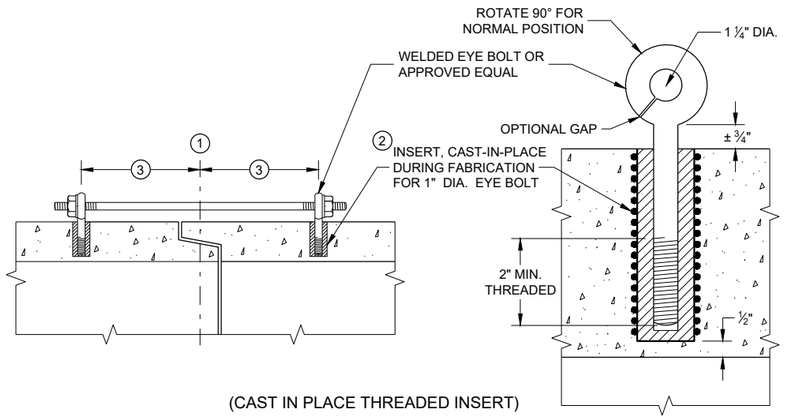
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

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



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.

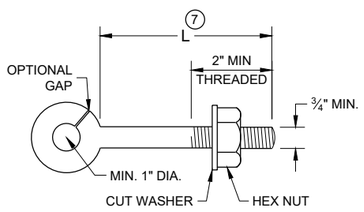
(3) HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.

(4) BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

(5) OPENING TO BE ROD DIAMETER PLUS 1 INCH.

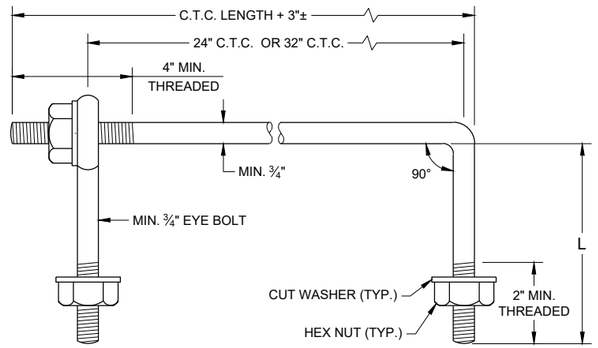
(6) LENGTH ADEQUATE TO EXTEND TO WITHIN ½ INCH OF THE INNER SURFACE OF THE PIPE.

(7) EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

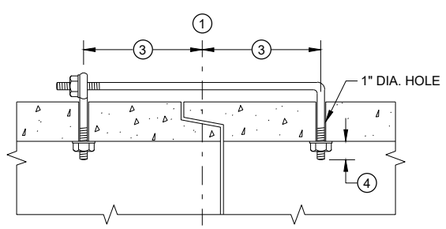


EYE BOLT (7)

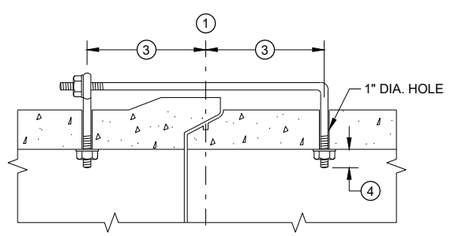
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

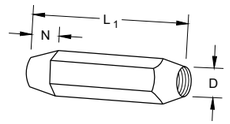
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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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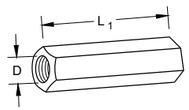
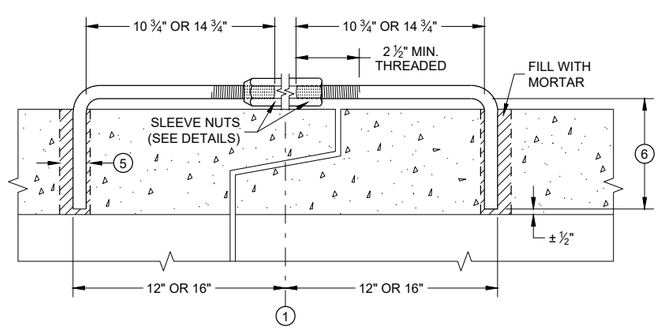


PLAIN

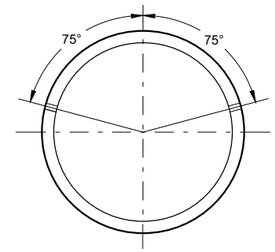
RIGHT AND LEFT THREADS

SLEEVE NUTS



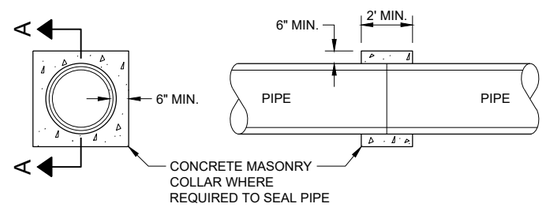
LONGITUDINAL SECTION

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

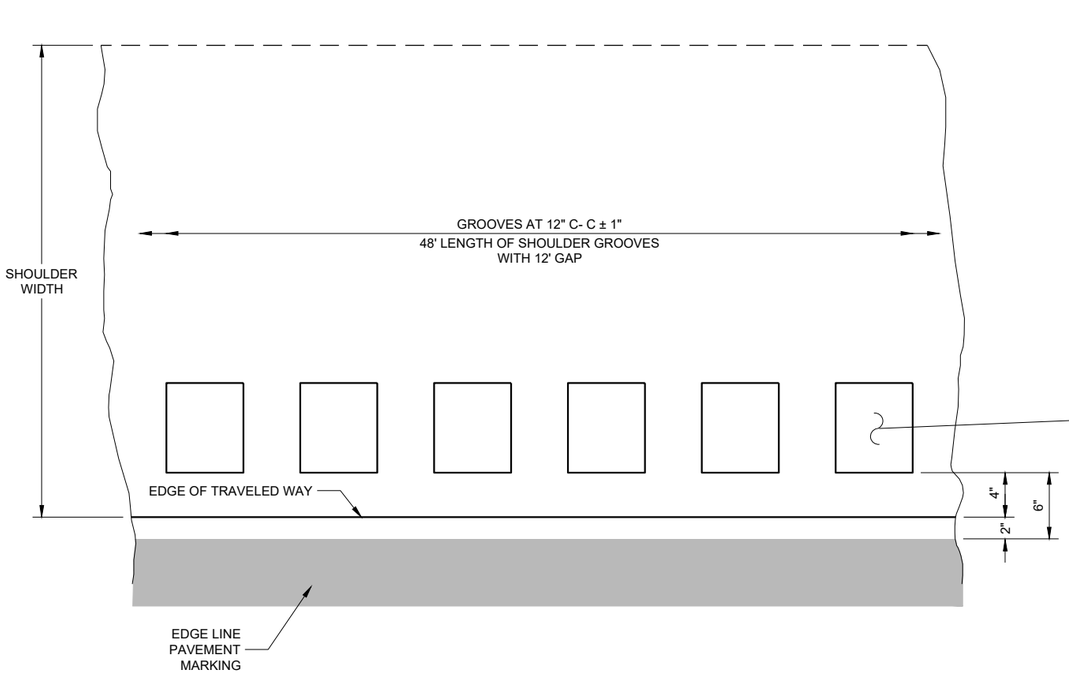
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

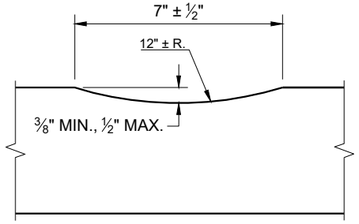
APPROVED
November 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

SDD 08F04 - 08

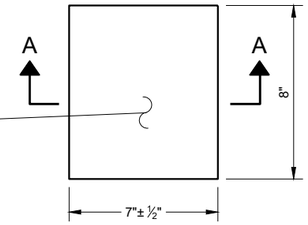
SDD 08F04 - 08



PLAN DETAIL VIEW
SHOULDER WITH GROOVES



SECTION A - A

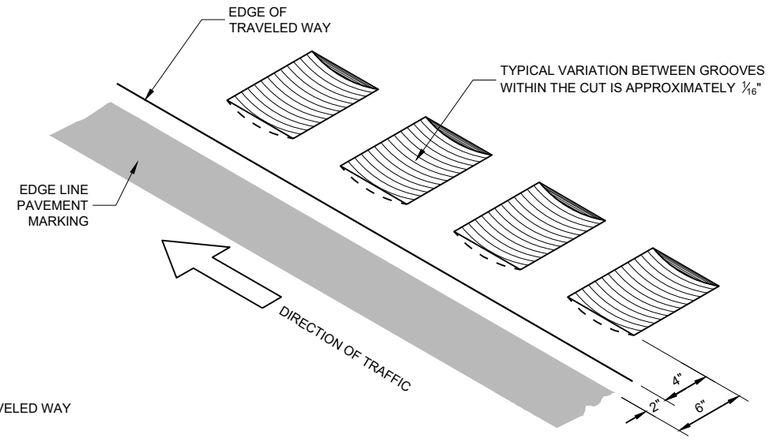


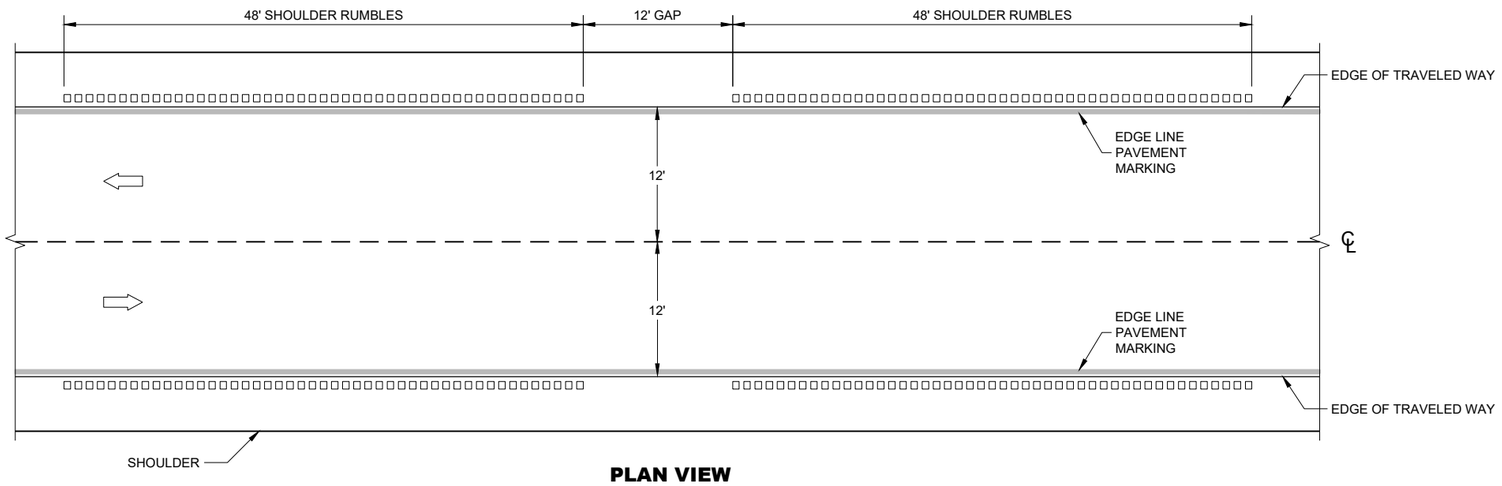
PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A10 SHEETS "g" AND "h".

SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.





PLAN VIEW

SHOULDER RUMBLE STRIPS - ASPHALT

6

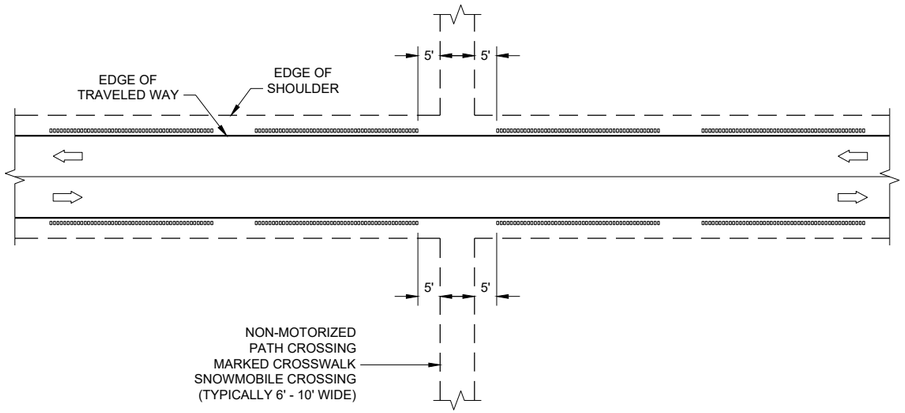
SDD 13A10 - 03a

SHOULDER RUMBLE STRIPS ASPHALT

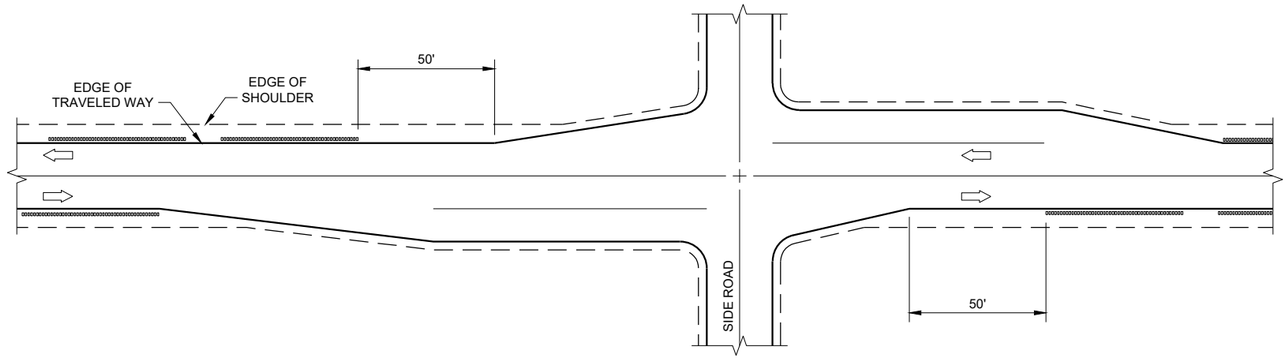
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

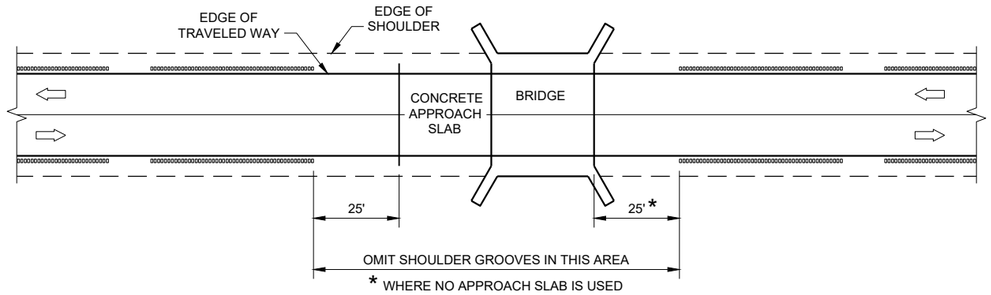
SDD 13A10 - 03a



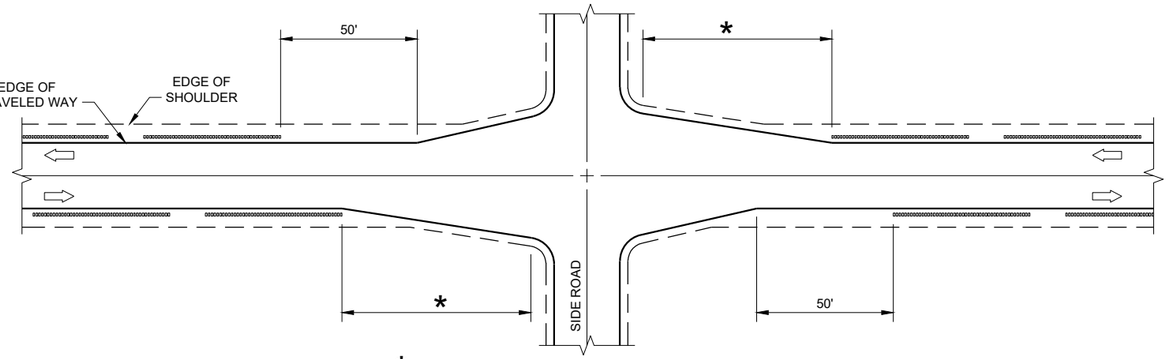
GROOVES AT MISCELLANEOUS CROSSINGS



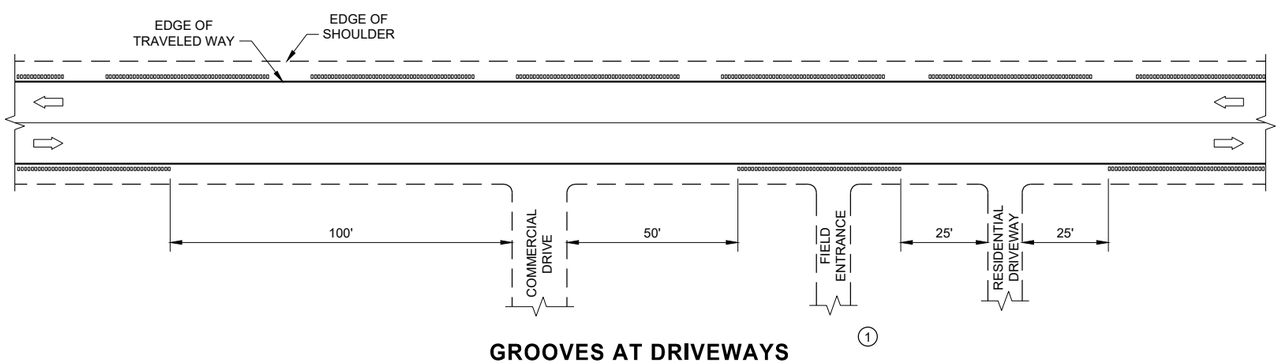
GROOVES AT RIGHT TURN LANE



GROOVES AT BRIDGES



GROOVES AT INTERSECTIONS WITH APPROACH TAPER



GROOVES AT DRIVEWAYS ①

GENERAL NOTES

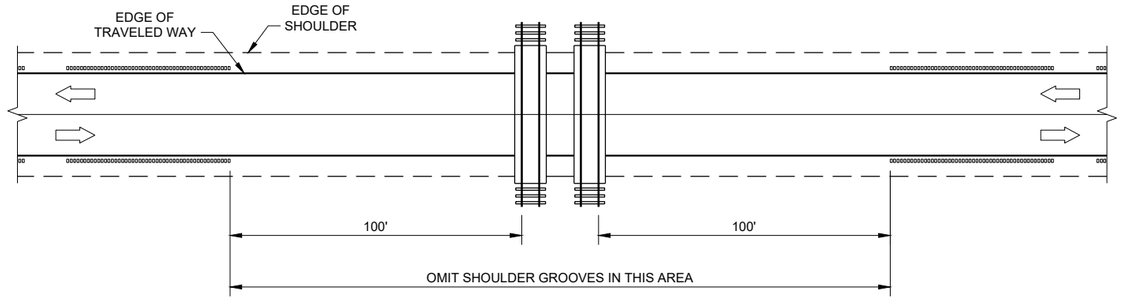
① SHOULDER GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.

SHOULDER AND EDGE LINE RUMBLE STRIPS CROSSINGS, INTERSECTIONS, BRIDGES, DRIVEWAYS

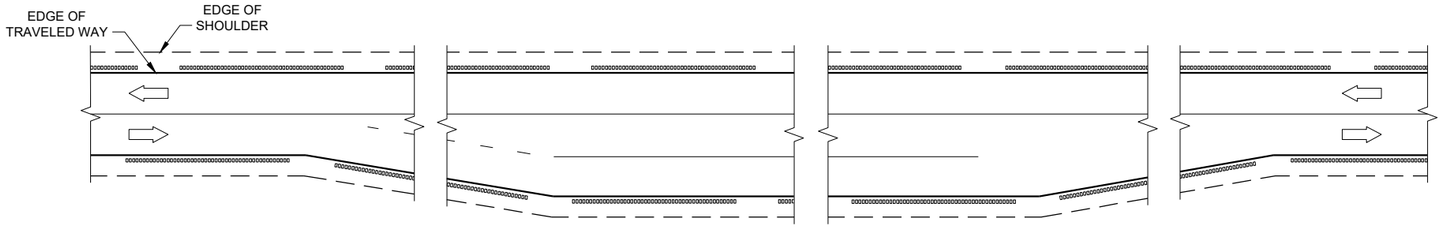
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

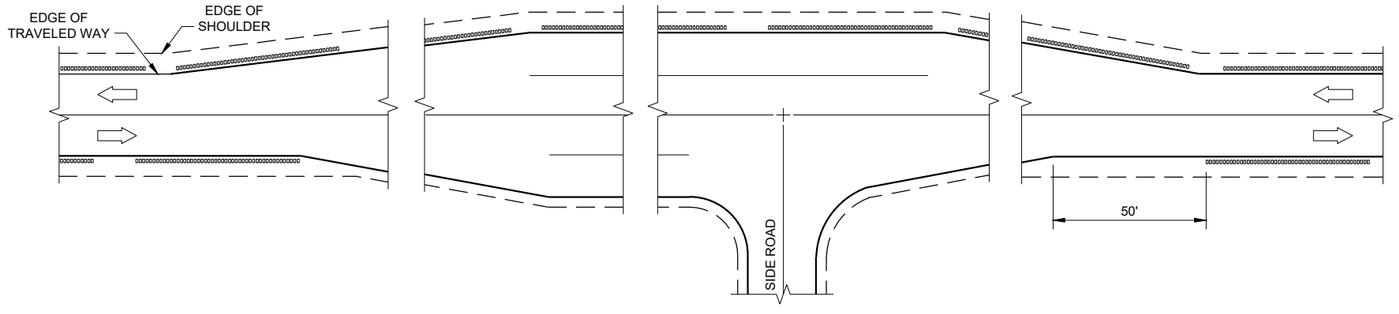
SDD 13A10 - 03g



GROOVES AT RAILROADS



GROOVES AT PASSING AND CLIMBING LANES



GROOVES AT BYPASS LANES

6

SDD 13A10 - 03h

SHOULDER AND EDGE LINE RUMBLE STRIPS - RAILROAD, PASSING, CLIMBING AND BYPASS LANES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

FHWA

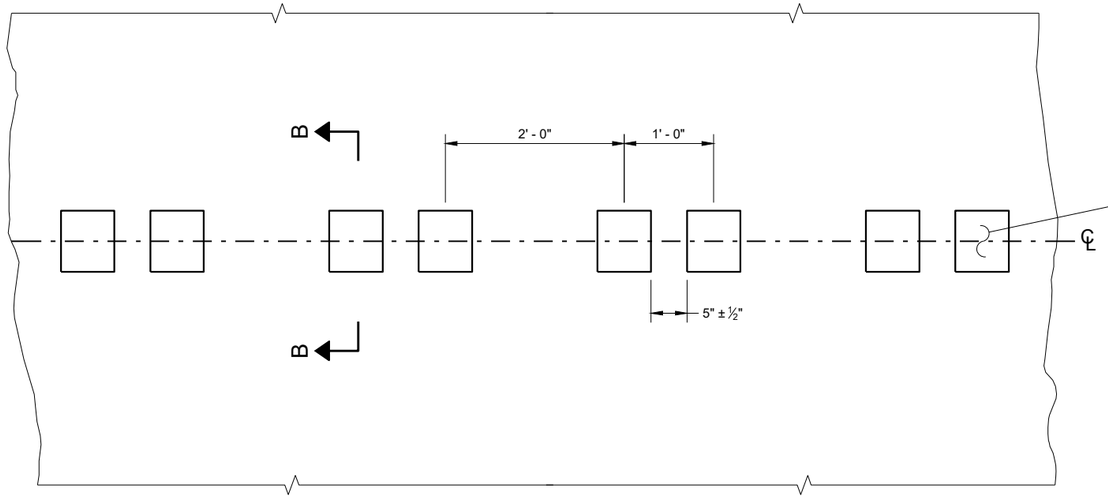
6

SDD 13A10 - 03h

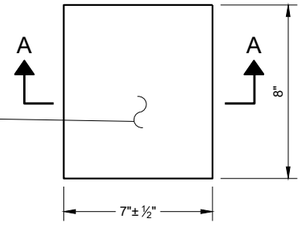
GENERAL NOTES

DO NOT MILL SHOULDER GROOVES THROUGH INTERSECTIONS, MARKED CROSSWALKS, NON-MOTORIZED PATH CROSSINGS, ETC. REFER TO SDD 13A11 SHEETS "d" AND "e".

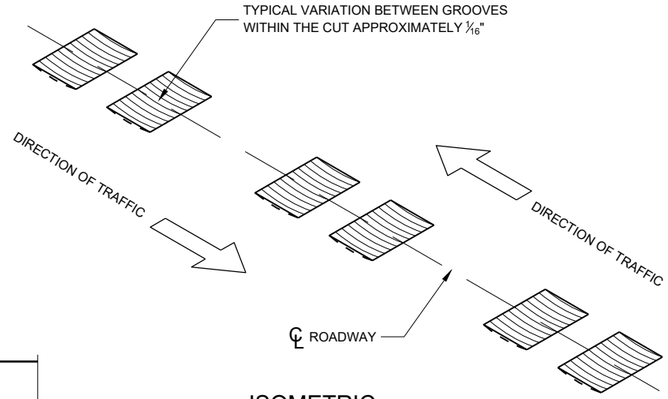
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



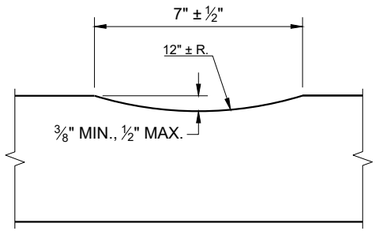
PLAN DETAIL VIEW



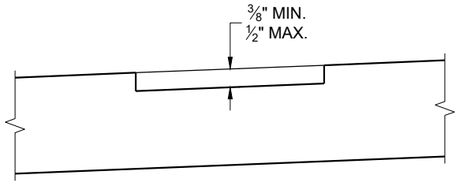
PLAN VIEW (SINGLE GROOVE)



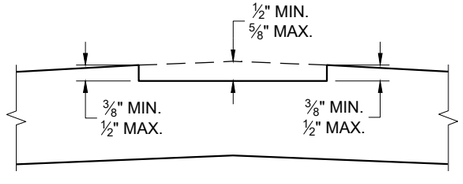
ISOMETRIC



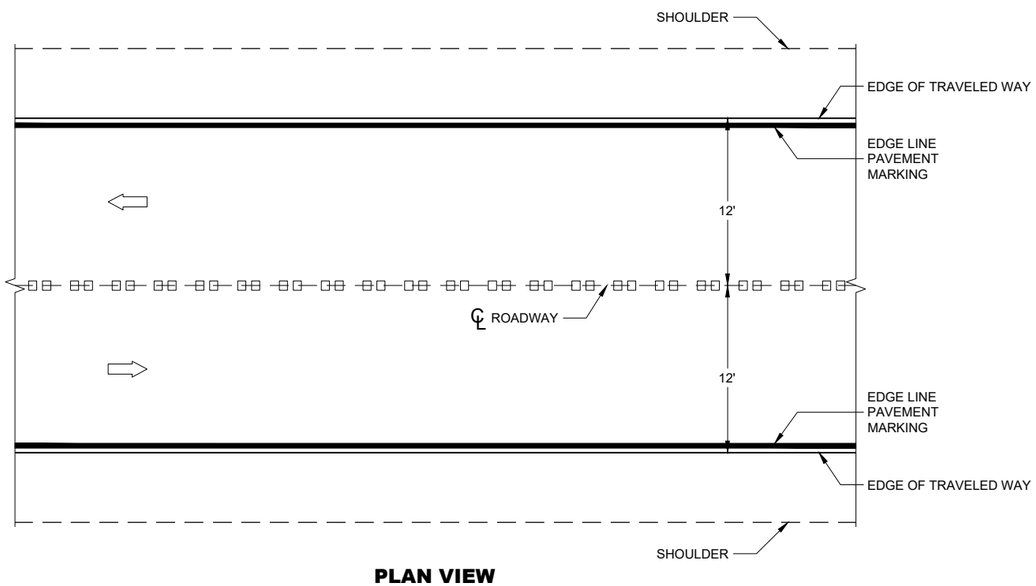
SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY



SECTION B - B
CROWNED ROADWAY



PLAN VIEW

CENTERLINE RUMBLE STRIPS - ASPHALT

CENTERLINE RUMBLE STRIPS - ASPHALT

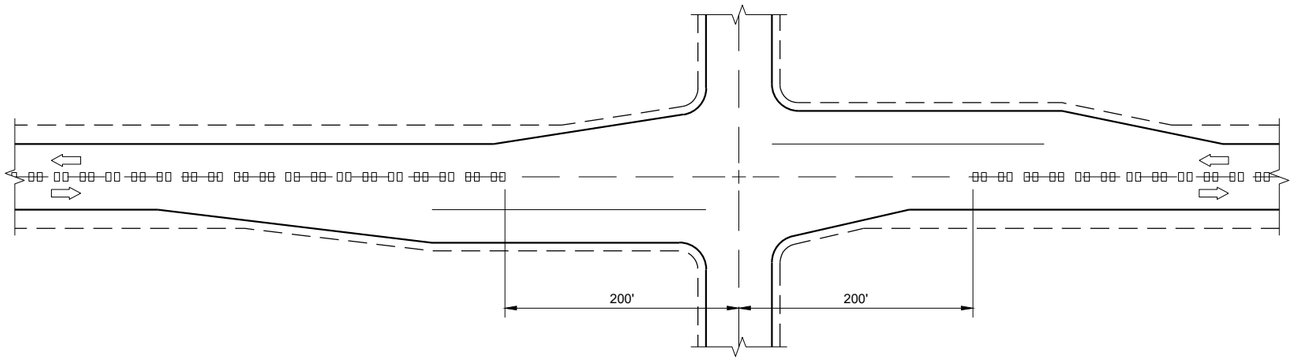
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13A11 - 04a

6

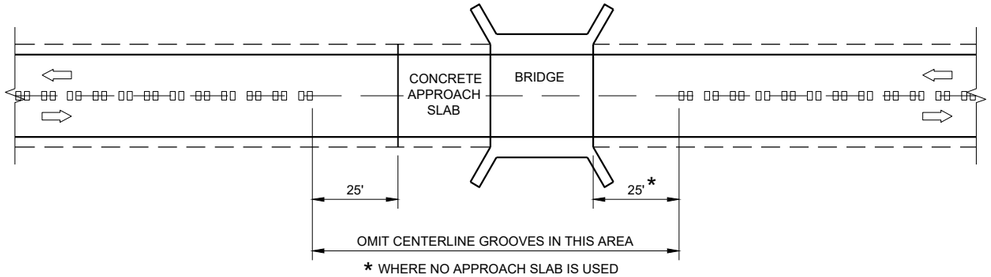
SDD 13A11 - 04a



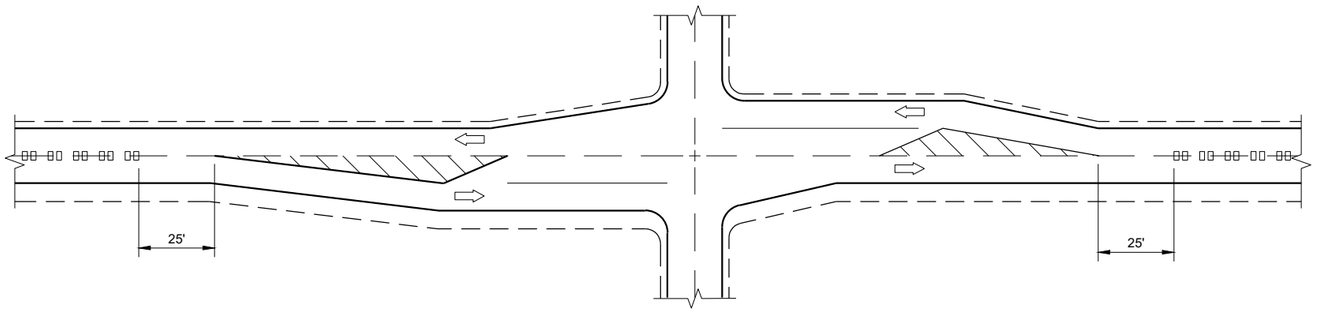
CENTERLINE GROOVES AT INTERSECTIONS

GENERAL NOTES

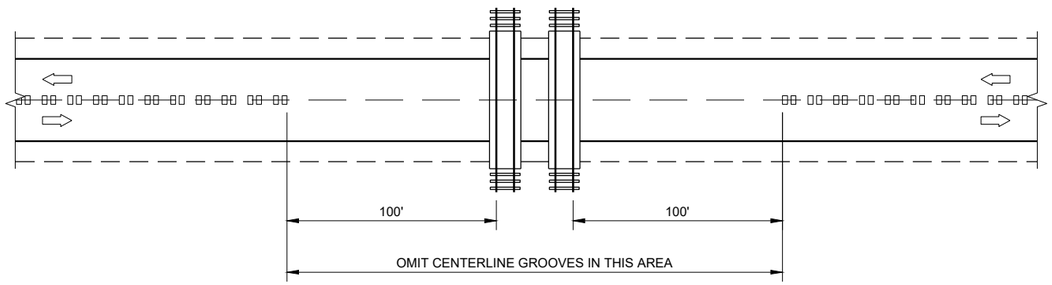
1. CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



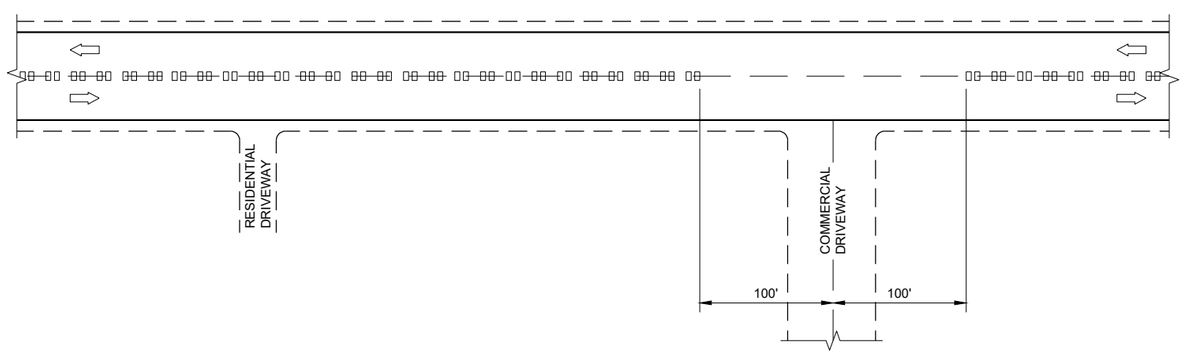
CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT INTERSECTIONS (WITH LEFT TURN LANES)



CENTERLINE GROOVES AT RAILROADS



CENTERLINE GROOVES AT DRIVEWAYS (1)

CENTER LINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAIL ROADS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023
DATE

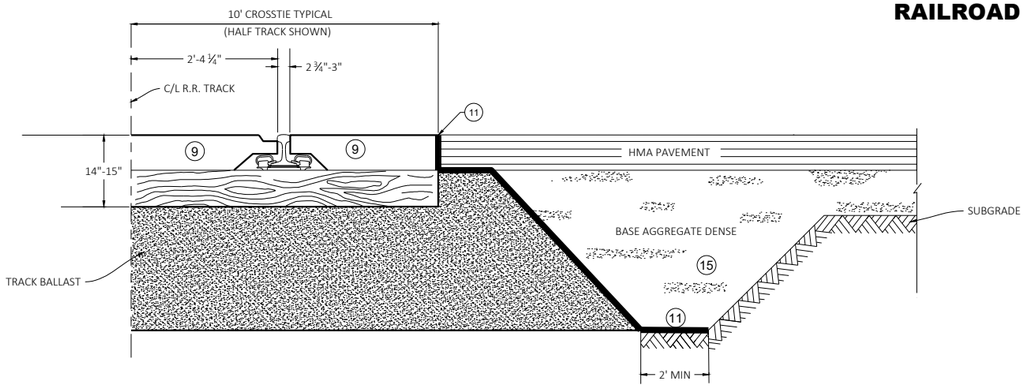
/S/ John Jenkins
ROADWAY STANDARDS DEVE ENGINEER

FHWA

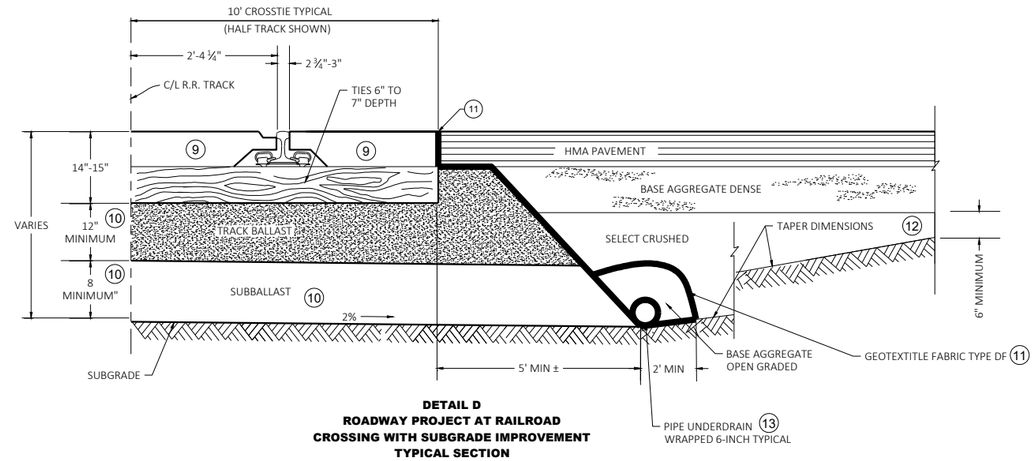
6

SDD 13A11 - 04d

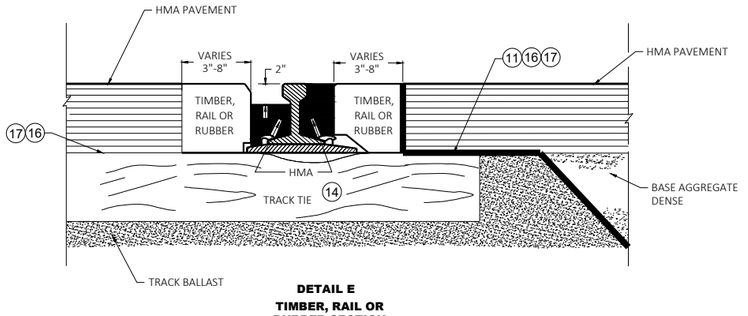
TYPICAL SECTIONS FOR RAILROAD APPROACH



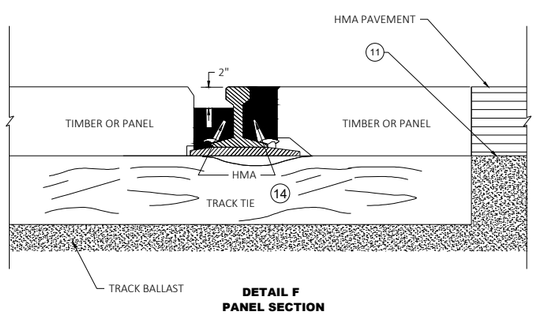
DETAIL C
ROADWAY PROJECT AT RAILROAD CROSSING WITHOUT SUBGRADE IMPROVEMENT TYPICAL SECTION



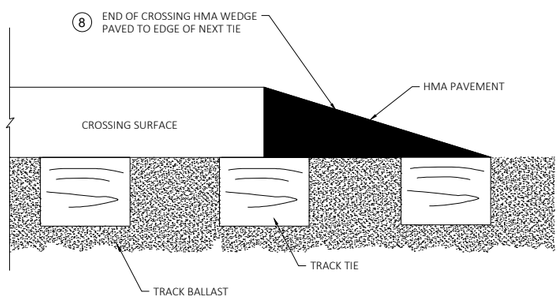
DETAIL D
ROADWAY PROJECT AT RAILROAD CROSSING WITH SUBGRADE IMPROVEMENT TYPICAL SECTION



DETAIL E
TIMBER, RAIL OR RUBBER SECTION HMA FLANGEWAY AND FIELD FILLERS



DETAIL F
PANEL SECTION HMA FLANGEWAY AND FIELD FILLERS



DETAIL G
END OF CROSSING HMA WEDGE

GENERAL NOTES

8. IF METAL END PLATES ARE NOT INSTALLED BY THE RAILROAD THEN HMA PAVEMENT WEDGE SHALL BE PLACED AT THE END OF THE LAST PANEL TAPERED TO BACK EDGE OF NEXT TIE AND THOROUGHLY COMPACTED. SEE DETAIL A AND B.

9. MATCH THE CROSSING TYPE THAT IS INSTALLED UNLESS OTHERWISE DIRECTED BY PROJECT ENGINEER.

10. TRACK BALLAST AND SUBBALLAST REQUIRED 12" AND 8" MINIMUM DEPTHS RESPECTIVELY. DIMENSION FROM BOTTOM OF TRACK TIE TO HIGH SIDE OF 2% SLOPE. THE 2% SLOPE IS REQUIRED ON RAILROAD SUBBALLAST. SEE PLAN FOR CROWN, MATERIAL THICKNESS, AND SLOPE DIRECTION. SUBBALLAST CAN BE HMA, 1 1/2" BASE AGGREGATE DENSE, SELECT CRUSHED, OR A COMBINATION OF THEM.

11. GEOTEXTILE FABRIC TYPE SAS PLACED IN ORDER TO PROVIDE STABILIZATION AND SEPARATION ON TOP OF THE TRACK BALLAST WHERE IT IS UNDER HMA PAVEMENT, BASE AGGREGATE DENSE OR SELECT CRUSHED MATERIAL AND THE FIELD SIDE BALLAST CRIBS. GEOTEXTILE FABRIC TYPE DF PLACED IN ORDER TO PROVIDE STABILIZATION AND SEPARATION UNDER AND AROUND THE PIPE UNDERDRAIN. PLACING GEOTEXTILE FABRIC OR GEOGRID UNDER THE SUBBALLAST IS OPTIONAL.

12. TAPER DIMENSIONS PROVIDED BY PLAN OR BY PROJECT ENGINEER.

13. IF SHOWN ON THE PLAN, TYPICAL 6-INCH PERFORATED PVC SCHEDULE 80 PIPE UNDERDRAIN TO BE PLACED ALONG THE TOE OF SLOPE, GRADED TO DRAIN AND DAYLIGHT OR INTO STORM SEWER. BASE AGGREGATE OPEN GRADED OVER PIPE UNDERDRAIN AND THEN WRAPPED IN GEOTEXTILE FABRIC TYPE DF SCHEDULE A IN ORDER TO STABILIZE AND SEPARATE FROM SELECT CRUSHED.

14. HMA FLANGEWAY AND FIELD FILLERS ARE TO BE PLACED AND THOROUGHLY HAND COMPACTED BY THE CONTRACTOR, WHEN NOT PROVIDED BY OTHERS AS PART OF THE CROSSING SURFACE MATERIAL. IF THE CROSSING SURFACE IS NOT BEING REPLACED, THEN REMOVE AND REPLACE THE HMA FLANGEWAY AND FIELD FILLERS AS DIRECTED BY THE RAILROAD OR PROJECT ENGINEER.

15. GRADE TO MATCH EXISTING OR PROPOSED TYPICAL SECTION OF ROADWAY. SEE PLAN OR PROJECT ENGINEER FOR MORE DETAIL. IF NOT NOTED OTHERWISE IN THE PLAN, BACKFILL ANY REMOVED BASE AND SUBGRADE WITH BASE AGGREGATE DENSE.

16. IF THE CROSSING IS NOT BEING REPLACED, REMOVE AND REPLACE HMA AS DIRECTED BY RAILROAD AND PROJECT ENGINEER. CARE MUST BE TAKEN TO NOT DAMAGE CROSSING PANELS, TIES, RAIL, PLATES AND SPIKES.

17. PLACE HMA FULL DEPTH. AGGREGATE IS NOT TO BE PLACED BETWEEN THE RAILROAD TIES AND THE HMA PAVEMENT.

TYPEICAL SECTIONS FOR RAILWAY APPROACH

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

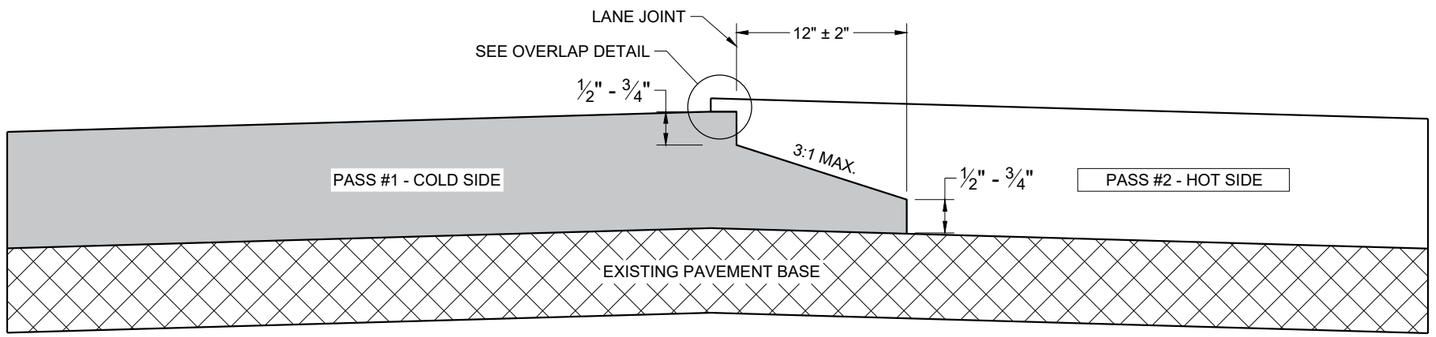
APPROVED
May 2023
DATE

/S/ Kristen Sommers
STATE RAILROAD ENGINEER AND SAFETY SUPERVISOR

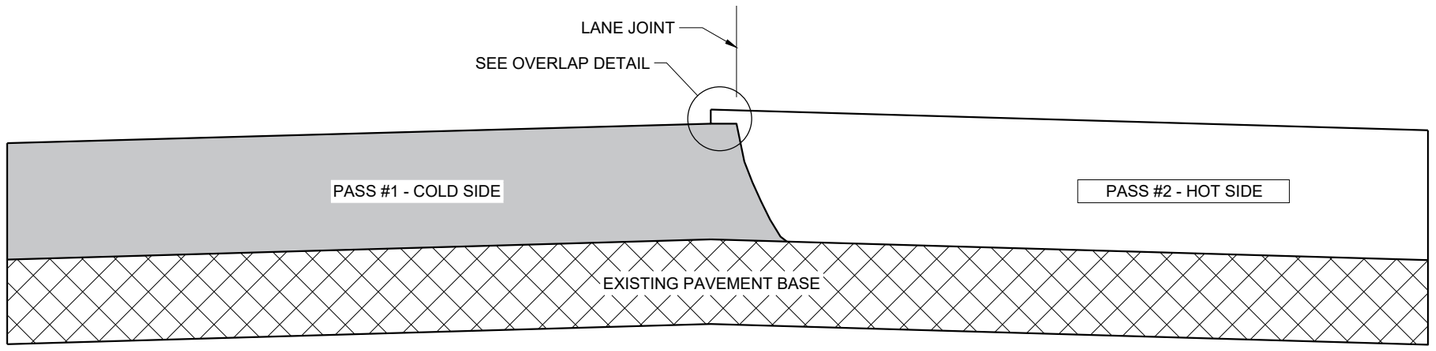
FHWA

6

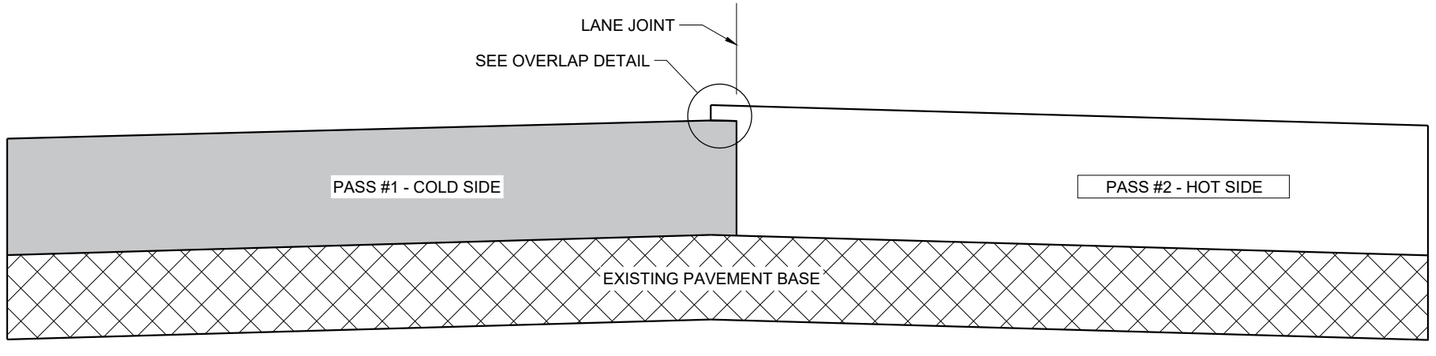
SDD 13B01-11b



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

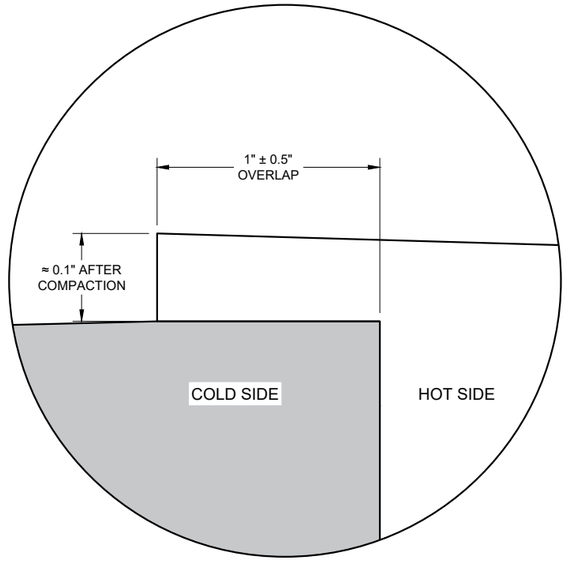
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

FOR ALL LONGITUDINAL JOINTS, ENSURE THE PAVER SCREED OVERLAPS THE PREVIOUSLY PLACED PAVEMENT BY 1" ± 0.5" AND THE HOT SIDE OF THE JOINT REMAINS HIGHER THAN THE COLD SIDE BY APPROXIMATELY 0.1" AFTER FINAL COMPACTION. (IT WILL BE FLUSH WHEN PAVING IN ECHELON.)

ONLY REMOVE THE LONGITUDINAL NOTCHED WEDGE JOINT FOR SMA PAVEMENT OR AS DIRECTED BY THE ENGINEER TO ADDRESS SPECIFIC LENGTHS OF JOINT DAMAGED BY TRAFFIC.

WHEN MILLING BACK OR REMOVING ANY LONGITUDINAL JOINT, LIMIT THE MATERIAL REMOVED TO 2" FROM THE TOP NOTCH OR FROM THE VERTICAL JOINT EDGE ON THE COLD SIDE OF THE JOINT.

USE LONGITUDINAL MILLED JOINT AS PLANS SHOW OR THE AS THE ENGINEER DIRECTS.



OVERLAP DETAIL (TYPICAL)

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SDD 13C19 - 03

SDD 13C19 - 03

HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Steven Hefel
HMA PAVEMENT ENGIN

FHWA

GENERAL NOTES

(1) W6 X 9 OR W6 X 8.5 STEEL POSTS AND NOTCHED PLASTIC BLOCKOUTS ARE ACCEPTABLE ALTERNATIVES FOR 6" X 8" WOOD POSTS WITH WOOD OR PLASTIC BLOCKOUTS. USE APPROVED NOTCHED PLASTIC BLOCKOUTS WITH STEEL POSTS. APPROVED PLASTIC BLOCKOUT DESIGNS MAY VARY FROM THIS TYPICAL DETAIL WHEN USED IN CONJUNCTION WITH STEEL POSTS.

DO NOT MIX STEEL POSTS AND WOOD POSTS IN A SINGLE INSTALLATION.

(2) USE STRUCTURAL STEEL POSTS CONFORMING TO ASTM A 36. GALVANIZED POSTS ACCORDING TO AASHTO M 111. EITHER SET THE POSTS IN DRILLED HOLES OR DRIVE TO GRADE. REMOVE MUSHROOMING CAUSED BY DRIVING AND REPAIR DAMAGED SPELTER COATING ON GALVANIZED POSTS.

(3) INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.

(4) USE EITHER WOOD OR APPROVED PLASTIC BLOCKOUTS ON WOOD POSTS.

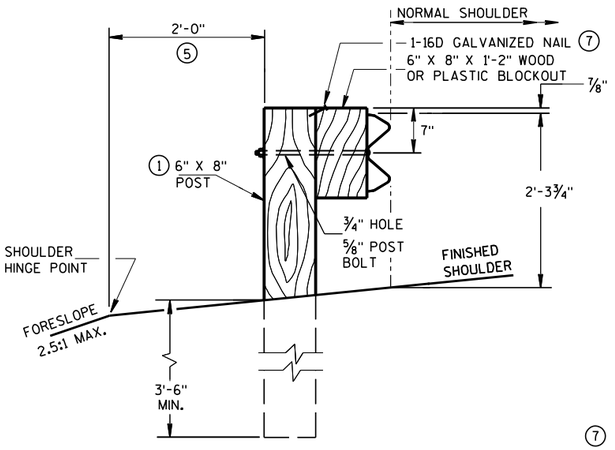
(5) IF THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING, W BEAM (LHW).

(6) IF ROCK IS ENCOUNTERED DURING EXCAVATION, THE ENGINEER MAY APPROVE USING A 12 INCH DIAMETER POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE APPROXIMATELY 2½ INCHES DEEP. CUT THE POSTS TO LENGTH AND PLACE IN YHE HOLE. BACKFILL WITH MATERIAL EXCAVATED FROM THE HOLE AND COMPACT ADEQUATEY.

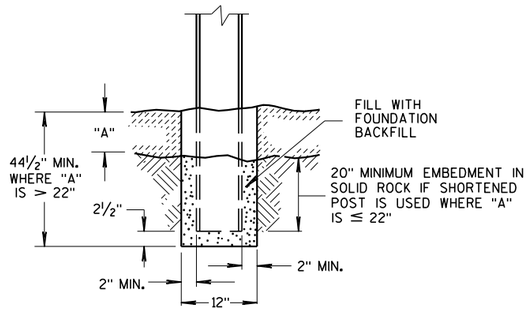
(7) WHEN USING STEEL POSTS AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

INSTALL BEAM GUARD SECTIONS AND ALL NECESSARY HARDWARE ACCORDING TO THE APPLICABLE PLAN AND CURRENT STANDARD AND SUPPLEMENTAL SPECIFICATIONS.

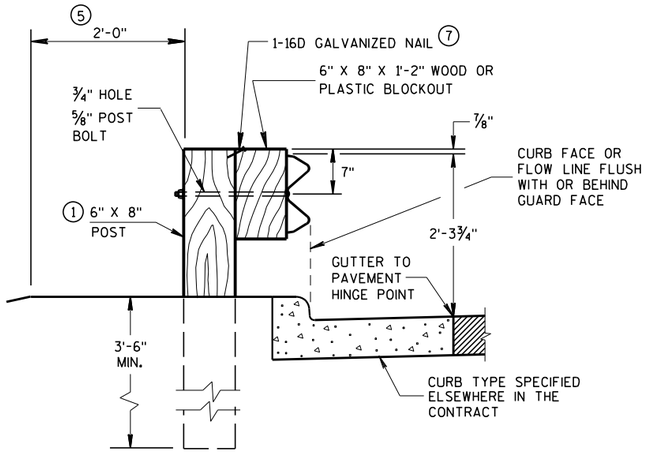
ALL DIMENSIONS ARE SUBJECT TO MANUFACTURER'S TOLERANCES EXCEPT WHERE ALLOWABLE TOLERANCES ARE SHOWN.



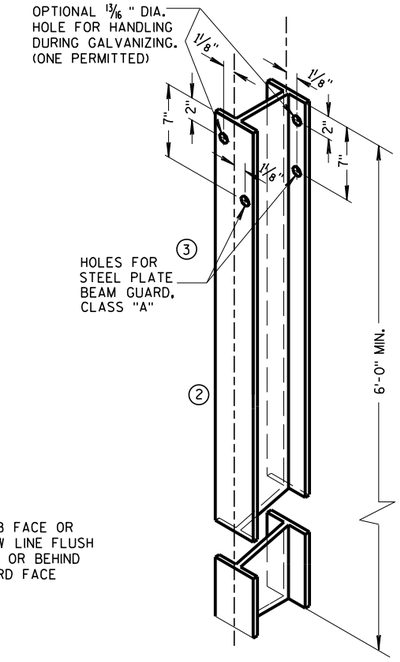
END VIEW
LOCATED ALONG A ROADWAY SHOULDER
STANDARD INSTALLATION



END VIEW
SETTING STEEL OR WOOD POST IN ROCK (6)

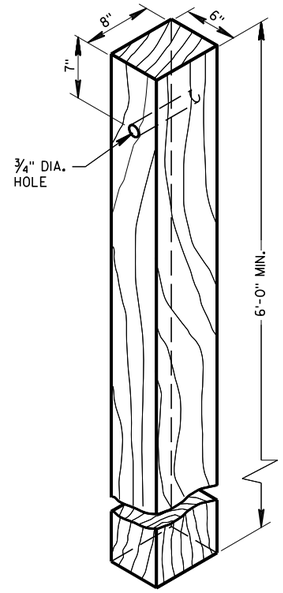


END VIEW
LOCATED ALONG A CURBED ROADWAY

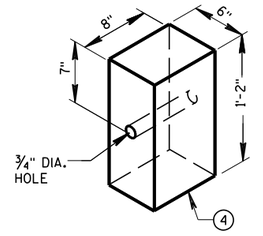


STEEL POST &
HOLE PUNCHING DETAIL
(W6 X 9) (1)

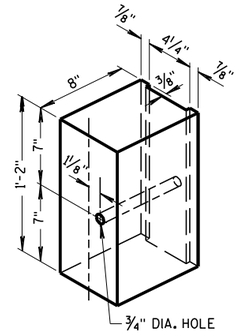
ALL HOLES 13/16" DIAMETER EXCEPT AS NOTED



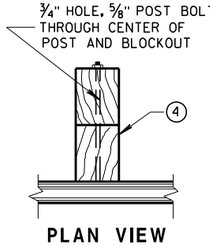
WOOD POST
(6"X8") NOMINAL



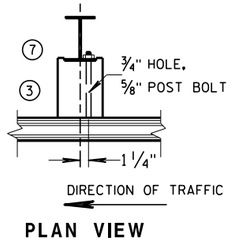
WOOD OR PLASTIC
BLOCKOUT FOR
WOOD POSTS



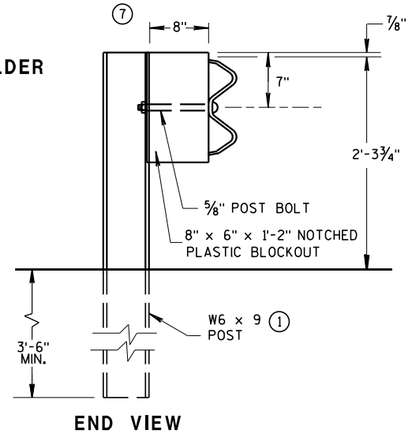
TYPICAL NOTCHED
PLASTIC BLOCKOUT
FOR STEEL POSTS (1)



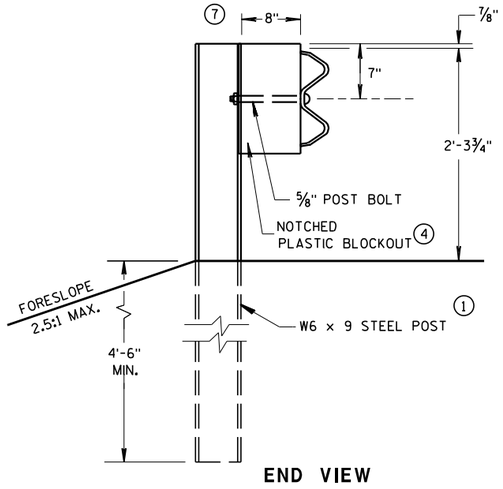
PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



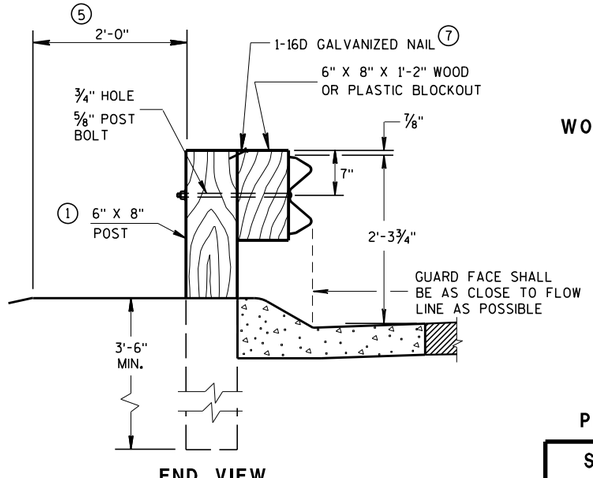
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



END VIEW
STEEL POST & NOTCHED
PLASTIC BLOCKOUT ALTERNATIVE
STANDARD INSTALLATION



END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



END VIEW
LOCATED ALONG A
MOUNTABLE CURBED ROADWAY

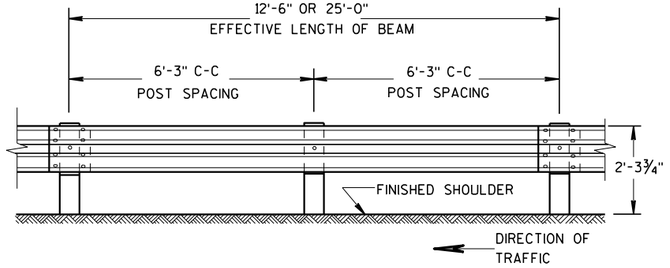
TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

STEEL PLATE BEAM GUARD,
CLASS "A"
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

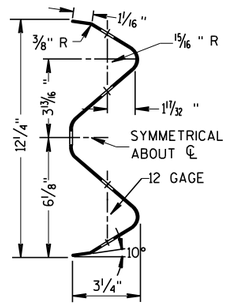
S.D.D. 14 B 15-11a

S.D.D. 14 B 15-11a

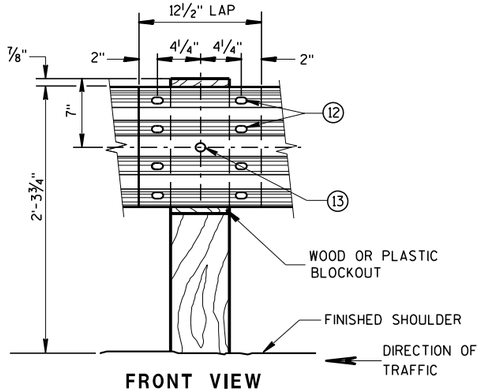


FRONT VIEW

POST SPACING STANDARD INSTALLATION



SECTION THRU W BEAM



FRONT VIEW

BEAM SPLICE AT WOOD POST AND POST MOUNTING DETAIL

GENERAL NOTES

FURNISH GUARDRAIL DEFLECTORS FROM APPROVED PRODUCTS LIST.

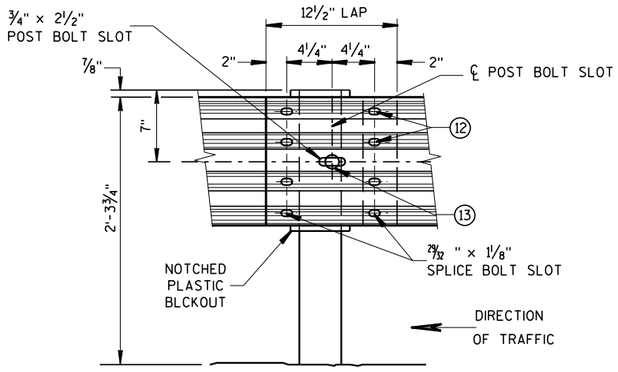
(9) DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINA. START REFLECTORS AT POST #9 AND SPACE EVENLY EVERY 100 FEET (MAX.) TO THE END OF GUARDRAIL RUN, USING A MINIMUM OF 3 REFLECTORS.

(12) 8 -5/8" ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.

(13) 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.

FRONT VIEW

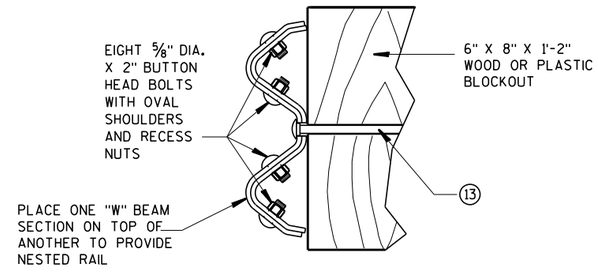
POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



FRONT VIEW

BEAM SPLICE AT STEEL POST

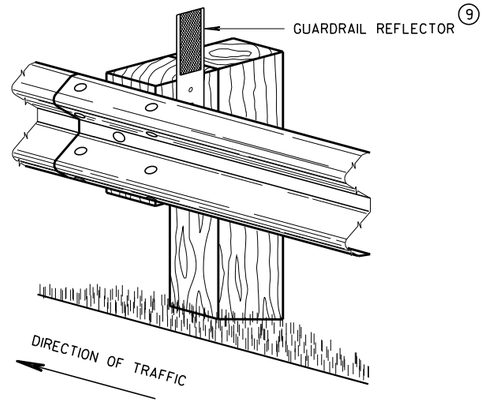
TYPICAL SPLICING DETAILS OF STEEL PLATE BEAM GUARD



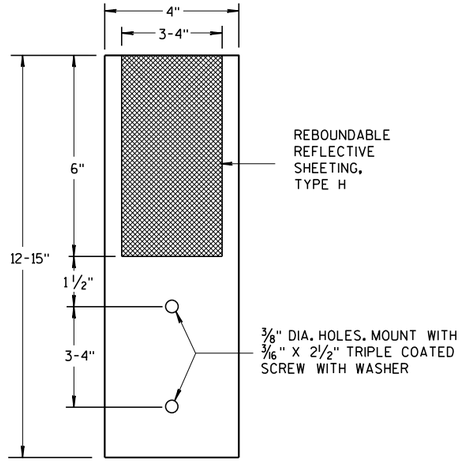
NESTED W BEAM (NW)

USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)

* USE DOUBLE SIDED WHITE GUADRAIL REFLECTORS ON ROADWAYS WITH BI-DIRECTIONAL TRAFFIC (NO MEDIAN). USE SINGLE SIDED WHITE (RIGHT SIDE) AND SINGLE SIDED YELLOW (LEFT SIDE) ON ROADWAYS WITH MEDIAN SEPARATION.



4" X 12" GUARDRAIL REFLECTOR DETAIL AND TYPICAL INSTALLATION *



4"x 12" GUARDRAIL REFLECTOR

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCO 98
DEPARTMENT OF TRANSPORTATION

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S.D.D. 14 B 15-11b

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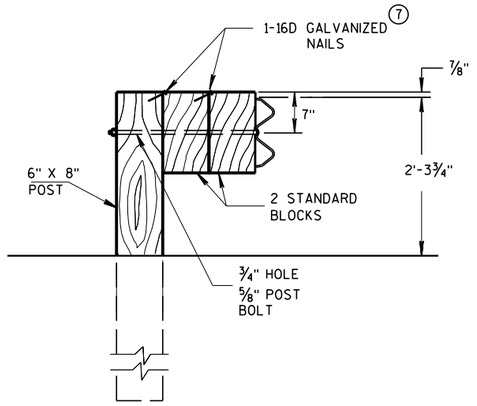
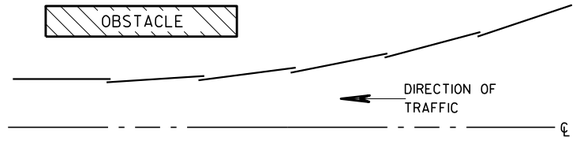
S.D.D. 14 B 15-11b

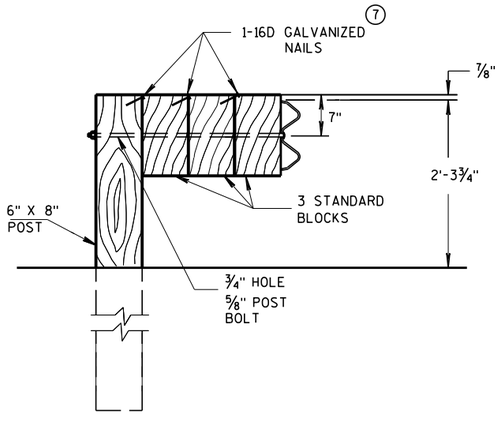


DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS WITHIN A BARRIER RUN IS UNLIMITED

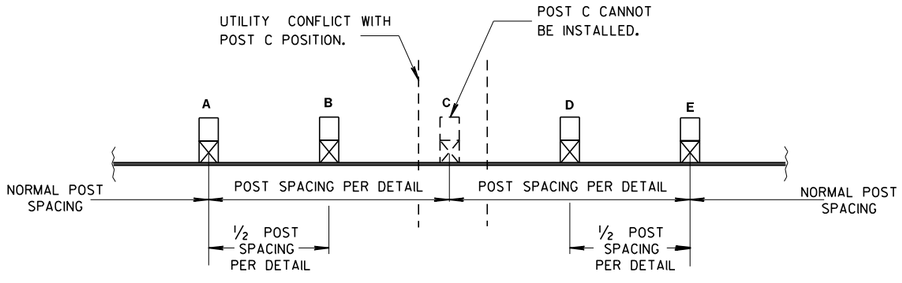


PLAN VIEW
BEAM LAPPING DETAIL



DETAIL FOR TRIPLE BLOCKS

TRIPLE BLOCK DETAIL IS LIMITED TO ONE LOCATION WITHIN A BEAM GUARD RUN.



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA 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.

STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS UNIT SUPERVISOR
FHWA

6
S.D.D. 14 B 15-11c

BILL OF MATERIALS

NOTE NO.	DESCRIPTION
①	WOOD BREAKAWAY TERMINAL POST: 5½" X 7½" X 3'-9"
②	STEEL TUBE TS 8" X 6" X 0.188", 6'-0"
④	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	PIPE SLEEVE: 2" X 5 ½" STANDARD PIPE
⑦	BEARING PLATE
⑧	BCT CABLE ASSEMBLY
⑨	CABLE ANCHOR BOX
⑩	STRUT & YOKE
⑪	STEEL PLATE BEAM, END PANEL 12 GA.
⑫	STEEL PLATE BEAM: 12 GA. 13'-6½"
⑬	IMPACT HEAD
⑭	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS.

(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.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 AND 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

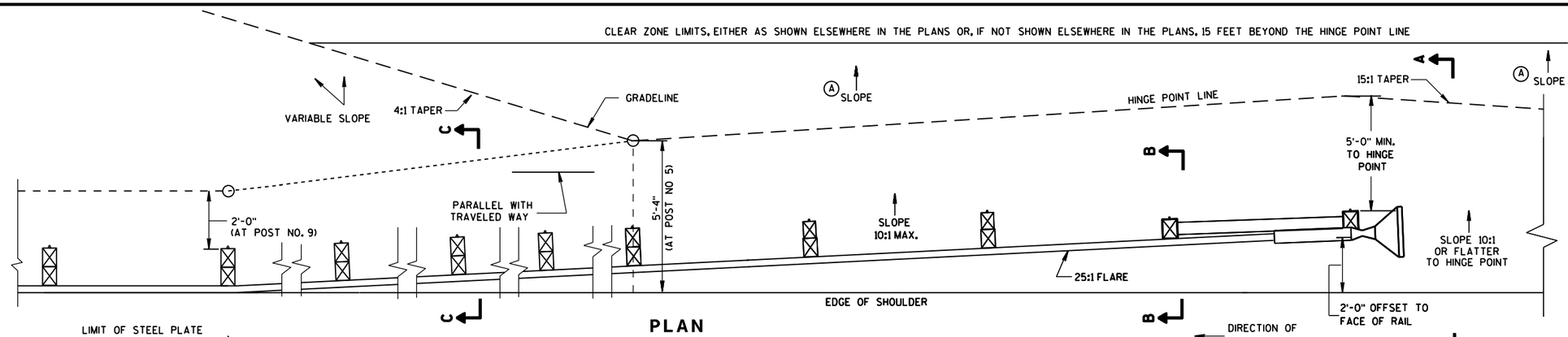
(E) THE CENTER OF THE UPPER 3½" DIAMETER HOLE ON POST 3 THROUGH 8 SHALL BE ¾" ABOVE THE FINISHED GROUND LINE.

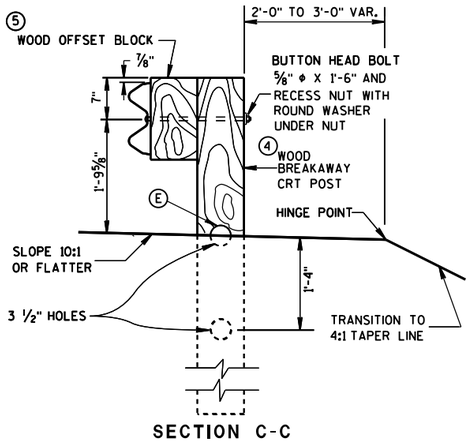
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS. ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

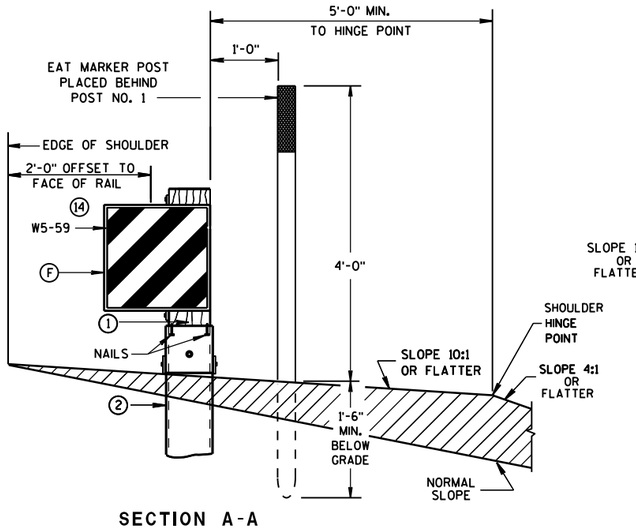
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

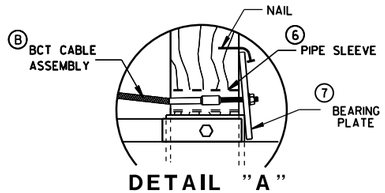




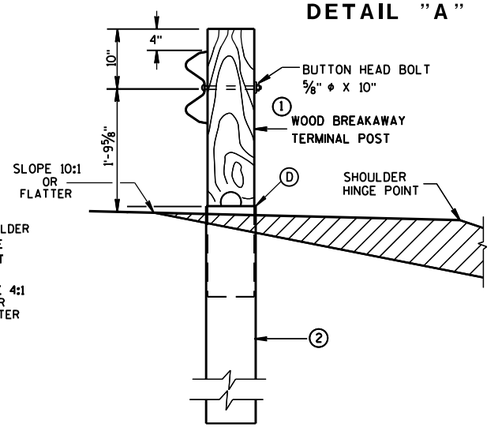
SECTION C-C
TYPICAL AT POST NOS. 6, 8



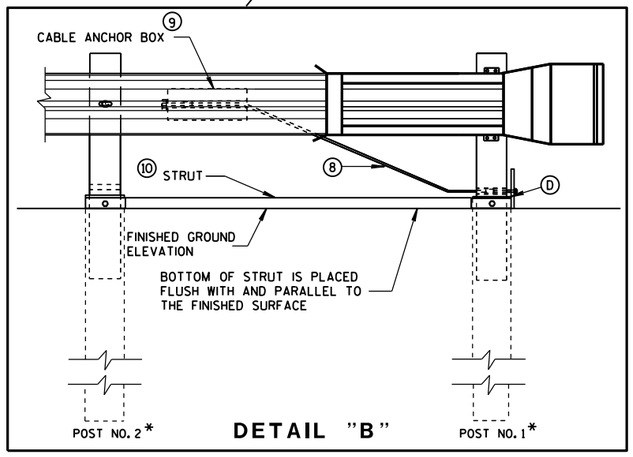
SECTION A-A
TYPICAL AT POST NO. 1*



DETAIL "A"



SECTION B-B
TYPICAL AT POST NO. 2*



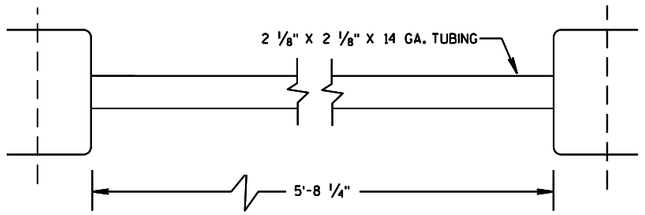
DETAIL "B"

STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL

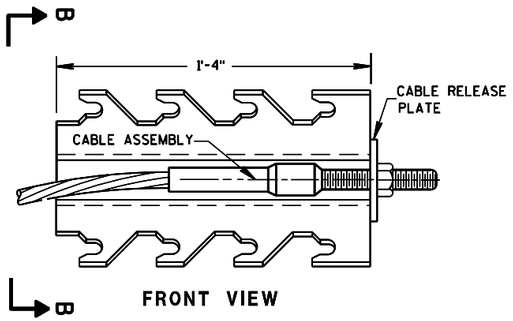
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

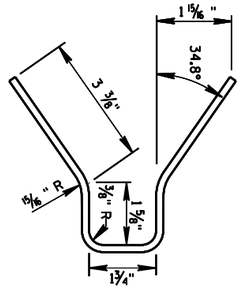
S.D.D. 14 B 24-9a



⑩ STRUT DETAIL

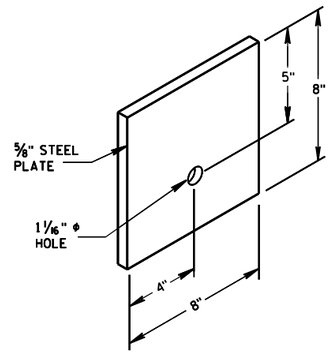


FRONT VIEW



SECTION B-B

⑨ CABLE ANCHOR BOX



⑦ STEEL BEARING PLATE

6

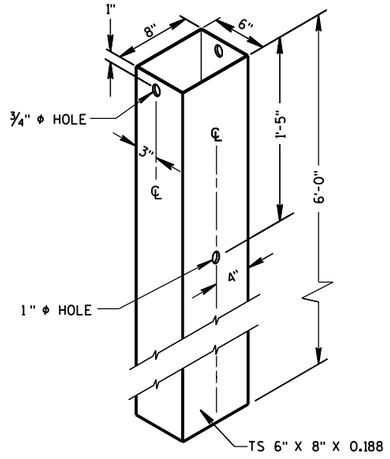
6

S.D.D. 14 B 24-9b

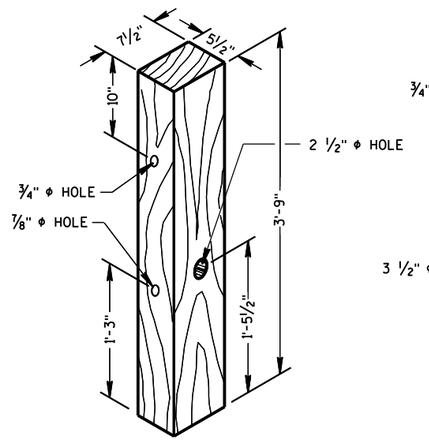
S.D.D. 14 B 24-9b

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

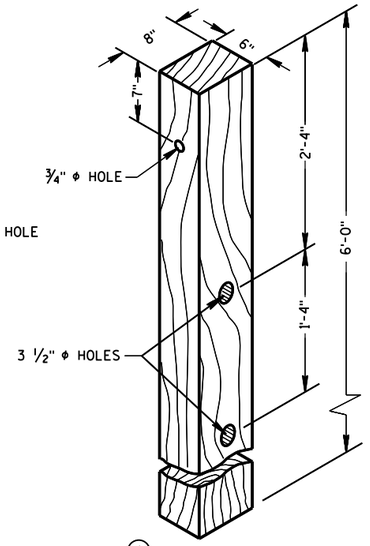
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI



② 72" STEEL TUBE
(POSTS NO. 1-2



① TERMINAL POST

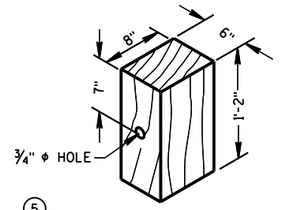


④ CRT POST
(POSTS NO'S 5-8)

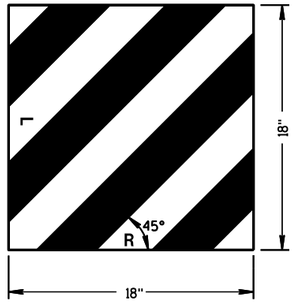
WOOD BREAKAWAY POSTS

GENERAL NOTES

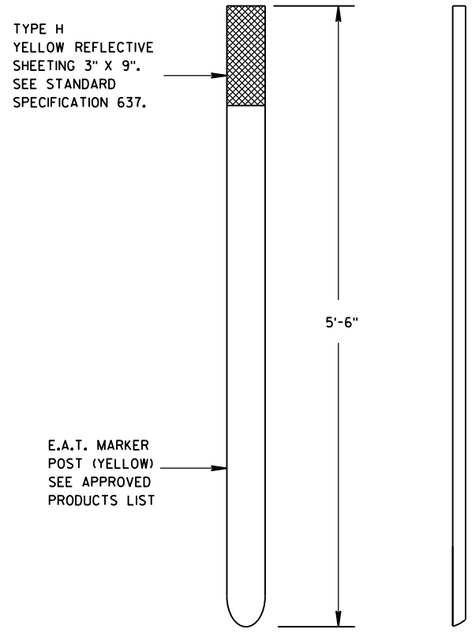
WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 ½" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.



⑤ WOOD OFFSET BLOCK
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



⑭ REFLECTIVE SHEETING DETAILS



E.A.T. MARKER POST

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2017
DATE
FHWA

/S/ Rodney Taylor
ROADWAY STANDARDS
UNIT SUPERV...

102

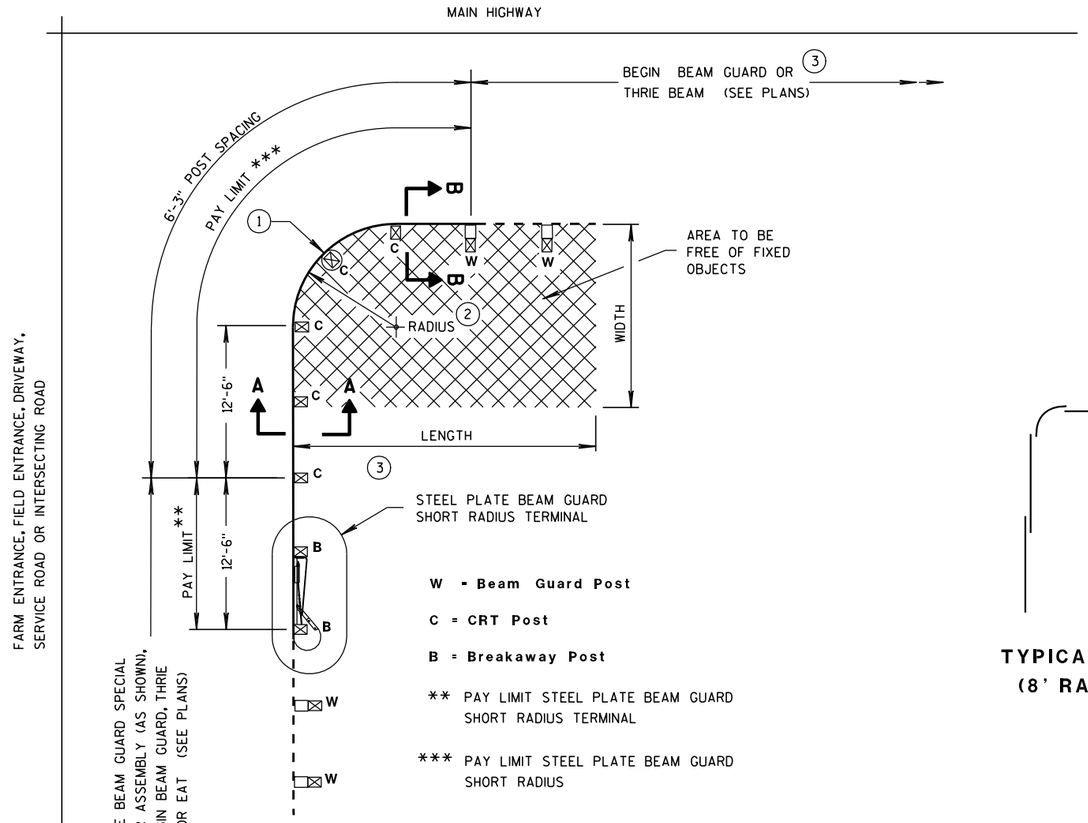
ENT

6

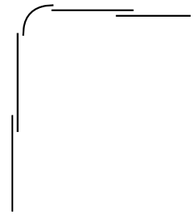
S.D.D. 14 B 24-9c

6

S.D.D. 14 B 24-9c



TYPICAL LAYOUT
(8' RADIUS SHOWN)



TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2. UNLESS NOTED OTHERWISE.

SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

(1) ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.

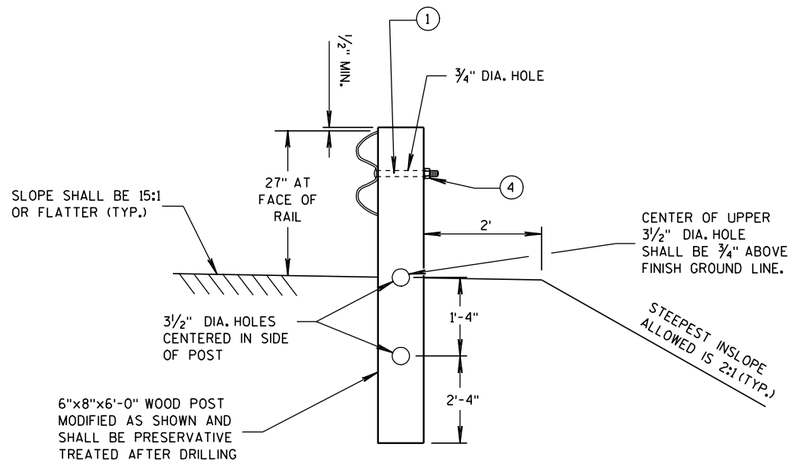
(2) RADIUS FROM 8' - 36'. SEE PLAN.

(3) HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.

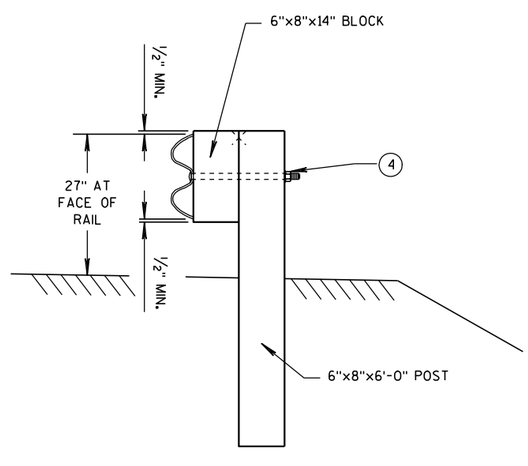
(4) 5/8" ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	*NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



SECTION A-A
(CRT POST)



SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

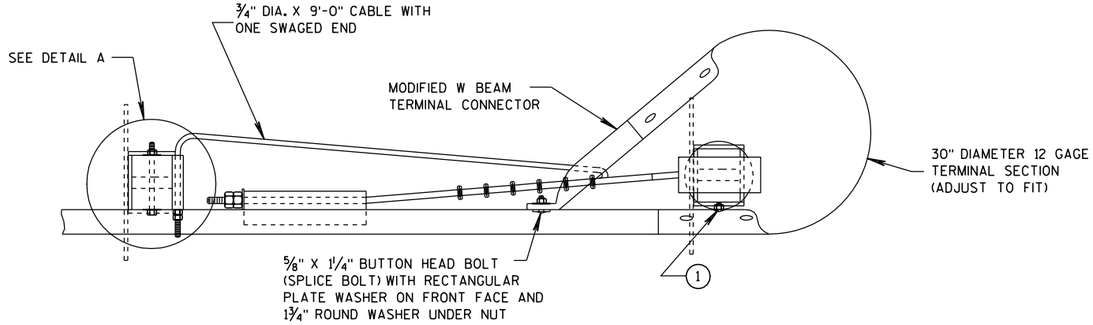
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	103

6

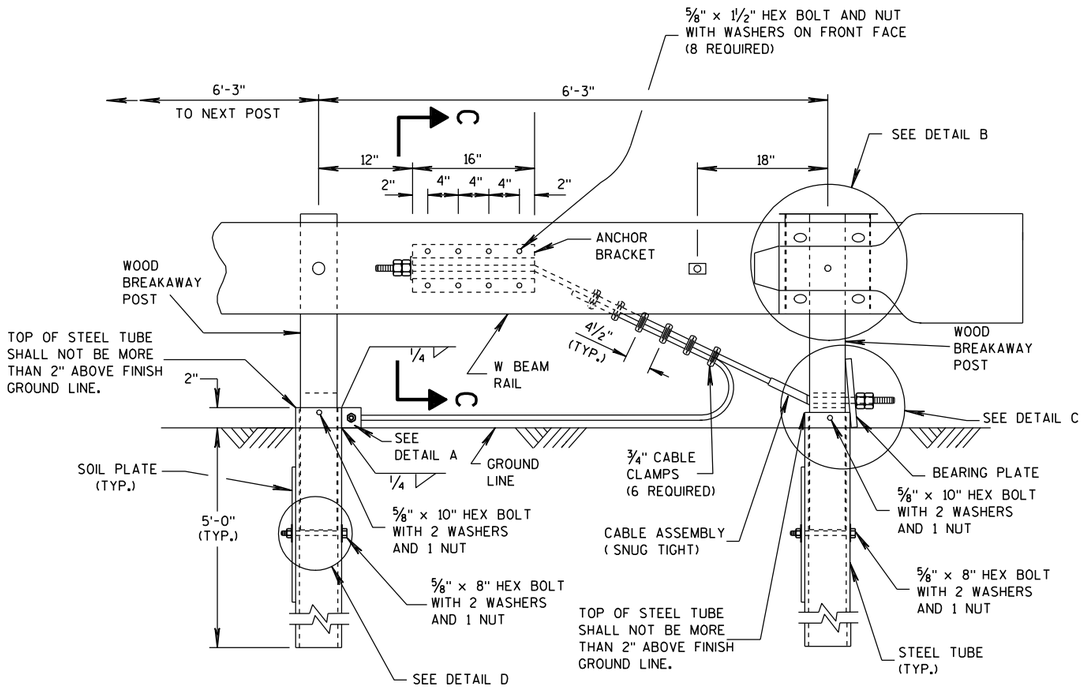
S.D.D. 14 B 27-1a

6

S.D.D. 14 B 27-1a



PLAN VIEW



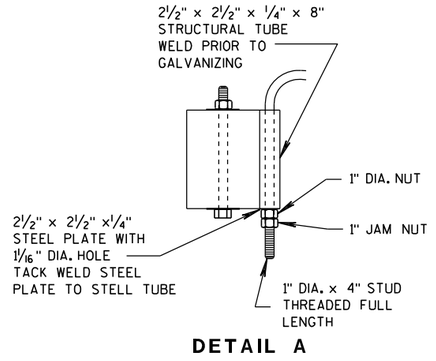
ELEVATION VIEW

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

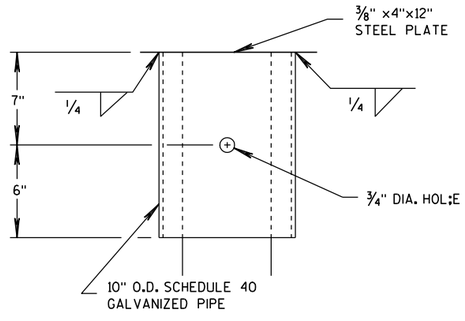
GENERAL NOTES

(1) ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A ⅝" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.

INSTALL GALVANIZED ¾" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



DETAIL A



DETAIL B

(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

S.D.D. 14 B 27-1b

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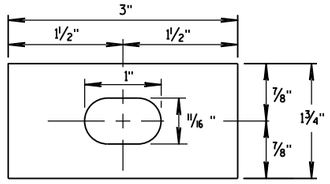
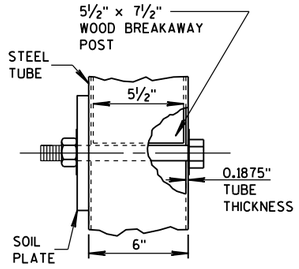
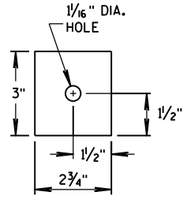
S.D.D. 14 B 27-1b



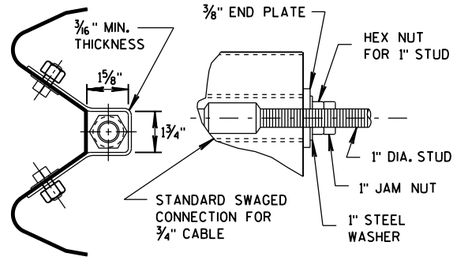
RECTANGULAR PLATE WASHER



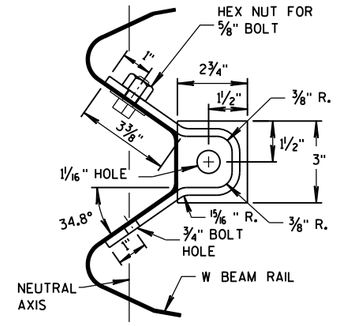
DETAIL D



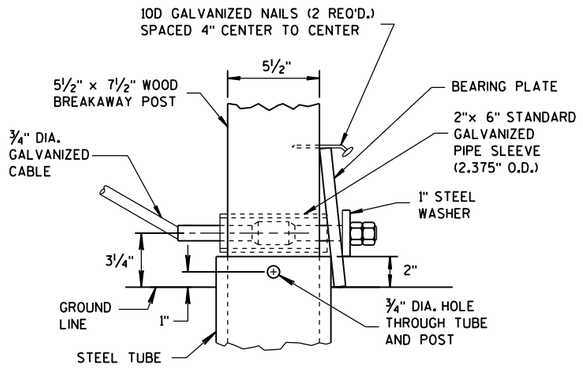
END PLATE



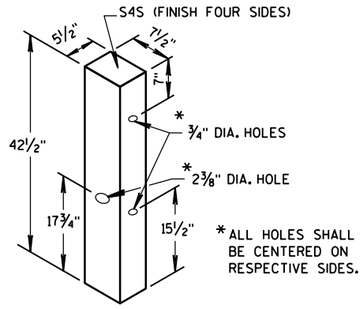
SECTION C-C
(END PLATE REMOVED)



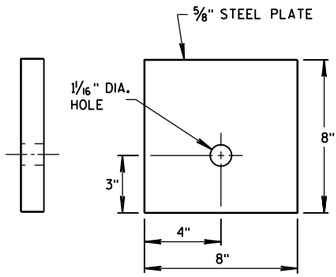
ANCHOR BRACKET



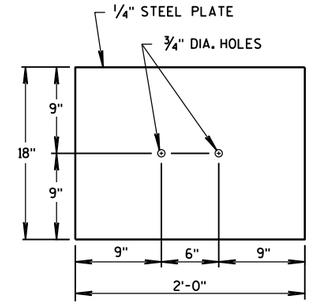
DETAIL C



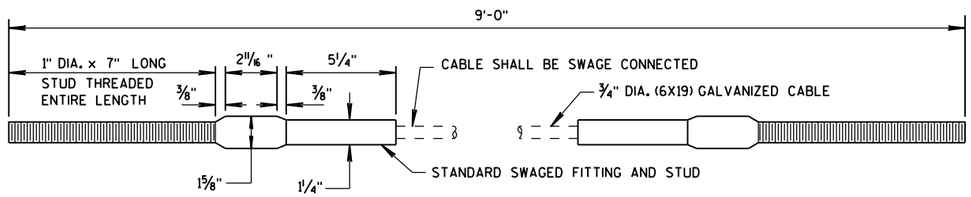
WOOD BREAKAWAY POST



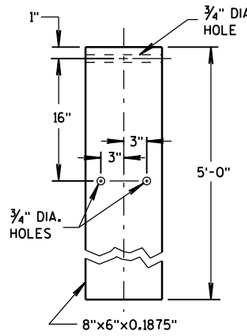
BEARING PLATE



SOIL PLATE



CABLE ASSEMBLY



STEEL TUBE

STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/18/08 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 14 B 27-1c

6

S.D.D. 14 B 27-1c

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

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

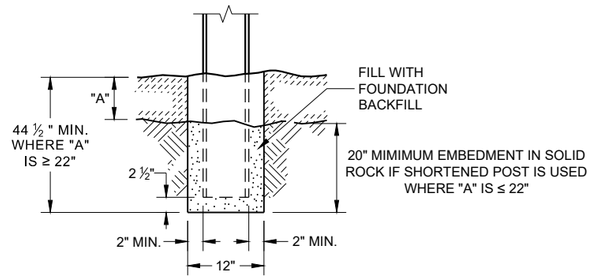
(3) IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL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

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

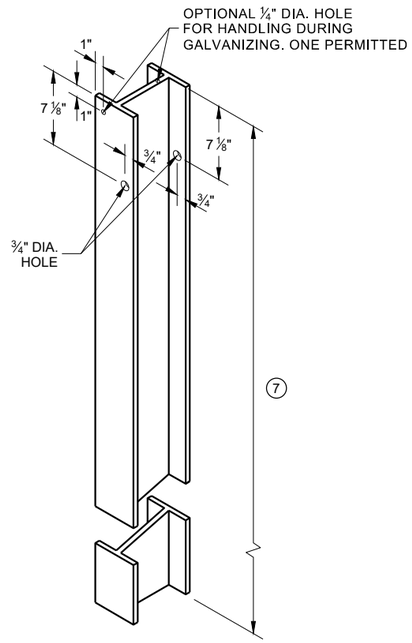
(5) FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ±1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 ¾" TO 32".

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

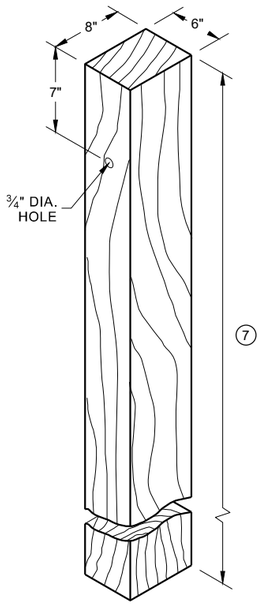
(7) TOTAL POST LENGTH FOR TYPE K IS 7' - 0".
TOTAL POST LENGTH FOR OTHER MGS TYPES IS 6' - 0".



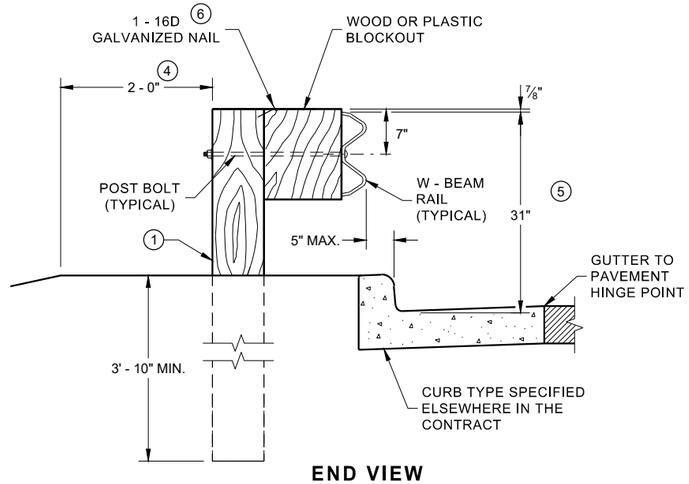
END VIEW
SETTING STEEL OR WOOD POST IN ROCK (3)



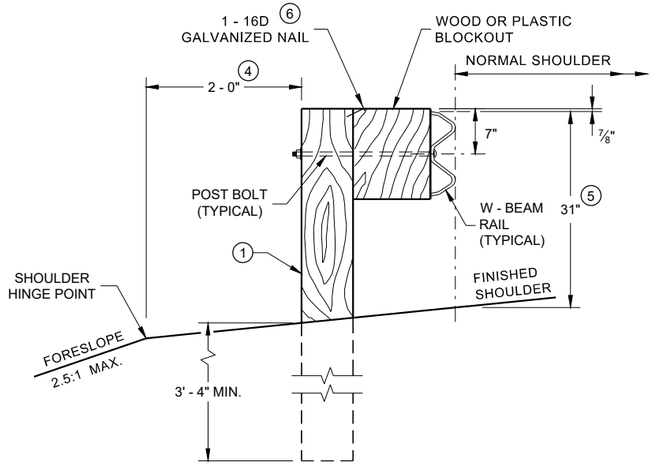
STEEL POST & HOLE PUNCHING DETAIL (W 6 X 9) (1)



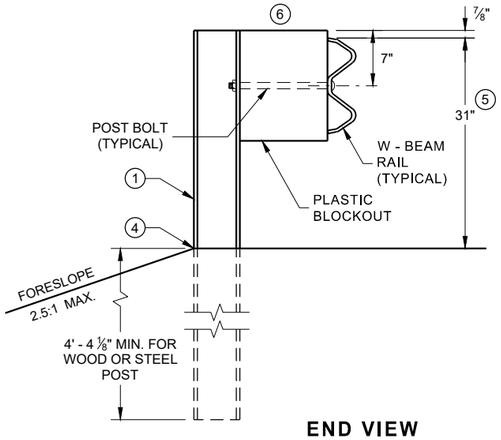
WOOD POST (6" X 8") NOMINAL (1)



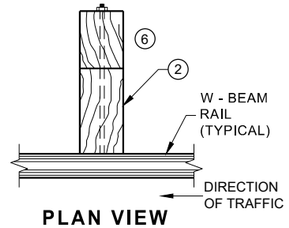
END VIEW
LOCATED ALONG A CURBED ROADWAY



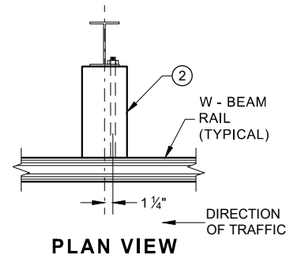
END VIEW
LOCATED ALONG A ROADWAY SHOULDER STANDARD INSTALLATION



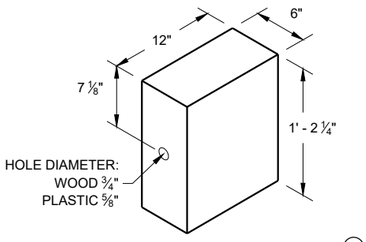
END VIEW
MGS LONGER POST AT HALFPOST SPACING W BEAM (K)



PLAN VIEW
WOOD POST, BLOCKOUT & BEAM



PLAN VIEW
STEEL POST, PLASTIC BLOCKOUT & BEAM



WOOD OR PLASTIC BLOCKOUT (2)

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B42 - 07a

6

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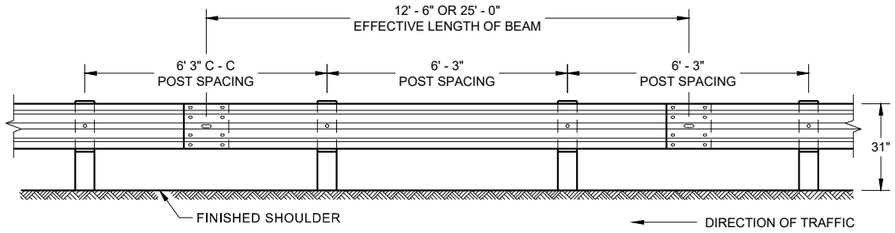
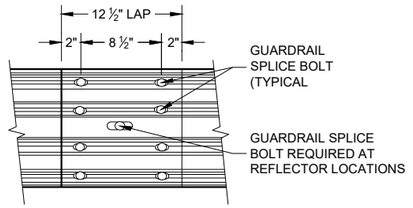


FRONT VIEW
POST SPACING STANDARD INSTALLATION



FRONT VIEW
MID-SPAN BEAM SPLICE

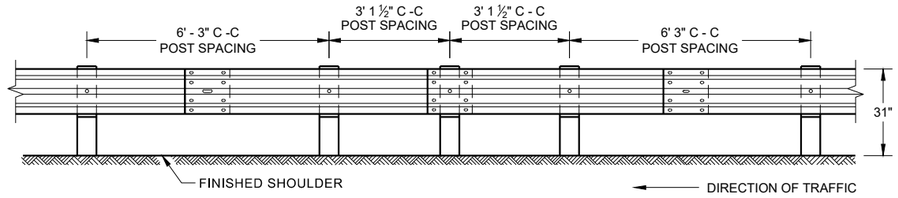
GENERAL NOTES

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

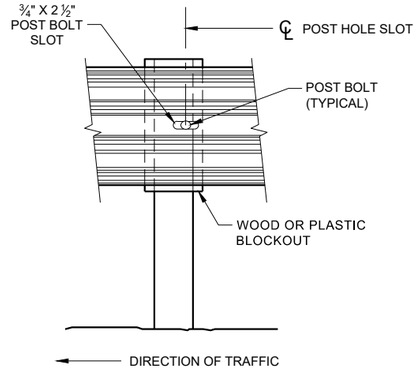
(9) 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

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

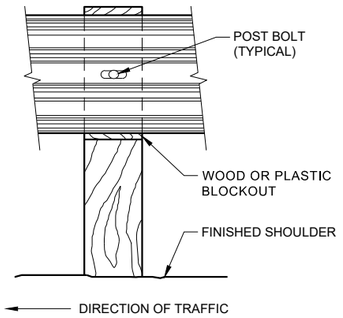
GUARD RAIL SPLICE BOLTS ARE A ⅝" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES ⅝" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



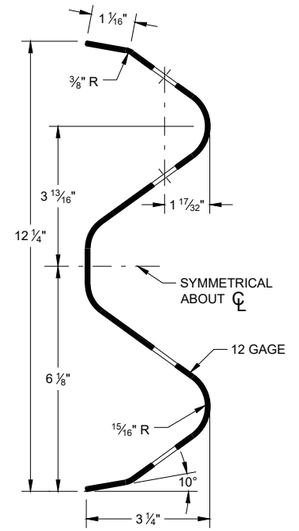
FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)



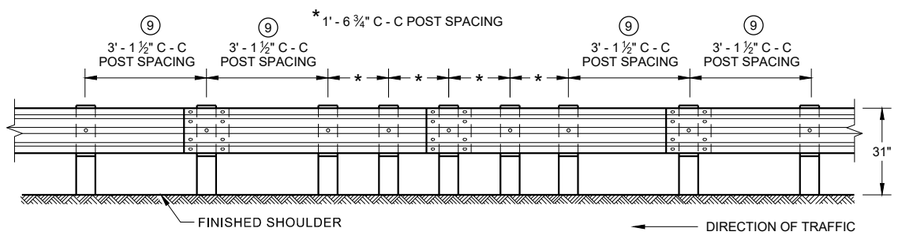
FRONT VIEW AT STEEL POST



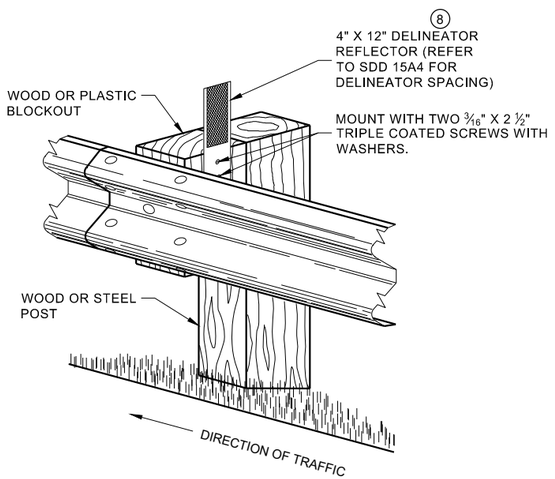
FRONT VIEW AT WOOD POST



SECTION THRU W-BEAM RAIL



FRONT VIEW
QUARTER POST SPACING (QS)



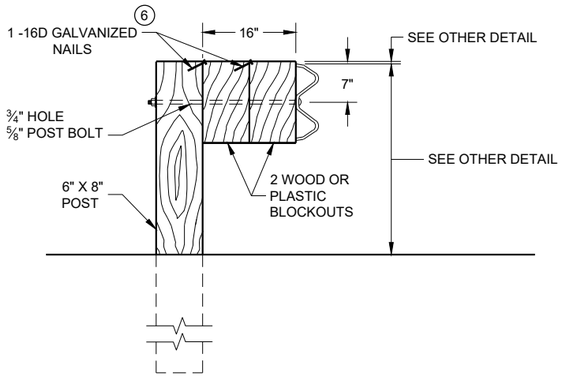
ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

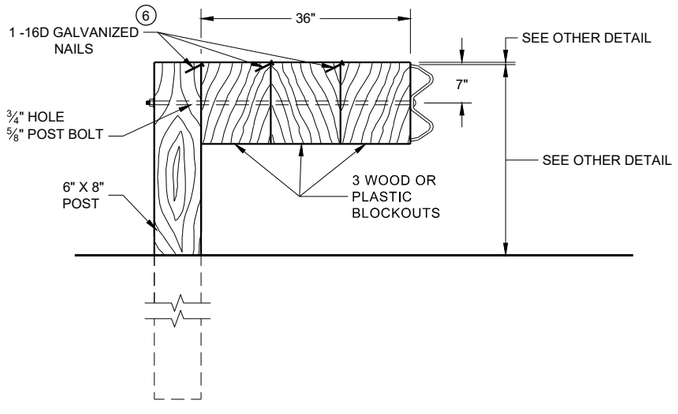
6

SDD 14B42 - 07b
SDD 14B42 - 07b



DETAIL FOR 16" BLOCKOUT DEPTH

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



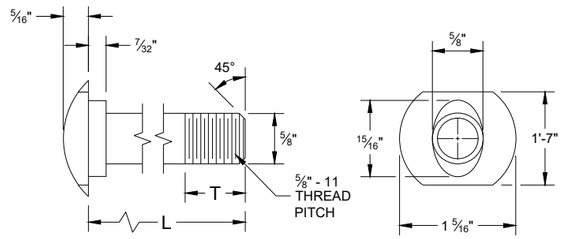
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

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

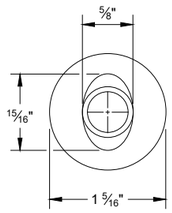
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN ¼" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

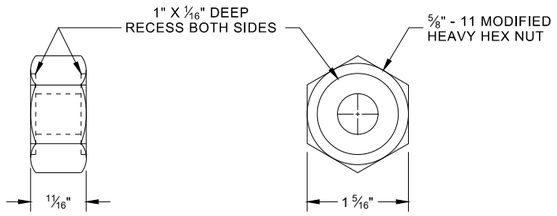


POST BOLT TABLE

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

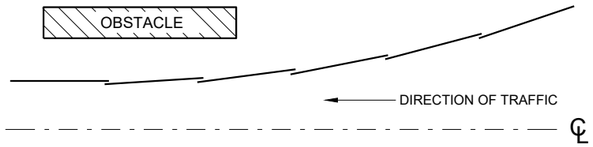


ALTERNATE BOLT HEAD

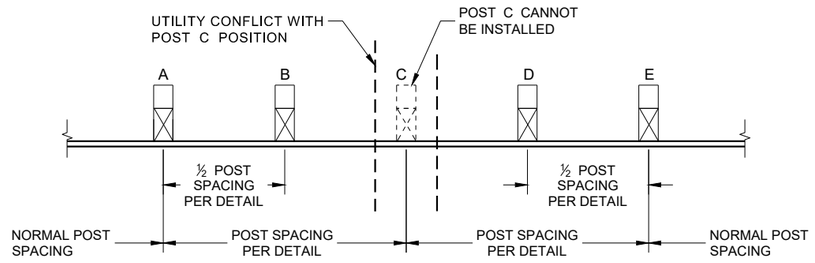


POST BOLT, SPLICE BOLT AND RECESS NUT

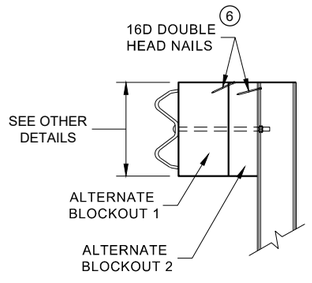
6 WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



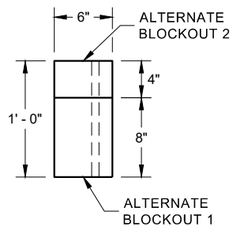
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

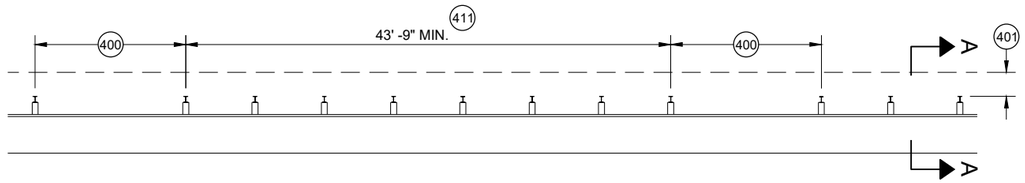


SIDE VIEW

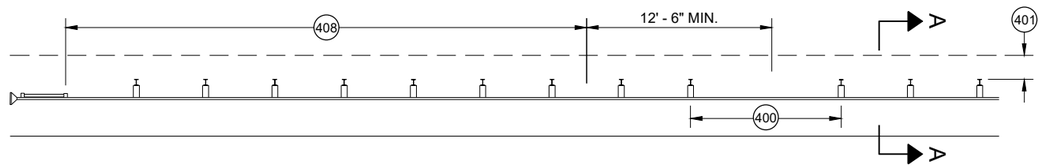


PLAN VIEW

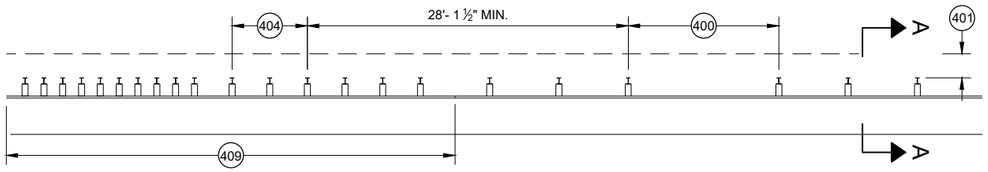
ALTERNATE WOOD BLOCKOUT DETAIL



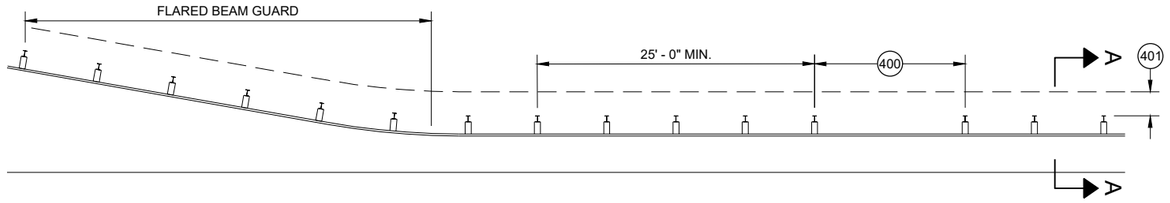
MISSING POST IN MGS GUARDRAIL



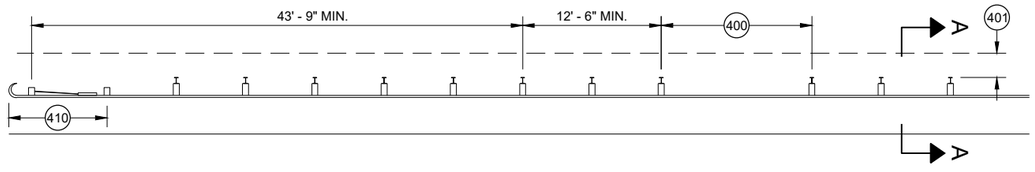
MISSING POST IN MGS GUARDRAIL NEAR EAT



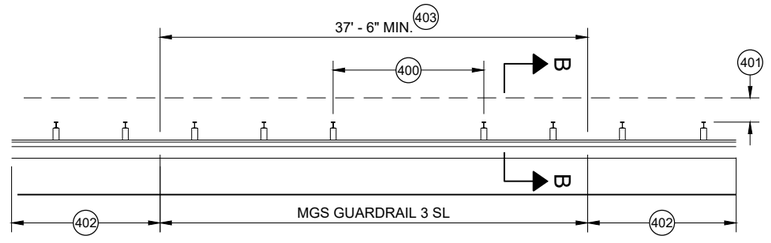
MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION



MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD

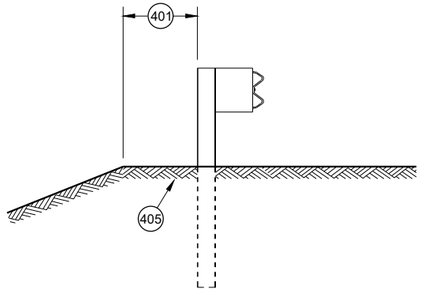


MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL

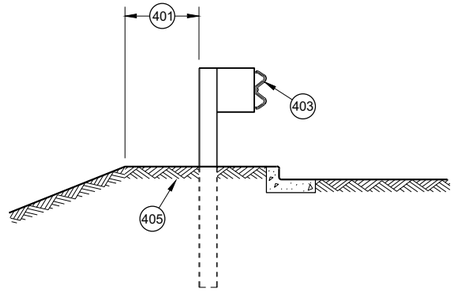


MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL) 407

(400) MAX SPAN 12' - 6"
(401) 2' MIN.
(402) MGS GUARDRAIL 3
(403) NESTING BEAM GUARD
(404) ASYMMETRIC TRANSITION
(405) SOIL WELL DRAINED AND COMPACTED
(406) SEE OTHER DRAWINGS IN THIS SDD
(407) SEE OTHER DRAWINGS FOR MIN. SPACING BETWEEN SPANS
(408) SEE SDD 14B44
(409) SEE SDD 14B45
(410) SEE SDD 14B47
(411) MINIMUM DISTANCE BETWEEN MISSING POST SPANS.



SECTION A - A 406



SECTION B - B 406

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2021 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

6

SDD 14B42 - 07d

GENERAL NOTES

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL) AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED

(C) DIFFERENT MANUFACTURERS REQUIRE DIFFERENT PERFORATED W - BEAM RAIL END PANELS. SEE MANUFACTURER'S INFORMATION.

(D) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF - TAPPING SCREWS. ONE SCREW PER CORNER.

(E) HARDWARE MAY VARY BETWEEN MANUFACTURER. SEE MANUFACTURER'S DRAWING FOR INFORMATION.

DIMENSIONS MAY VARY, MANUFACTURER'S INFORMATION.

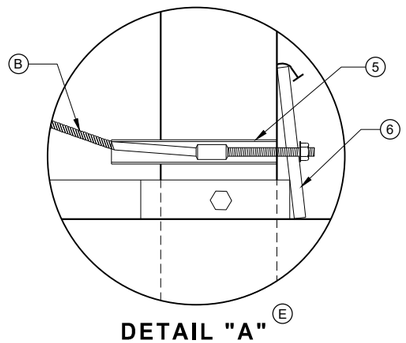
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

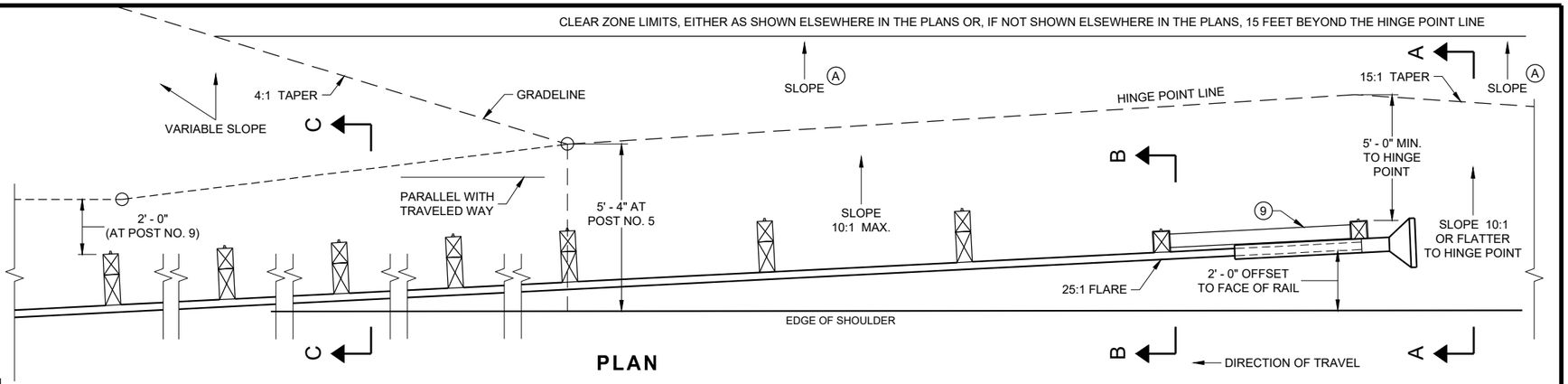
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

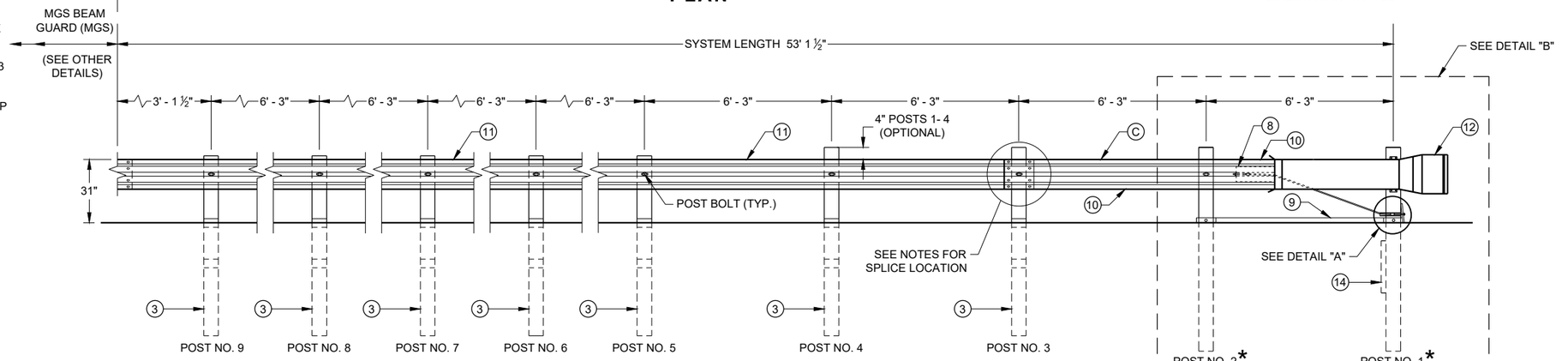
THE CENTER OF THE UPPER 3 ½" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



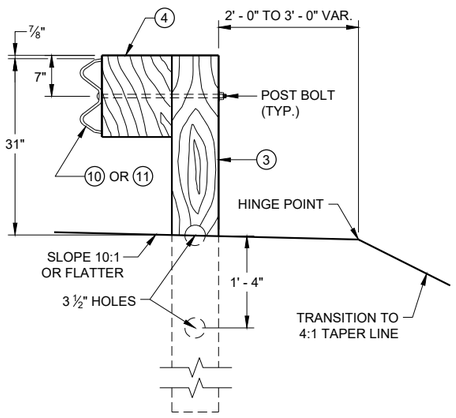
DETAIL "A" (E)



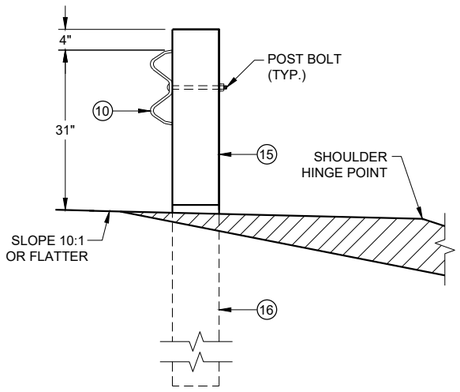
PLAN



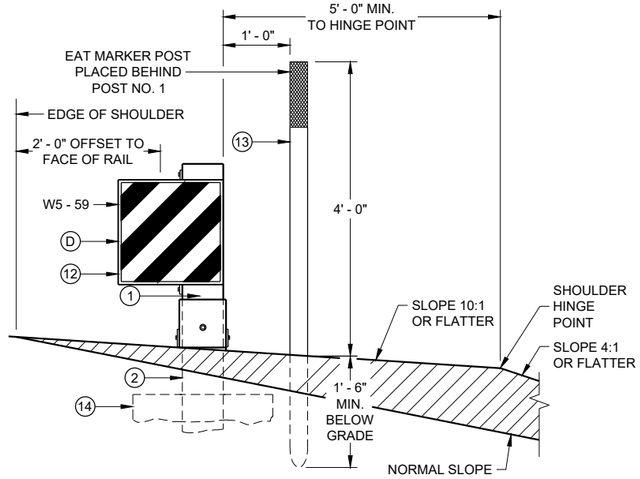
ELEVATION



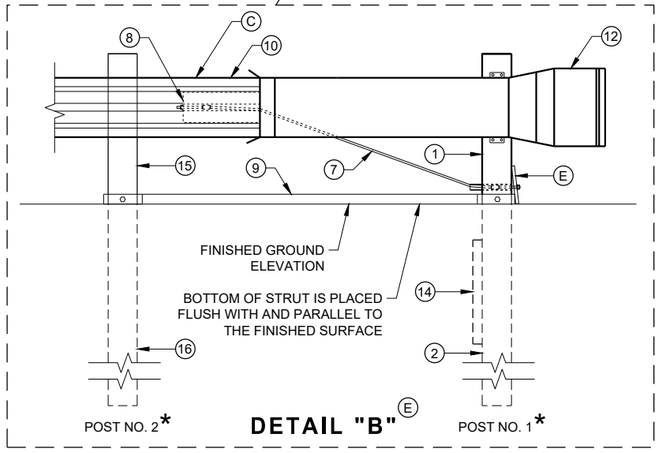
SECTION C - C
TYPICAL AT POST NOS. 3 - 9



SECTION B - B
TYPICAL AT POST NO. 2*



SECTION A - A
TYPICAL AT POST NO. 1*



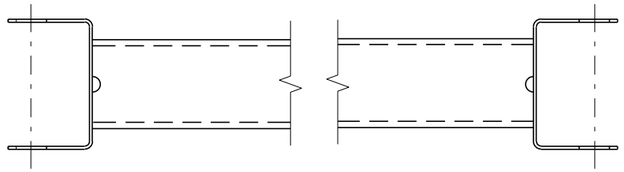
DETAIL "B" (E)

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 14B44 - 04a

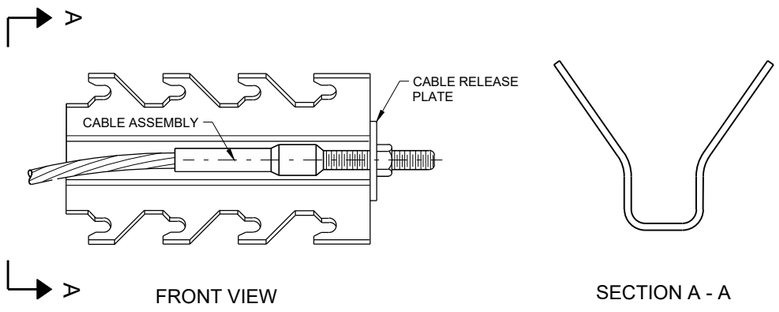
SDD 14B44 - 04a



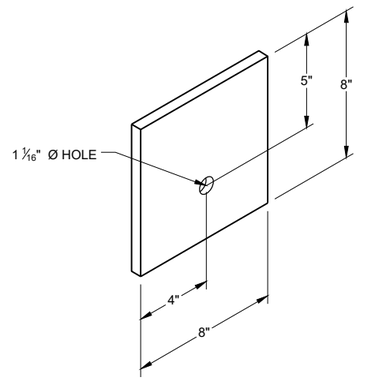
GENERIC GROUND STRUT ⑨ Ⓔ

BILL OF MATERIALS

PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUGACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	IMPACT HEAD
⑬	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)
⑭	SOIL PLATE
⑮	UPPER POST NO. 2
⑯	LOWER POST NO. 2



GENERIC ANCHOR CABLE BOX ⑨ Ⓔ



BEARING PLATE ⑥ Ⓔ

6

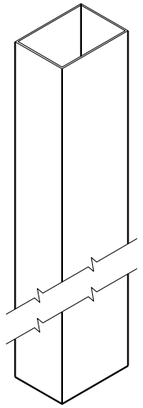
6

SDD 14B44 - 04b

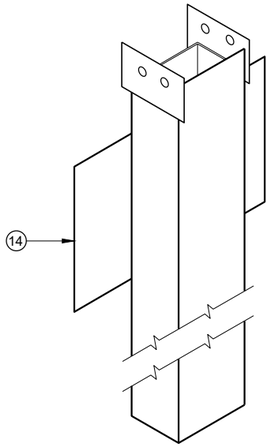
SDD 14B44 - 04b

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

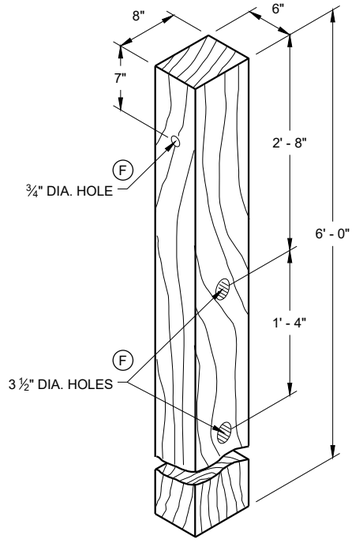
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



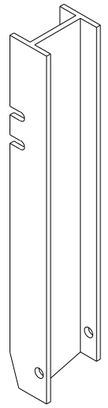
UPPER POST NO. 1 (1) (E)



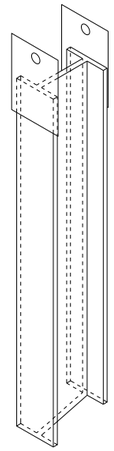
LOWER POST NO. 1 (2) (E)



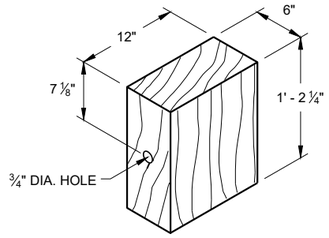
WOOD CRT POST (3) (E)
POSTS NUMBER 3-9



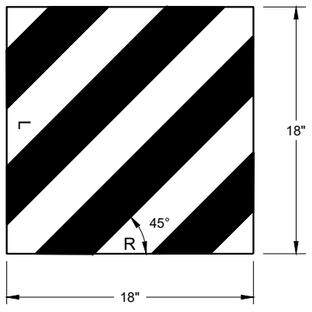
UPPER POST NO. 2 (15) (E)



LOWER POST NO. 2 (16) (E)

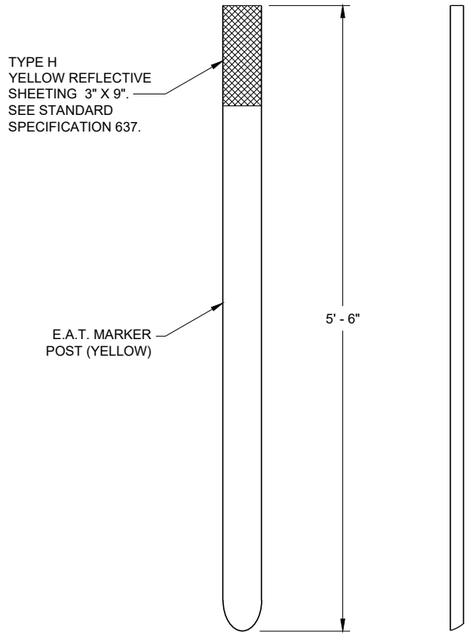


WOOD BLOCKOUT (4)
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2



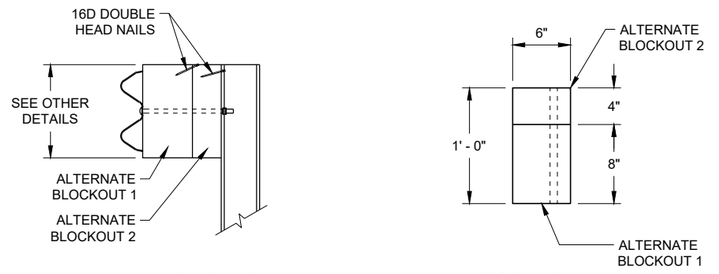
W5 - 59

REFLECTIVE SHEETING DETAIL (E)



FRONT VIEW SIDE VIEW

E.A.T. MARKER POST (13)



SIDE VIEW TOP VIEW

ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)

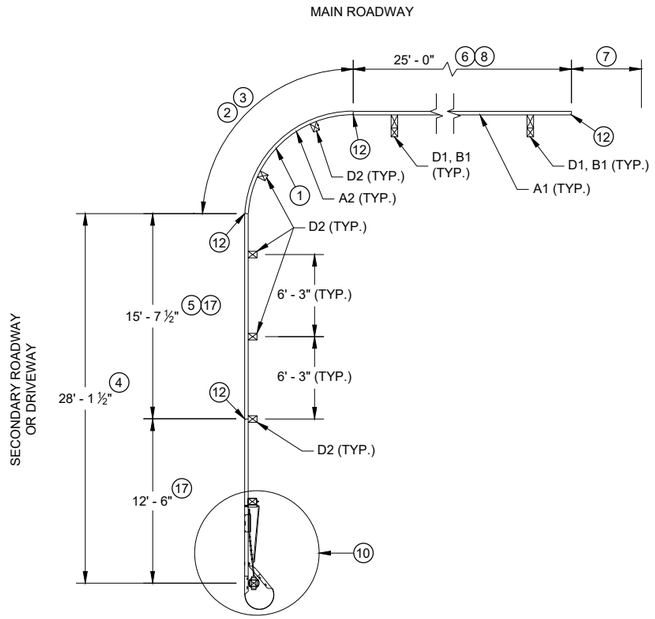
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

FHWA

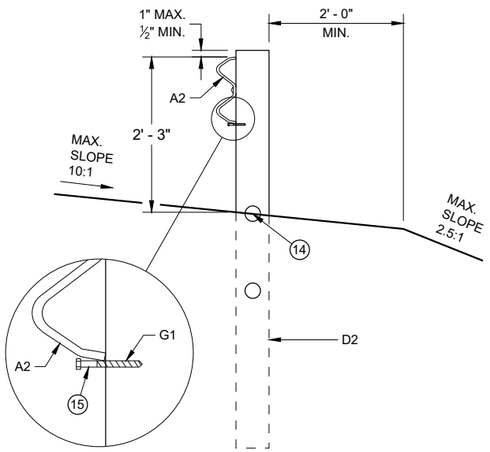
6

SDD 14B44 - 04c

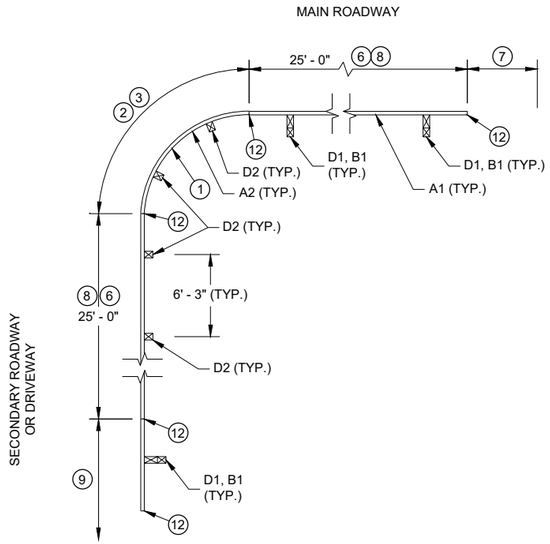


PLAN VIEW

SHORT RADIUS BEAM GUARD WITH SHORT RADIUS TERMINAL ON SECONDARY ROAD OR DRIVEWAY

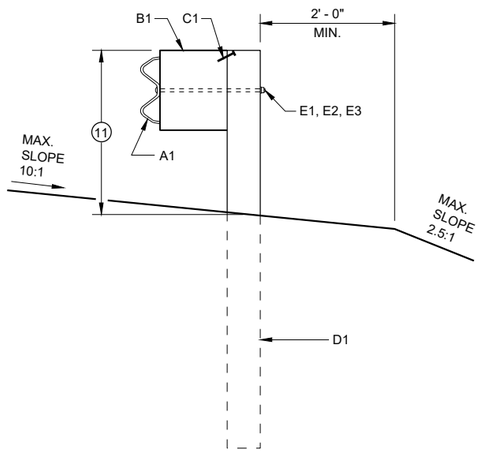


CONTROLLED RELEASE TERMINAL POST (CRT) IN RADIUS



PLAN VIEW

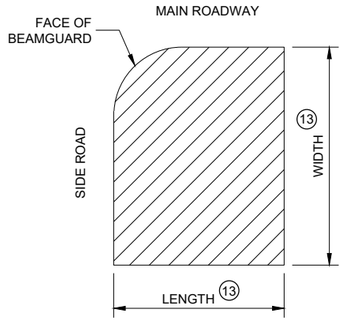
SHORT RADIUS BEAM GUARD WITH EAT, ADDITIONAL BEAM GUARD OR TRANSITION TO RIGID BARRIER ON SECONDARY ROAD OR DRIVEWAY



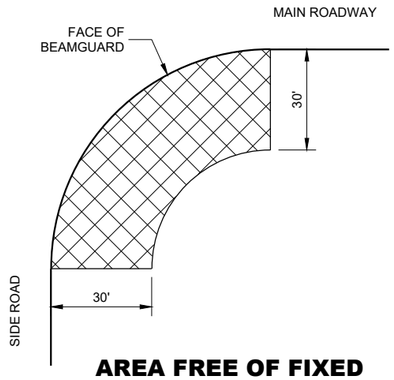
BEAM GUARD POSTS IN HEIGHT TRANSITION

TABLE FOR RADIUS OF 32' AND LESS

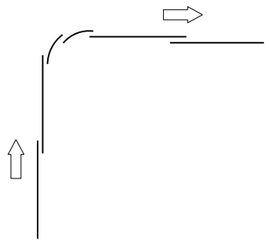
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



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
DEPARTMENT OF TRANSPORTATION

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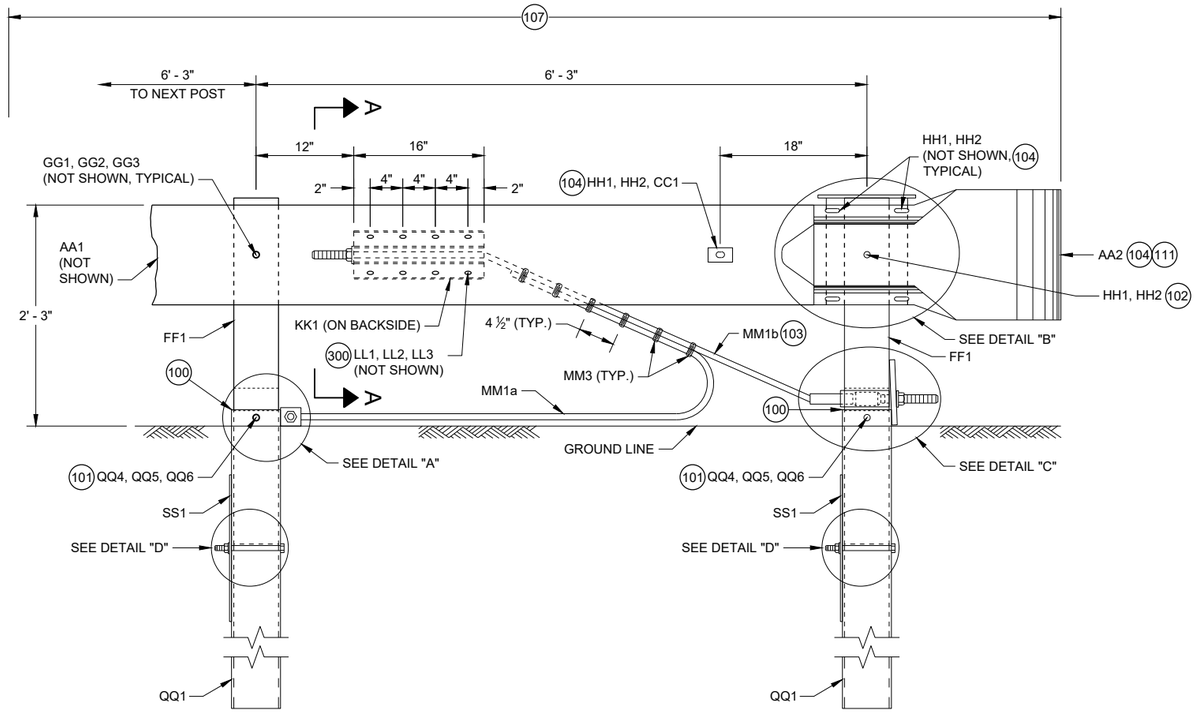
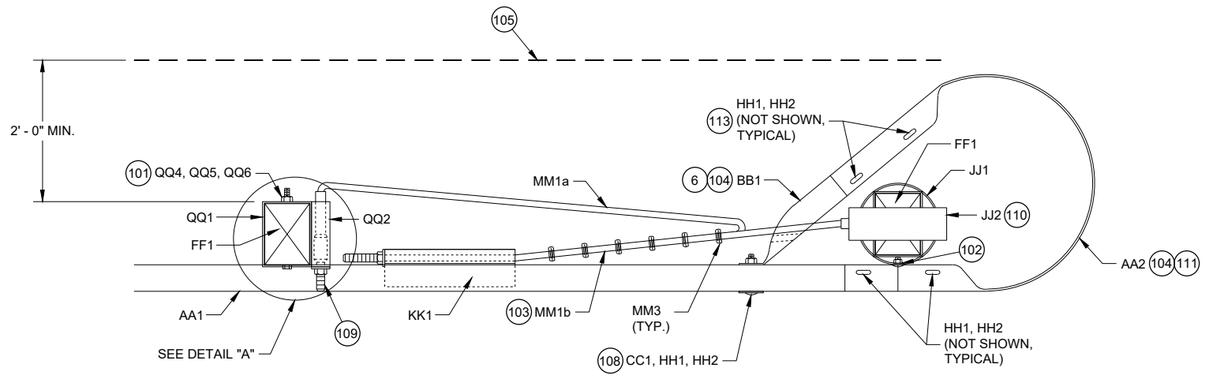
SDD 14B53 - 02a

SDD 14B53 - 02a



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.

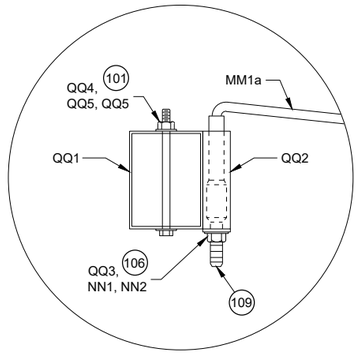
109 CUT OR PROVIDE THREADED STUD THAT IS FLUSH WITH FACE OF BEAM GUARD RAIL KK1 (PLUS OR MINUS ½" TOLERANCE). DEBURR AFTER CUTTING.

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.

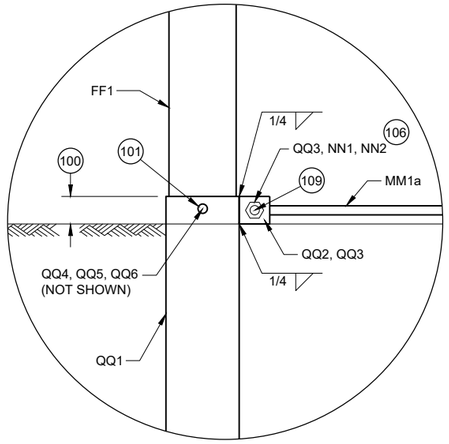
113 FOUR (4) HH1 AND HH2 REQUIRED TO ATTACH AA2 TO BB1.



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
DEPARTMENT OF TRANSPORTATION

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SDD 14B53 - 02b

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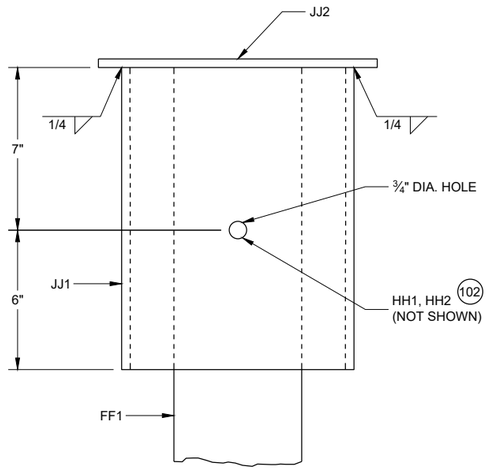
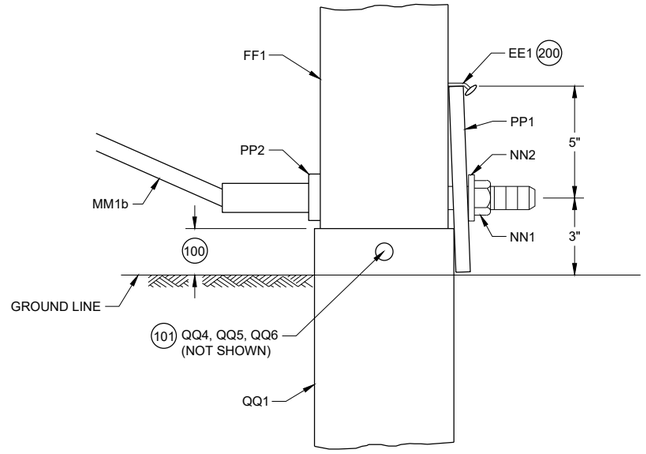
GENERAL NOTES

(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



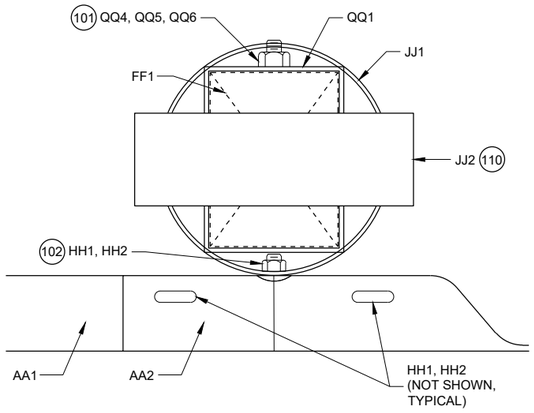
PROFILE VIEW

DETAIL "B"
STEEL PIPE ASSEMBLY
(BEAM GUARD AND W BEAM END SECTION NOT SHOWN)



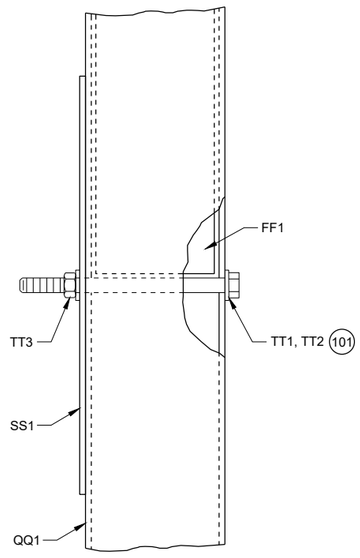
PROFILE VIEW

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
DEPARTMENT OF TRANSPORTATION

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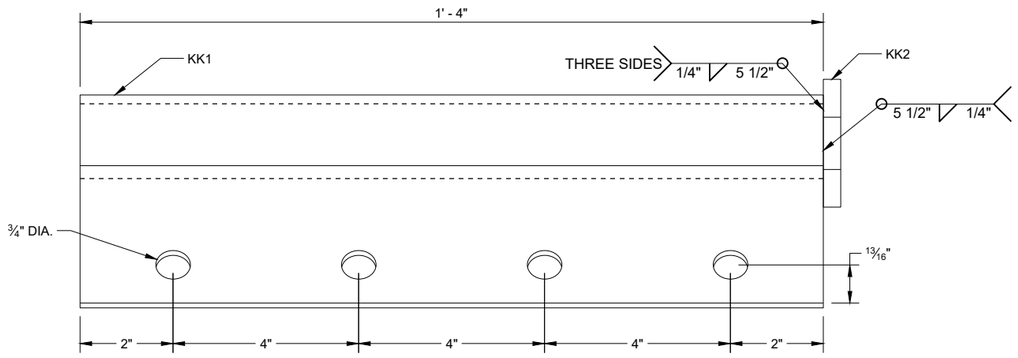
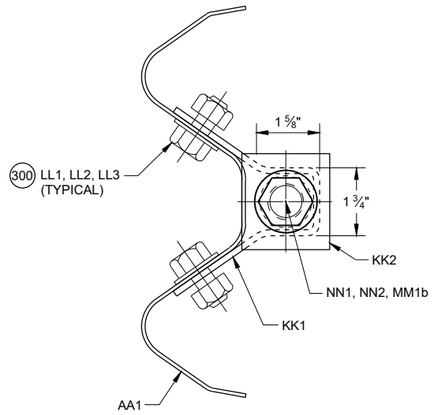
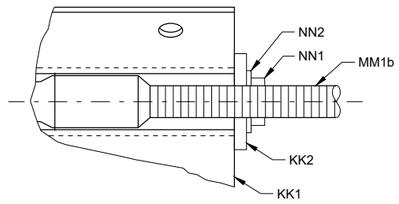
SDD 14B53 - 02c

GENERAL NOTES

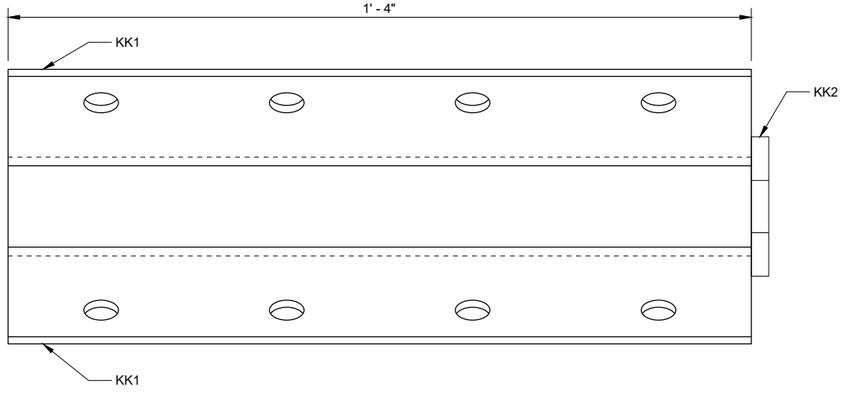
(300) WASHERS REQUIRED BETWEEN BOLT HEAD AND BEAM GUARD RAIL AND BETWEEN NUT AND ANCHOR BRACKET. EIGHT (8) LL1 AND LL3 REQUIRED. SIXTEEN (16) LL2 REQUIRED.

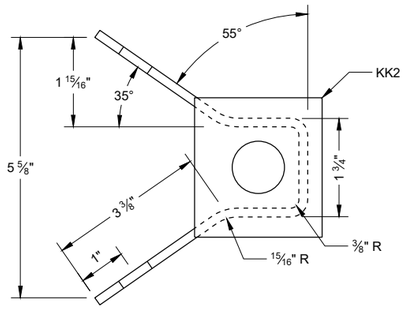




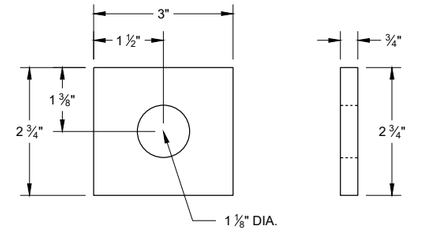


SECTION A - A





ANCHOR BRACKET (KK1, KK2)



ANCHOR BRACKET BEARING PLATE (KK2)

SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

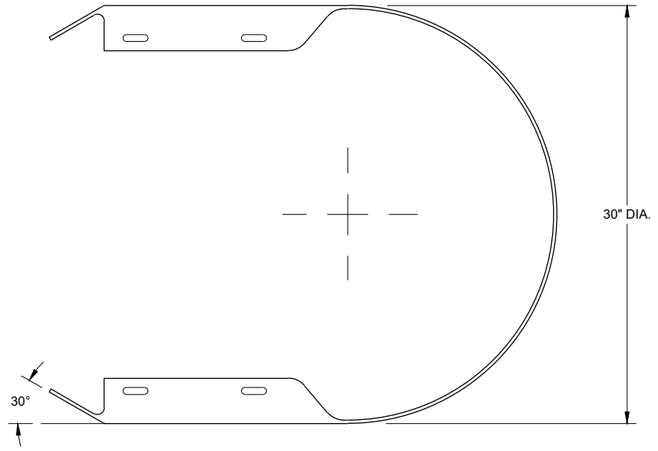
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6
SDD 14B53 - 02d

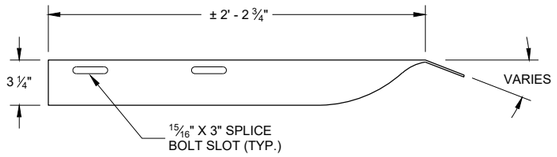
GENERAL NOTES

(400) CROSS SECTION OF PART IS TO FIT OVER AA1 .

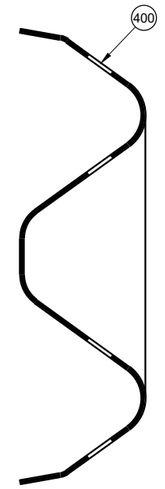
(401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



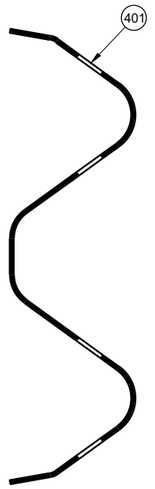
TOP VIEW



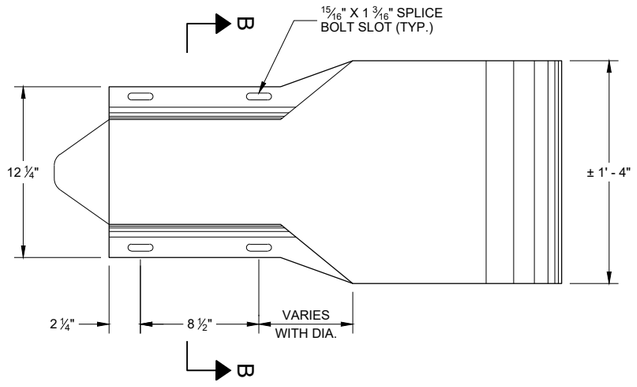
TOP VIEW



SECTION B -B

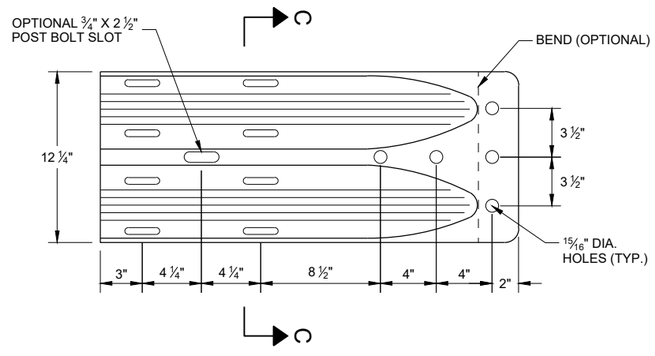


SECTION C -C



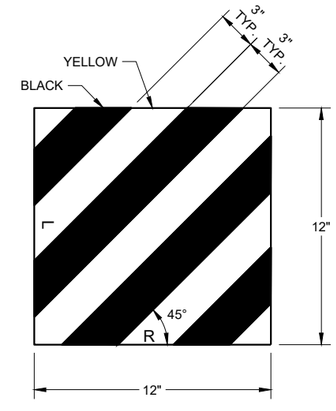
PROFILE VIEW

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)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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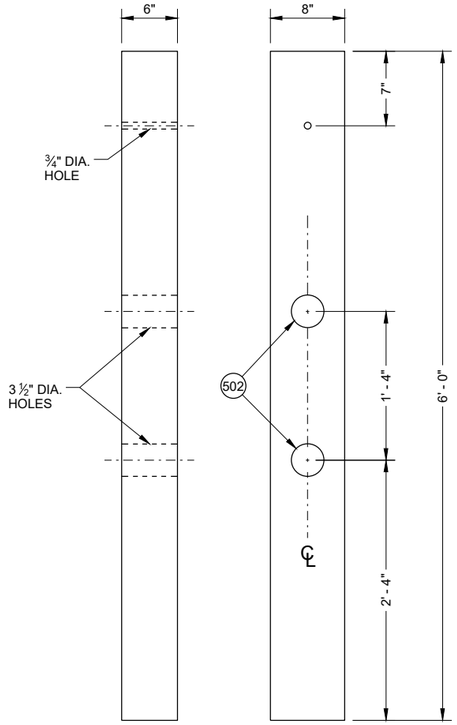
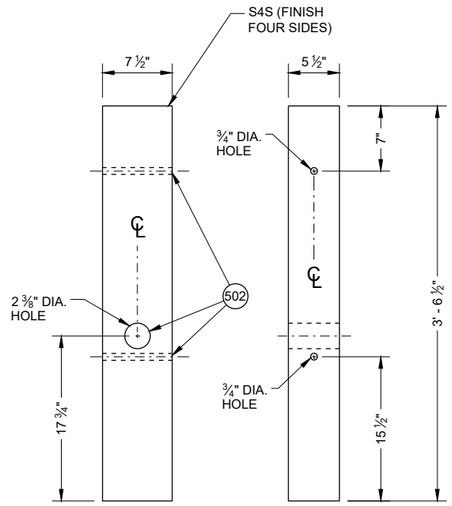
SDD 14B53 - 02e



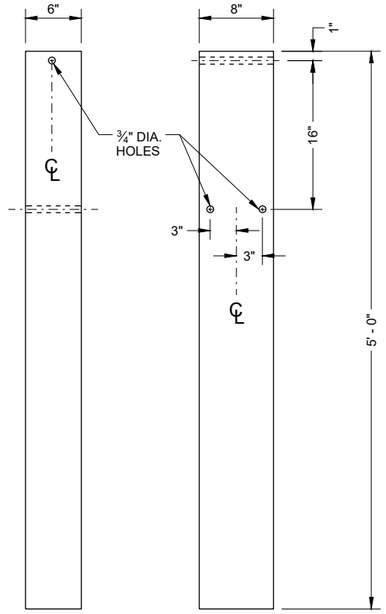
FRONT VIEW SIDE VIEW

CONTROLLED RELEASE POST (CRT) (DD2)



FRONT VIEW SIDE VIEW

WOOD BREAKAWAY POST (FF1)



FRONT VIEW SIDE VIEW

FOUNDATION TUBE (QQ1) (500)

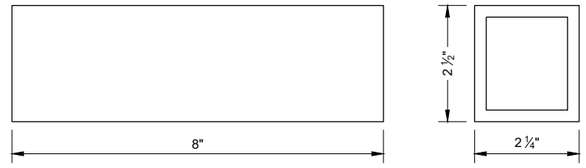
GENERAL NOTES

(500) SEE DETAIL "D" FOR LOCATION AND ATTACHMENT OF SS1.

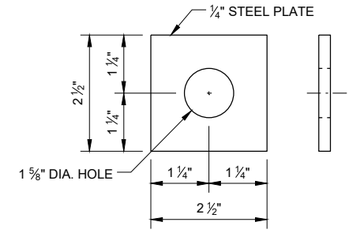
(501) FOR MM1a THREADED STUD ONLY REQUIRED ON ONE END. SWAGED FITTING REQUIRED.

(502) LOCATE HOLES ON THE CENTERLINE OF THE SIDE OF THE POST.

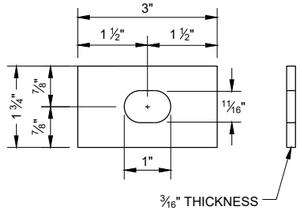
(503) MM1a MAY HAVE ONE THREADED STUD 4 INCHES LONG. SEE NOTE (109).



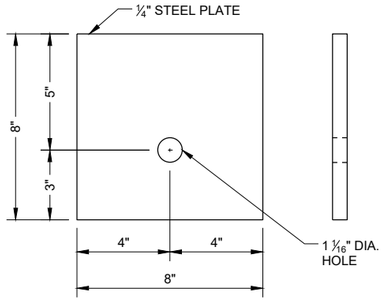
FOUNDATION TUBE - ANCHOR CABLE TUBE (QQ2)



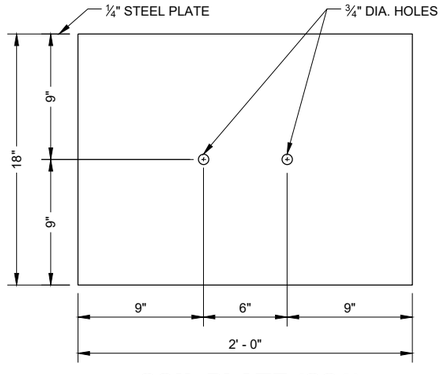
ANCHOR CABLE TUBE END PLATE (QQ3)



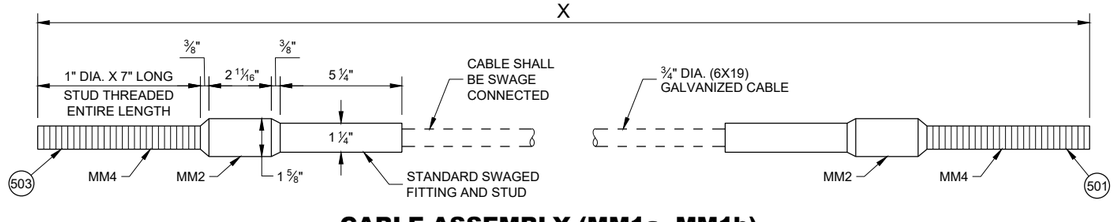
RECTANGULAR PLATE WASHER (CC1)



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)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 14B53 - 02f

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)

6

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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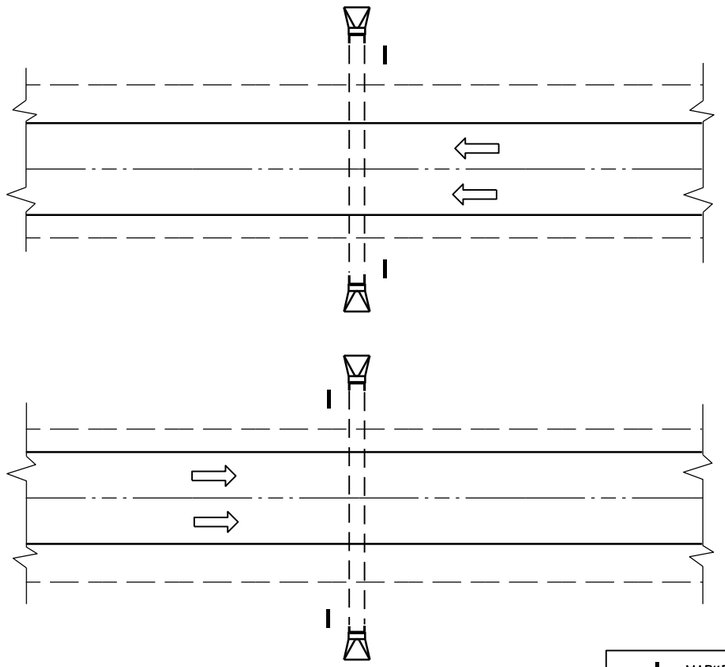
SHORT RADIUS BEAM GUARD (MGS) SHORT RADIUS TERMINAL (MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

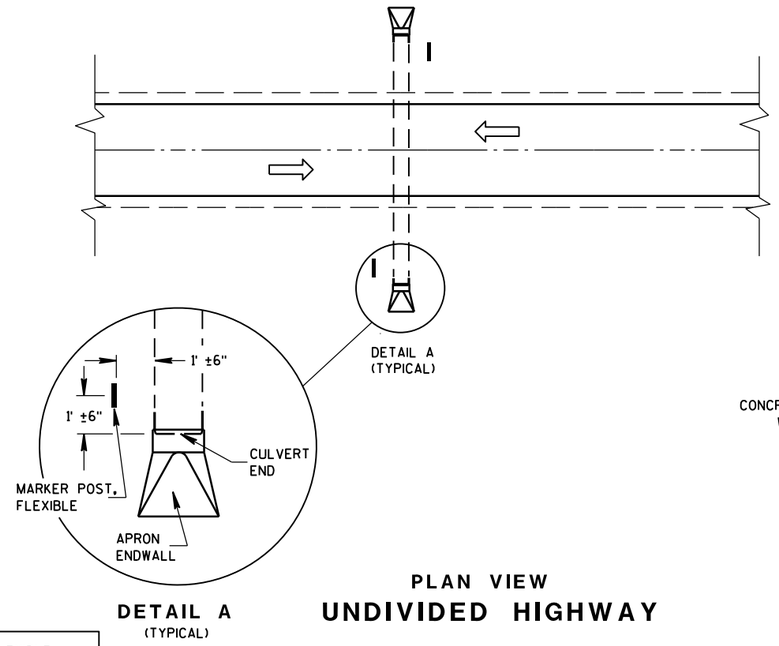
FHWA

SDD 14B53 - 02i



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

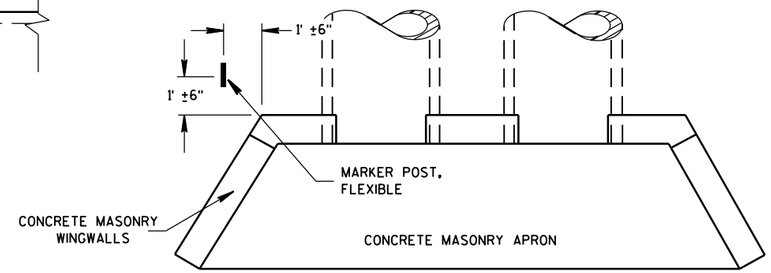
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

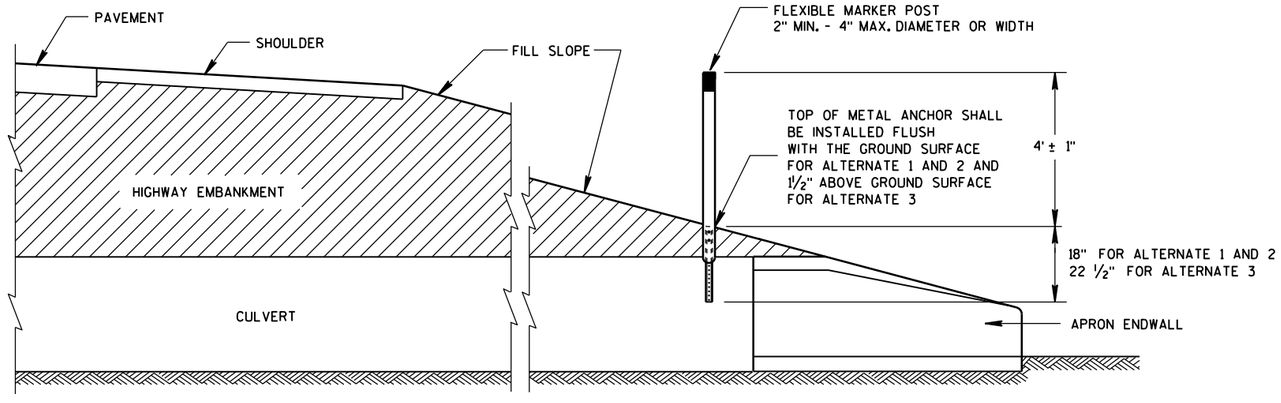
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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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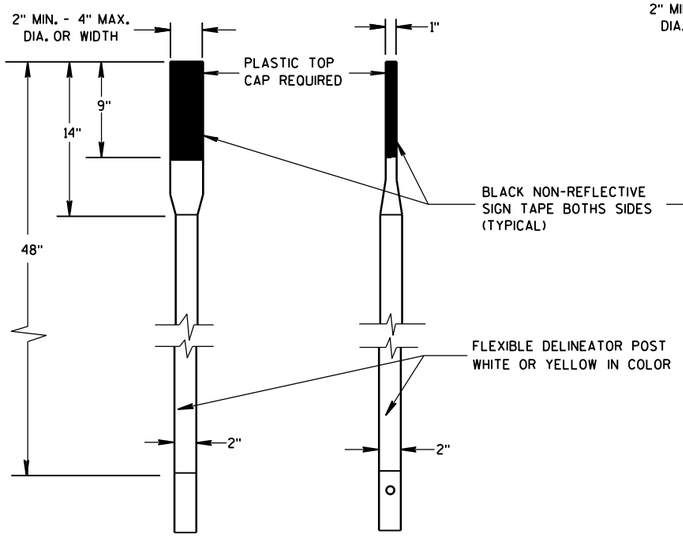
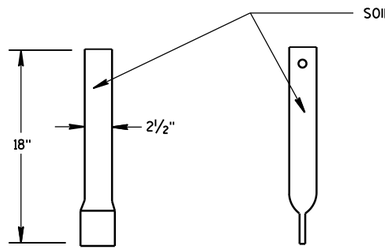
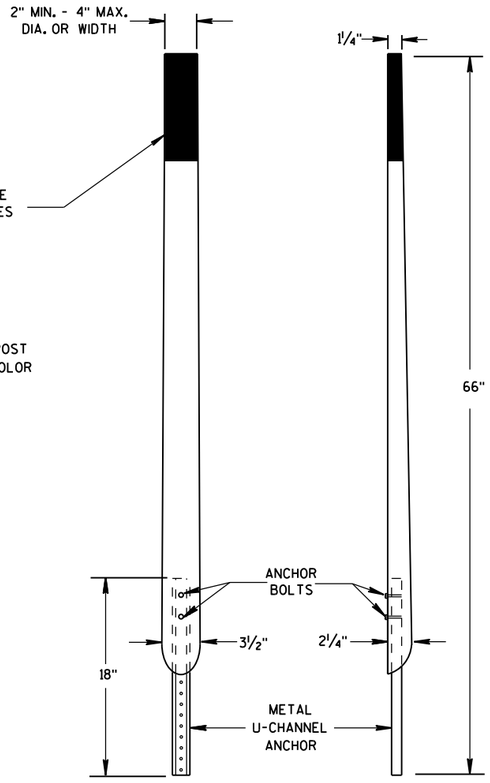
S.D.D. 15 A 3-2a





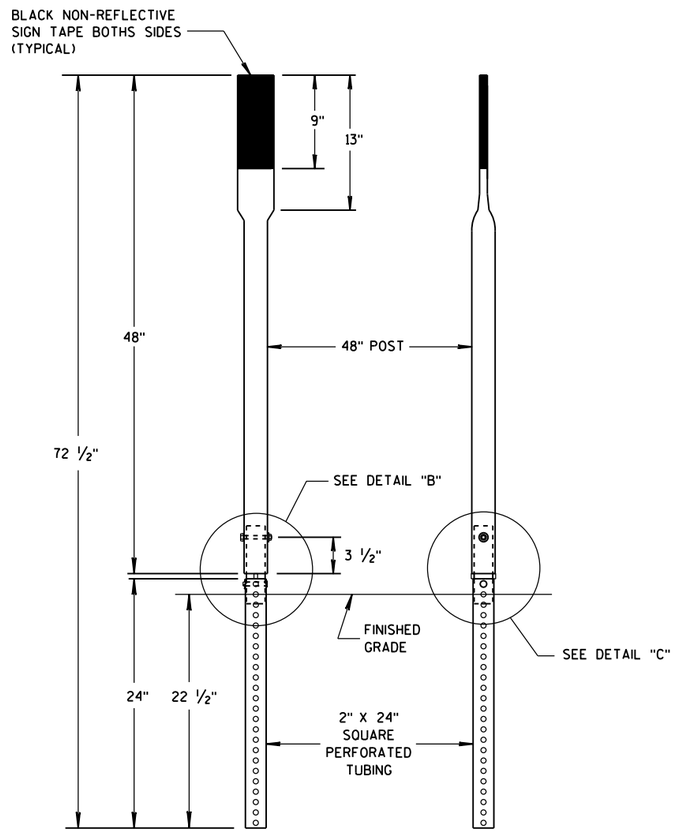
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

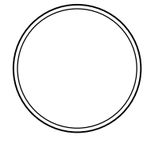
ALTERNATE 2



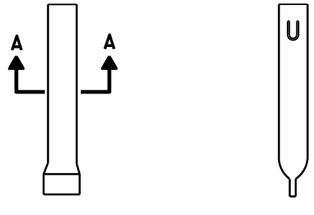
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

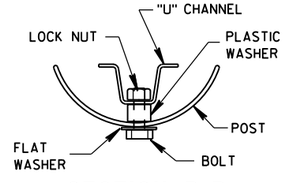


SECTION A-A

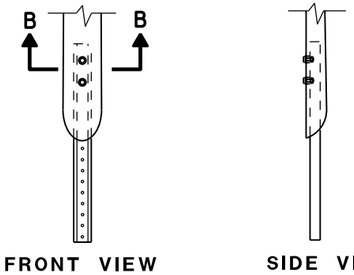


FRONT VIEW SIDE VIEW

ALTERNATE 1

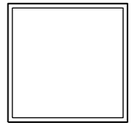


SECTION B-B

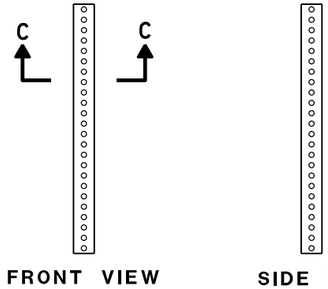


FRONT VIEW SIDE VIEW

ALTERNATE 2



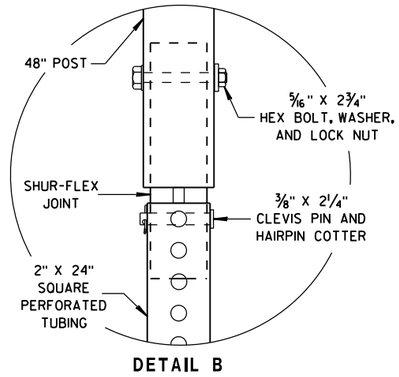
SECTION C-C



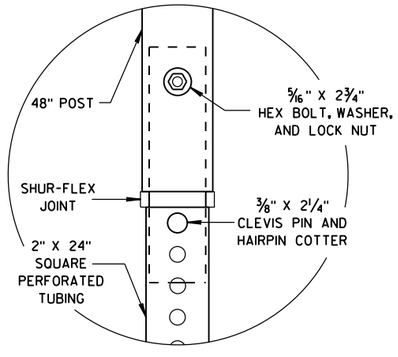
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
10/1/2012 — DATE
/S/ Travis Feltes — STATE TRAFFIC ENGINEER
FHWA

6

S.D.D. 15 A 3-2b

6

S.D.D. 15 A 3-2b

GENERAL NOTES

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

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

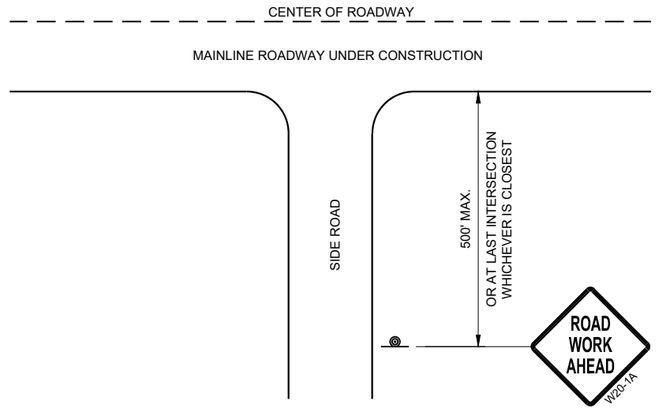
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

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

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

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



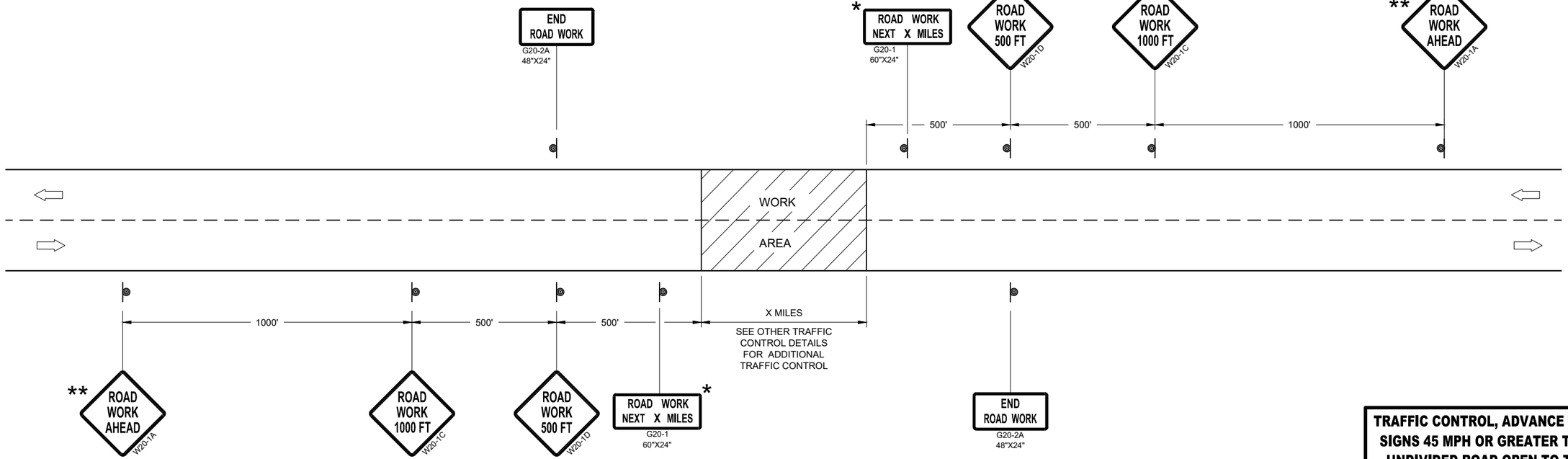
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C04 - 05

* 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

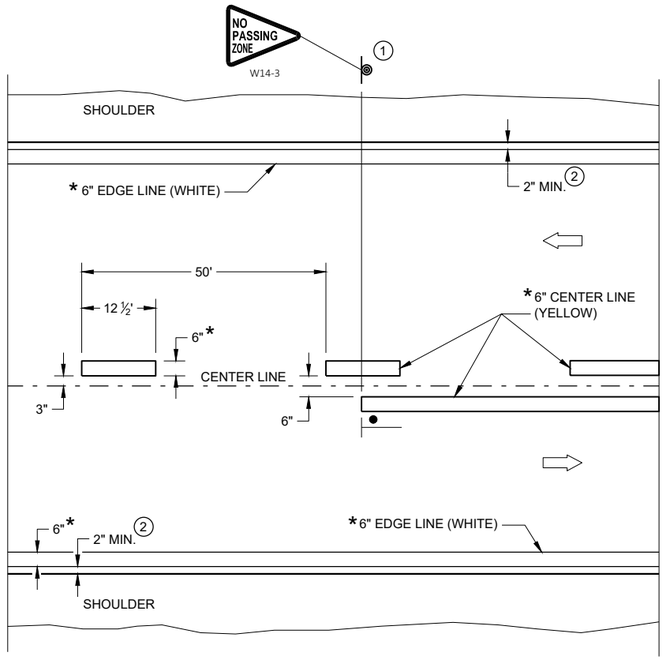
(2) MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

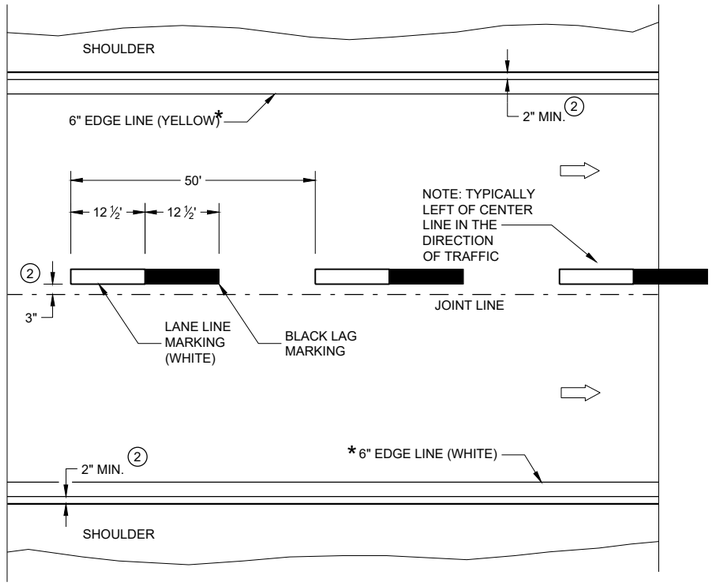
"T" MARKING

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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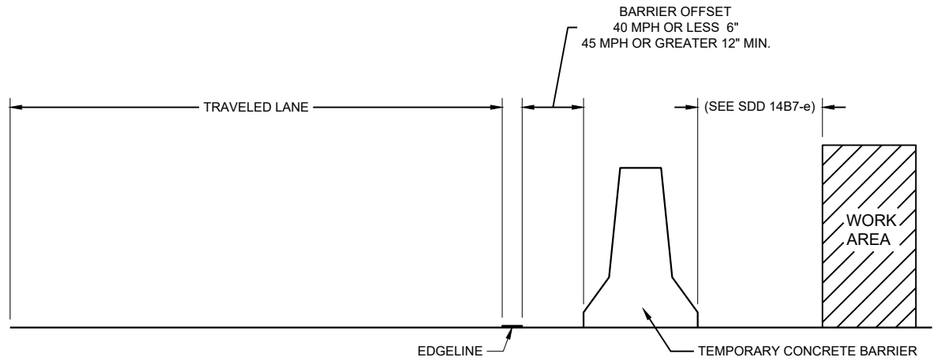
SDD 15C08-23a

SDD 15C08-23a



TEMPORARY BARRIER OFFSET FROM EDGELINE

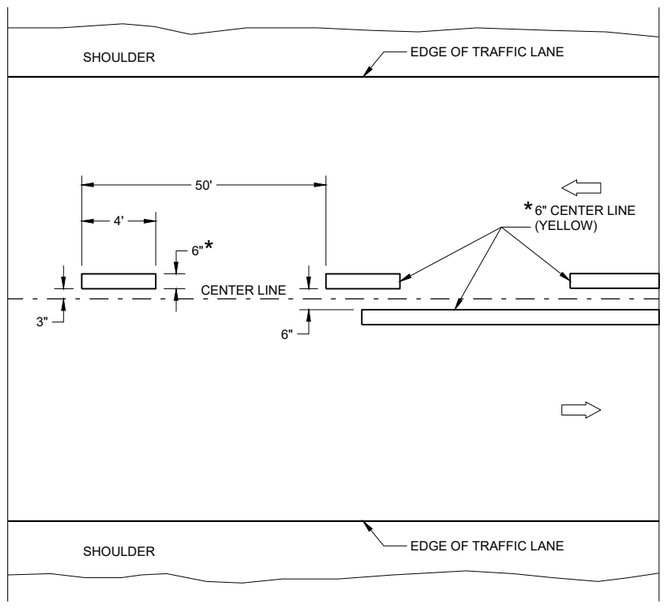
GENERAL NOTES

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

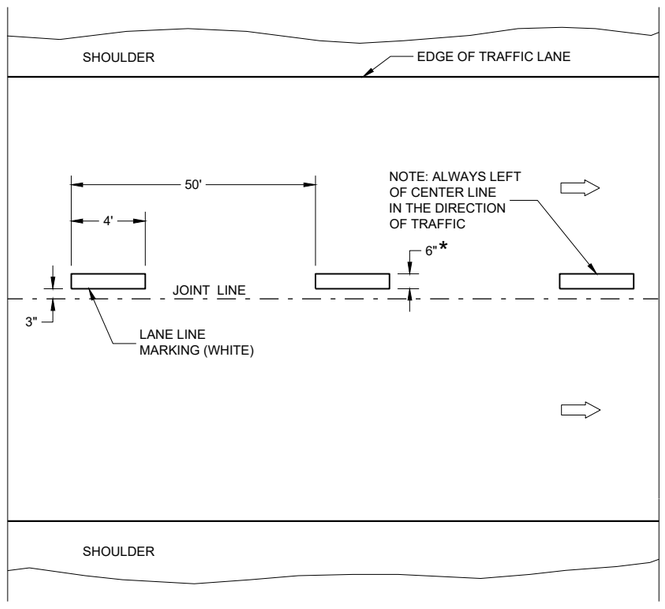
LEGEND

⇨ DIRECTION OF TRAFFIC

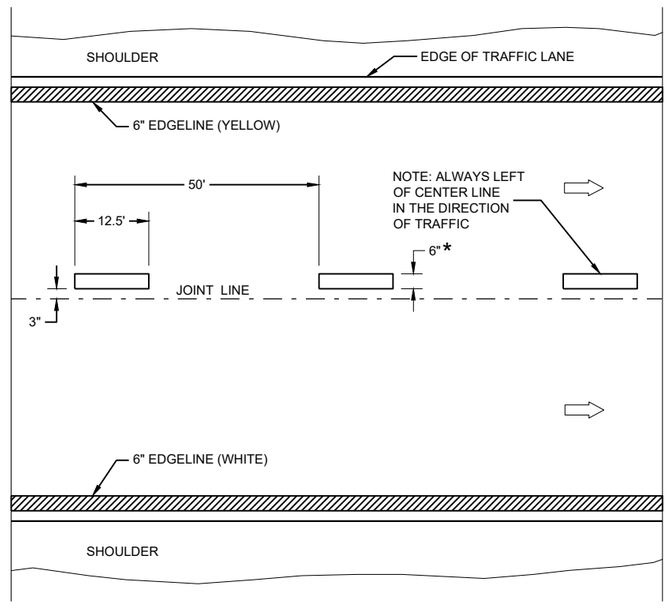
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



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
FHWA	

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SDD 15C08-23b

6

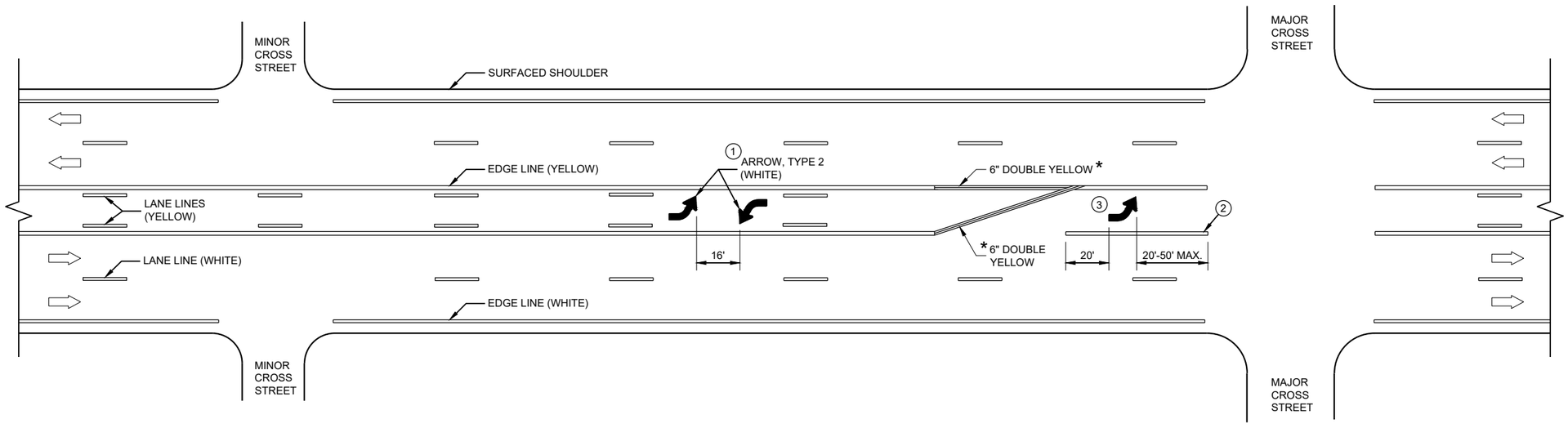
SDD 15C08-23b

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 10" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



TWO WAY LEFT TURN LANE

6

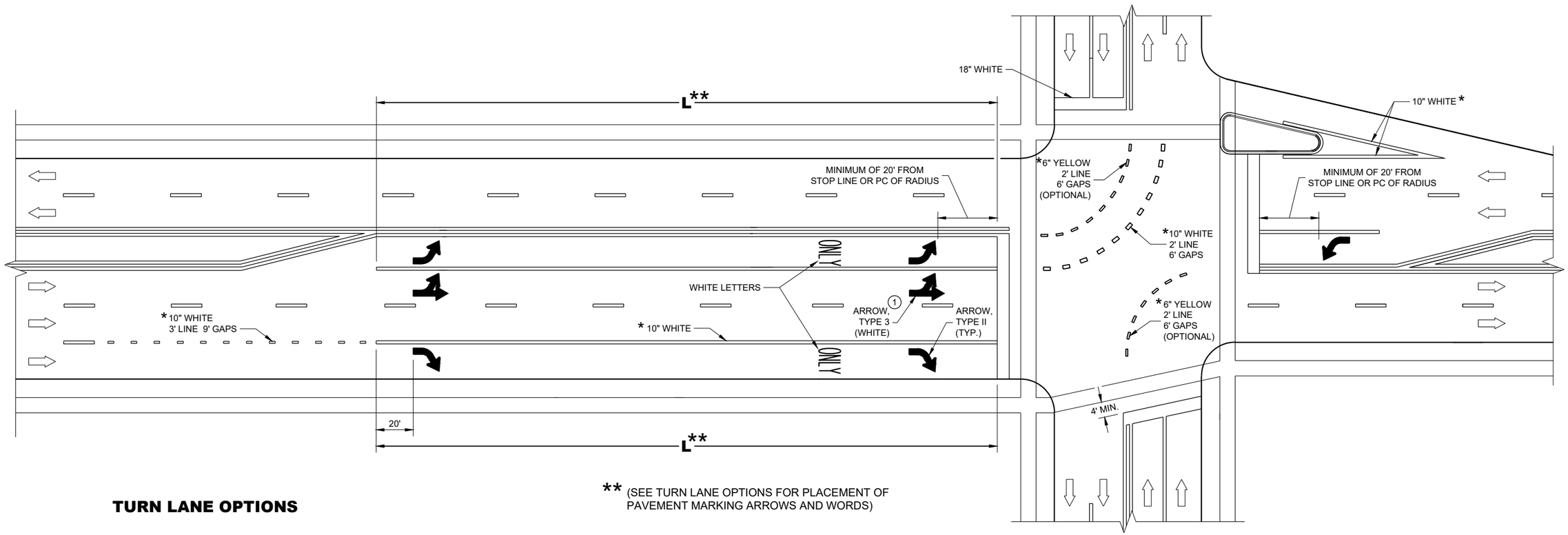
SDD 15C08-23c

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTA· 127

6

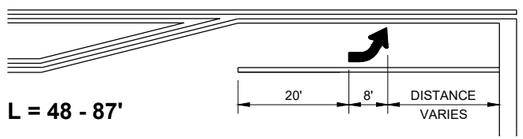
SDD 15C08-23c



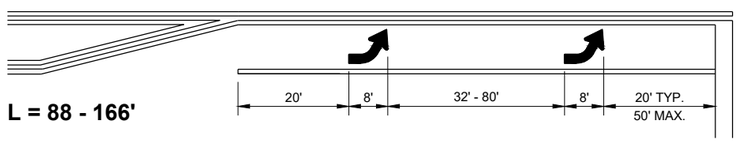
** (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

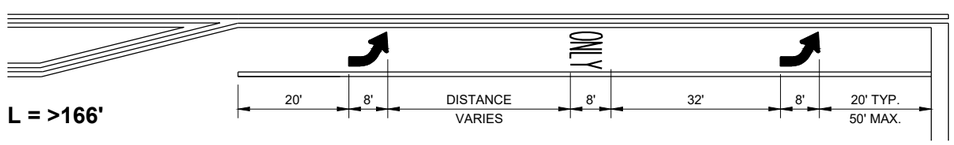
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

(1) QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

PAVEMENT MARKING (TURN LANES)

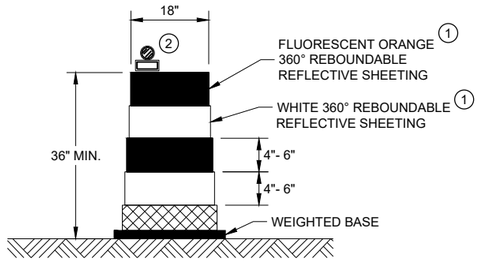
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08-23d

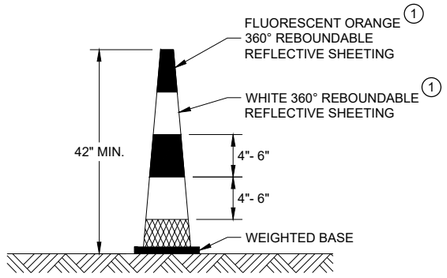
GENERAL NOTES

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

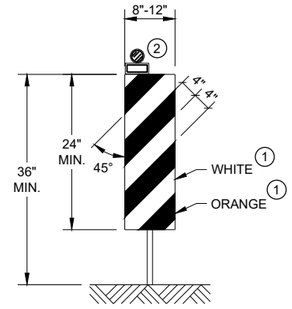
BALLAST WIDTHS
RANGE FROM 24"-36"



42" CONE

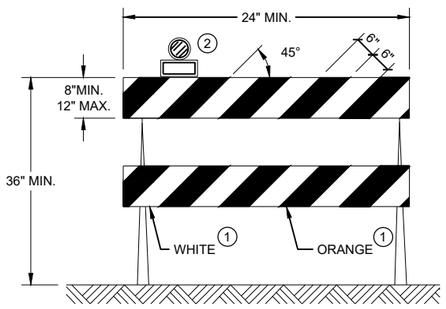
DO NOT USE IN TAPERS
½ SPACING OF DRUMS

BALLAST WIDTHS
RANGE FROM 14"-20"



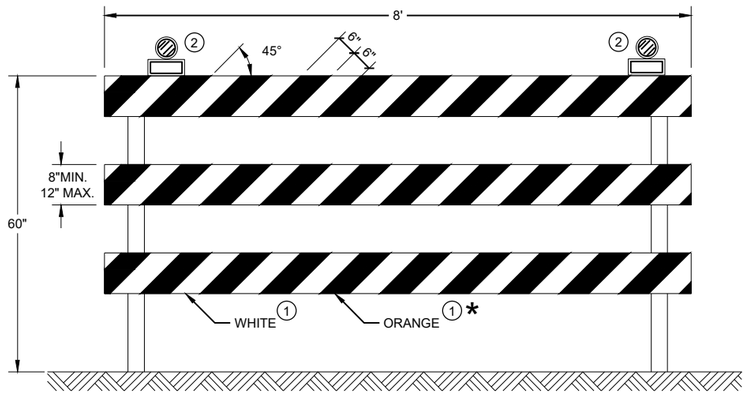
VERTICAL PANEL

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

6

SDD 15C11 - 10b

6

SDD 15C11 - 10b

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

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

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

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

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGING

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.

(2) SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

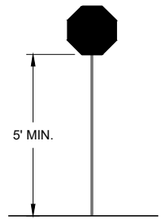
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



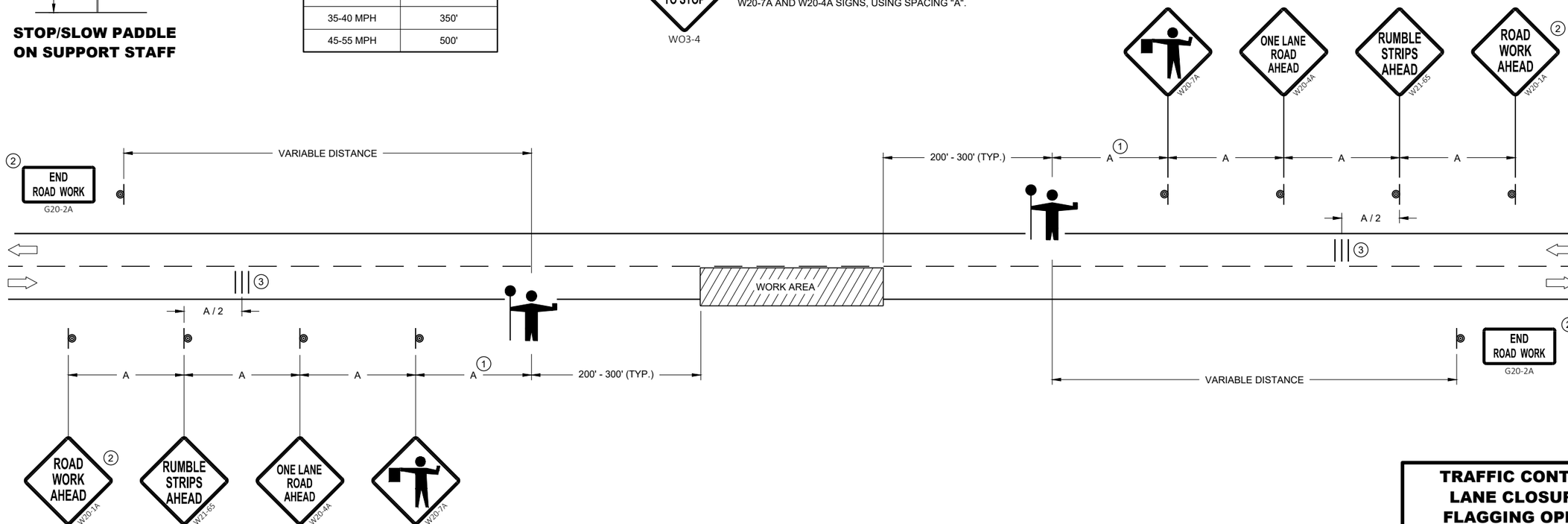
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2022
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15C12 - 09a

SDD 15C12 - 09a

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.

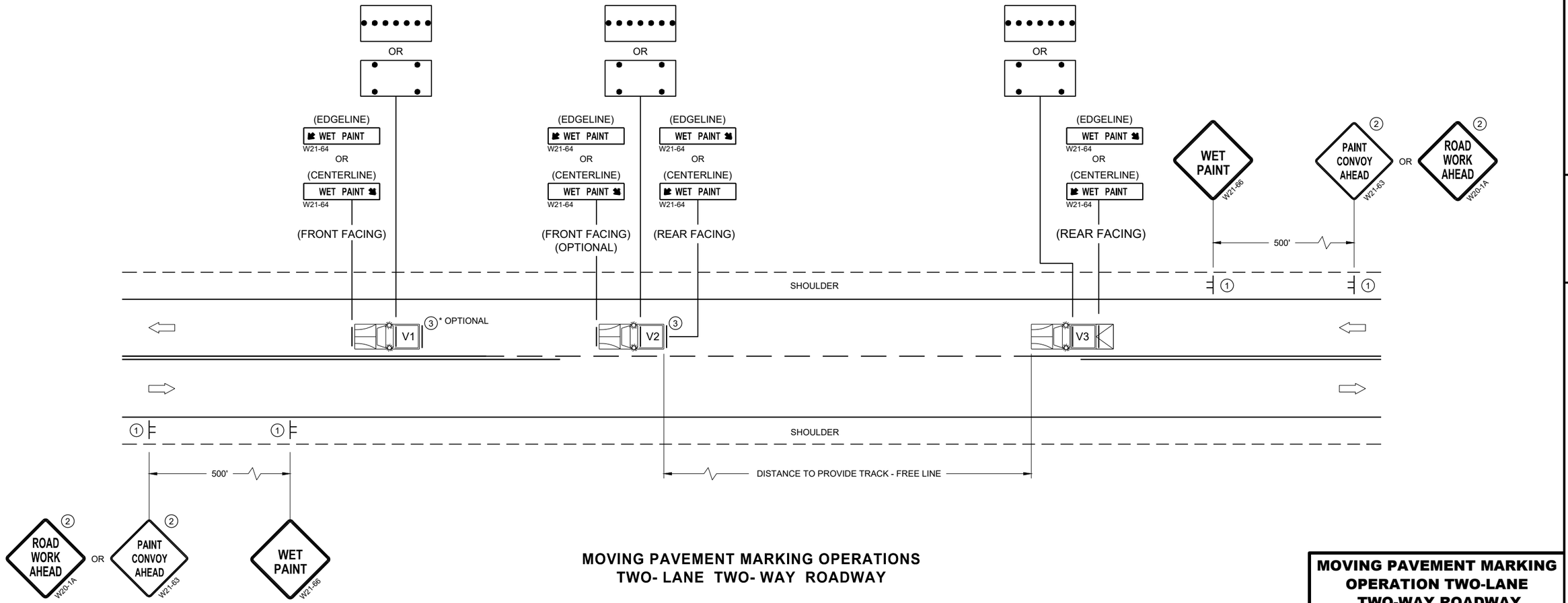
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

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

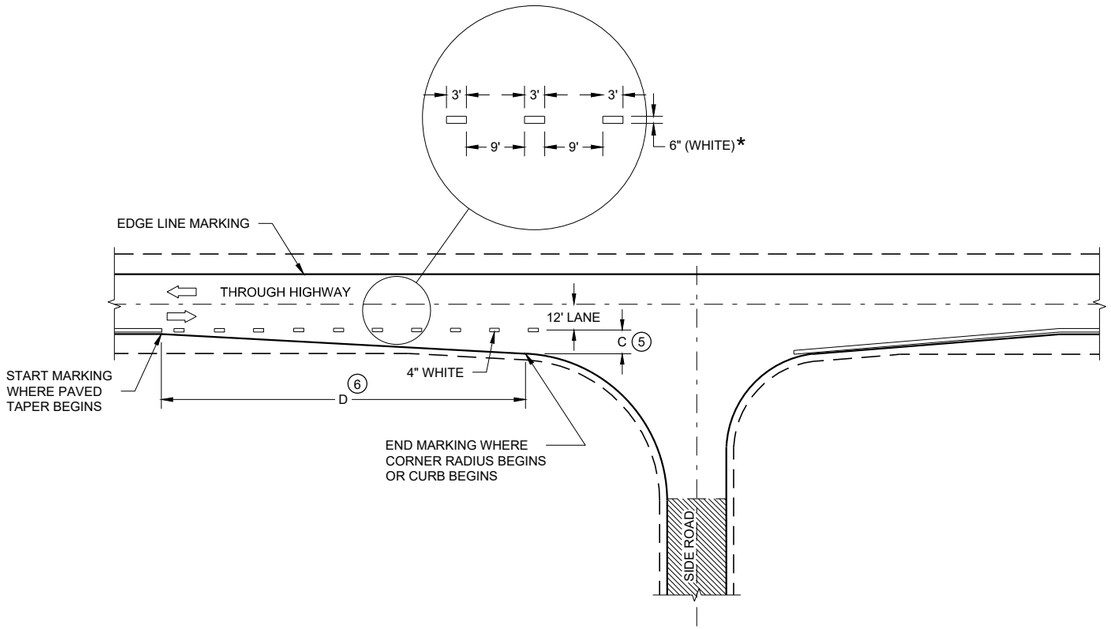
APPROVED
February 2023
DATE

/S/ Andrew I...
WORK ZONE EN

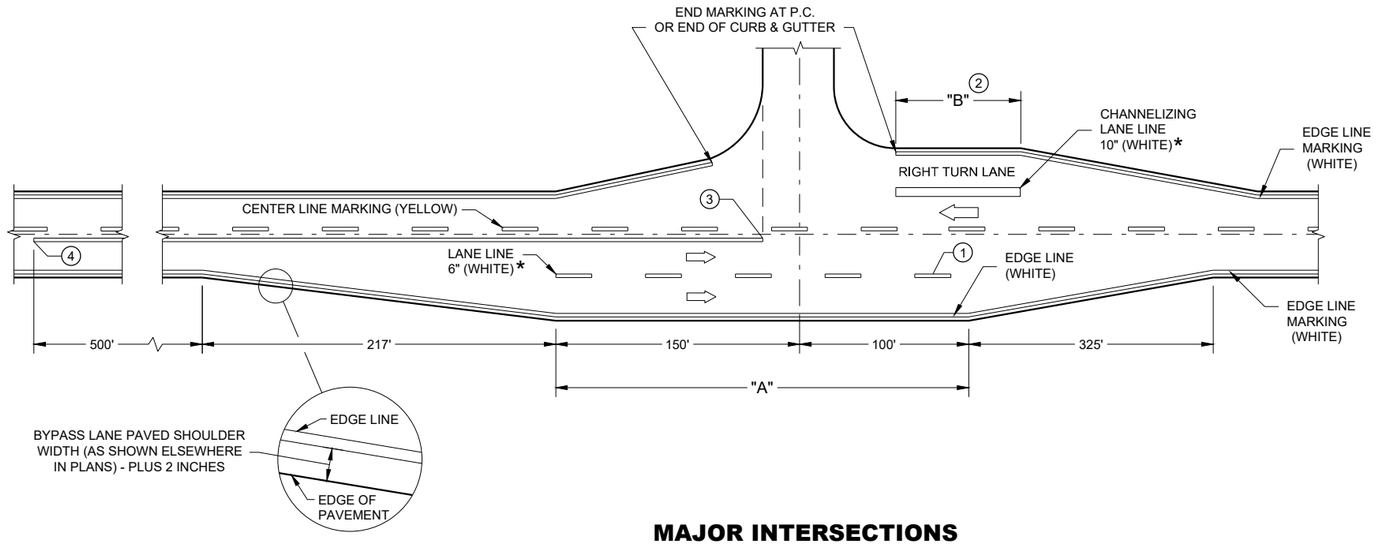
FHWA

SDD 15C19-08a

SDD 15C19-08a



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

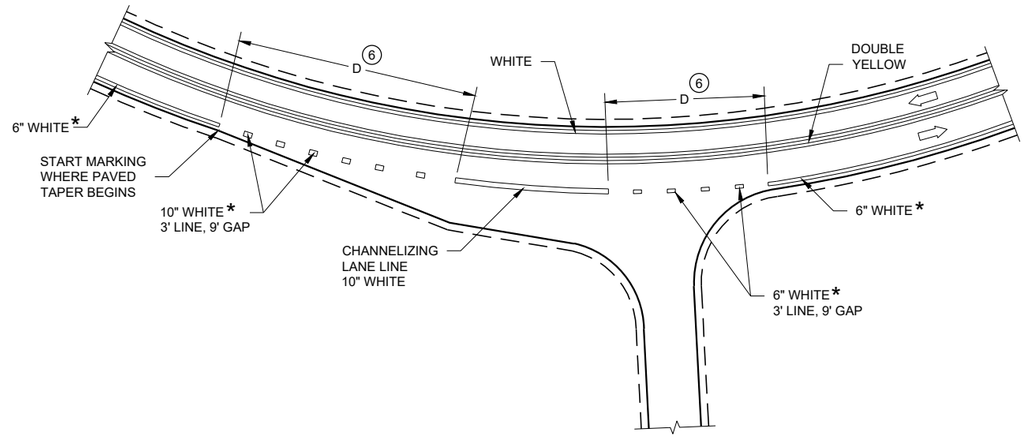
GENERAL NOTES

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

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

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

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.

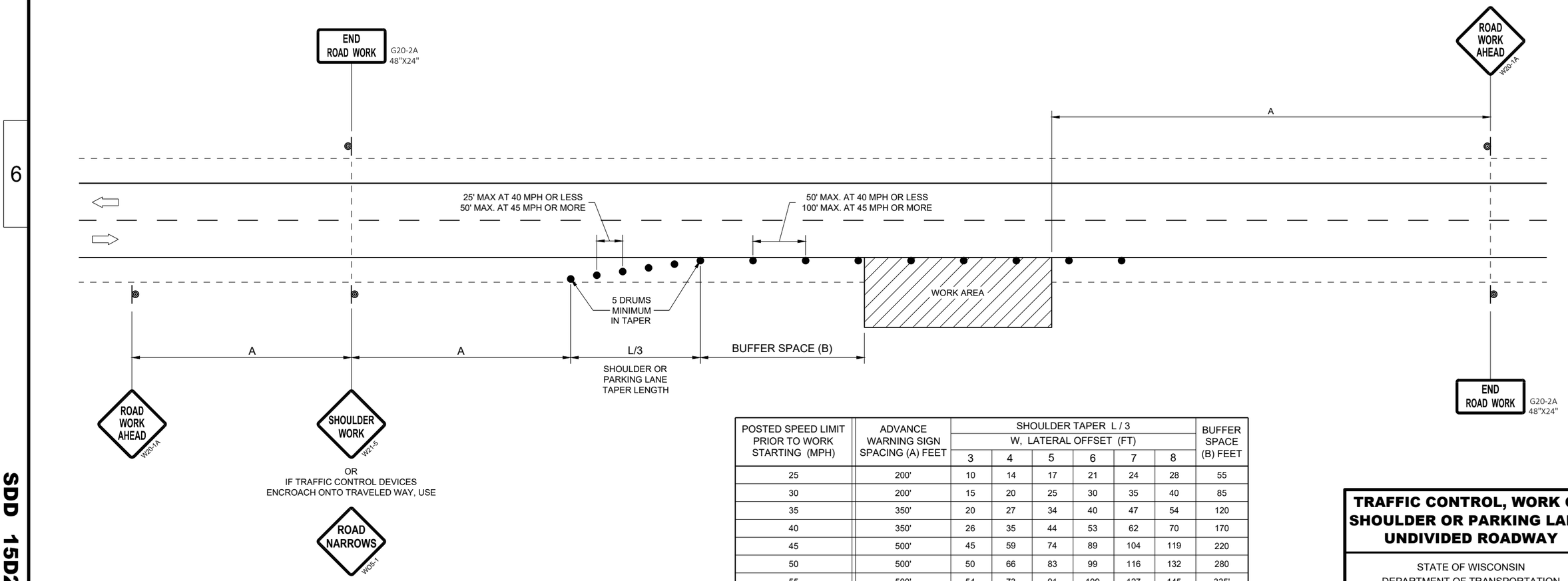
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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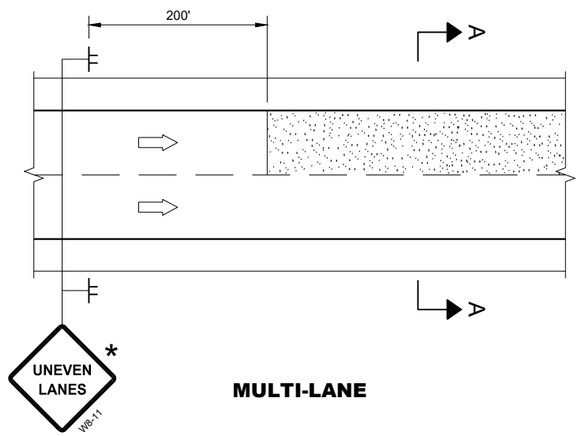
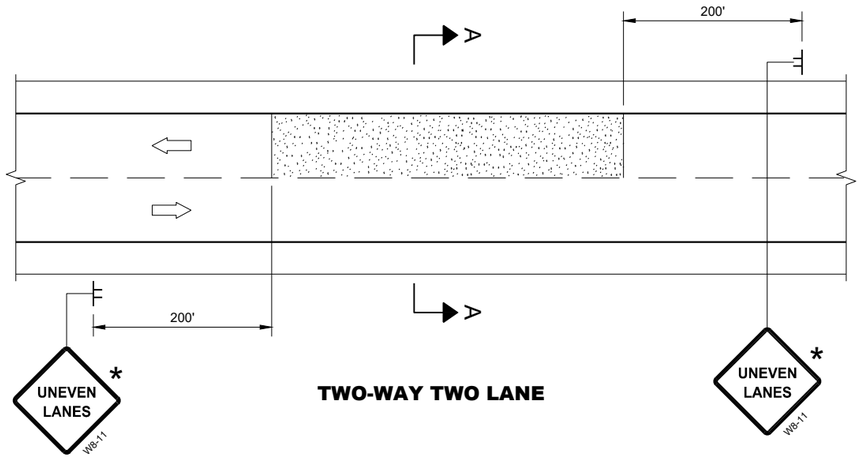
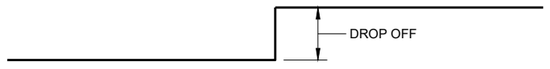


MULTI-LANE

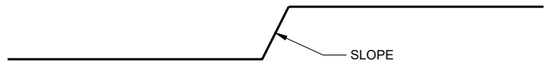


TWO-WAY TWO LANE

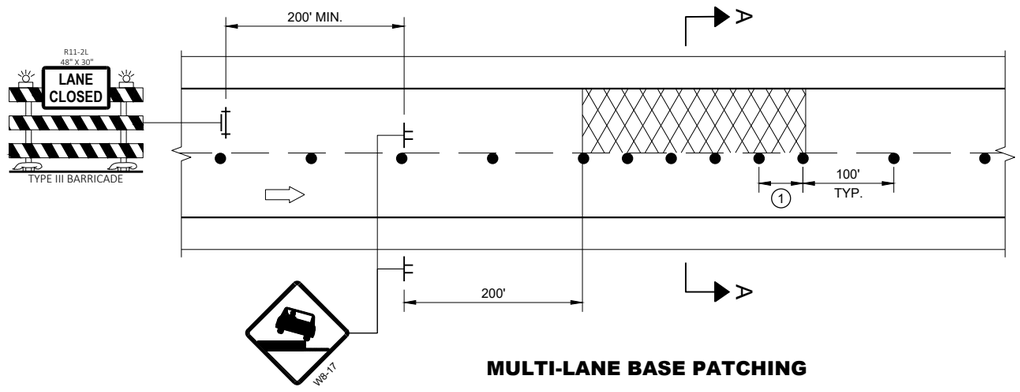


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

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.

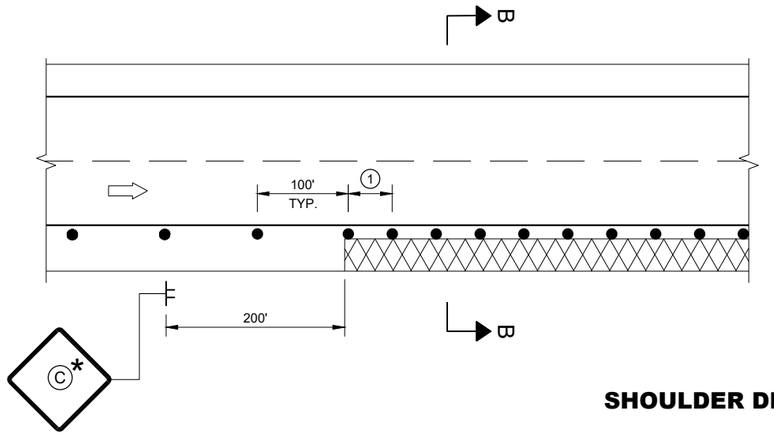
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

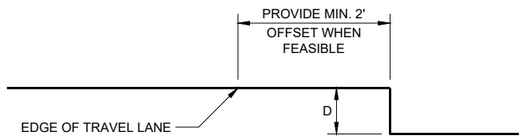
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

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



SHOULDER DROP-OFFS



SECTION B - B

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

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15D39 - 02

6

SDD 15D39 - 02

GENERAL NOTES

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

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

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

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

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

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

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

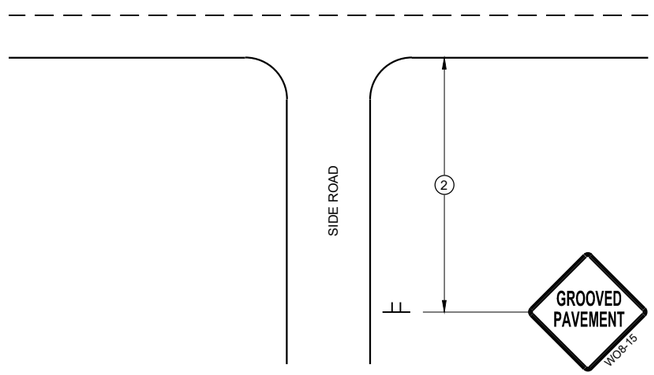
(1) PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.

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

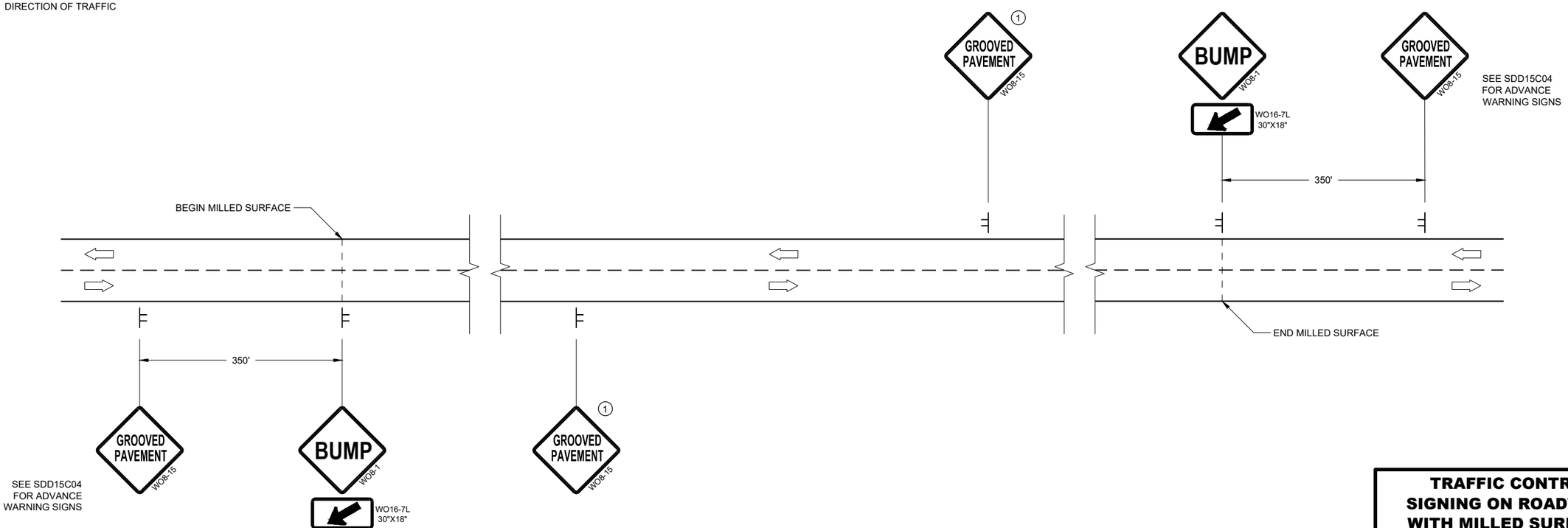
LEGEND

SIGN ON TEMPORARY SUPPORT

DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

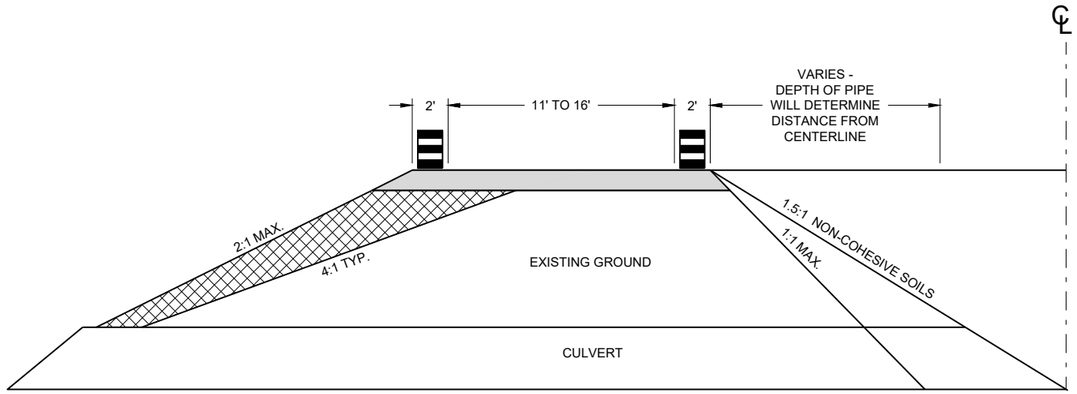
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6
SDD 15D44 - 02



CROSS SECTION

GENERAL NOTES

USE 1:1 FOR COHESIVE CLAYS AND SILTS, LOAMS, SANDY CLAYS AND ANGULAR GRAVEL SOILS.
USE 1.5:1 FOR NON-COHESIVE SOILS.

THE TAPER SHOULD EXTEND ACROSS THE SHOULDER UNLESS DOING SO WOULD GREATLY CONFLICT WITH THE WORK OPERATION.

ALL LANE CLOSURE SIGNS SHALL BE REMOVED OR COVERED AND ALL DEVICES REMOVED BEYOND THE SHOULDER WHEN WORK IS NOT IN PROGRESS AND THE LANE IS RESTORED TO A SAFE OPERATING CONDITION.

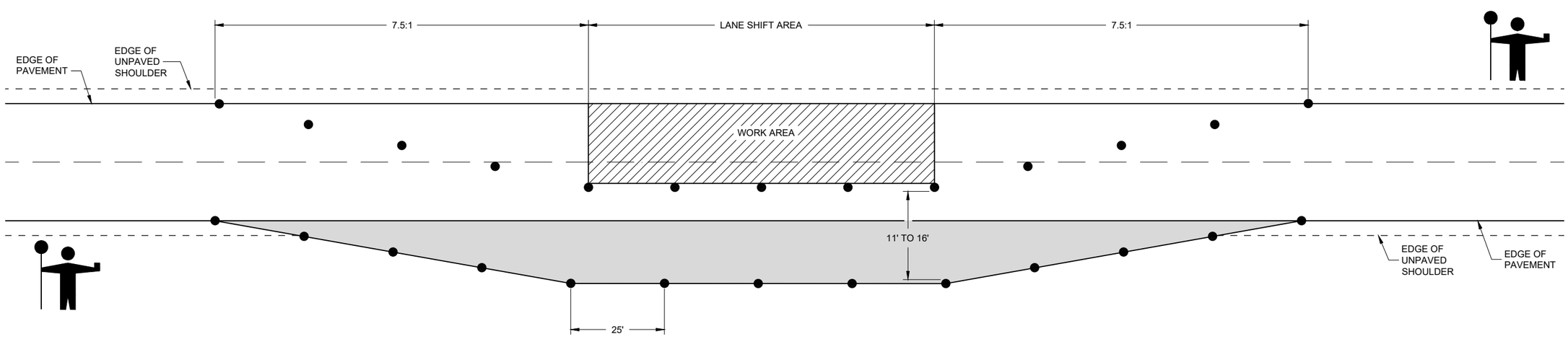
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

USE WITH SDD 15C12 "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATIONS"

USE WITH SDD 15D45 "SIGNING ON ROADWAYS WITH LOOSE GRAVEL"

LEGEND

- DRUM WITHOUT WARNING LIGHT
- 6" BASE AGGREGATE DENSE 1 ¼" -INCIDENTAL TO LANE SHIFT ITEM
- FILL - INCIDENTAL TO LANE SHIFT ITEM
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF



LANE SHIFT IN FLAGGING OPERATION

TRAFFIC CONTROL, TEMPORARY LANE SHIFT DURING CULVERT WORK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15D48 - 01

6

SDD 15D48 - 01

LEGEND

V1 WORK VEHICLE

V2 SHADOW VEHICLE

TRUCK MOUNTED ATTENUATOR (TMA)

FLASHING ARROW PANEL (CAUTION)

WORK AREA

DIRECTION OF TRAFFIC

POSTED SPEED PRIOR TO WORK STARTING (MPH)	DECISION SIGHT DISTANCE (D)
0 - 25	550'
30	550'
35	700'
40	700'
45	900'
50	900'
55	1200'

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

MOBILE IS WORK THAT MOVES CONTINUOUSLY OR MOVES AT LEAST THE DECISION SIGHT DISTANCE EVERY 15 MINUTES.

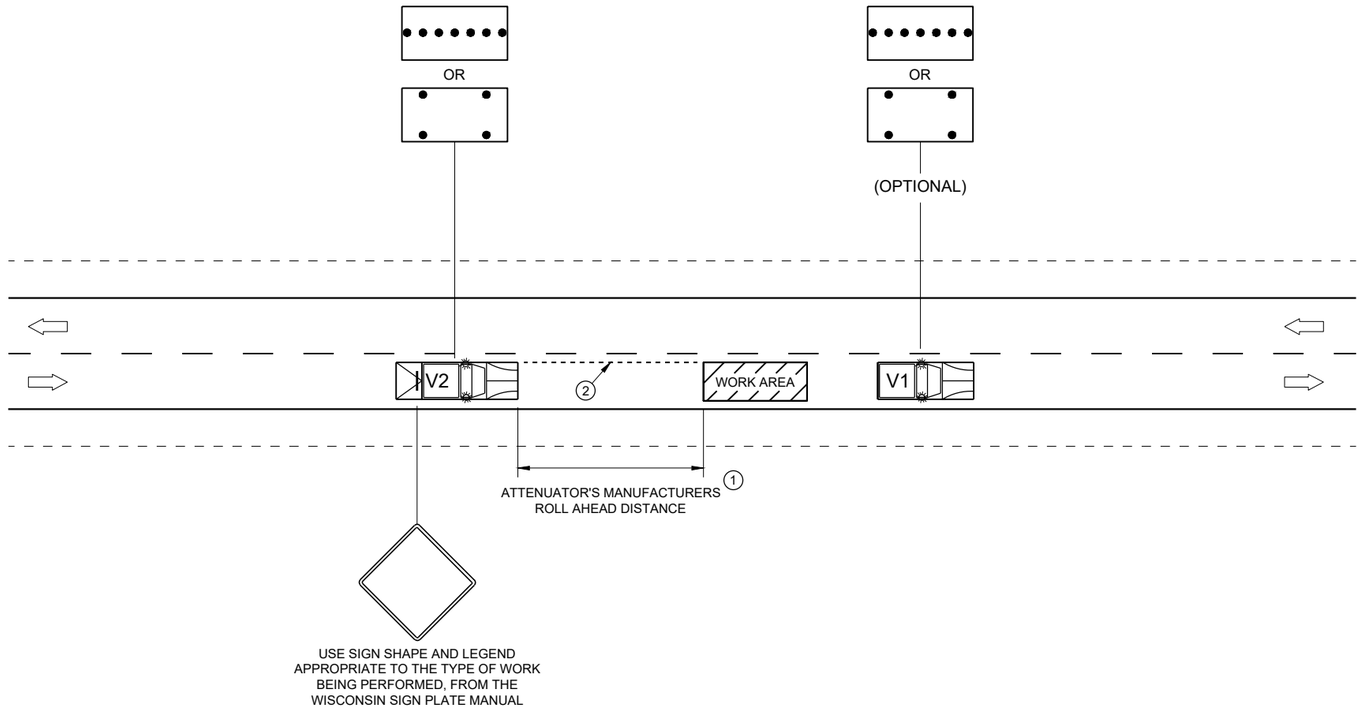
ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.

ALL ARROW PANELS SHALL BE REAR FACING, TYPE "B" OR "C", AND DISPLAYING THE FLASHING CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

(1) DISTANCE BETWEEN VEHICLES MAY INCREASE FROM THE ATTENUATOR'S ROLL AHEAD BASED ON TERRAIN, SIGHT DISTANCE, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

(2) ALIGN LEFT SIDE OF SHADOW VEHICLE WITH EDGE OF WORK AREA.



TRAFFIC CONTROL, MOBILE OPERATIONS ON AN UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 — DATE
/S/ Andrew Heidtke — STATEWIDE WORK ZONE T SAFETY ENGINEER

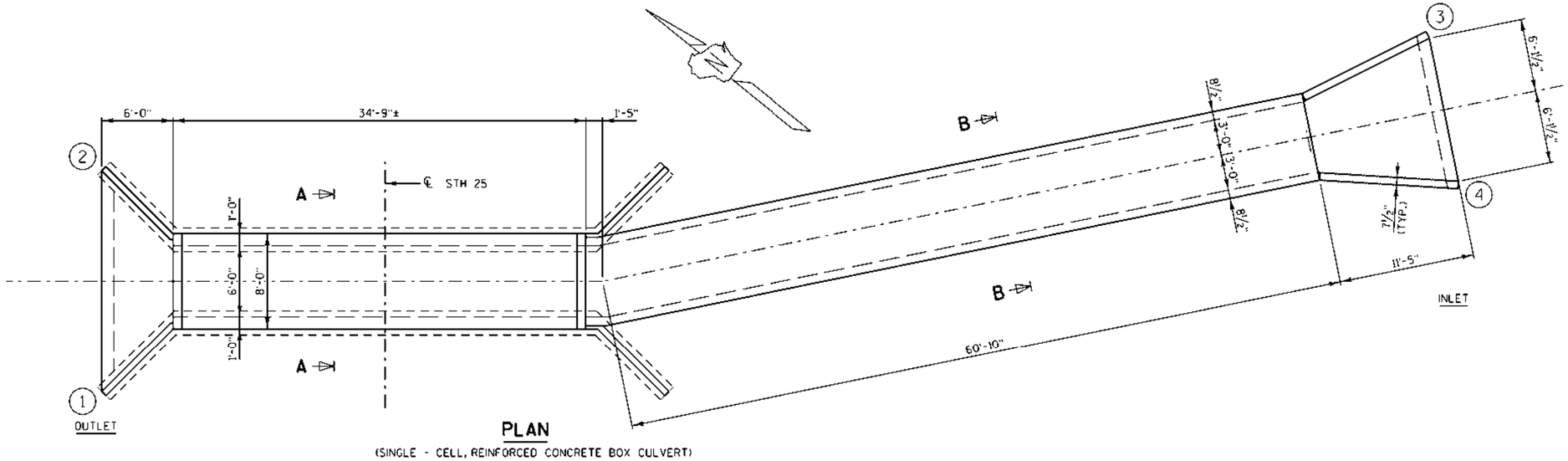
FHWA

6

SDD 15D51 - 01

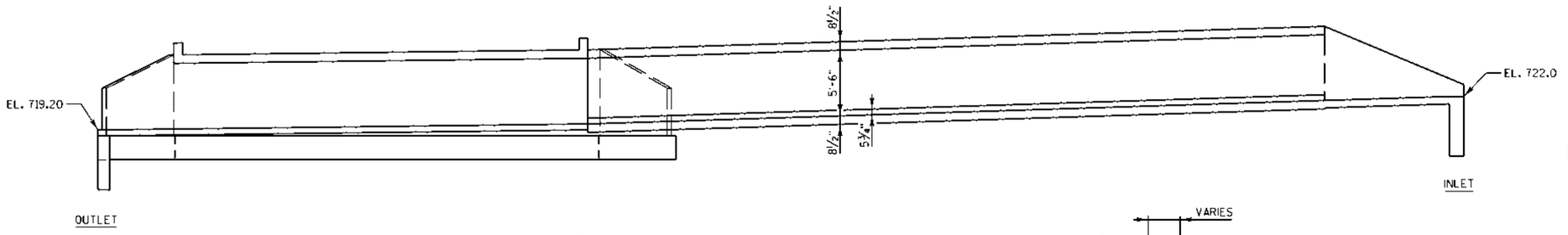
STATE PROJECT NUMBER

7170-00-76

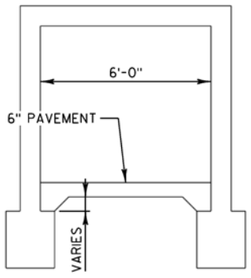


PLAN

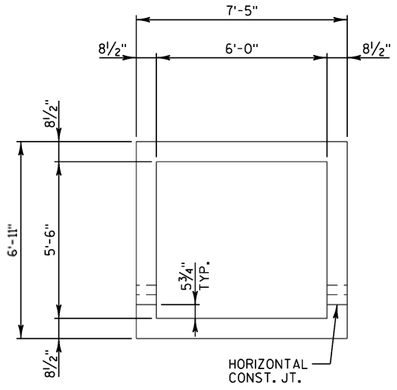
(SINGLE - CELL, REINFORCED CONCRETE BOX CULVERT)



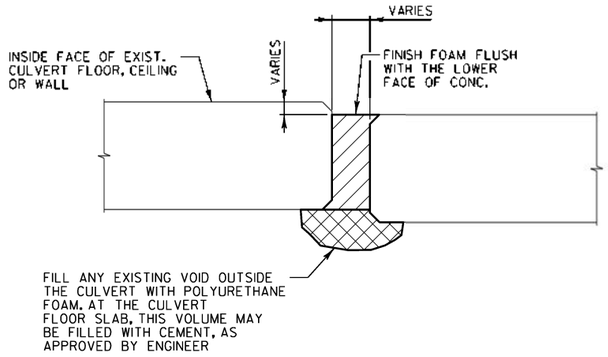
SECTION ALONG ℄ OF STRUCTURE



SECTION A-A



SECTION B-B



SECTION AT JOINT

TOTAL ESTIMATED QUANTITIES

	ITEM NUMBER	ITEM DESCRIPTION	ITEM UNIT	QUANTITY
1-02	206.5001	COFFERDAMS C-46-3	EACH	1
1-01	509.1500	CONCRETE SURFACE REPAIR	SF	75
	SPV.0090	POLYURETHANE FOAM CRACK OR JOINT FILLING	LF	23
1-01	SPV.0165	CONCRETE SURFACE REPAIR FULL-DEPTH	SF	55

ALL ITEMS ARE CATEGORY 0020.

GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.

DIMENSIONS AND ELEVATIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS.

DESIGN DATA

LIVE LOAD:
- DESIGN LOADING — HS - 20
- INVENTORY RATING — HS - 20
- OPERATIONAL RATING — HS - 33
- WISCONSIN STANDARD PERMIT VEHICLE (WIS-SPV) — 190 KIPS

EARTH LOAD:
- DESIGNED FOR — 14.0' OF FILL

LOAD RATINGS PER WBM 45.8.2.1.

TRAFFIC DATA

A.A.D.T. (2047) = 2,710
R.D.S. = 55 MPH

SCOPE OF WORK C-46-3

1. PERFORM CONCRETE SURFACE REPAIR AND CRACK OR JOINT FILLING AT LOCATIONS DESIGNATED BY ENGINEER.

LIST OF DRAWINGS

1. GENERAL PLAN

LEGEND

1-01 CONCRETE SURFACE REPAIR AND CONCRETE SURFACE REPAIR FULL-DEPTH QUANTITIES ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE THE FIELD IDENTIFICATION AND DETERMINATION OF ALL REPAIR LOCATIONS WITH THE ENGINEER. IDENTIFIED LOCATIONS ARE PREDOMINATELY ALONG THE SOUTH WALL, AT CONSTRUCTION JOINTS, AND NEAR THE KINK POINT IN THE NORTH WALL.

1-02 DEWATERING AND PLACEMENT OF SANDBAGS, OR OTHER TECHNIQUE, TO DIVERT WATER TO COMPLETE THE REQUIRED WORK IS INCLUDED IN THE BID ITEM "COFFERDAMS C-46-3". PAYMENT SHALL BE BASED ON THE QUANTITY TOTAL OF ONE, REGARDLESS IF THE CONTRACTOR PREFERS TO USE SEPARATE SYSTEMS FOR THE DIFFERENT REPAIR LOCATIONS.

(X) DENOTES WING NUMBER.

WISCONSIN PROFESSIONAL ENGINEER
WILLIAM A. HOVE
E-33600
MADISON, WI

5/31/2023

BUREAU OF STRUCTURES CONTACT:
AARON BONK (608) 261-0261

CONSULTANT CONTACT:
BILL HOVE (262) 393-1260

NO.	DATE	REVISION	BY

CORRE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

ACCEPTED SDR 08/15/23
CHIEF STRUCTURES DESIGN ENGINEER — DATE

STRUCTURE C-46-3

STH 25 OVER DRAINAGE WAY

COUNTY: PEPIN — TOWN/~~CITY/VILLAGE~~: DURAND

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
BH	EP	TKB	BH

GENERAL PLAN

SHEET 1 OF 1

FILE NAME : C:\GD\CORRE, Inc\Projects - WI NW Reg gs\7170-00-06 STH 25\500 CADD\503 Structures\C-46-003-01 genplan.dgn

PLOT DATE : 5/31/2023 3:13:10 PM

PLOT SCALE : 1:2

QR-25 BG1 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF)	INCREMENTAL VOL (CY) (UNADJUSTED)	CUMULATIVE VOL (CY)	
			FILL	FILL	EXPANDED FILL	MASS ORDINATE
					1.00	
				NOTE 3		NOTE 8
304+35.017	30435.02	0.00	10.26	0	0	0
304+50	30450.00	14.98	13.08	6	6	-6
304+75	30475.00	25.00	17.62	14	20	-20
305+00	30500.00	25.00	17.31	16	36	-36
305+25	30525.00	25.00	8.00	12	48	-48
305+50	30550.00	25.00	7.75	7	55	-55
305+65.485	30565.48	15.48	10.57	5	60	-60

QR-25 BG2 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)	CUMULATIVE VOL (CY)	
			CUT	FILL	FILL	EXPANDED FILL	MASS ORDINATE
						1.00	
					NOTE 3		NOTE 8
341+00	34100.00	0.00	0.02	10.70	0	0	0
341+25	34125.00	25.00	0.00	17.64	13	13	-13
341+50	34150.00	25.00	0.00	17.98	16	29	-29
341+75	34175.00	25.00	0.02	22.18	19	48	-48
342+00	34200.00	25.00	0.27	15.29	17	65	-65
342+25	34225.00	25.00	0.10	9.14	11	76	-76
342+50	34250.00	25.00	0.01	3.87	6	82	-82

QR-25 BG3 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)	CUMULATIVE VOL (CY)	
			CUT	FILL	FILL	EXPANDED FILL	MASS ORDINATE
						1.00	
					NOTE 3		NOTE 8
437+00	43700.00	0.00	0.00	42.11	0	0	0
437+25	43725.00	25.00	0.00	30.91	34	34	-34
437+50	43750.00	25.00	0.01	37.25	32	66	-66
437+75	43775.00	25.00	0.13	7.41	21	87	-87
438+00	43800.00	25.00	0.01	5.63	6	93	-93
438+25	43825.00	25.00	0.00	1.71	3	96	-96
438+50	43850.00	25.00	0.00	2.10	2	98	-98

QR-25 BG4 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)	CUMULATIVE VOL (CY)	
			CUT	FILL	FILL	EXPANDED FILL	MASS ORDINATE
						1.00	
					NOTE 3		NOTE 8
447+92.352	44792.35	0.00	0.00	22.21	0	0	0
448+00	44800.00	7.65	0.00	22.07	6	6	-6
448+25	44825.00	25.00	0.13	19.21	19	25	-25
448+50	44850.00	25.00	0.00	12.93	15	40	-40
448+75	44875.00	25.00	0.00	4.44	8	48	-48
448+92.224	44892.22	17.22	0.00	2.30	2	50	-50

QR-25 BG5 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF)	INCREMENTAL VOL (CY) (UNADJUSTED)	CUMULATIVE VOL (CY)	
			FILL	FILL	EXPANDED FILL	MASS ORDINATE
					1.00	
				NOTE 3		NOTE 8
619+39.131	61939.13	0.00	10.22	0	0	0
619+50	61950.00	10.87	13.60	5	5	-5
619+75	61975.00	25.00	27.57	19	24	-24
620+00	62000.00	25.00	37.54	30	54	-54
620+25	62025.00	25.00	28.49	31	85	-85
620+50	62050.00	25.00	27.64	26	111	-111
620+68.867	62068.87	18.87	81.79	38	149	-149

QR-25 BG6 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)	CUMULATIVE VOL (CY)	
			CUT	FILL	FILL	EXPANDED FILL	MASS ORDINATE
						1.00	
					NOTE 3		NOTE 8
622+43.868	62243.87	0.00	0.00	50.59	0	0	0
622+50	62250.00	6.13	0.00	28.17	9	9	-9
622+77.955	62277.96	27.96	0.29	15.09	22	31	-31
623+00	62300.00	22.04	0.00	14.37	12	43	-43
623+25	62325.00	25.00	0.01	11.92	12	55	-55
623+50	62350.00	25.00	0.06	9.10	10	65	-65
623+75	62375.00	25.00	0.10	5.83	7	72	-72
623+83.923	62383.92	8.92	0.10	4.82	2	74	-74

QR-25 BG7 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF)	INCREMENTAL VOL (CY) (UNADJUSTED)	CUMULATIVE VOL (CY)	
			FILL	FILL	EXPANDED FILL	MASS ORDINATE
					1.00	
				NOTE 3		NOTE 8
624+61.484	62461.48	0.00	8.12	0	0	0
624+75	62475.00	13.52	10.31	5	5	-5
625+00	62500.00	25.00	14.25	11	16	-16
625+25	62525.00	25.00	12.26	12	28	-28
625+50	62550.00	25.00	9.03	10	38	-38
625+75	62575.00	25.00	5.53	7	45	-45
626+00	62600.00	25.00	2.62	4	49	-49
626+08.966	62608.97	8.97	1.66	1	50	-50

9

9

PROJECT NO: 7170-00-76 | HWY: STH 25 | COUNTY: BUFFALO | EARTHWORK DATA | SHEET 139 | E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090101-EW.DWG
LAYOUT NAME - 090101-ew

PLOT DATE : 8/1/2023 7:48 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49

QR-25 BG8 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	MASS ORDINATE
				NOTE 3		NOTE 8
667+27.508	66727.51	0.00	4.90	0	0	0
667+50	66750.00	22.49	9.26	6	6	-6
667+75	66775.00	25.00	14.19	11	17	-17
668+00	66800.00	25.00	17.75	15	32	-32
668+25	66825.00	25.00	20.37	18	50	-50
668+50	66850.00	25.00	28.59	23	73	-73
668+69.915	66869.91	19.91	64.90	34	107	-107

QR-25 BG9 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	MASS ORDINATE
					NOTE 3		NOTE 8
669+91.482	66991.48	0.00	0.00	14.01	0	0	0
670+00	67000.00	8.52	0.00	11.76	4	4	-4
670+25	67025.00	25.00	0.14	9.49	10	14	-14
670+50	67050.00	25.00	0.00	16.48	12	26	-26
670+75	67075.00	25.00	0.00	15.57	15	41	-41
671+00	67100.00	25.00	0.00	13.66	14	55	-55
671+25	67125.00	25.00	0.00	9.03	11	66	-66
671+47.623	67147.62	22.62	0.00	5.34	6	72	-72

QR-25 BG10 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	MASS ORDINATE
					NOTE 3		NOTE 8
696+16.779	69616.78	0.00	0.00	2.37	0	0	0
696+25	69625.00	8.22	0.00	2.53	1	1	-1
696+50	69650.00	25.00	0.00	3.43	3	4	-4
696+75	69675.00	25.00	0.00	5.08	4	8	-8
697+00	69700.00	25.00	0.00	2.01	3	11	-11
697+25	69725.00	25.00	0.26	1.31	2	13	-13

QR-25 BG11 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	MASS ORDINATE
					NOTE 3		NOTE 8
714+64.304	71464.30	0.00	0.00	0.17	0	0	0
714+75	71475.00	10.70	0.00	0.25	0	0	0
715+00	71500.00	25.00	0.00	1.51	1	1	-1
715+25	71525.00	25.00	0.00	17.76	9	10	-10
715+50	71550.00	25.00	0.00	29.61	22	32	-32
715+75	71575.00	25.00	0.48	26.96	26	58	-58
716+00	71600.00	25.00	0.00	38.56	30	88	-88
716+25	71625.00	25.00	0.00	30.44	32	120	-120
716+50	71650.00	25.00	0.12	7.34	17	137	-137

DIVISION -- ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	MASS ORDINATE
				NOTE 3		NOTE 8
724+16.38	72416.38	0.00	52.75	0	0	0
724+25	72425.00	8.62	44.37	16	16	-16
724+50	72450.00	25.00	18.02	29	45	-45
724+75	72475.00	25.00	2.23	9	54	-54
725+00	72500.00	25.00	7.61	5	59	-59
725+25	72525.00	25.00	7.33	7	66	-66
725+50	72550.00	25.00	8.45	7	73	-73
725+75	72575.00	25.00	17.43	12	85	-85
726+00	72600.00	25.00	19.65	17	102	-102
726+25	72625.00	25.00	26.22	21	123	-123
726+50	72650.00	25.00	24.68	24	147	-147
726+75	72675.00	25.00	18.81	20	167	-167
727+00	72700.00	25.00	13.08	15	182	-182
727+25	72725.00	25.00	12.46	12	194	-194
727+31.91	72731.91	6.91	8.27	3	197	-197

QR-25 BG13 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	MASS ORDINATE
				NOTE 3		NOTE 8
760+83.698	76083.70	0.00	9.95	0	0	0
761+00	76100.00	16.30	4.87	4	4	-4
761+25	76125.00	25.00	6.91	5	9	-9
761+50	76150.00	25.00	12.48	9	18	-18
761+75	76175.00	25.00	7.92	9	27	-27
762+00	76200.00	25.00	4.57	6	33	-33

QR-25 BG14 - ALI-STH25-BUFFALO

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	CUMULATIVE VOL (CY) MASS ORDINATE NOTE 8
794+22.821	79422.82	0.00	0.00	23.21	0	0	0
794+25	79425.00	2.18	0.00	23.62	2	2	-2
794+50	79450.00	25.00	0.02	27.33	24	26	-26
794+75	79475.00	25.00	0.00	29.38	26	52	-52
795+00	79500.00	25.00	0.00	27.26	26	78	-78
795+25	79525.00	25.00	0.00	12.47	18	96	-96
795+50	79550.00	25.00	0.00	14.09	12	108	-108
795+67.151	79567.15	17.15	0.00	14.31	9	117	-117

QR-25 BG15- ALI-STH25-PEPIN

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	CUMULATIVE VOL (CY) MASS ORDINATE NOTE 8
834+50	83450.00	0.00	0.09	0.61	0	0	0
834+75	83475.00	25.00	0.07	3.69	2	2	-2
835+00	83500.00	25.00	0.01	4.43	4	6	-6
835+25	83525.00	25.00	0.00	5.95	5	11	-11
835+50	83550.00	25.00	0.00	11.43	8	19	-19
835+75	83575.00	25.00	0.00	4.23	7	26	-26
836+00	83600.00	25.00	0.02	0.87	2	28	-28

QR-25 BG16- ALI-STH25-PEPIN

STATION	REAL STATION	DISTANCE	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	CUMULATIVE VOL (CY) MASS ORDINATE NOTE 8
840+22.358	84022.36	0.00	0.00	2.92	0	0	0
840+25	84025.00	2.64	0.00	4.53	0	0	0
840+50	84050.00	25.00	0.01	9.51	6	6	-6
840+75	84075.00	25.00	0.00	19.83	14	20	-20
841+00	84100.00	25.00	0.12	19.75	18	38	-38
841+25	84125.00	25.00	0.10	16.98	17	55	-55
841+50	84150.00	25.00	0.33	15.04	15	70	-70
841+75	84175.00	25.00	0.44	24.39	18	88	-88
841+90.296	84190.30	15.30	0.48	29.29	15	103	-103

QR-25 BG17- ALI-STH25-PEPIN

STATION	REAL STATION	DISTANCE	AREA (SF) FILL	INCREMENTAL VOL (CY) (UNADJUSTED) FILL NOTE 3	CUMULATIVE VOL (CY) EXPANDED FILL 1.00	CUMULATIVE VOL (CY) MASS ORDINATE NOTE 8
881+18.599	88118.60	0.00	61.07	0	0	0
881+25	88125.00	6.40	59.05	14	14	-14
881+50	88150.00	25.00	62.00	56	70	-70
881+75	88175.00	25.00	62.38	58	128	-128
882+00	88200.00	25.00	45.26	50	178	-178
882+25	88225.00	25.00	46.47	42	220	-220
882+50	88250.00	25.00	43.64	42	262	-262
882+75	88275.00	25.00	38.84	38	300	-300
883+00	88300.00	25.00	20.04	27	327	-327
883+06.871	88306.87	6.87	14.05	4	331	-331

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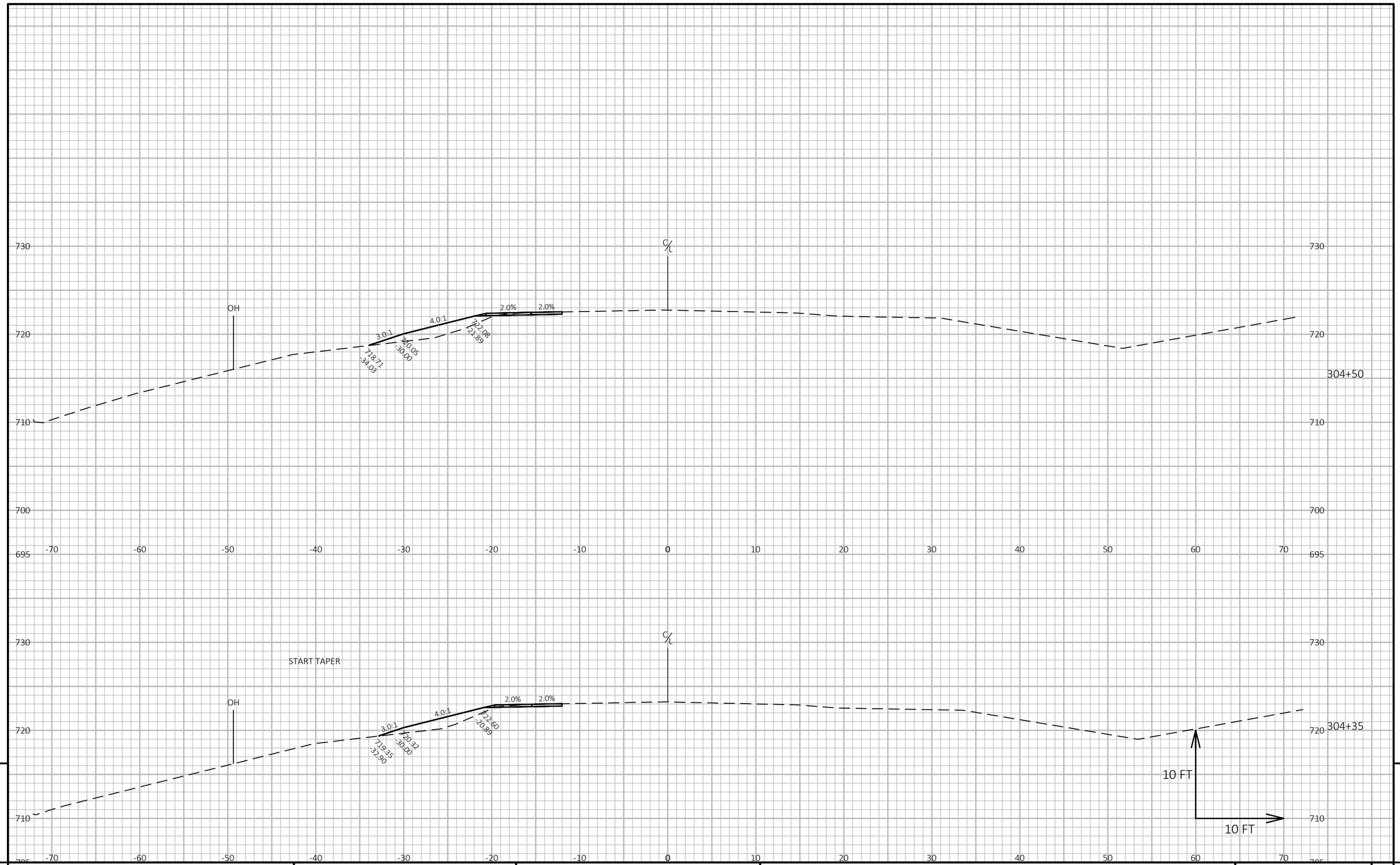
PROJECT NO: 7170-00-76 | HWY: STH 25 | COUNTY: BUFFALO | EARTHWORK DATA | SHEET 141 | E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090101-EW.DWG
LAYOUT NAME - 090103-ew

PLOT DATE : 8/1/2023 7:48 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1" = 1'

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 142	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 01

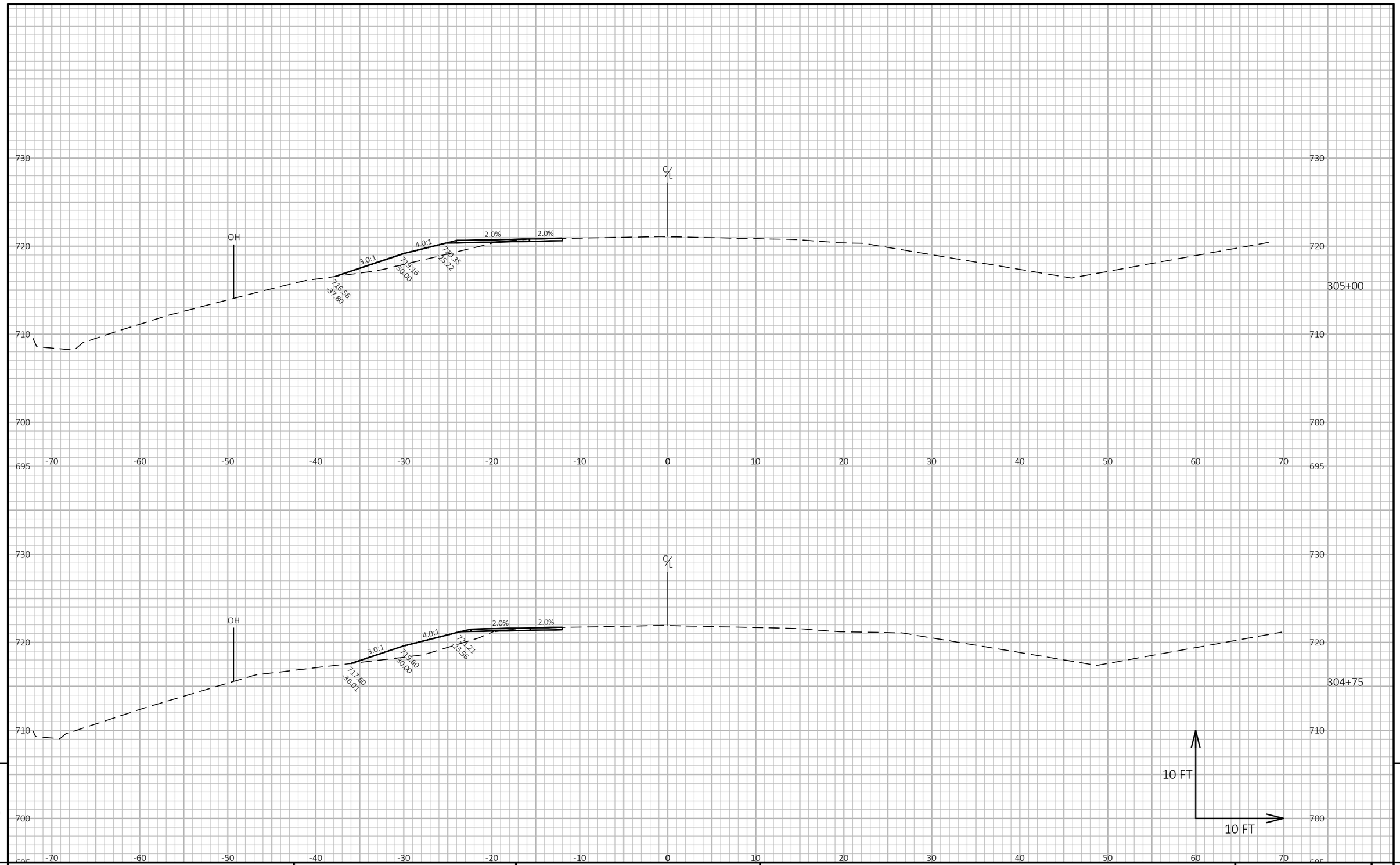
PLOT DATE : 8/1/2023 10:24 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 143 E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 02

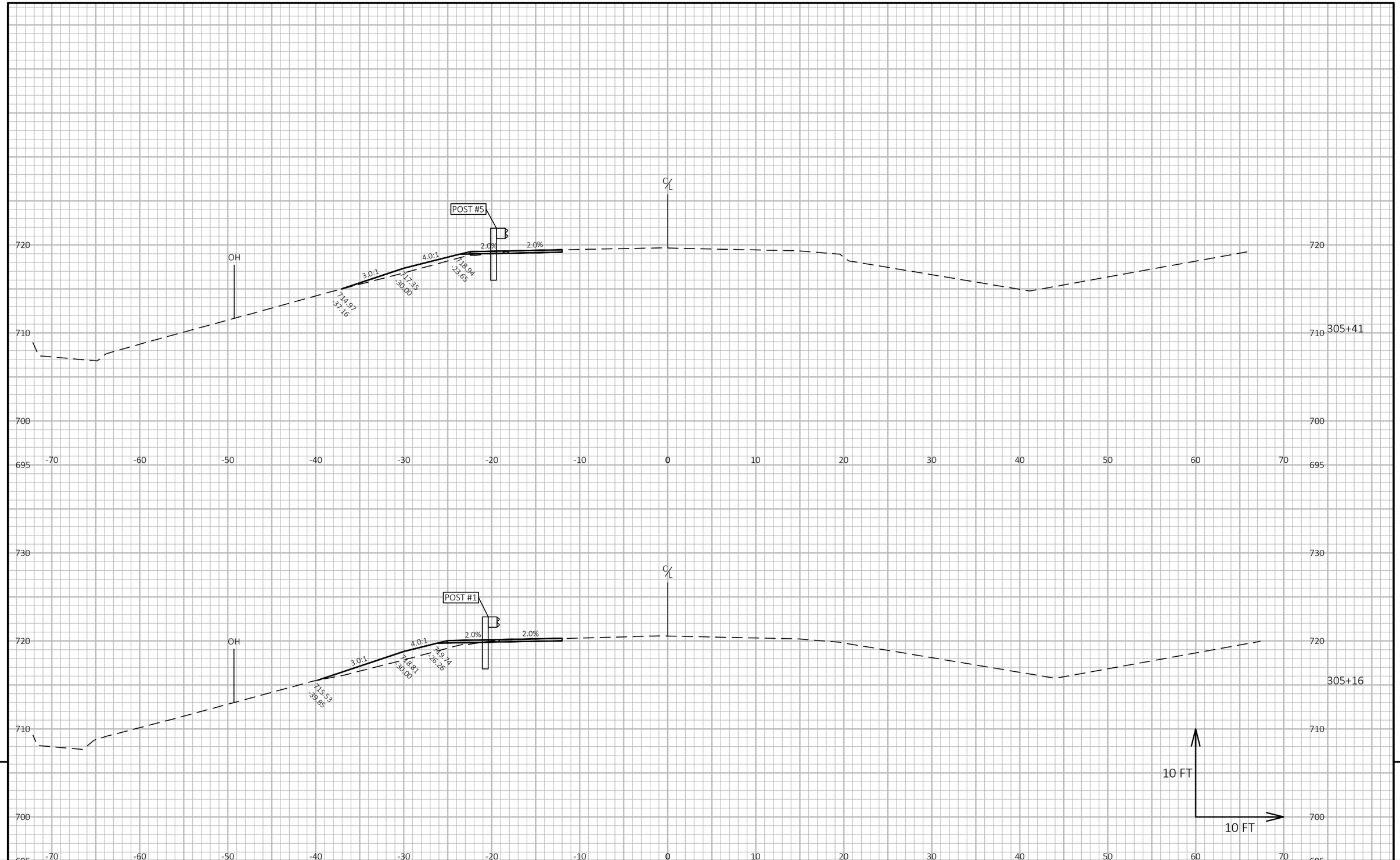
PLOT DATE : 8/1/2023 10:25 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 144	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 03

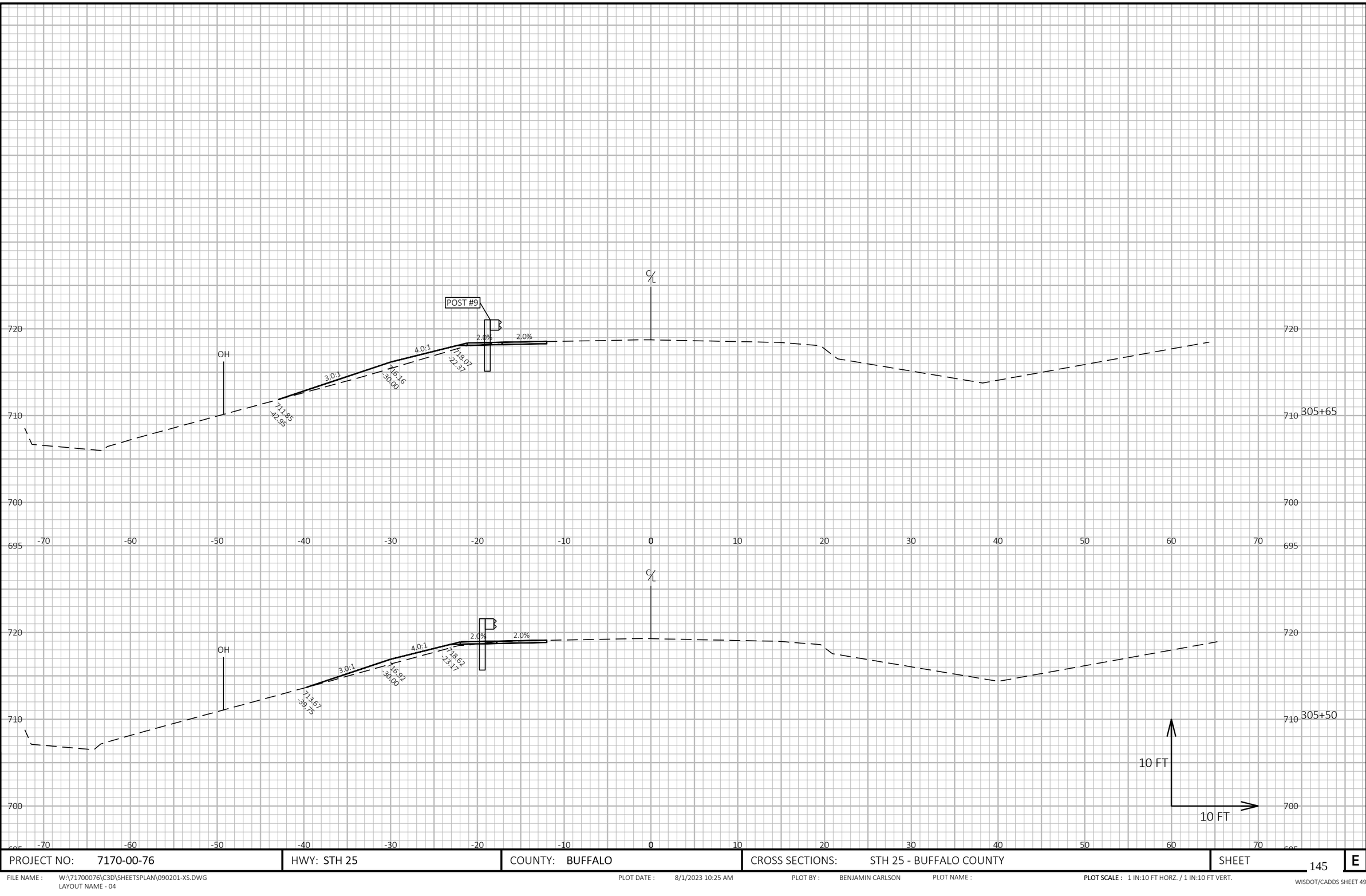
PLOT DATE : 8/1/2023 10:25 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 145	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 04

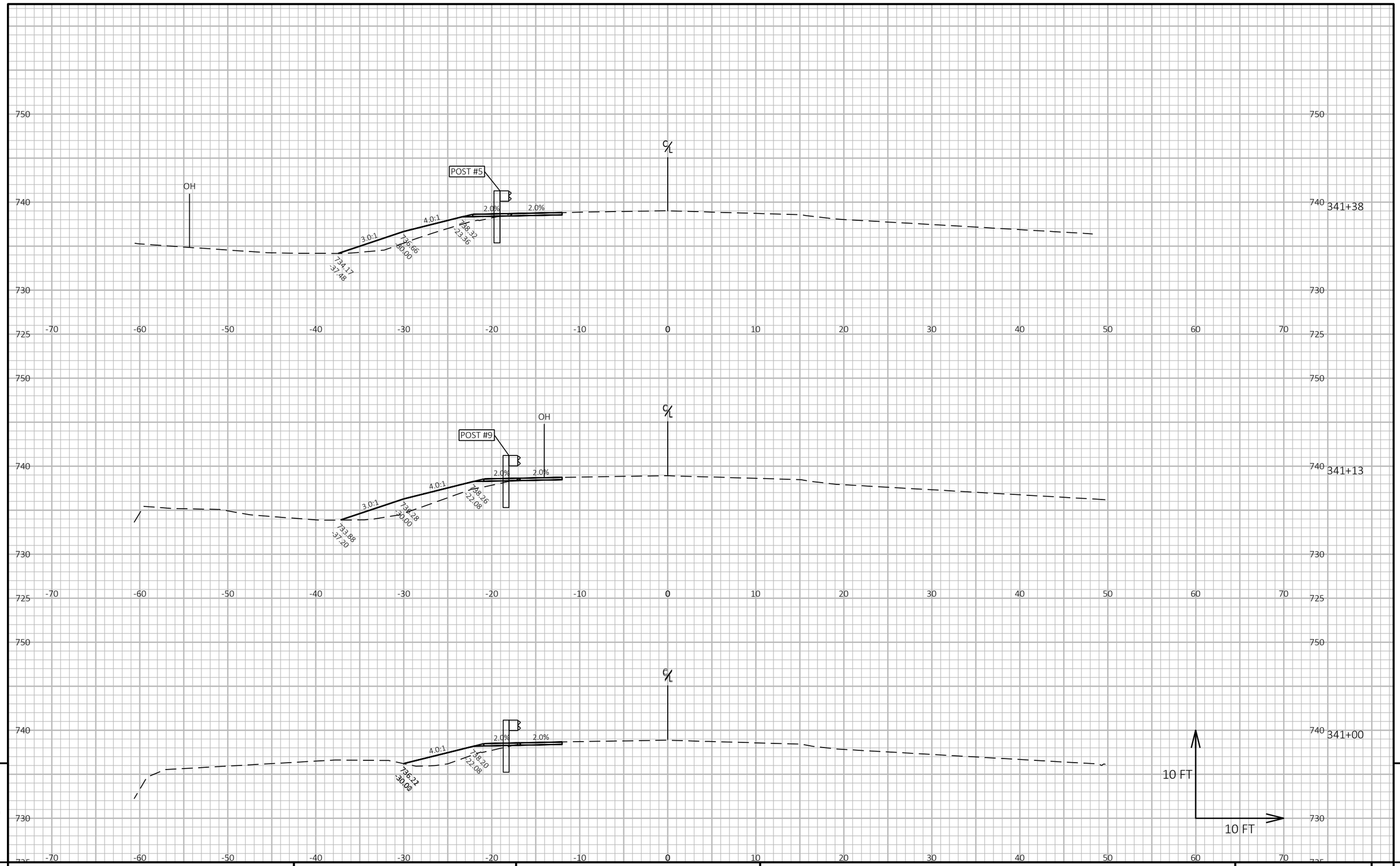
PLOT DATE : 8/1/2023 10:25 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 146	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 05

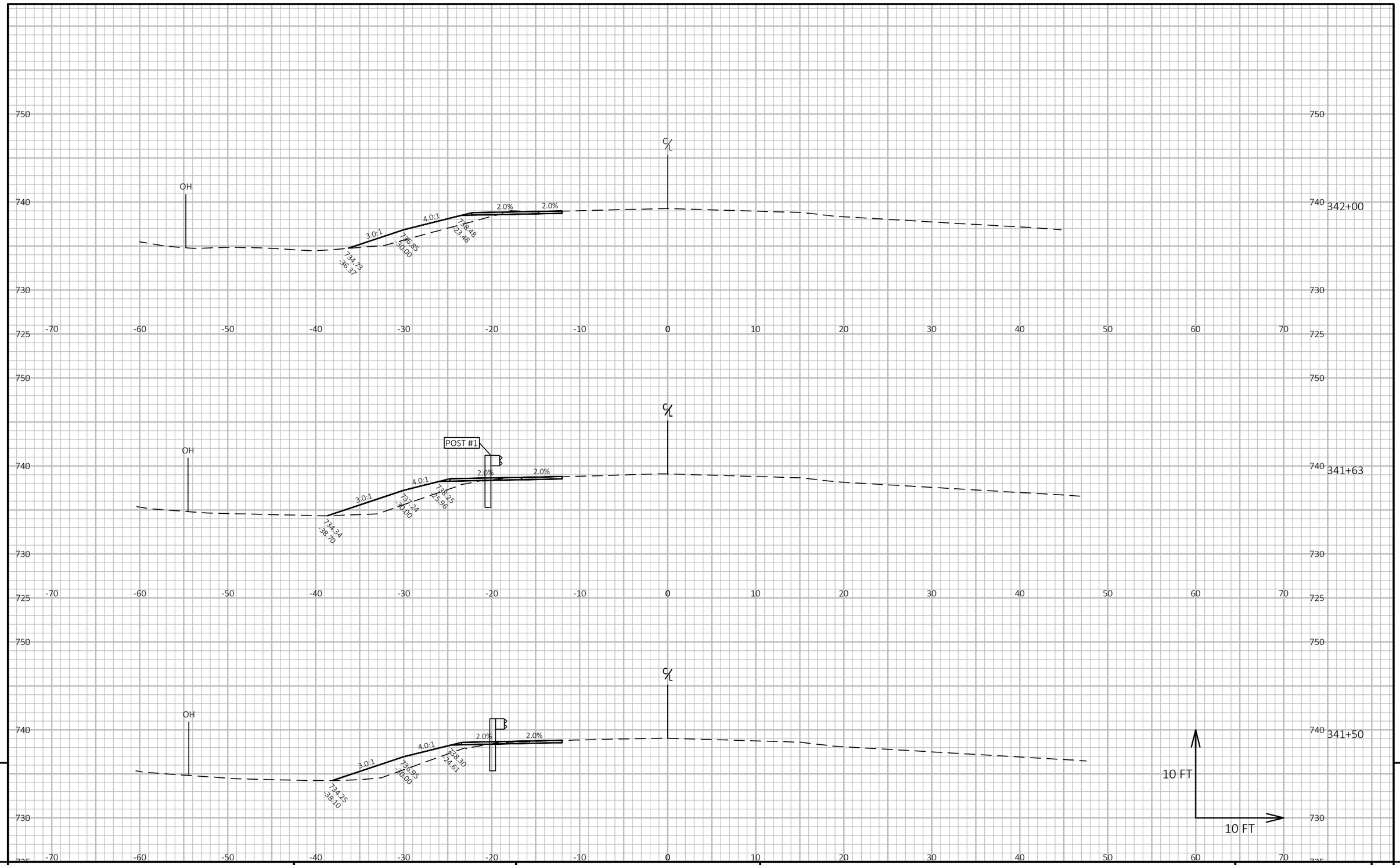
PLOT DATE : 8/1/2023 10:25 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



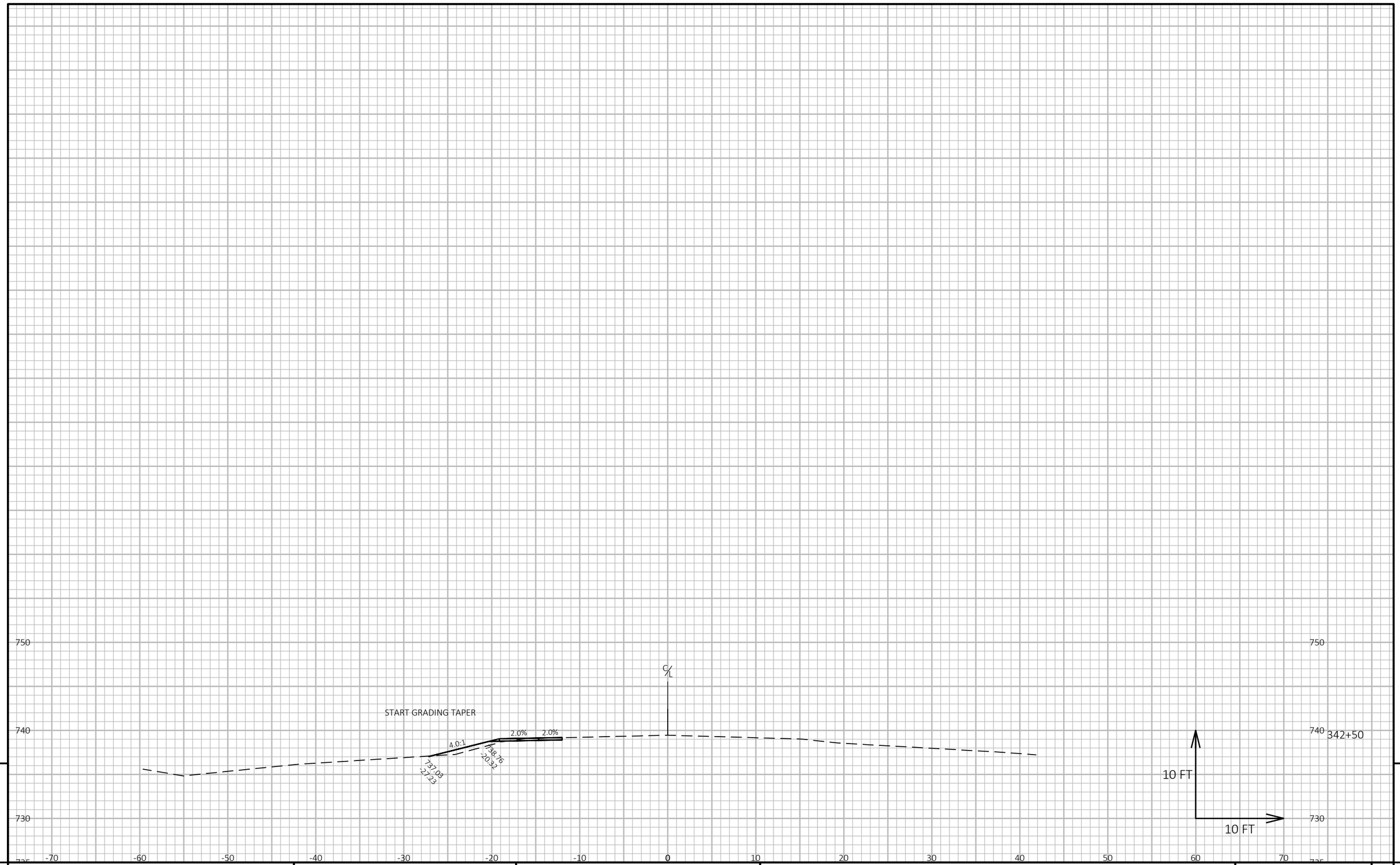
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 147	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 06

PLOT DATE : 8/1/2023 10:25 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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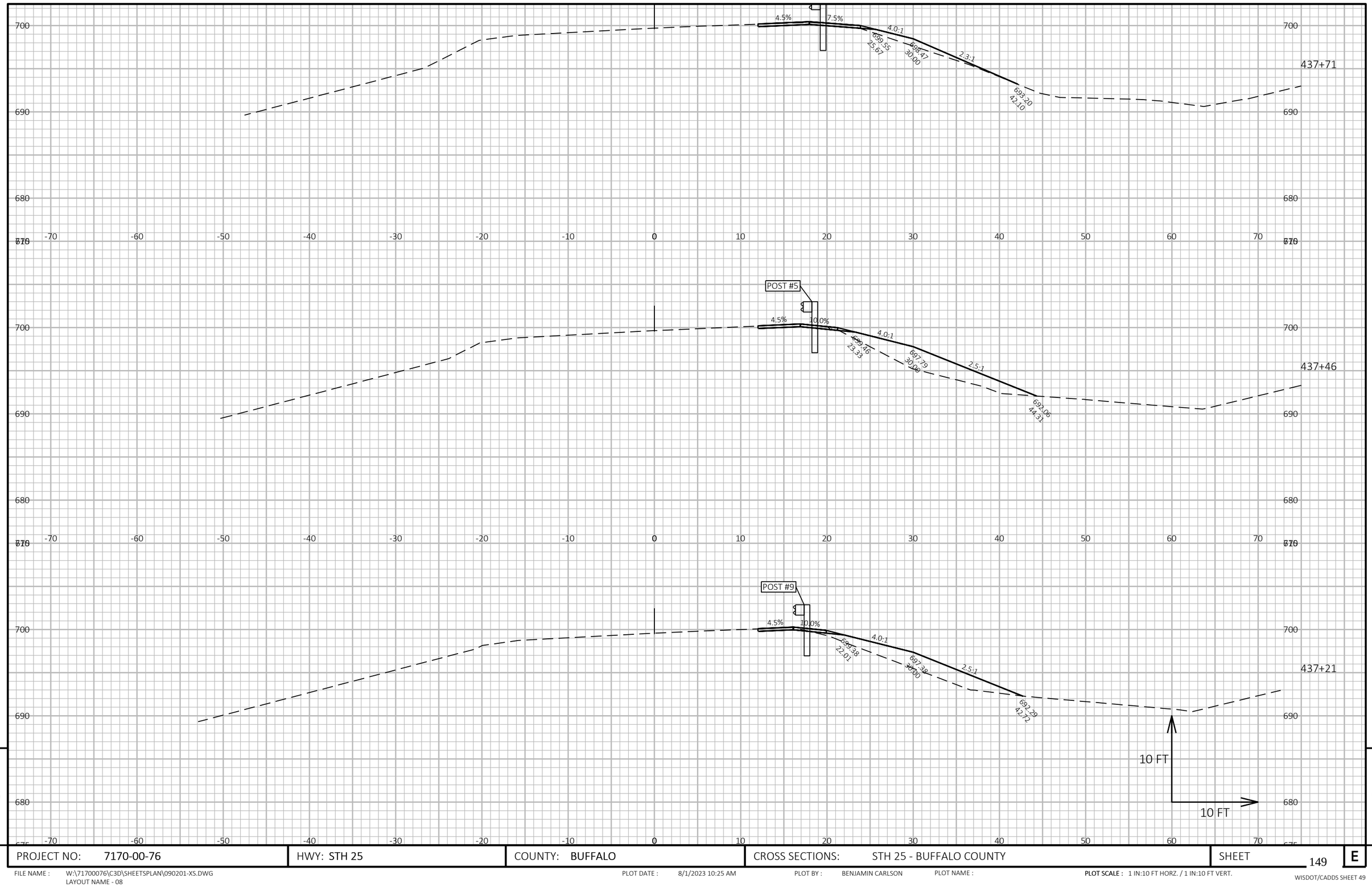
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 148	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 07

PLOT DATE : 8/1/2023 10:25 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 149	E

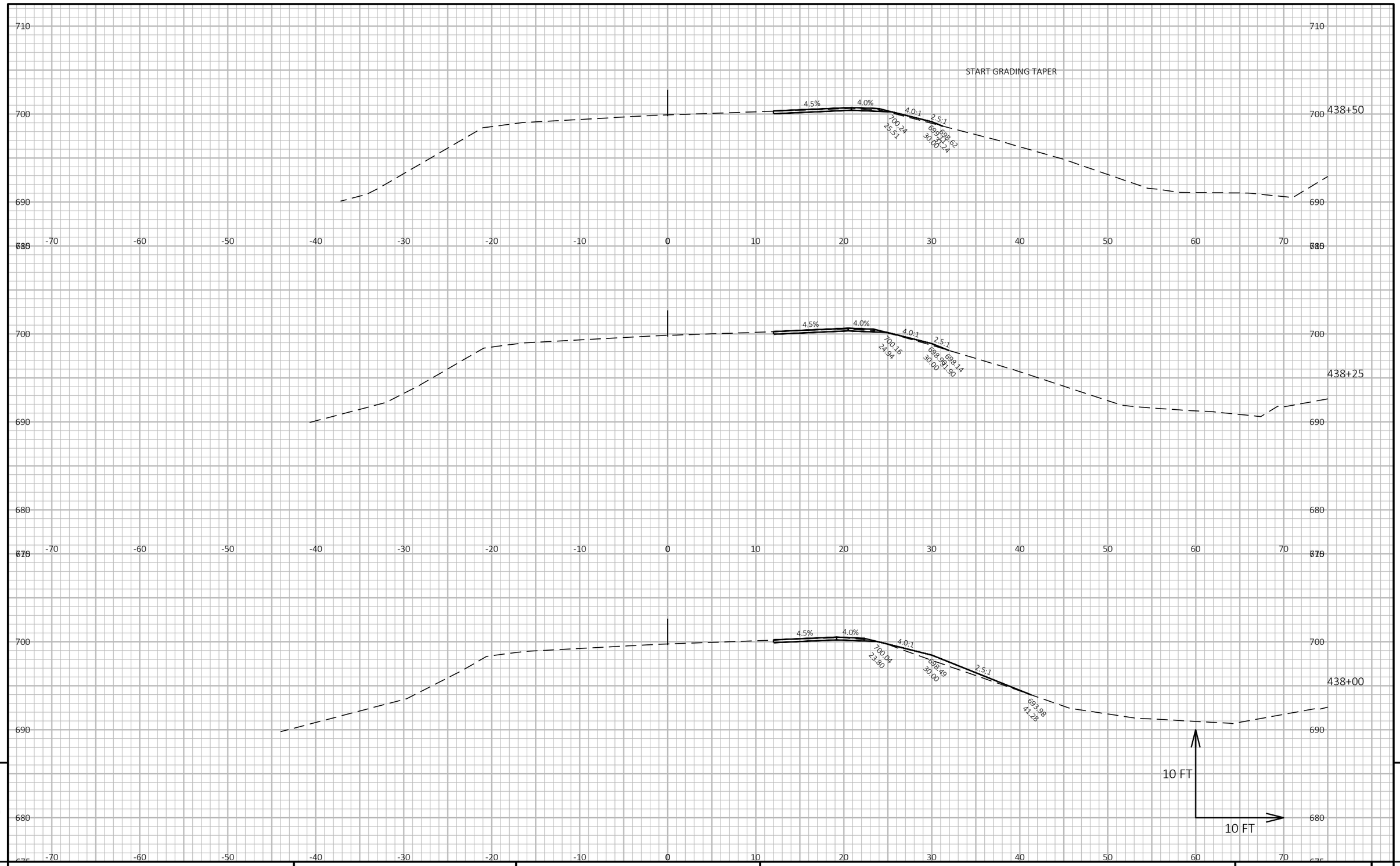
FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 08

PLOT DATE : 8/1/2023 10:25 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 150	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 09

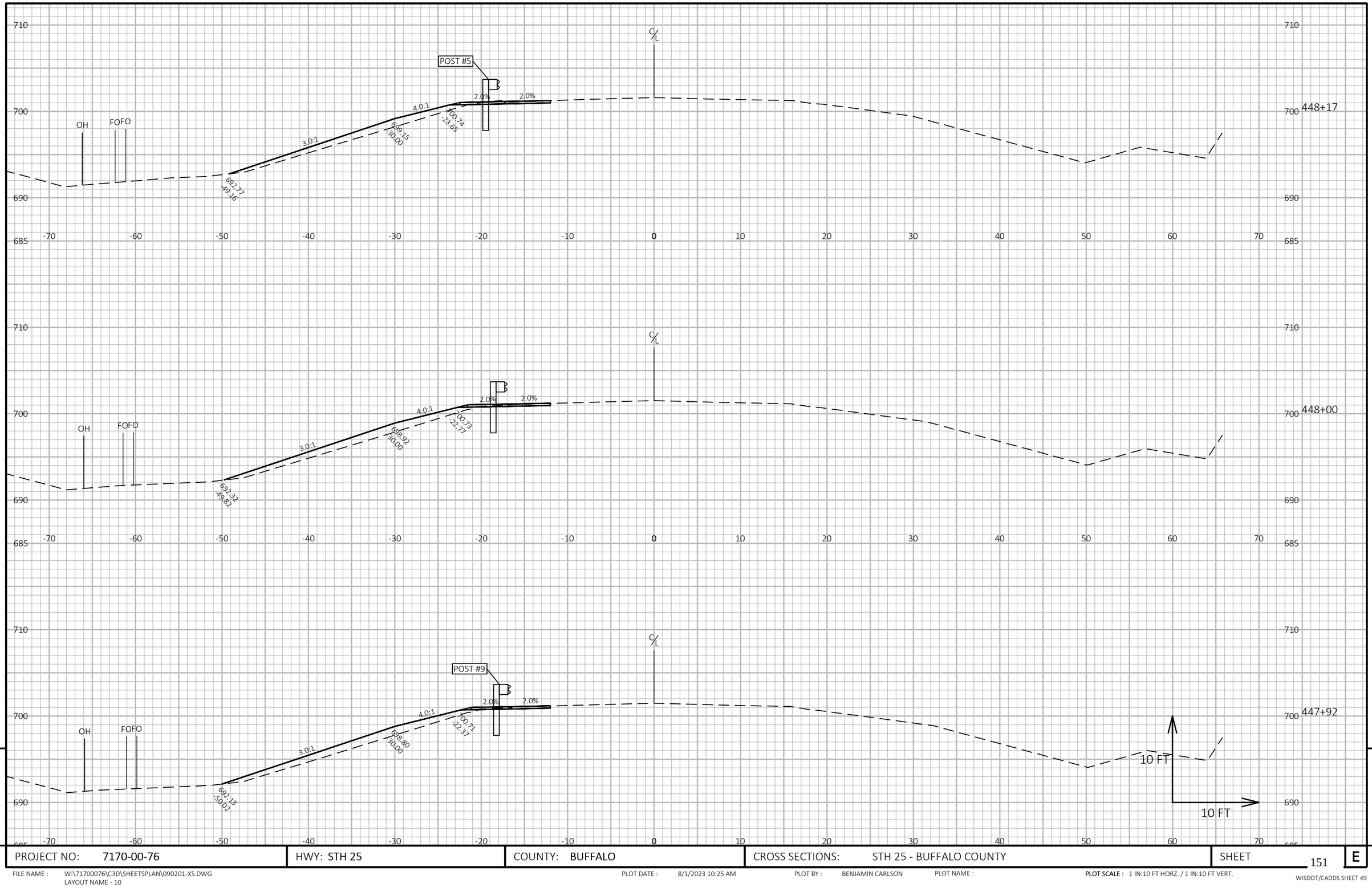
PLOT DATE : 8/1/2023 10:25 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 151	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 10

PLOT DATE : 8/1/2023 10:25 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

START GRADING TAPER

448+92

OH FO FO

3.0:1 4.0:1 2.0% 2.0%

699.44 -30.00 699.05 -31.19 701.10 -23.36

448+50

OH FO FO

3.0:1 4.0:1 2.0% 2.0%

694.01 -47.59 699.81 -30.00 700.87 -25.75

448+42

POST #1

OH FO FO

3.0:1 4.0:1 2.0% 2.0%

693.01 -50.60 699.88 -30.00 700.92 -26.26

10 FT

10 FT

9

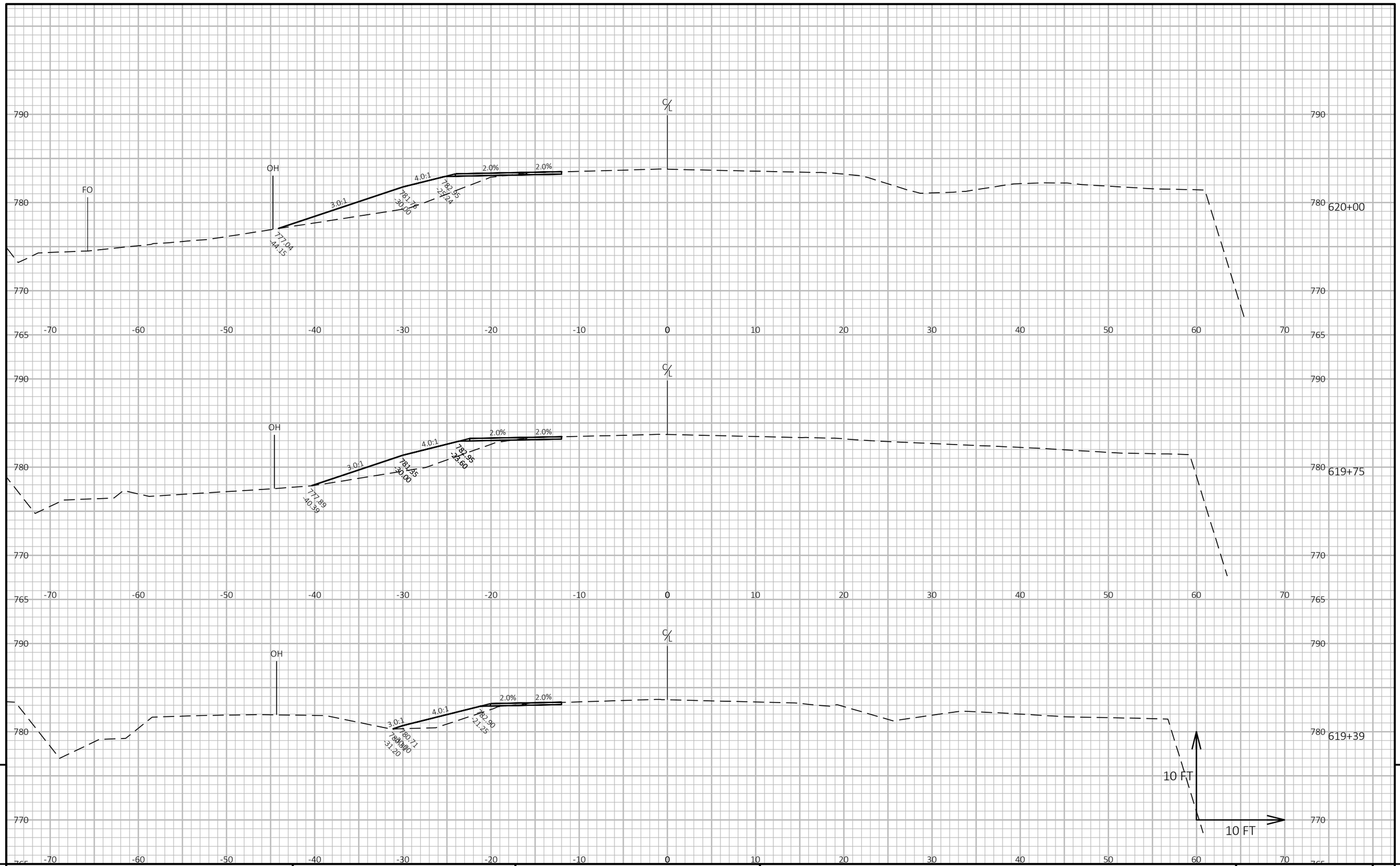
9

PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 152	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 11

PLOT DATE : 8/1/2023 10:26 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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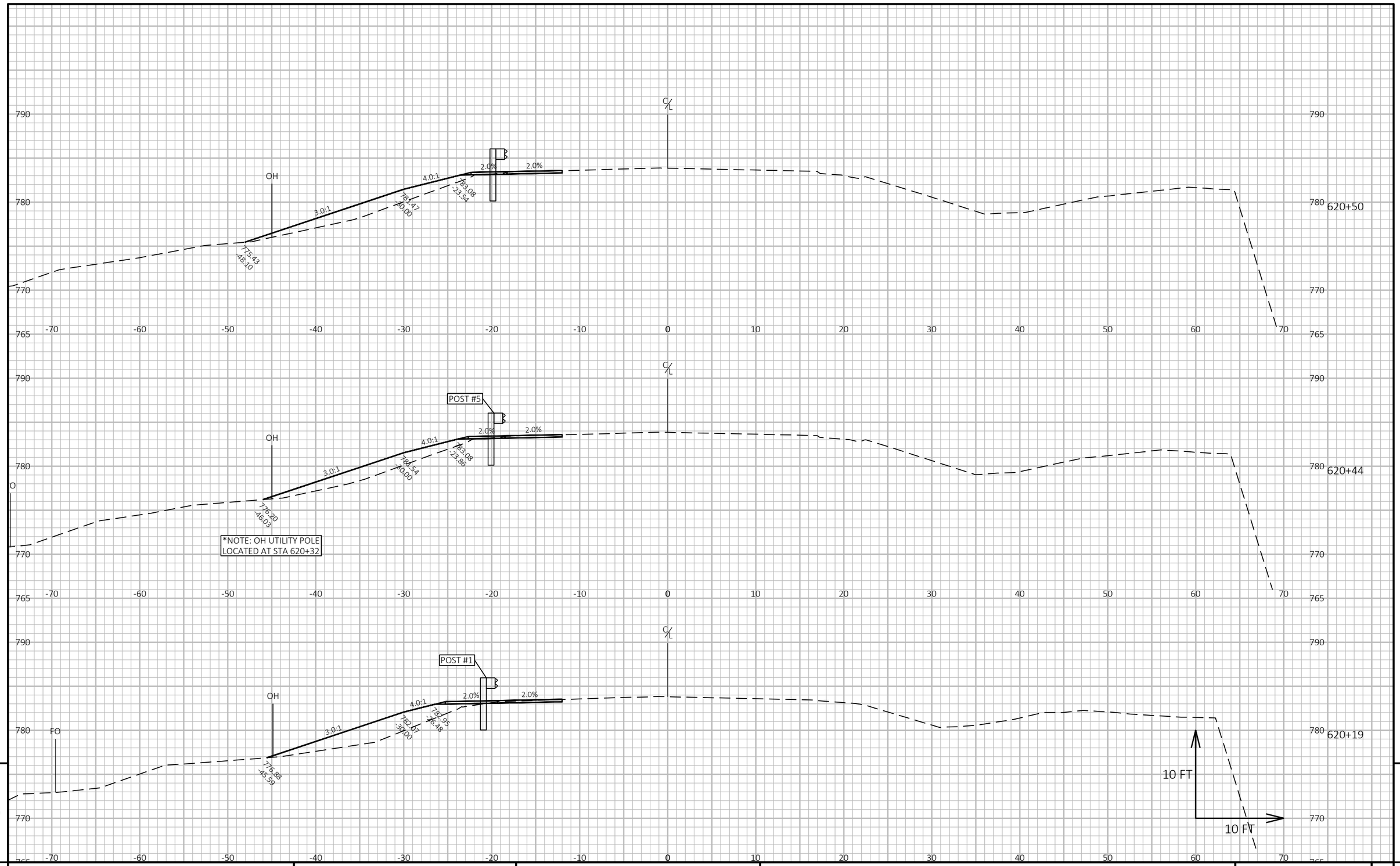
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 153	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 12

PLOT DATE : 8/1/2023 10:26 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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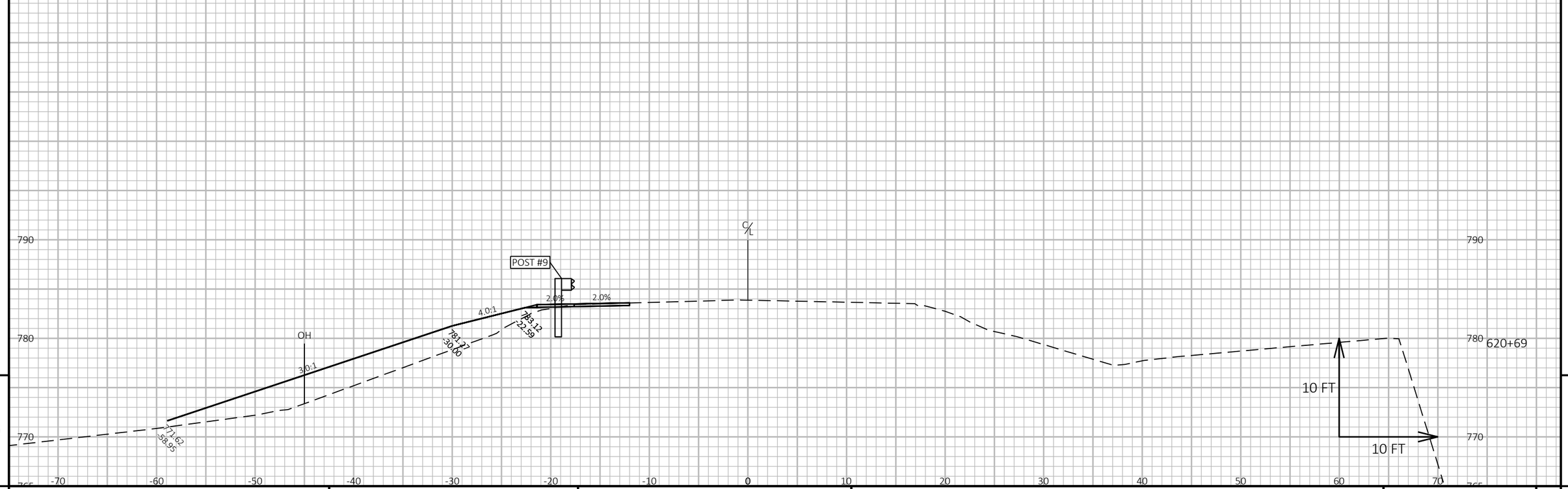
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 154	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 13

PLOT DATE : 8/1/2023 10:26 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 155	E

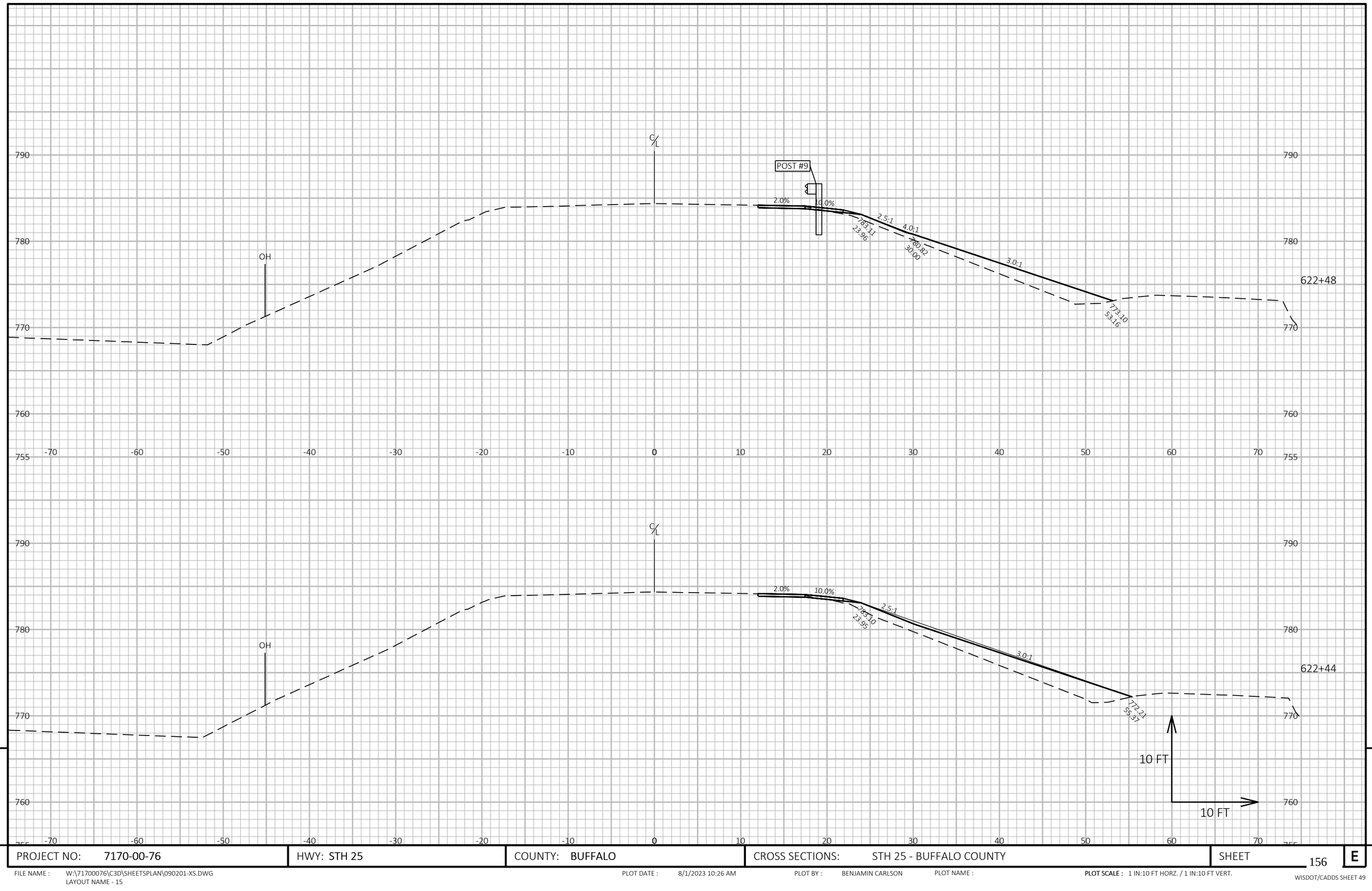
FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 14

PLOT DATE : 8/1/2023 10:26 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 156	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15

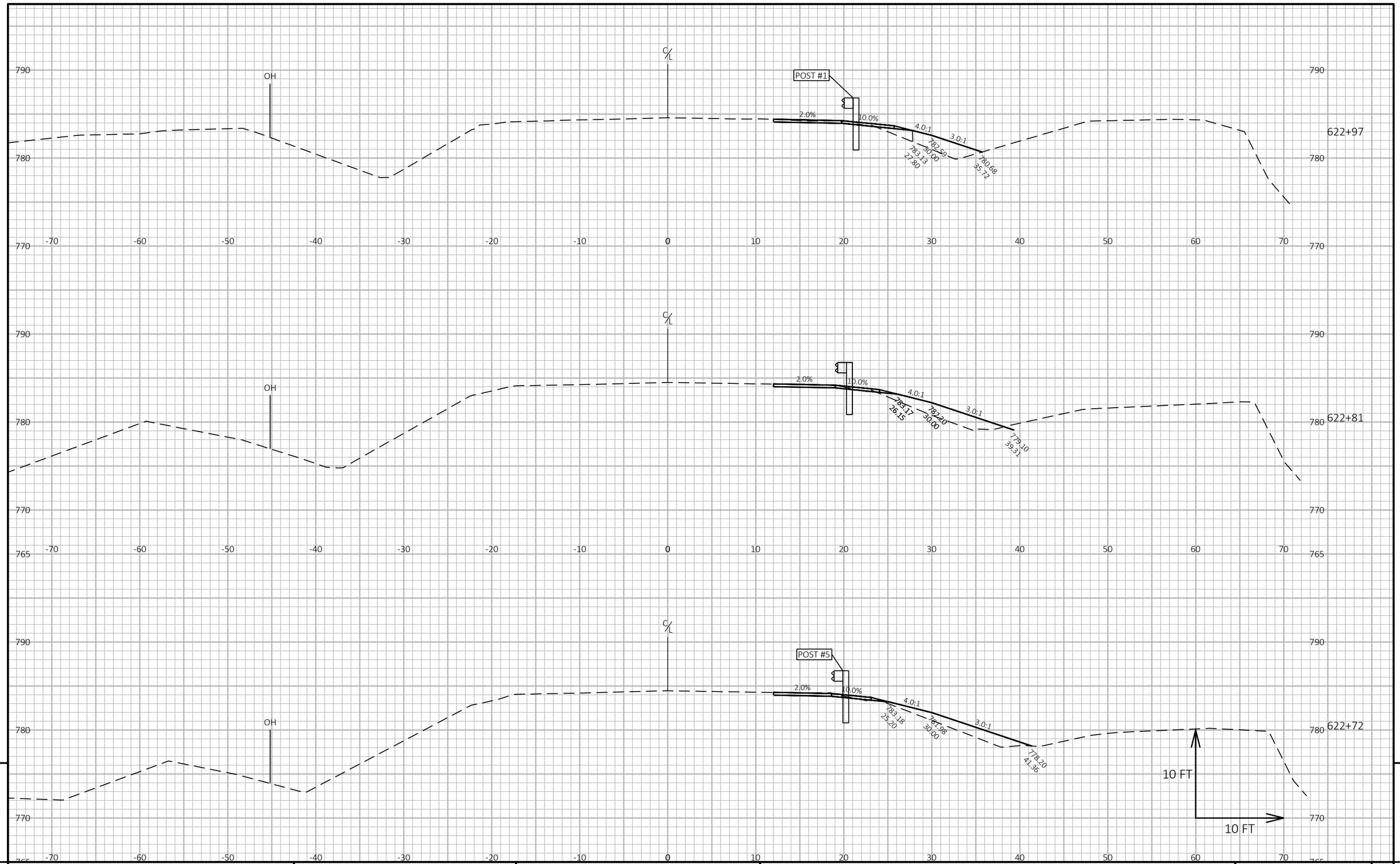
PLOT DATE : 8/1/2023 10:26 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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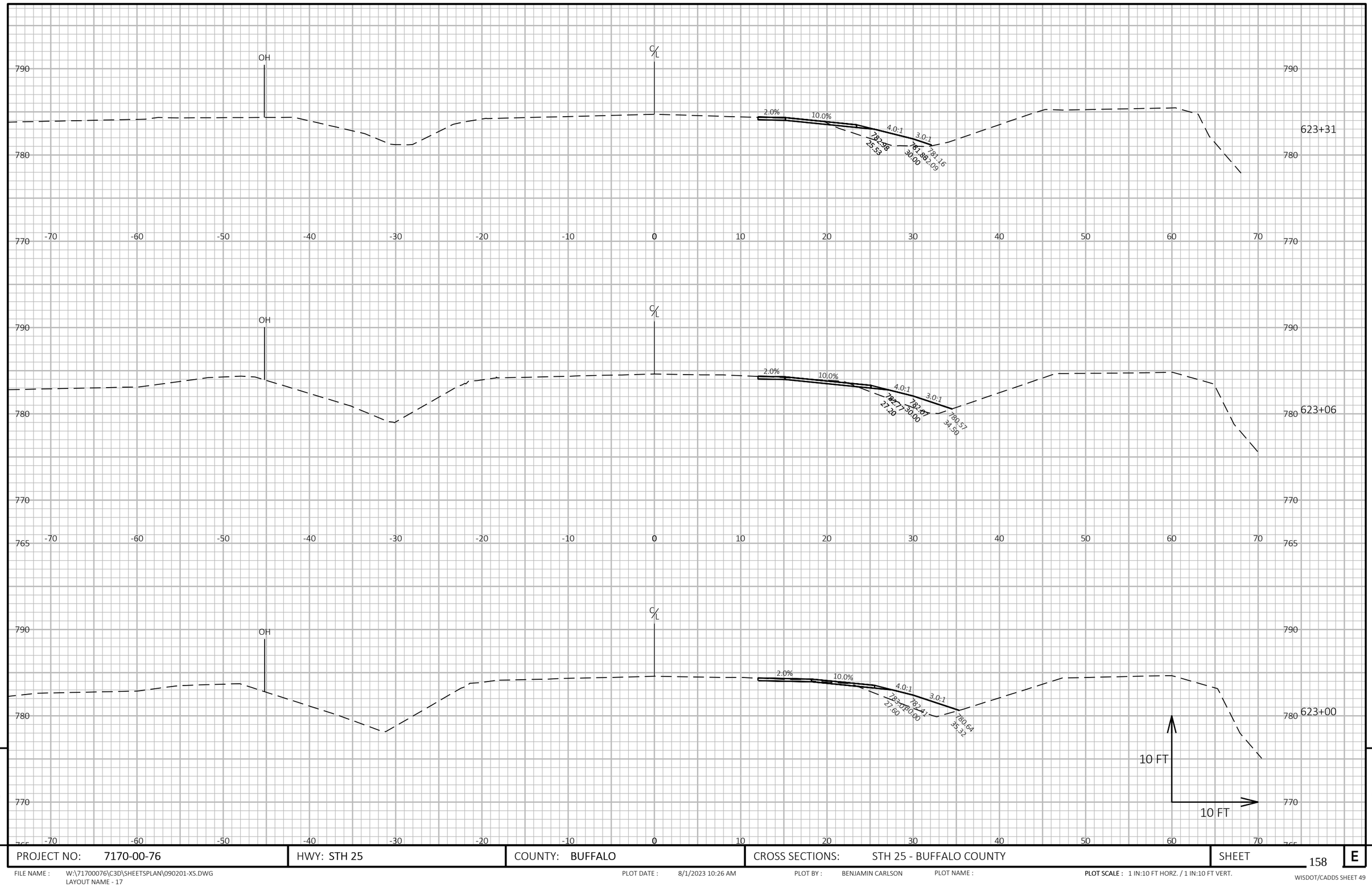
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 157	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 16

PLOT DATE : 8/1/2023 10:26 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 158	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 17

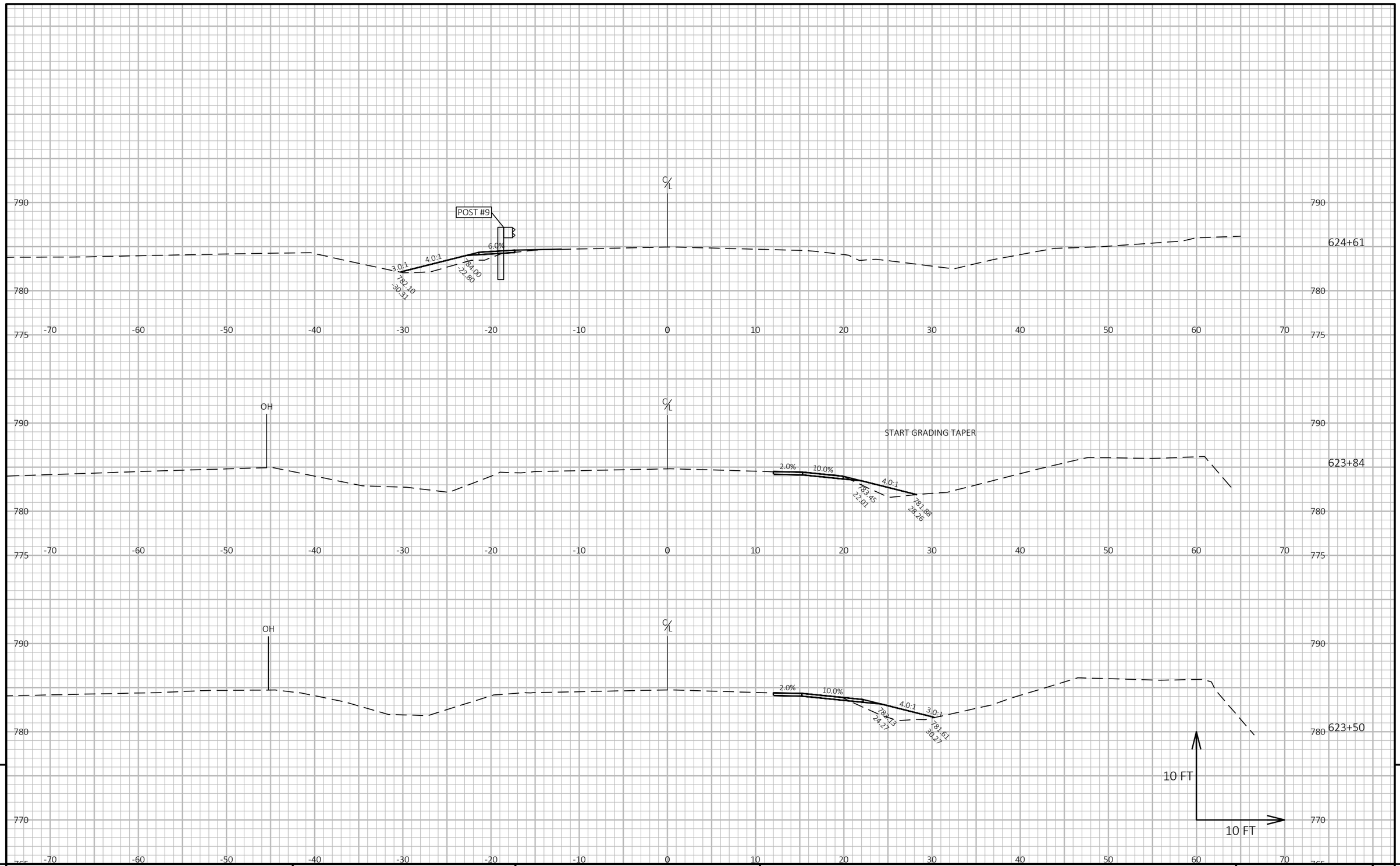
PLOT DATE : 8/1/2023 10:26 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 159	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 18

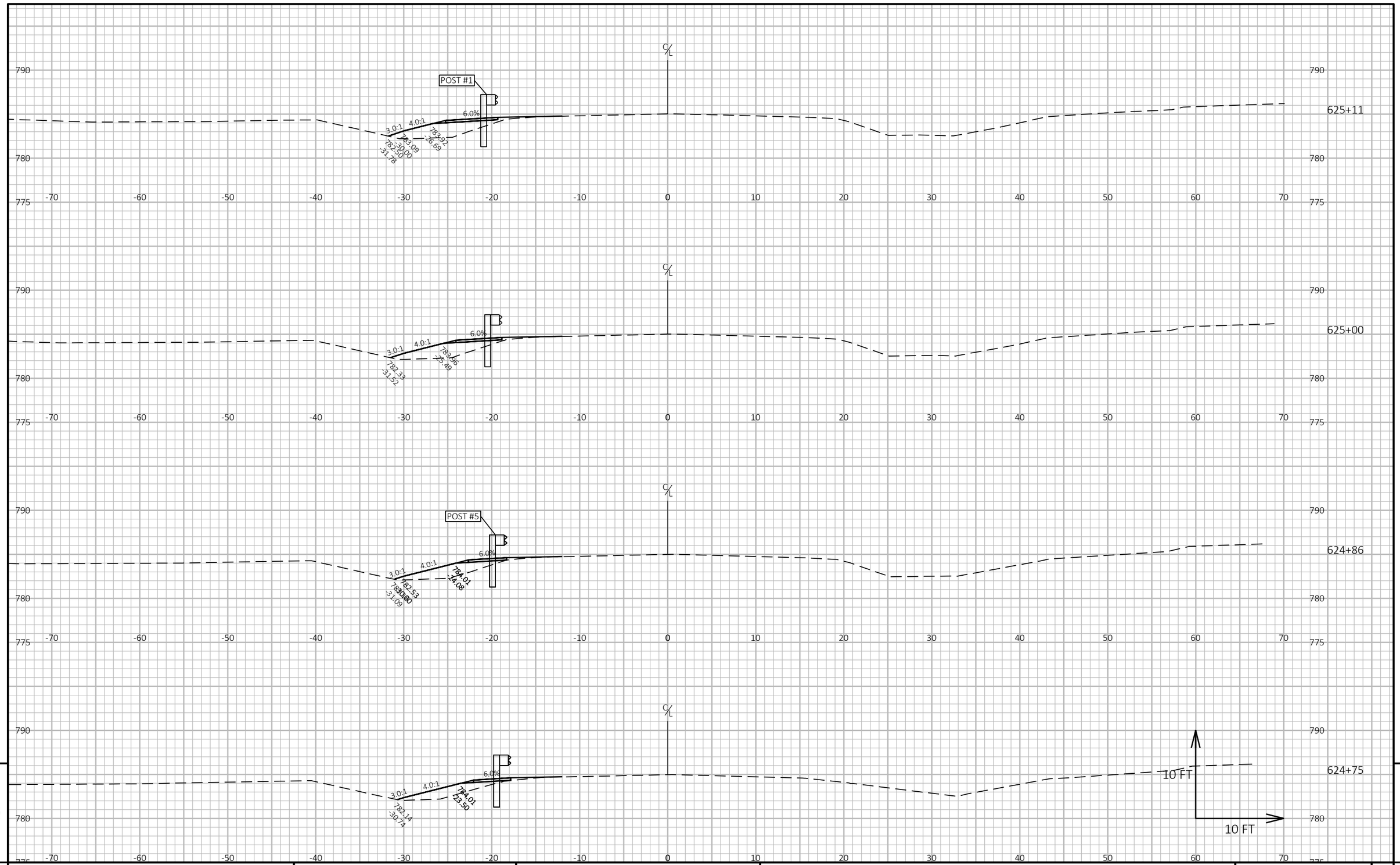
PLOT DATE : 8/1/2023 10:26 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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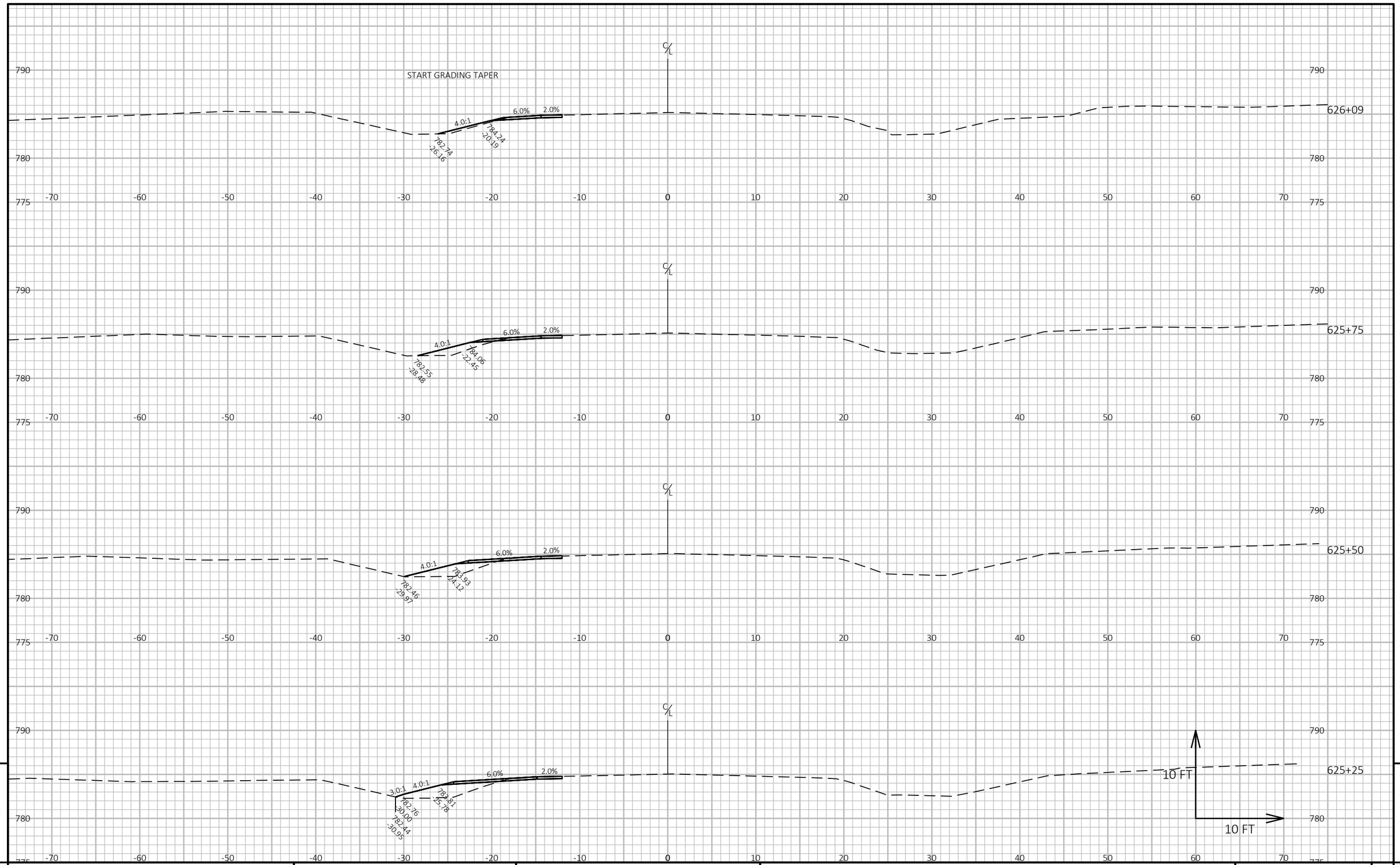
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 160	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 19

PLOT DATE : 8/1/2023 10:26 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 161	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 20

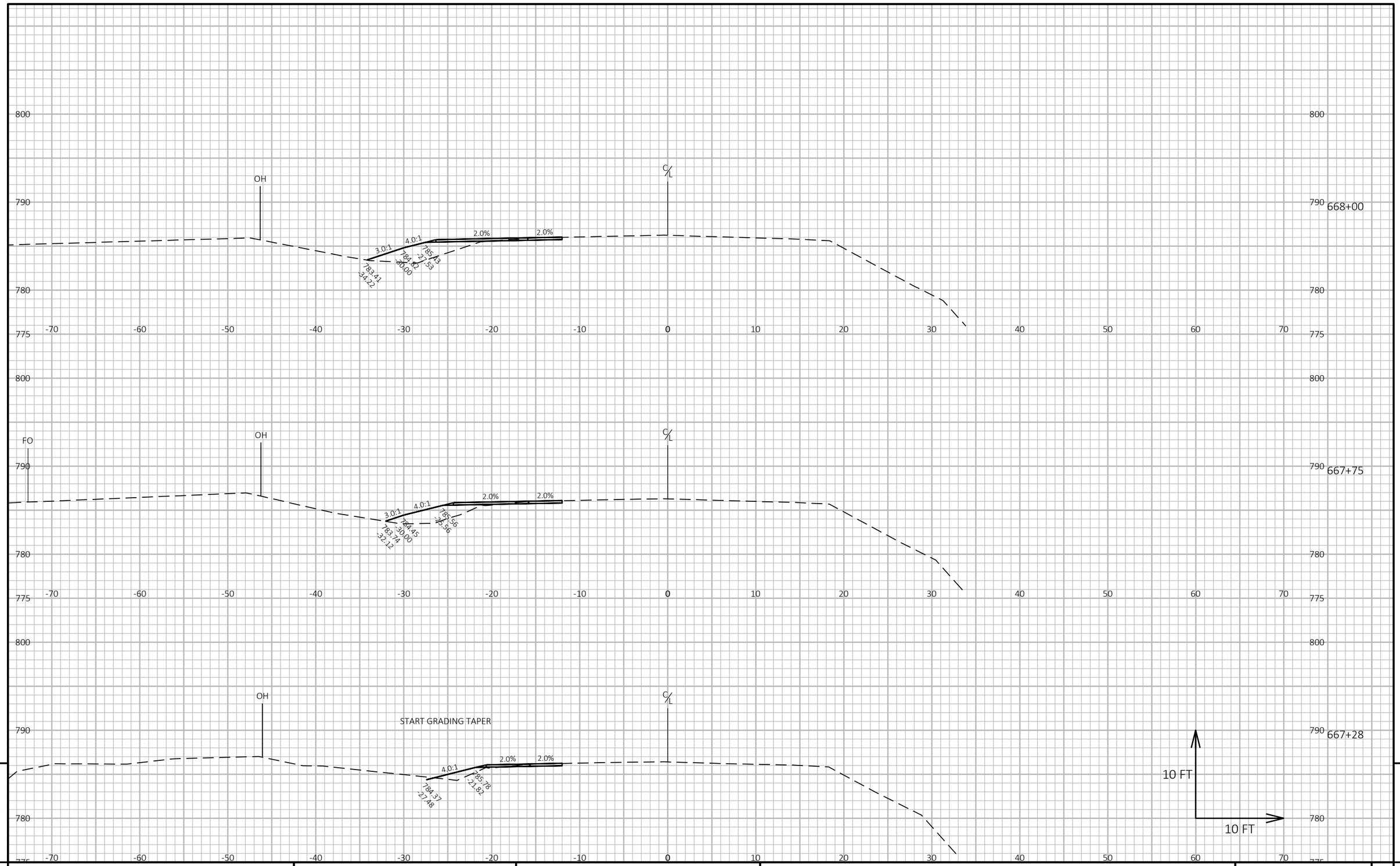
PLOT DATE : 8/1/2023 10:27 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 162	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 21

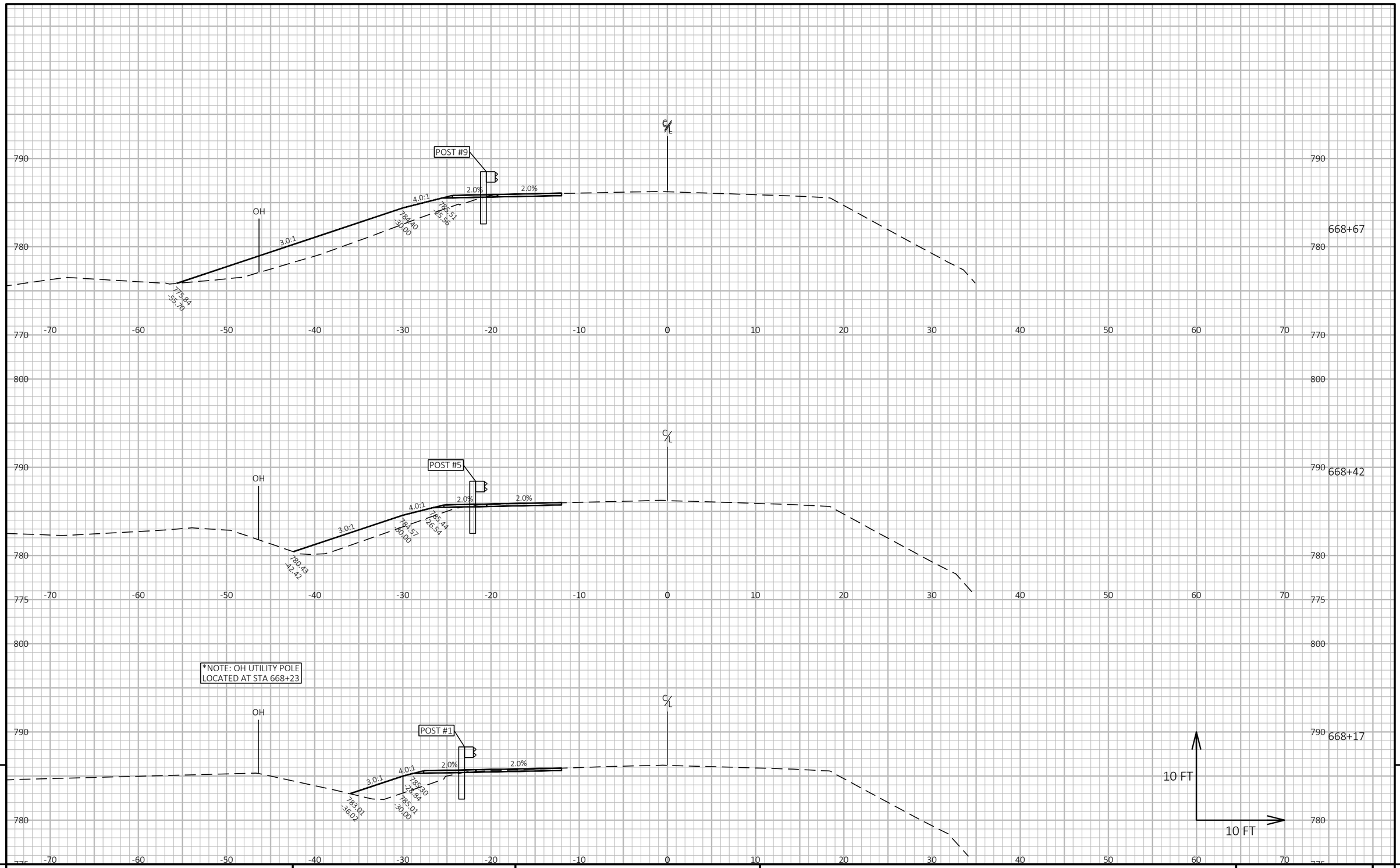
PLOT DATE : 8/1/2023 10:27 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 163	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 22

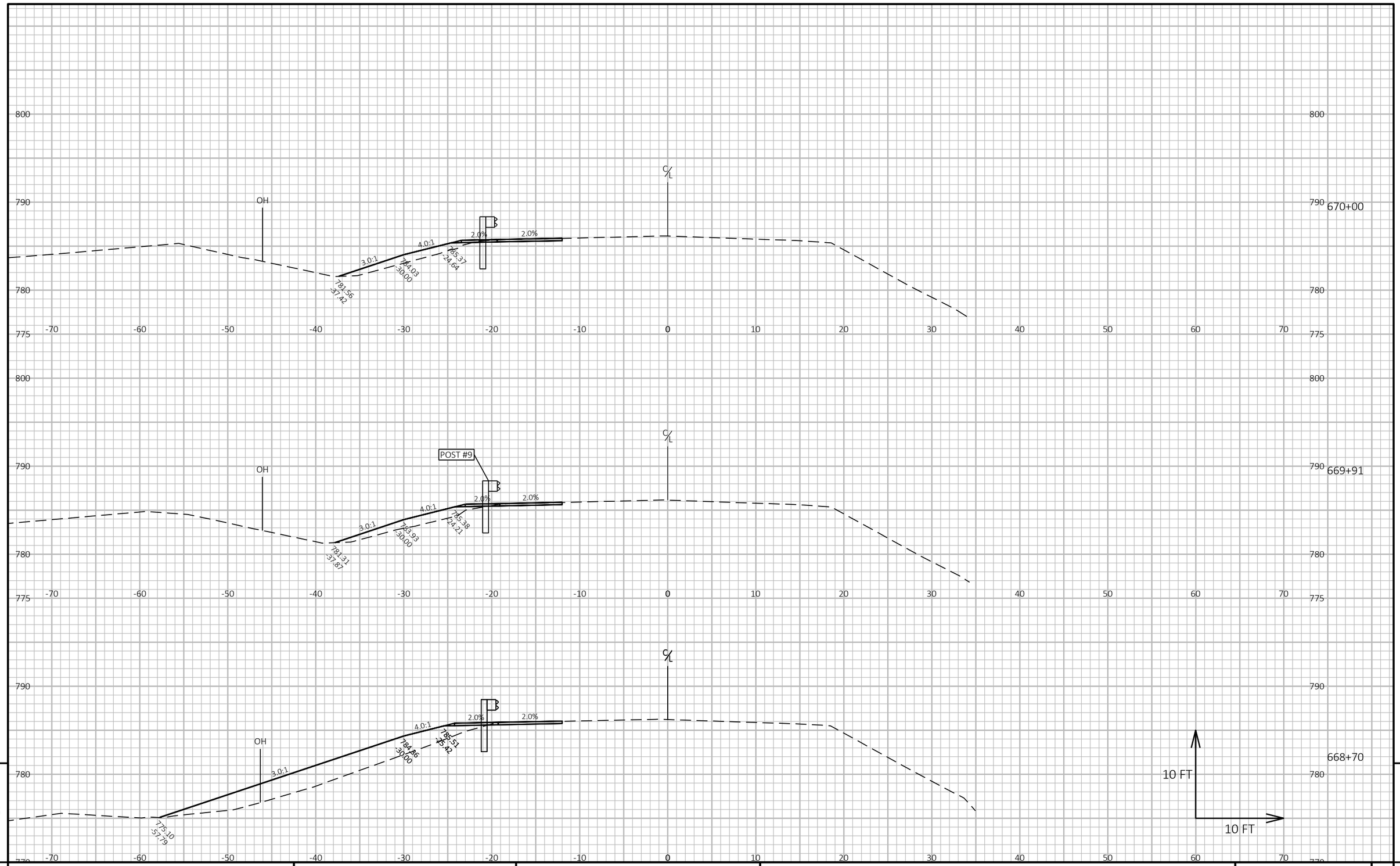
PLOT DATE : 8/1/2023 10:27 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 164	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 23

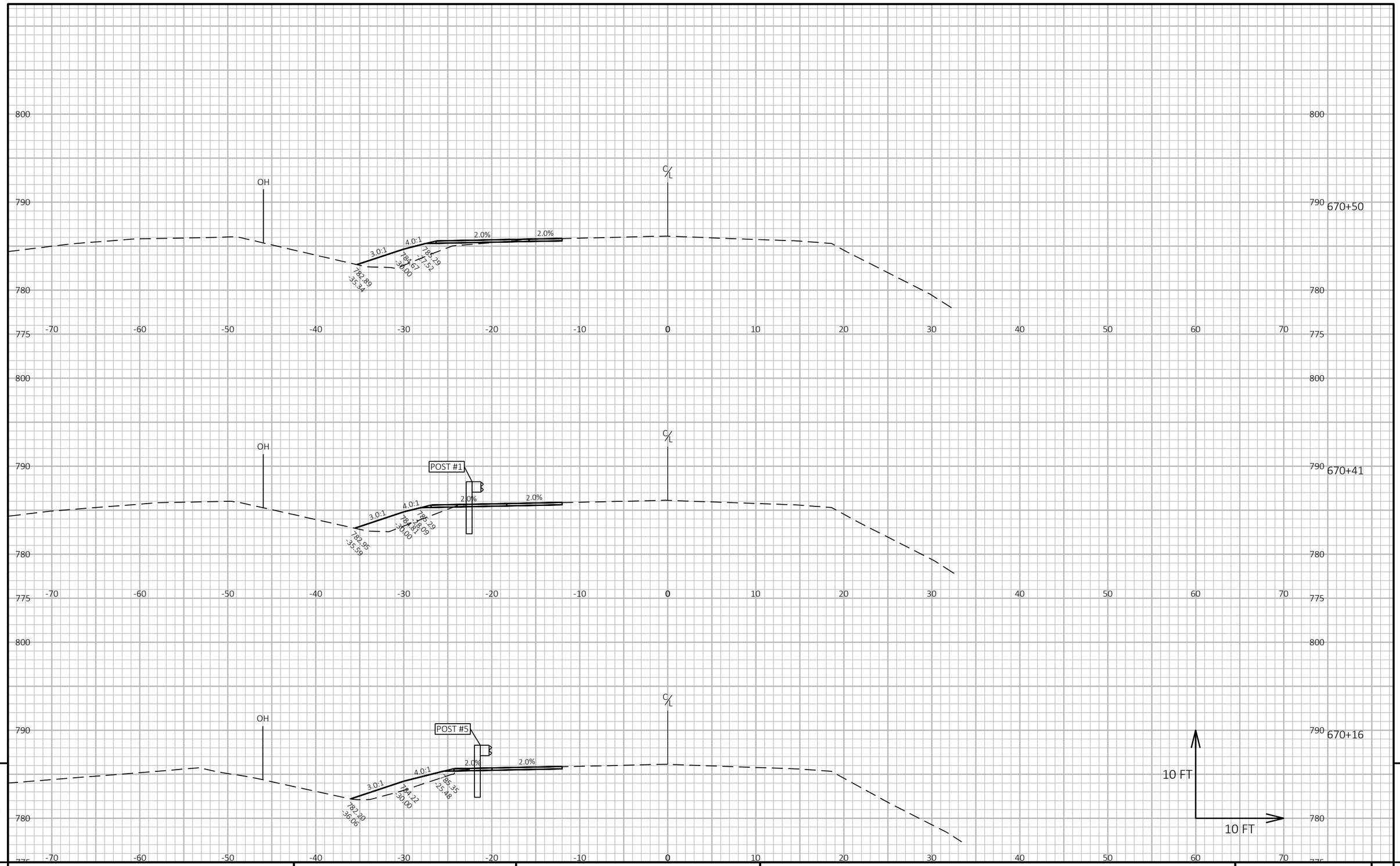
PLOT DATE : 8/1/2023 10:27 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 165	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 24

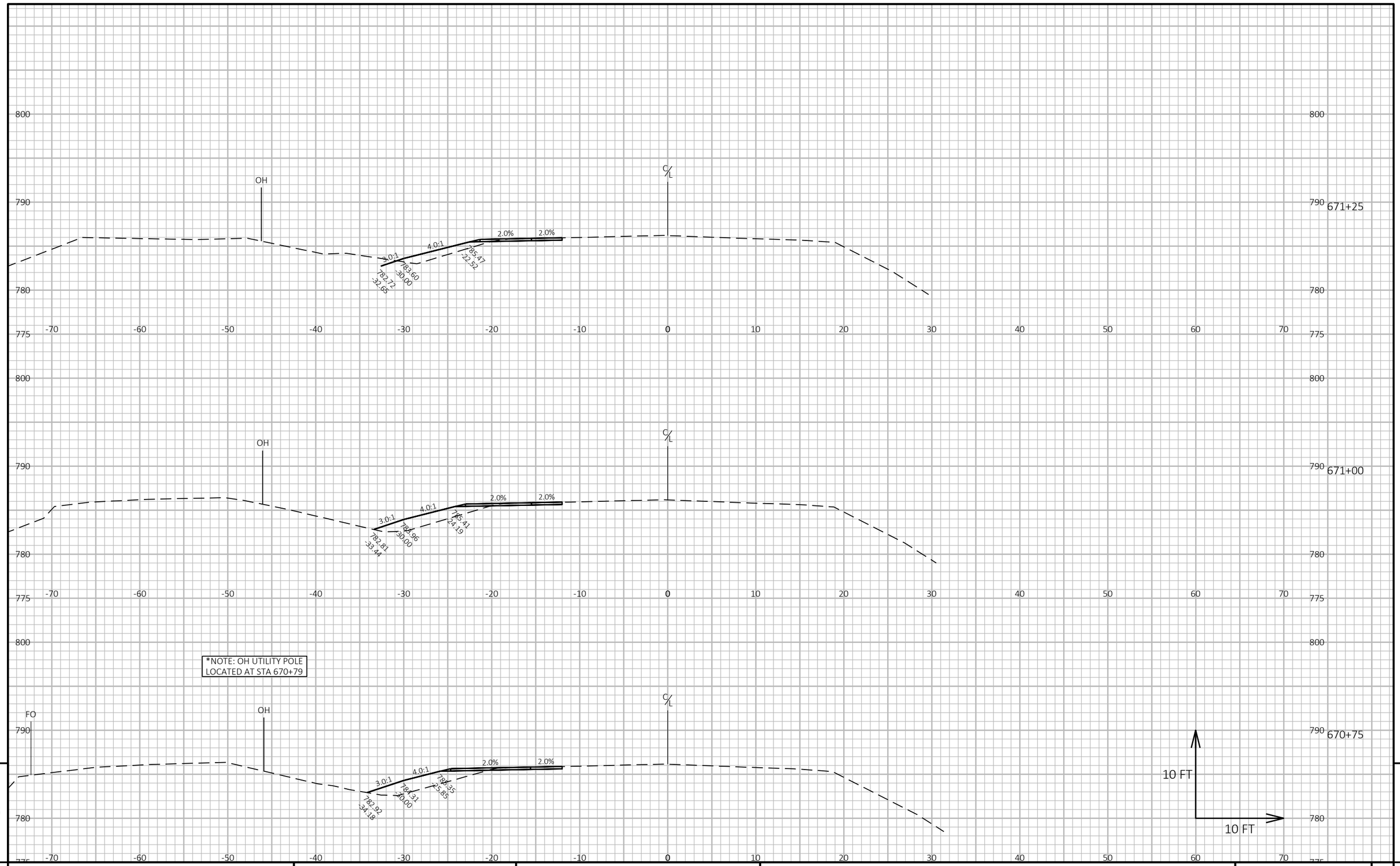
PLOT DATE : 8/1/2023 10:27 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 166	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 25

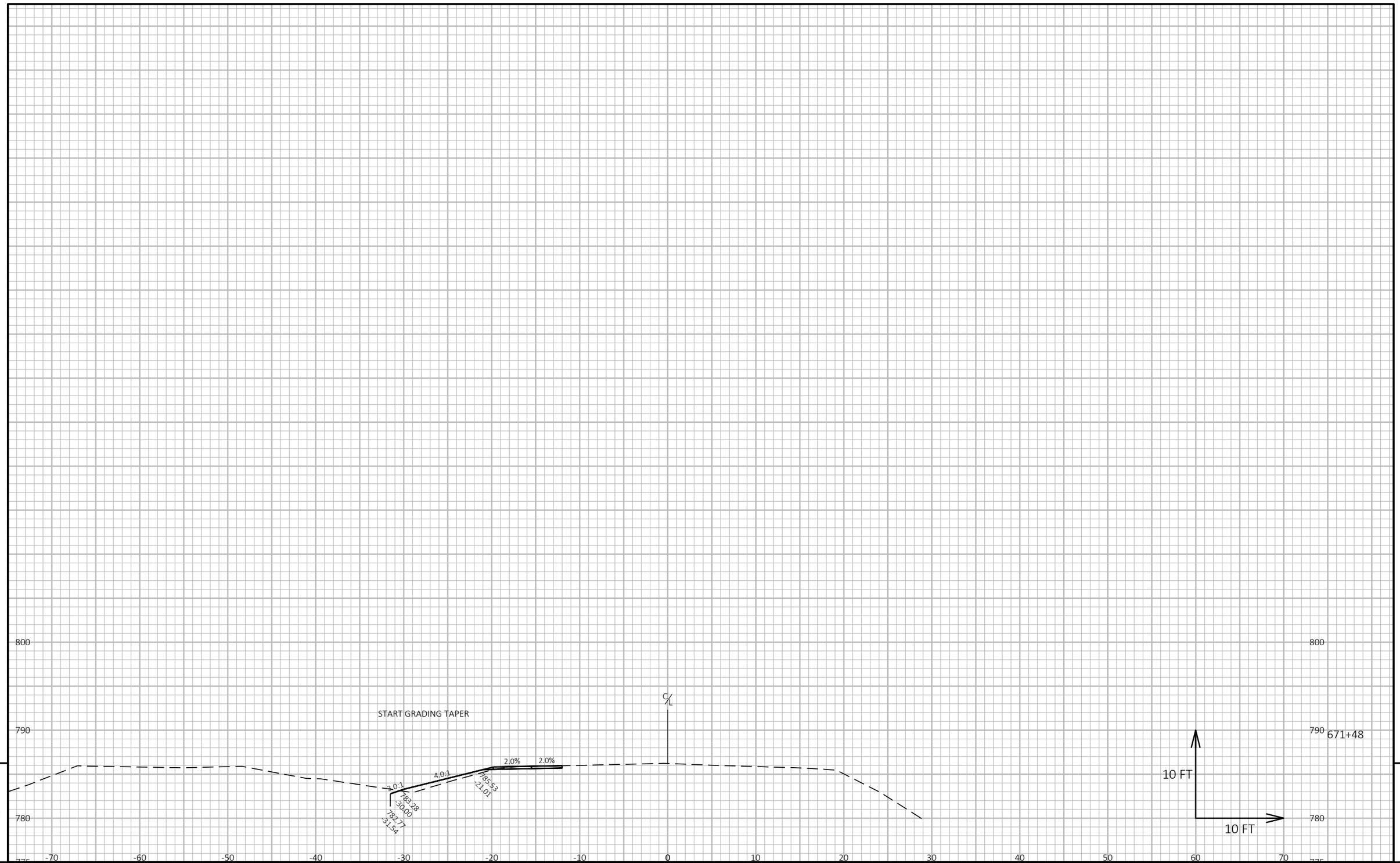
PLOT DATE : 8/1/2023 10:27 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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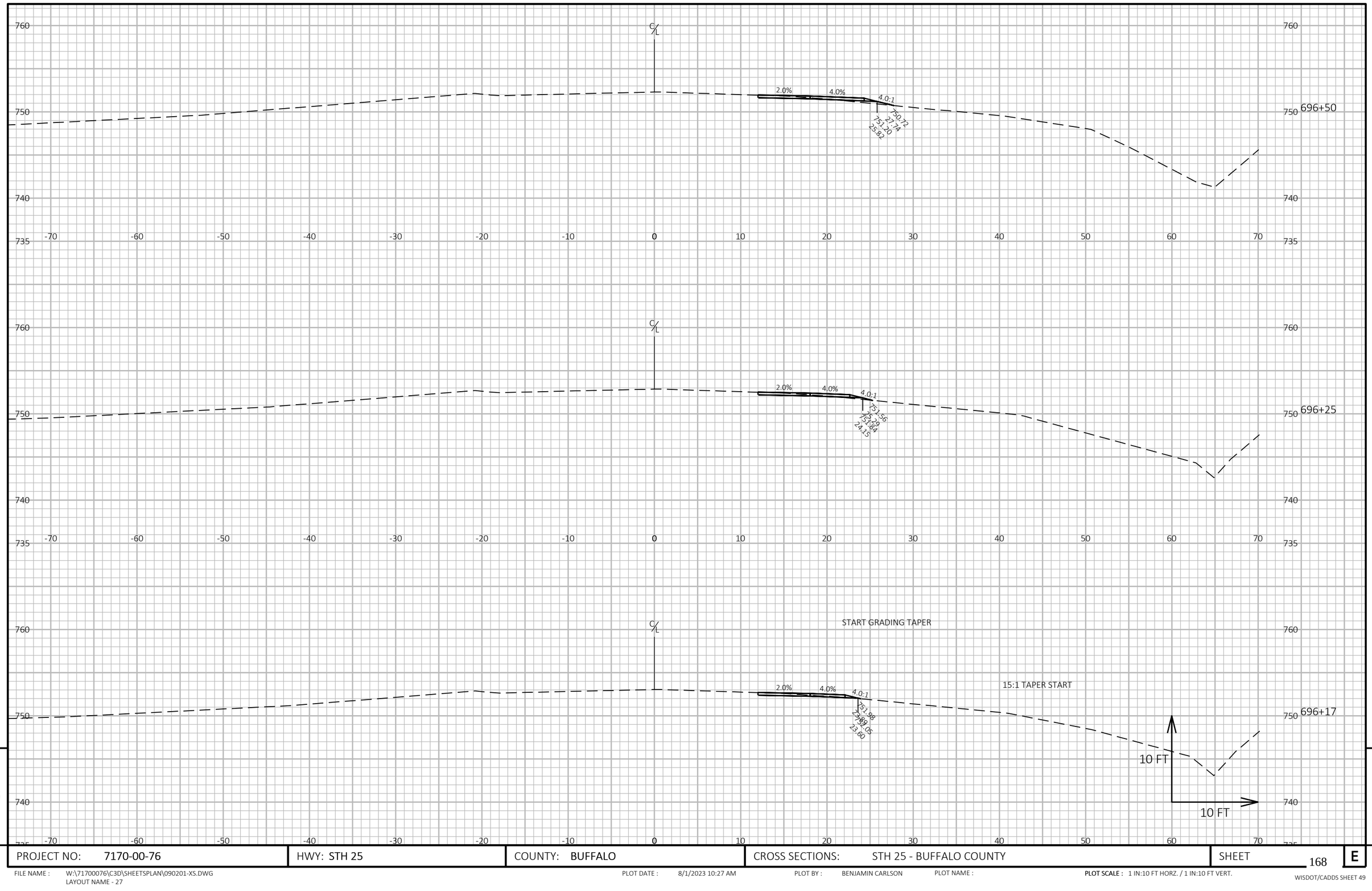
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 167	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 26

PLOT DATE : 8/1/2023 10:27 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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



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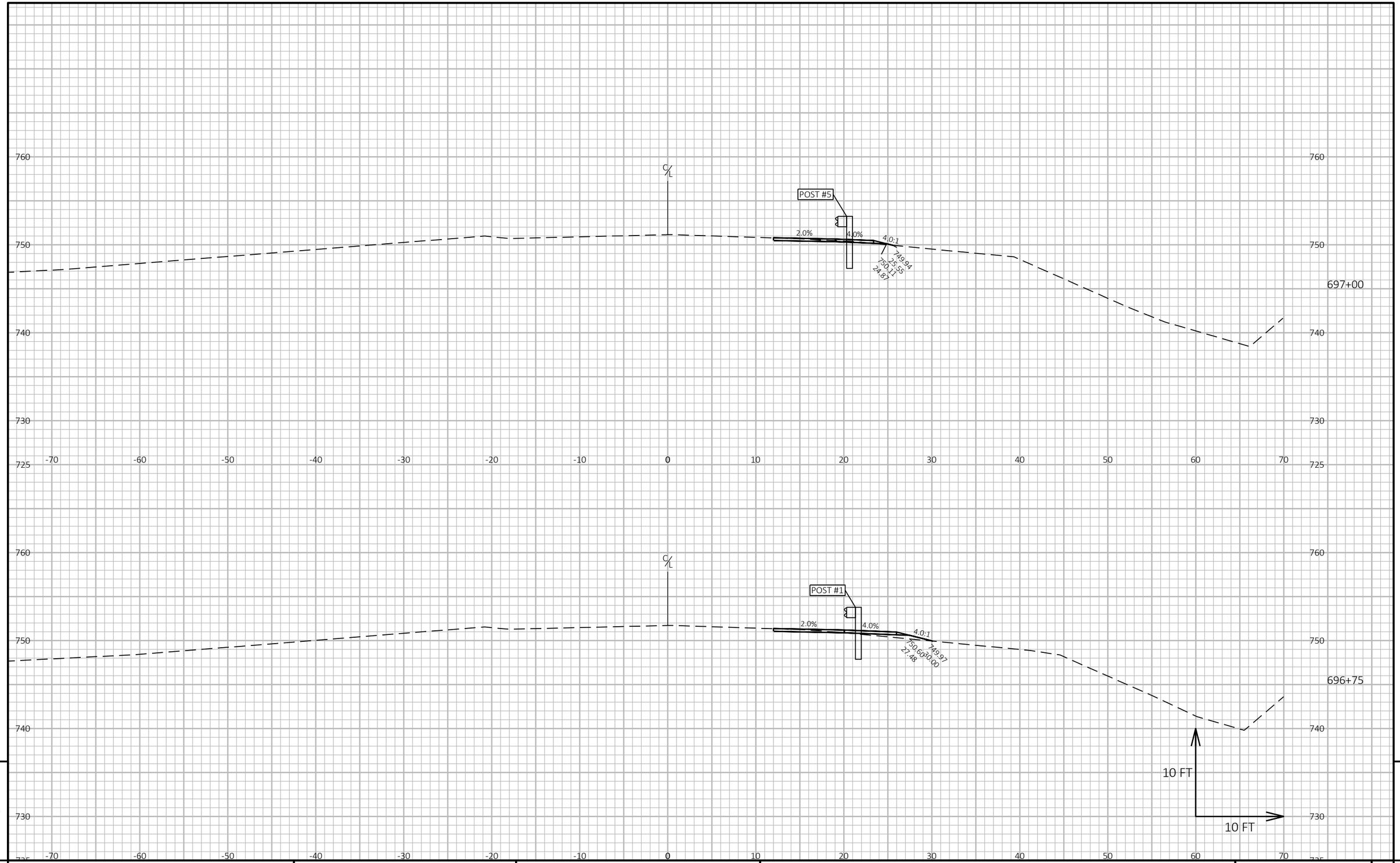
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 168	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 27

PLOT DATE : 8/1/2023 10:27 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 169	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 28

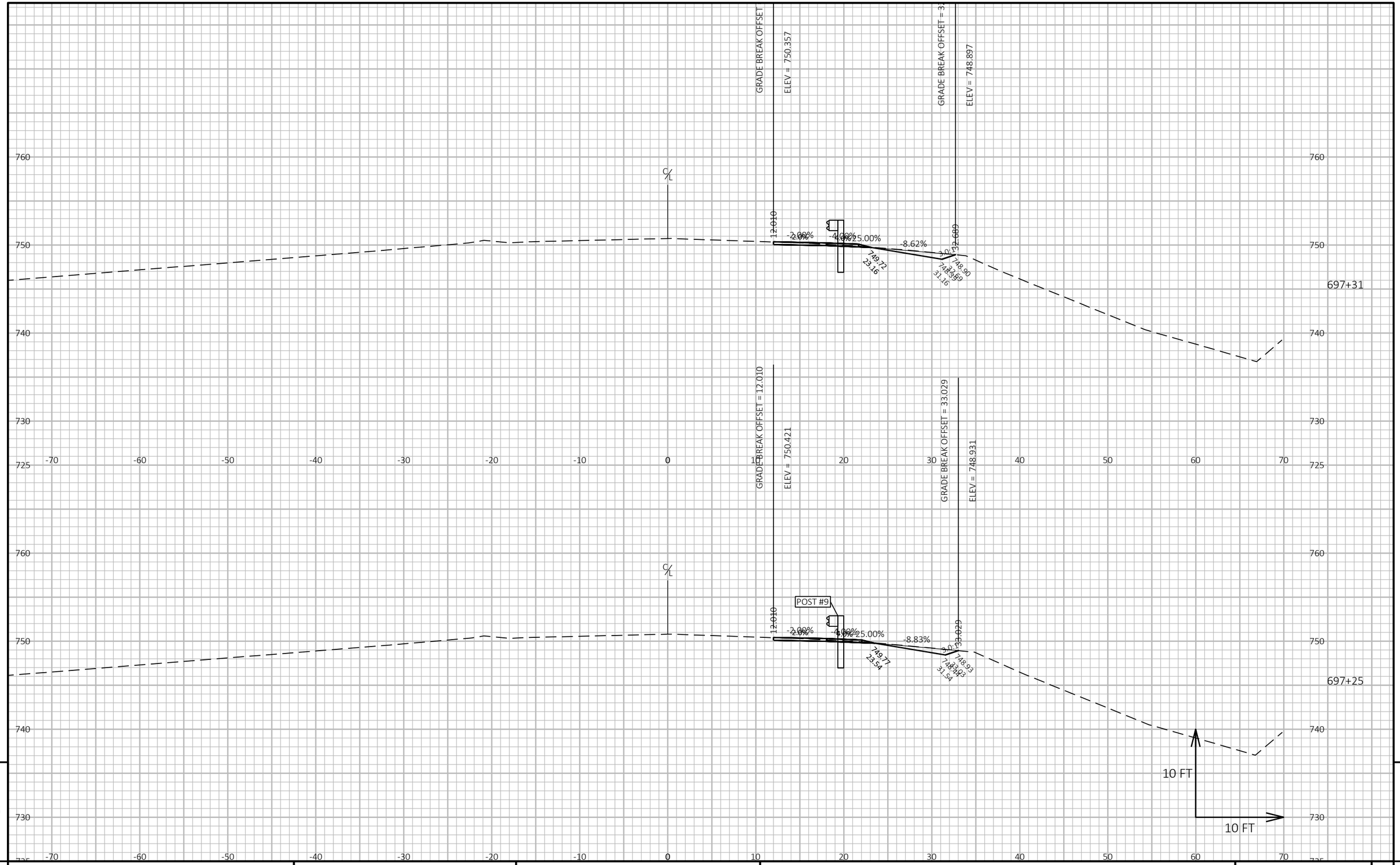
PLOT DATE : 8/1/2023 10:27 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 170	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 29

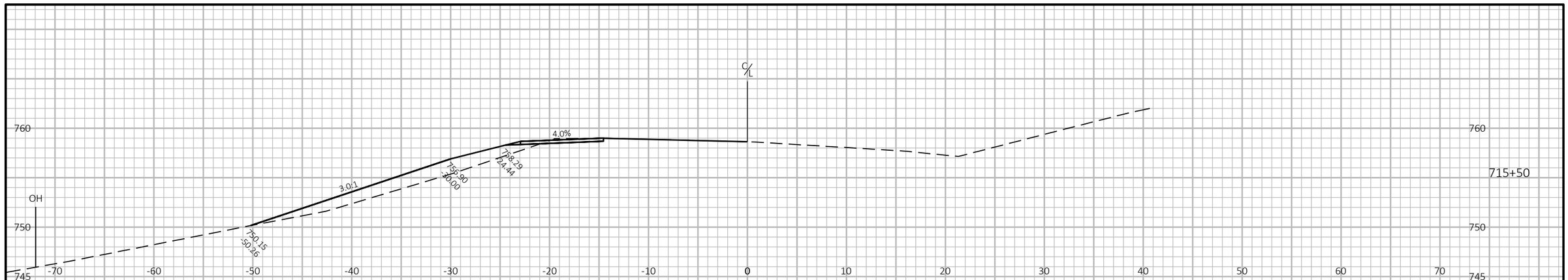
PLOT DATE : 8/1/2023 10:27 AM

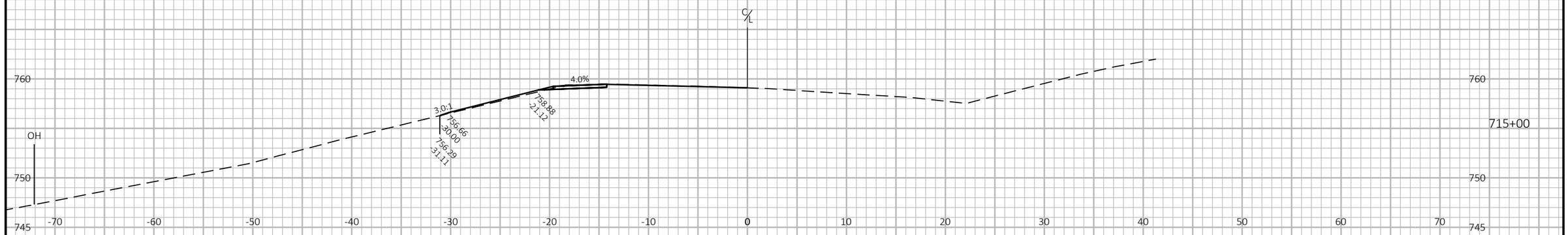
PLOT BY : BENJAMIN CARLSON

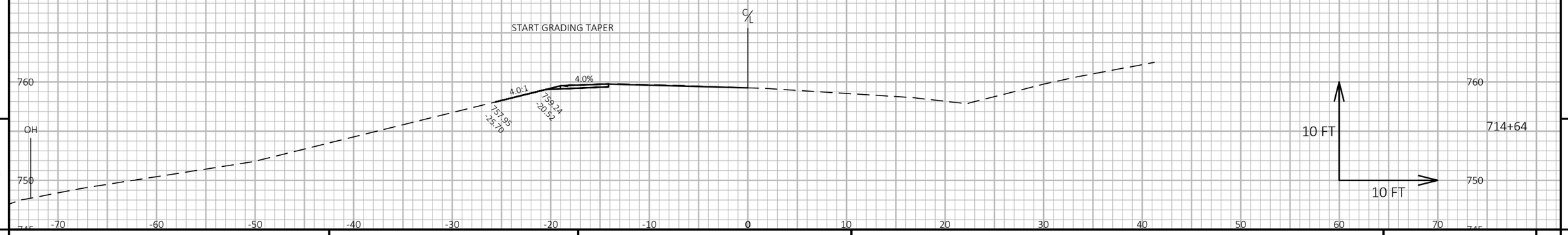
PLOT NAME :

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

WISDOT/CADDS SHEET 49







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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 171	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 30

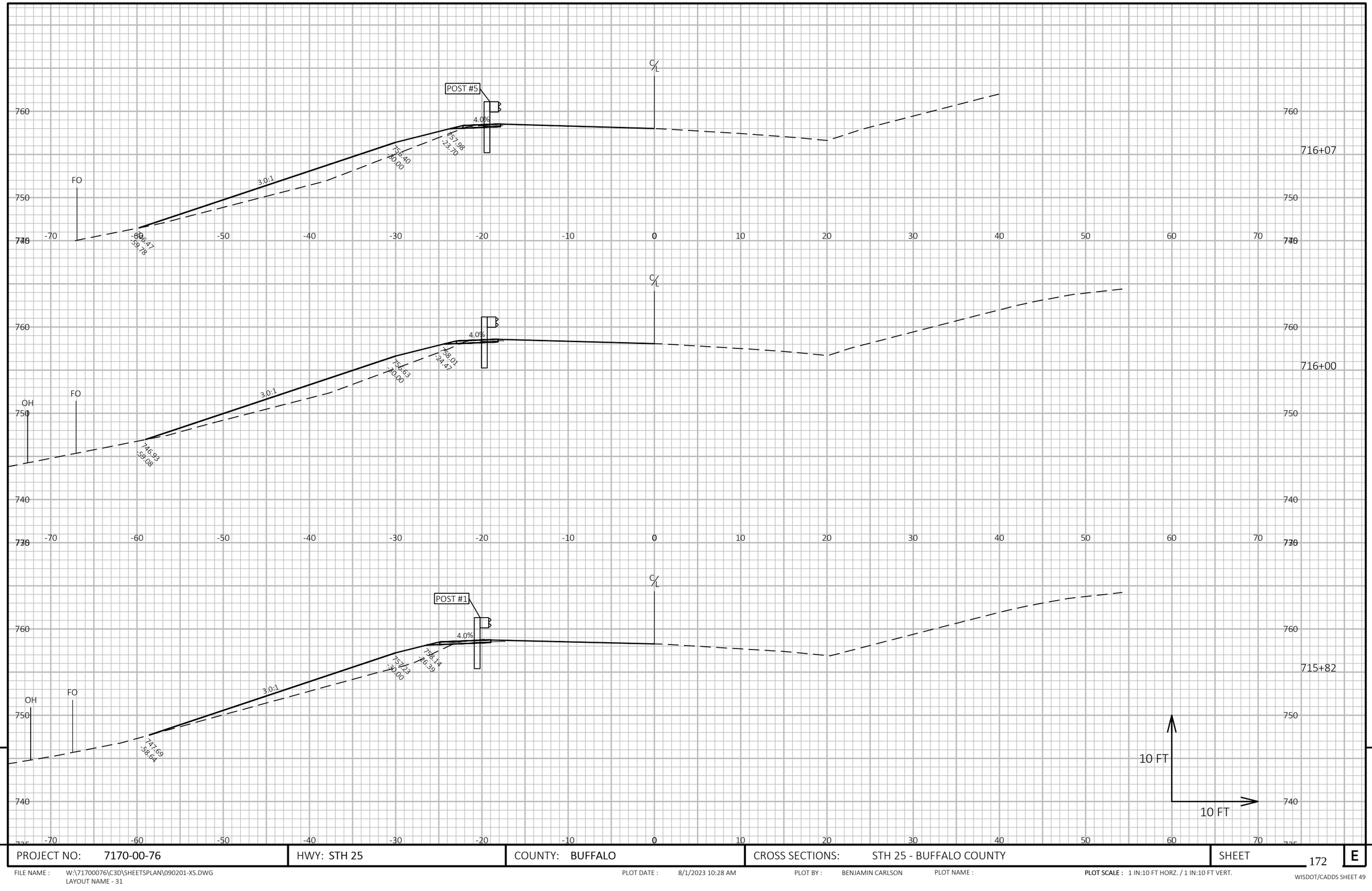
PLOT DATE : 8/1/2023 10:28 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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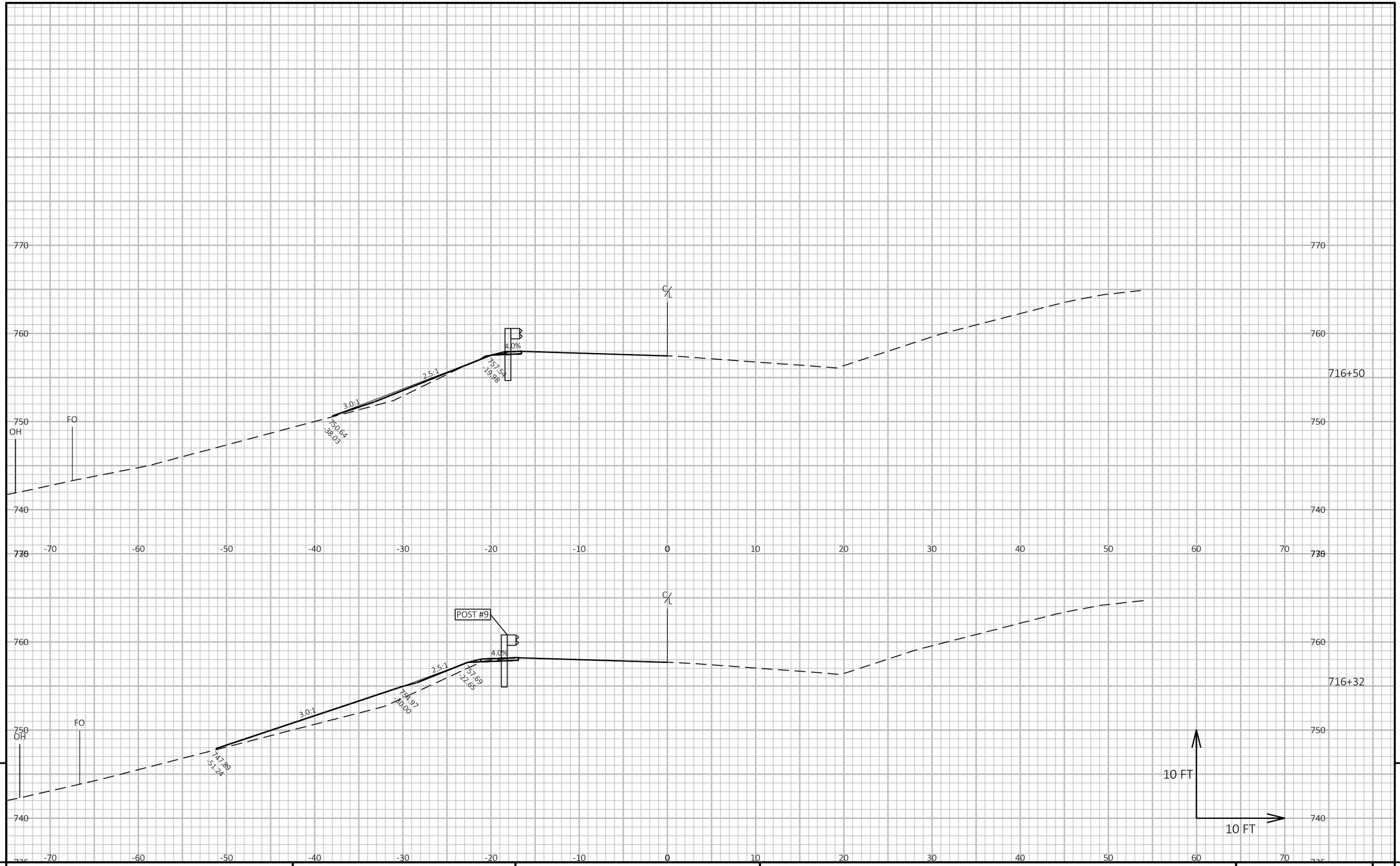
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 172	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 31

PLOT DATE : 8/1/2023 10:28 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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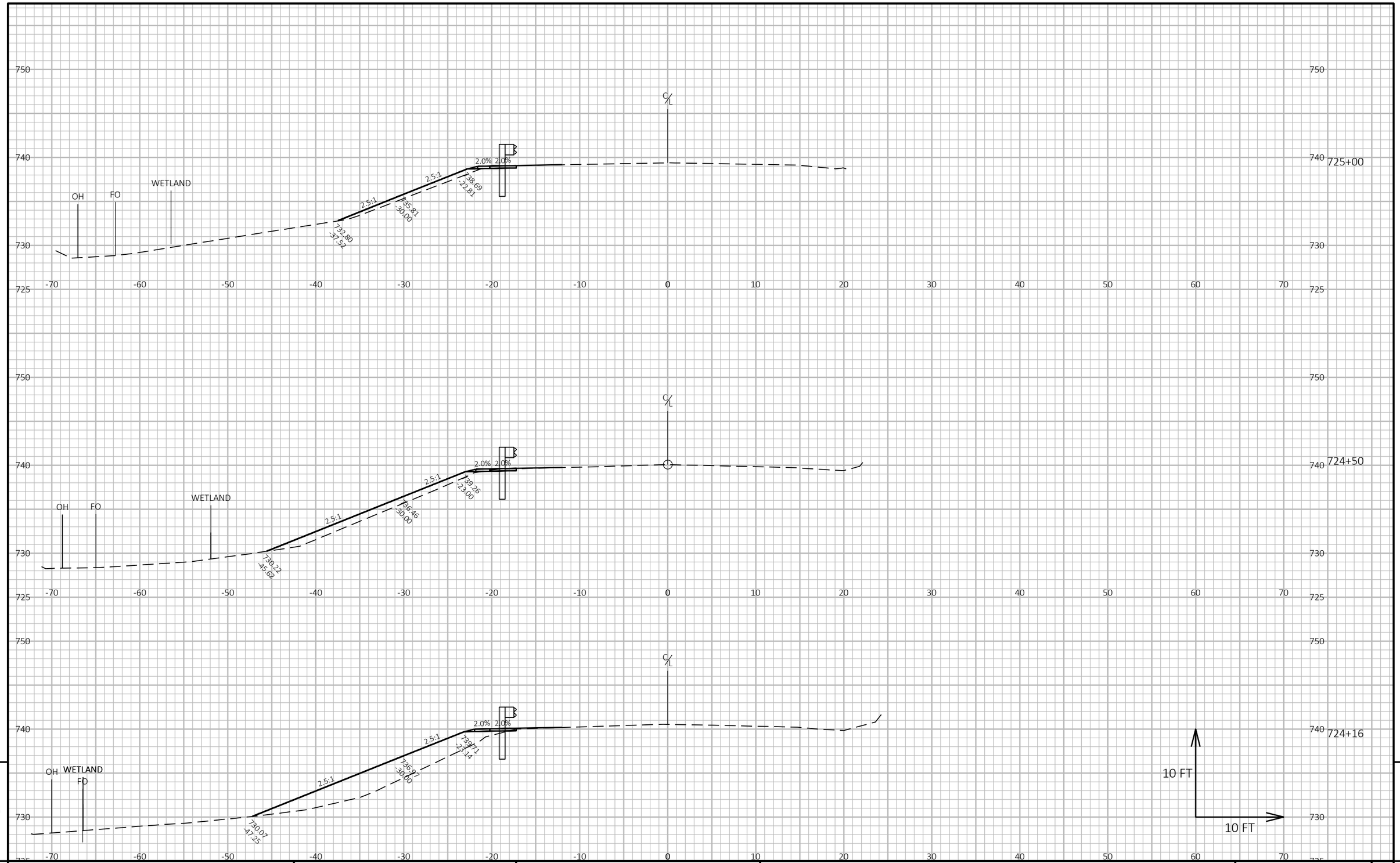
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 173	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 32

PLOT DATE : 8/1/2023 10:28 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 174 E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 33

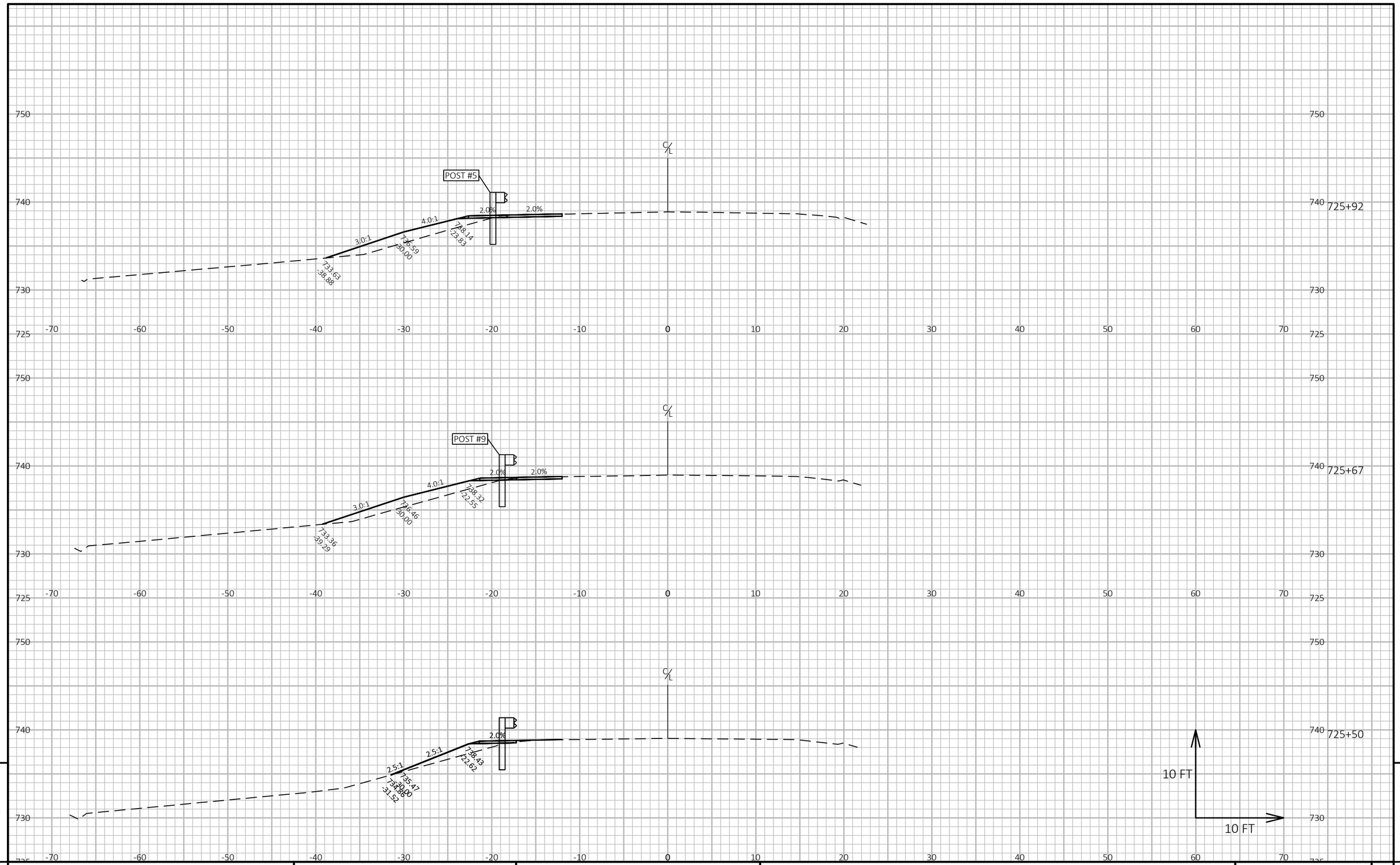
PLOT DATE : 8/1/2023 10:28 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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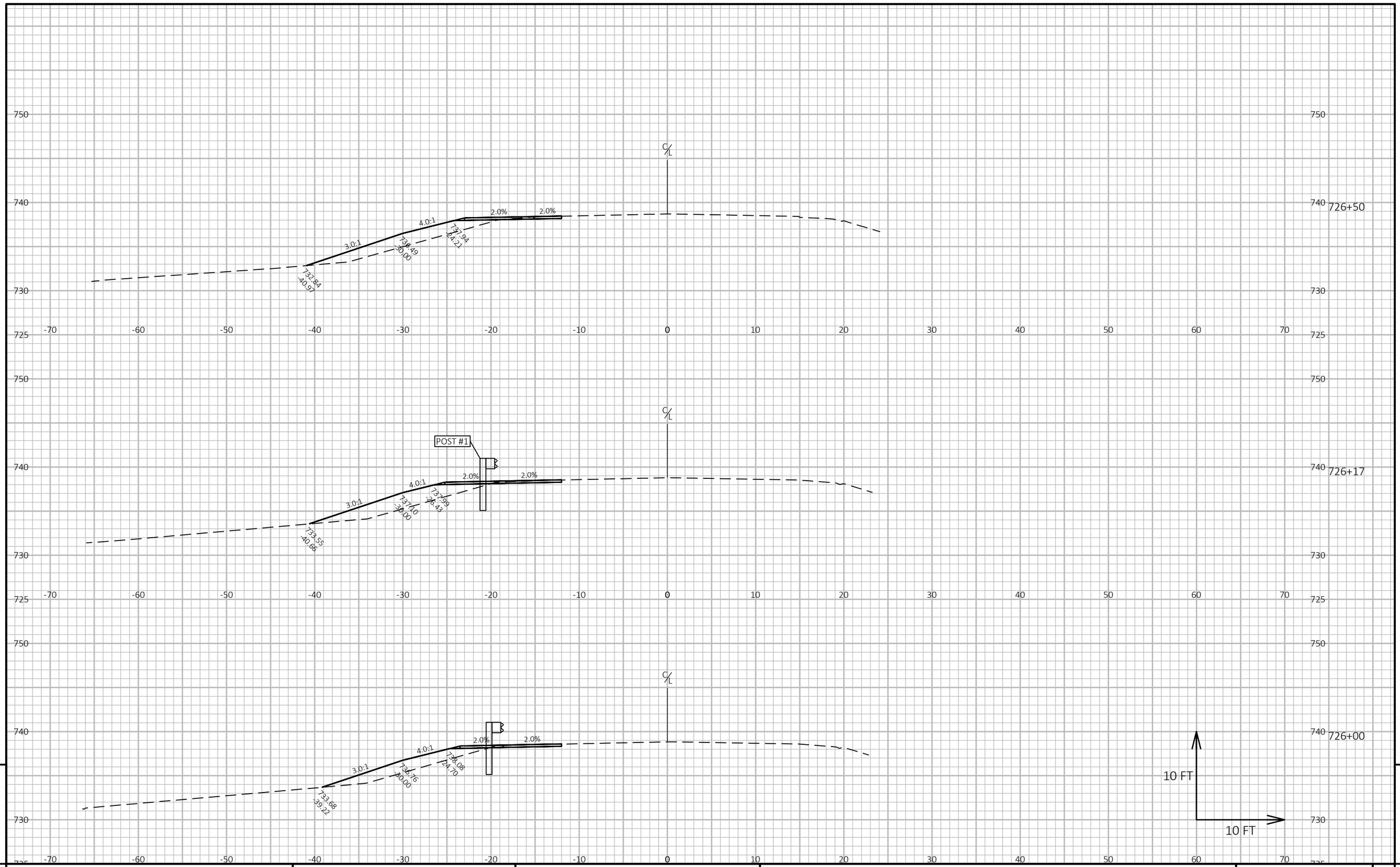
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 175	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 34

PLOT DATE : 8/1/2023 10:28 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



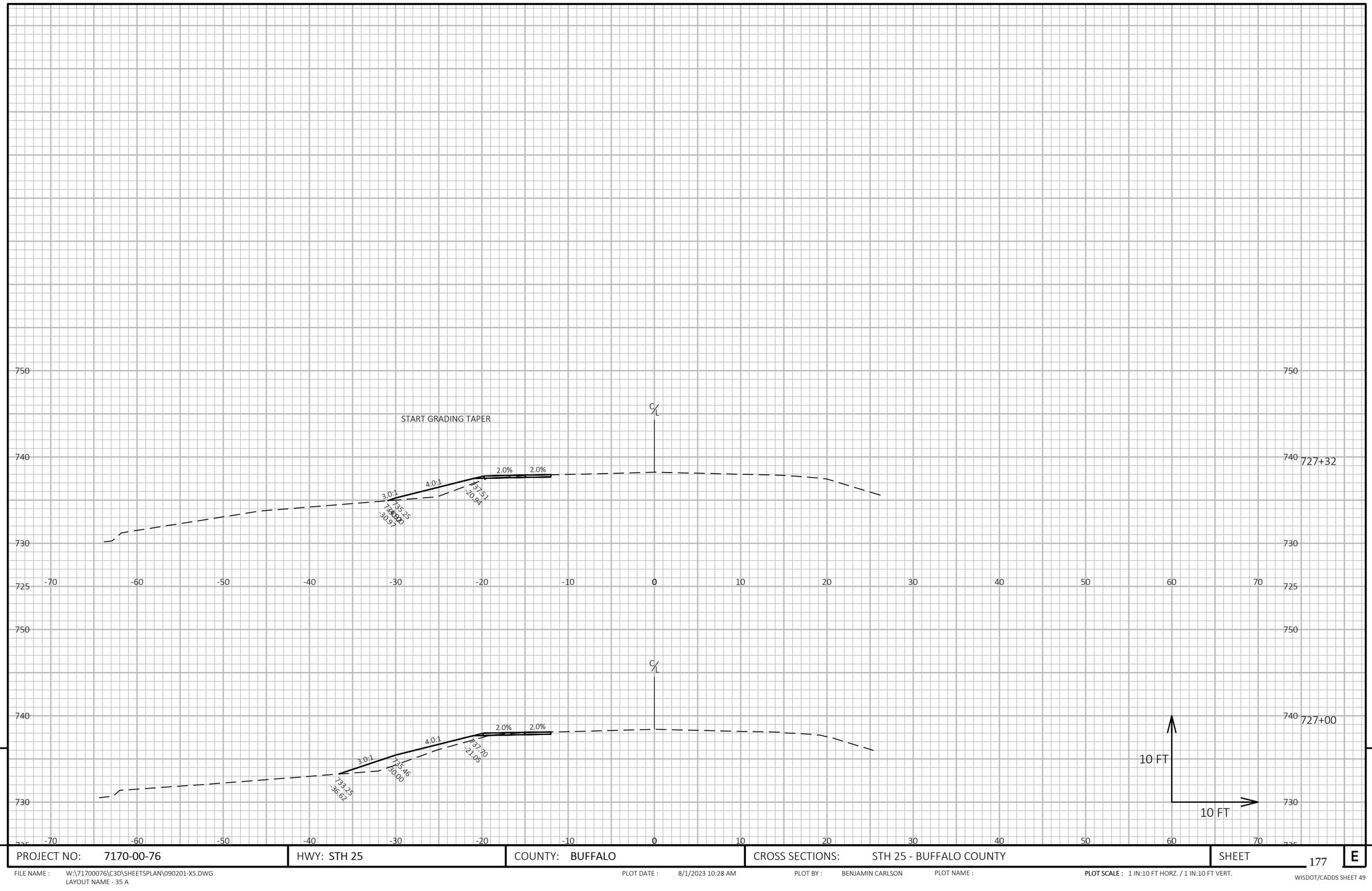
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 176	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 35

PLOT DATE : 8/1/2023 10:28 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 177	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 35 A

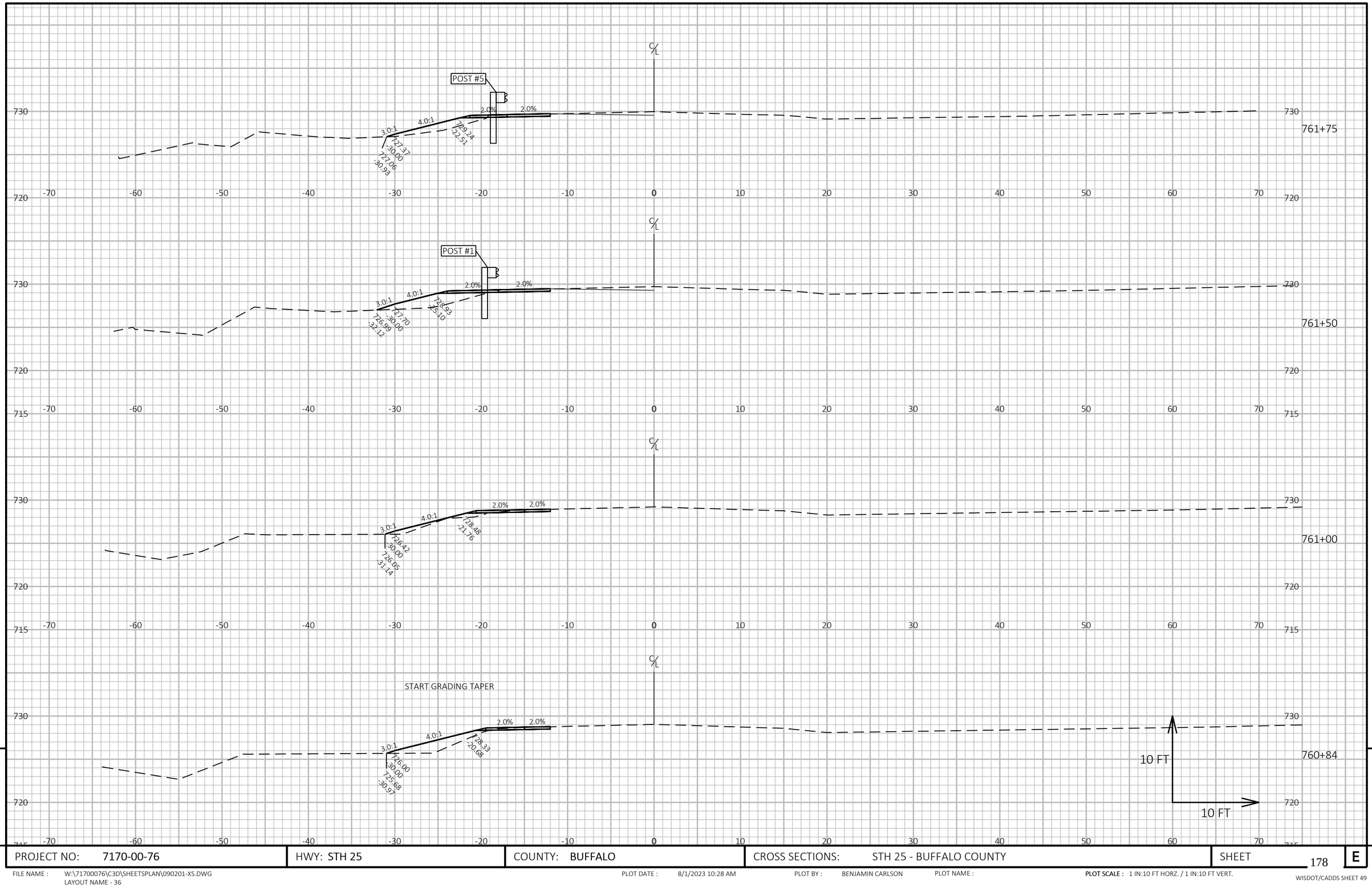
PLOT DATE : 8/1/2023 10:28 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 178 E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 36

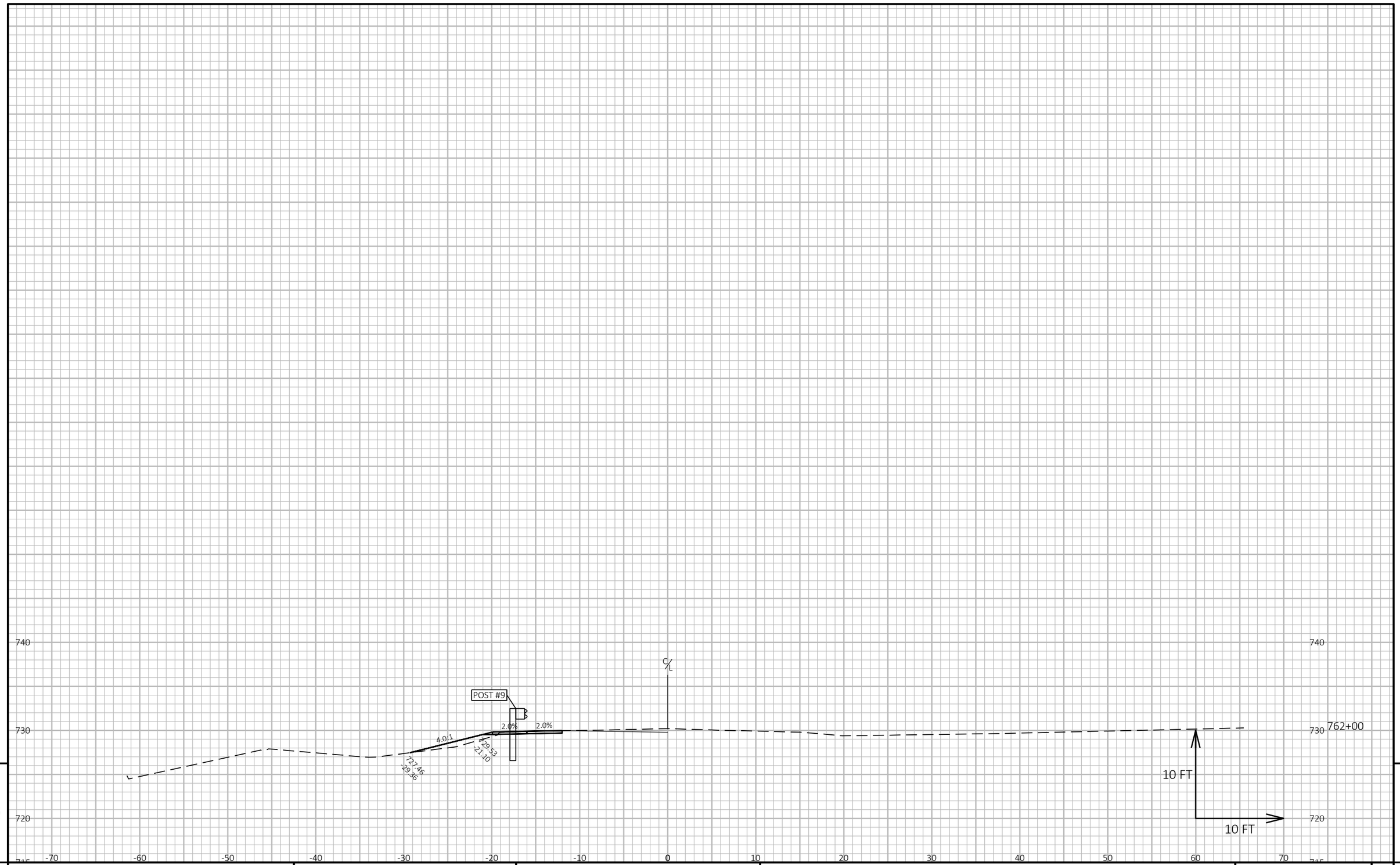
PLOT DATE : 8/1/2023 10:28 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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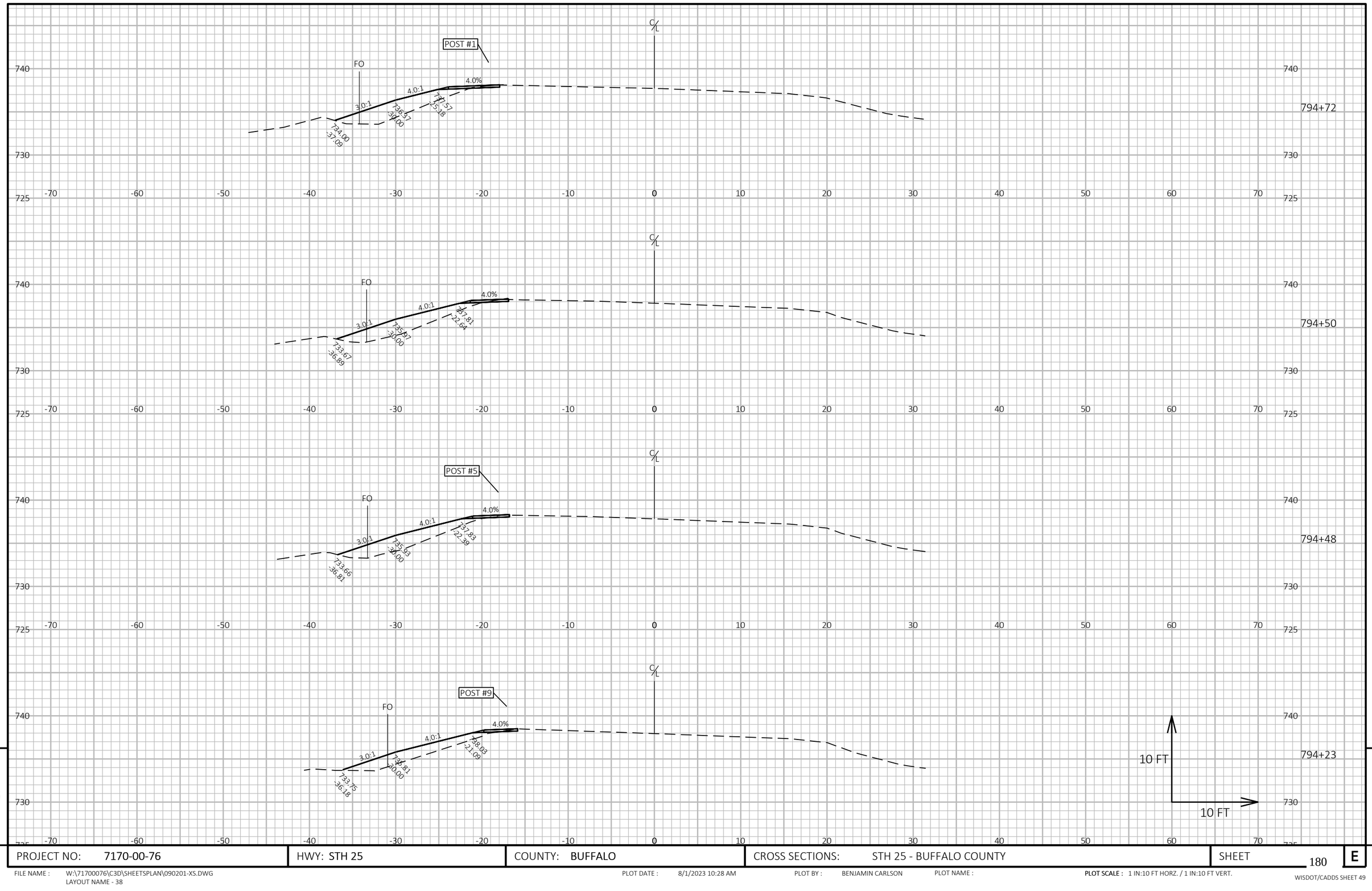
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 179	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 37

PLOT DATE : 8/1/2023 10:28 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.



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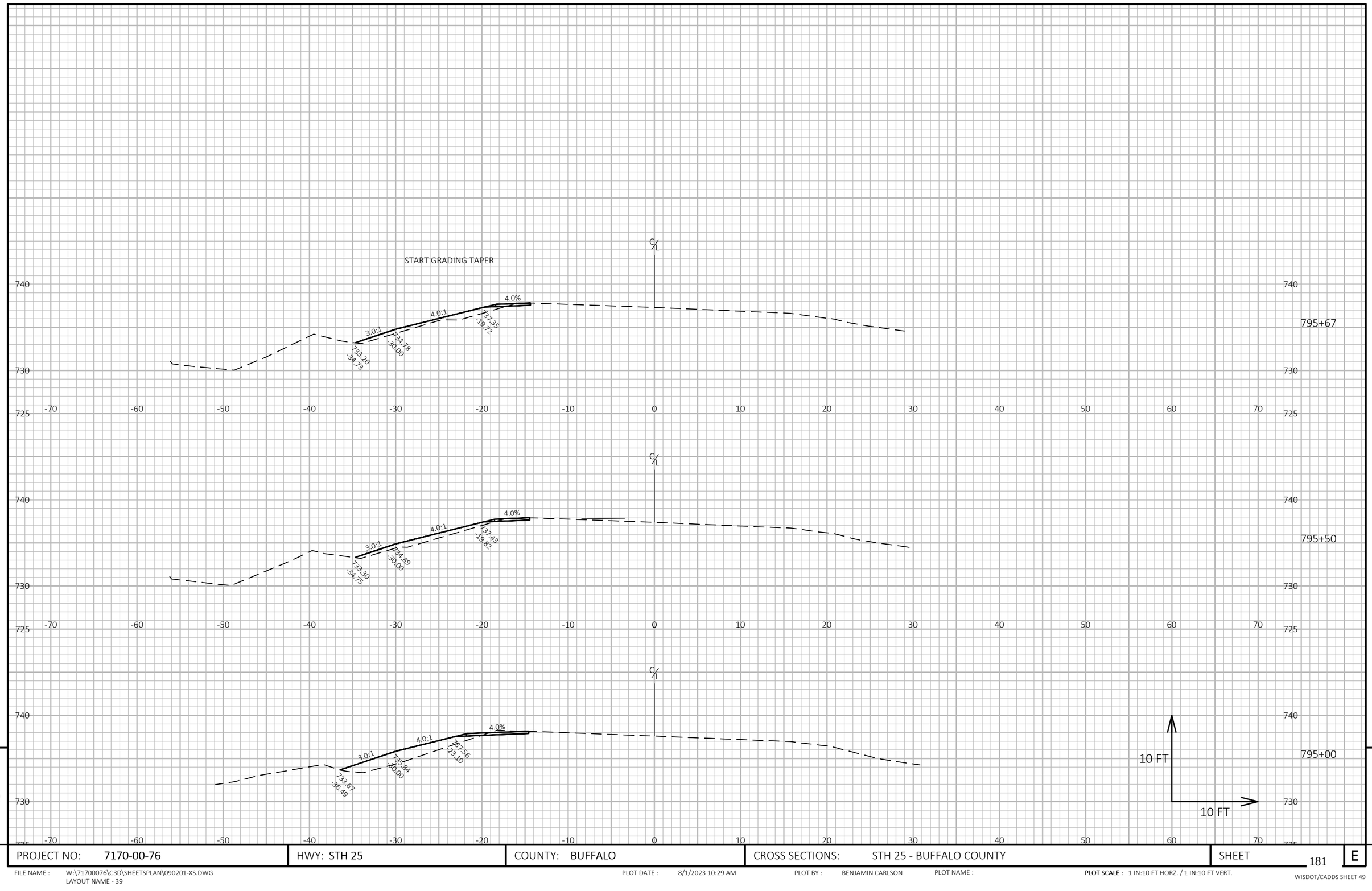
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 180	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 38

PLOT DATE : 8/1/2023 10:28 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - BUFFALO COUNTY	SHEET 181	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 39

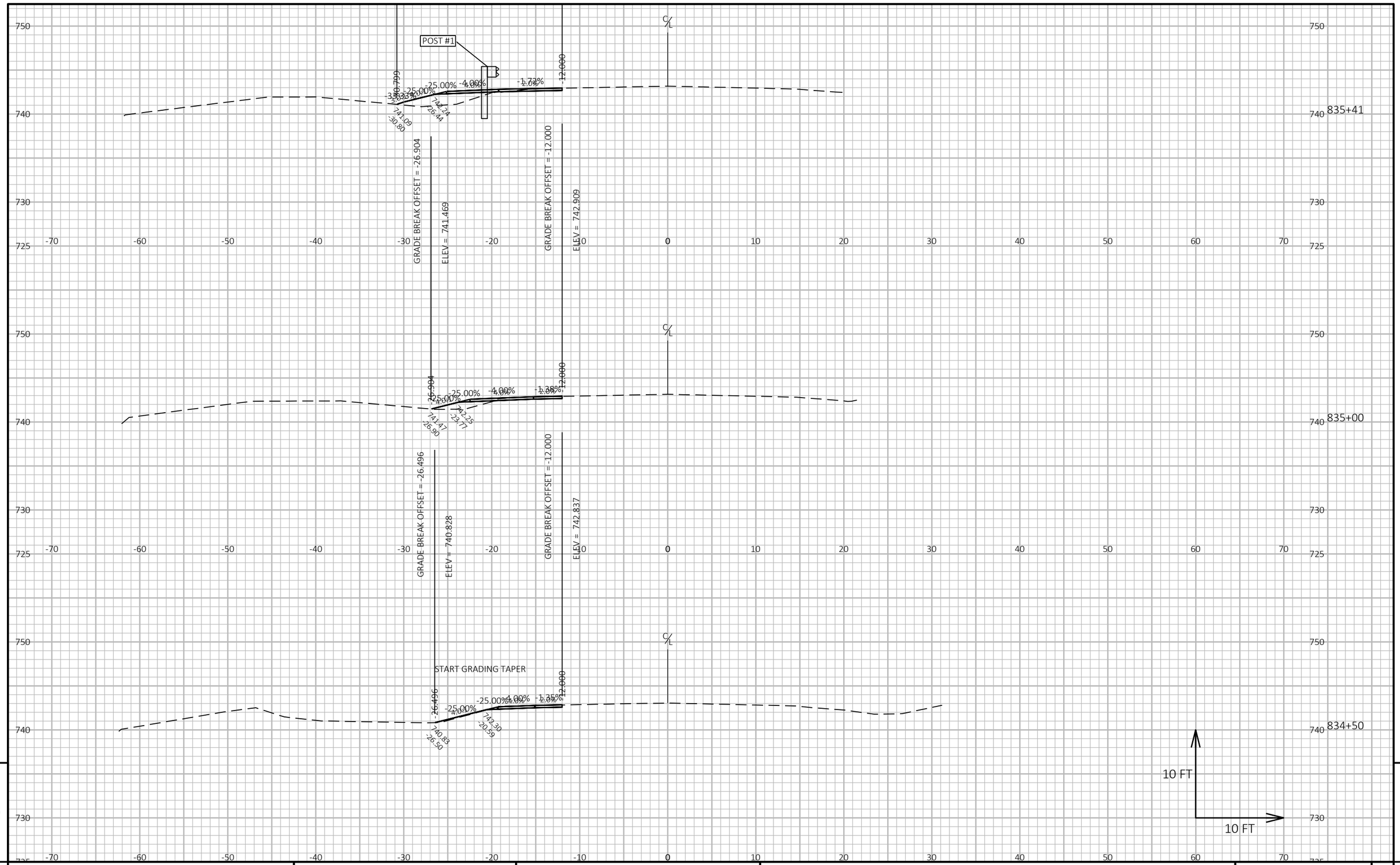
PLOT DATE : 8/1/2023 10:29 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 182	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 40

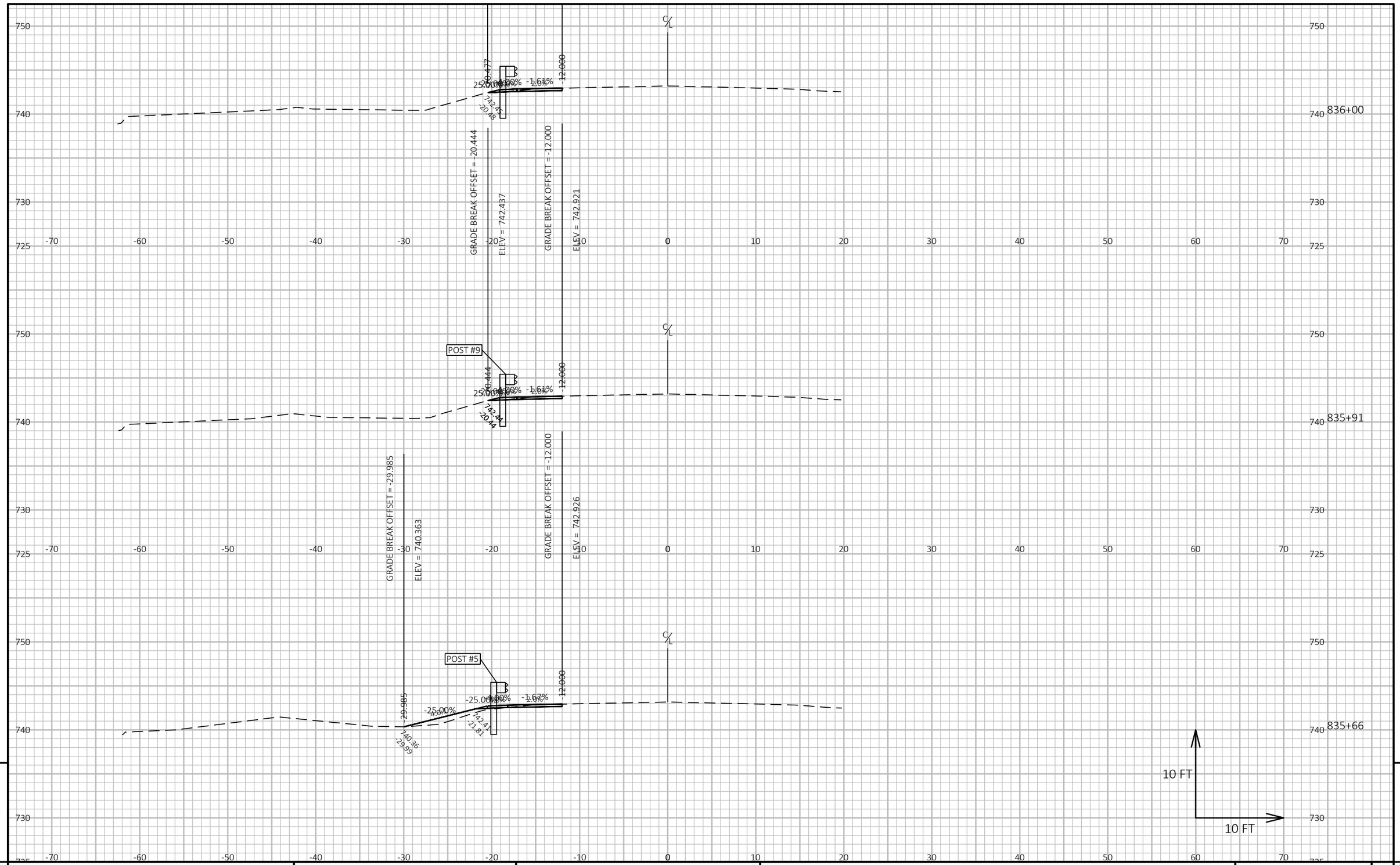
PLOT DATE : 8/1/2023 10:29 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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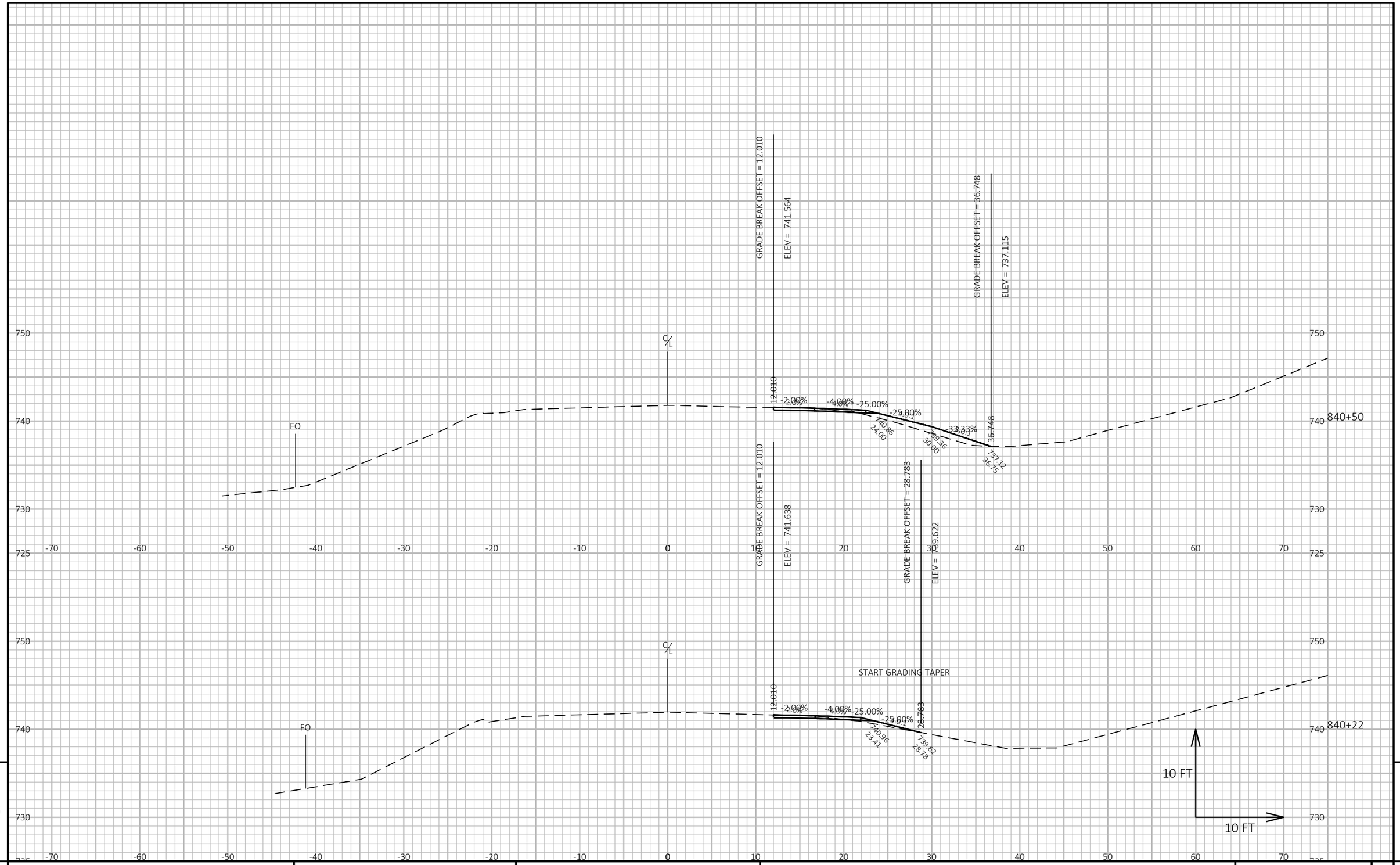
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 183	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 41

PLOT DATE : 8/1/2023 10:29 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 184	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 42

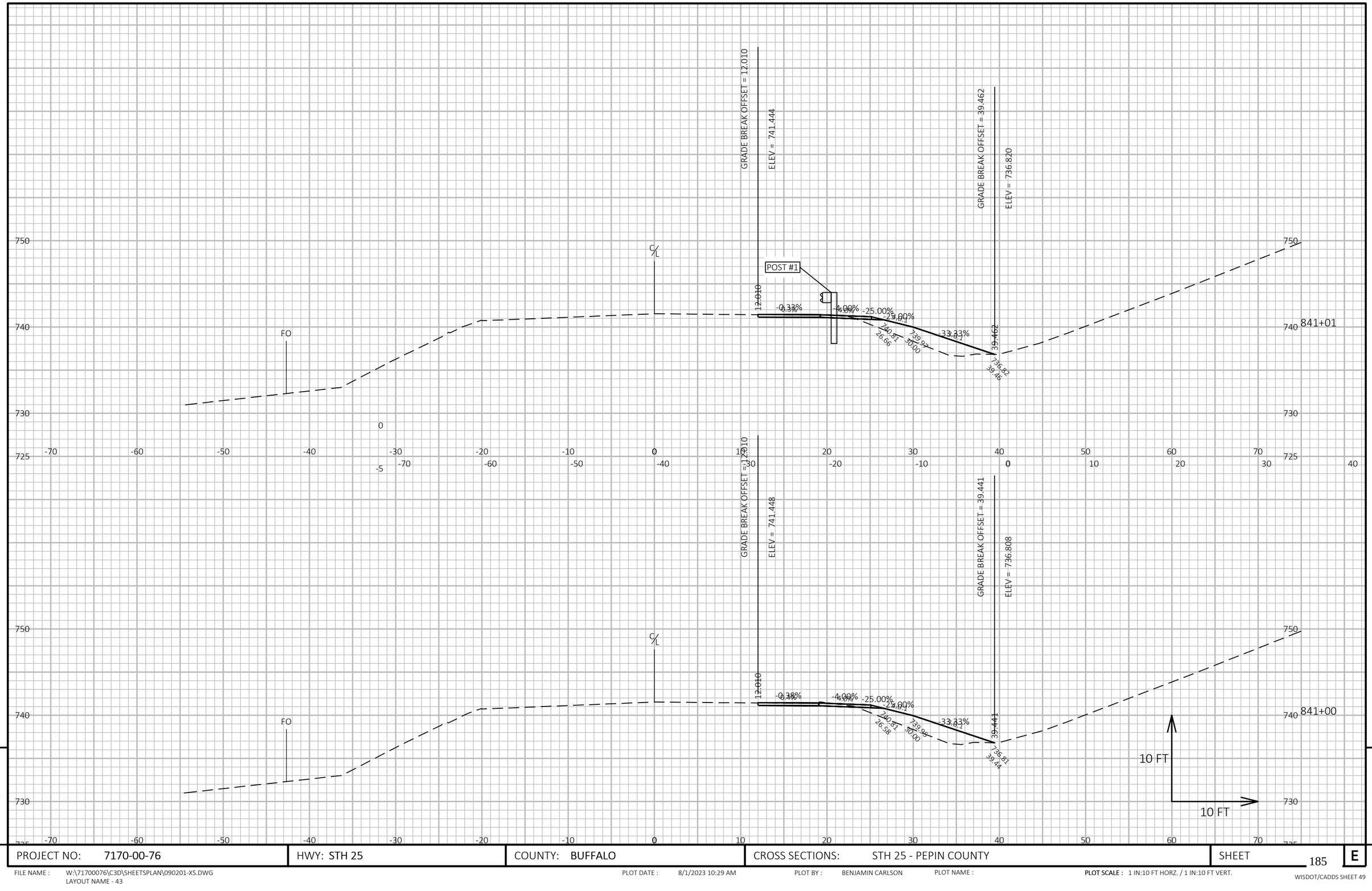
PLOT DATE : 8/1/2023 10:29 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



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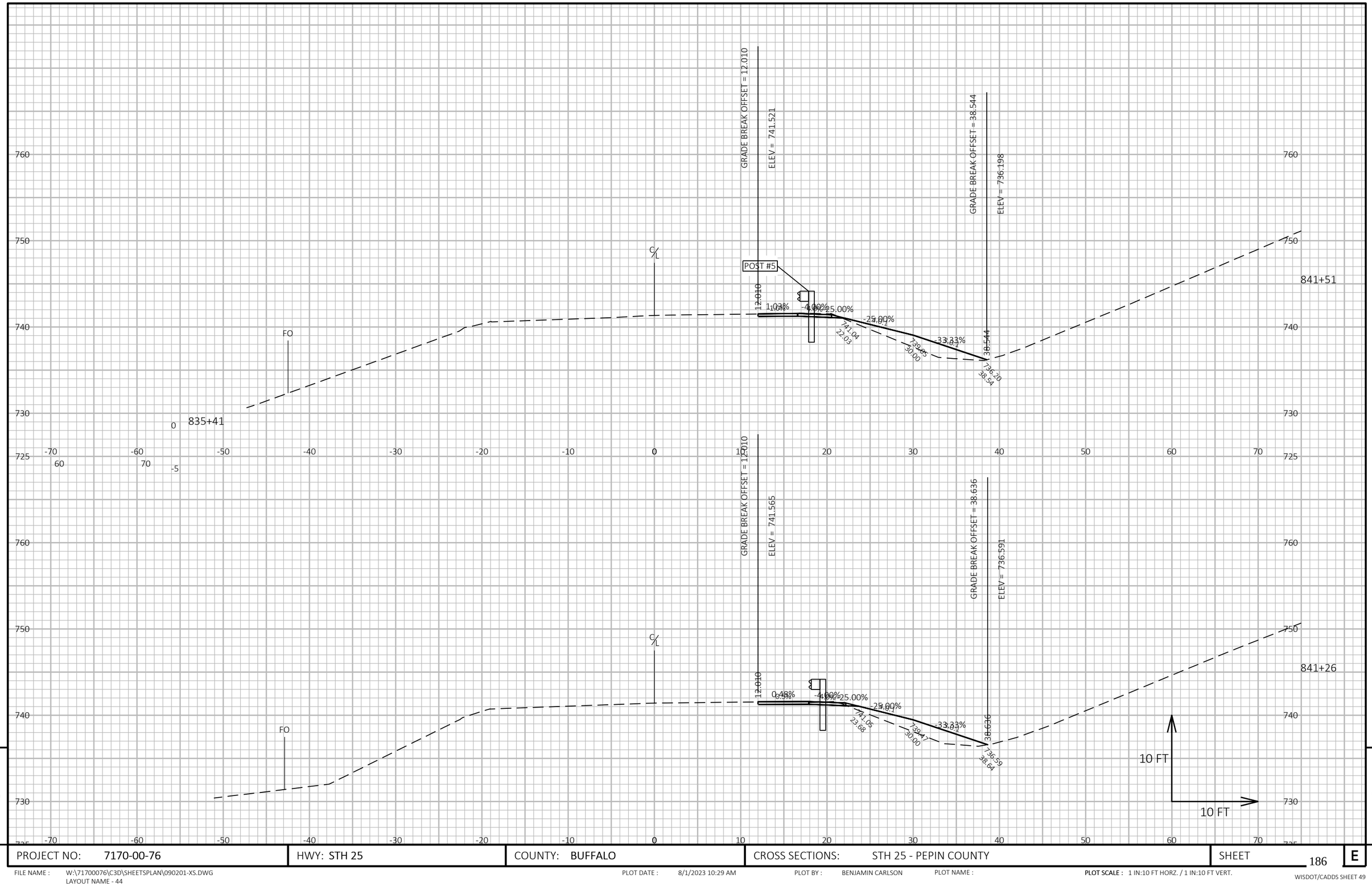
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 185	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 43

PLOT DATE : 8/1/2023 10:29 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 186	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 44

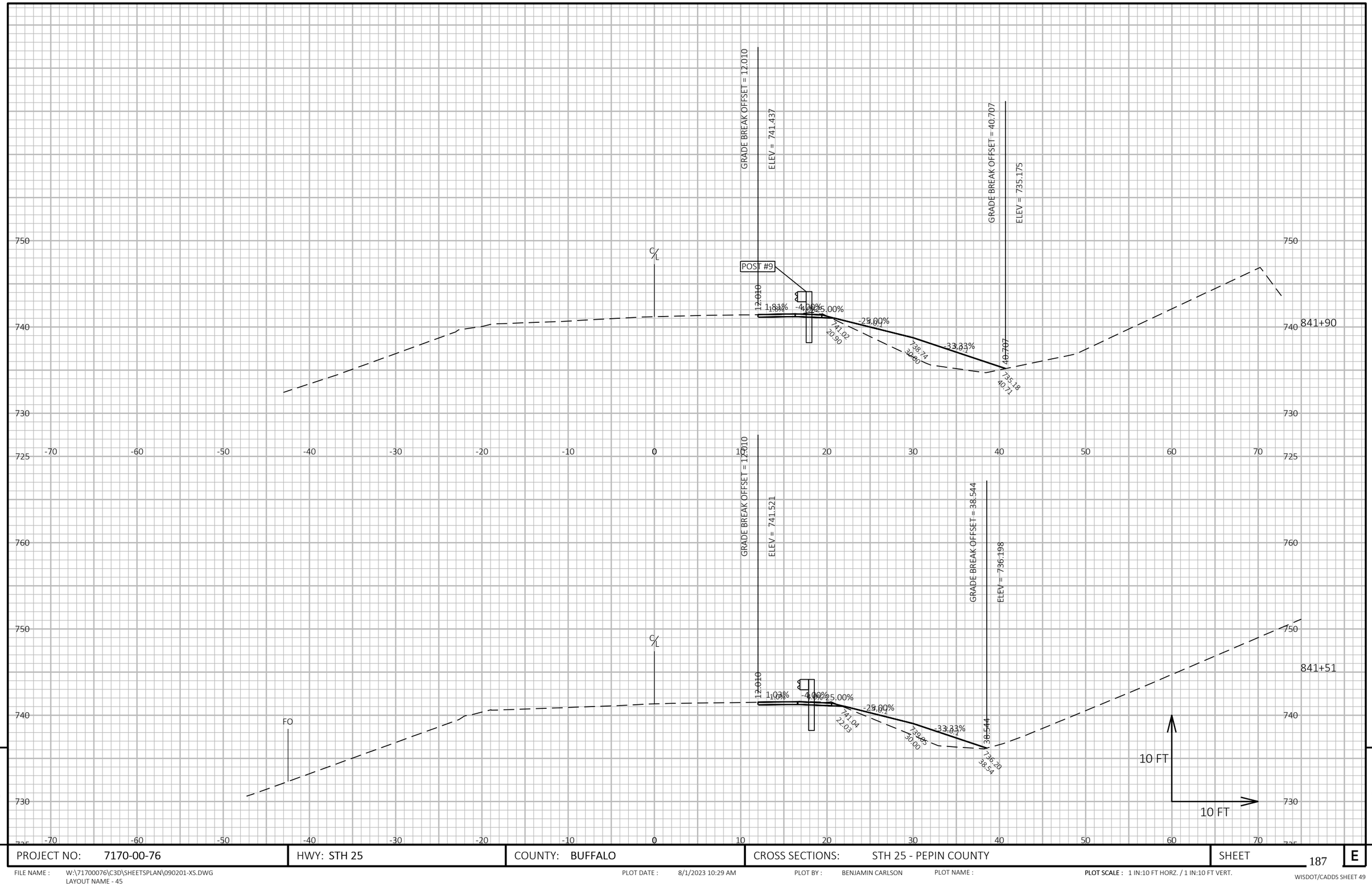
PLOT DATE : 8/1/2023 10:29 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



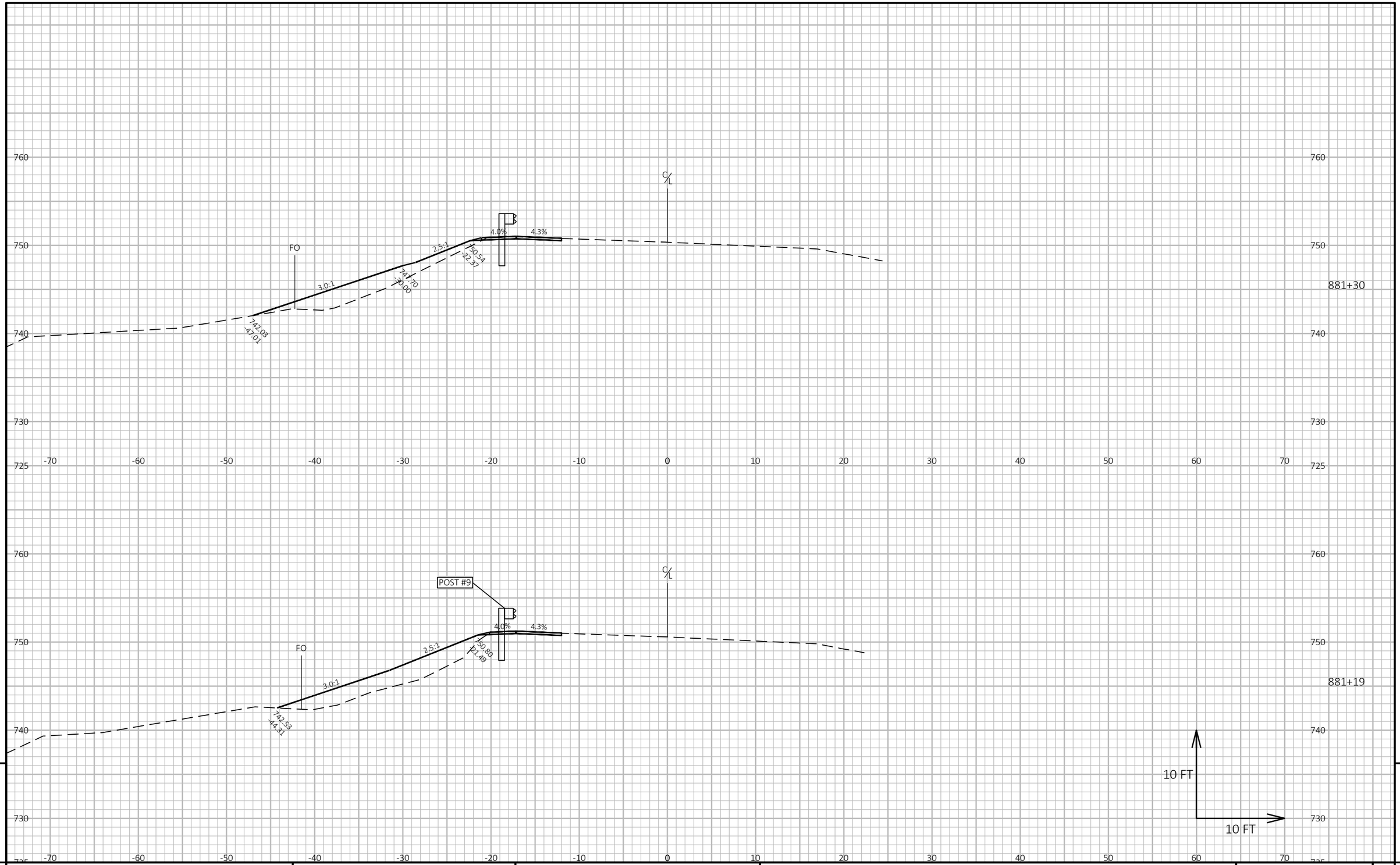
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 187	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 45

PLOT DATE : 8/1/2023 10:29 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 188	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 46

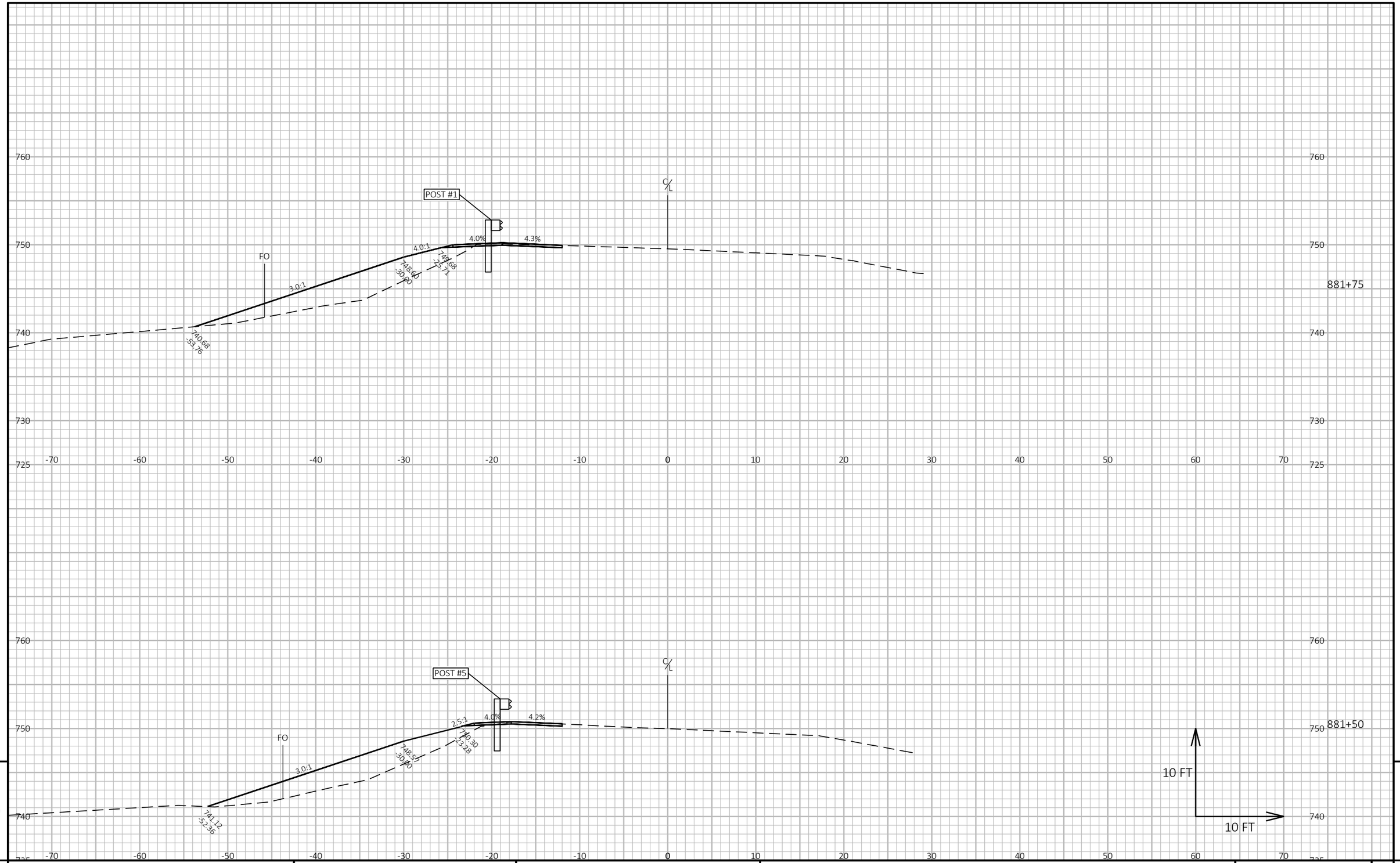
PLOT DATE : 8/1/2023 10:29 AM

PLOT BY : BENJAMIN CARLSON

PLOT NAME :

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

WISDOT/CADDS SHEET 49



9

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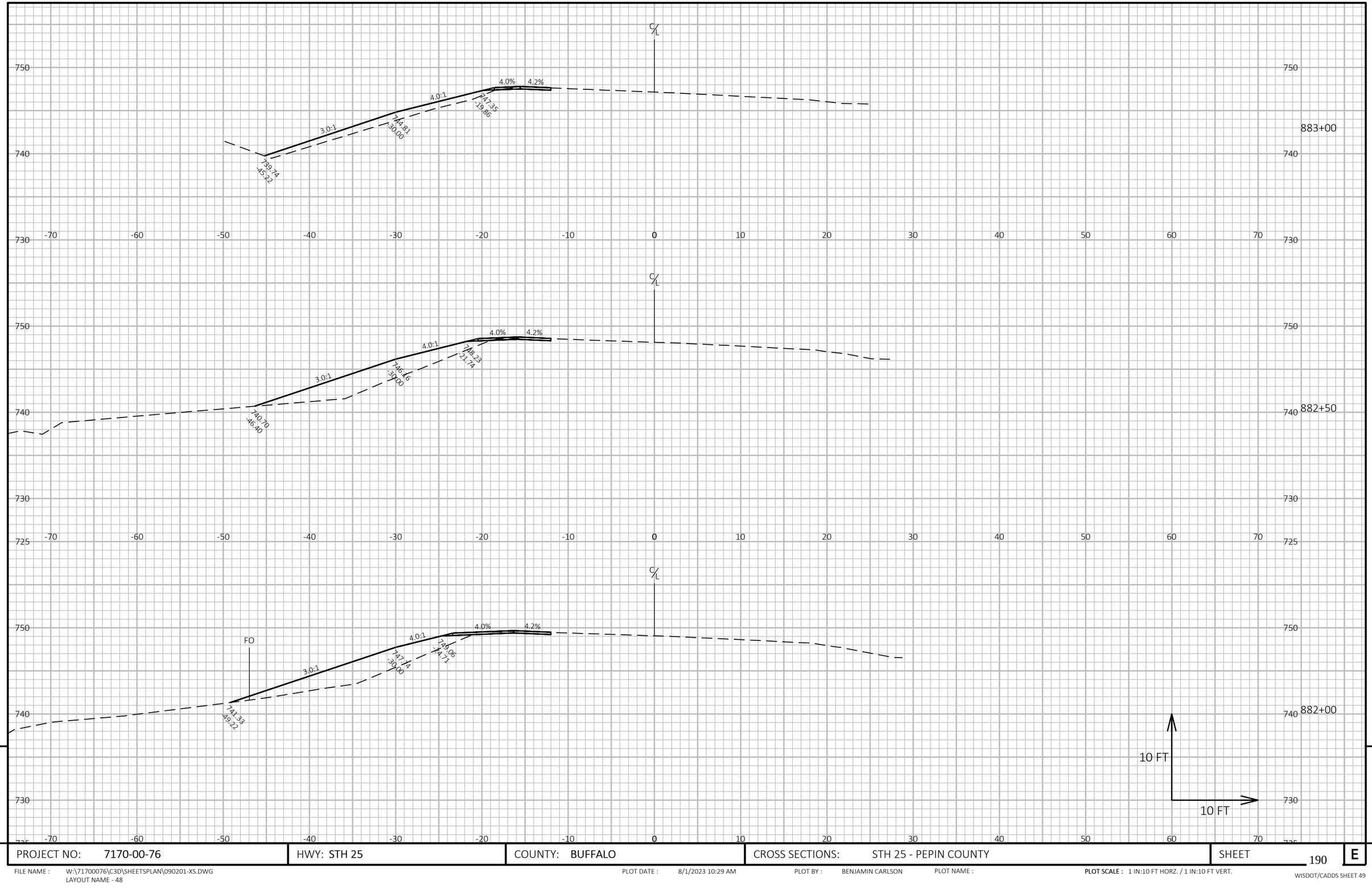
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 189	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 47

PLOT DATE : 8/1/2023 10:29 AM PLOT BY : BENJAMIN CARLSON PLOT NAME : **PLOT SCALE :** 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



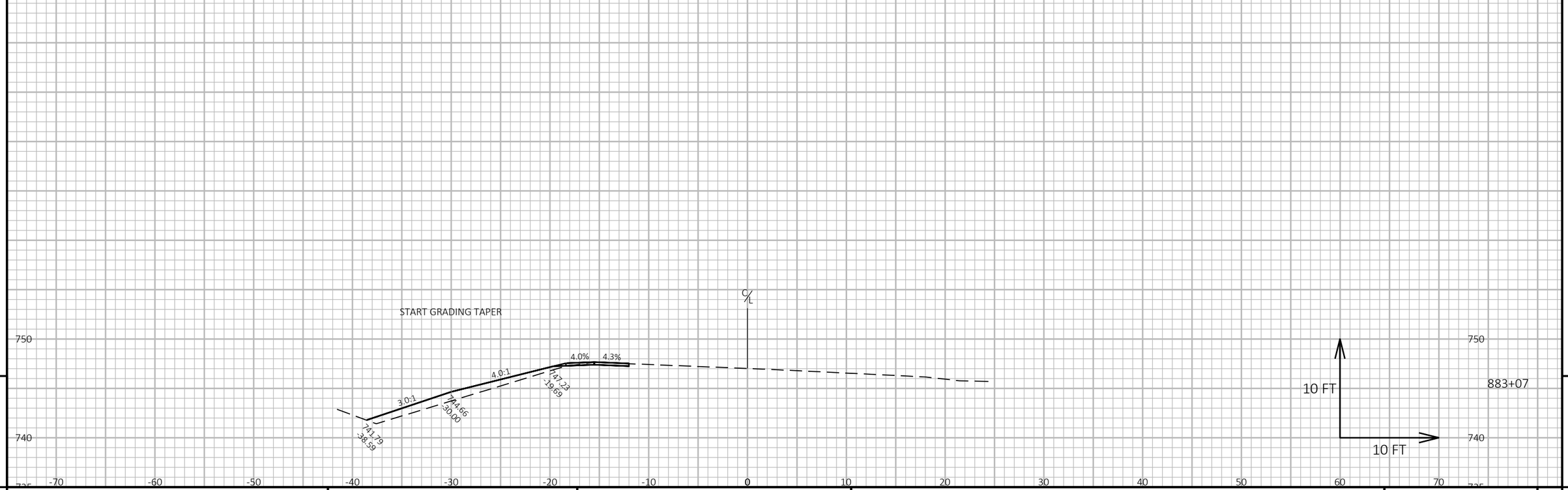
PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 190	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 48

PLOT DATE : 8/1/2023 10:29 AM PLOT BY : BENJAMIN CARLSON PLOT NAME :

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

WISDOT/CADDS SHEET 49



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PROJECT NO: 7170-00-76	HWY: STH 25	COUNTY: BUFFALO	CROSS SECTIONS: STH 25 - PEPIN COUNTY	SHEET 191	E

FILE NAME : W:\71700076\C3D\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 49

PLOT DATE : 8/1/2023 10:30 AM PLOT BY : BENJAMIN CARLSON 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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through innovation and exceptional service.

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