

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5150-02-70	WISC 2024001	1

# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

## DESOTO - VIROQUA

STH 35 TO STH 27

STH 82

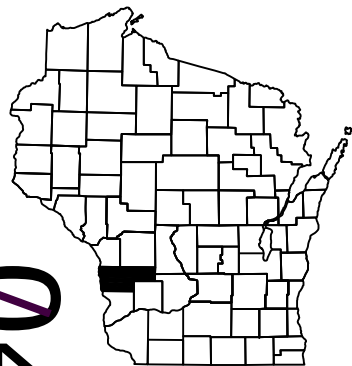
VERNON COUNTY

STATE PROJECT NUMBER
<b>5150-02-70</b>

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 = 296



# 04

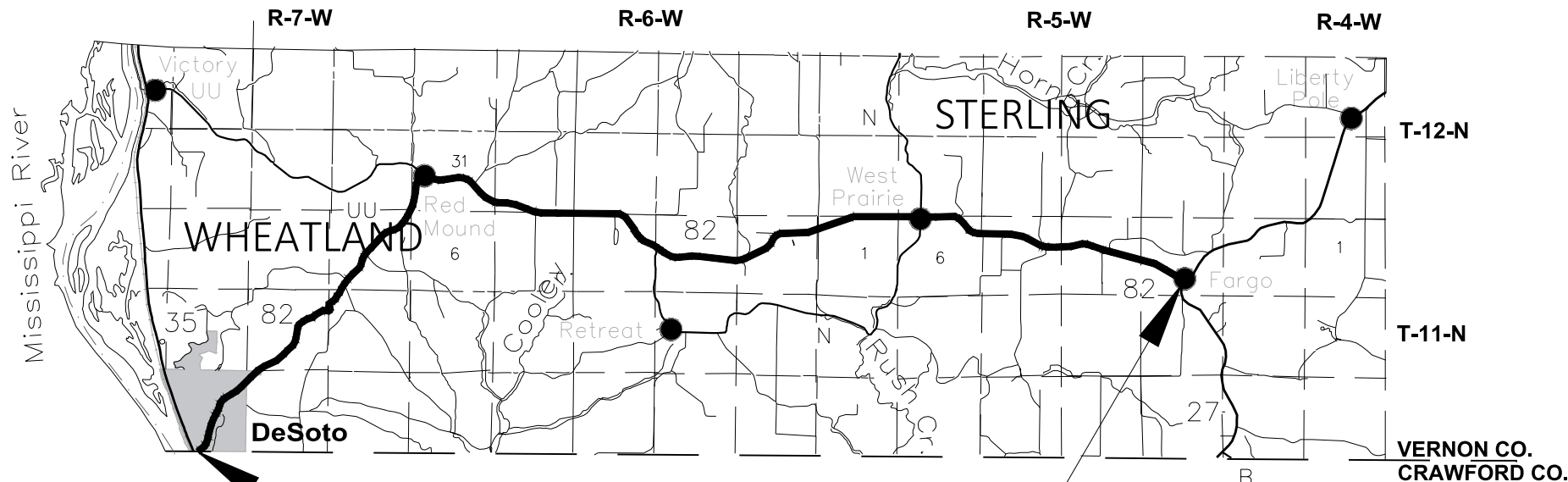
DESIGN DESIGNATION

A.A.D.T. (2024)	=	1500
A.A.D.T. (2034)	=	1700
D.H.V.	=	270
D.D.	=	60/40
T.	=	15.9%
DESIGN SPEED	=	60 MPH
ESALS	=	460,000

CONVENTIONAL SYMBOLS

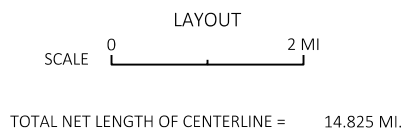
<b>PLAN</b>	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

<b>PROFILE</b>	
GRADE LINE	
ORIGINAL GROUND	
MARSH OR ROCK PROFILE (To be noted as such)	
SPECIAL DITCH	
GRADE ELEVATION	
CULVERT (Profile View)	
<b>UTILITIES</b>	
ELECTRIC	
FIBER OPTIC	
GAS	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	



**BEGIN PROJECT**  
STA 0+75  
Y = 100,521.724  
X = 619,267.578

**END PROJECT**  
STA 783+50  
Y = 112,500.018  
X = 683,626.112



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

ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

ORIGINAL PLANS PREPARED BY  
TEAM ENGINEERING INC.

DATE: \_\_\_\_\_  
(Professional Engineer Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY	Surveyor	TEAM ENGINEERING
Designer	TEAM ENGINEERING	
Project Manager	PAUL VALENTI, PE.	
Regional Examiner	SW REGION	
Regional Supervisor	JOHN BAINTER, PE.	

APPROVED FOR THE DEPARTMENT  
DATE: 07/20/23

E

ABUT.	Abutment	JT	Joint	SEC	Section
AC	Acre	JCT	Junction	SHLDR	Shoulder
AGG.	Aggregate	LHF	Left-Hand Forward	SHR	Shrinkage
AH	Ahead	L	Length of Curve	SW	Sidewalk
<	Angle	LIN FT OR LF	Linear Foot	S	South
ASPH	Asphaltic	LC	Long Chord of Curve	SQ	Square
AVG.	Average	MH	Manhole	SF OR SQ FT	Square Feet
A.D.T.	Average Daily Traffic	MB	Mailbox	SY OR SQ YD	Square Yard
BAD	Base Aggregate Dense	ML OR M/L	Match Line	STD	Standard
BK.	Back	N	North	SDD	Standard Detail Drawings
BF	Back Fence	Y	North Grid Coordinate	STH	State Trunk Highways
B.M	Bench Mark	OAL	Overall Length	STA	Station
BR.	Bridge	OD	Outside Diameter	SS	Storm Sewer
C/L	Center Line	PLE	Permanent Limited Easement	SG	Subgrade
CC	Center to Center	PT	Point	SE	Superelevation
CTH	County Truck Highway	PC	Point of Curvature	SL OR S/L	Survey Line
CR.	Creek	PI	Point of Intersection	SV	Septic Vent
CY OR CU YD	Cubic Yard	PRC	Point of Reverse Curvature	T	Tangent
CP	Culvert Pipe	PT	Point of Tangency	TEL	Telephone
C & G	Curb and Gutter	POC	Point on Curve	TEMP	Temporary
D	Degree of Curve	POT	Point on Tangent	TI	Temporary Interest
DHV	Design Hour Volume	PVC	Polyvinyl Chloride	TLE	Temporary Limited Easement
DIA	Diameter	PCC	Portland Cement Concrete	t	Ton
E	East	LB	Pound	T OR TN	Town
X	East Grid Coordinate	PSI	Pounds Per Square Inch	TRANS	Transition
ELEC	Electric	PE	Private Entrance	TL OR T/L	Transit Line
EL OR ELEV	Elevation	R	Radius	T	Trucks (percent of)
ESALS	Equivalent Single Axle Loads	RR	Railroad	TYP	Typical
EBS	Excavation Below Subgrade	RL OR R/L	Reference Line	UNCL	Unclassified
FF	Face to Face	RP	Reference Point	UG	Underground Cable
FE	Field Entrance	RCCP	Reinforced Concrete Culvert Pipe	USH	United States Highway
F	Fill	REQD	Required	VAR	Variable
FG	Finished Grade	RES	Residence or Residential	V	Velocity or Design Speed
FL OR F/L	Flow Line	RW	Retaining Wall	VERT	Vertical
FT	Foot	RT	Right	VC	Vertical Curve
FTG	Footing	RHF	Right-Hand Forward	VOL	Volume
GN	Grid North	R/W	Right-of-Way	WM	Water Main
HT	Height	R	River	WV	Water Valve
CWT	Hundredweight	RD	Road	W	West
HYD	Hydrant	RDWY	Roadway	WB	Westbound
INL	Inlet	SALV	Salvaged	YD	Yard
ID	Inside Diameter	SAN S	Sanitary Sewer		
INV	Invert				
IP	Iron Pipe or Pin				
IRS	Iron Rod Set				

GENERAL NOTES

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

THE CONTRACTOR SHALL COORDINATE THEIR CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

RIGHT OF WAY LINES SHOWN ON THE CROSS SECTIONS ARE APPROXIMATE.

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES EXCEPT WHEN PIPE LAYING OPERATIONS REQUIRE THE DRIVEWAY TO BE CLOSED. ACCESS TO DRIVEWAY SHALL BE RE-ESTABLISHED IMMEDIATELY AFTER PIPE IN DRIVEWAY AREA IS INSTALLED. ACCESS SHALL BE PROVIDED DURING ALL NON-WORKING HOURS.

3.5-INCH REMOVING ASPHALTIC SURFACE MILLING OPERATIONS ARE EXPECTED TO ENCOUNTER UNDERLYING BASE COURSE MATERIAL.

THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTED TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, BIKE OR PARKING LANE.

HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 112 LB/SY/IN.

APPLY TACK COAT AT A RATE OF 0.07 GAL/SY TO MILLED PAVEMENT SURFACES AND 0.05 GAL/SY BETWEEN LAYERS OF HMA PAVEMENT.

4-INCH HMA PAVEMENT TYPE 4LT 58-28 S, SHALL BE CONSTRUCTED WITH 1.75-INCH UPPER LAYER AND 2.25-INCH LOWER LAYER.

3.5-INCH HMA PAVEMENT TYPE 4LT 58-28 S, SHALL BE CONSTRUCTED WITH 1.75-INCH UPPER LAYER AND 1.75-INCH LOWER LAYER.

CONSTRUCT INSIDE EDGE OF SIDEWALK 1/2 INCH HIGHER THAN TOP OF CURB WHEN THEY ARE ADJACENT TO EACH OTHER.

PRIOR TO THE PLACEMENT OF MGS GUARDRAIL, THE SHOULDERS SHALL BE IN PLACE, SHAPED AND COMPACTED UNLESS SHOWN OTHERWISE.

DISTURBED AREAS WITHIN THE RIGHT OF WAY ARE TO BE TOPSOILED (SALVAGED), FERTILIZED, SEEDED, AND MULCHED OR APPLY EROSION MAT AS DIRECTED BY THE ENGINEER.

THE CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY THEIR OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.

THE LOCATIONS OF SILT FENCE, SALVAGED TOPSOIL, SEEDING MIX TYPES, SEEDING TEMPORARY, MULCH AND TEMPORARY DITCH CHECKS ARE APROXIMATE.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

SAWCUTS IF REQUIRED FOR BUTT JOINTS ARE INCIDENTAL TO THE BID ITEM.

TRAFFIC CONTROL GENERAL NOTES

PLACE ADVANCED SIGNING IN ACCORDANCE WITH SDD "TRAFFIC CONTROL, ADVANCED WARNING SIGNS 45 MPH OR GREATER IN TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC".

ALL SIDE ROADS TO FOLLOW THE "TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL".

ALL CONSTRUCTION WITHIN THE PROJECT LIMITS AS WELL AS ALL CULVERTS DESIGNATED FOR FULL REPLACEMENT, SHALL FOLLOW SDD "TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION". ALL CULVERTS DESIGNATED FOR FULL REPLACEMENT TO BE CONSTRUCTED 1/2 AT A TIME UTILIZING THE SDD.

USE "TRAFFIC CONTROL, WORKING ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY" SDD FOR THE FOLLOWING:

- IN ALL BEAM GUARD AREAS
- IN ALL CURB RAMP AND CURB AND GUTTER REPLACEMENT AREAS IN THE VILLAGE OF DESOTO (STA 4+00 TO STA 27+00)
- NEW CURB & GUTTER AT STA 247+75 TO STA 258+00 (REDMOUND AREA).

DESIGNER

TEAM ENGINEERING, INC.  
210 GUARD STREET  
WAUZEKA, WI 53826  
ATTN: JEREMY KRACHEY, P.E.  
PH: (608) 875-5075  
jkrachey@teamenginc.com

WISDOT CONTACT

PAUL VALENTI, PE  
WISDOT SOUTHWEST PROJECT MANAGER  
3550 MORMON COULEE RD  
LA CROSSE WI 54601  
PH: (608) 785-9053  
paul.valenti@dot.wi.gov

UTILITIES

DAIRYLAND POWER COOPERATIVE -  
ELECT  
MICHAEL LYDON  
3200 EAST AVE. S.  
P.O. BOX 817  
LA CROSSE, WI 54602-0817  
PH: (608) 787-1381  
michael.lydon@dairylandpower.com

DE SOTO WWTF - SANITARY SEWER  
STEVE HOLT  
P.O. BOX 65  
DE SOTO, WI 54624  
PH: (608) 498-2071  
vdesoto@mwt.net

MEDIACOM WISCONSIN LLC -  
COMLN  
CRAIG EGGERT  
1240 HIGHWAY 52  
CHATFIELD, MN 55923  
PH: (563) 419-5160  
ceggert@mediacomcc.com

VERNON ELECTRIC COOPERATIVE -  
ELECT  
MARK SEE  
110 SAUGSTAD RD.  
WESTBY, WI 54667-1199  
PH: (608) 634-3121  
msee@vernonelectric.org

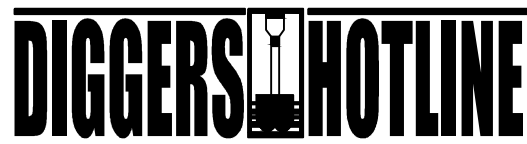
VERNON COMMUNICATIONS COOPERATIVE-  
COMLN  
SCOTT FREDERICK  
103 N MAIN ST.  
WESTBY, WI 54667  
PH: (608) 632-0607  
sfrederick@vernoncom.coop

XCEL ENERGY - ELECT  
DAVID MELSNESS  
414 W HAMILTON AVE  
P.O. BOX 8  
EAU CLAIRE, WI 54702  
PH: (715) 737-1495  
david.j.melsness@xcelenergy.com

WINDSTREAM KDL LLC-  
COMLN  
LORI KETTER  
969 WAUBE LANE  
GREEN BAY, WI 54302  
PH: (920) 410-6902  
lori.ketter@windstream.com

DNR CONTACT

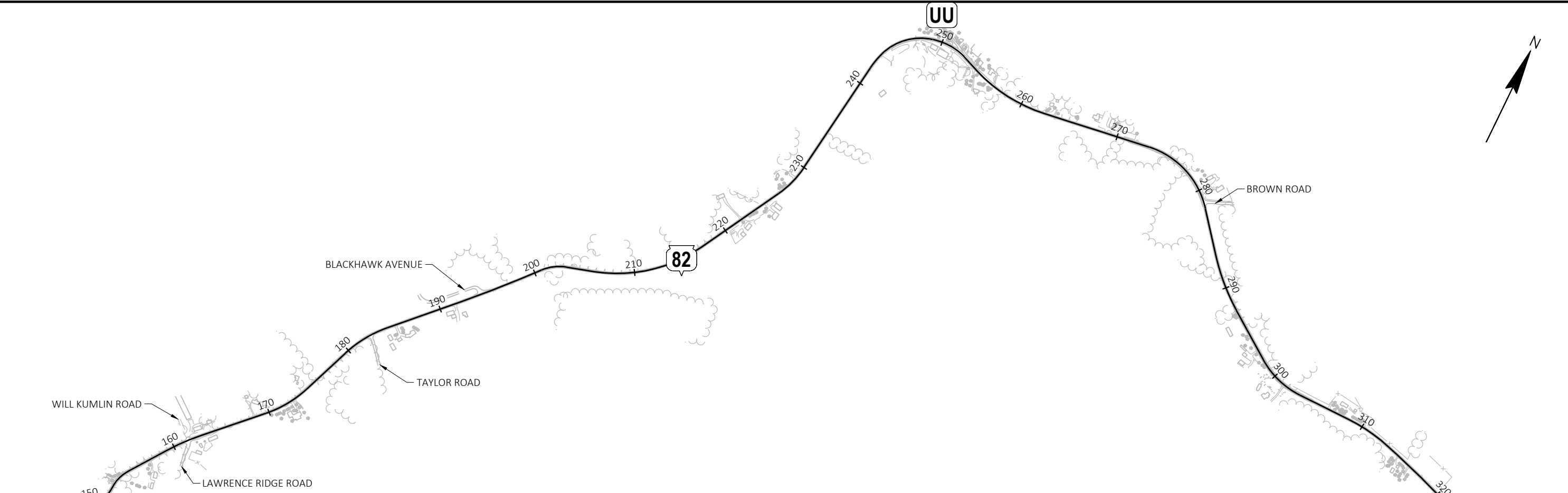
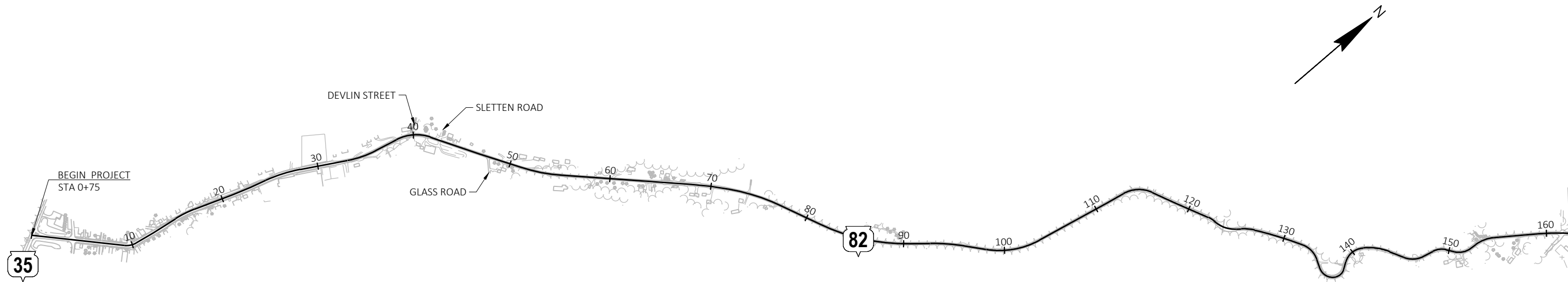
DEPARTMENT OF NATURAL RESOURCES  
3550 MORMON COULEE ROAD  
LA CROSSE, WI 54601  
ATTN: KAREN KALVELAGE  
ENVIRONMENTAL ANALYSIS & REVIEW SPECIALIST  
PH: (608) 785-9115  
karen.kalvelage@wisconsin.gov



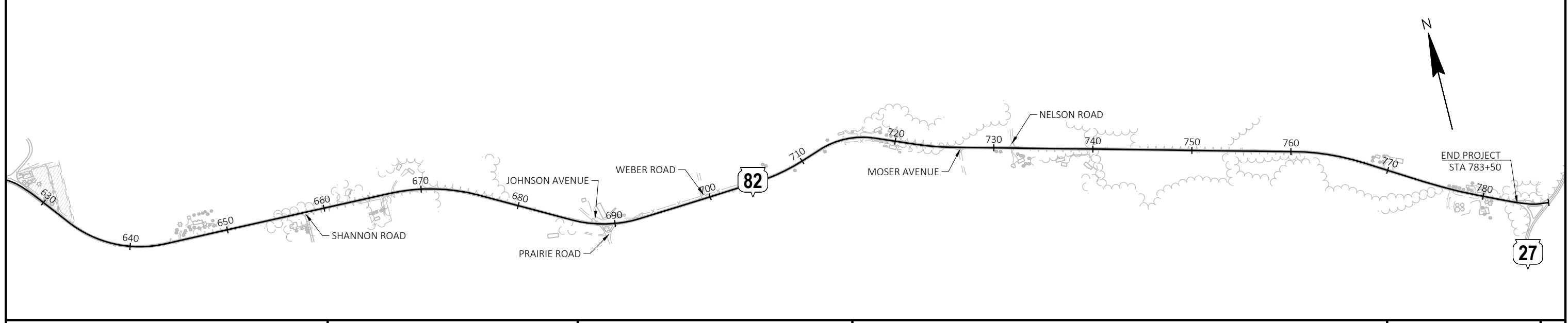
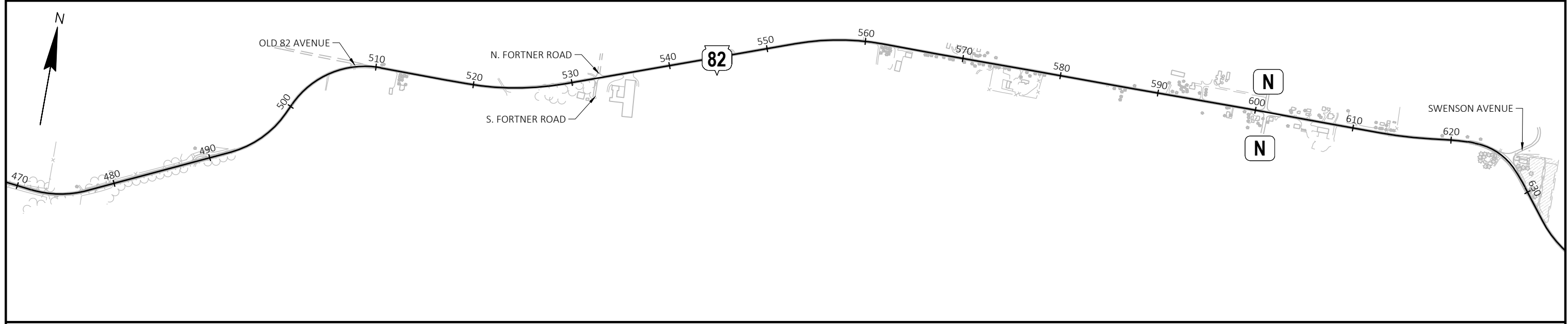
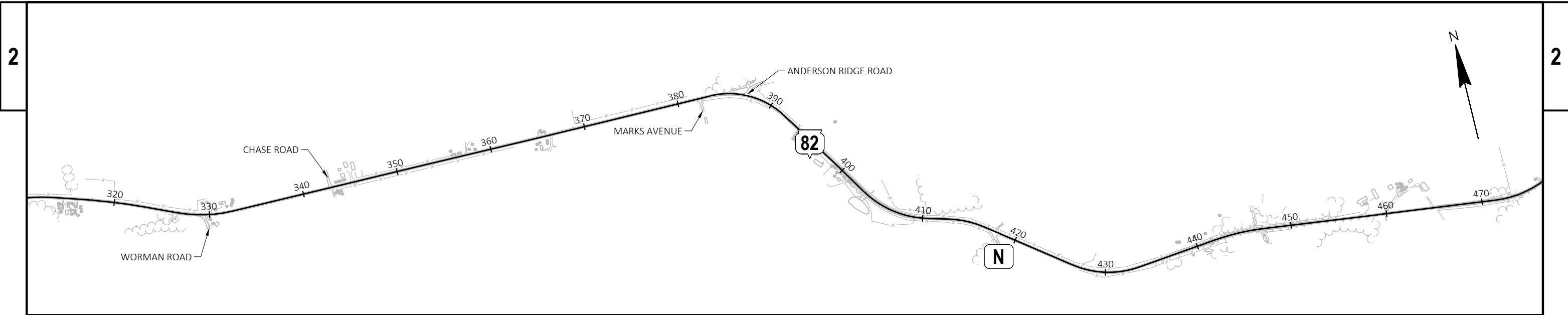
Dial **811** or (800)242-8511

www.DiggersHotline.com

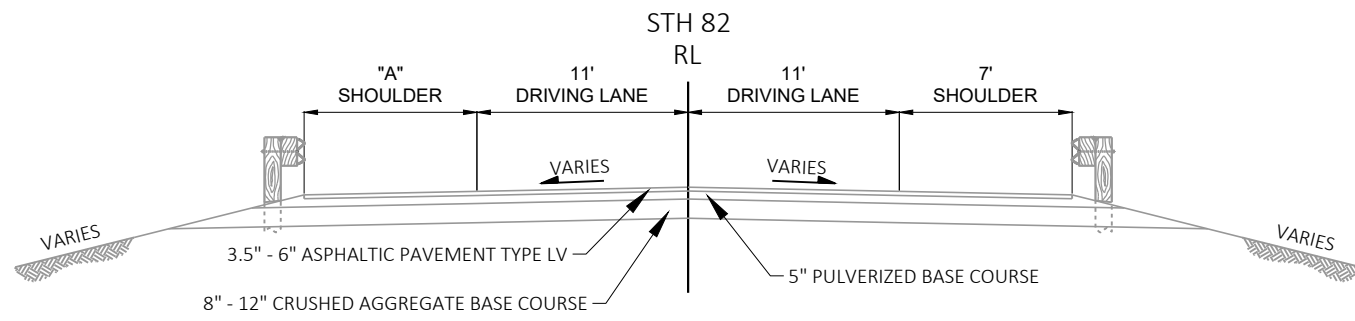
\* - NOT A MEMBER OF DIGGER'S HOTLINE.



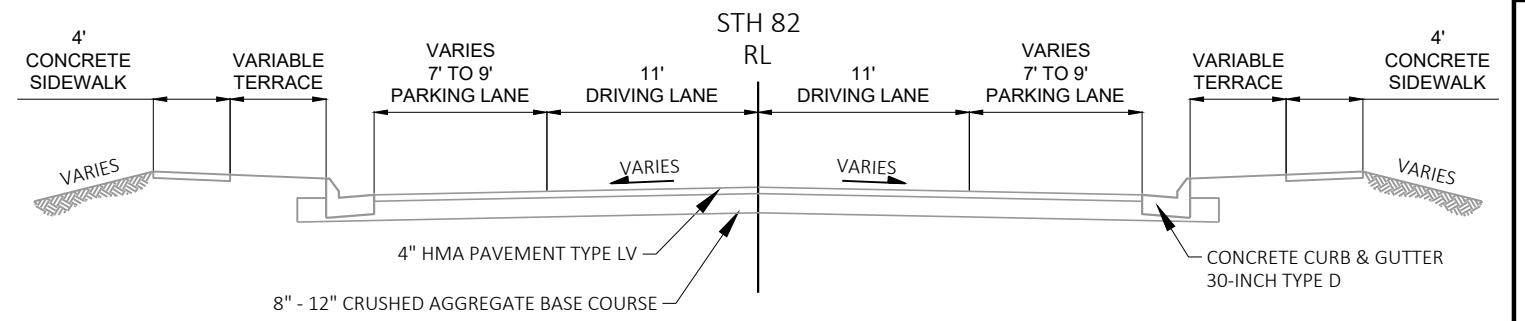
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PROJECT OVERVIEW	SHEET	E
------------------------	-------------	----------------	------------------	-------	---



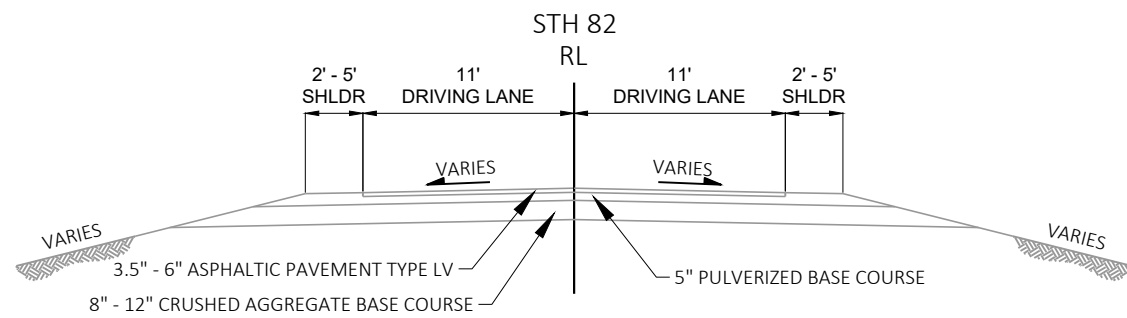
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PROJECT OVERVIEW	SHEET	E
------------------------	-------------	----------------	------------------	-------	---



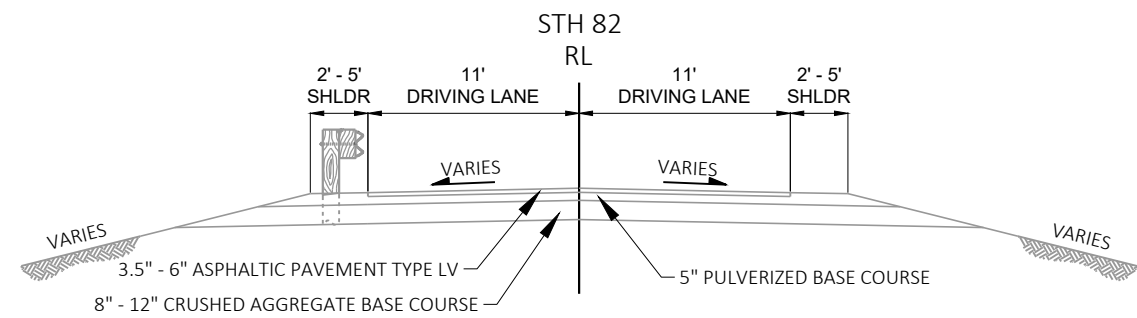
**EXISTING TYPICAL SECTION**  
 STA 0+75 TO STA 1+50 (A = 26' TO 9')  
 STA 1+50 TO STA 4+00 (A = 9')



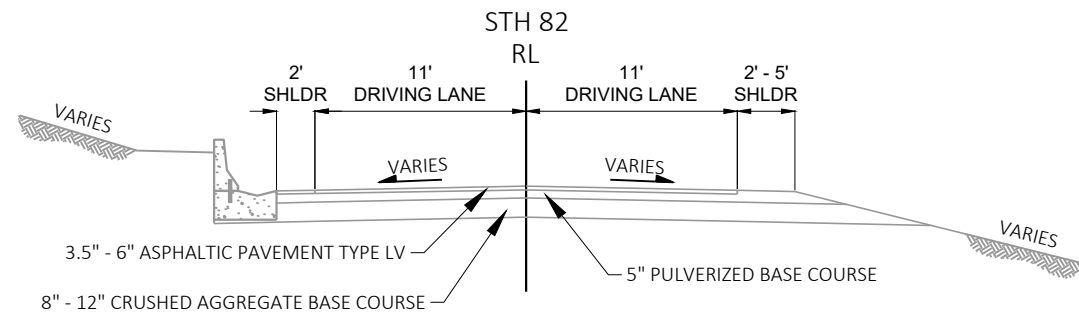
**EXISTING TYPICAL SECTION**  
 STA 4+00 TO STA 31+31



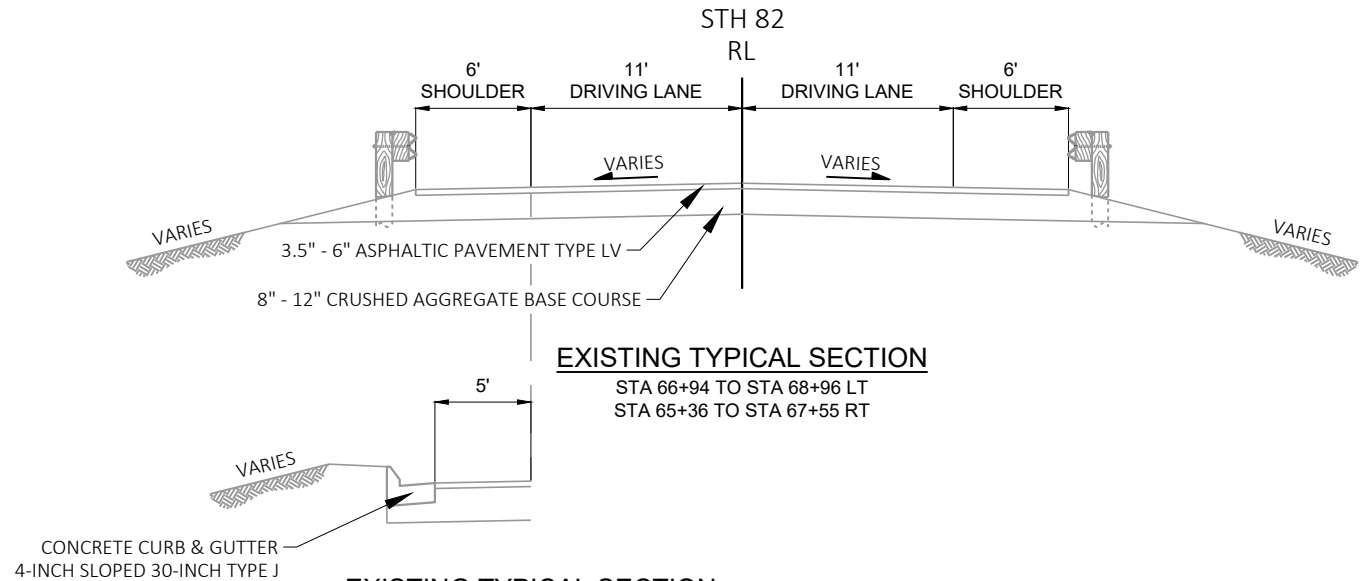
**EXISTING TYPICAL SECTION**  
 STA 31+31 TO STA 34+23  
 STA 37+97 TO STA 65+05  
 STA 68+96 TO STA 112+20  
 STA 152+86 TO STA 202+50  
 STA 206+45 TO STA 783+50



**EXISTING TYPICAL SECTION**  
 STA 34+23 TO STA 34+81  
 STA 37+25 TO STA 37+97  
 STA 138+80 TO STA 152+86  
 STA 202+50 TO STA 206+45

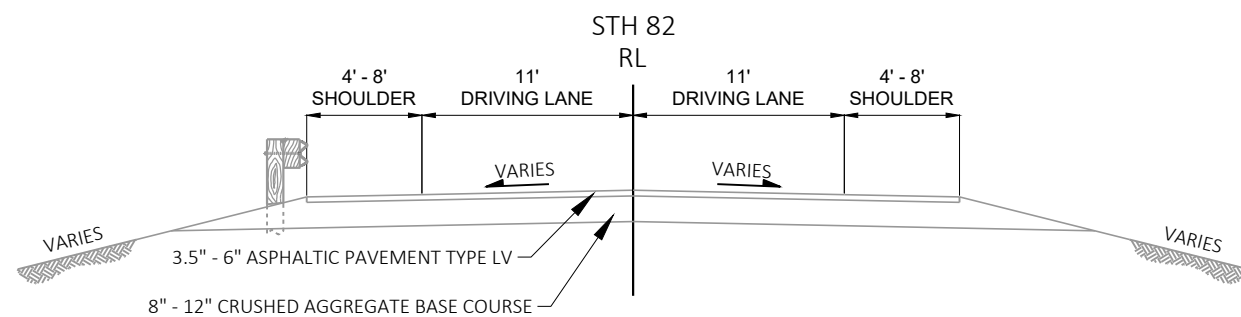


**EXISTING TYPICAL SECTION**  
STA 34+81 TO STA 37+25

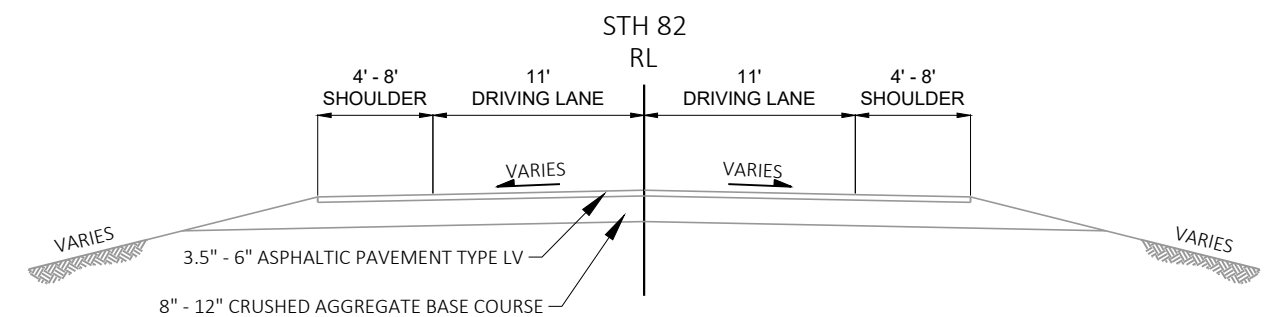


**EXISTING TYPICAL SECTION**  
STA 66+94 TO STA 68+96 LT  
STA 65+36 TO STA 67+55 RT

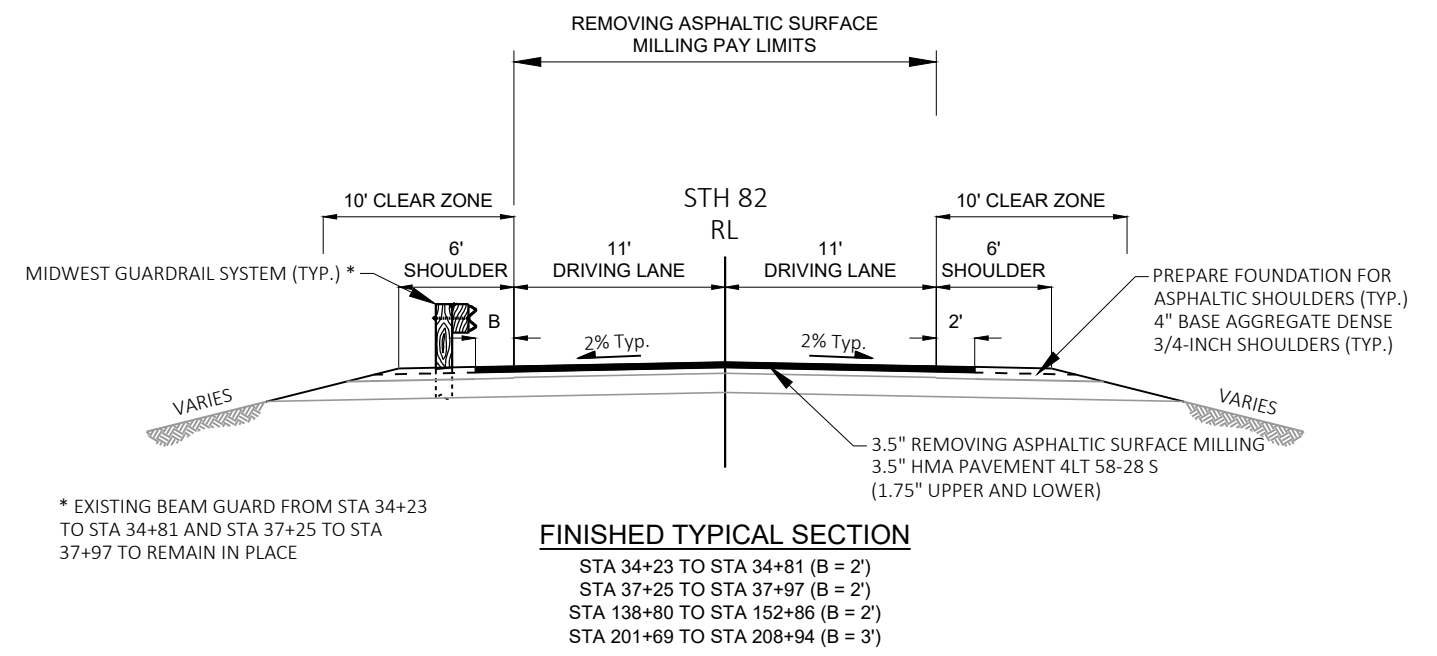
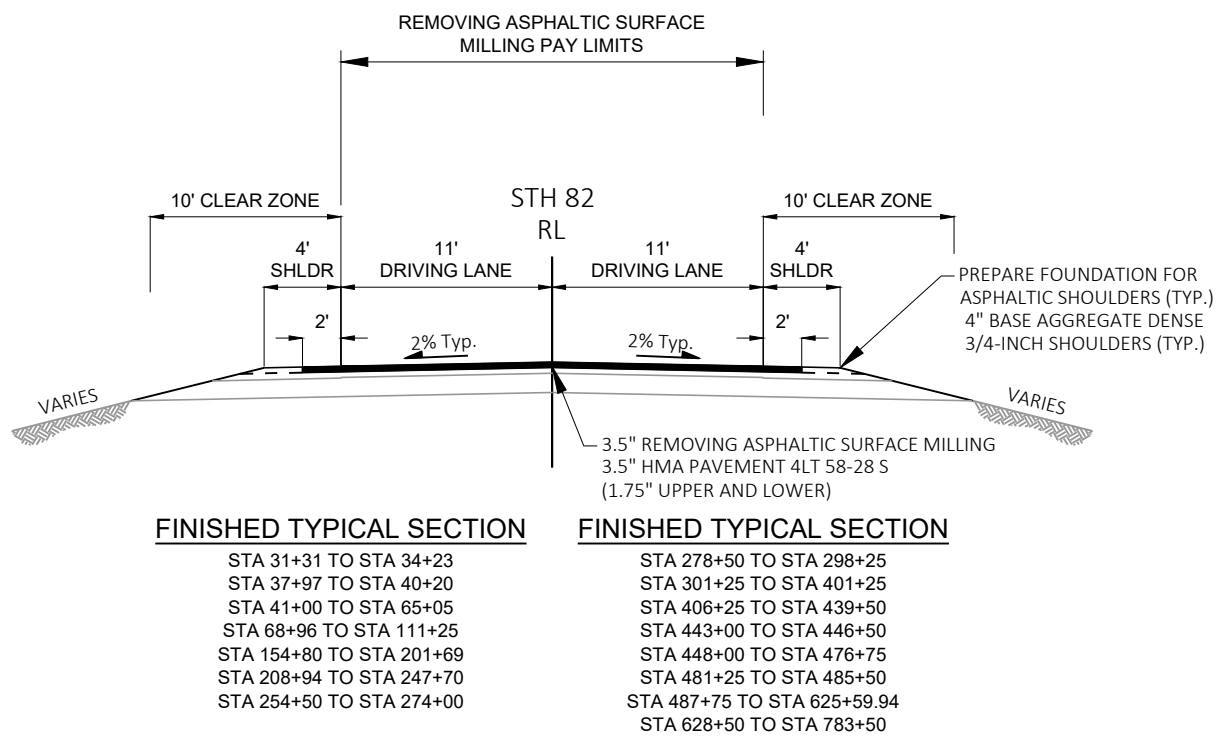
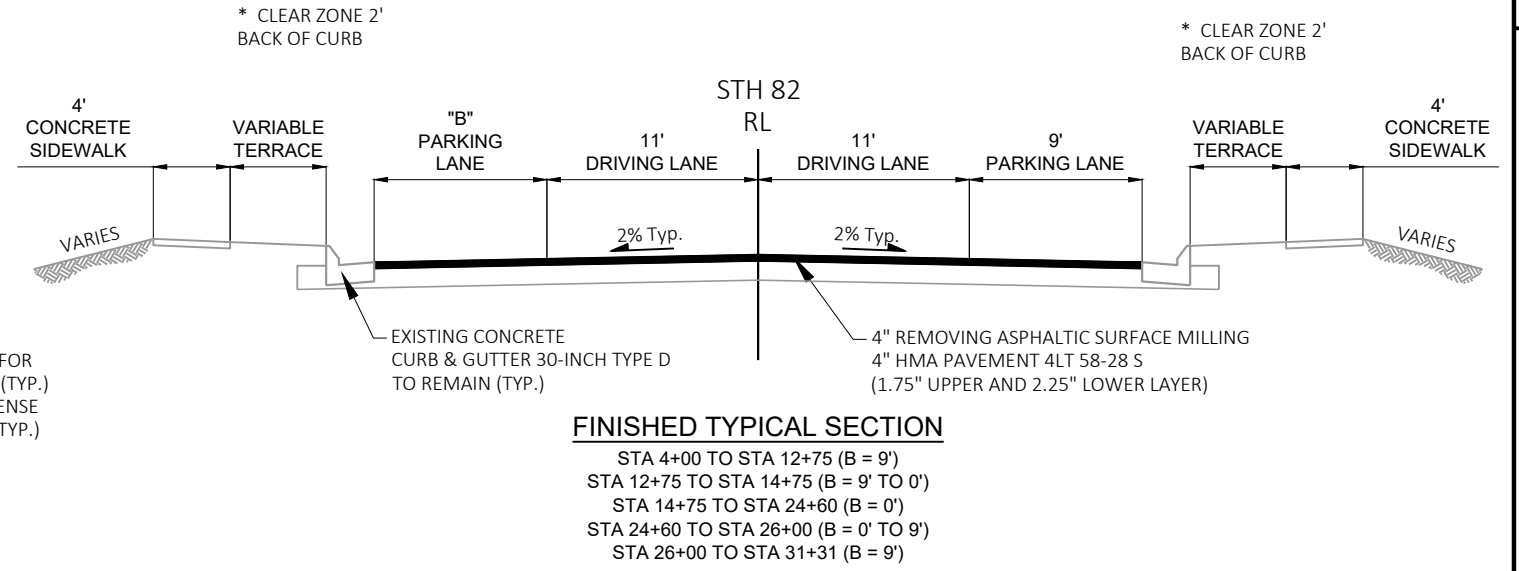
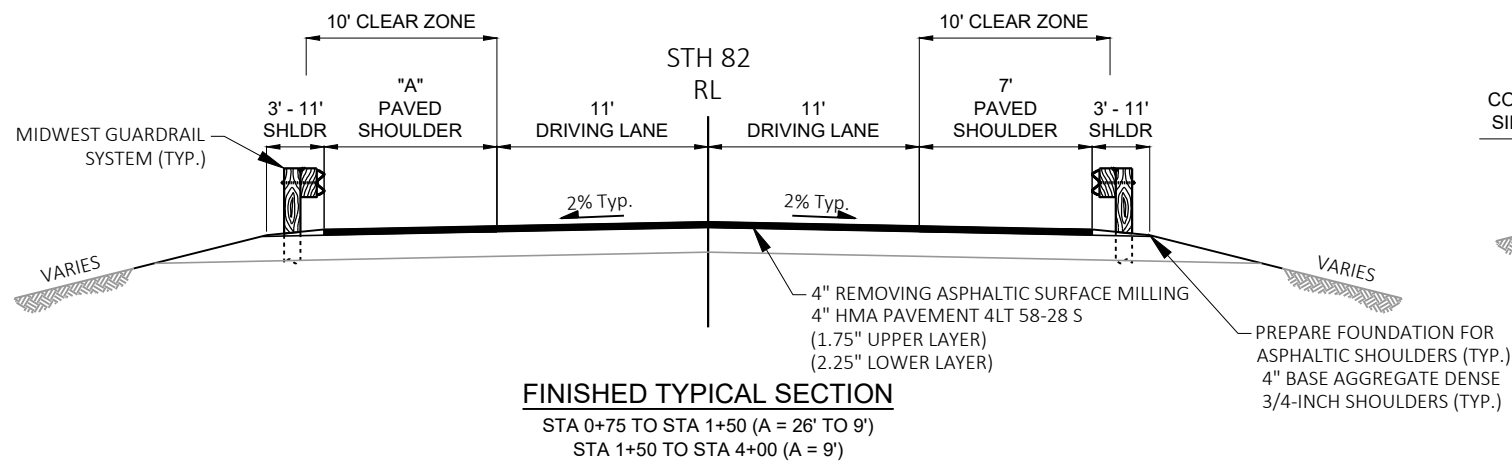
**EXISTING TYPICAL SECTION**  
STA 65+05 TO STA 66+94 LT



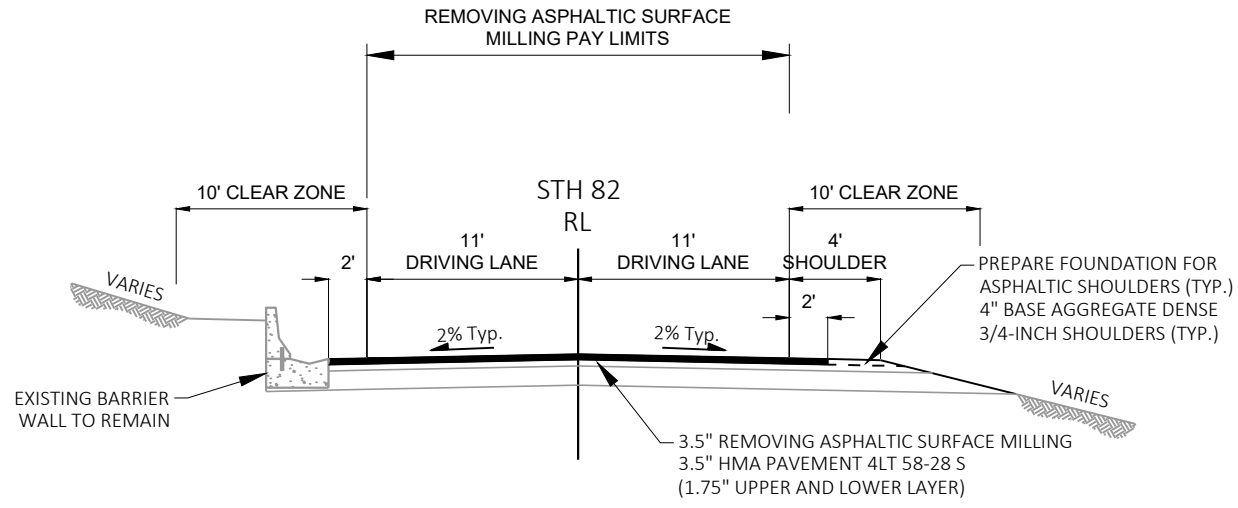
**EXISTING TYPICAL SECTION**  
STA 112+20 TO STA 123+00  
STA 125+13 TO STA 133+93



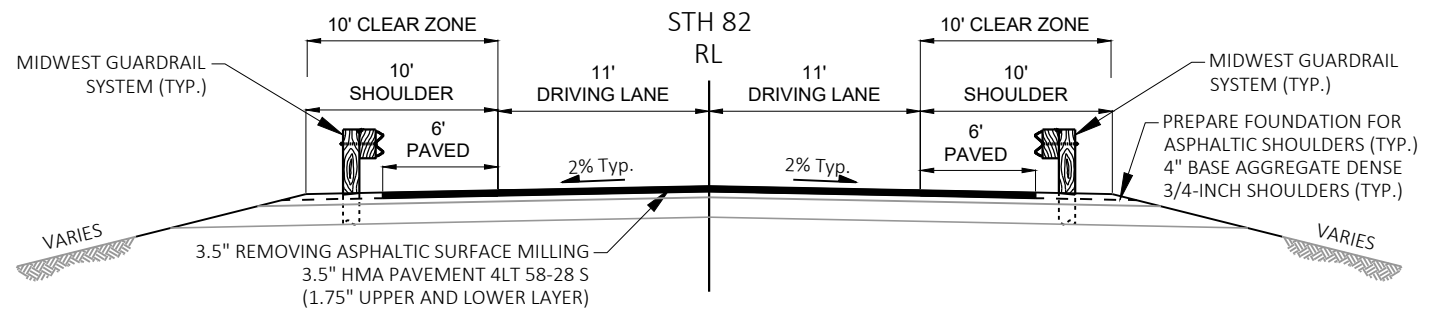
**EXISTING TYPICAL SECTION**  
STA 123+00 TO STA 125+13  
STA 133+93 TO STA 138+80



NOTE: MILLING DEPTH MOST LIKELY TO ENCOUNTER MILLINGS (ASPHALT BASE) FROM PREVIOUS PROJECT. EXPECTED THAT THIS MILLING IS STABLE AND COMPACT.

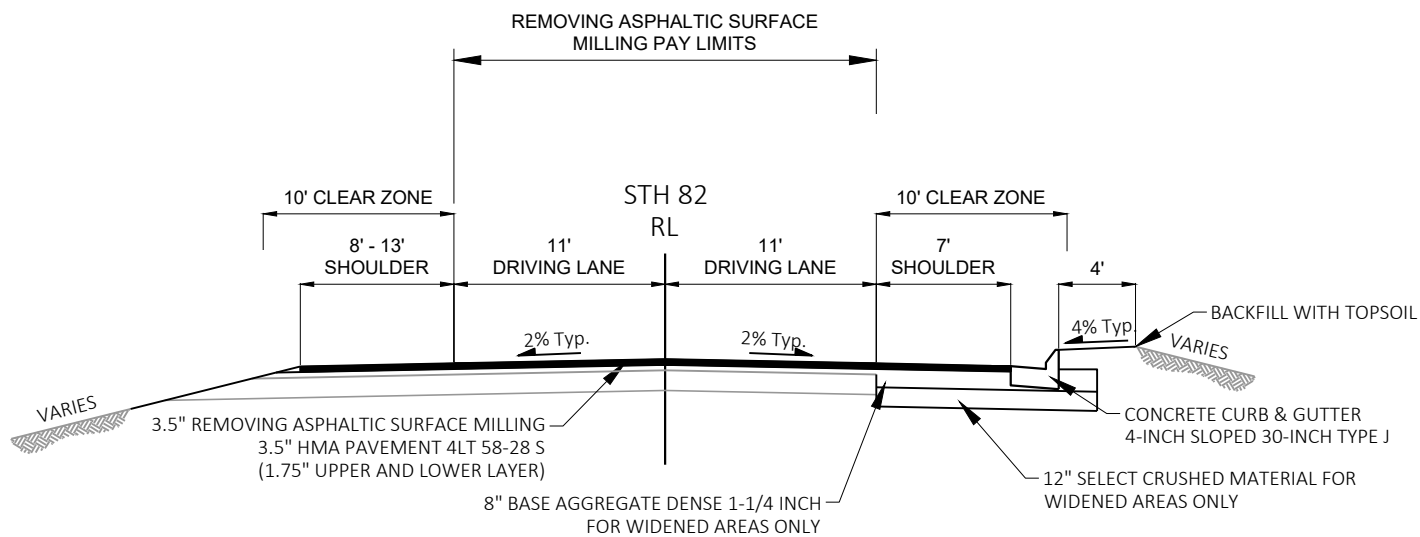


**FINISHED TYPICAL SECTION**  
STA 34+81 TO STA 37+25

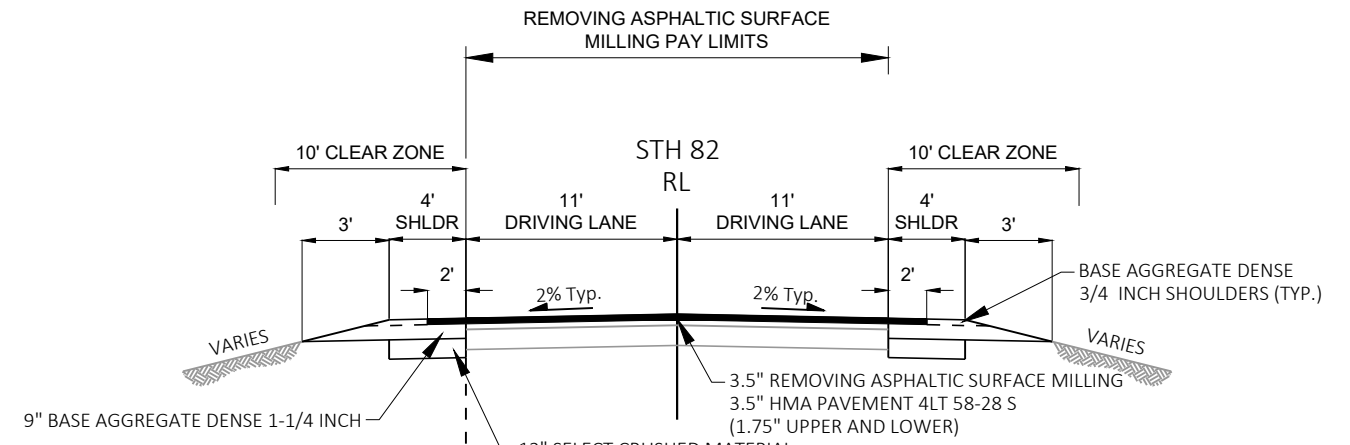


**FINISHED TYPICAL SECTION**  
STA 65+36 TO STA 68+96

NOTE: MILLING DEPTH MOST LIKELY TO ENCOUNTER MILLINGS (ASPHALT BASE) FROM PREVIOUS PROJECT. EXPECTED THAT THIS MILLING IS STABLE AND COMPACT.

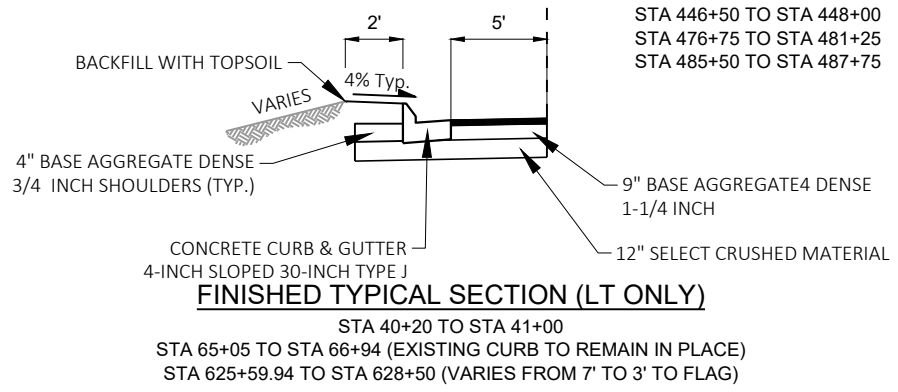


**FINISHED TYPICAL SECTION**  
STA 247+70 TO STA 254+50



**FINISHED TYPICAL SECTION**

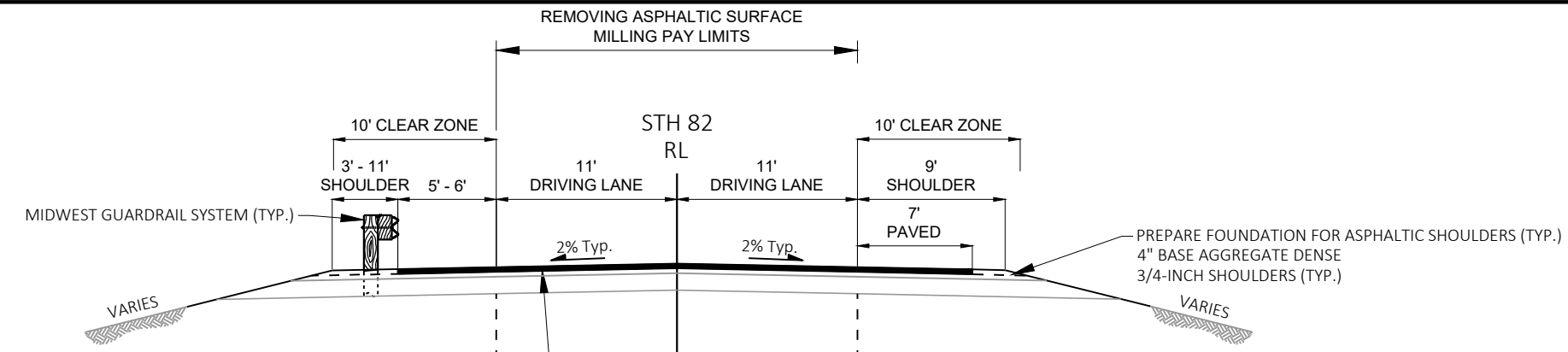
- STA 274+00 TO STA 278+50
- STA 298+25 TO STA 301+25
- STA 401+25 TO STA 406+25
- STA 439+50 TO STA 443+00
- STA 446+50 TO STA 448+00
- STA 476+75 TO STA 481+25
- STA 485+50 TO STA 487+75



**FINISHED TYPICAL SECTION (LT ONLY)**

- STA 40+20 TO STA 41+00
- STA 65+05 TO STA 66+94 (EXISTING CURB TO REMAIN IN PLACE)
- STA 625+59.94 TO STA 628+50 (VARIES FROM 7' TO 3' TO FLAG)



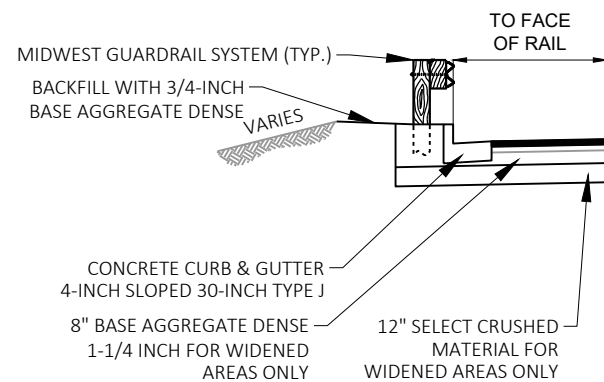


**FINISHED TYPICAL SECTION (LT ONLY)**

STA 111+25 TO STA 115+00  
 STA 131+95 TO STA 134+19  
 STA 138+19 TO STA 145+31  
 STA 147+28 TO STA 150+43  
 STA 152+23 TO STA 152+82

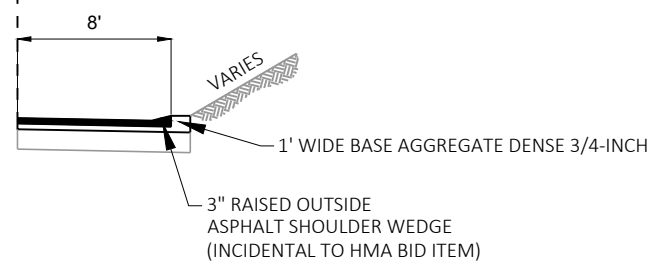
**FINISHED TYPICAL SECTION (RT ONLY)**

STA 111+25 TO STA 122+00  
 STA 126+00 TO STA 138+80



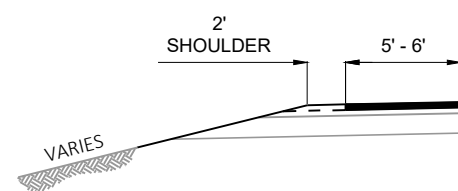
**FINISHED TYPICAL SECTION (LT ONLY)**

\* STA 115+00 TO STA 122+00 (5')  
 \* STA 126+00 TO STA 131+95 (4')  
 \* STA 145+31 TO STA 147+28 (3')  
 \* STA 150+43 TO STA 152+23 (3')



**FINISHED TYPICAL SECTION (RT ONLY)**

STA 138+80 TO STA 154+80



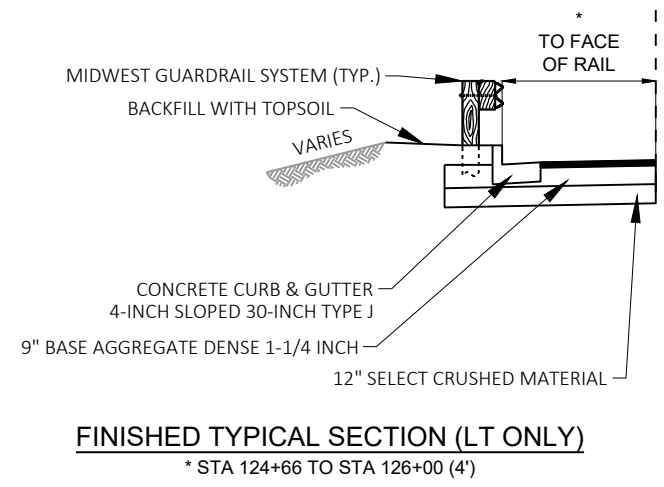
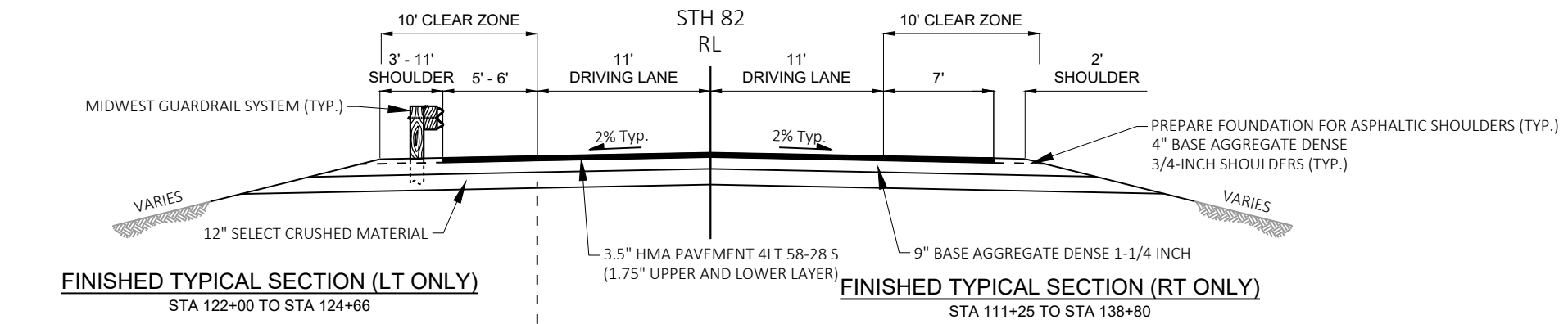
**FINISHED TYPICAL SECTION (LT ONLY)**

STA 134+19 TO STA 138+19  
 STA 152+82 TO STA 154+80

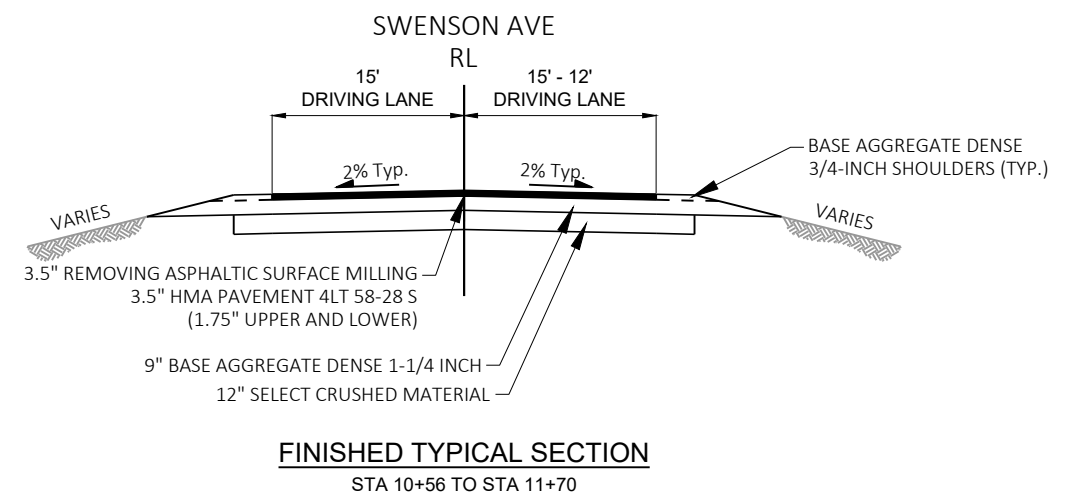
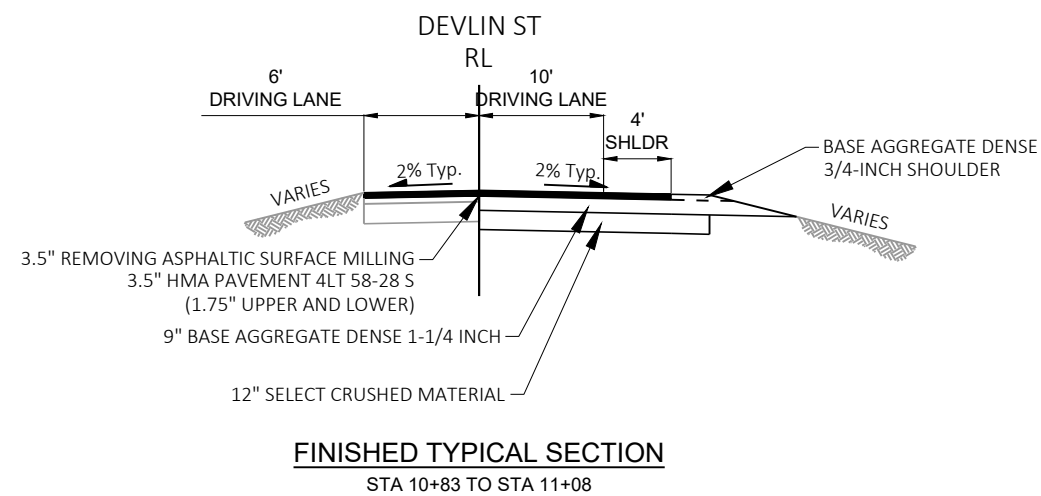
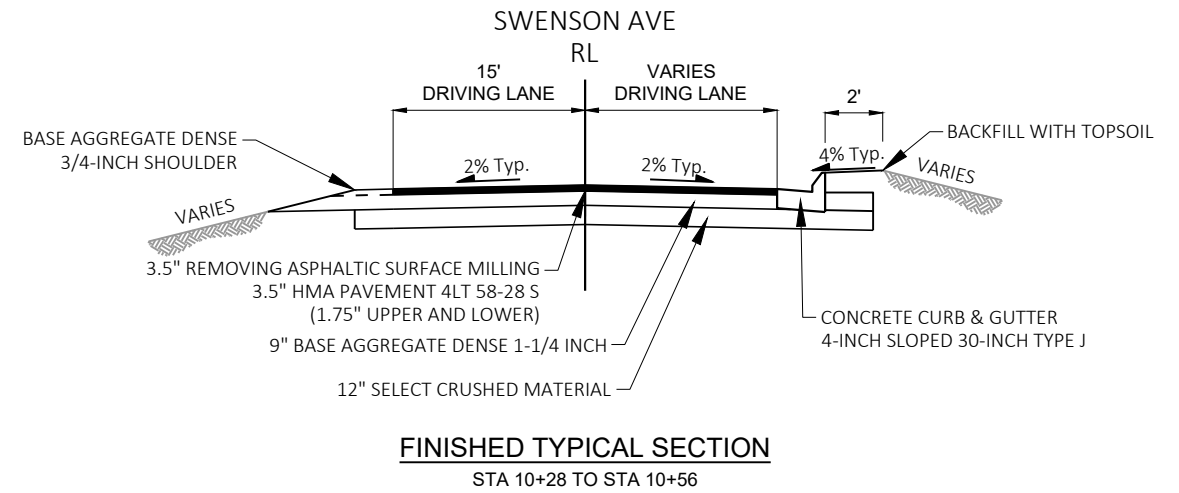
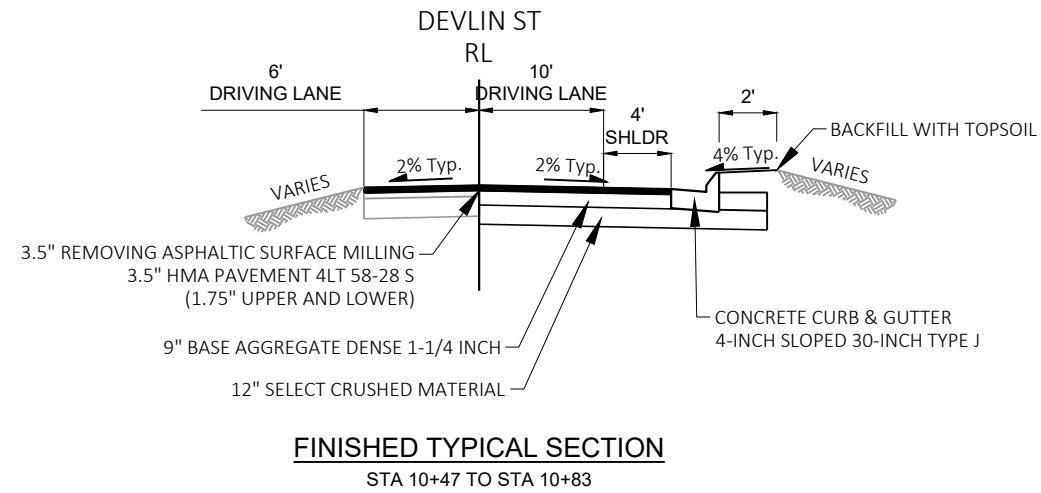
**FINISHED TYPICAL SECTION**

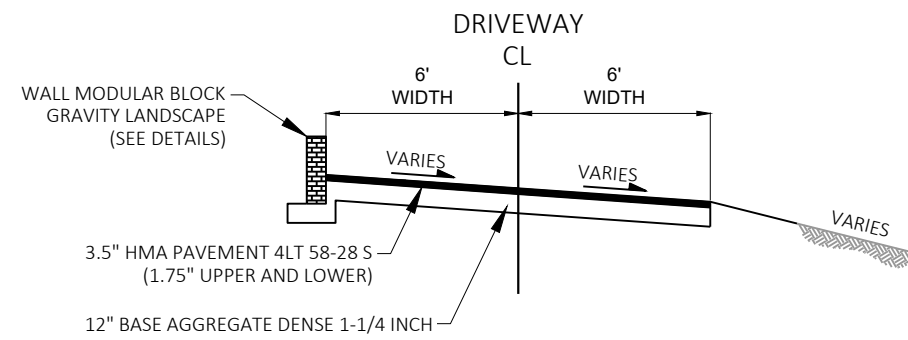
STA 111+25 TO STA 122+00  
 STA 126+00 TO STA 154+80

NOTE: MILLING DEPTH MOST LIKELY TO ENCOUNTER MILLINGS (ASPHALT BASE) FROM PREVIOUS PROJECT. EXPECTED THAT THIS MILLING IS STABLE AND COMPACT.



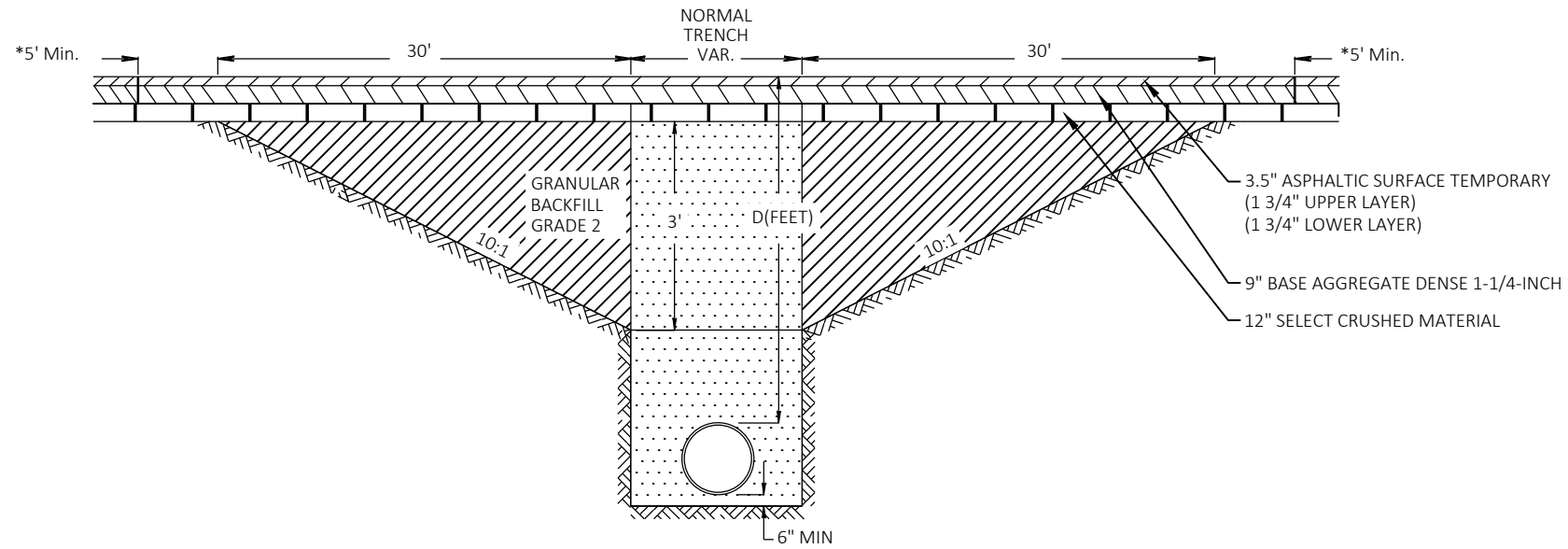
**FINISHED TYPICAL SECTION**  
STA 122+00 TO STA 126+00







**FINISHED TYPICAL SECTION**  
 STA 10+56 TO STA 11+70

\* PAVEMENT REMOVAL LIMITS (TYPICAL)

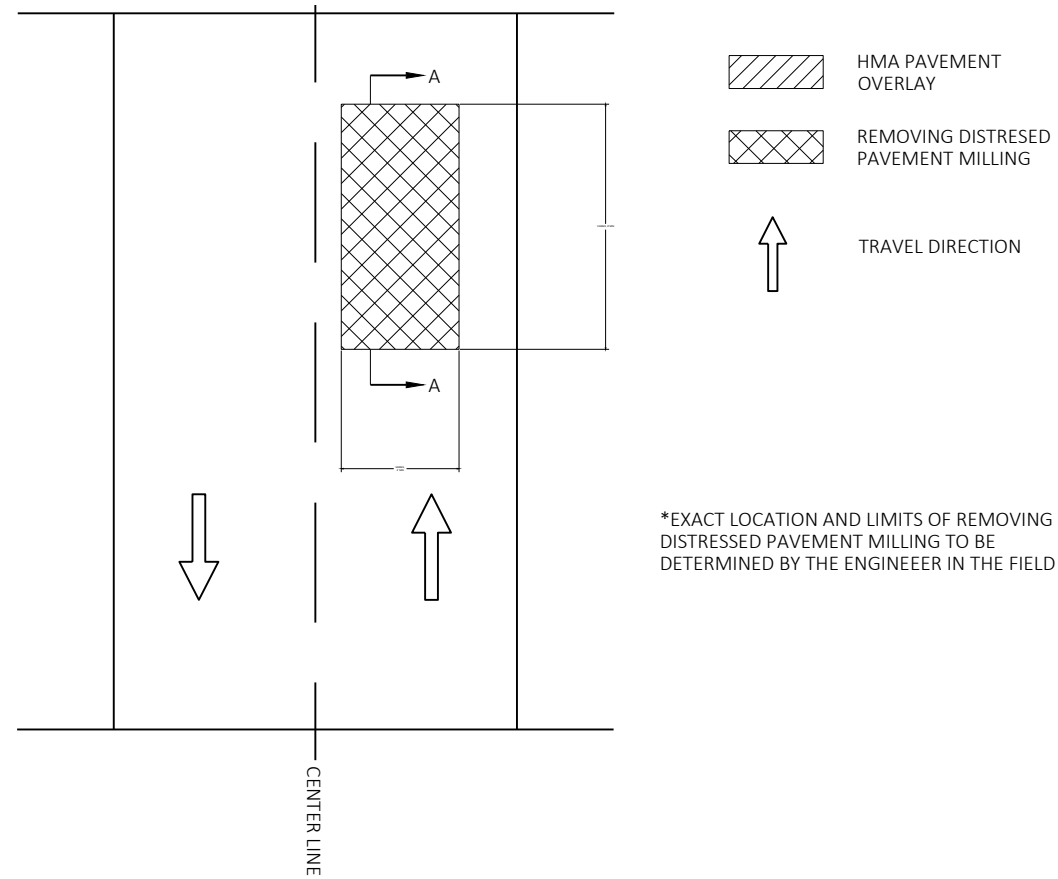
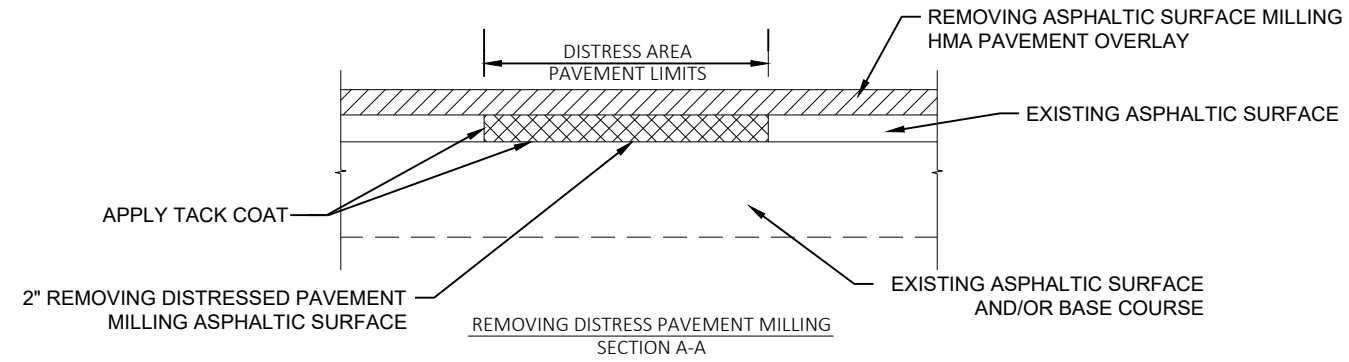


TRENCH CROSS SECTION

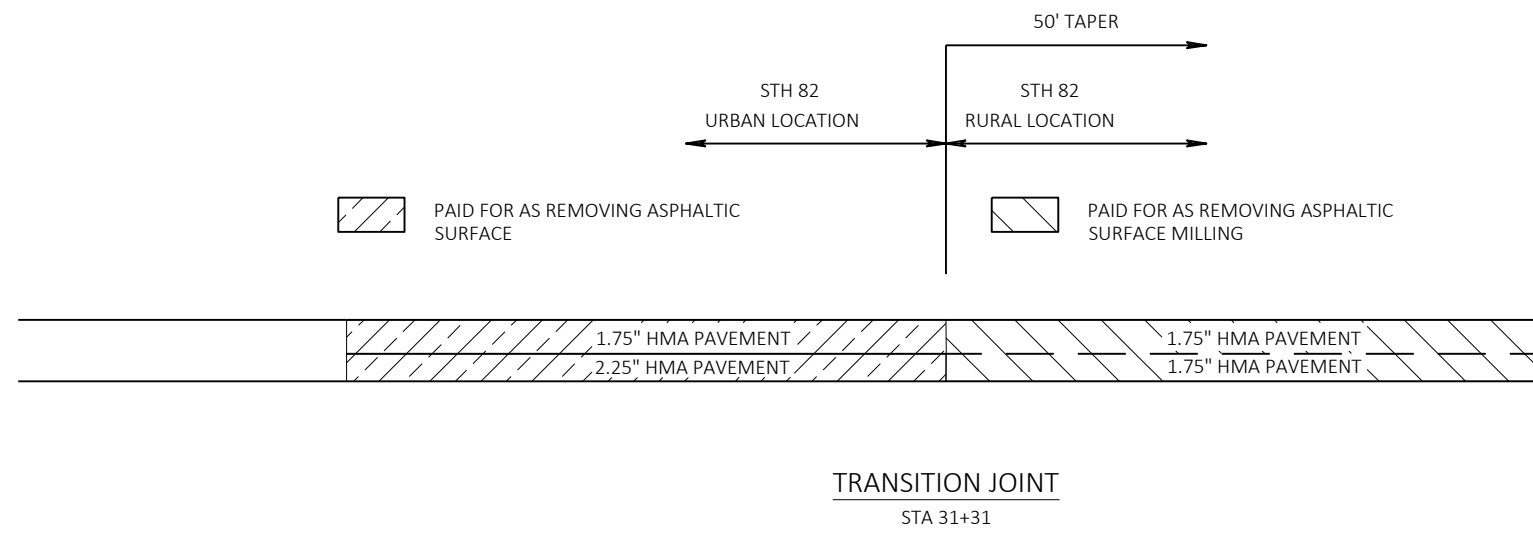
LEGEND

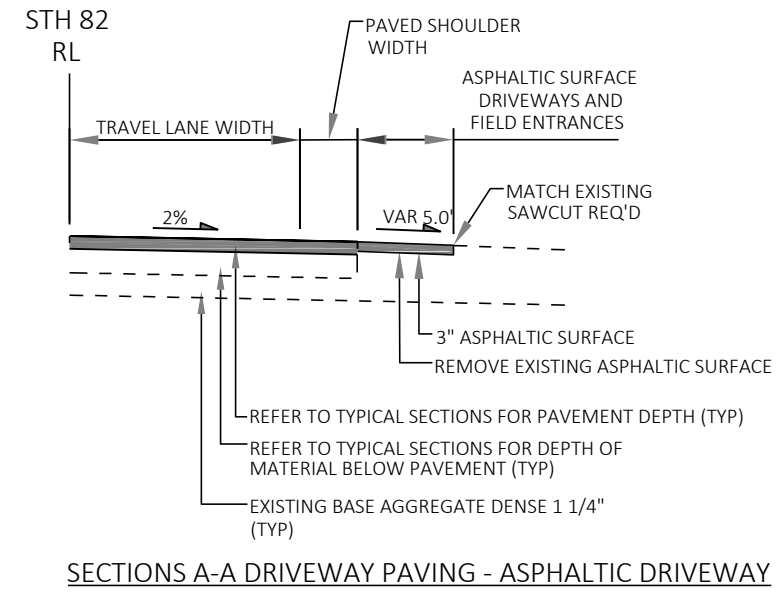
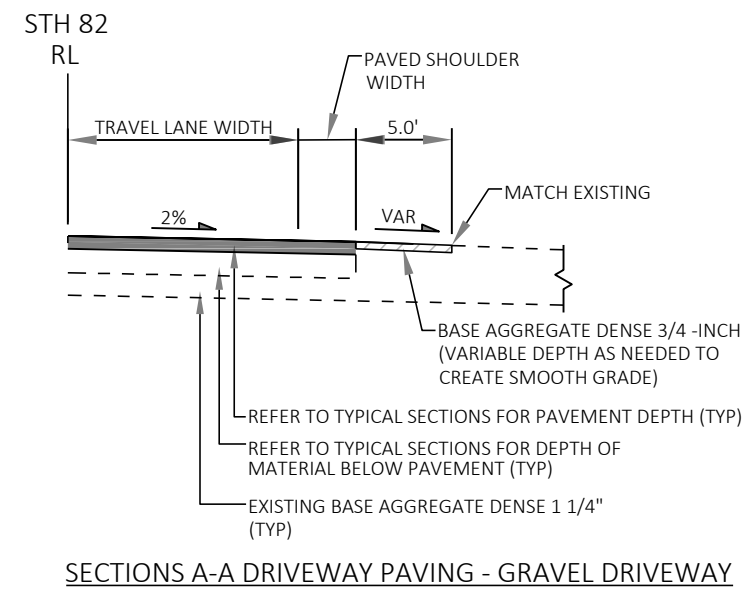
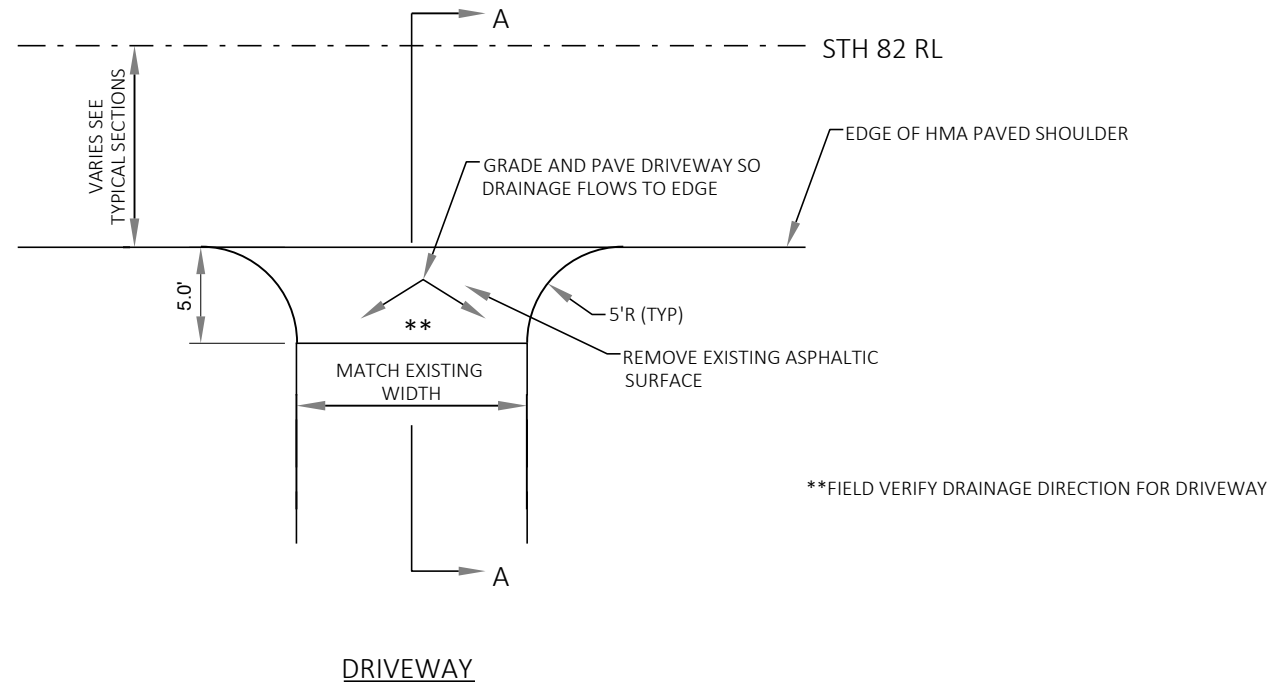
-  COMMON EXCAVATION & BACKFILL
-  EXCAVATION (INCIDENTAL TO REMOVING EXISTING CULVERT) & BACKFILL GRANULAR GRADE 2

STATION	DIAMETER	D(FT)
39+82	72"X113"	2.61
276+27	36"	9.77
299+73	36"	4.66
403+77	72"	3.57
478+13	84"	8.64
486+88	96"	5.52

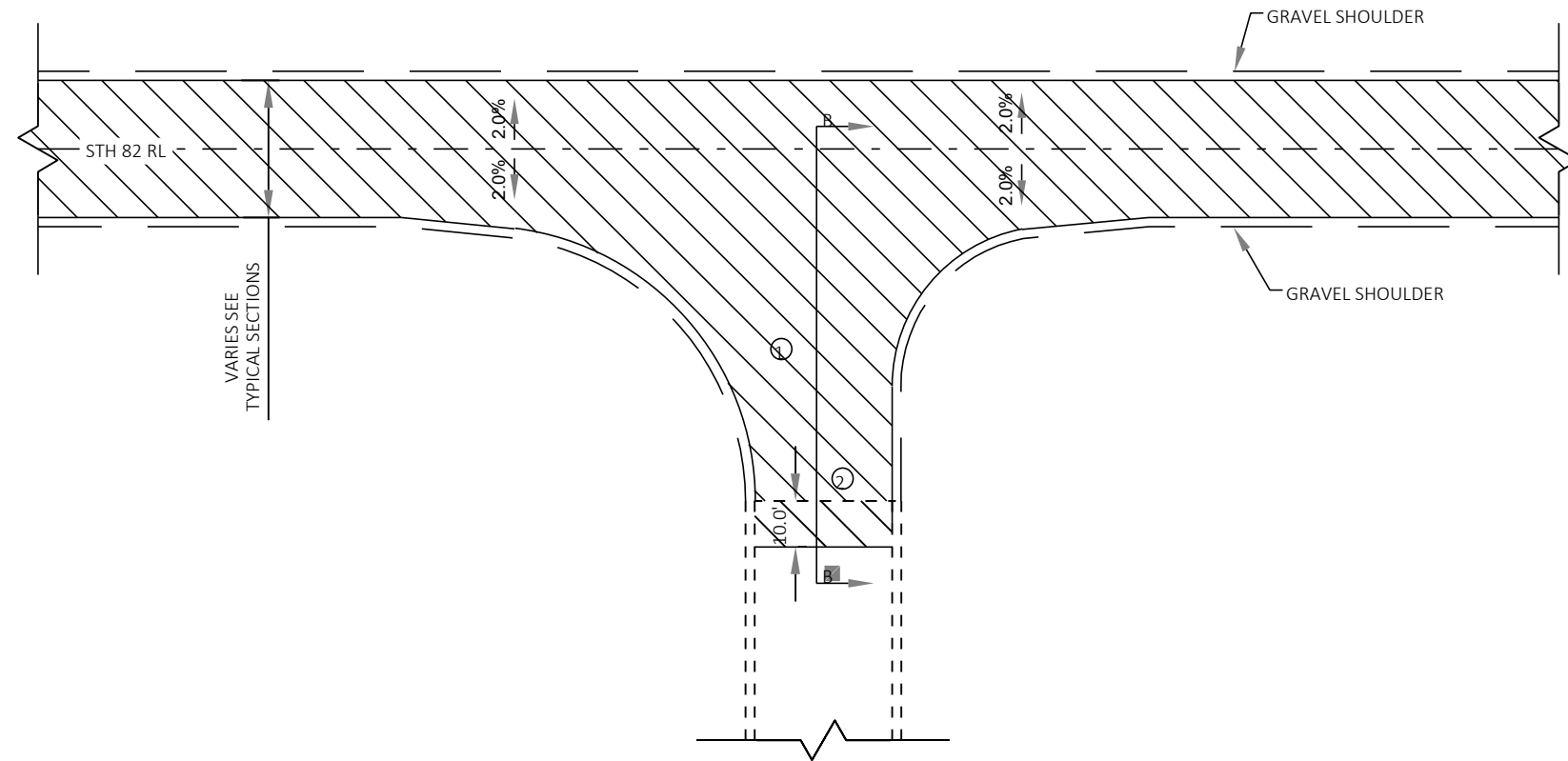


REMOVING DISTRESS PAVEMENT MILLING  
PLAN VIEW







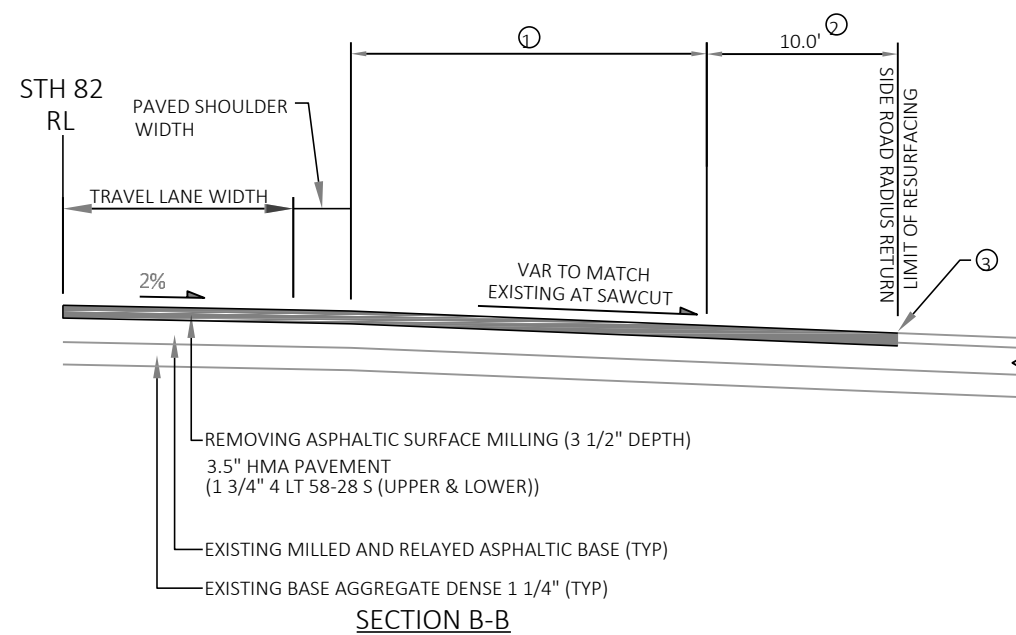


**INTERSECTION MILLING AND PAVING**  
WITH NO CURB AND GUTTER AROUND RADII

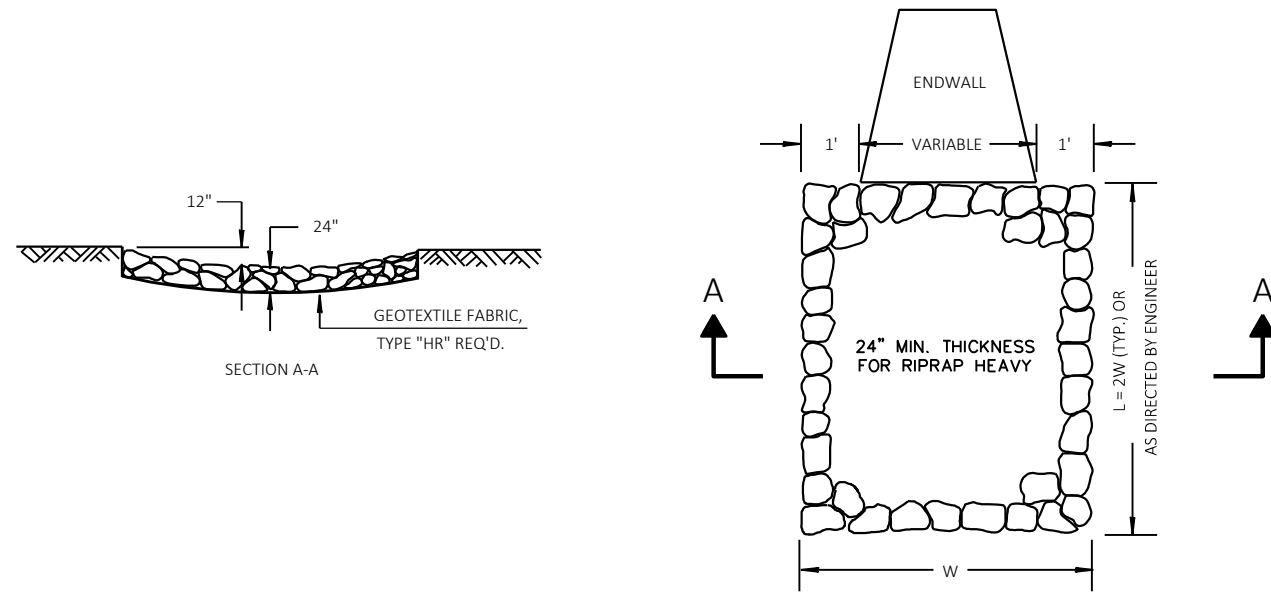
**NOTES**

- ① MILLING PAID AS "REMOVING ASPHALTIC SURFACE MILLING"
- ② MILLING LAST 10' PAID AS "REMOVING ASPHALTIC SURFACE BUTT JOINTS"
- ③ SAWCUT REQ'D TO 3.5" DEPTH ON CONTINUOUS ASPHALTIC PAVEMENT SIDE ROADS. RESURFACE TO ASPHALTIC LIMITS ON GRAVEL SIDE ROADS.

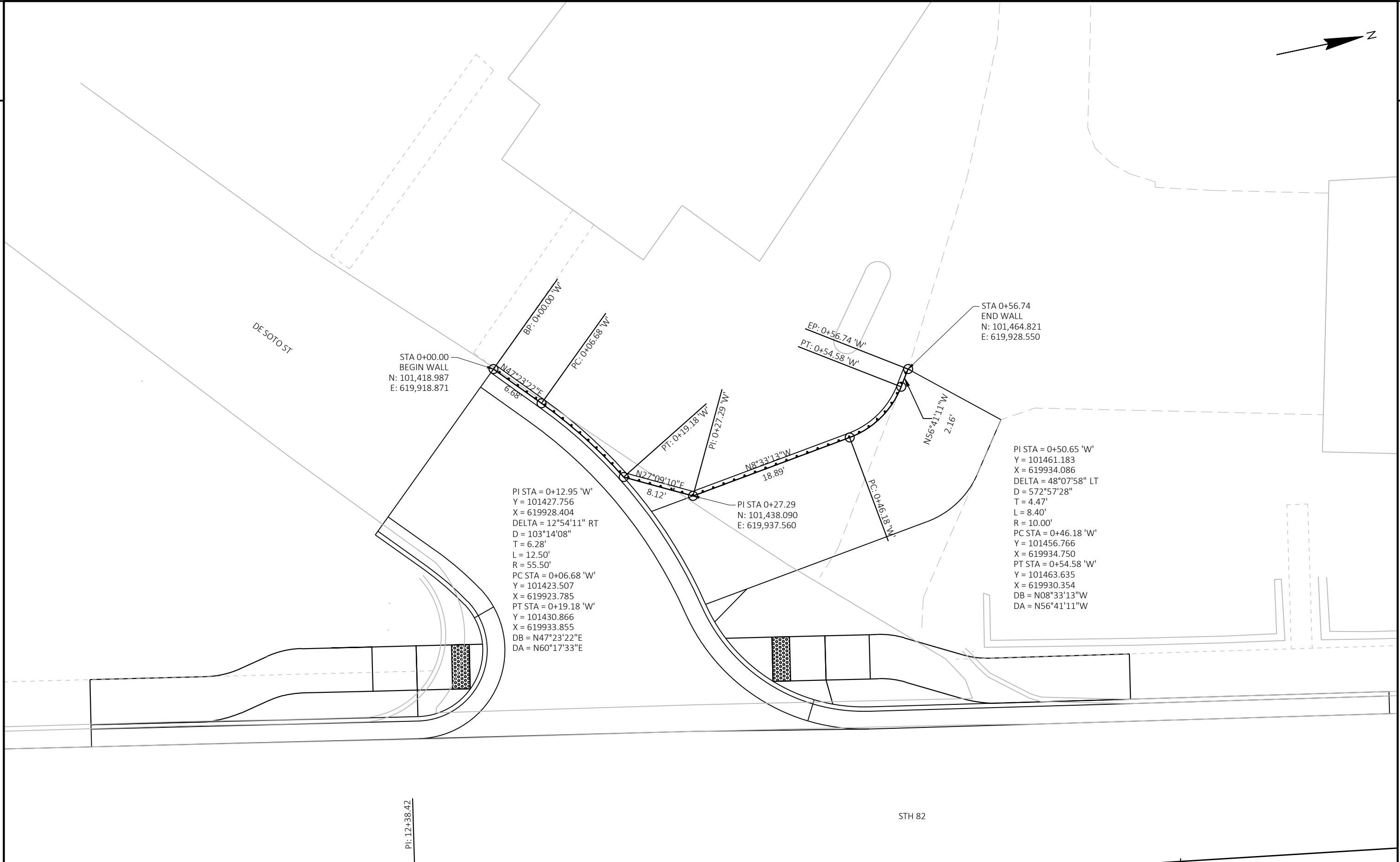
**LEGEND**



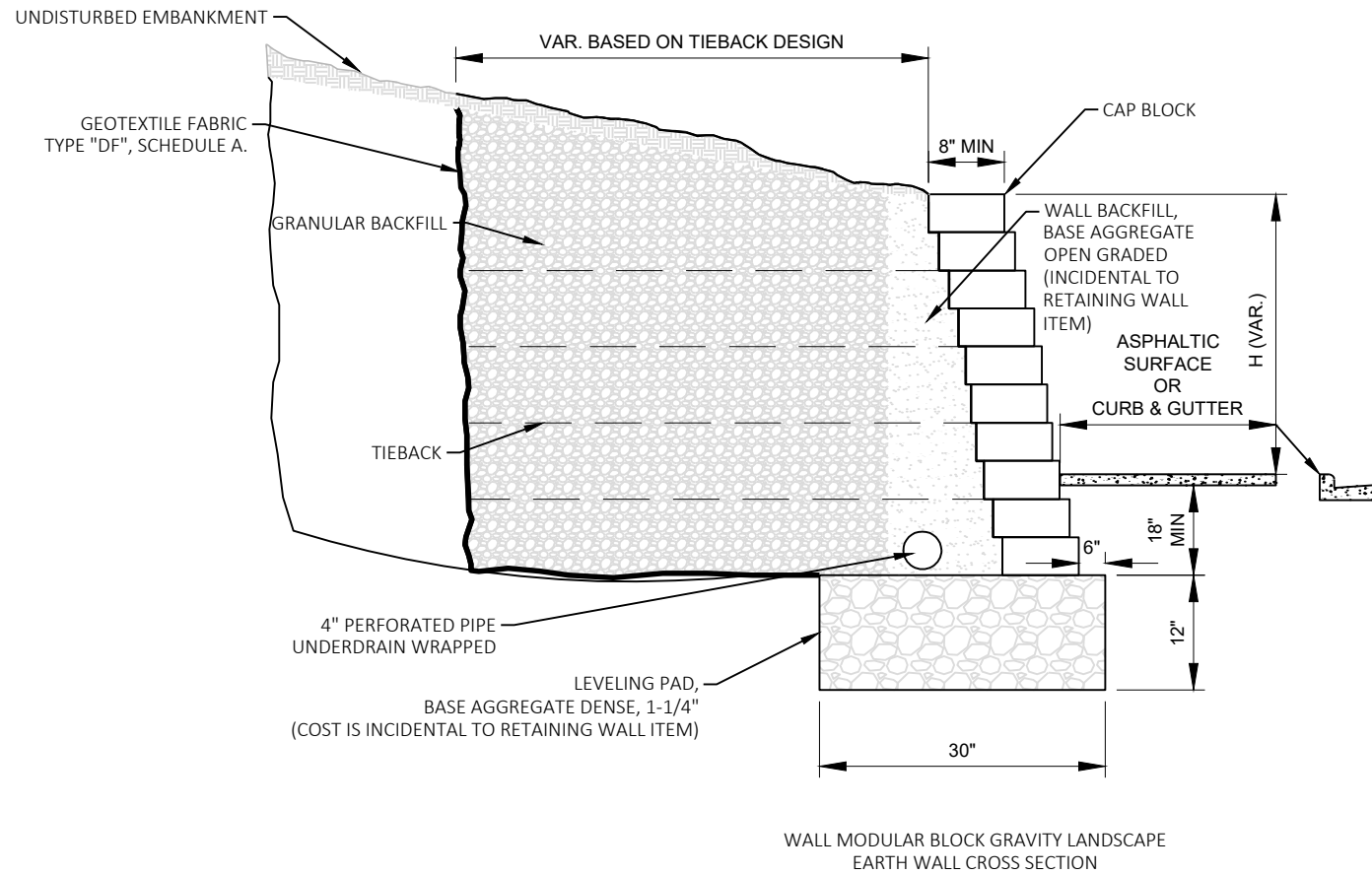
**SECTION B-B**



RIPRAP HEAVY TREATMENT AT CULVERTS

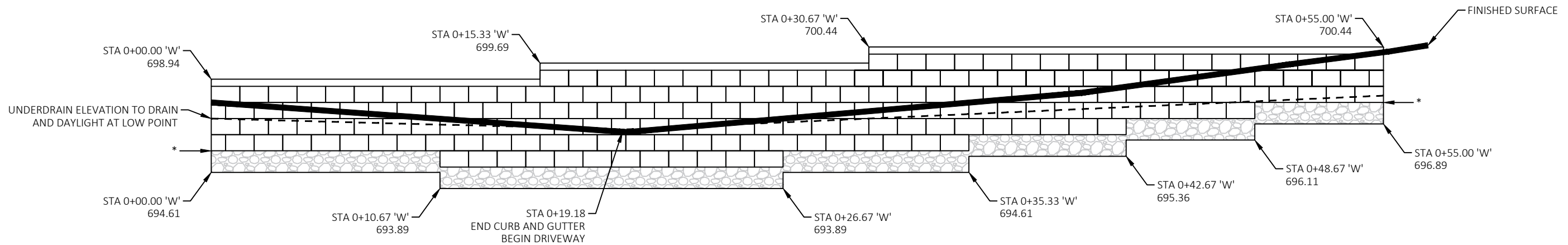


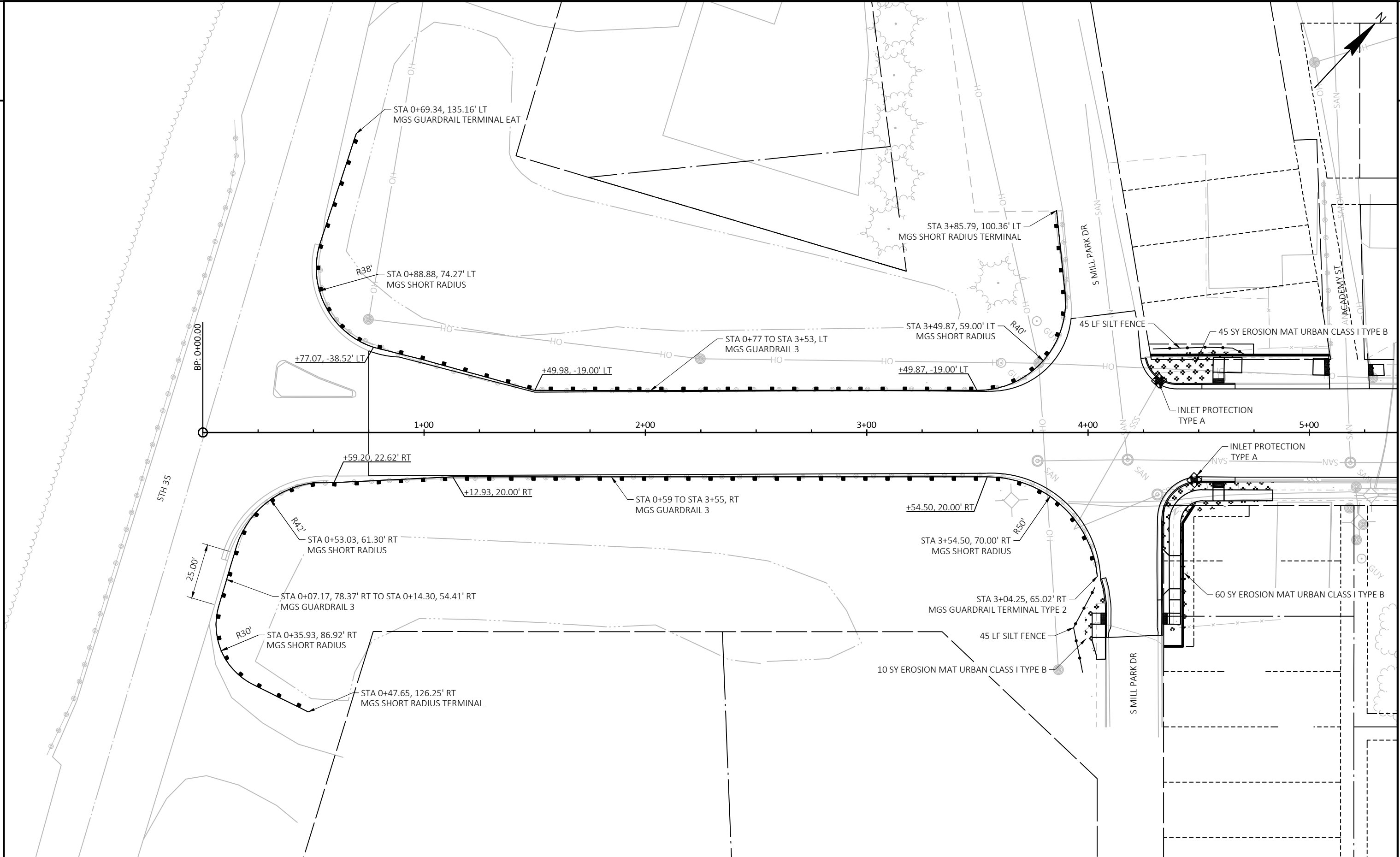
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	CONSTRUCTION DETAILS - WALL MODULAR BLOCK GRAVITY LANDSCAPE	SHEET	<b>E</b>
------------------------	-------------	----------------	---	-------	----------



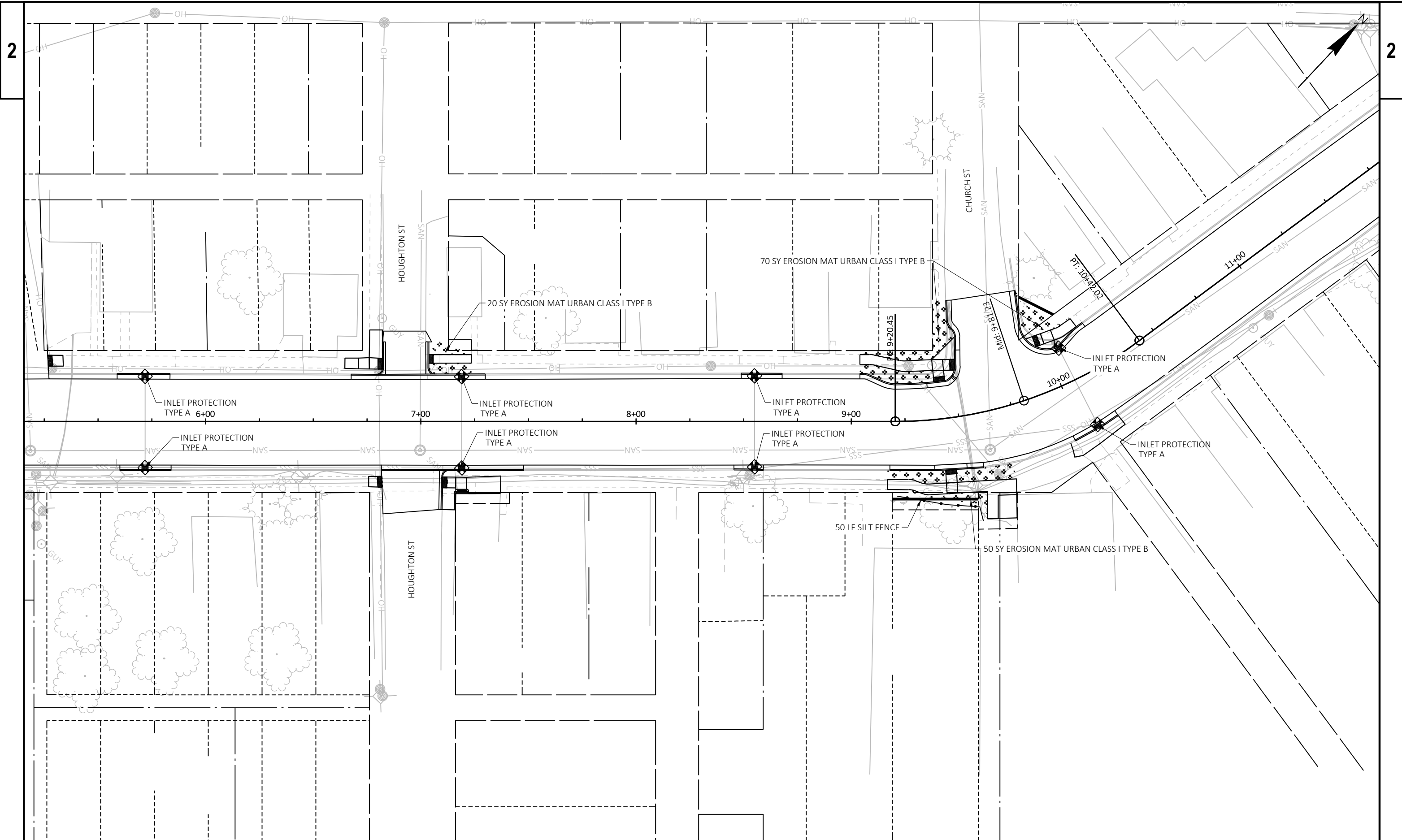
WALL MODULAR BLOCK GRAVITY LANDSCAPE (0+00 - 0+55) (215 SF)

\* PAY LIMITS IS TO BE CONSIDERED TO TOP OF LEVELING PAD





PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET	E
------------------------	-------------	----------------	--	-------	---



PROJECT NO: 5150-02-70

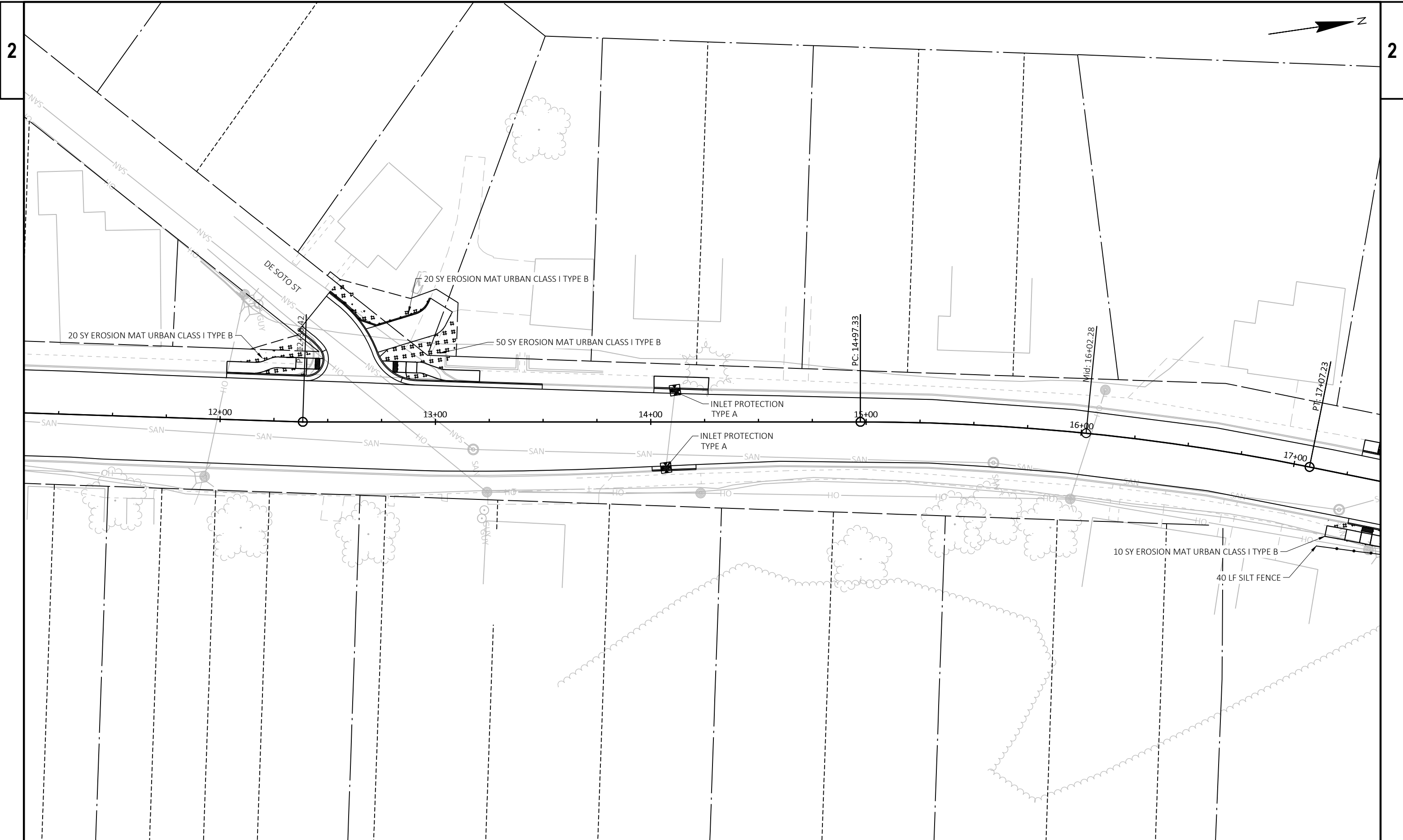
HWY: STH 82

COUNTY: VERNON

PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS

SHEET

E



PROJECT NO: 5150-02-70

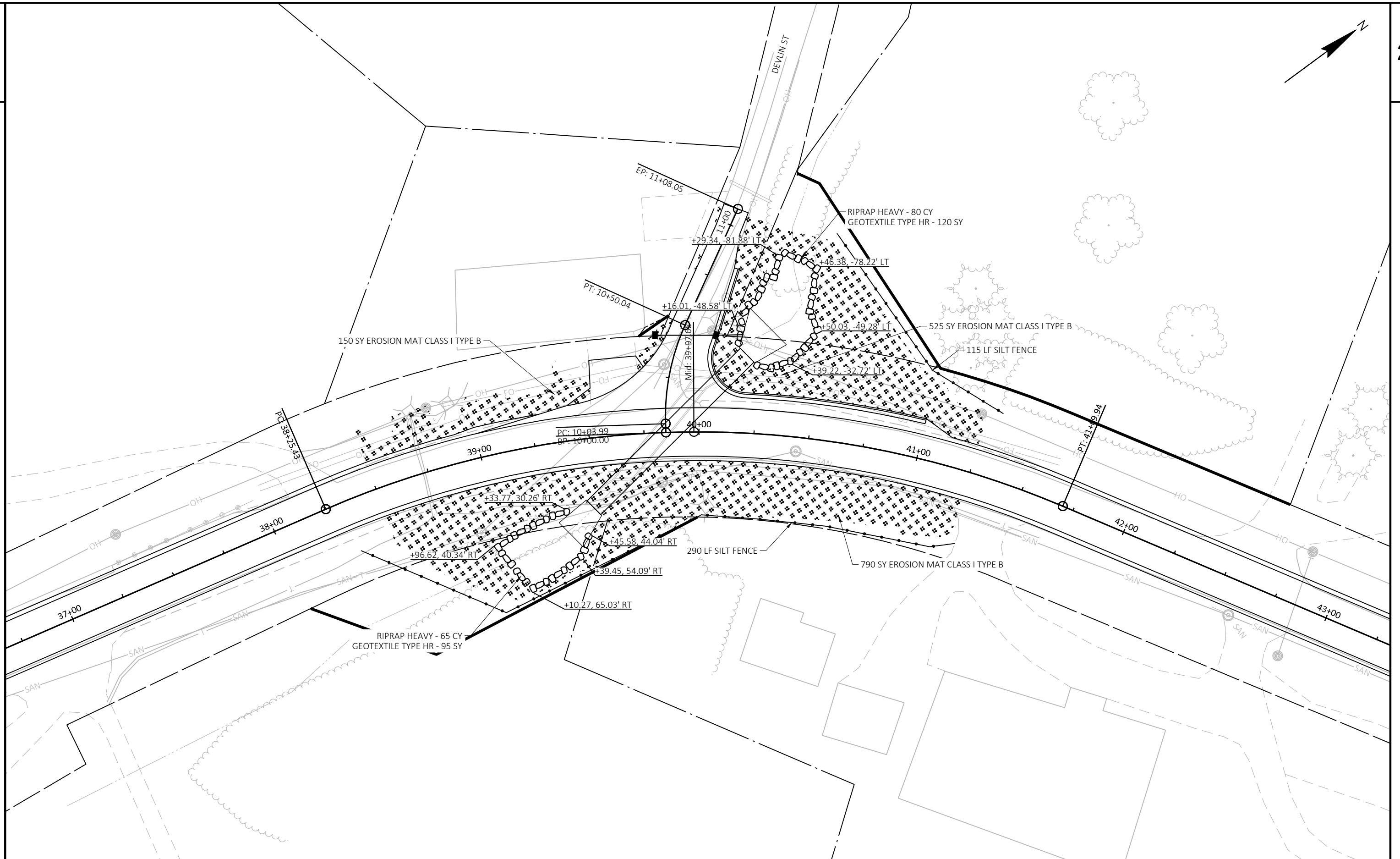
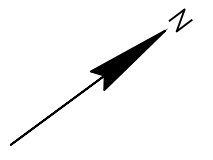
HWY: STH 82

COUNTY: VERNON

PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS

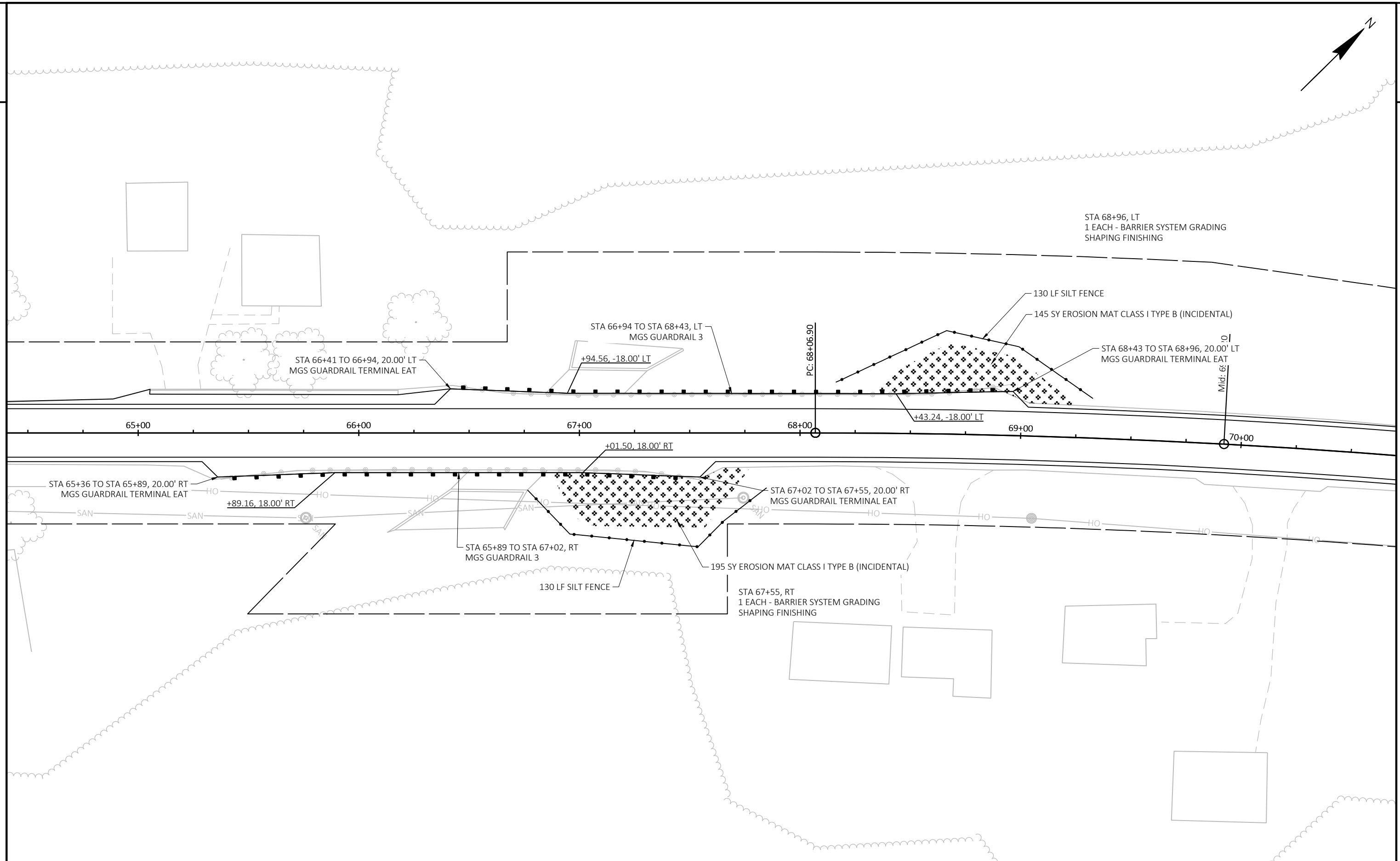
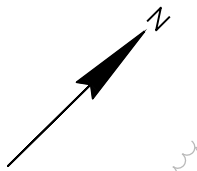
SHEET

E

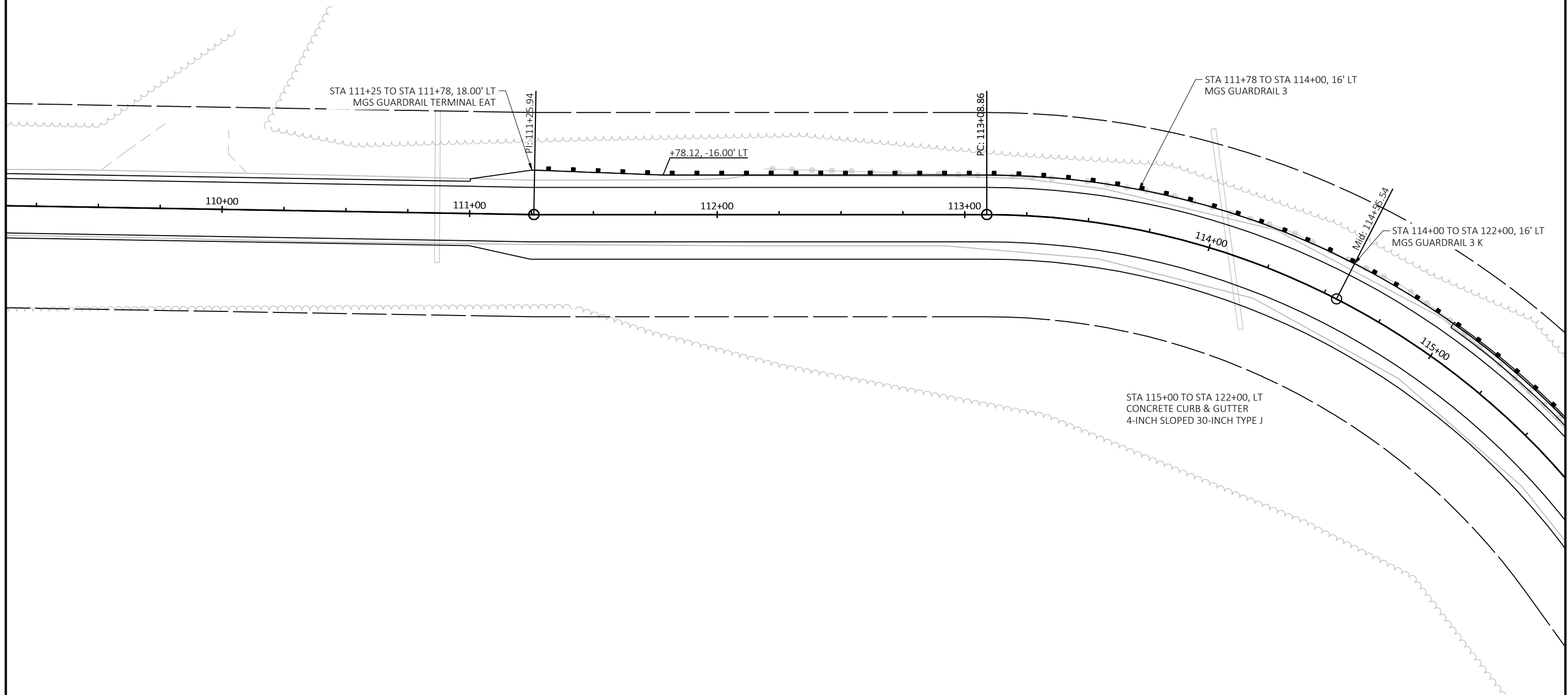


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET <b>E</b>
------------------------	-------------	----------------	--	----------------

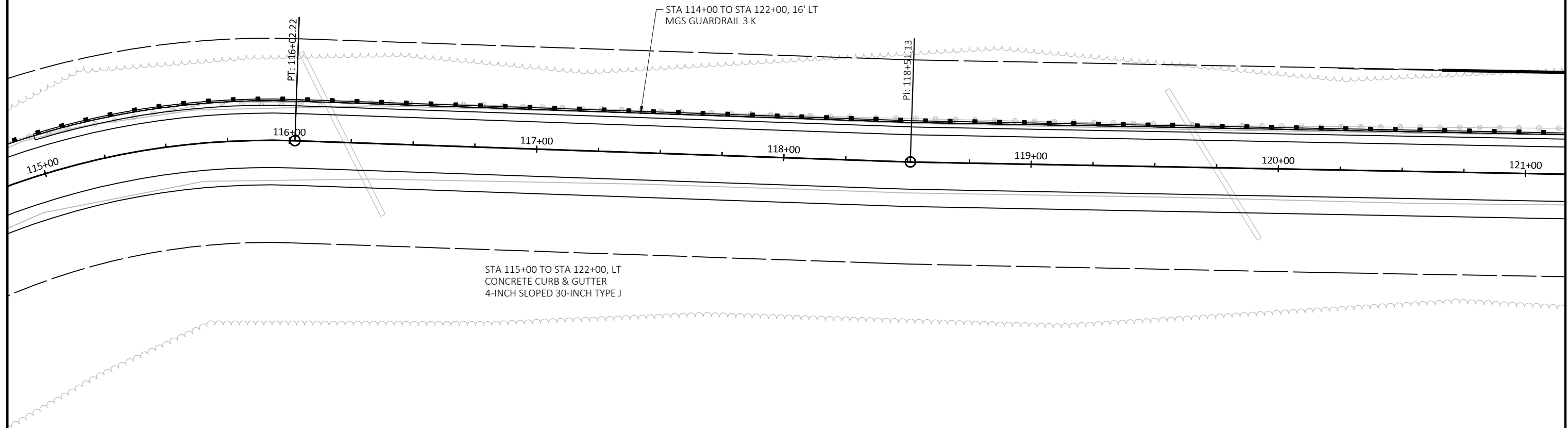
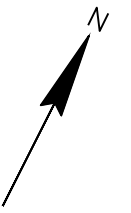




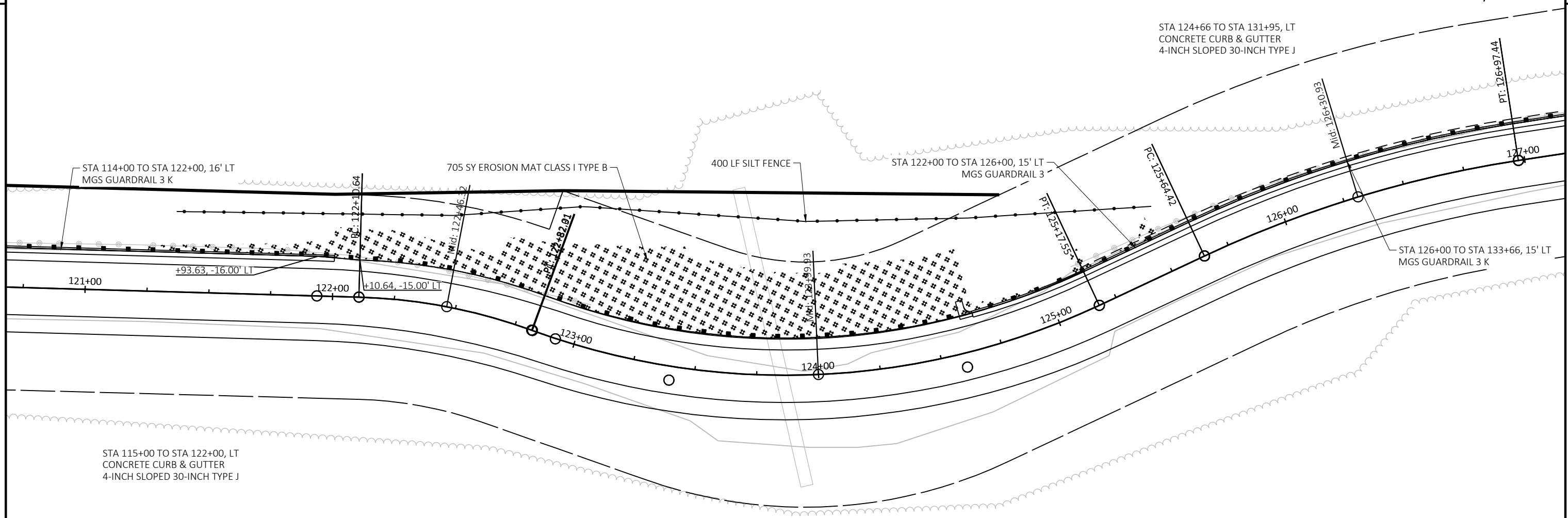
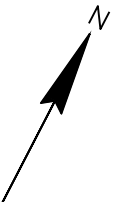
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET	E
------------------------	-------------	----------------	--	-------	---



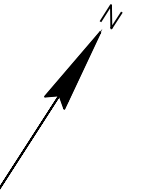
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET <b>E</b>
------------------------	-------------	----------------	--	----------------



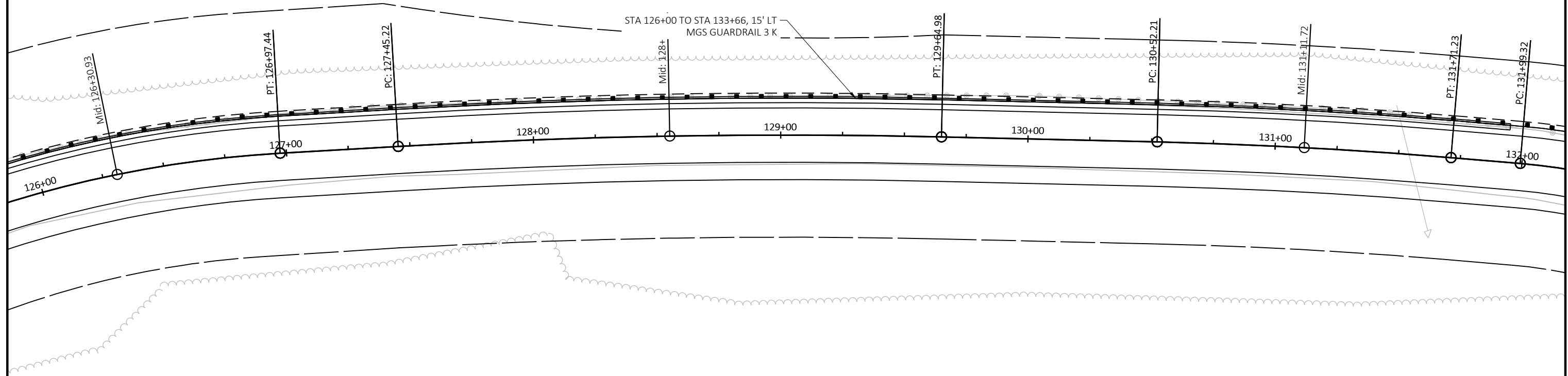
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET	<b>E</b>
------------------------	-------------	----------------	--	-------	----------

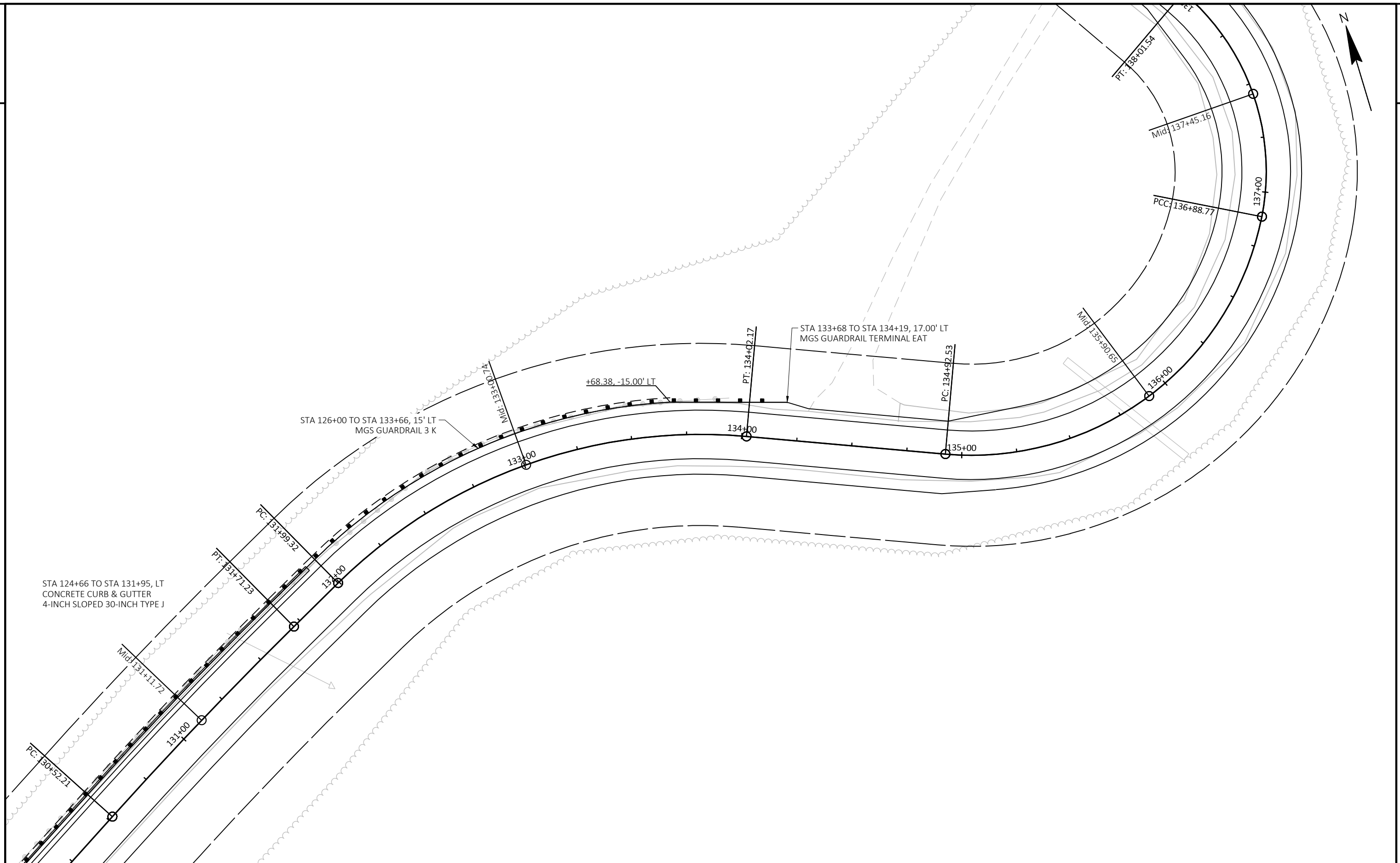


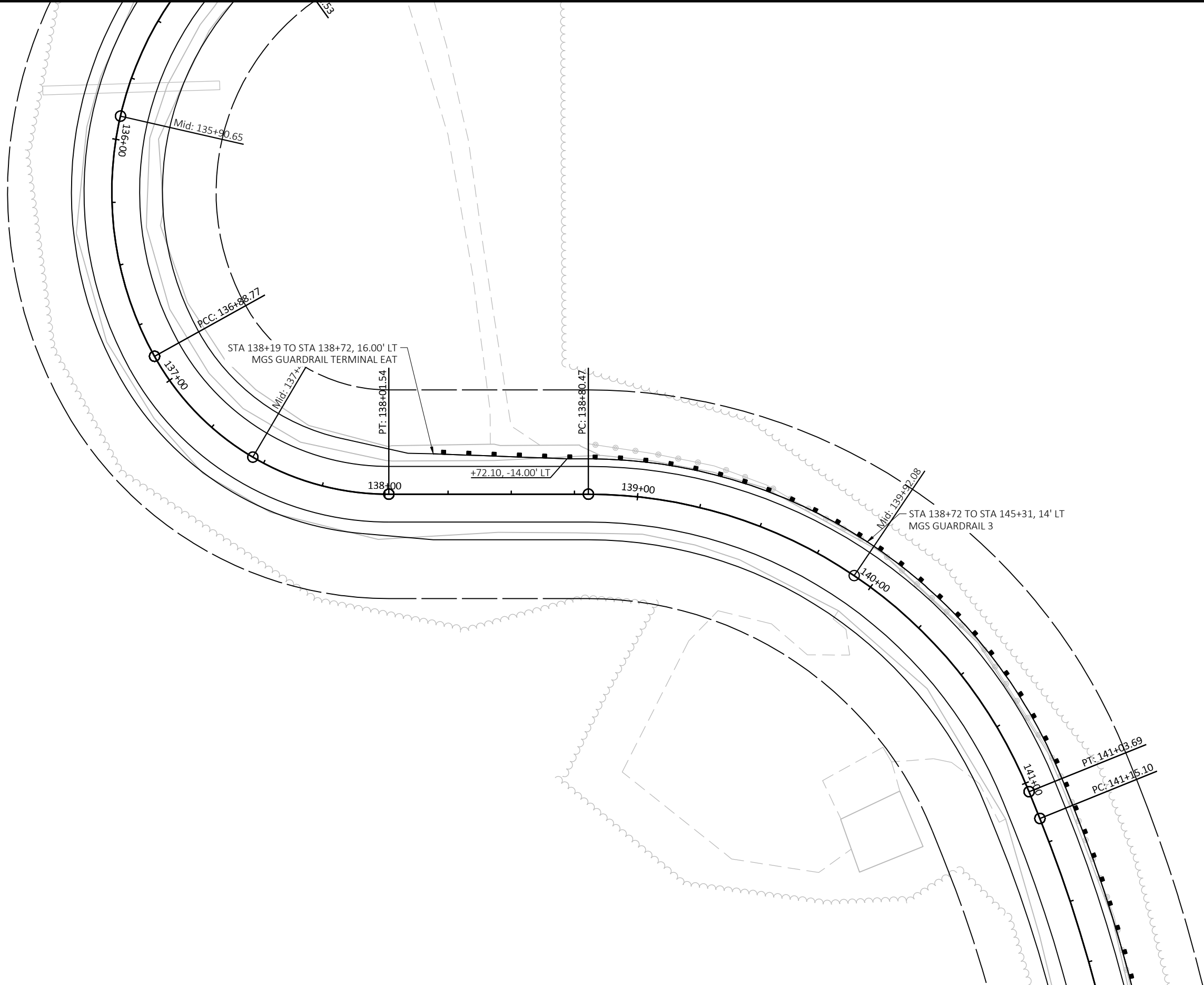
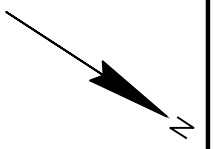
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET <b>E</b>
------------------------	-------------	----------------	--	----------------

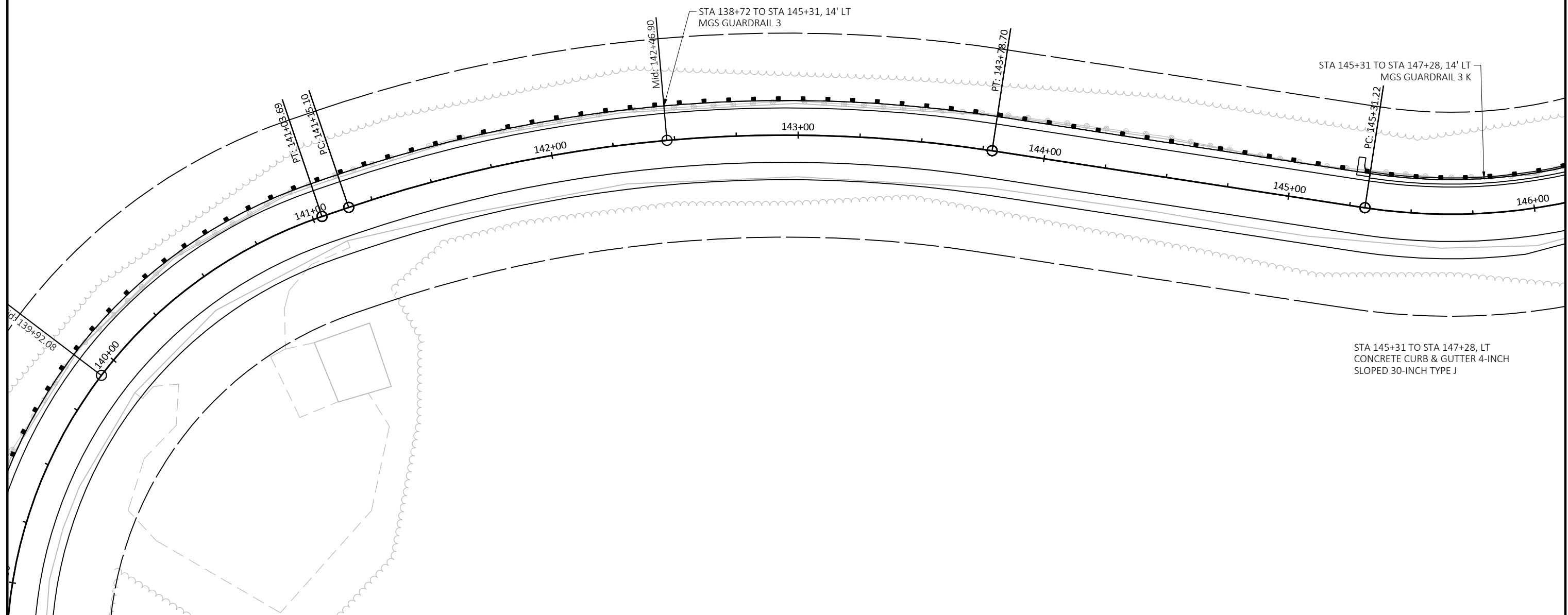
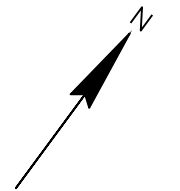


STA 124+66 TO STA 131+95, LT  
CONCRETE CURB & GUTTER  
4-INCH SLOPED 30-INCH TYPE J









PROJECT NO: 5150-02-70

HWY: STH 82

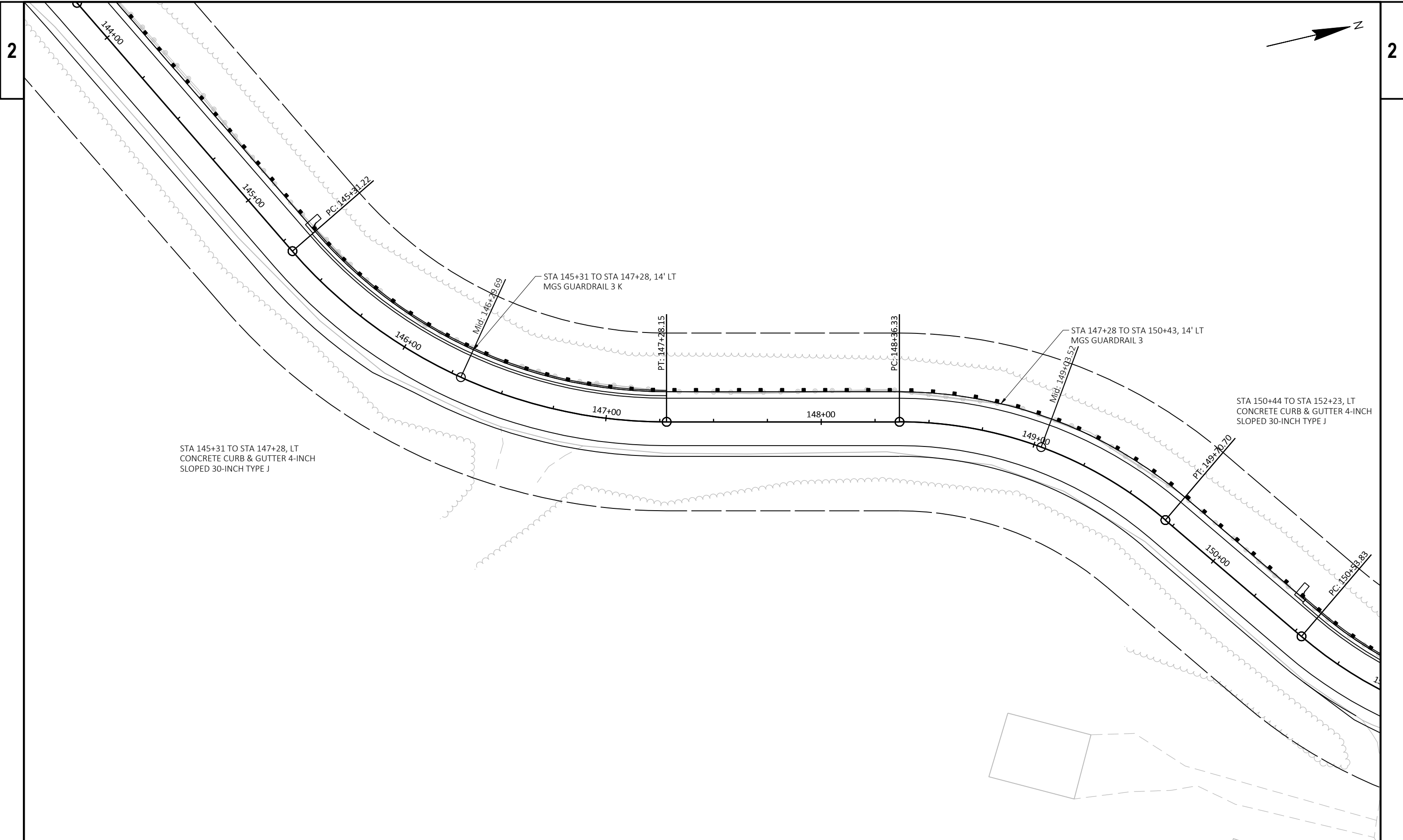
COUNTY: VERNON

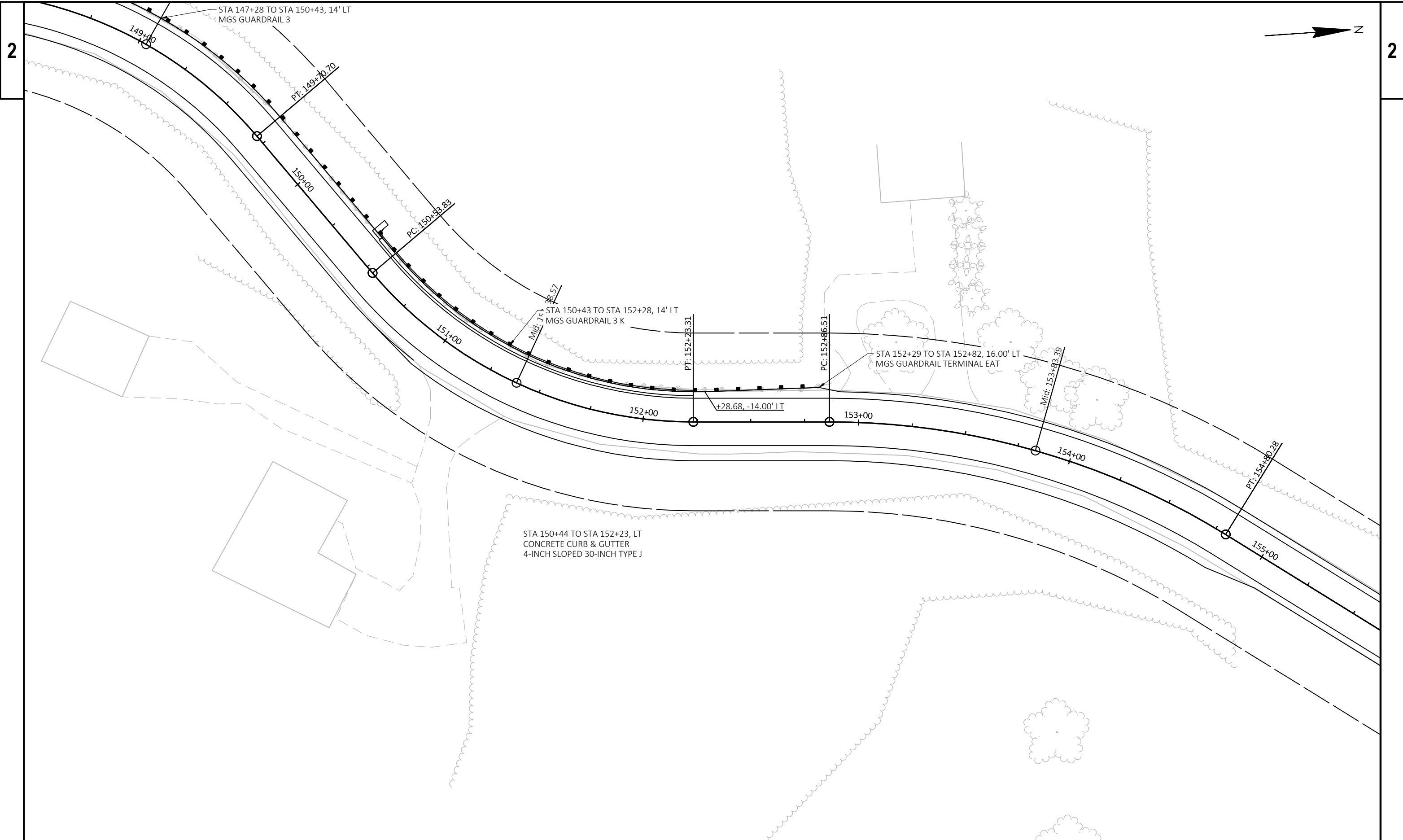
PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS

SHEET

E







PROJECT NO: 5150-02-70

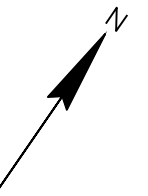
HWY: STH 82

COUNTY: VERNON

PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS

SHEET

E



STA 201+69, LT  
1 EACH - BARRIER SYSTEM GRADING  
SHAPING FINISHING

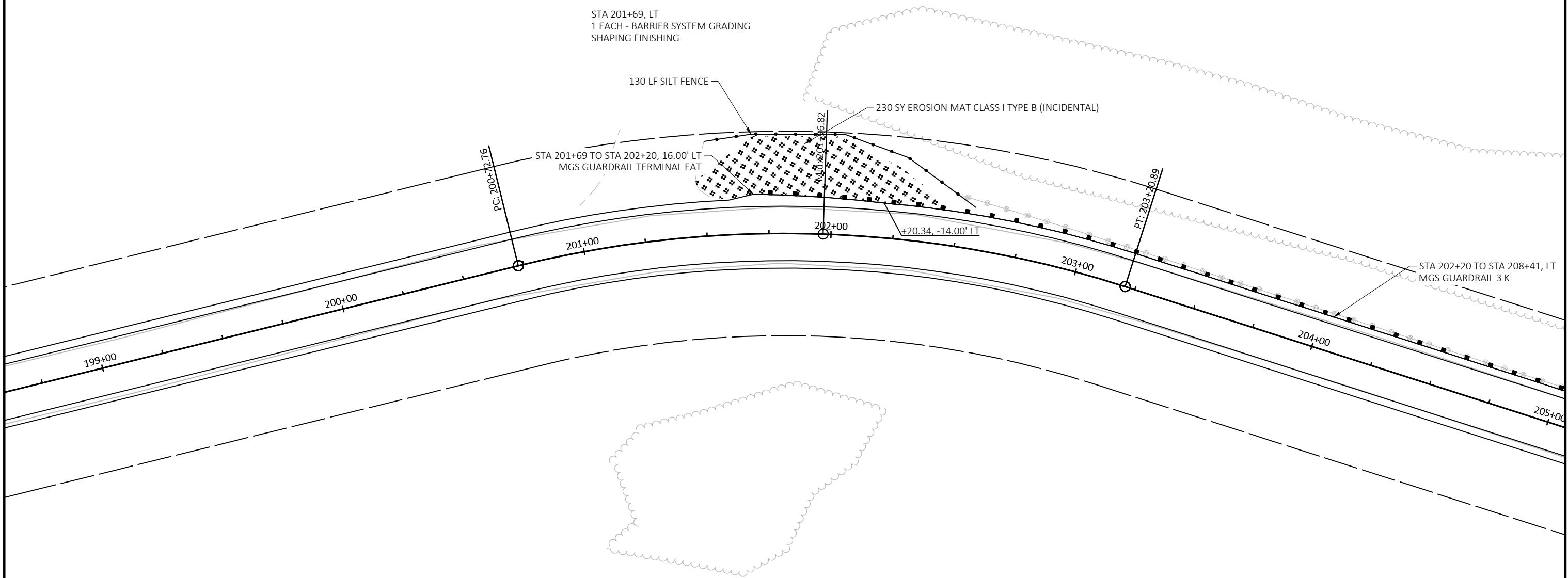
130 LF SILT FENCE

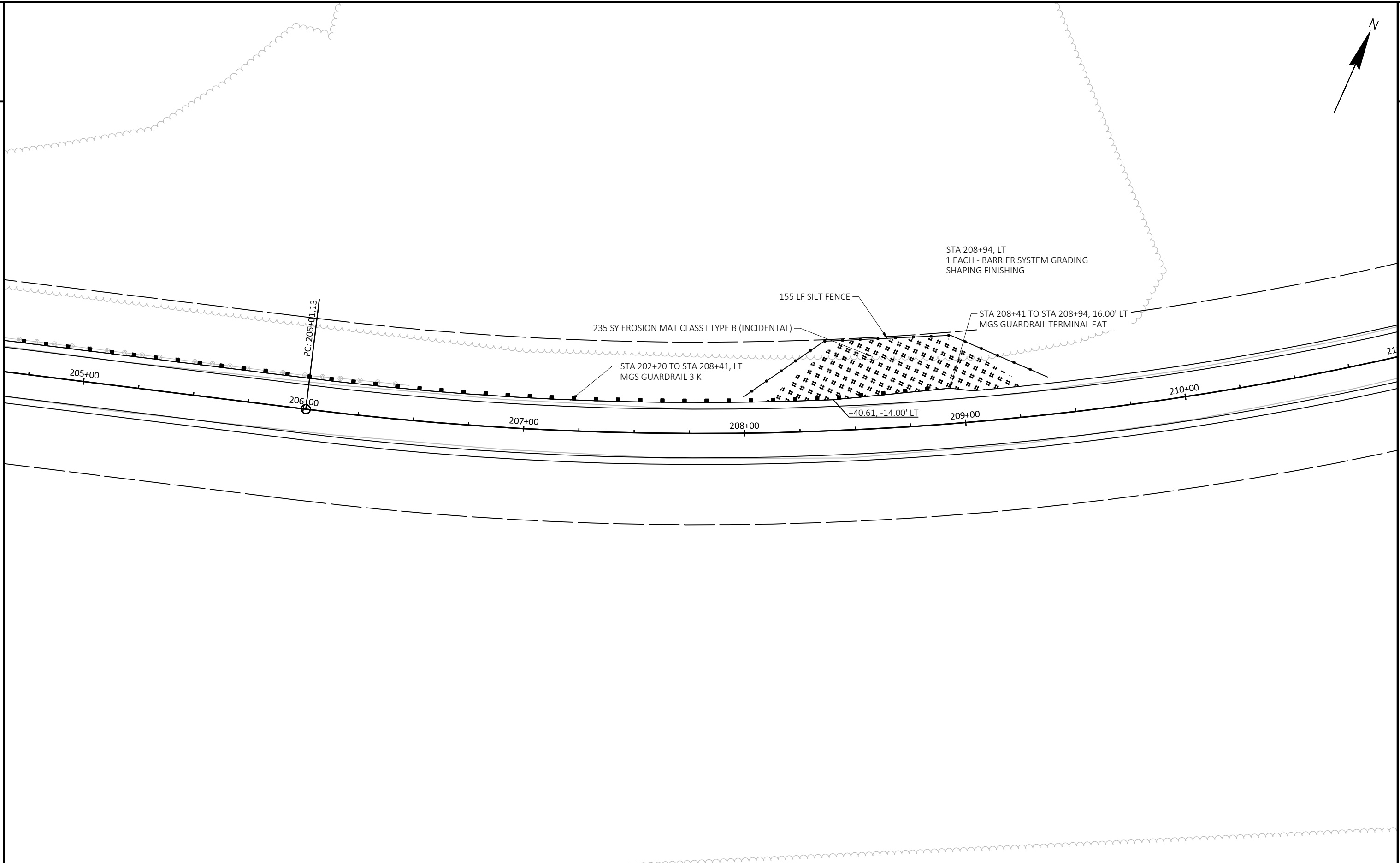
230 SY EROSION MAT CLASS I TYPE B (INCIDENTAL)

STA 201+69 TO STA 202+20, 16.00' LT  
MGS GUARDRAIL TERMINAL EAT

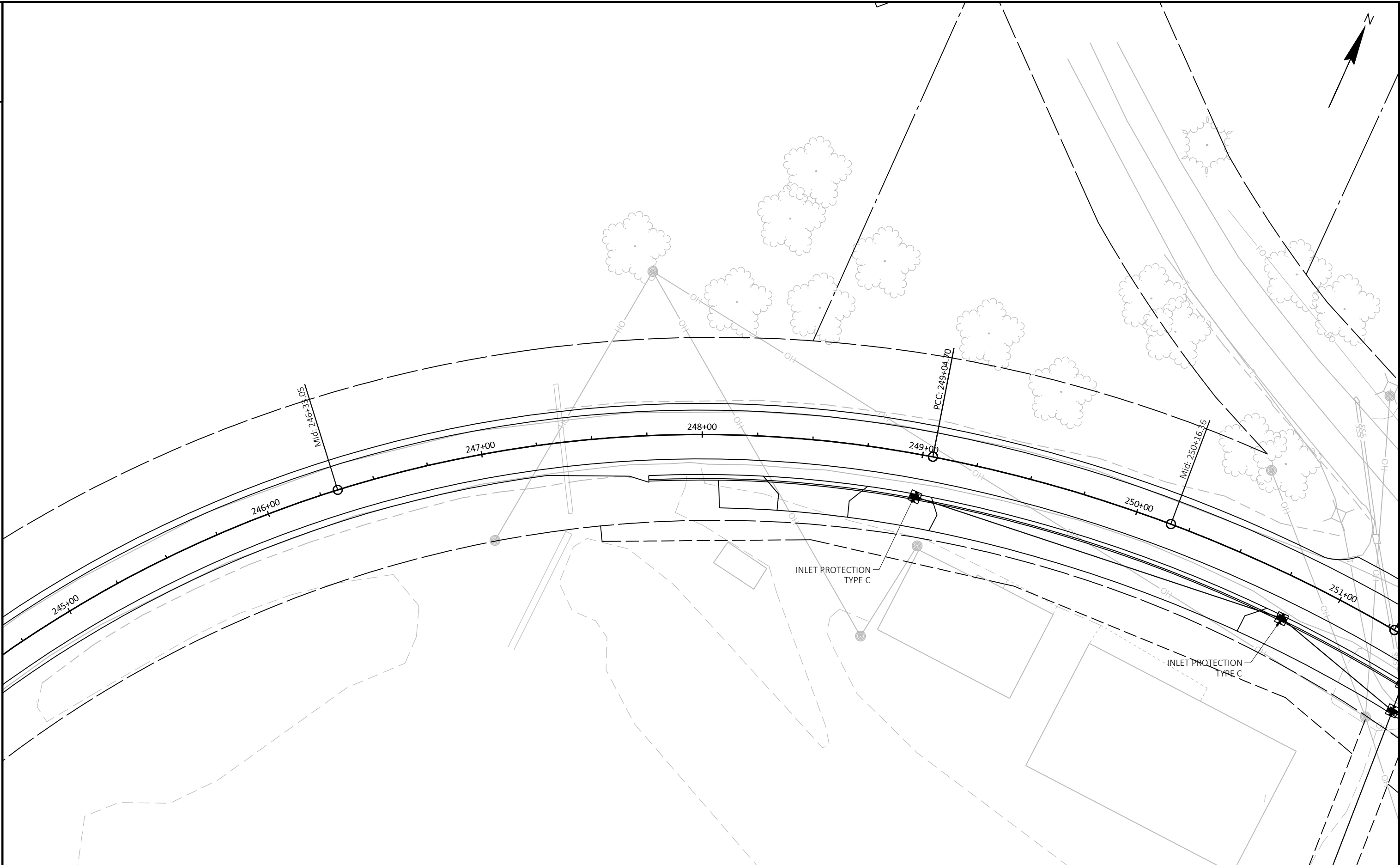
+20.34, -14.00' LT

STA 202+20 TO STA 208+41, LT  
MGS GUARDRAIL 3 K

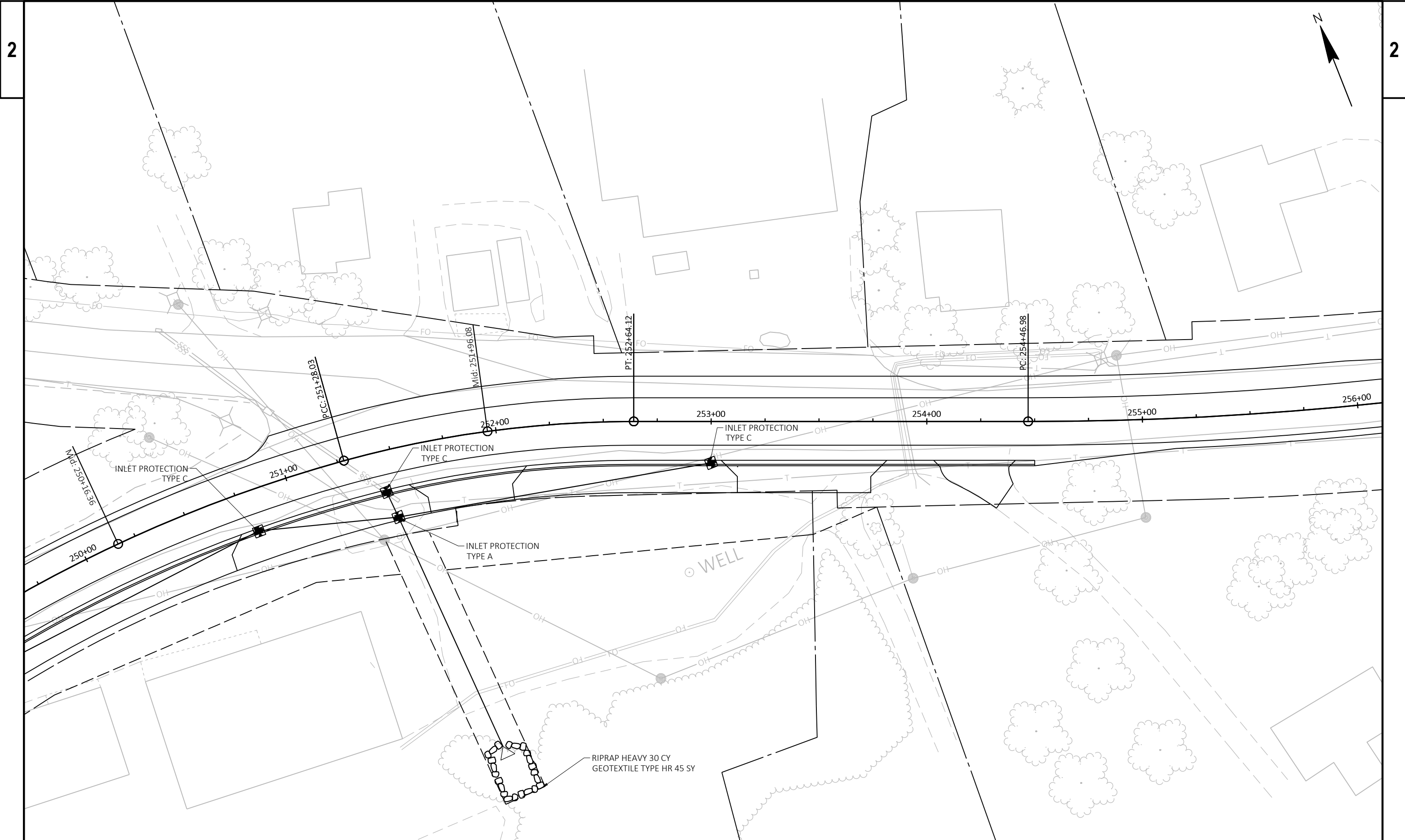




PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET	E
------------------------	-------------	----------------	--	-------	---



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET <b>E</b>
------------------------	-------------	----------------	--	----------------



2

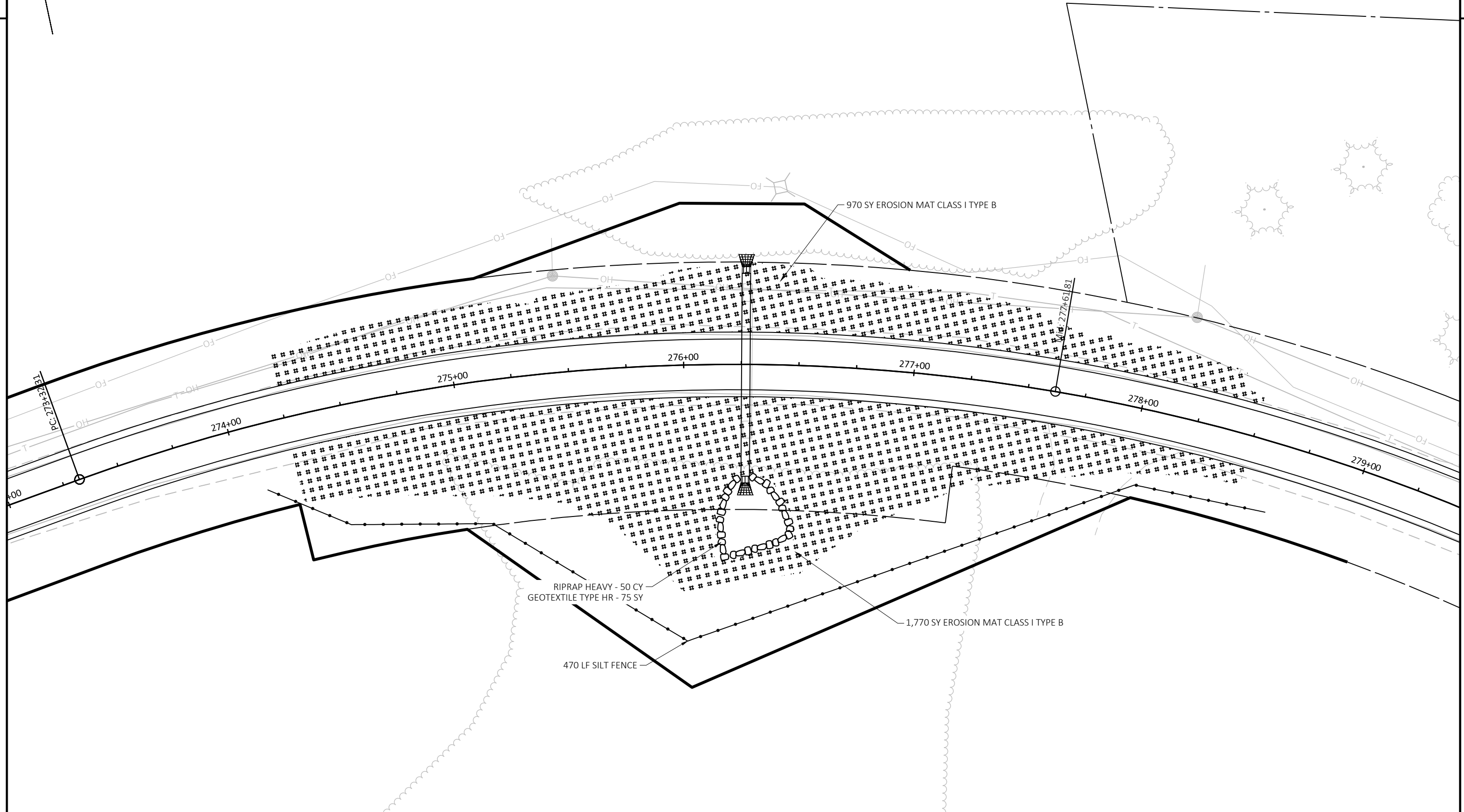
2

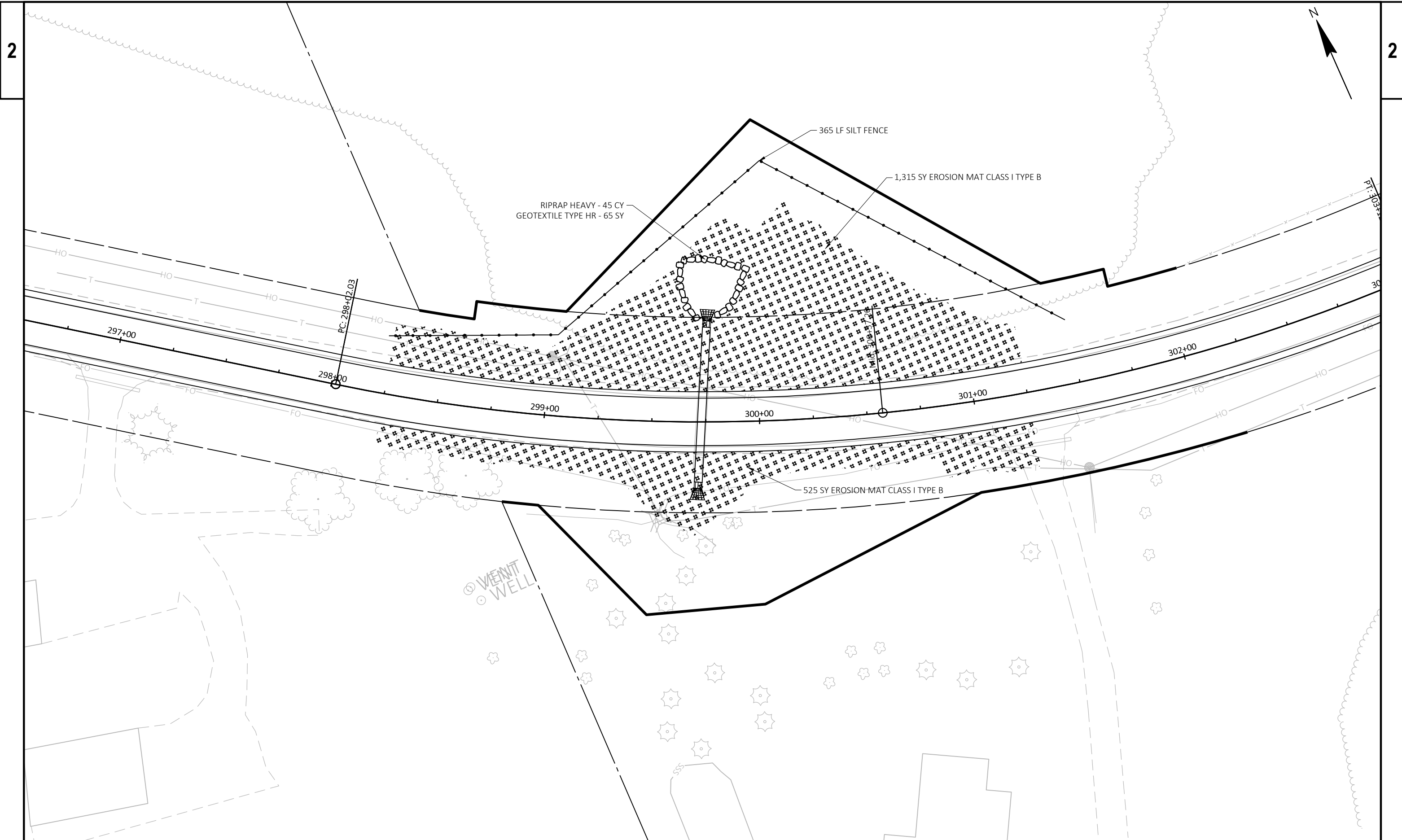


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET	E
------------------------	-------------	----------------	--	-------	---

FILE NAME : W:\PROJECTS\2018\18-1712-1 (WAUZEKA DRIVE) STH 82\DRAWINGS\2022 WISDOT DRAWINGS\51500270-BEAMGUARD & EC SHEETS.DWG PLOT DATE : 4/3/2023 11:40 AM PLOT BY : TYLER BUCHANAN PLOT NAME : PLOT SCALE : 1 IN:40 FT WISDOT/CADD SHEET 42

LAYOUT NAME - BMGRD & EC 15



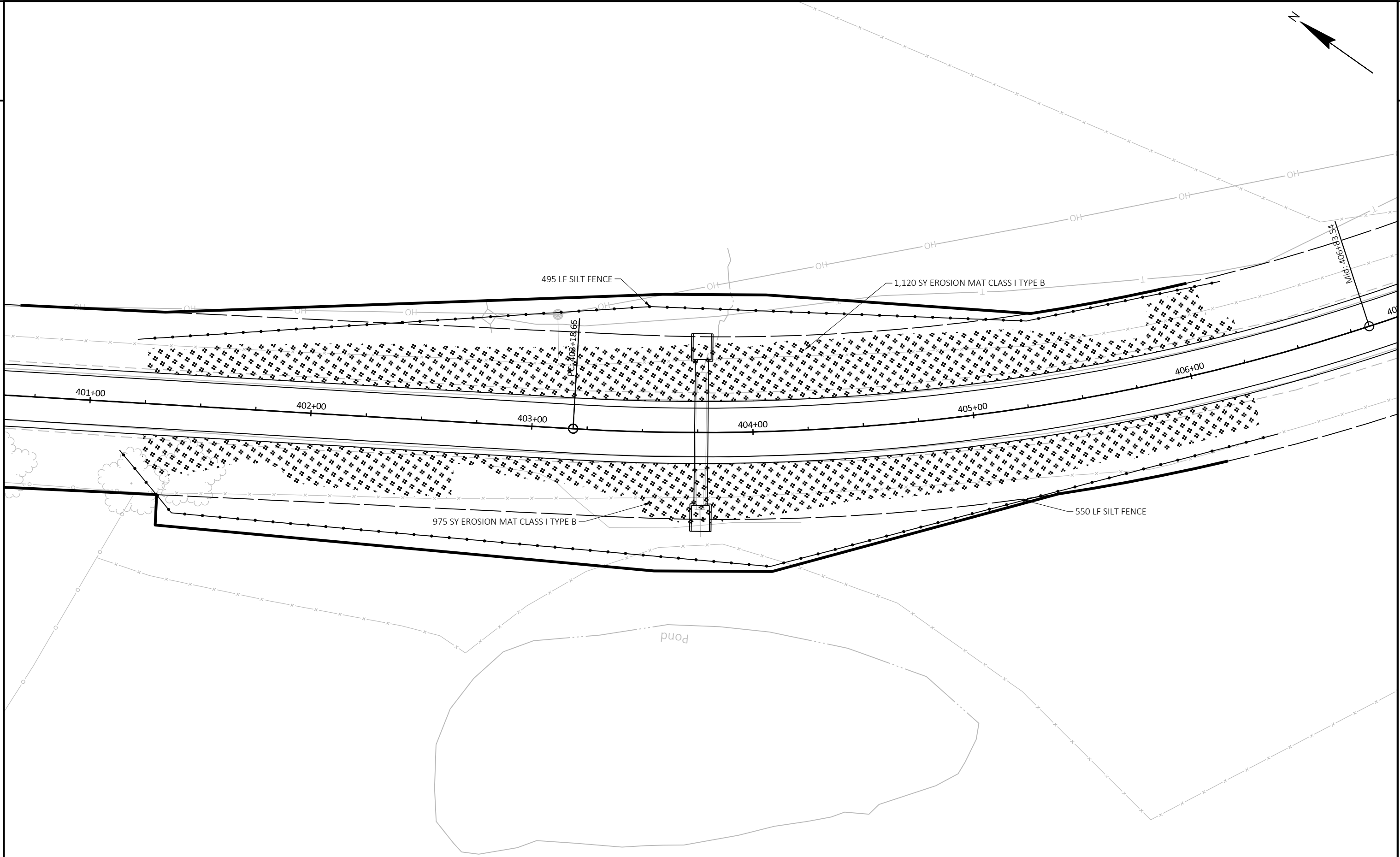
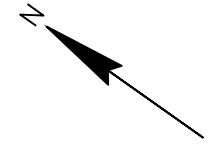


2

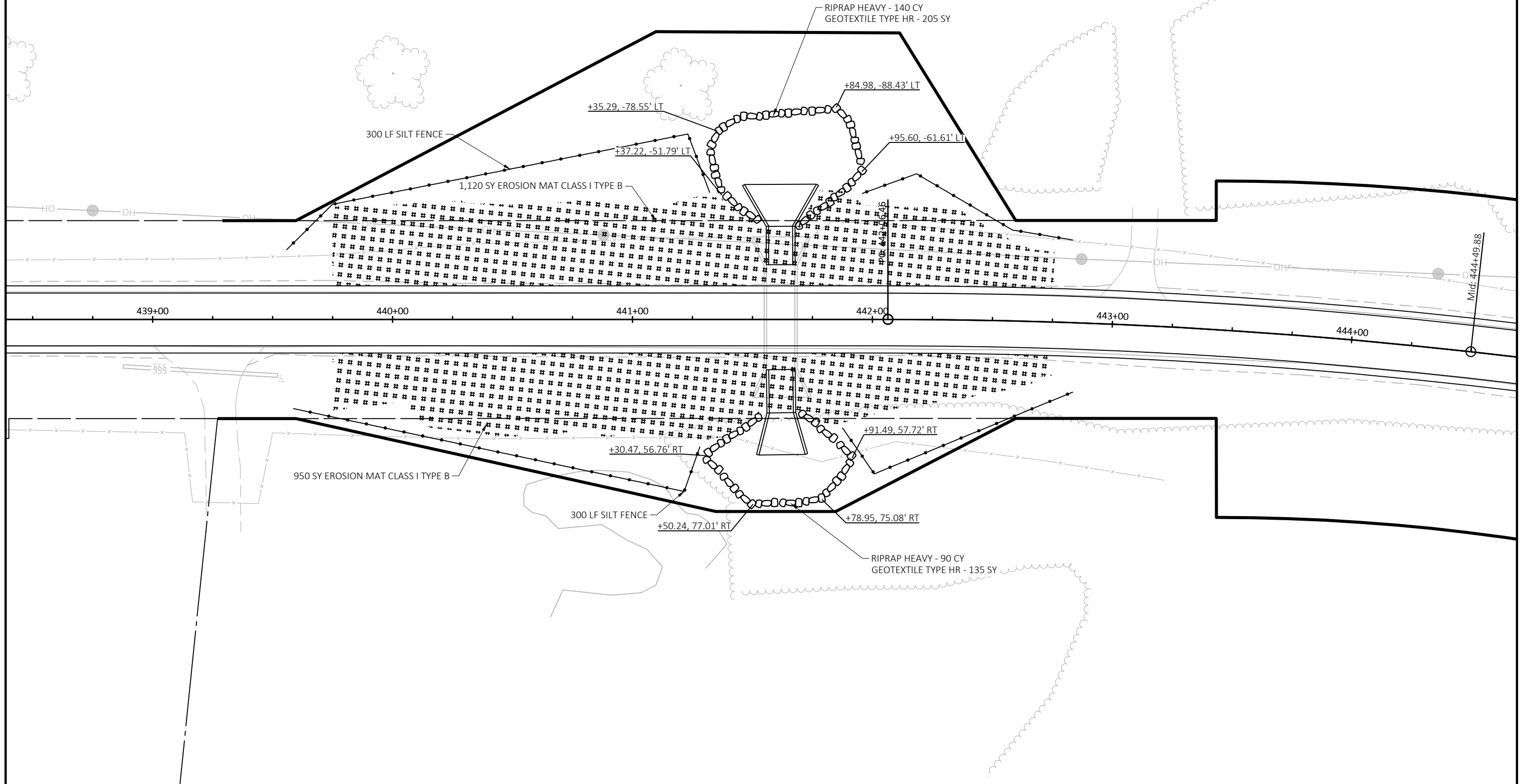
2

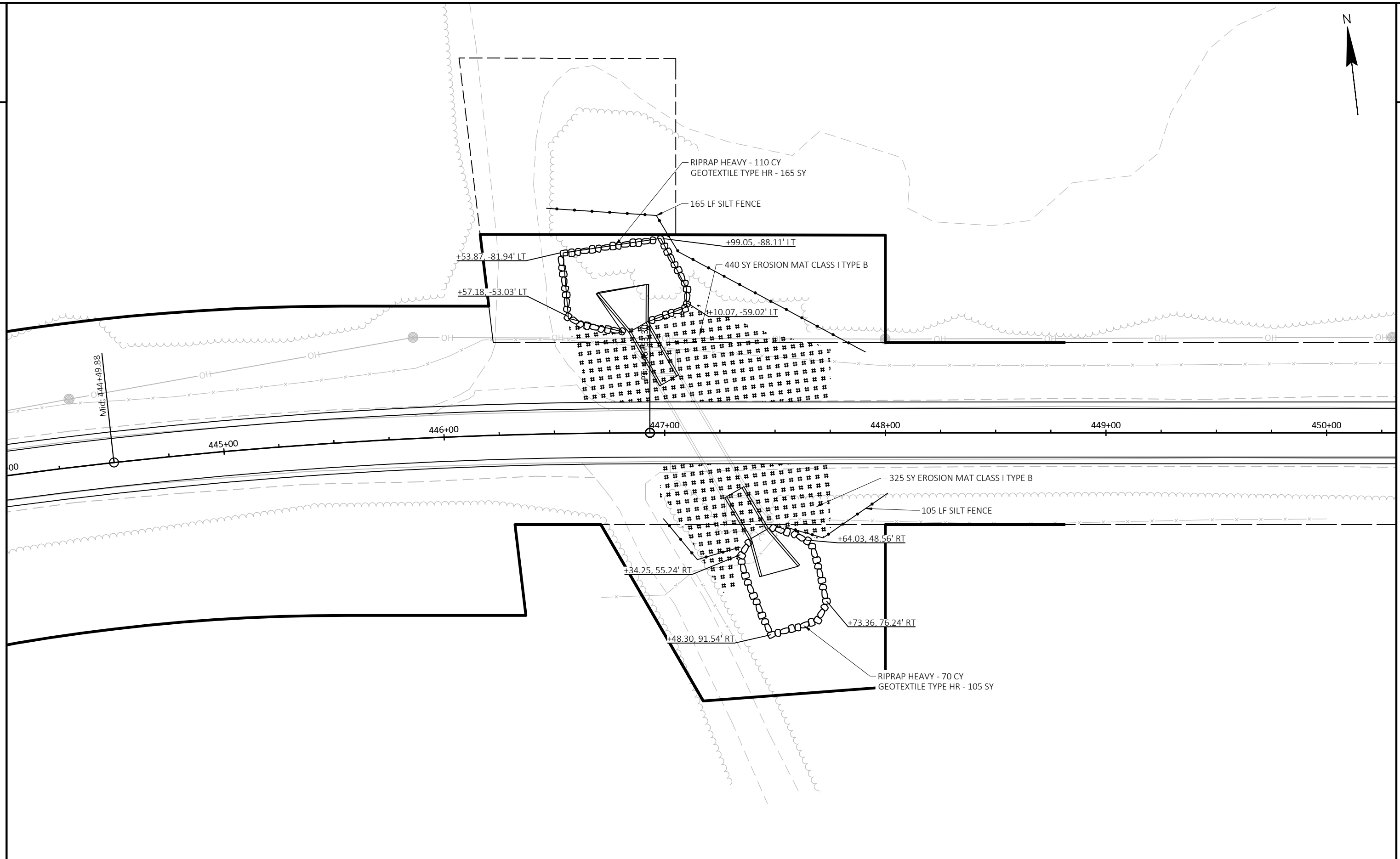
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET	E
------------------------	-------------	----------------	--	-------	---



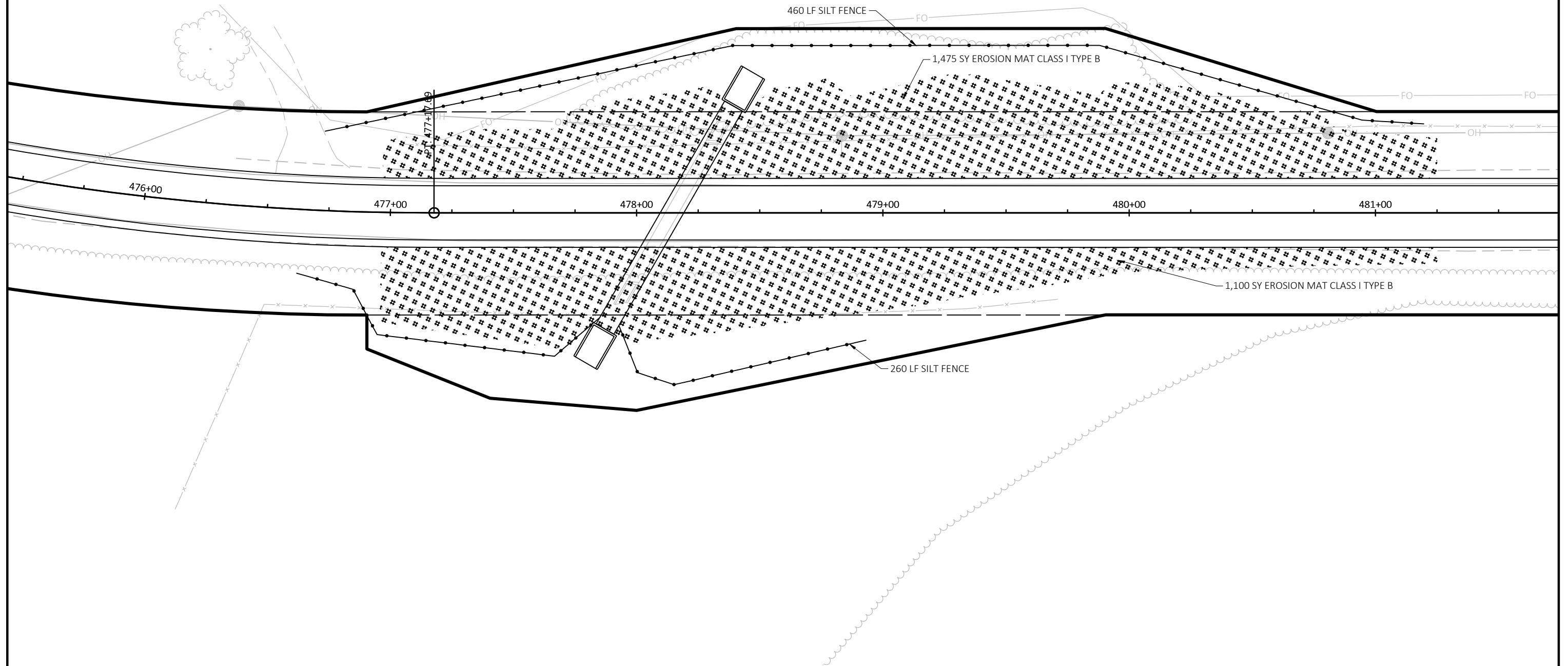
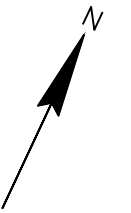


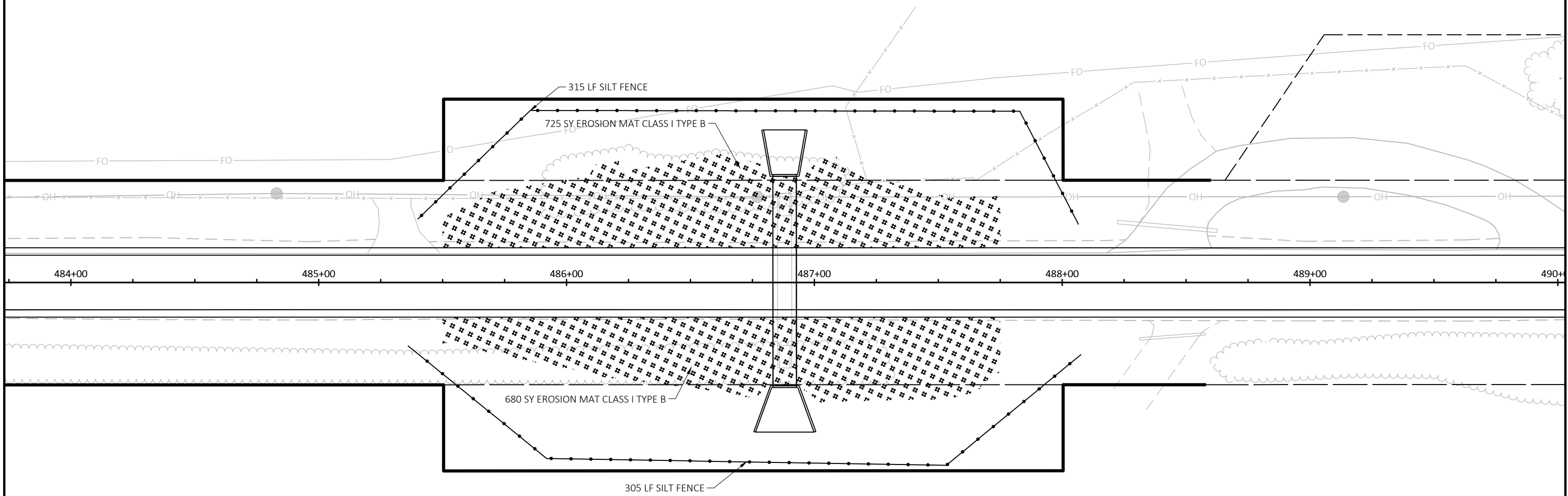
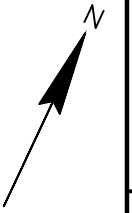
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET <b>E</b>
------------------------	-------------	----------------	--	----------------



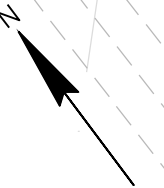


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET	E
------------------------	-------------	----------------	--	-------	---





PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN DETAILS - BEAMGUARD & EROSION CONTROL PLANS	SHEET <b>E</b>
------------------------	-------------	----------------	--	----------------



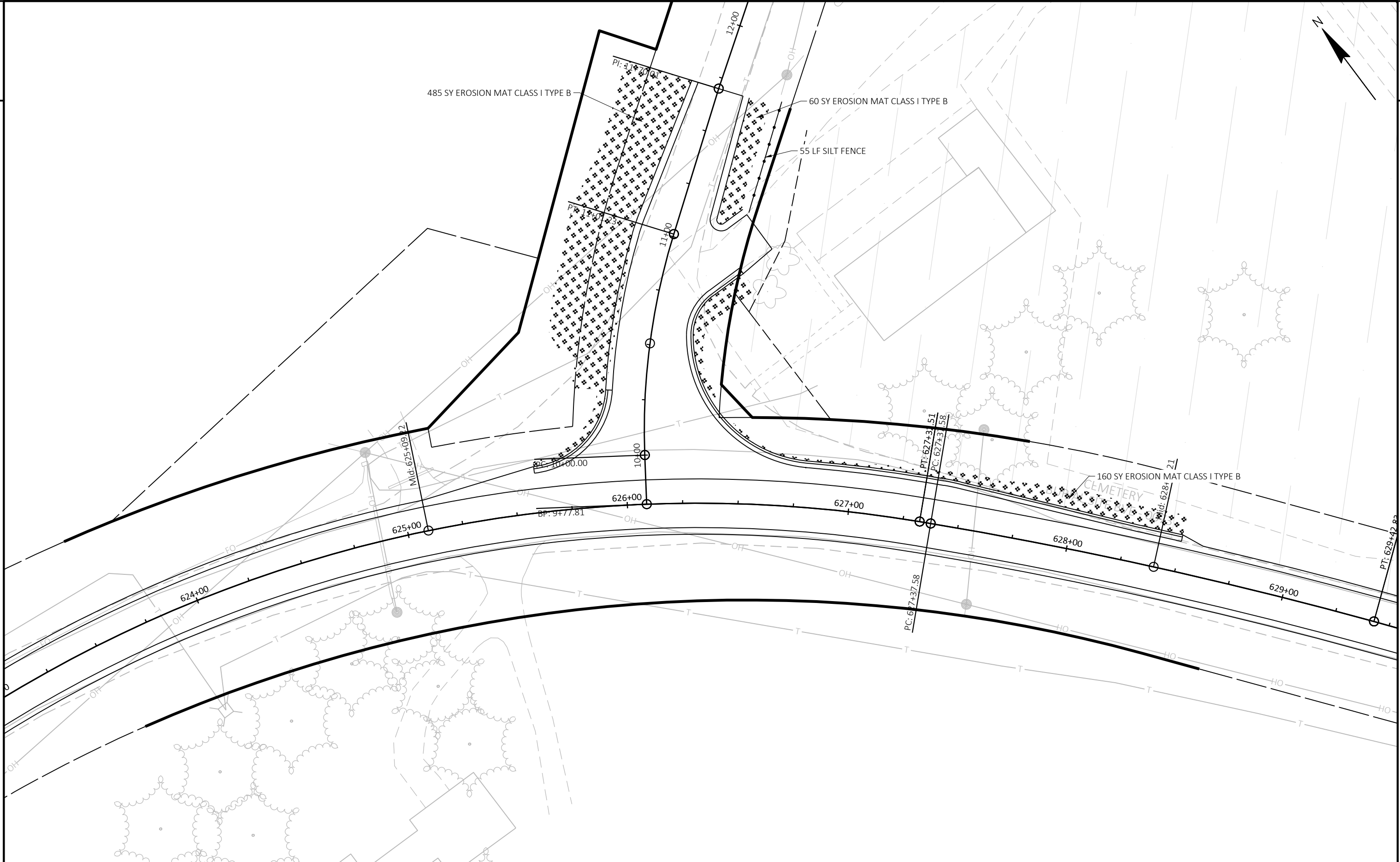
485 SY EROSION MAT CLASS I TYPE B

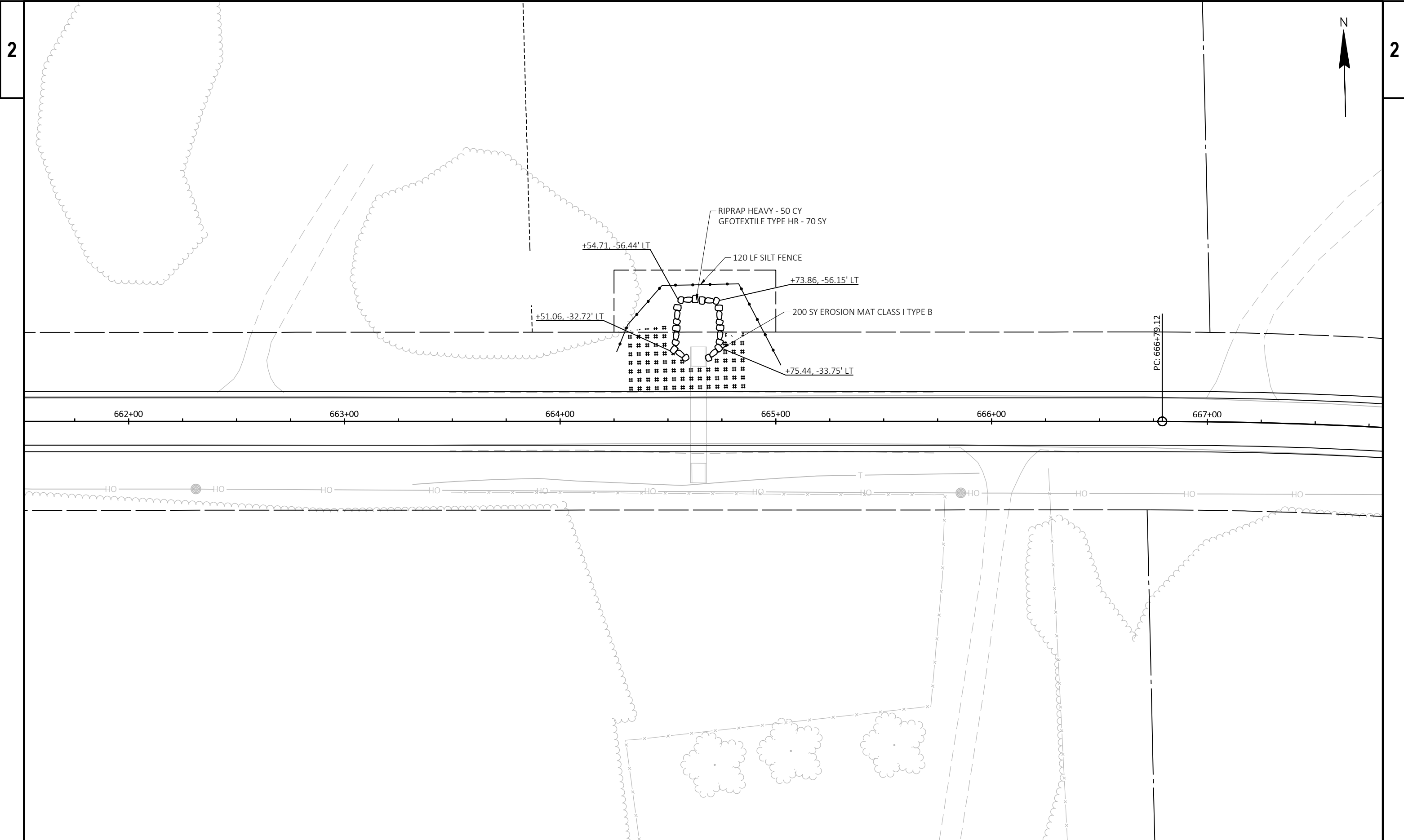
60 SY EROSION MAT CLASS I TYPE B

55 LF SILT FENCE

160 SY EROSION MAT CLASS I TYPE B

CEMETERY



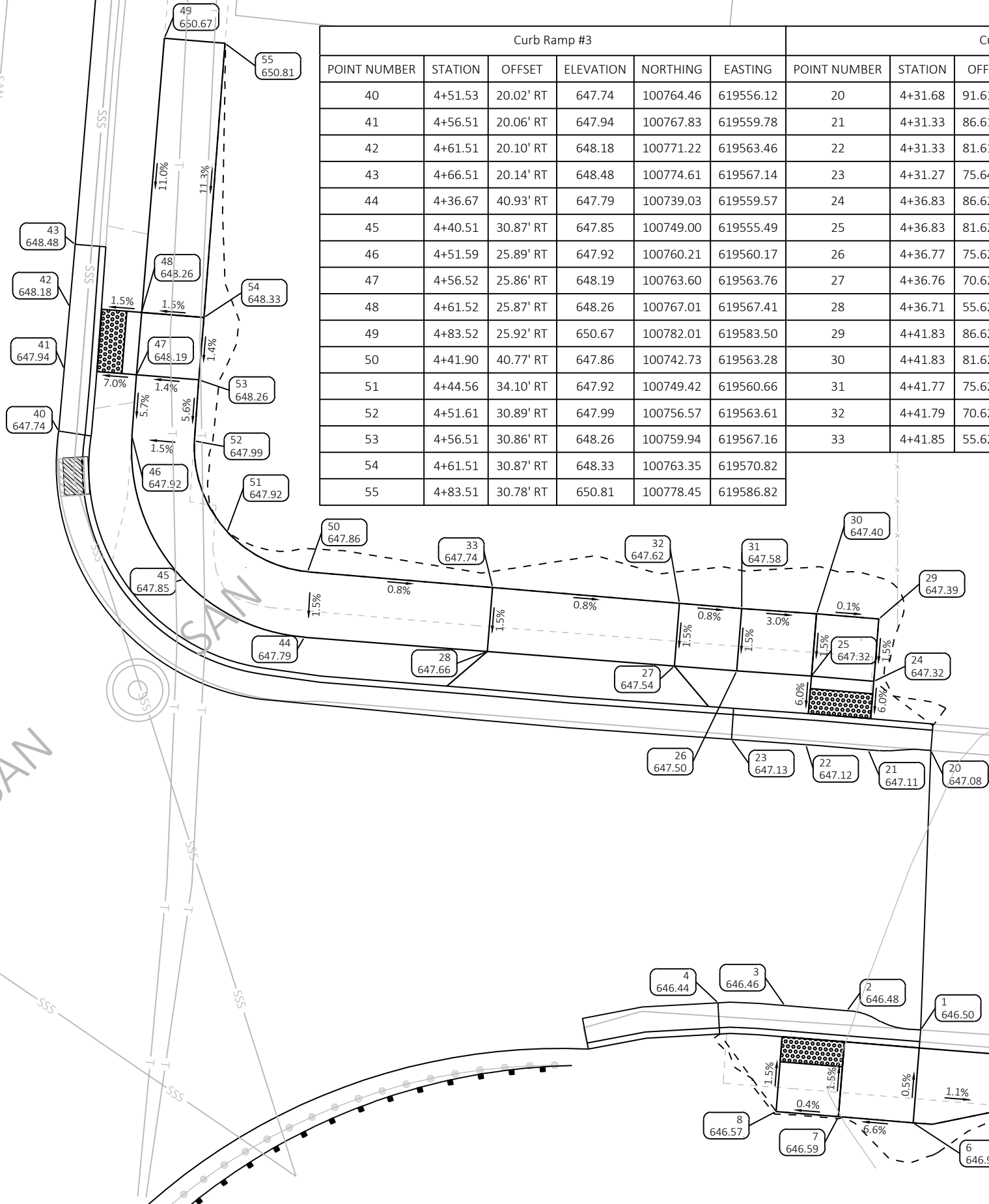


2

2



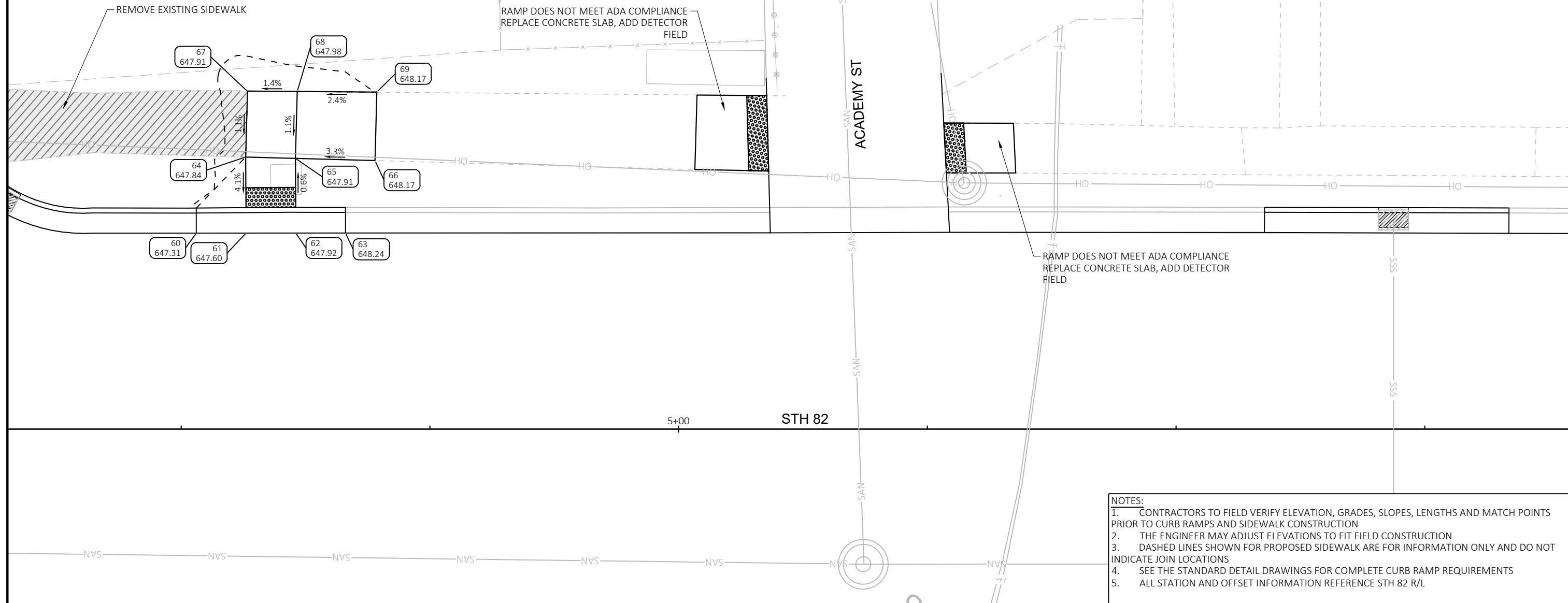
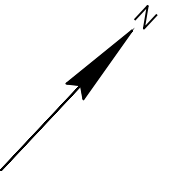
Curb Ramp #3						Curb Ramp #2						Curb Ramp #1					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING	POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
40	4+51.53	20.02' RT	647.74	100764.46	619556.12	20	4+31.68	91.61' RT	647.08	100698.63	619590.56	1	4+09.34	92.60' RT	646.50	100682.63	619574.93
41	4+56.51	20.06' RT	647.94	100767.83	619559.78	21	4+31.33	86.61' RT	647.11	100702.04	619586.88	2	4+10.40	86.60' RT	646.48	100687.74	619571.60
42	4+61.51	20.10' RT	648.18	100771.22	619563.46	22	4+31.33	81.61' RT	647.12	100705.69	619583.48	3	4+10.40	81.60' RT	646.46	100691.39	619568.19
43	4+66.51	20.14' RT	648.48	100774.61	619567.14	23	4+31.27	75.64' RT	647.13	100710.01	619579.35	4	4+10.20	76.26' RT	646.44	100695.15	619564.39
44	4+36.67	40.93' RT	647.79	100739.03	619559.57	24	4+36.83	86.62' RT	647.32	100705.79	619590.91	5	4+07.90	102.38' RT	646.98	100674.51	619580.56
45	4+40.51	30.87' RT	647.85	100749.00	619555.49	25	4+36.83	81.62' RT	647.32	100709.45	619587.49	6	4+01.89	92.60' RT	646.99	100677.55	619569.49
46	4+51.59	25.89' RT	647.92	100760.21	619560.17	26	4+36.77	75.62' RT	647.50	100713.79	619583.35	7	4+01.90	86.60' RT	646.59	100681.93	619565.39
47	4+56.52	25.86' RT	648.19	100763.60	619563.76	27	4+36.76	70.62' RT	647.54	100717.42	619579.92	8	4+01.90	81.60' RT	646.57	100685.58	619561.98
48	4+61.52	25.87' RT	648.26	100767.01	619567.41	28	4+36.71	55.62' RT	647.66	100728.34	619569.64						
49	4+83.52	25.92' RT	650.67	100782.01	619583.50	29	4+41.83	86.62' RT	647.39	100709.21	619594.56						
50	4+41.90	40.77' RT	647.86	100742.73	619563.28	30	4+41.83	81.62' RT	647.40	100712.86	619591.15						
51	4+44.56	34.10' RT	647.92	100749.42	619560.66	31	4+41.77	75.62' RT	647.58	100717.20	619587.00						
52	4+51.61	30.89' RT	647.99	100756.57	619563.61	32	4+41.79	70.62' RT	647.62	100720.86	619583.60						
53	4+56.51	30.86' RT	648.26	100759.94	619567.16	33	4+41.85	55.62' RT	647.74	100731.85	619573.39						
54	4+61.51	30.87' RT	648.33	100763.35	619570.82												
55	4+83.51	30.78' RT	650.81	100778.45	619586.82												



- NOTES:
1. CONTRACTORS TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMPS AND SIDEWALK CONSTRUCTION
  2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION  
DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOIN LOCATIONS
  3. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
  4. ALL STATION AND OFFSET INFORMATION REFERENCE STH 82 R/L



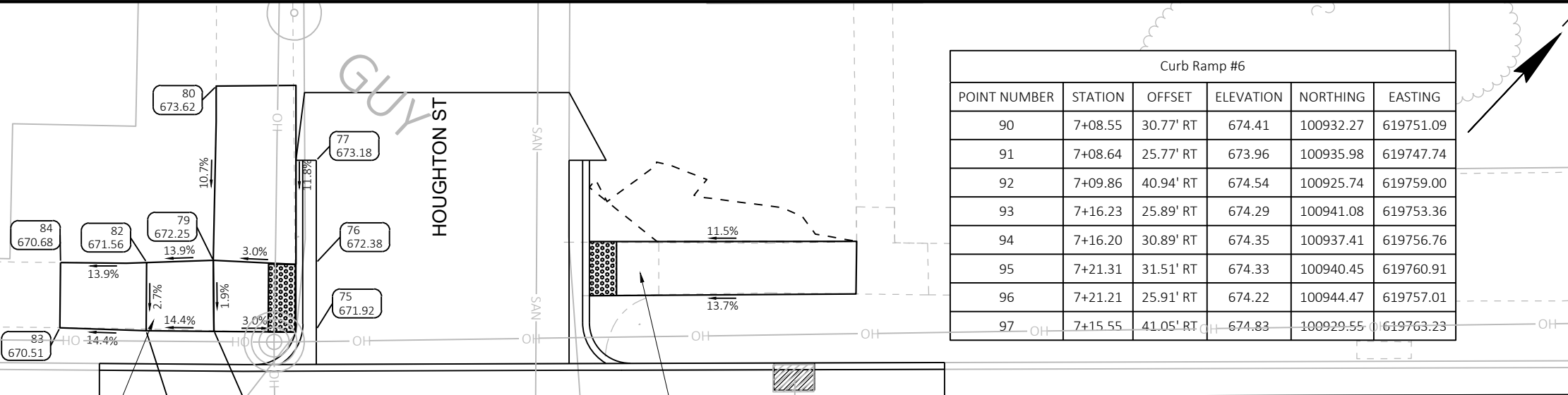
Curb Ramp #4					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
60	4+51.51	19.71' LT	647.31	100793.44	619528.95
61	4+56.51	19.71' LT	647.60	100796.86	619532.60
62	4+61.51	19.71' LT	647.92	100800.28	619536.25
63	4+66.51	19.72' LT	648.24	100803.70	619539.90
64	4+56.48	27.36' LT	647.84	100802.42	619527.35
65	4+61.48	27.22' LT	647.91	100805.74	619531.10
66	4+69.47	27.00' LT	648.17	100811.04	619537.08
67	4+56.66	33.95' LT	647.91	100807.36	619522.98
68	4+61.66	33.95' LT	647.98	100810.77	619526.64
69	4+69.66	33.88' LT	648.17	100816.19	619532.52



- NOTES:
1. CONTRACTORS TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMPS AND SIDEWALK CONSTRUCTION
  2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
  3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOIN LOCATIONS
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 82 R/L

Curb Ramp #5					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
75	6+83.63	24.54' LT	671.92	100955.62	619695.10
76	6+83.63	29.47' LT	672.38	100959.21	619691.73
77	6+83.63	37.03' LT	673.18	100964.73	619686.57
78	6+76.07	24.45' LT	672.15	100950.38	619689.64
79	6+76.04	29.64' LT	672.25	100954.15	619686.07
80	6+76.24	42.50' LT	673.62	100963.68	619677.43
81	6+71.07	24.45' LT	671.43	100946.96	619685.99
82	6+71.12	29.48' LT	671.56	100950.67	619682.58
83	6+64.72	24.67' LT	670.51	100942.78	619681.20
84	6+64.76	29.48' LT	670.68	100946.33	619677.94

Curb Ramp #6					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
90	7+08.55	30.77' RT	674.41	100932.27	619751.09
91	7+08.64	25.77' RT	673.96	100935.98	619747.74
92	7+09.86	40.94' RT	674.54	100925.74	619759.00
93	7+16.23	25.89' RT	674.29	100941.08	619753.36
94	7+16.20	30.89' RT	674.35	100937.41	619756.76
95	7+21.31	31.51' RT	674.33	100940.45	619760.91
96	7+21.21	25.91' RT	674.22	100944.47	619757.01
97	7+15.55	41.05' RT	674.83	100929.55	619763.23

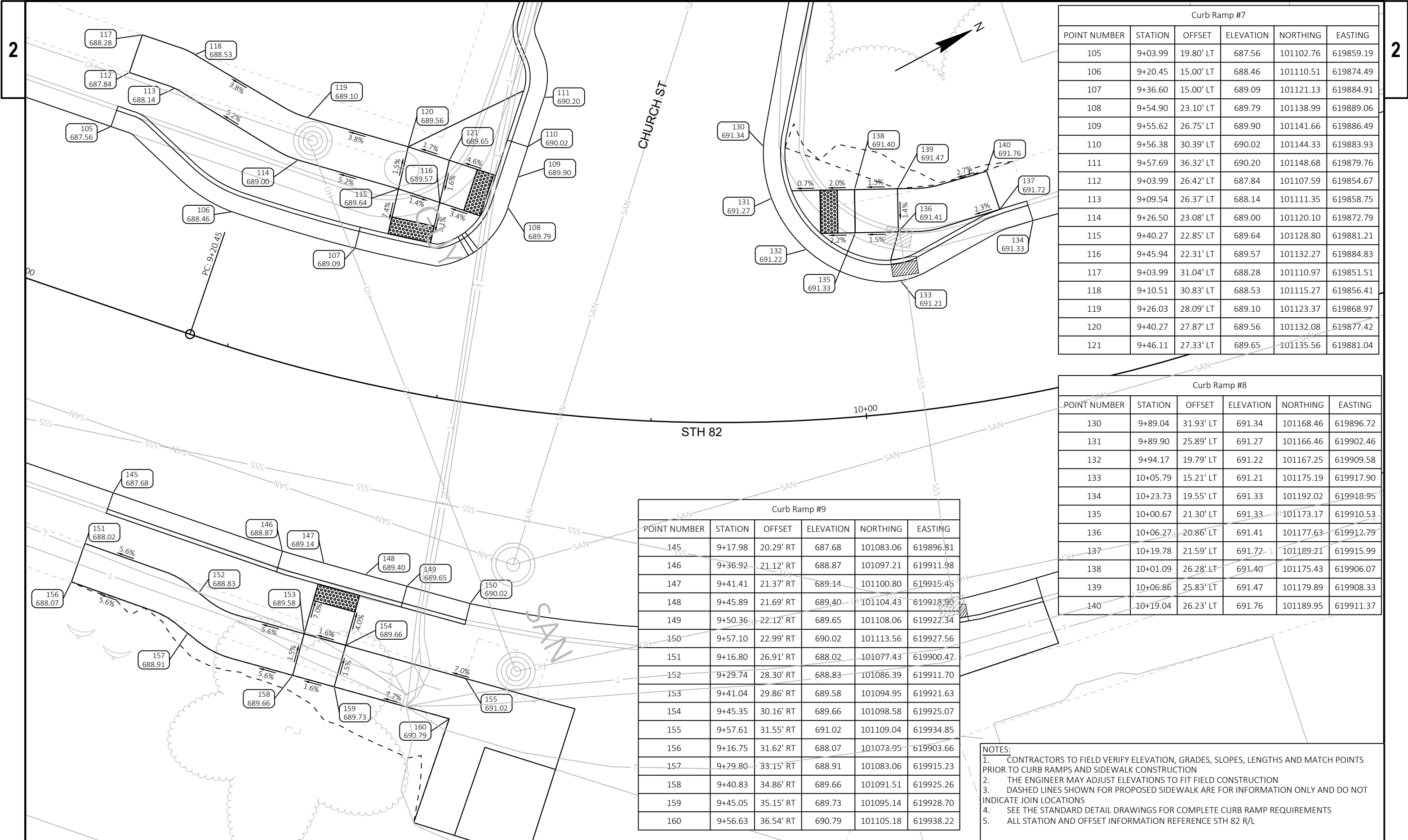


RAMP DOES NOT MEET ADA COMPLIANCE  
REPLACE CONCRETE SLAB, ADD DETECTOR  
FIELD

RAMP DOES NOT MEET ADA COMPLIANCE  
REPLACE CONCRETE SLAB, ADD DETECTOR  
FIELD

RAMP DOES NOT MEET ADA COMPLIANCE  
REPLACE CONCRETE SLAB, ADD DETECTOR  
FIELD

- NOTES:
1. CONTRACTORS TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMPS AND SIDEWALK CONSTRUCTION
  2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
  3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOIN LOCATIONS
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 82 R/L



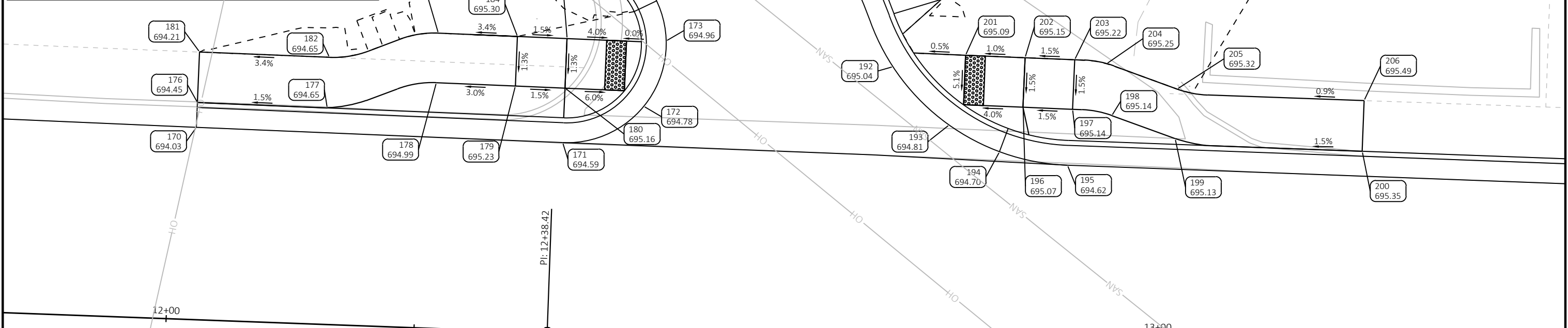
Curb Ramp #7					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
105	9+03.99	19.80' LT	687.56	101102.76	619859.19
106	9+20.45	15.00' LT	688.46	101110.51	619874.49
107	9+36.60	15.00' LT	689.09	101121.13	619884.91
108	9+54.90	23.10' LT	689.79	101138.99	619889.06
109	9+55.62	26.75' LT	689.90	101141.66	619886.49
110	9+56.38	30.39' LT	690.02	101144.33	619883.93
111	9+57.69	36.32' LT	690.20	101148.68	619879.76
112	9+03.99	26.42' LT	687.84	101107.59	619854.67
113	9+09.54	26.37' LT	688.14	101111.35	619858.75
114	9+26.50	23.08' LT	689.00	101120.10	619872.79
115	9+40.27	22.85' LT	689.64	101128.80	619881.21
116	9+45.94	22.31' LT	689.57	101132.27	619884.83
117	9+03.99	31.04' LT	688.28	101110.97	619851.51
118	9+10.51	30.83' LT	688.53	101115.27	619856.41
119	9+26.03	28.09' LT	689.10	101123.37	619868.97
120	9+40.27	27.87' LT	689.56	101132.08	619877.42
121	9+46.11	27.33' LT	689.65	101135.56	619881.04

Curb Ramp #8					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
130	9+89.04	31.93' LT	691.34	101168.46	619896.72
131	9+89.90	25.89' LT	691.27	101166.46	619902.46
132	9+94.17	19.79' LT	691.22	101167.25	619909.58
133	10+05.79	15.21' LT	691.21	101175.19	619917.90
134	10+23.73	19.55' LT	691.33	101192.02	619918.95
135	10+00.67	21.30' LT	691.33	101173.17	619910.53
136	10+06.27	20.86' LT	691.41	101177.63	619912.79
137	10+19.78	21.59' LT	691.72	101189.21	619915.99
138	10+01.09	26.28' LT	691.40	101175.43	619906.07
139	10+06.86	25.83' LT	691.47	101179.89	619908.33
140	10+19.04	26.23' LT	691.76	101189.95	619911.37

Curb Ramp #9					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
145	9+17.98	20.29' RT	687.68	101083.06	619896.81
146	9+36.92	21.12' RT	688.87	101097.21	619911.98
147	9+41.41	21.37' RT	689.14	101100.80	619915.45
148	9+45.89	21.69' RT	689.40	101104.43	619918.90
149	9+50.36	22.12' RT	689.65	101108.06	619922.34
150	9+57.10	22.99' RT	690.02	101113.56	619927.56
151	9+16.80	26.91' RT	688.02	101077.43	619900.47
152	9+29.74	28.30' RT	688.83	101086.39	619911.70
153	9+41.04	29.86' RT	689.58	101094.95	619921.63
154	9+45.35	30.16' RT	689.66	101098.58	619925.07
155	9+57.61	31.55' RT	691.02	101109.04	619934.85
156	9+16.75	31.62' RT	688.07	101073.95	619903.66
157	9+29.80	33.15' RT	688.91	101083.06	619915.23
158	9+40.83	34.86' RT	689.66	101091.51	619925.26
159	9+45.05	35.15' RT	689.73	101095.14	619928.70
160	9+56.63	36.54' RT	690.79	101105.18	619938.22

- NOTES:
- CONTRACTORS TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMP AND SIDEWALK CONSTRUCTION
  - THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
  - DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOIN LOCATIONS
  - SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
  - ALL STATION AND OFFSET INFORMATION REFERENCE STH 82 R/L

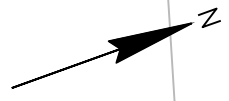
Curb Ramp #10					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
170	12+02.34	19.39' LT	694.03	101365.74	619951.24
171	12+39.90	19.17' LT	694.59	101402.06	619957.99
172	12+48.04	22.87' LT	694.78	101410.66	619955.51
173	12+50.27	29.45' LT	694.96	101413.82	619949.32
174	12+49.29	33.49' LT	695.12	101413.44	619945.18
175	12+36.61	44.37' LT	696.59	101403.90	619932.75
176	12+02.35	21.89' LT	694.45	101366.20	619948.79
177	12+15.45	21.83' LT	694.65	101379.08	619951.18
178	12+26.34	24.77' LT	694.99	101390.32	619956.71
179	12+34.31	24.73' LT	695.23	101398.15	619951.67
180	12+40.11	24.66' LT	695.16	101403.07	619952.58
181	12+02.38	26.99' LT	694.21	101367.13	619945.78
182	12+15.47	26.94' LT	694.65	101380.01	619946.15
183	12+26.36	29.77' LT	695.03	101391.23	619945.30
184	12+34.33	29.73' LT	695.30	101399.06	619946.75
185	12+40.29	29.66' LT	695.22	101403.98	619947.66



Curb Ramp #11					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
190	12+49.37	58.39' LT	697.44	101417.15	619920.56
191	12+64.25	43.91' LT	695.92	101429.76	619937.05
192	12+73.15	26.98' LT	695.04	101436.10	619955.10
193	12+78.84	21.12' LT	694.81	101440.87	619961.73
194	12+83.93	18.45' LT	694.70	101445.52	619965.10
195	12+90.79	17.12' LT	694.62	101452.11	619967.42
196	12+86.28	22.94' LT	695.07	101448.49	619961.01
197	12+91.27	22.75' LT	695.14	101453.41	619961.92
198	12+95.23	22.14' LT	695.14	101457.23	619963.11

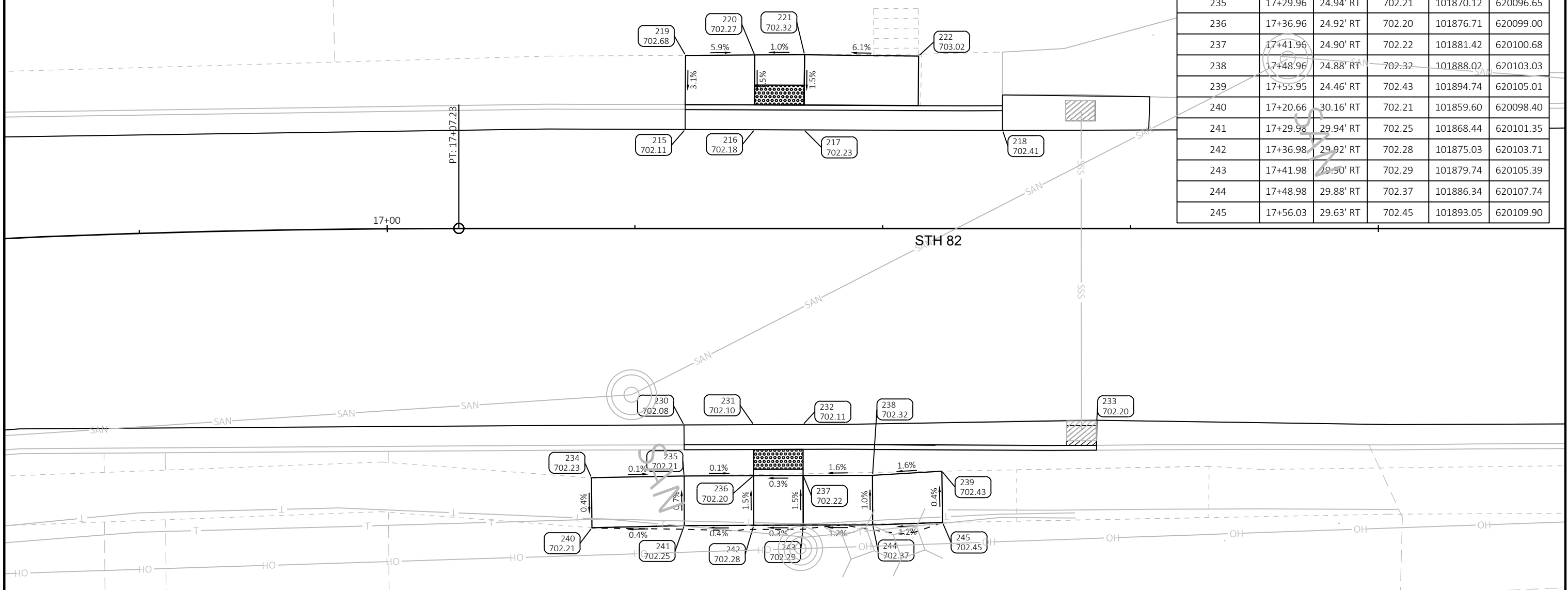
Curb Ramp #11					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
199	13+01.62	19.84' LT	695.13	101463.23	619966.31
200	13+20.47	18.65' LT	695.35	101481.70	619970.23
201	12+80.47	28.16' LT	695.09	101443.51	619955.00
202	12+86.46	27.93' LT	695.15	101449.41	619956.09
203	12+91.46	27.75' LT	695.22	101454.32	619957.00
204	12+94.68	27.36' LT	695.25	101457.46	619957.85
205	13+01.81	24.84' LT	695.32	101464.14	619961.39
206	13+20.66	23.77' LT	695.49	101482.63	619965.20

- NOTES:**
1. CONTRACTORS TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMPS AND SIDEWALK CONSTRUCTION
  2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
  3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOIN LOCATIONS
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 82 R/L



Curb Ramp #12					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
215	17+30.06	9.98' LT	702.11	101882.06	620063.83
216	17+37.06	9.96' LT	702.18	101888.63	620066.22
217	17+42.06	9.94' LT	702.23	101893.33	620067.94
218	17+62.08	9.88' LT	702.41	101912.14	620074.79
219	17+30.10	17.45' LT	702.68	101884.63	620056.82
220	17+37.08	17.49' LT	702.27	101891.21	620059.15
221	17+42.10	17.52' LT	702.32	101895.95	620060.82
222	17+53.61	17.37' LT	703.02	101906.72	620064.86

Curb Ramp #13					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
230	17+29.94	19.80' RT	702.08	101871.85	620091.80
231	17+36.96	19.77' RT	702.10	101878.46	620094.16
232	17+41.96	19.76' RT	702.11	101883.17	620095.84
233	17+71.55	19.85' RT	702.20	101910.97	620105.96
234	17+20.61	25.10' RT	702.23	101861.27	620093.63
235	17+29.96	24.94' RT	702.21	101870.12	620096.65
236	17+36.96	24.92' RT	702.20	101876.71	620099.00
237	17+41.96	24.90' RT	702.22	101881.42	620100.68
238	17+48.96	24.88' RT	702.32	101888.02	620103.03
239	17+55.95	24.46' RT	702.43	101894.74	620105.01
240	17+20.66	30.16' RT	702.21	101859.60	620098.40
241	17+29.96	29.94' RT	702.25	101868.44	620101.35
242	17+36.98	29.92' RT	702.28	101875.03	620103.71
243	17+41.98	29.90' RT	702.29	101879.74	620105.39
244	17+48.98	29.88' RT	702.37	101886.34	620107.74
245	17+56.03	29.63' RT	702.45	101893.05	620109.90

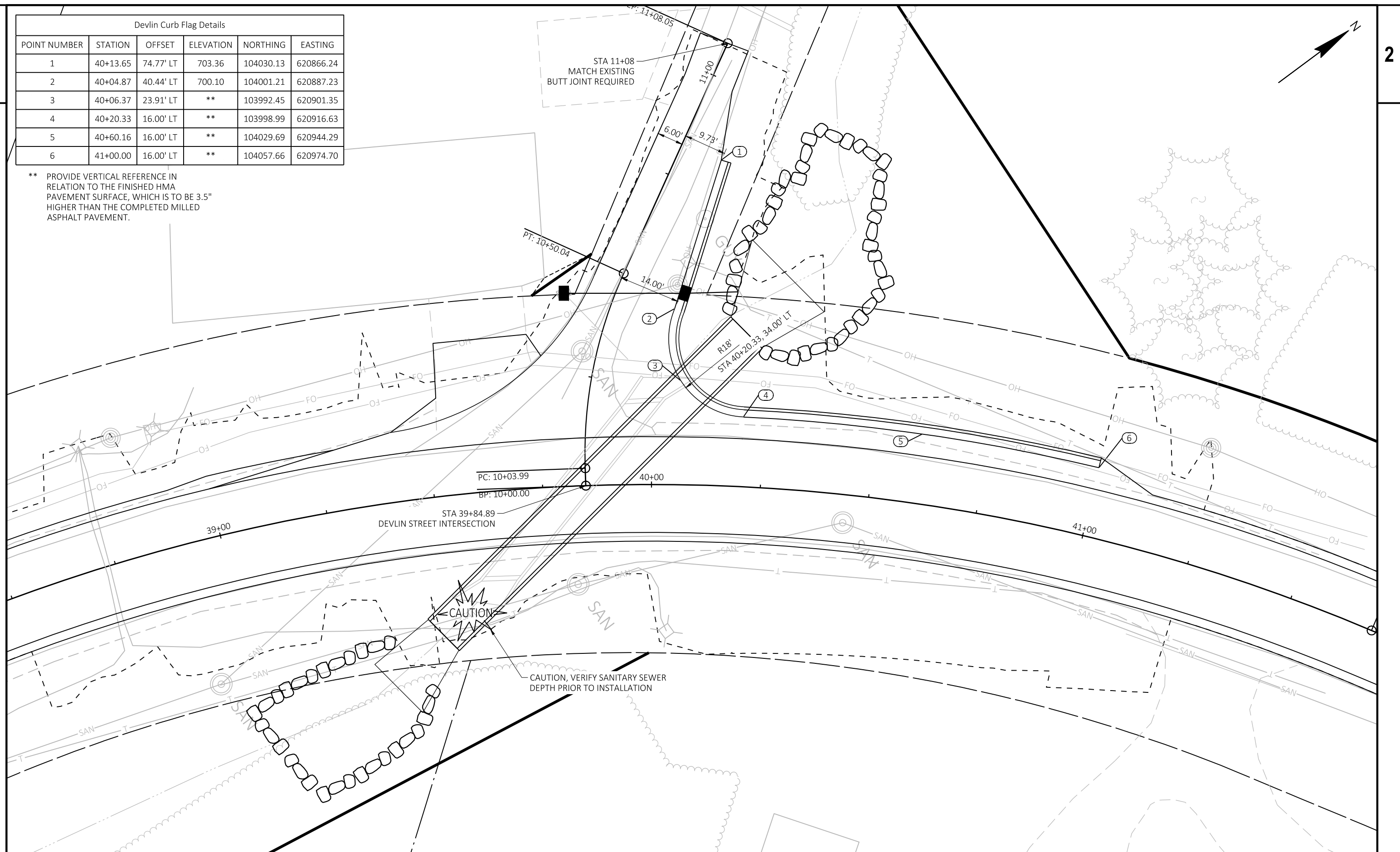


- NOTES:**
1. CONTRACTORS TO FIELD VERIFY ELEVATION, GRADES, SLOPES, LENGTHS AND MATCH POINTS PRIOR TO CURB RAMPS AND SIDEWALK CONSTRUCTION
  2. THE ENGINEER MAY ADJUST ELEVATIONS TO FIT FIELD CONSTRUCTION
  3. DASHED LINES SHOWN FOR PROPOSED SIDEWALK ARE FOR INFORMATION ONLY AND DO NOT INDICATE JOIN LOCATIONS
  4. SEE THE STANDARD DETAIL DRAWINGS FOR COMPLETE CURB RAMP REQUIREMENTS
  5. ALL STATION AND OFFSET INFORMATION REFERENCE STH 82 R/L

Devlin Curb Flag Details

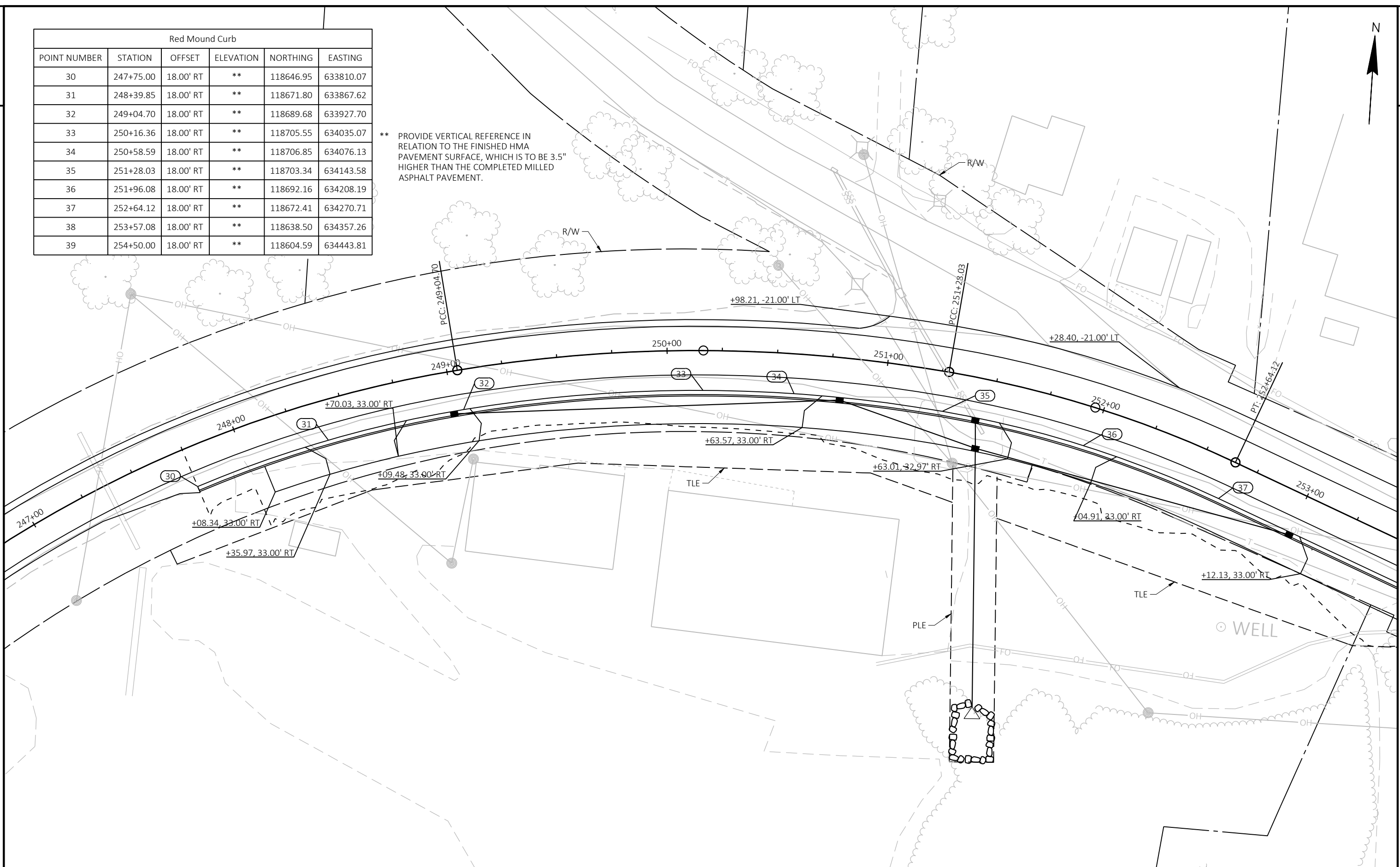
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
1	40+13.65	74.77' LT	703.36	104030.13	620866.24
2	40+04.87	40.44' LT	700.10	104001.21	620887.23
3	40+06.37	23.91' LT	**	103992.45	620901.35
4	40+20.33	16.00' LT	**	103998.99	620916.63
5	40+60.16	16.00' LT	**	104029.69	620944.29
6	41+00.00	16.00' LT	**	104057.66	620974.70

\*\* PROVIDE VERTICAL REFERENCE IN RELATION TO THE FINISHED HMA PAVEMENT SURFACE, WHICH IS TO BE 3.5" HIGHER THAN THE COMPLETED MILLED ASPHALT PAVEMENT.



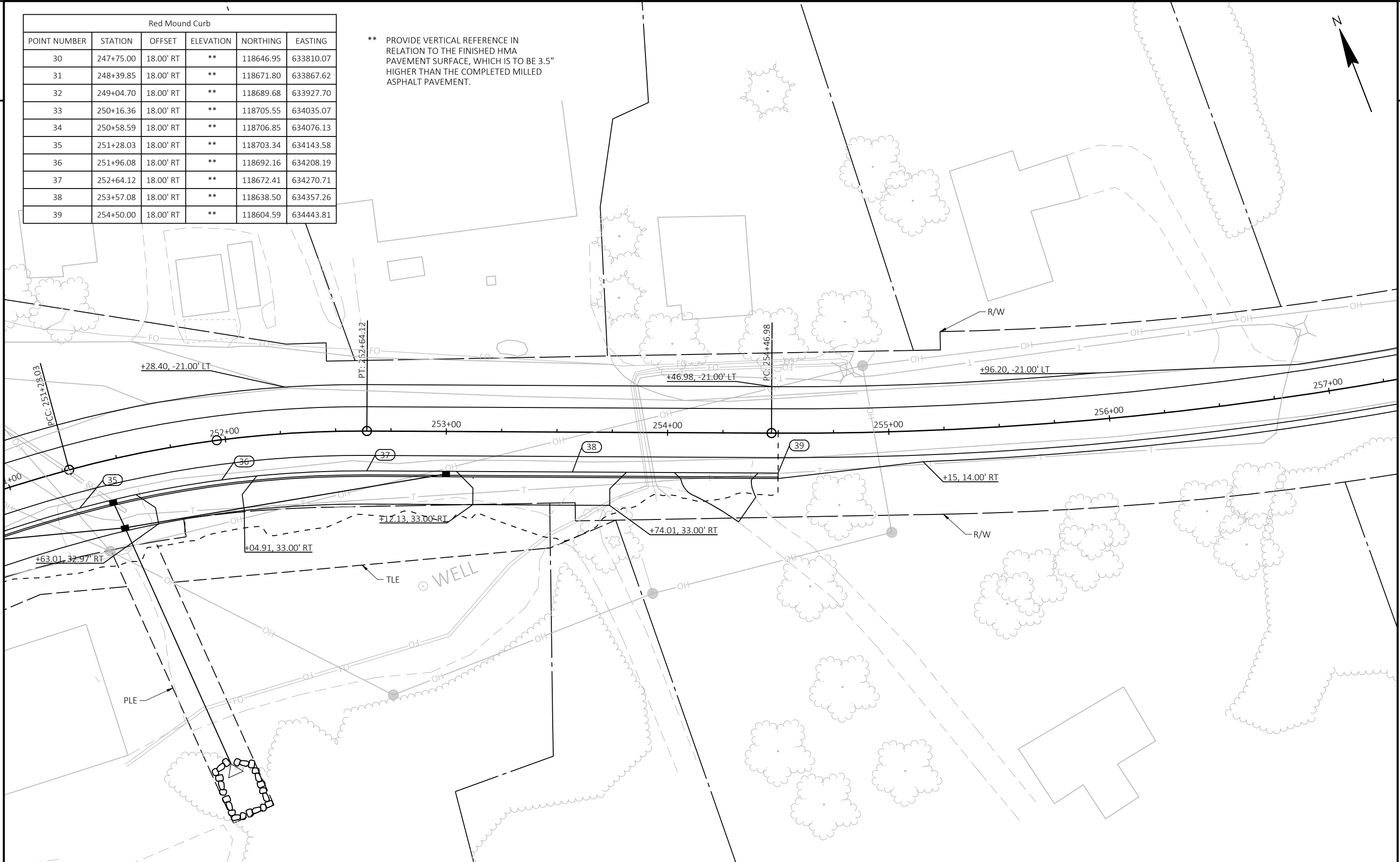
Red Mound Curb					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
30	247+75.00	18.00' RT	**	118646.95	633810.07
31	248+39.85	18.00' RT	**	118671.80	633867.62
32	249+04.70	18.00' RT	**	118689.68	633927.70
33	250+16.36	18.00' RT	**	118705.55	634035.07
34	250+58.59	18.00' RT	**	118706.85	634076.13
35	251+28.03	18.00' RT	**	118703.34	634143.58
36	251+96.08	18.00' RT	**	118692.16	634208.19
37	252+64.12	18.00' RT	**	118672.41	634270.71
38	253+57.08	18.00' RT	**	118638.50	634357.26
39	254+50.00	18.00' RT	**	118604.59	634443.81

\*\* PROVIDE VERTICAL REFERENCE IN RELATION TO THE FINISHED HMA PAVEMENT SURFACE, WHICH IS TO BE 3.5" HIGHER THAN THE COMPLETED MILLED ASPHALT PAVEMENT.



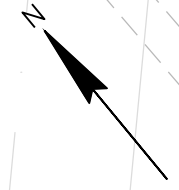
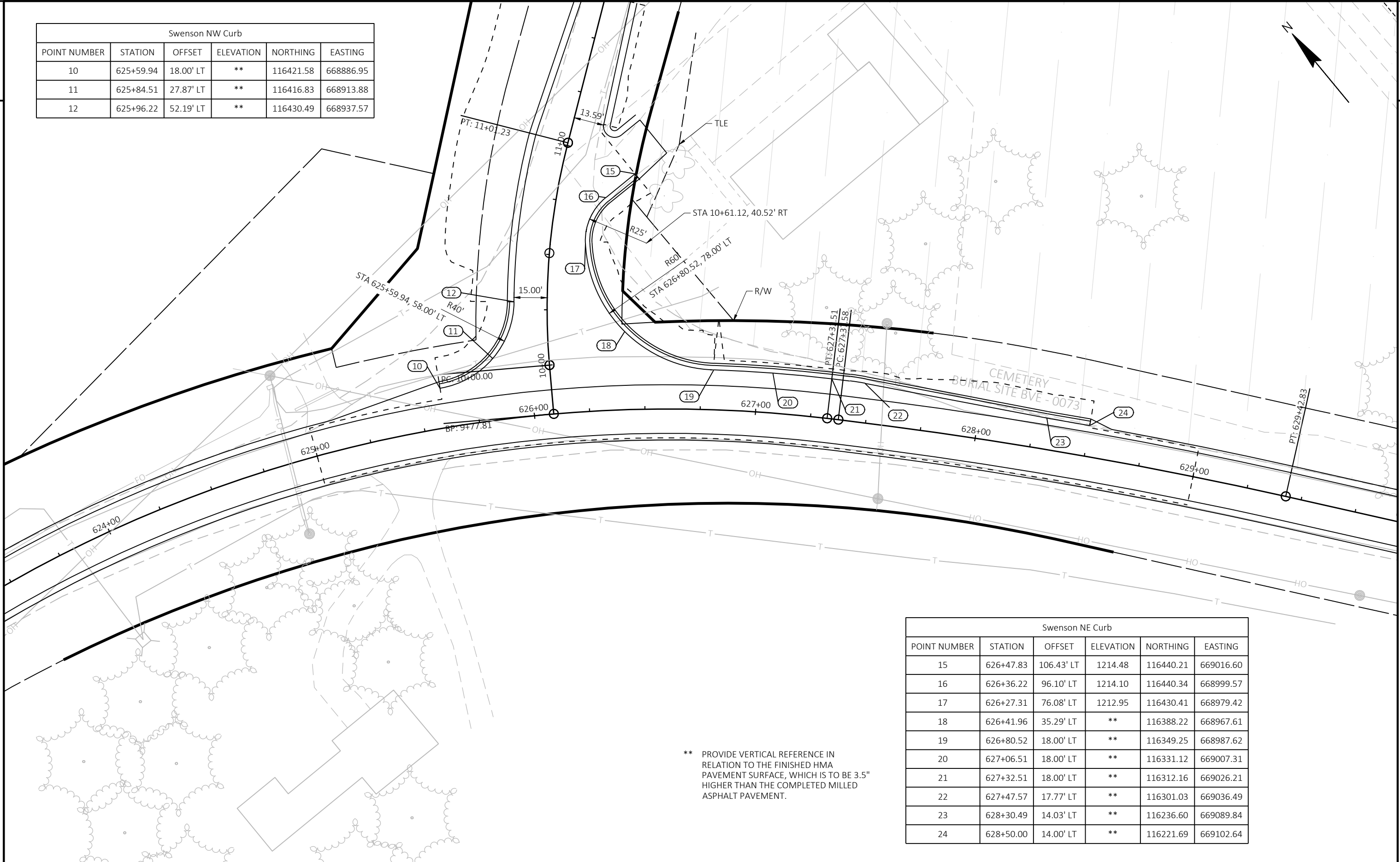
Red Mound Curb					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
30	247+75.00	18.00' RT	**	118646.95	633810.07
31	248+39.85	18.00' RT	**	118671.80	633867.62
32	249+04.70	18.00' RT	**	118689.68	633927.70
33	250+16.36	18.00' RT	**	118705.55	634035.07
34	250+58.59	18.00' RT	**	118706.85	634076.13
35	251+28.03	18.00' RT	**	118703.34	634143.58
36	251+96.08	18.00' RT	**	118692.16	634208.19
37	252+64.12	18.00' RT	**	118672.41	634270.71
38	253+57.08	18.00' RT	**	118638.50	634357.26
39	254+50.00	18.00' RT	**	118604.59	634443.81

\*\* PROVIDE VERTICAL REFERENCE IN RELATION TO THE FINISHED HMA PAVEMENT SURFACE, WHICH IS TO BE 3.5" HIGHER THAN THE COMPLETED MILLED ASPHALT PAVEMENT.



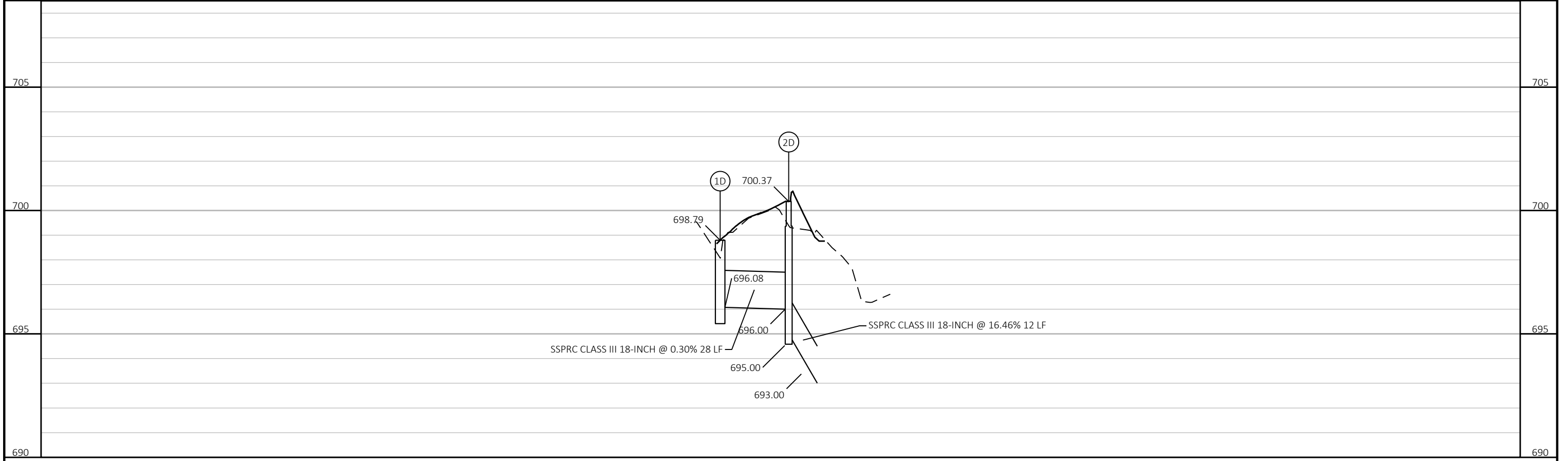
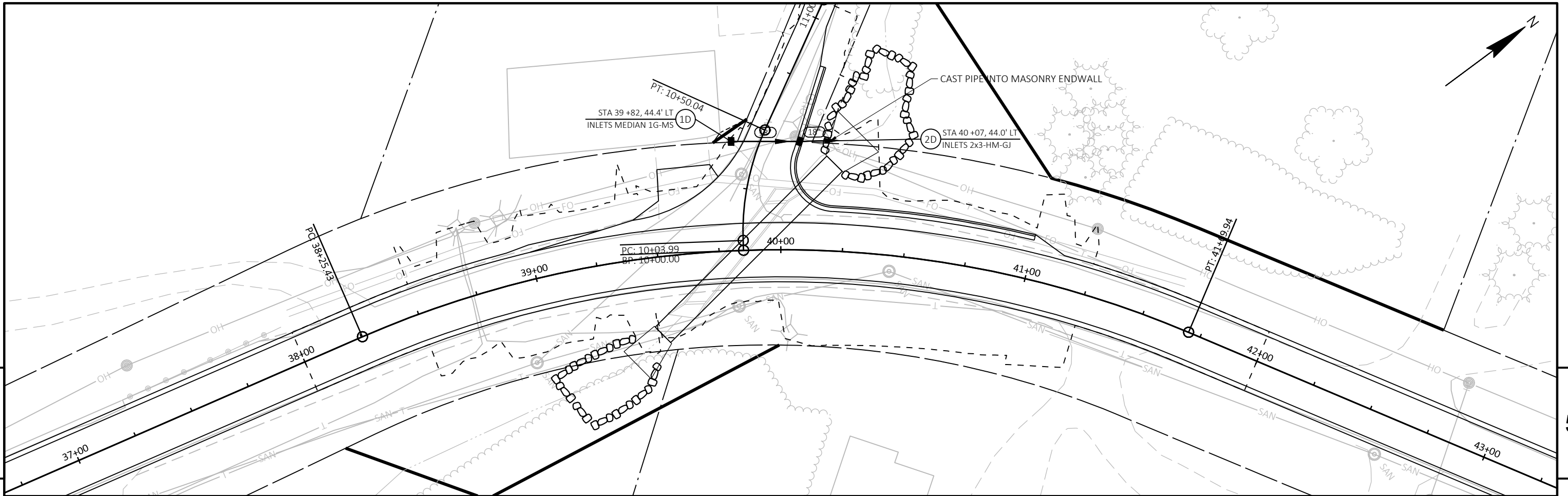


Swenson NW Curb					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
10	625+59.94	18.00' LT	**	116421.58	668886.95
11	625+84.51	27.87' LT	**	116416.83	668913.88
12	625+96.22	52.19' LT	**	116430.49	668937.57

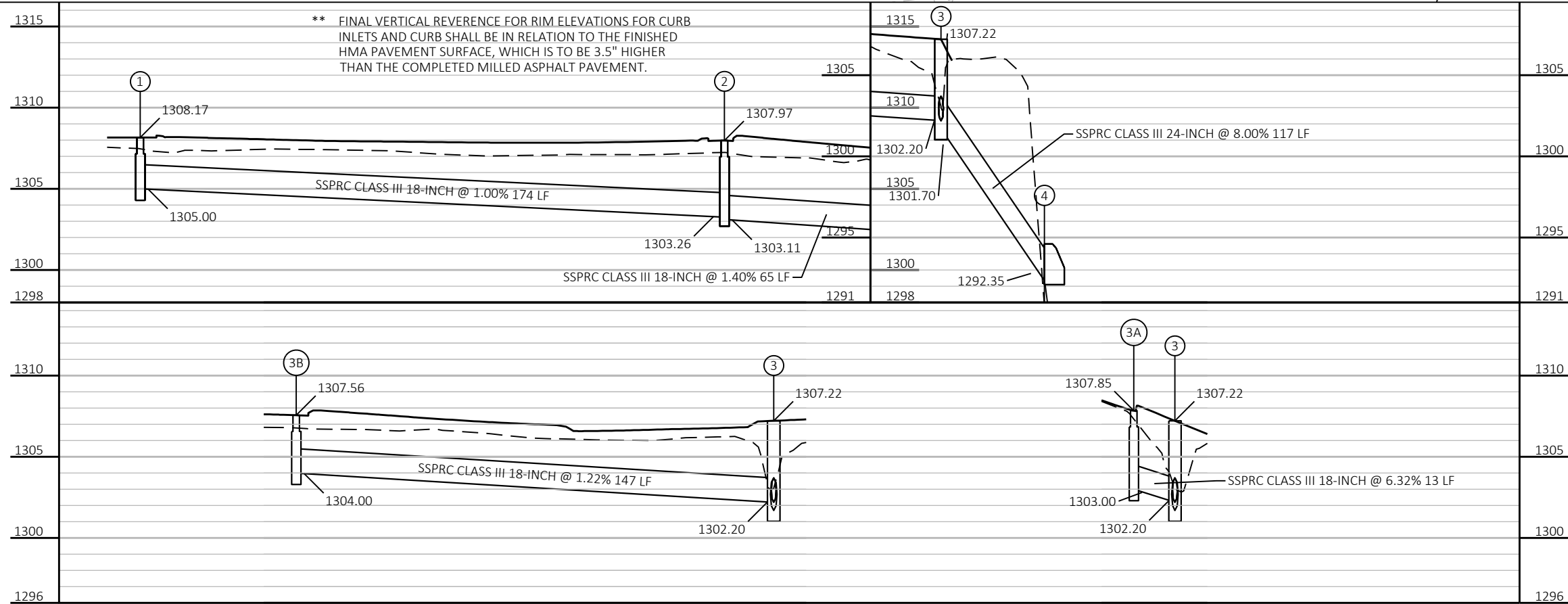
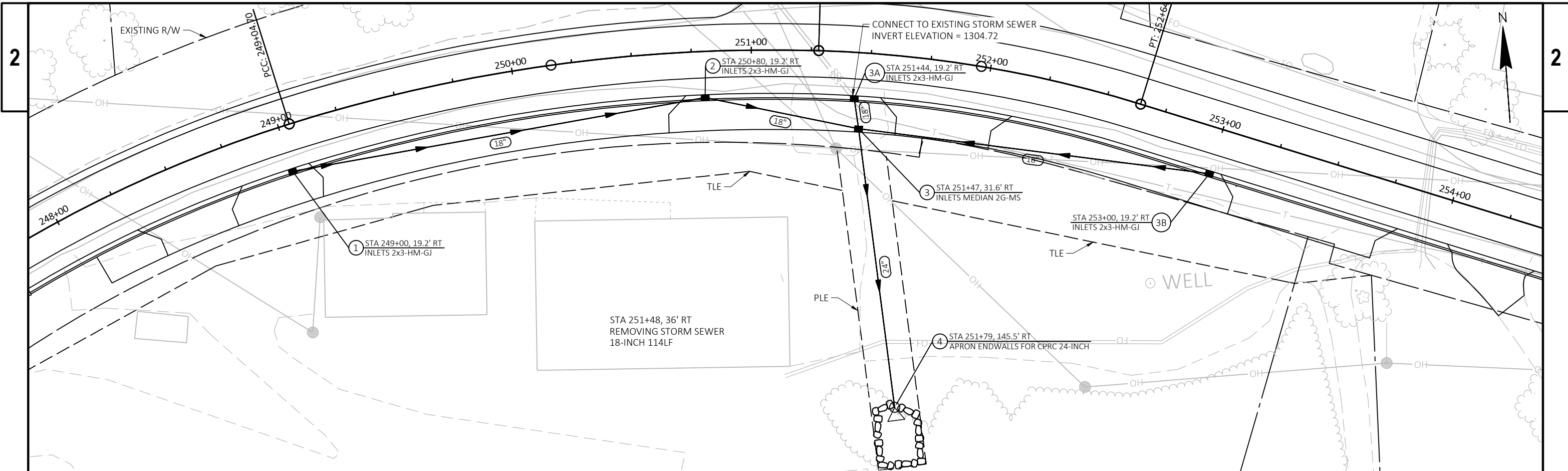


Swenson NE Curb					
POINT NUMBER	STATION	OFFSET	ELEVATION	NORTHING	EASTING
15	626+47.83	106.43' LT	1214.48	116440.21	669016.60
16	626+36.22	96.10' LT	1214.10	116440.34	668999.57
17	626+27.31	76.08' LT	1212.95	116430.41	668979.42
18	626+41.96	35.29' LT	**	116388.22	668967.61
19	626+80.52	18.00' LT	**	116349.25	668987.62
20	627+06.51	18.00' LT	**	116331.12	669007.31
21	627+32.51	18.00' LT	**	116312.16	669026.21
22	627+47.57	17.77' LT	**	116301.03	669036.49
23	628+30.49	14.03' LT	**	116236.60	669089.84
24	628+50.00	14.00' LT	**	116221.69	669102.64

\*\* PROVIDE VERTICAL REFERENCE IN RELATION TO THE FINISHED HMA PAVEMENT SURFACE, WHICH IS TO BE 3.5" HIGHER THAN THE COMPLETED MILLED ASPHALT PAVEMENT.



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN AND PROFILE: PLAN DETAILS - STORM SEWER	SHEET	<b>E</b>
------------------------	-------------	----------------	--	-------	----------

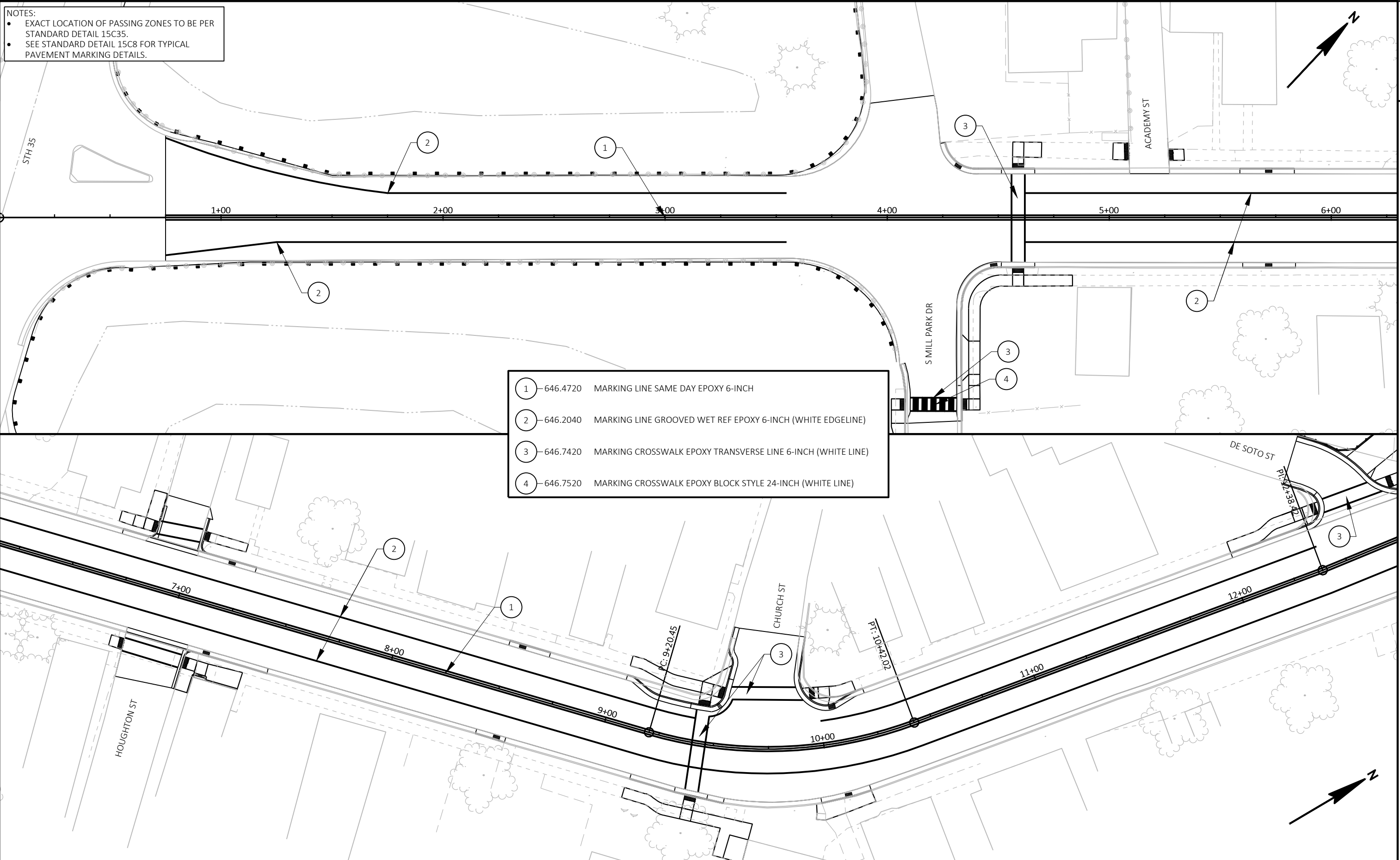


2

2

NOTES:

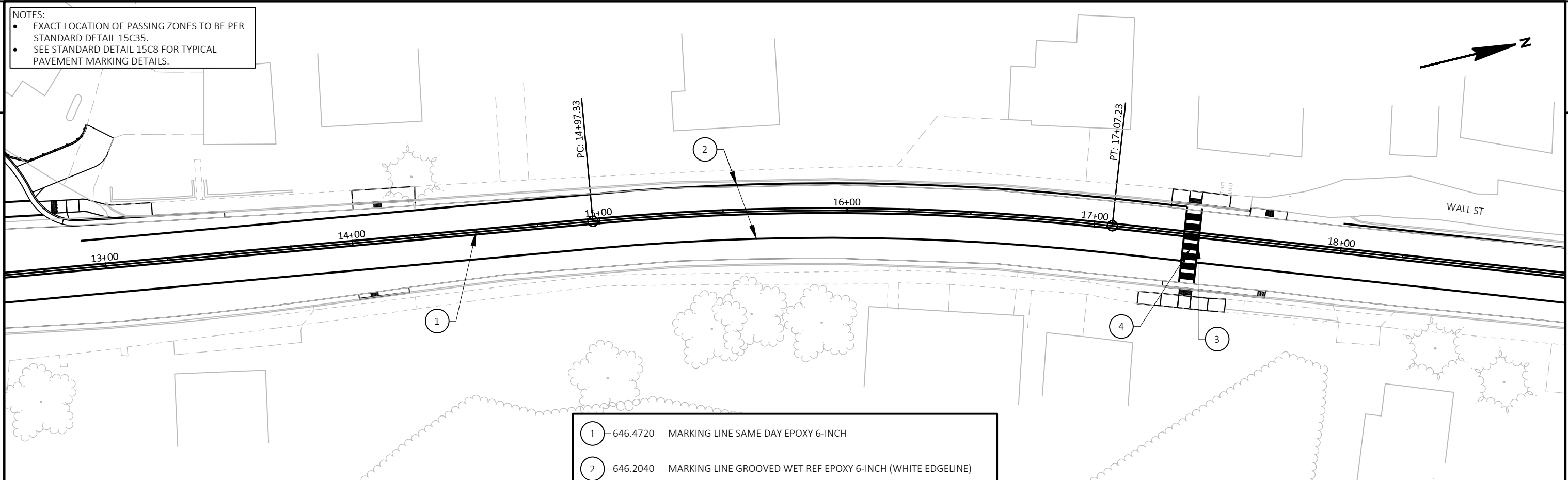
- EXACT LOCATION OF PASSING ZONES TO BE PER STANDARD DETAIL 15C35.
- SEE STANDARD DETAIL 15C8 FOR TYPICAL PAVEMENT MARKING DETAILS.



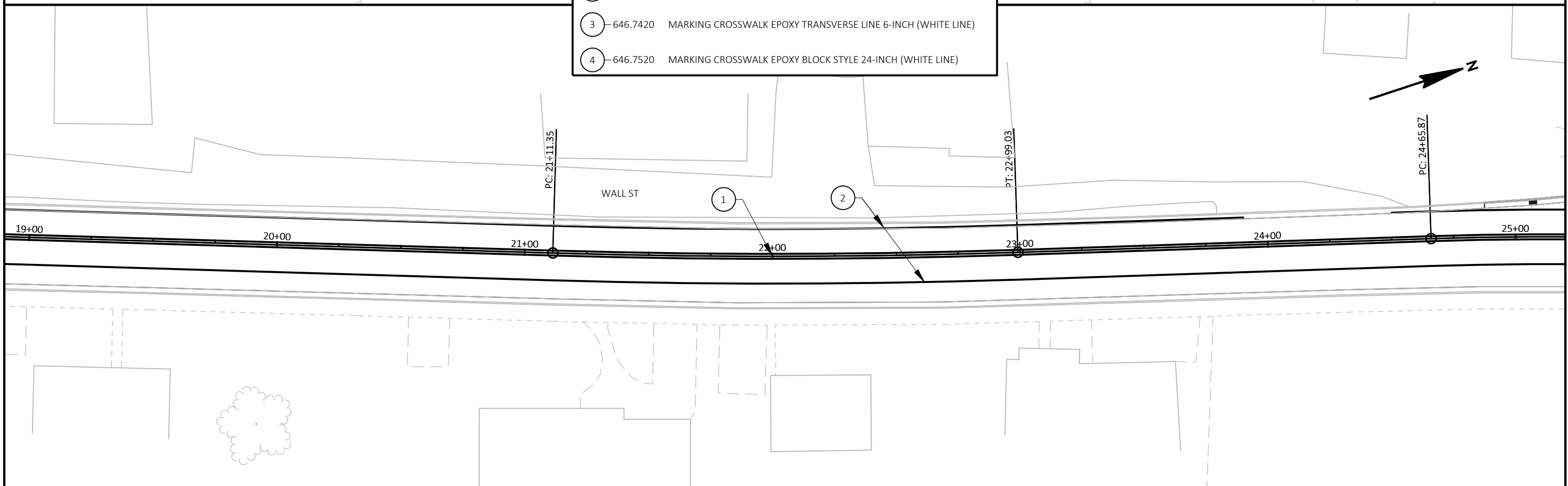
1	646.4720	MARKING LINE SAME DAY EPOXY 6-INCH
2	646.2040	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE EDGELINE)
3	646.7420	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE LINE)
4	646.7520	MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE LINE)

NOTES:

- EXACT LOCATION OF PASSING ZONES TO BE PER STANDARD DETAIL 15C35.
- SEE STANDARD DETAIL 15C8 FOR TYPICAL PAVEMENT MARKING DETAILS.

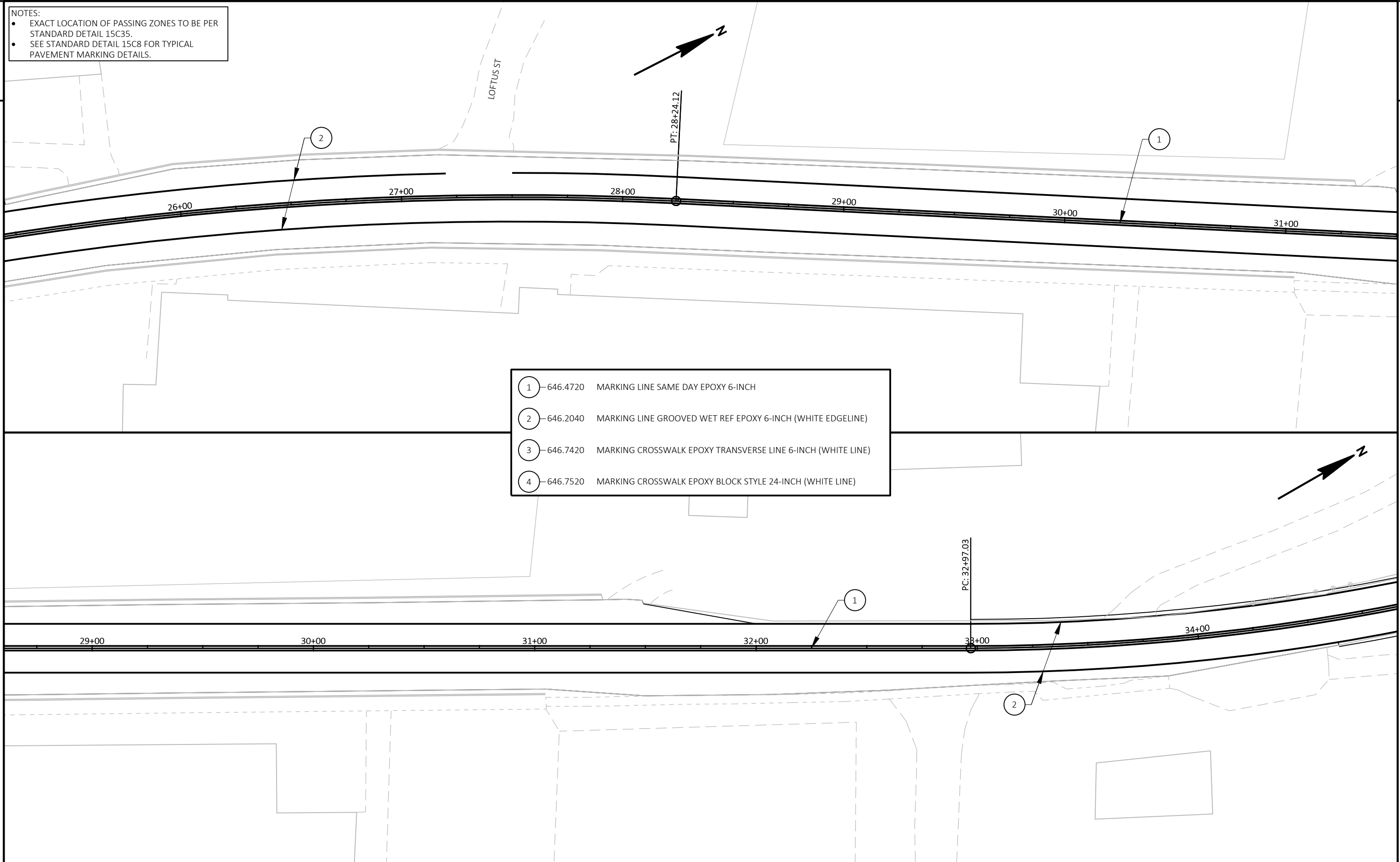


- ① - 646.4720 MARKING LINE SAME DAY EPOXY 6-INCH
- ② - 646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE EDGELINE)
- ③ - 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE LINE)
- ④ - 646.7520 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE LINE)



NOTES:

- EXACT LOCATION OF PASSING ZONES TO BE PER STANDARD DETAIL 15C35.
- SEE STANDARD DETAIL 15C8 FOR TYPICAL PAVEMENT MARKING DETAILS.



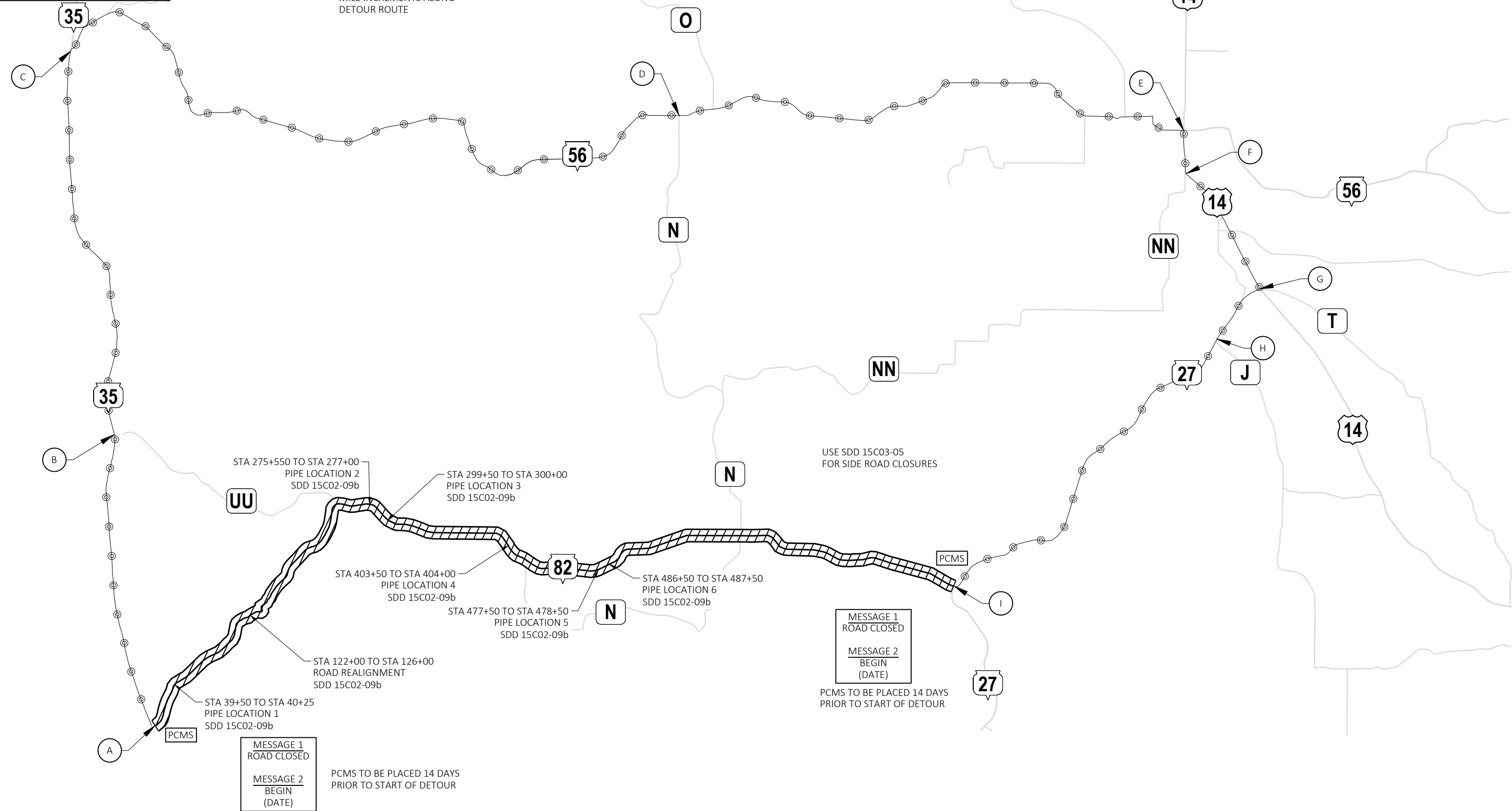
- ① - 646.4720 MARKING LINE SAME DAY EPOXY 6-INCH
- ② - 646.2040 MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE EDGELINE)
- ③ - 646.7420 MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE LINE)
- ④ - 646.7520 MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE LINE)

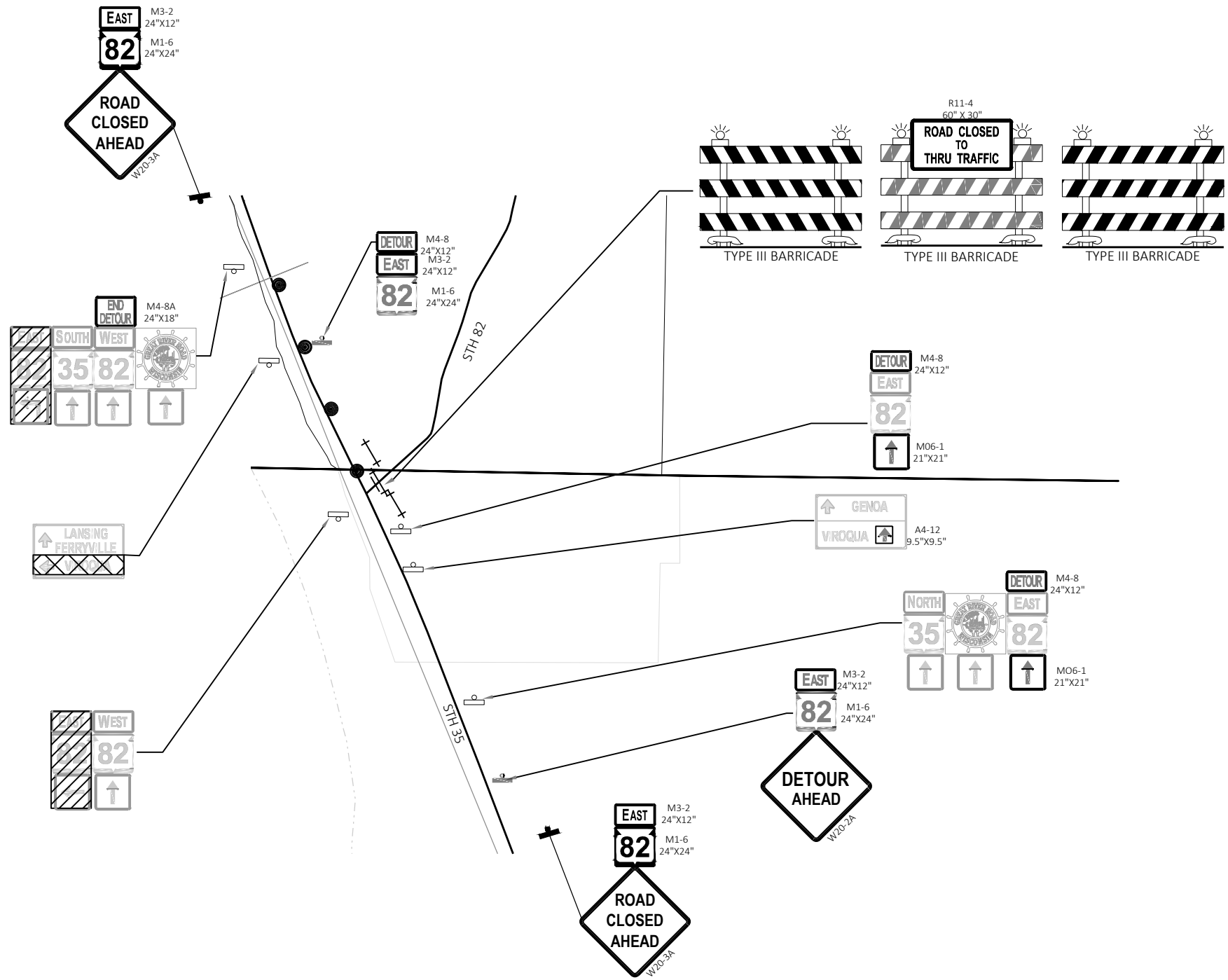
**LEGEND**

- WORK AREA
- DETOUR ROUTE
- DETAIL AREA
- PORTABLE CHANGEABLE MESSAGE BOARD

<b>DETOUR WEST</b>	M4-8 24"x12" M3-4 24"x12" M1-6 24"x24"	<b>DETOUR EAST</b>	M4-8 24"x12" M3-2 24"x12" M1-6 24"x24"
--------------------	---	--------------------	---

DETOUR REASSURANCE SIGNS SHALL BE PLACED AT 4 MILE INCREMENTS ALONG DETOUR ROUTE





DETAIL A

**LEGEND**

- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETOUR ROUTE

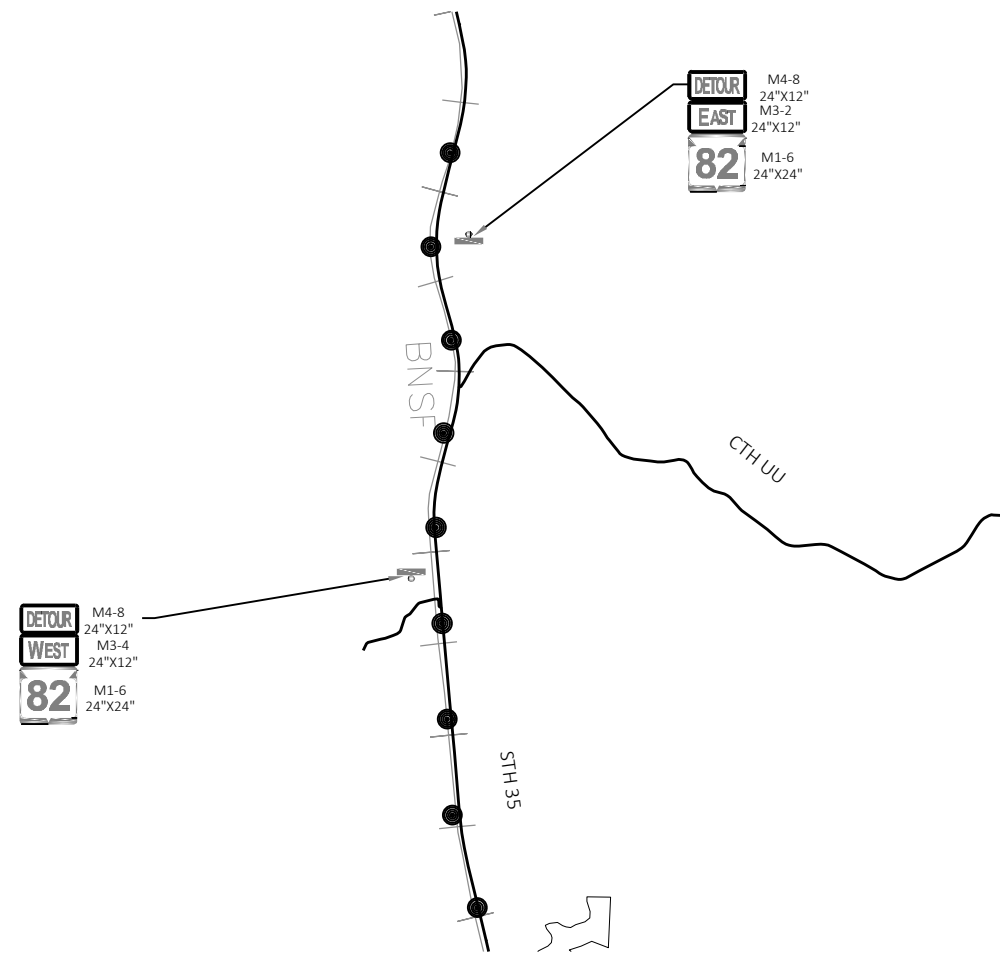
**GENERAL NOTES**

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. REFERENCE SDD 15C02-C DETOUR SIGNING FOR MAINLINE CLOSURES.

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.





DETAIL B

LEGEND

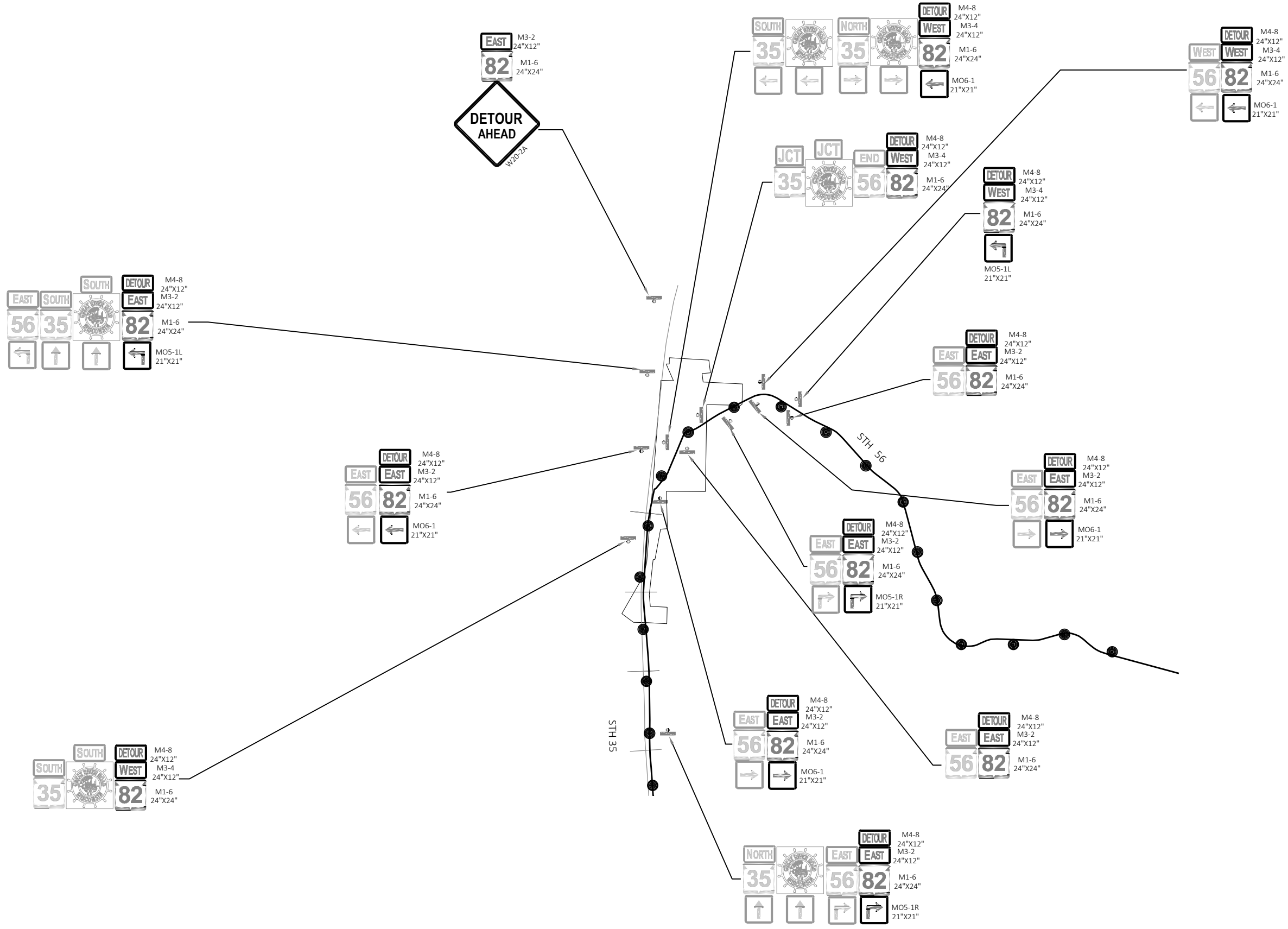
- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETOUR ROUTE

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. REFERENCE SDD 15C02-C DETOUR SIGNING FOR MAINLINE CLOSURES.

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.



DETAIL C

### LEGEND

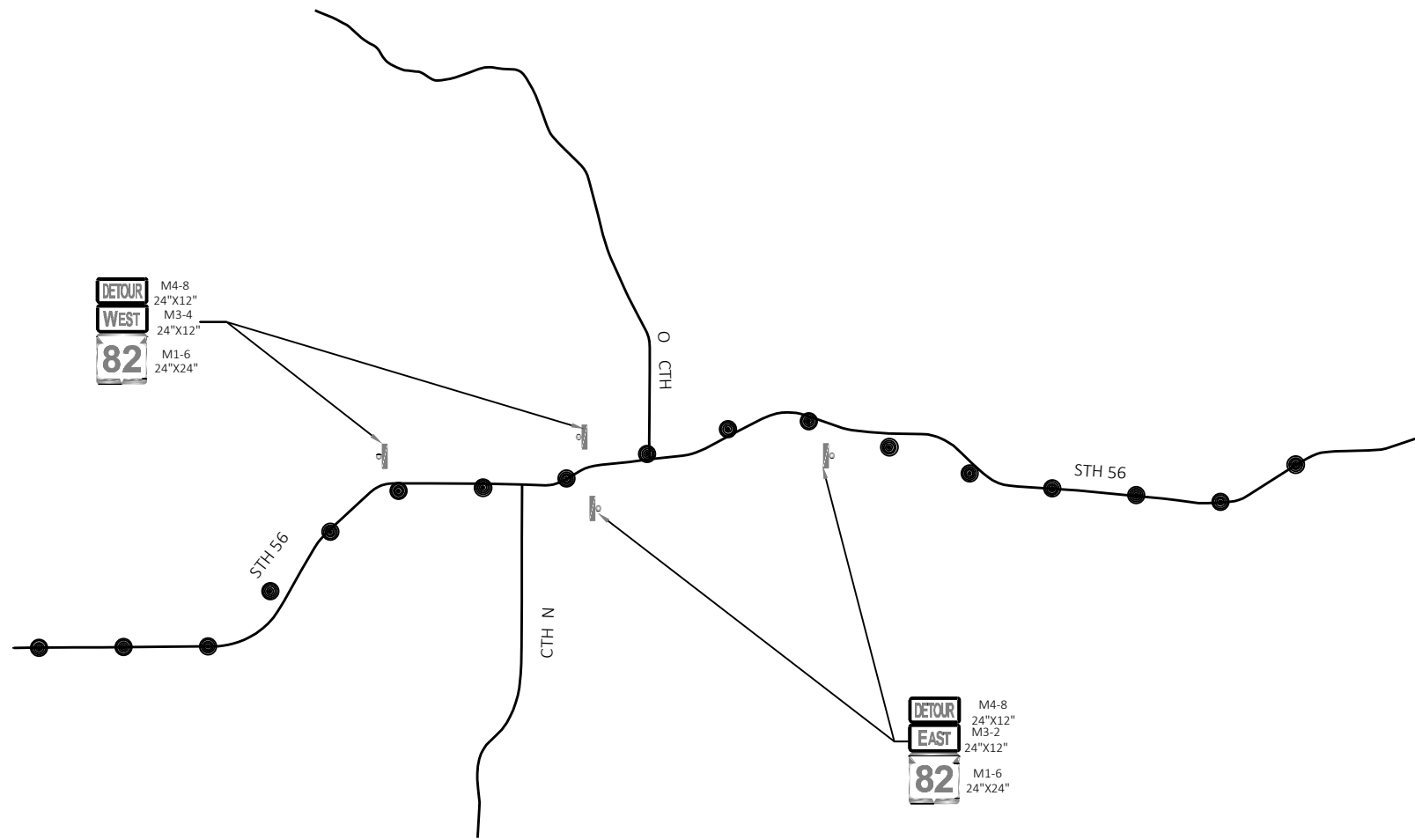
- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETOUR ROUTE

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. REFERENCE SDD 15C02-C DETOUR SIGNING FOR MAINLINE CLOSURES.








ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL MO5 AND MO6 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.



DETAIL D

LEGEND

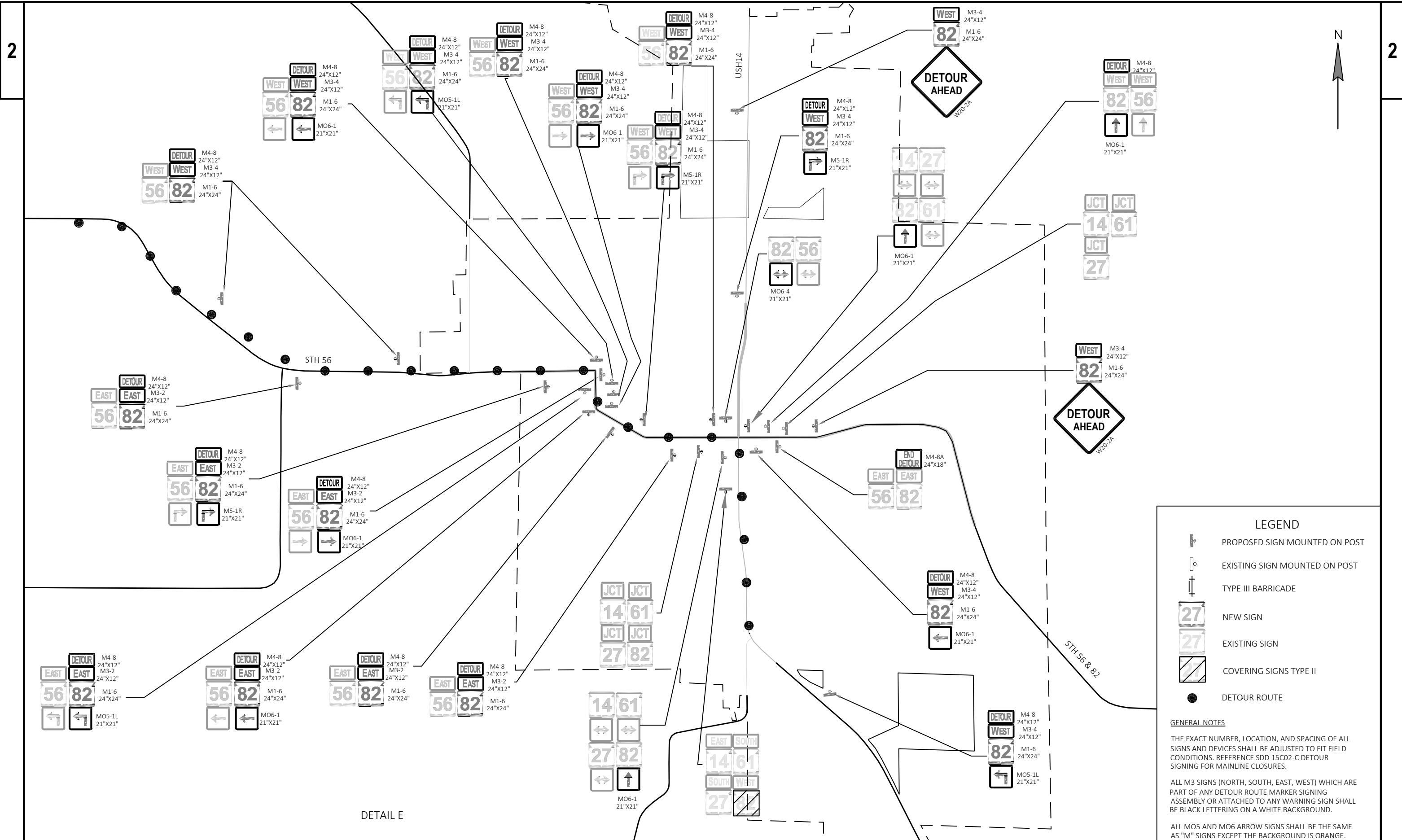
-  PROPOSED SIGN MOUNTED ON POST
-  EXISTING SIGN MOUNTED ON POST
-  TYPE III BARRICADE
-  NEW SIGN
-  EXISTING SIGN
-  COVERING SIGNS TYPE II
-  DETOUR ROUTE

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. REFERENCE SDD 15C02-C DETOUR SIGNING FOR MAINLINE CLOSURES.

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.



DETAIL E

**LEGEND**

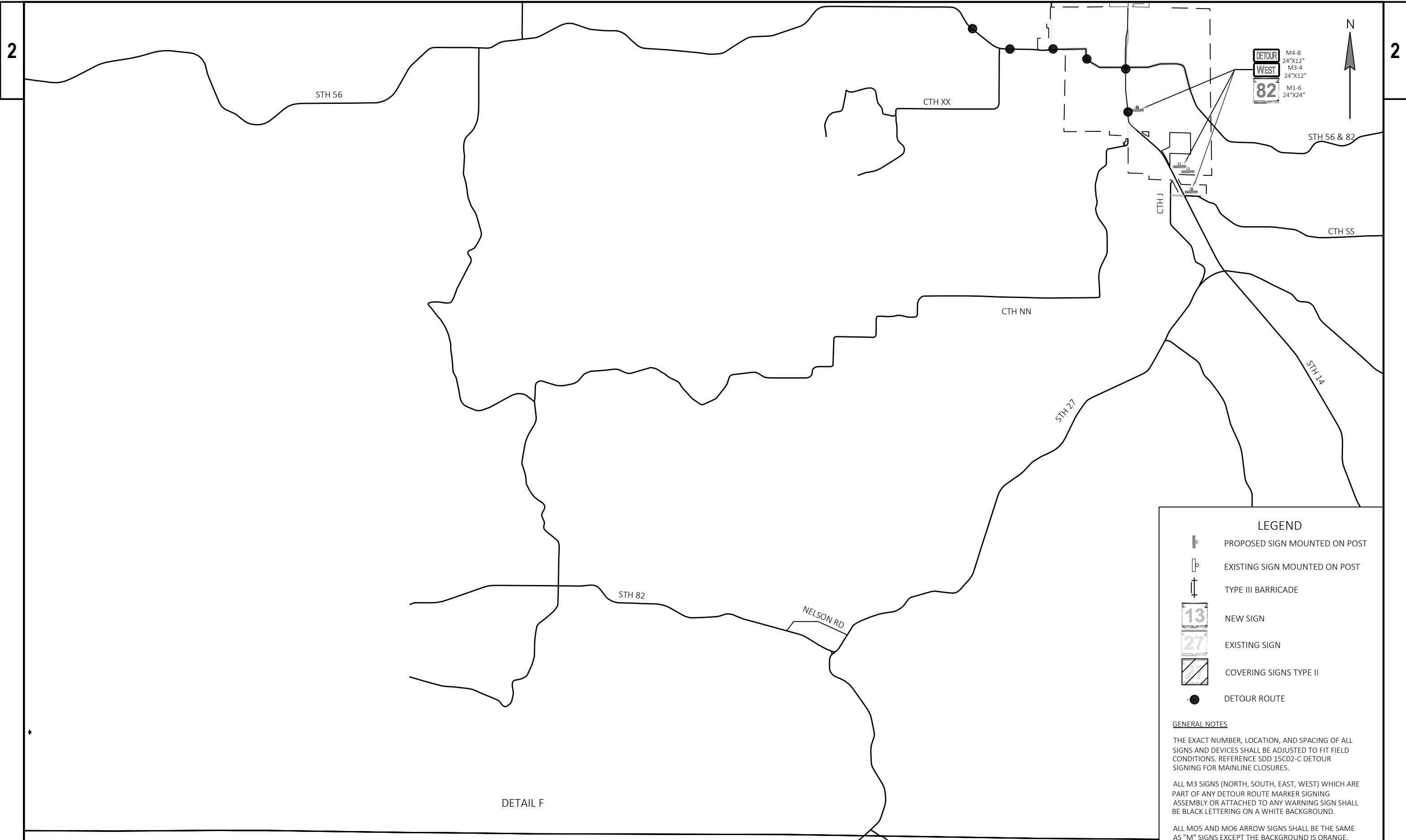
- PROPOSED SIGN MOUNTED ON POST
- EXISTING SIGN MOUNTED ON POST
- TYPE III BARRICADE
- NEW SIGN
- EXISTING SIGN
- COVERING SIGNS TYPE II
- DETOUR ROUTE

**GENERAL NOTES**








THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. REFERENCE SDD 15C02-C DETOUR SIGNING FOR MAINLINE CLOSURES.

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.



**LEGEND**

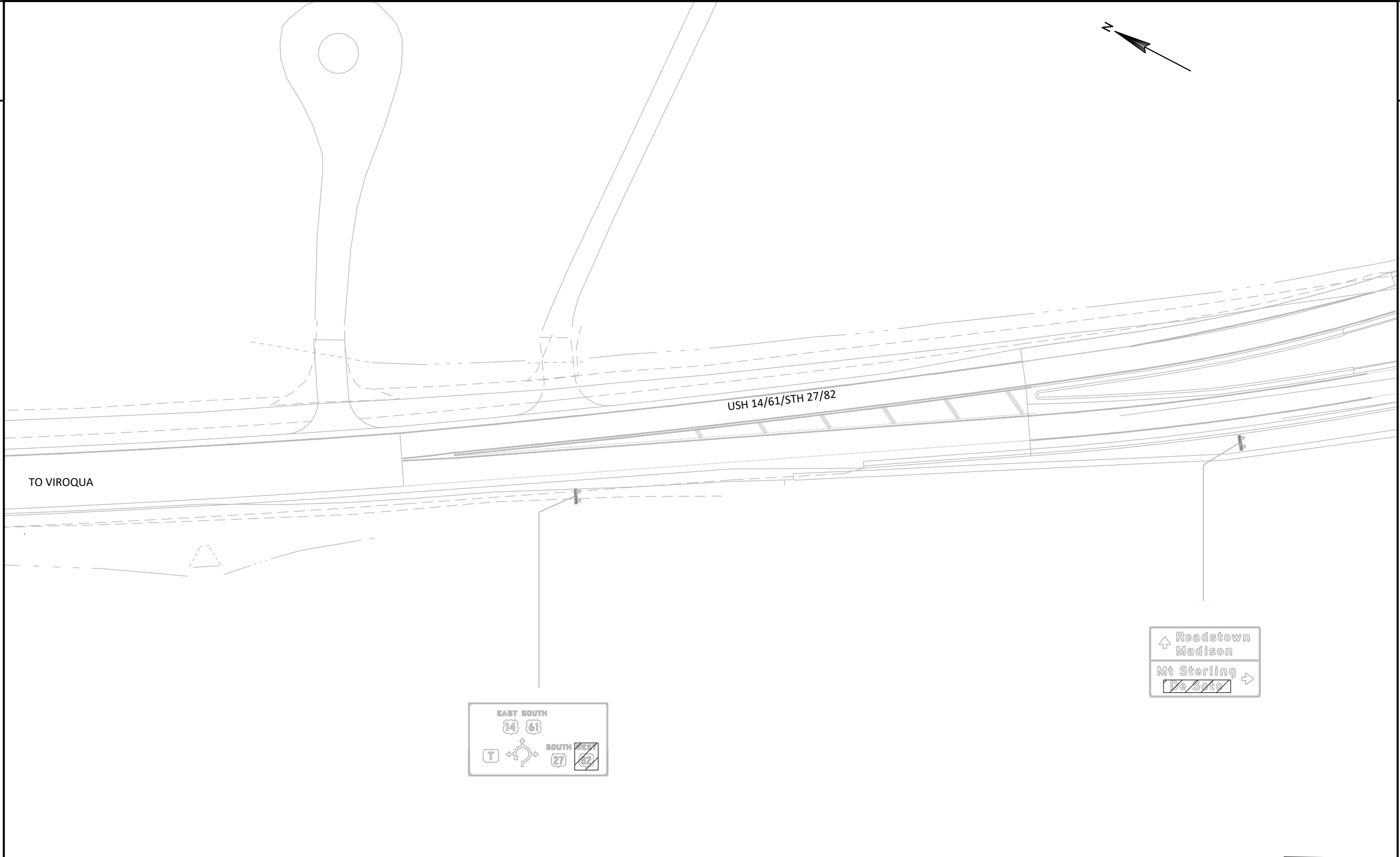
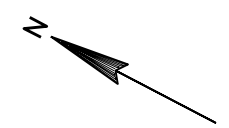
-  PROPOSED SIGN MOUNTED ON POST
-  EXISTING SIGN MOUNTED ON POST
-  TYPE III BARRICADE
-  NEW SIGN
-  EXISTING SIGN
-  COVERING SIGNS TYPE II
-  DETOUR ROUTE

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. REFERENCE SDD 15C02-C DETOUR SIGNING FOR MAINLINE CLOSURES.

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

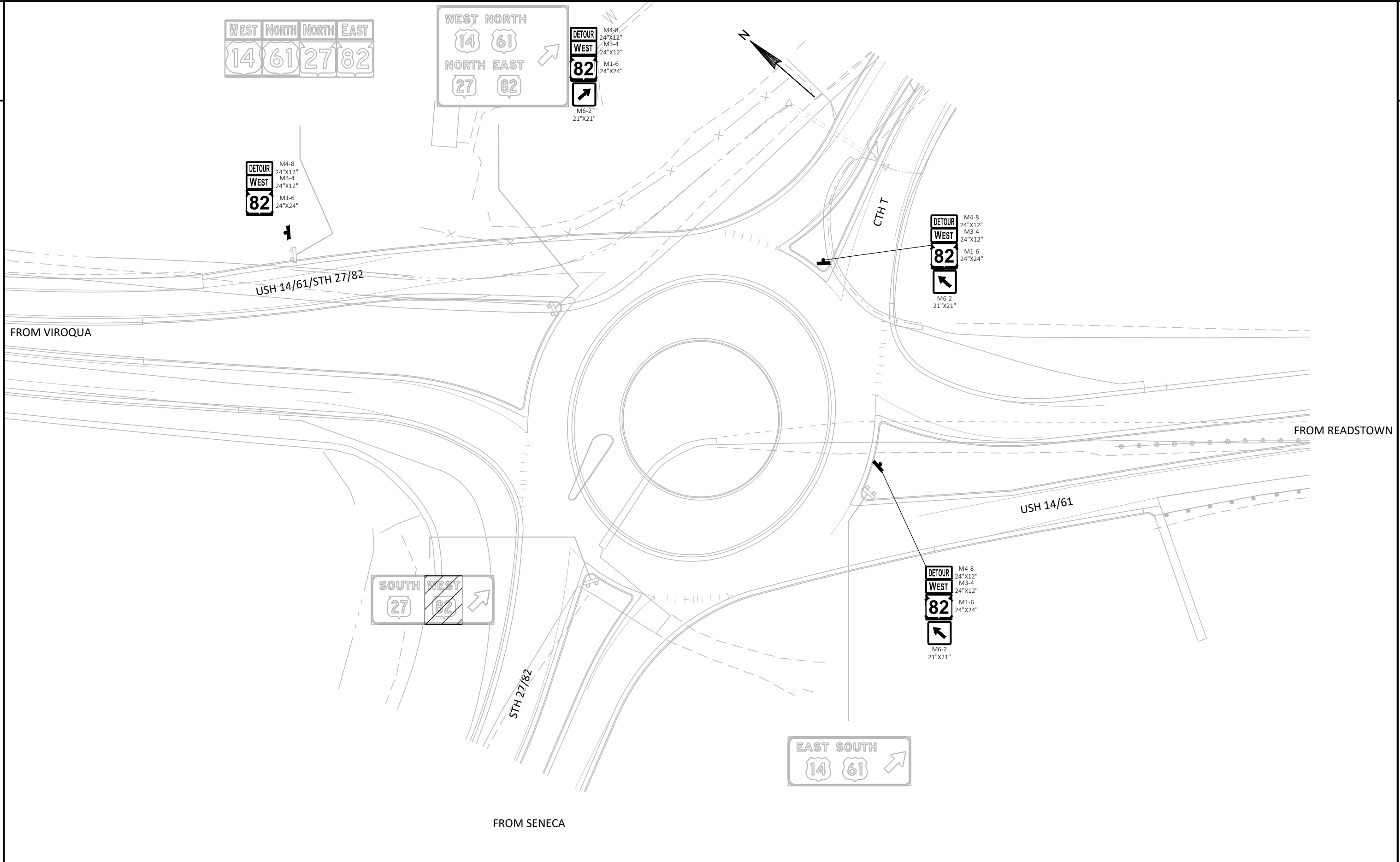


USH 14/61/STH 27/82

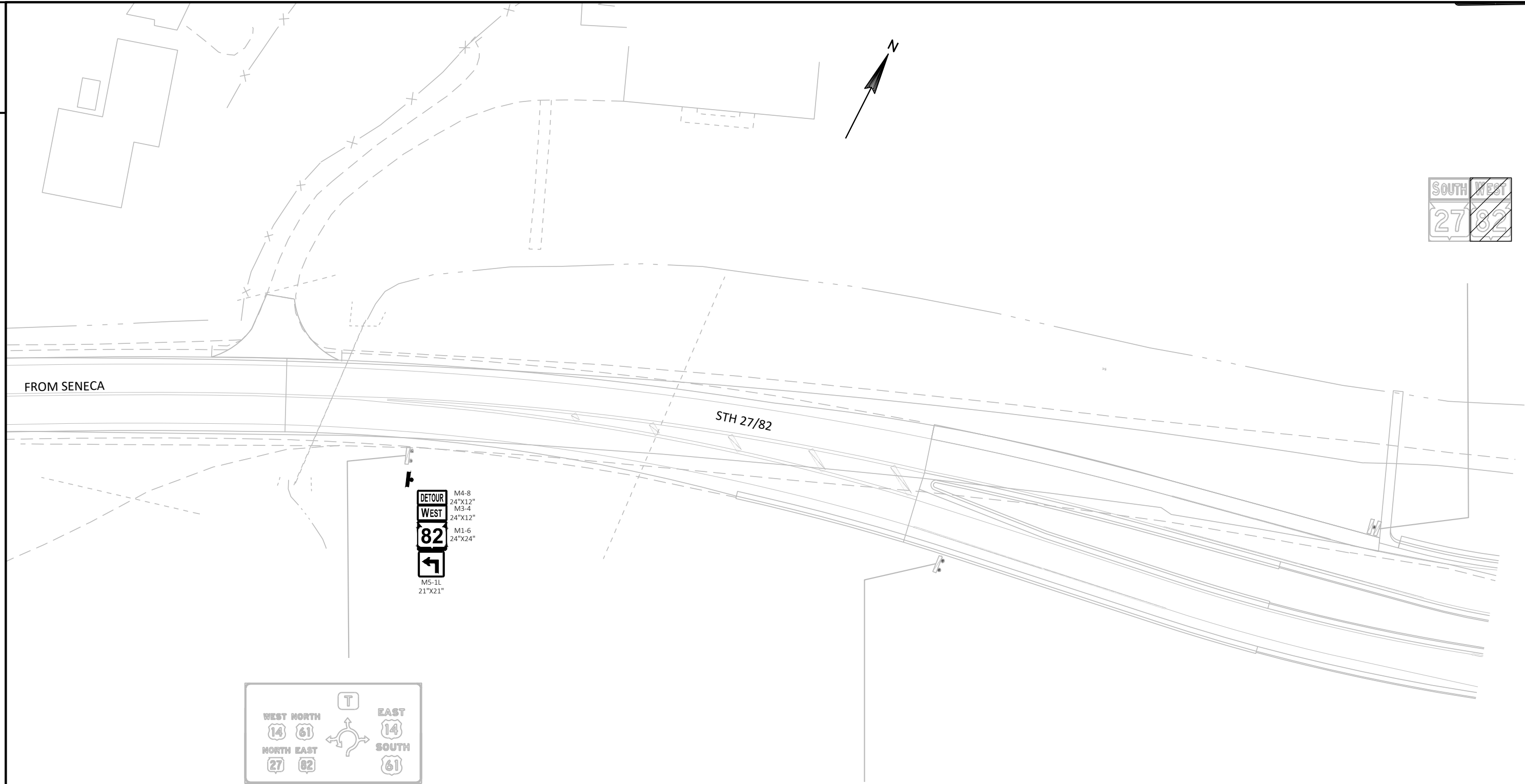
TO VIROQUA

EAST SOUTH  
 14 61  
 T ↻ SOUTH 27 82

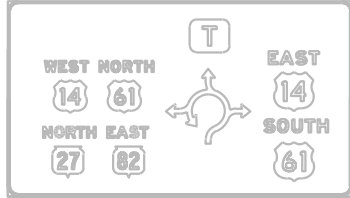
↑ Readstown Madison  
 Mt Sterling →  
 De Soto



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	TRAFFIC CONTROL - DETOUR ROUTE - DETAIL G	SHEET	<b>E</b>
------------------------	-------------	----------------	---	-------	----------



DETOUR  
 WEST  
 82  
 M4-8  
 24"X12"  
 M3-4  
 24"X12"  
 M1-6  
 24"X24"  
 M5-1L  
 21"X21"

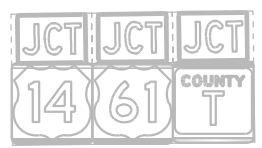
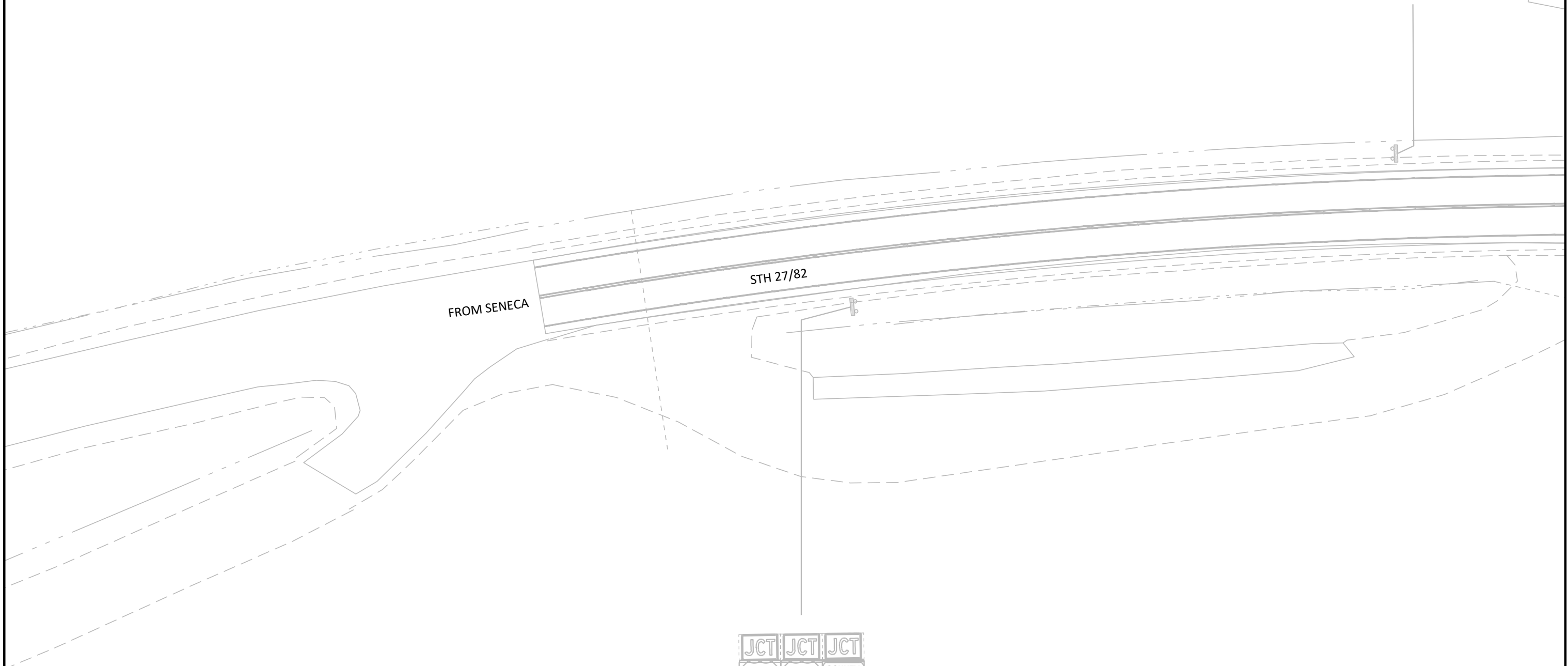


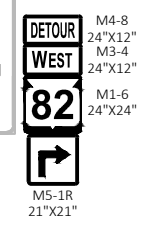
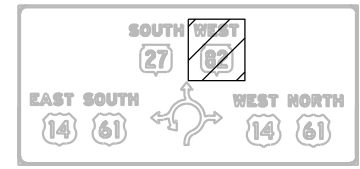
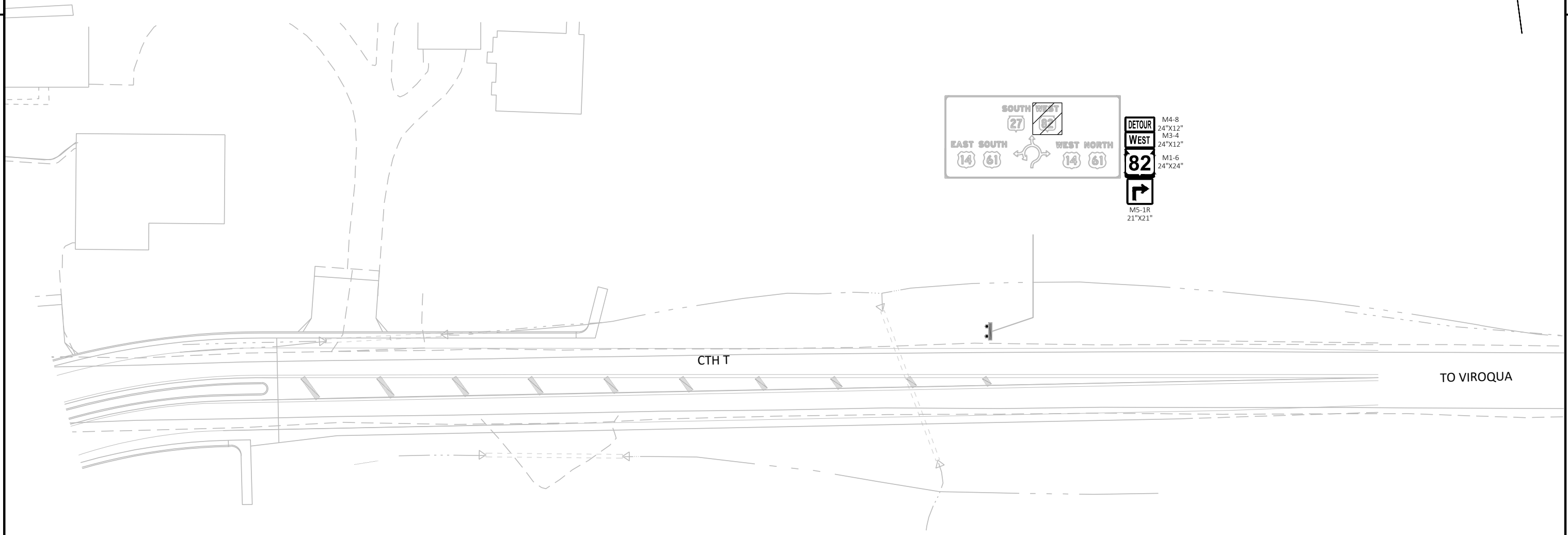
← Viroqua  
 La Crosse  
 Readstown  
 Madison →

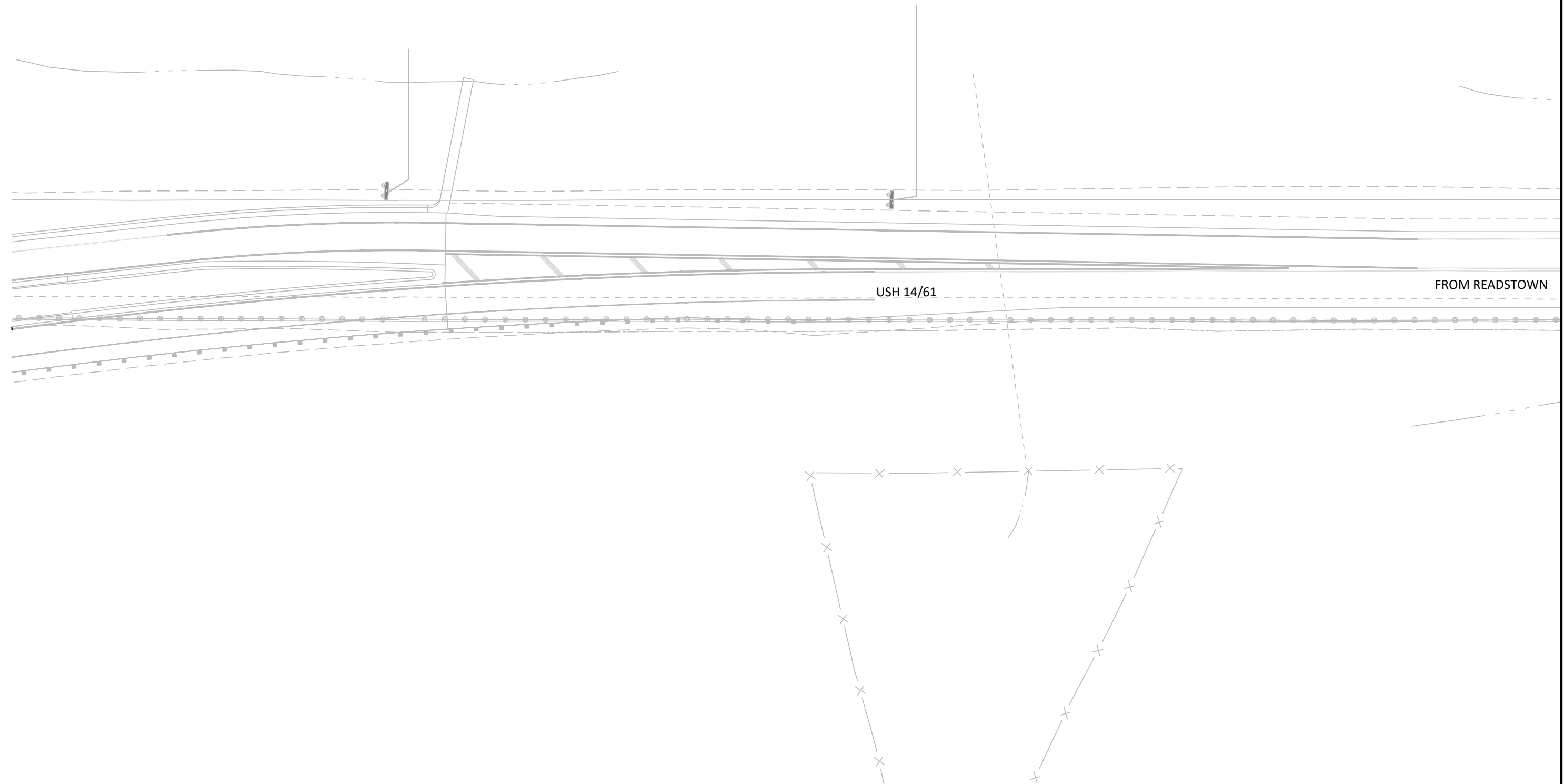
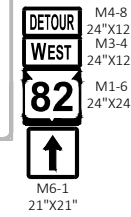
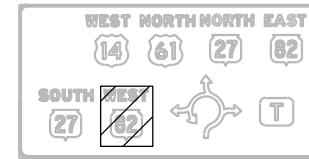
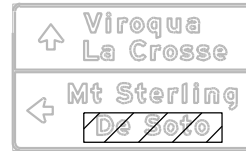
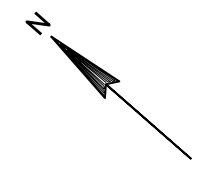


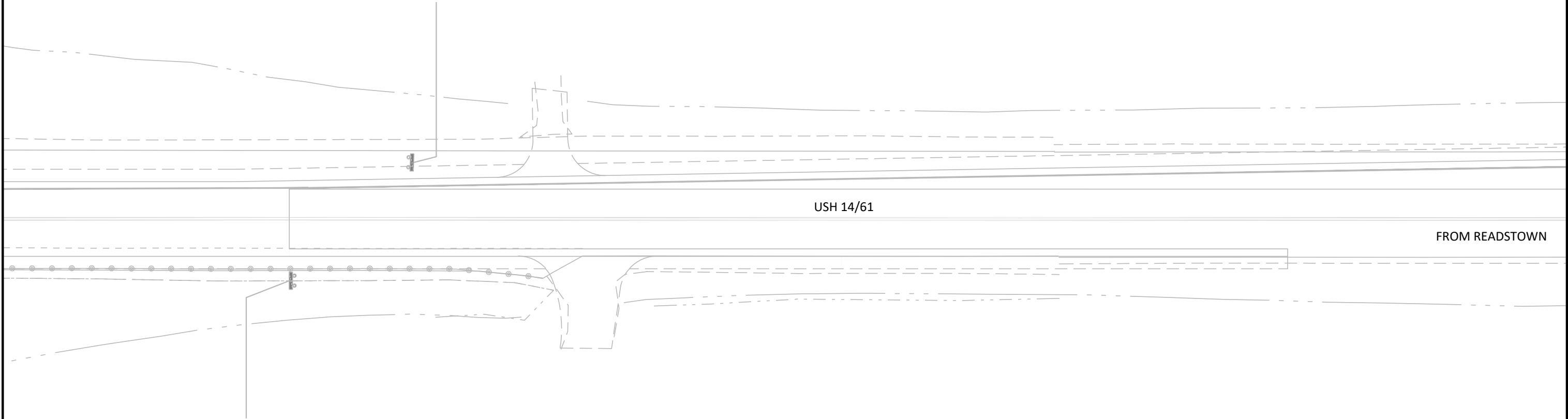
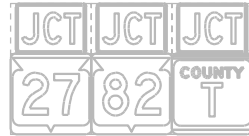
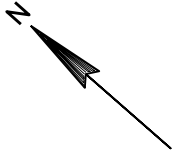


Mt Sterling	17
<del>De Soto</del>	<del>20</del>
Prairie du Chien	42





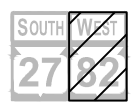
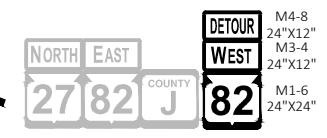
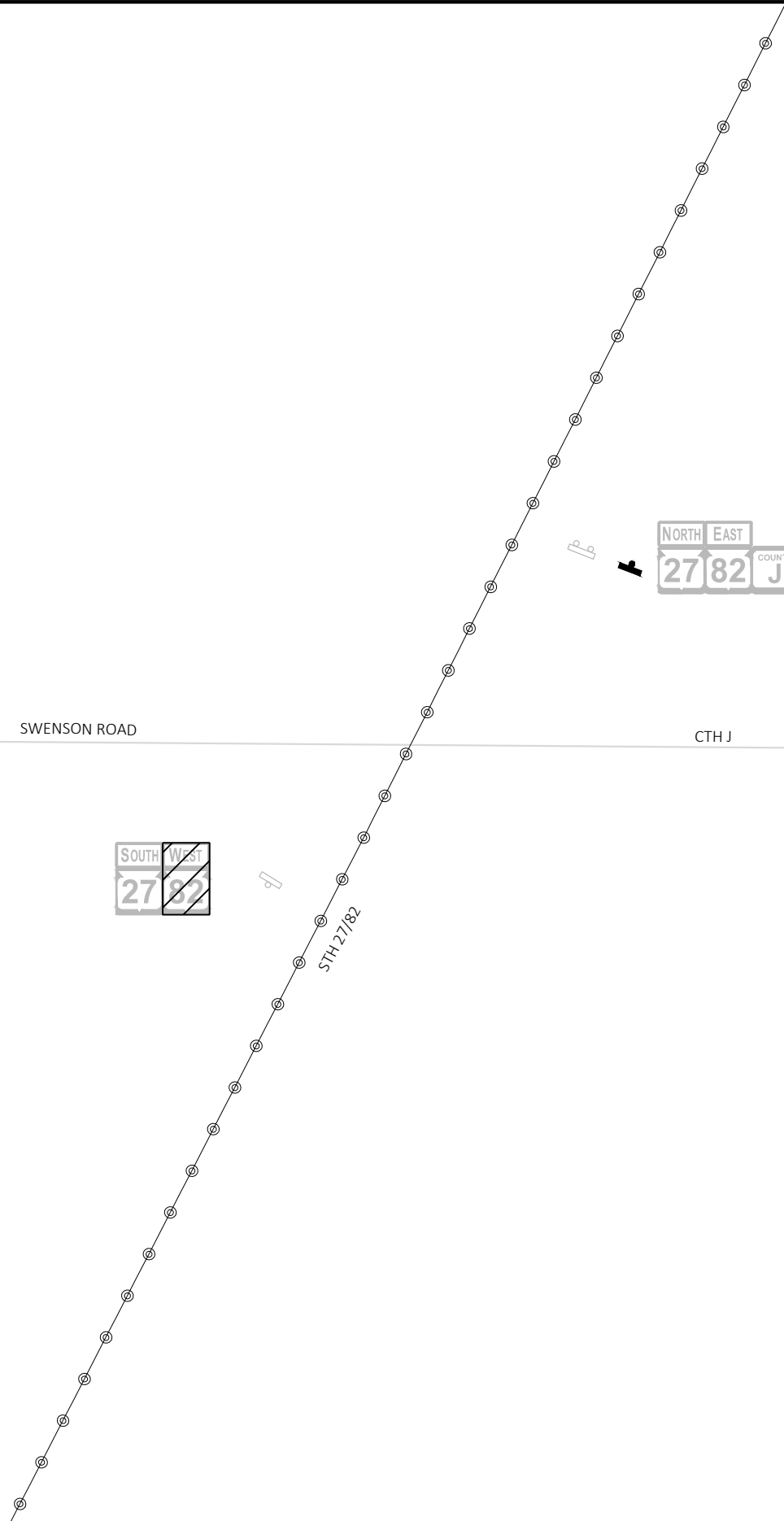











USH 14/61

FROM READSTOWN

Readstown	7
Soldiers Grove	12
Madison	86



**LEGEND**

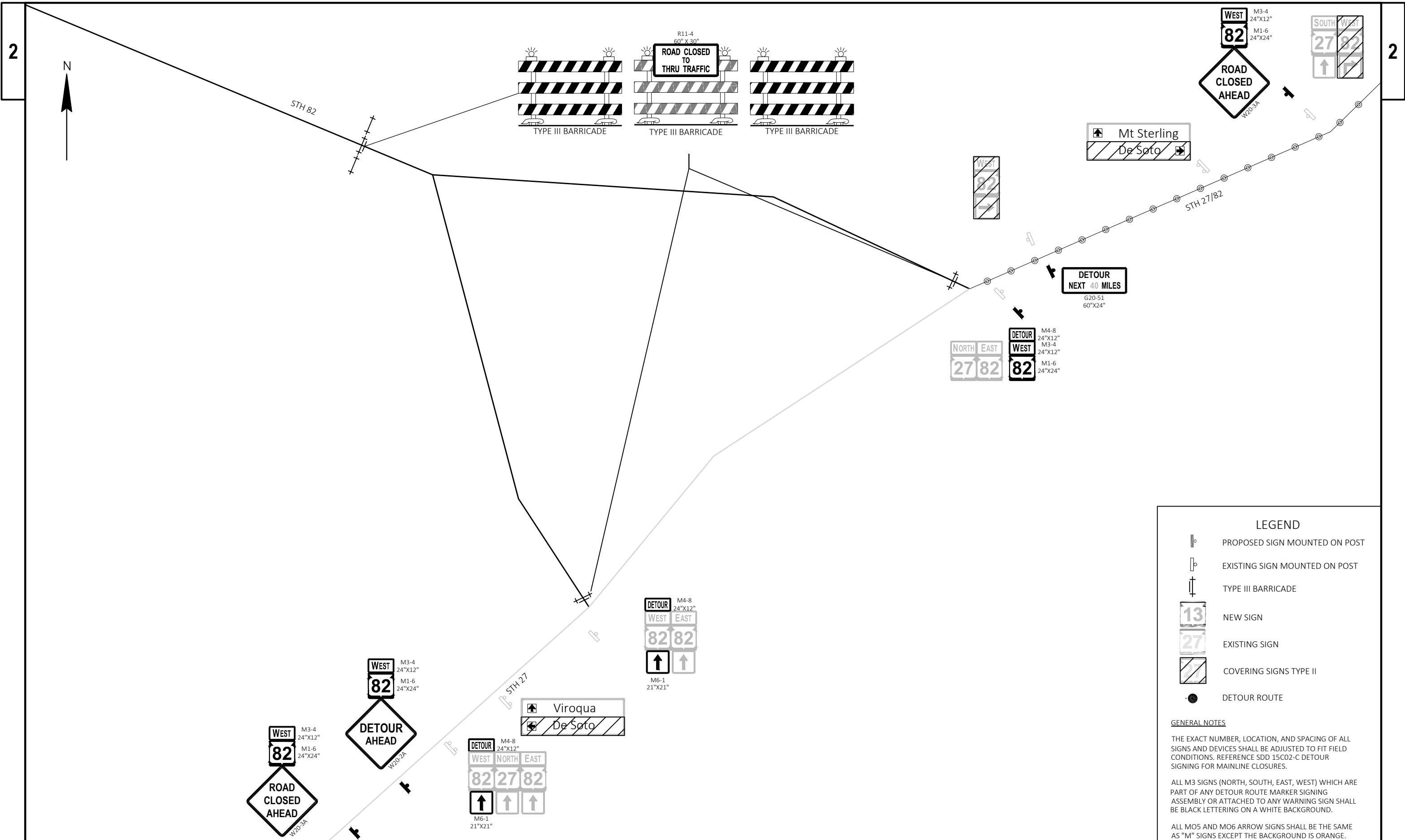
-  PROPOSED SIGN MOUNTED ON POST
-  EXISTING SIGN MOUNTED ON POST
-  TYPE III BARRICADE
-  NEW SIGN
-  EXISTING SIGN
-  COVERING SIGNS TYPE II
-  DETOUR ROUTE

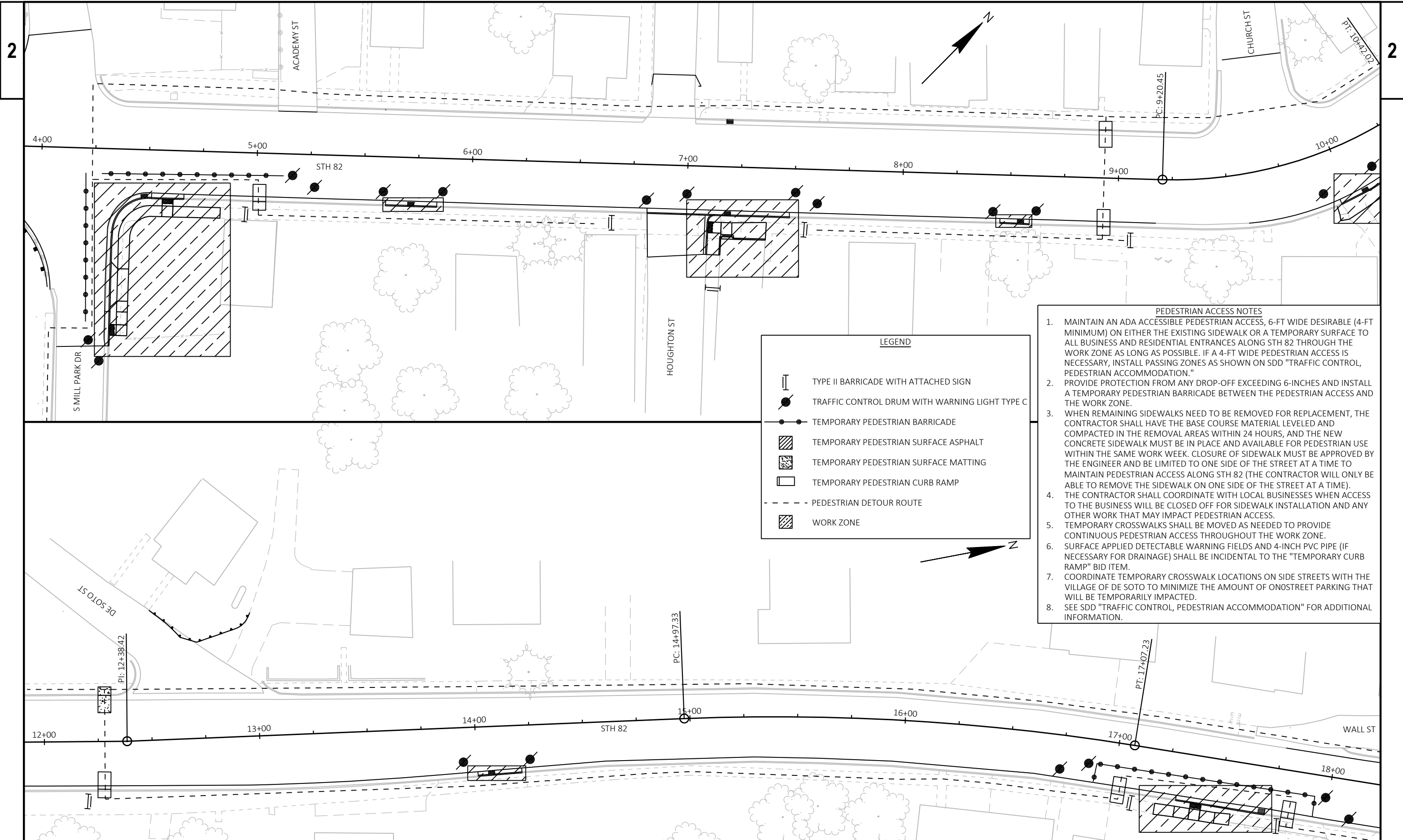
**GENERAL NOTES**

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS. REFERENCE SDD 15C02-C DETOUR SIGNING FOR MAINLINE CLOSURES.

ALL M3 SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKER SIGNING ASSEMBLY OR ATTACHED TO ANY WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

ALL M05 AND M06 ARROW SIGNS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

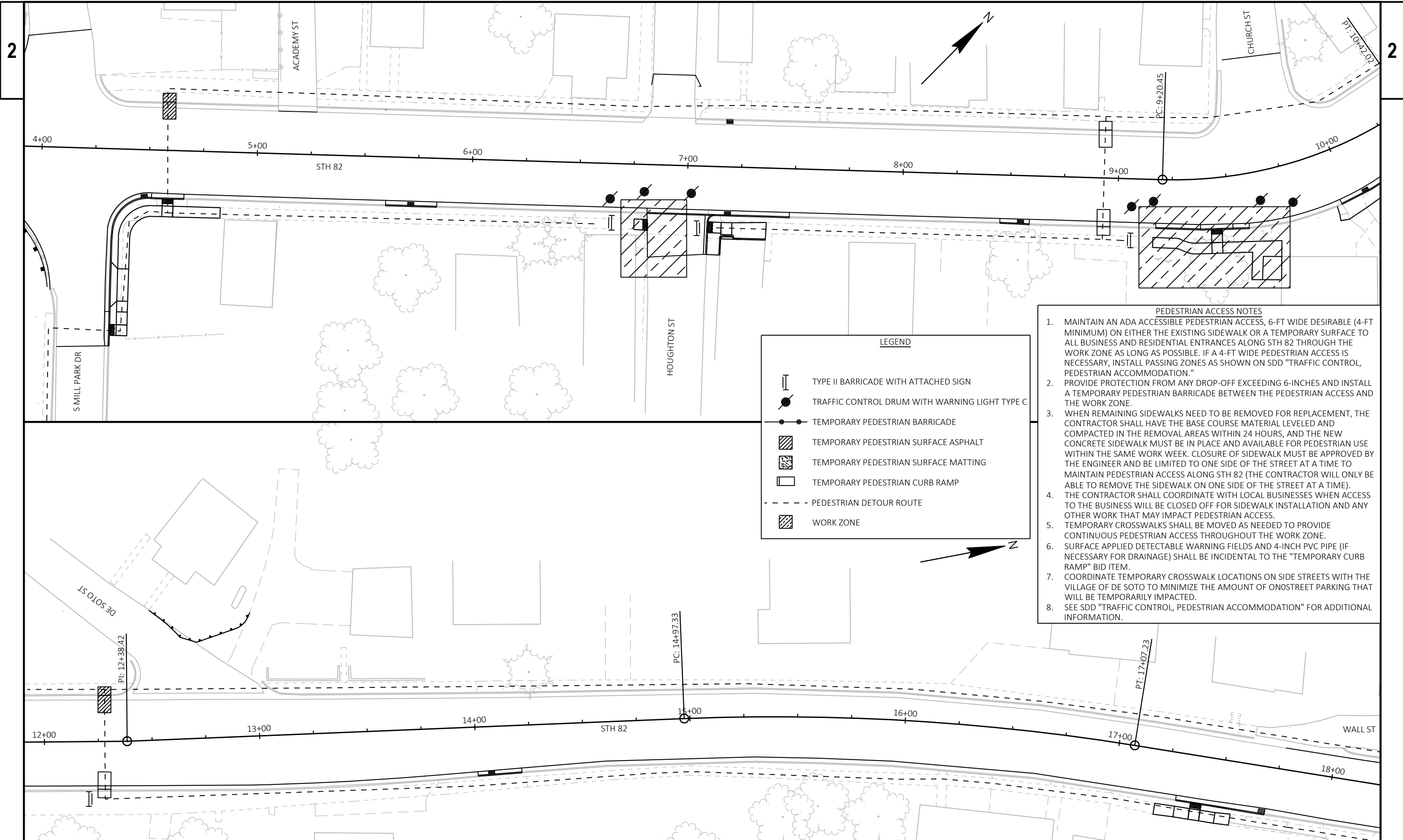




- PEDESTRIAN ACCESS NOTES**
1. MAINTAIN AN ADA ACCESSIBLE PEDESTRIAN ACCESS, 6-FT WIDE DESIRABLE (4-FT MINIMUM) ON EITHER THE EXISTING SIDEWALK OR A TEMPORARY SURFACE TO ALL BUSINESS AND RESIDENTIAL ENTRANCES ALONG STH 82 THROUGH THE WORK ZONE AS LONG AS POSSIBLE. IF A 4-FT WIDE PEDESTRIAN ACCESS IS NECESSARY, INSTALL PASSING ZONES AS SHOWN ON SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION."
  2. PROVIDE PROTECTION FROM ANY DROP-OFF EXCEEDING 6-INCHES AND INSTALL A TEMPORARY PEDESTRIAN BARRICADE BETWEEN THE PEDESTRIAN ACCESS AND THE WORK ZONE.
  3. WHEN REMAINING SIDEWALKS NEED TO BE REMOVED FOR REPLACEMENT, THE CONTRACTOR SHALL HAVE THE BASE COURSE MATERIAL LEVELED AND COMPACTED IN THE REMOVAL AREAS WITHIN 24 HOURS, AND THE NEW CONCRETE SIDEWALK MUST BE IN PLACE AND AVAILABLE FOR PEDESTRIAN USE WITHIN THE SAME WORK WEEK. CLOSURE OF SIDEWALK MUST BE APPROVED BY THE ENGINEER AND BE LIMITED TO ONE SIDE OF THE STREET AT A TIME TO MAINTAIN PEDESTRIAN ACCESS ALONG STH 82 (THE CONTRACTOR WILL ONLY BE ABLE TO REMOVE THE SIDEWALK ON ONE SIDE OF THE STREET AT A TIME). THE CONTRACTOR SHALL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT PEDESTRIAN ACCESS.
  4. TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS THROUGHOUT THE WORK ZONE.
  5. SURFACE APPLIED DETECTABLE WARNING FIELDS AND 4-INCH PVC PIPE (IF NECESSARY FOR DRAINAGE) SHALL BE INCIDENTAL TO THE "TEMPORARY CURB RAMP" BID ITEM.
  6. COORDINATE TEMPORARY CROSSWALK LOCATIONS ON SIDE STREETS WITH THE VILLAGE OF DE SOTO TO MINIMIZE THE AMOUNT OF ON-STREET PARKING THAT WILL BE TEMPORARILY IMPACTED.
  7. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL INFORMATION.









**LEGEND**

- TYPE II BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN SURFACE MATTING
- TEMPORARY PEDESTRIAN CURB RAMP
- PEDESTRIAN DETOUR ROUTE
- WORK ZONE

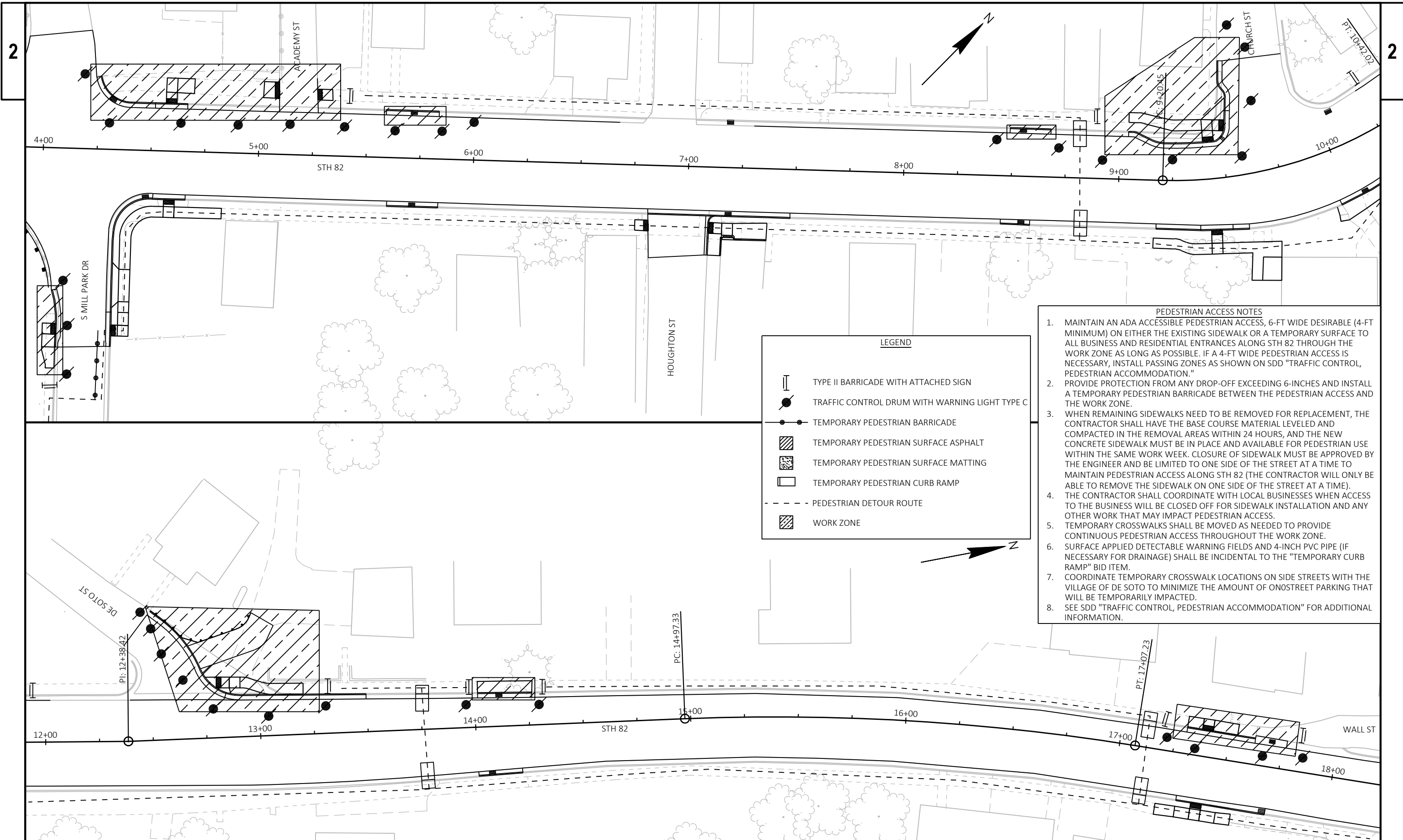


- PEDESTRIAN ACCESS NOTES**
1. MAINTAIN AN ADA ACCESSIBLE PEDESTRIAN ACCESS, 6-FT WIDE DESIRABLE (4-FT MINIMUM) ON EITHER THE EXISTING SIDEWALK OR A TEMPORARY SURFACE TO ALL BUSINESS AND RESIDENTIAL ENTRANCES ALONG STH 82 THROUGH THE WORK ZONE AS LONG AS POSSIBLE. IF A 4-FT WIDE PEDESTRIAN ACCESS IS NECESSARY, INSTALL PASSING ZONES AS SHOWN ON SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION."
  2. PROVIDE PROTECTION FROM ANY DROP-OFF EXCEEDING 6-INCHES AND INSTALL A TEMPORARY PEDESTRIAN BARRICADE BETWEEN THE PEDESTRIAN ACCESS AND THE WORK ZONE.
  3. WHEN REMAINING SIDEWALKS NEED TO BE REMOVED FOR REPLACEMENT, THE CONTRACTOR SHALL HAVE THE BASE COURSE MATERIAL LEVELED AND COMPACTED IN THE REMOVAL AREAS WITHIN 24 HOURS, AND THE NEW CONCRETE SIDEWALK MUST BE IN PLACE AND AVAILABLE FOR PEDESTRIAN USE WITHIN THE SAME WORK WEEK. CLOSURE OF SIDEWALK MUST BE APPROVED BY THE ENGINEER AND BE LIMITED TO ONE SIDE OF THE STREET AT A TIME TO MAINTAIN PEDESTRIAN ACCESS ALONG STH 82 (THE CONTRACTOR WILL ONLY BE ABLE TO REMOVE THE SIDEWALK ON ONE SIDE OF THE STREET AT A TIME). THE CONTRACTOR SHALL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT PEDESTRIAN ACCESS.
  4. TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS THROUGHOUT THE WORK ZONE.
  5. SURFACE APPLIED DETECTABLE WARNING FIELDS AND 4-INCH PVC PIPE (IF NECESSARY FOR DRAINAGE) SHALL BE INCIDENTAL TO THE "TEMPORARY CURB RAMP" BID ITEM.
  6. COORDINATE TEMPORARY CROSSWALK LOCATIONS ON SIDE STREETS WITH THE VILLAGE OF DE SOTO TO MINIMIZE THE AMOUNT OF ON-STREET PARKING THAT WILL BE TEMPORARILY IMPACTED.
  7. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL INFORMATION.

**LEGEND**

-  TYPE II BARRICADE WITH ATTACHED SIGN
-  TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
-  TEMPORARY PEDESTRIAN BARRICADE
-  TEMPORARY PEDESTRIAN SURFACE ASPHALT
-  TEMPORARY PEDESTRIAN SURFACE MATTING
-  TEMPORARY PEDESTRIAN CURB RAMP
-  PEDESTRIAN DETOUR ROUTE
-  WORK ZONE

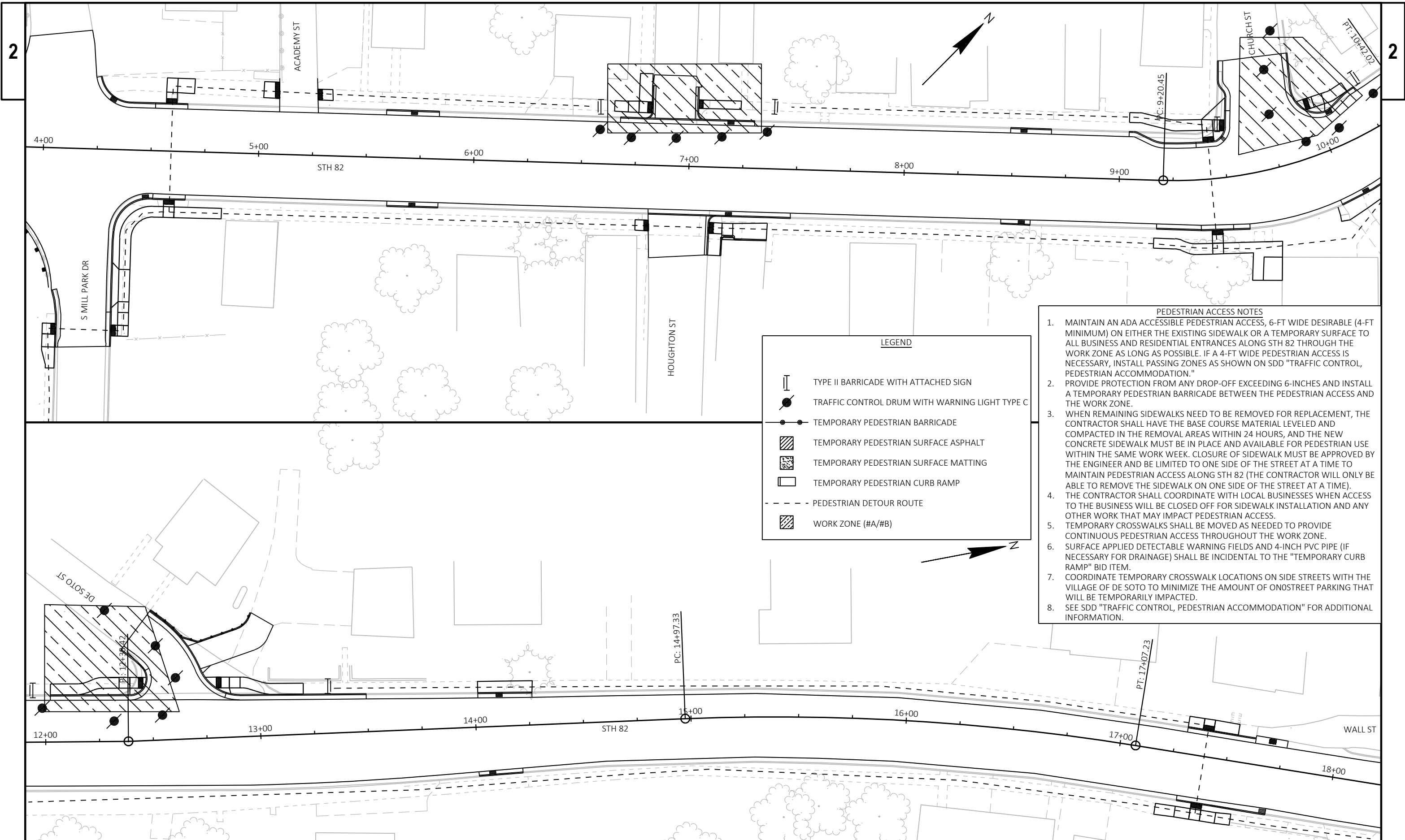




- PEDESTRIAN ACCESS NOTES**
1. MAINTAIN AN ADA ACCESSIBLE PEDESTRIAN ACCESS, 6-FT WIDE DESIRABLE (4-FT MINIMUM) ON EITHER THE EXISTING SIDEWALK OR A TEMPORARY SURFACE TO ALL BUSINESS AND RESIDENTIAL ENTRANCES ALONG STH 82 THROUGH THE WORK ZONE AS LONG AS POSSIBLE. IF A 4-FT WIDE PEDESTRIAN ACCESS IS NECESSARY, INSTALL PASSING ZONES AS SHOWN ON SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION."
  2. PROVIDE PROTECTION FROM ANY DROP-OFF EXCEEDING 6-INCHES AND INSTALL A TEMPORARY PEDESTRIAN BARRICADE BETWEEN THE PEDESTRIAN ACCESS AND THE WORK ZONE.
  3. WHEN REMAINING SIDEWALKS NEED TO BE REMOVED FOR REPLACEMENT, THE CONTRACTOR SHALL HAVE THE BASE COURSE MATERIAL LEVELED AND COMPACTED IN THE REMOVAL AREAS WITHIN 24 HOURS, AND THE NEW CONCRETE SIDEWALK MUST BE IN PLACE AND AVAILABLE FOR PEDESTRIAN USE WITHIN THE SAME WORK WEEK. CLOSURE OF SIDEWALK MUST BE APPROVED BY THE ENGINEER AND BE LIMITED TO ONE SIDE OF THE STREET AT A TIME TO MAINTAIN PEDESTRIAN ACCESS ALONG STH 82 (THE CONTRACTOR WILL ONLY BE ABLE TO REMOVE THE SIDEWALK ON ONE SIDE OF THE STREET AT A TIME). THE CONTRACTOR SHALL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT PEDESTRIAN ACCESS.
  4. TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS THROUGHOUT THE WORK ZONE.
  5. SURFACE APPLIED DETECTABLE WARNING FIELDS AND 4-INCH PVC PIPE (IF NECESSARY FOR DRAINAGE) SHALL BE INCIDENTAL TO THE "TEMPORARY CURB RAMP" BID ITEM.
  6. COORDINATE TEMPORARY CROSSWALK LOCATIONS ON SIDE STREETS WITH THE VILLAGE OF DE SOTO TO MINIMIZE THE AMOUNT OF ON-STREET PARKING THAT WILL BE TEMPORARILY IMPACTED.
  7. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL INFORMATION.

**LEGEND**

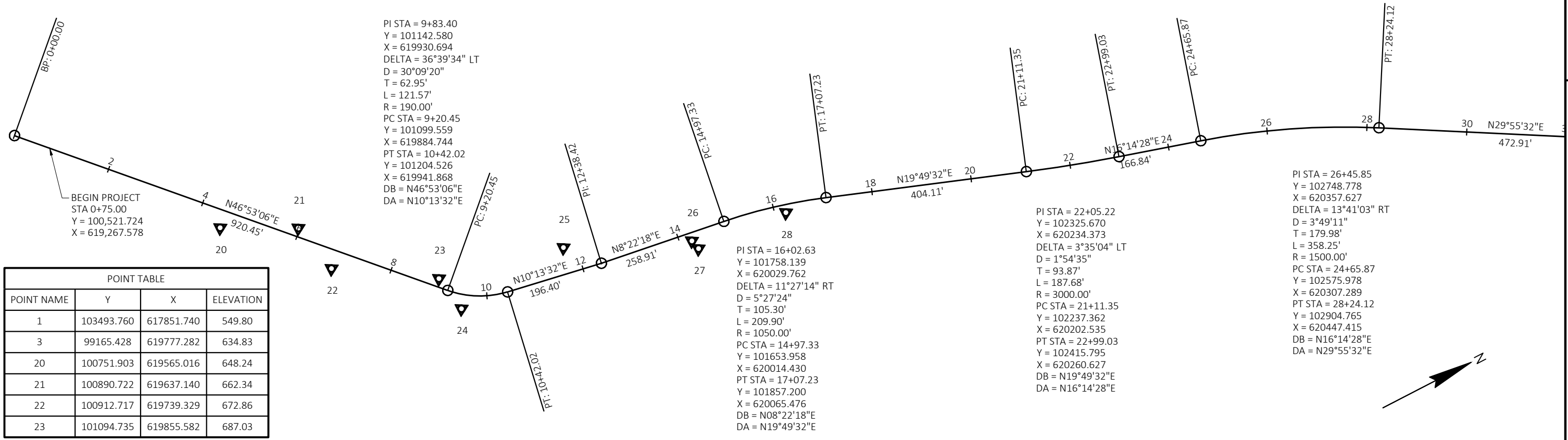
- TYPE II BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN SURFACE MATTING
- TEMPORARY PEDESTRIAN CURB RAMP
- PEDESTRIAN DETOUR ROUTE
- WORK ZONE



- PEDESTRIAN ACCESS NOTES**
1. MAINTAIN AN ADA ACCESSIBLE PEDESTRIAN ACCESS, 6-FT WIDE DESIRABLE (4-FT MINIMUM) ON EITHER THE EXISTING SIDEWALK OR A TEMPORARY SURFACE TO ALL BUSINESS AND RESIDENTIAL ENTRANCES ALONG STH 82 THROUGH THE WORK ZONE AS LONG AS POSSIBLE. IF A 4-FT WIDE PEDESTRIAN ACCESS IS NECESSARY, INSTALL PASSING ZONES AS SHOWN ON SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION."
  2. PROVIDE PROTECTION FROM ANY DROP-OFF EXCEEDING 6-INCHES AND INSTALL A TEMPORARY PEDESTRIAN BARRICADE BETWEEN THE PEDESTRIAN ACCESS AND THE WORK ZONE.
  3. WHEN REMAINING SIDEWALKS NEED TO BE REMOVED FOR REPLACEMENT, THE CONTRACTOR SHALL HAVE THE BASE COURSE MATERIAL LEVELED AND COMPACTED IN THE REMOVAL AREAS WITHIN 24 HOURS, AND THE NEW CONCRETE SIDEWALK MUST BE IN PLACE AND AVAILABLE FOR PEDESTRIAN USE WITHIN THE SAME WORK WEEK. CLOSURE OF SIDEWALK MUST BE APPROVED BY THE ENGINEER AND BE LIMITED TO ONE SIDE OF THE STREET AT A TIME TO MAINTAIN PEDESTRIAN ACCESS ALONG STH 82 (THE CONTRACTOR WILL ONLY BE ABLE TO REMOVE THE SIDEWALK ON ONE SIDE OF THE STREET AT A TIME). THE CONTRACTOR SHALL COORDINATE WITH LOCAL BUSINESSES WHEN ACCESS TO THE BUSINESS WILL BE CLOSED OFF FOR SIDEWALK INSTALLATION AND ANY OTHER WORK THAT MAY IMPACT PEDESTRIAN ACCESS.
  4. TEMPORARY CROSSWALKS SHALL BE MOVED AS NEEDED TO PROVIDE CONTINUOUS PEDESTRIAN ACCESS THROUGHOUT THE WORK ZONE.
  5. SURFACE APPLIED DETECTABLE WARNING FIELDS AND 4-INCH PVC PIPE (IF NECESSARY FOR DRAINAGE) SHALL BE INCIDENTAL TO THE "TEMPORARY CURB RAMP" BID ITEM.
  6. COORDINATE TEMPORARY CROSSWALK LOCATIONS ON SIDE STREETS WITH THE VILLAGE OF DE SOTO TO MINIMIZE THE AMOUNT OF ON-STREET PARKING THAT WILL BE TEMPORARILY IMPACTED.
  7. SEE SDD "TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION" FOR ADDITIONAL INFORMATION.

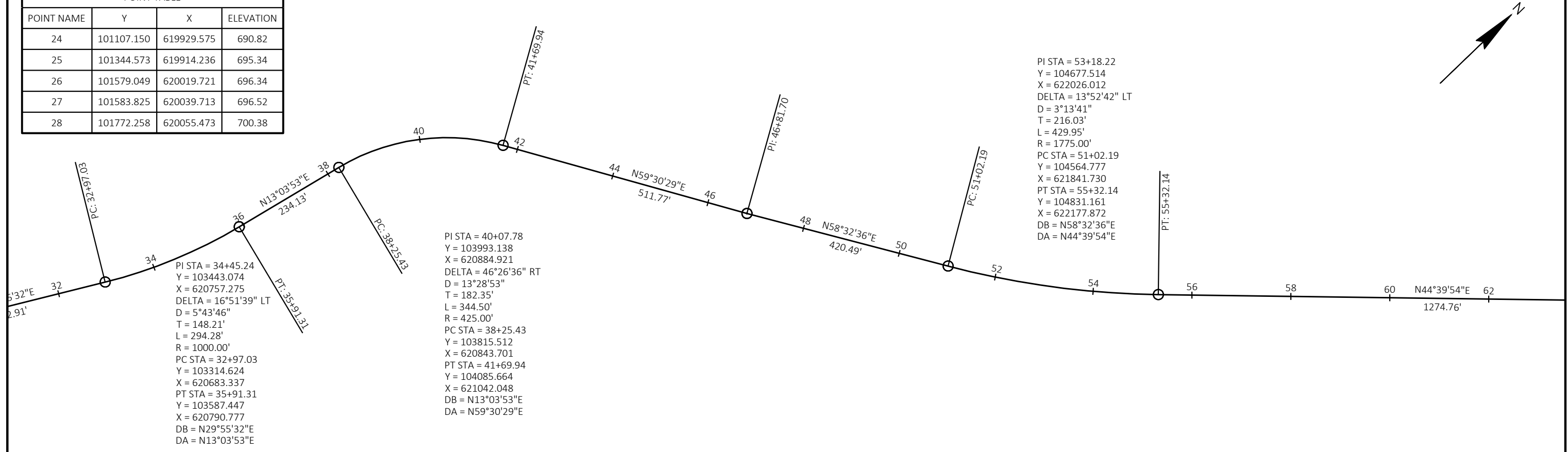
**LEGEND**

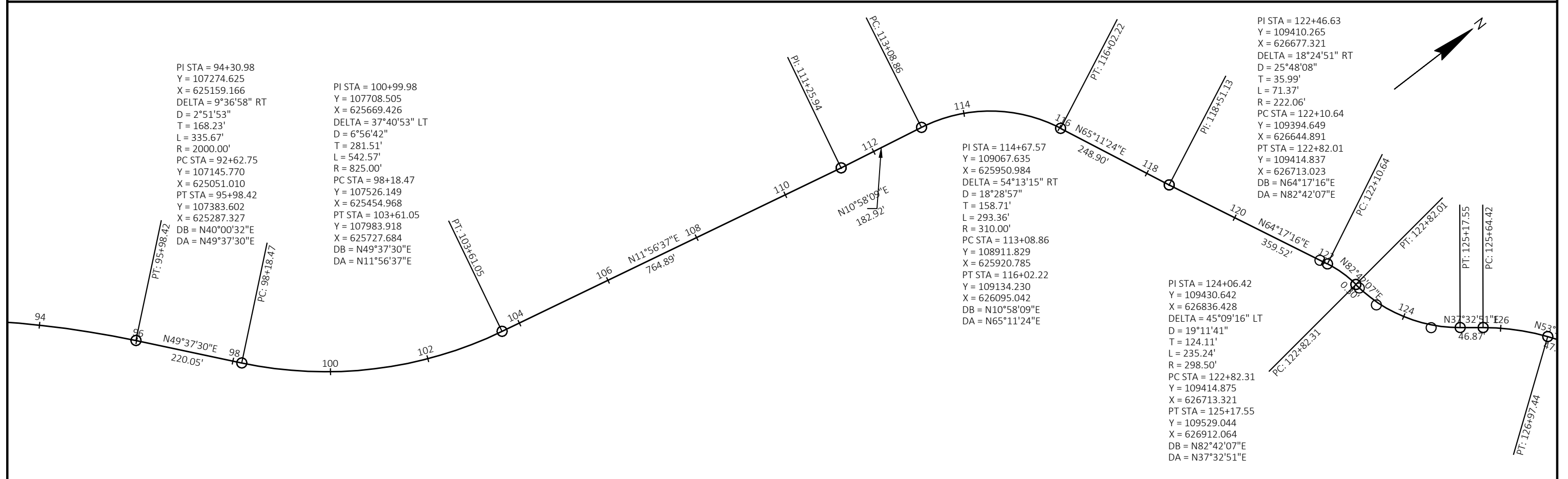
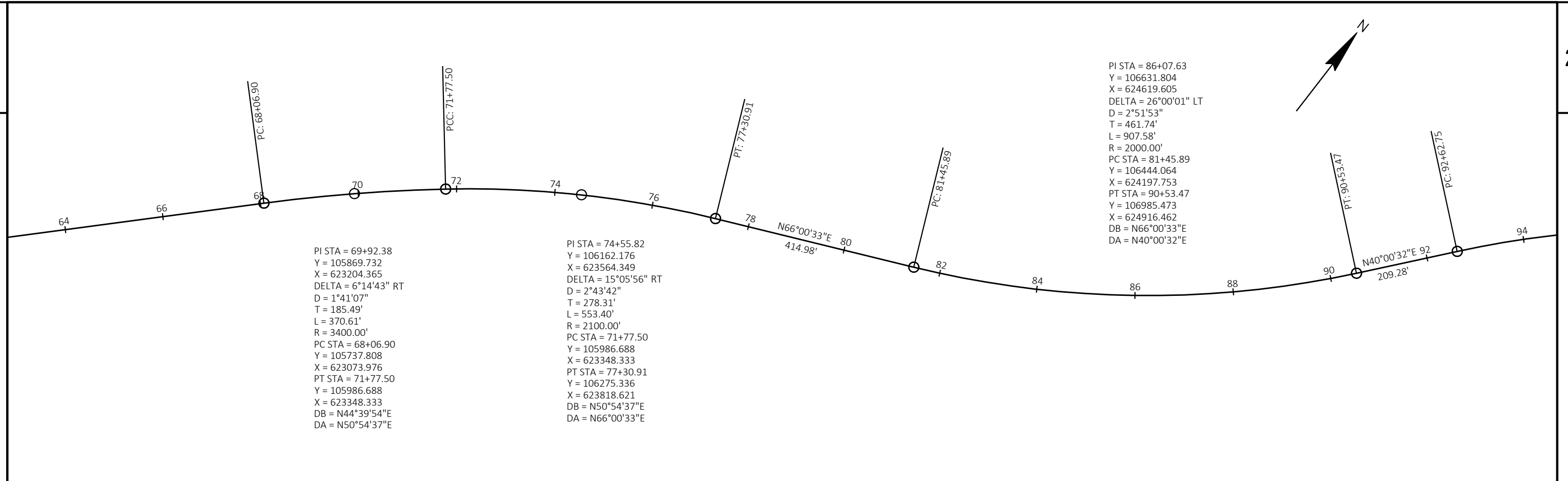
- TYPE II BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY PEDESTRIAN SURFACE ASPHALT
- TEMPORARY PEDESTRIAN SURFACE MATTING
- TEMPORARY PEDESTRIAN CURB RAMP
- PEDESTRIAN DETOUR ROUTE
- WORK ZONE (#A/#B)

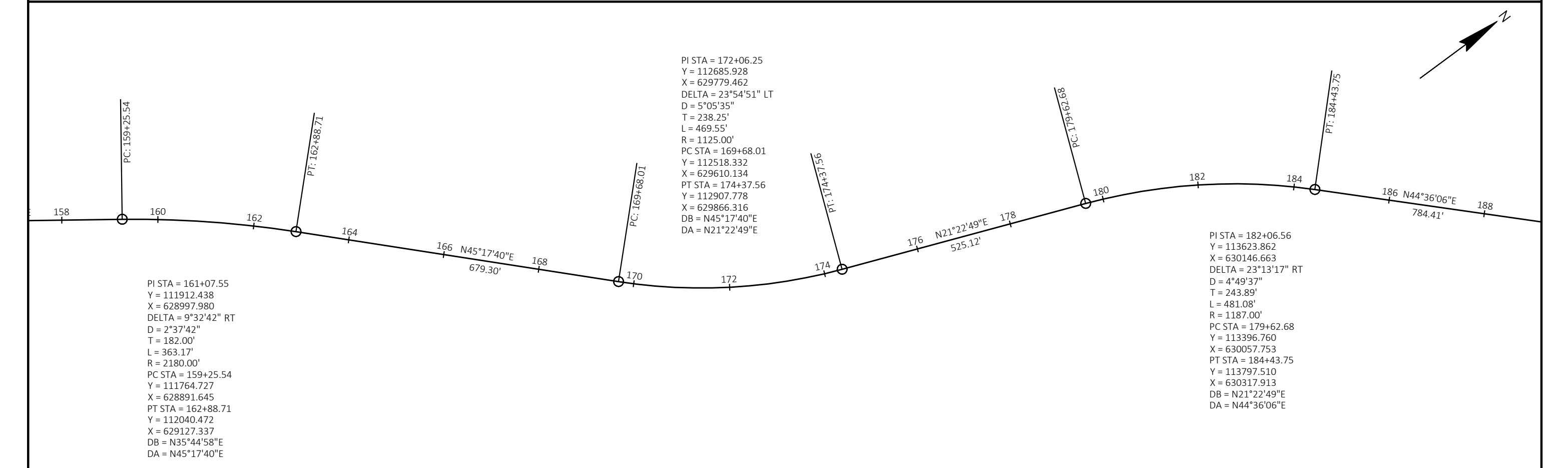
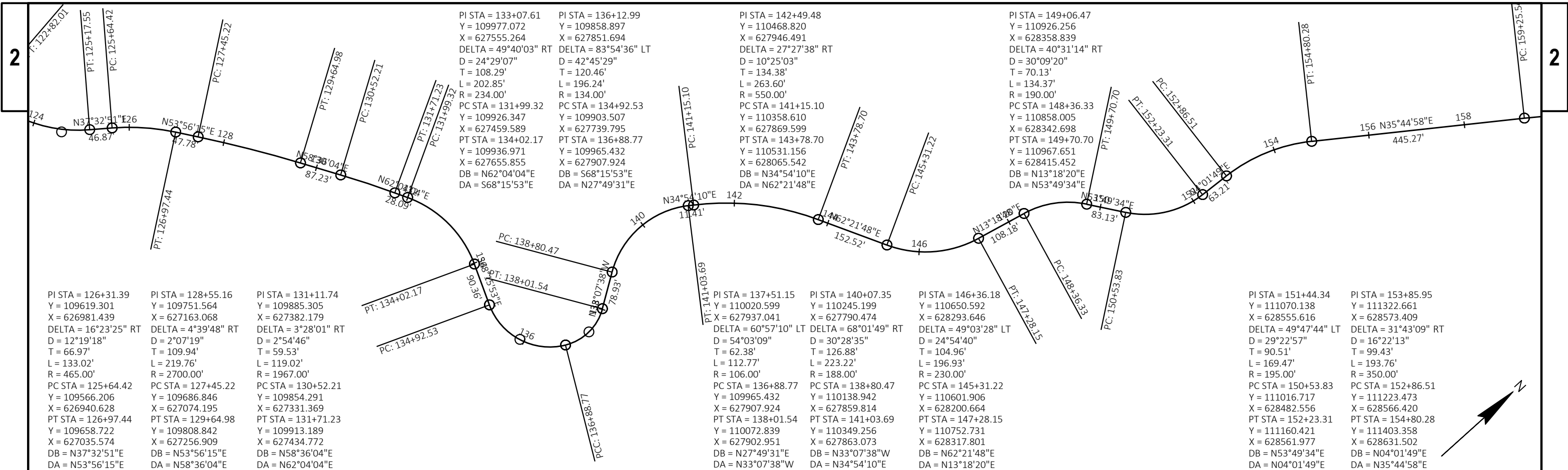


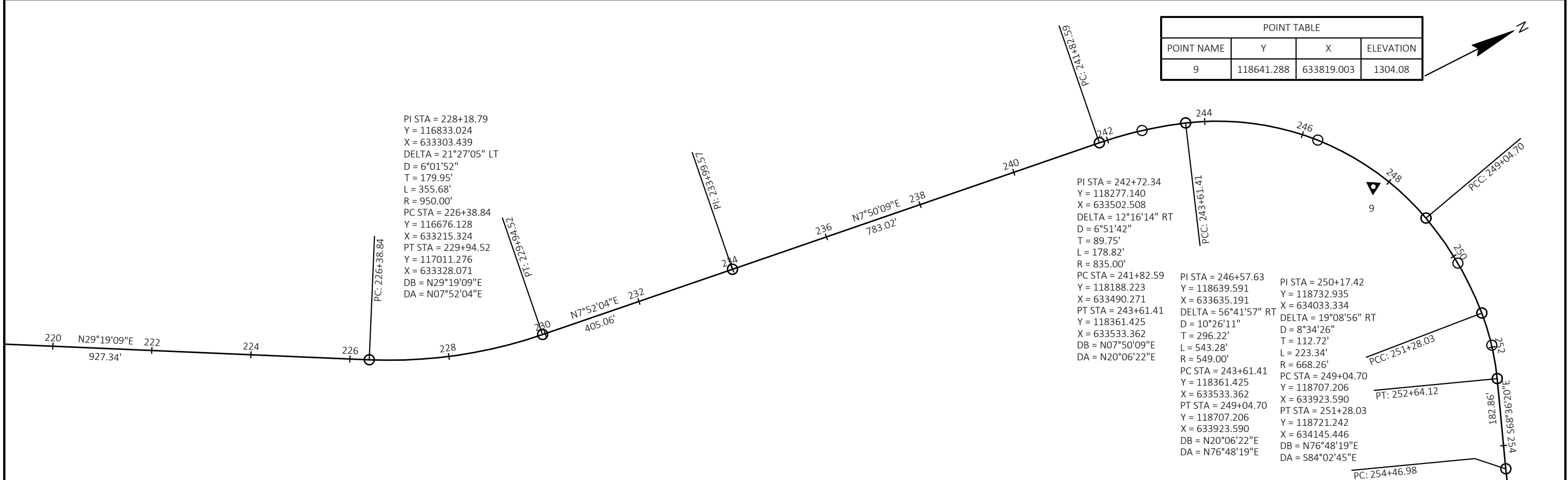
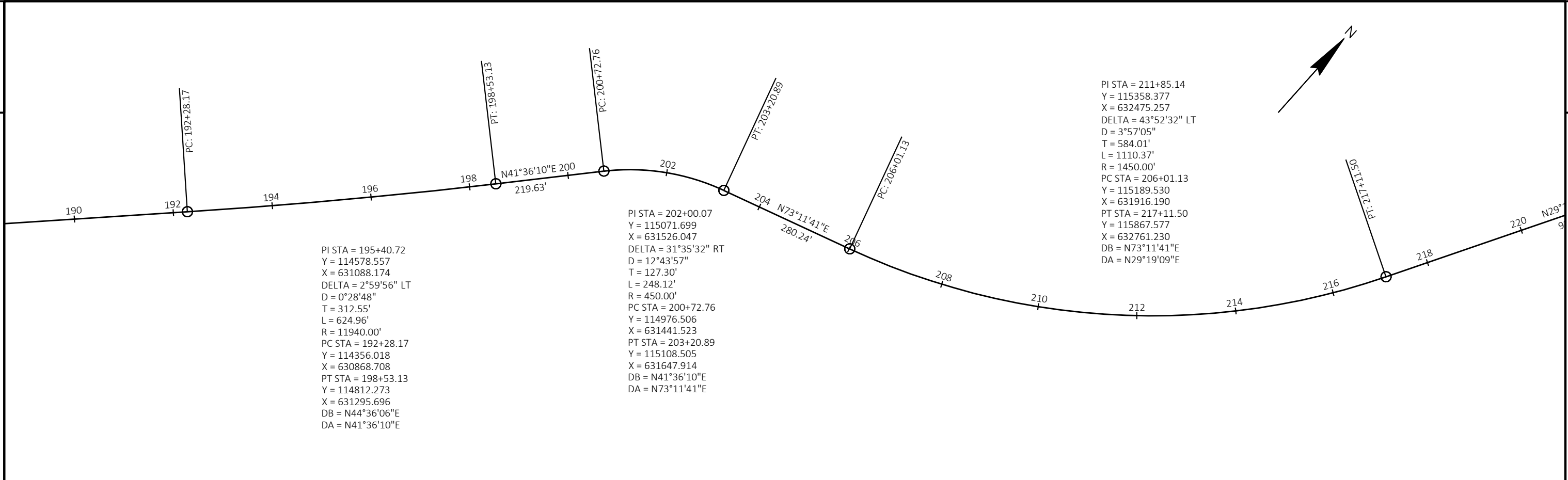
POINT TABLE			
POINT NAME	Y	X	ELEVATION
1	103493.760	617851.740	549.80
3	99165.428	619777.282	634.83
20	100751.903	619565.016	648.24
21	100890.722	619637.140	662.34
22	100912.717	619739.329	672.86
23	101094.735	619855.582	687.03

POINT TABLE			
POINT NAME	Y	X	ELEVATION
24	101107.150	619929.575	690.82
25	101344.573	619914.236	695.34
26	101579.049	620019.721	696.34
27	101583.825	620039.713	696.52
28	101772.258	620055.473	700.38





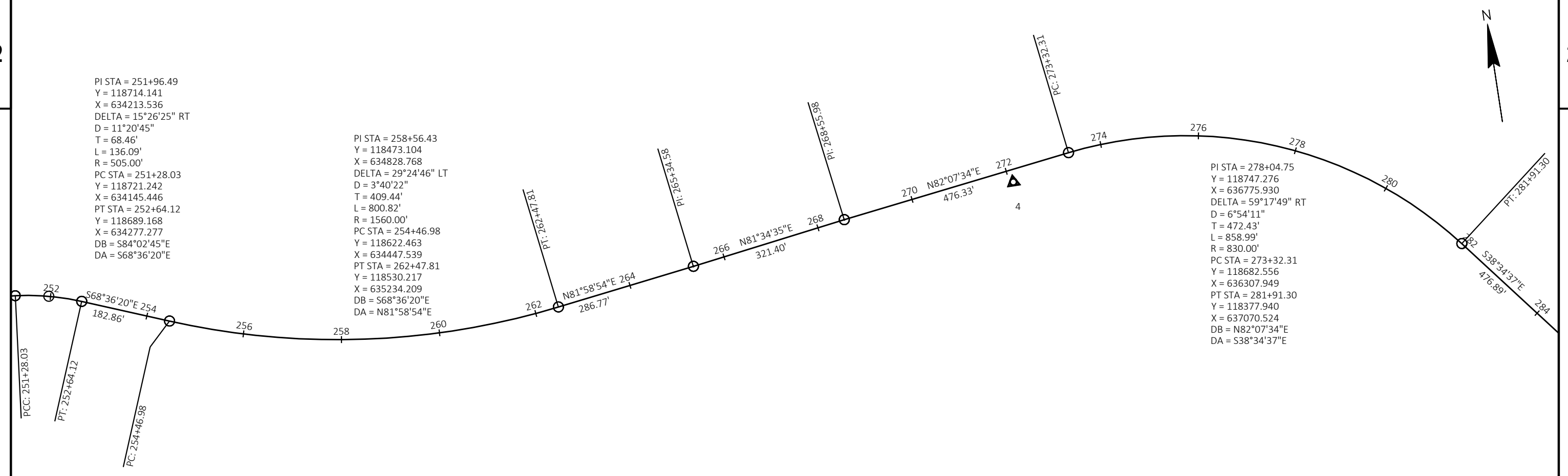




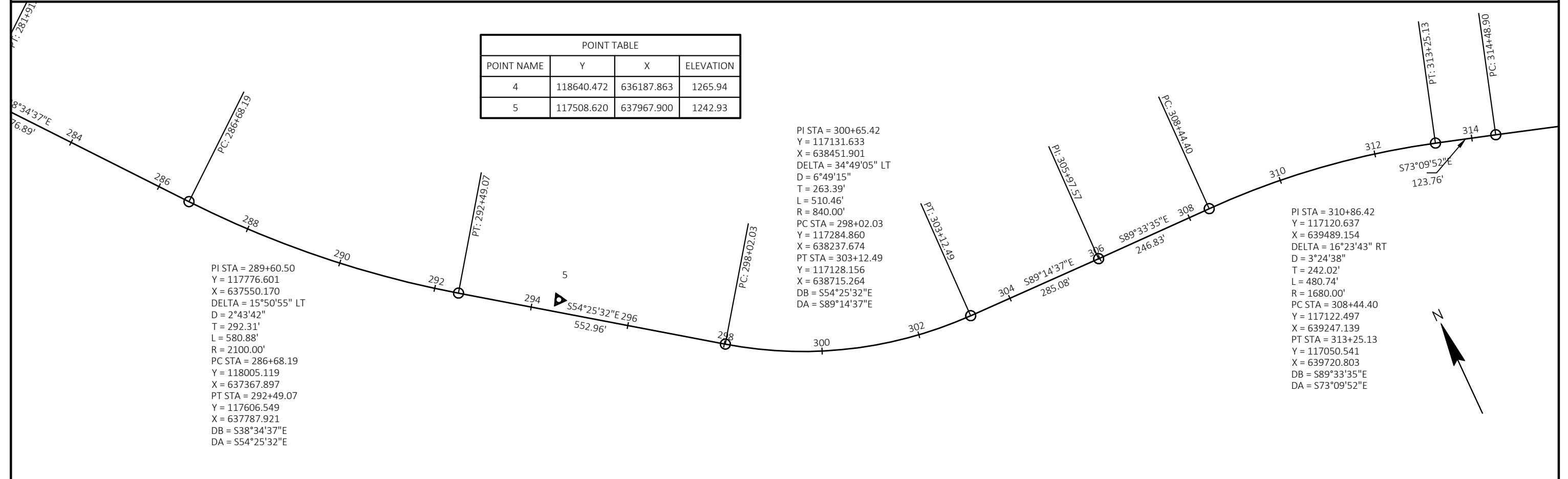
PI STA = 251+96.49  
 Y = 118714.141  
 X = 634213.536  
 DELTA = 15°26'25" RT  
 D = 11°20'45"  
 T = 68.46'  
 L = 136.09'  
 R = 505.00'  
 PC STA = 251+28.03  
 Y = 118721.242  
 X = 634145.446  
 PT STA = 252+64.12  
 Y = 118689.168  
 X = 634277.277  
 DB = S84°02'45"E  
 DA = S68°36'20"E

PI STA = 258+56.43  
 Y = 118473.104  
 X = 634828.768  
 DELTA = 29°24'46" LT  
 D = 3°40'22"  
 T = 409.44'  
 L = 800.82'  
 R = 1560.00'  
 PC STA = 254+46.98  
 Y = 118622.463  
 X = 634447.539  
 PT STA = 262+47.81  
 Y = 118530.217  
 X = 635234.209  
 DB = S68°36'20"E  
 DA = N81°58'54"E

PI STA = 278+04.75  
 Y = 118747.276  
 X = 636775.930  
 DELTA = 59°17'49" RT  
 D = 6°54'11"  
 T = 472.43'  
 L = 858.99'  
 R = 830.00'  
 PC STA = 273+32.31  
 Y = 118682.556  
 X = 636307.949  
 PT STA = 281+91.30  
 Y = 118377.940  
 X = 637070.524  
 DB = N82°07'34"E  
 DA = S38°34'37"E



POINT TABLE			
POINT NAME	Y	X	ELEVATION
4	118640.472	636187.863	1265.94
5	117508.620	637967.900	1242.93

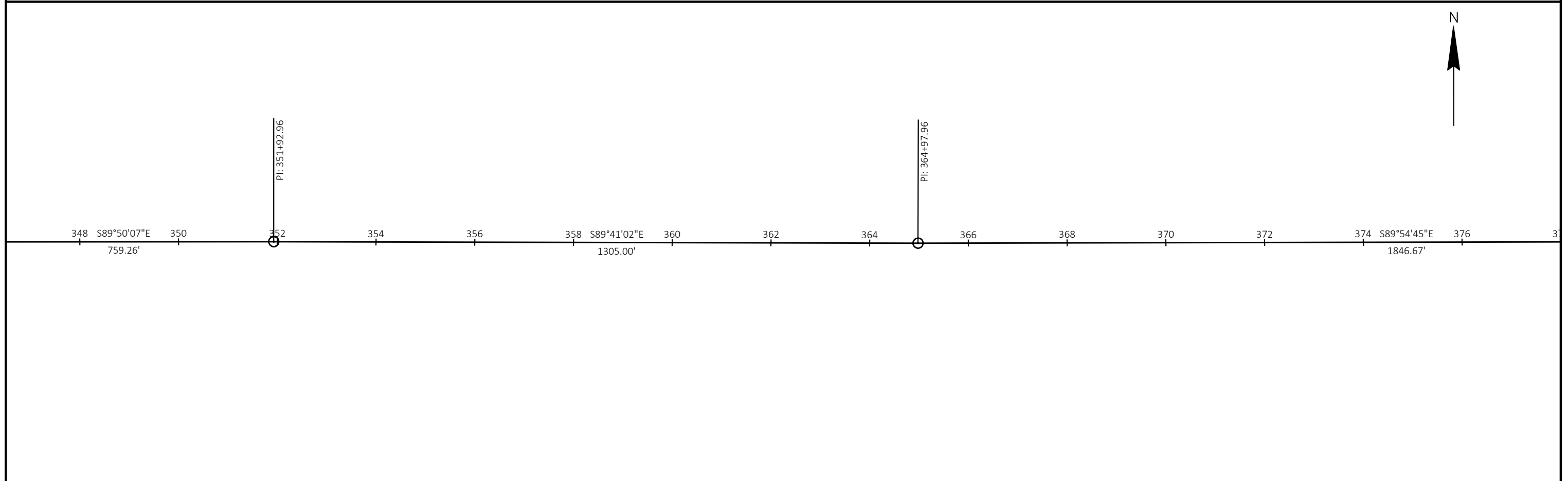
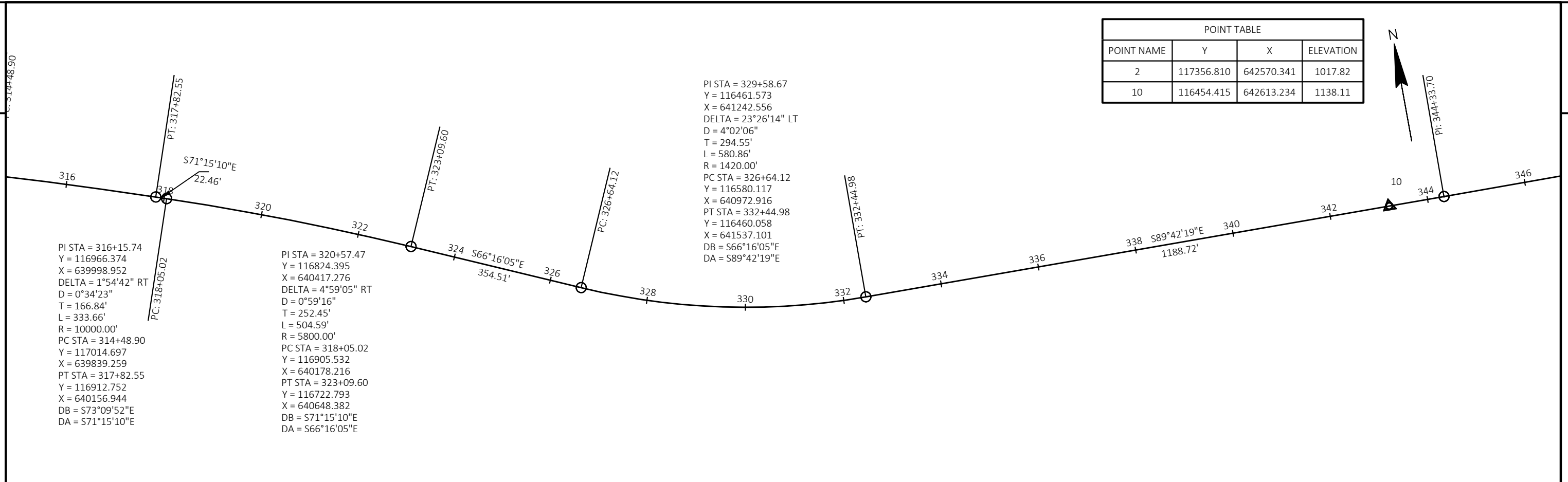


PI STA = 289+60.50  
 Y = 117776.601  
 X = 637550.170  
 DELTA = 15°50'55" LT  
 D = 2°43'42"  
 T = 292.31'  
 L = 580.88'  
 R = 2100.00'  
 PC STA = 286+68.19  
 Y = 118005.119  
 X = 637367.897  
 PT STA = 292+49.07  
 Y = 117606.549  
 X = 637787.921  
 DB = S38°34'37"E  
 DA = S54°25'32"E

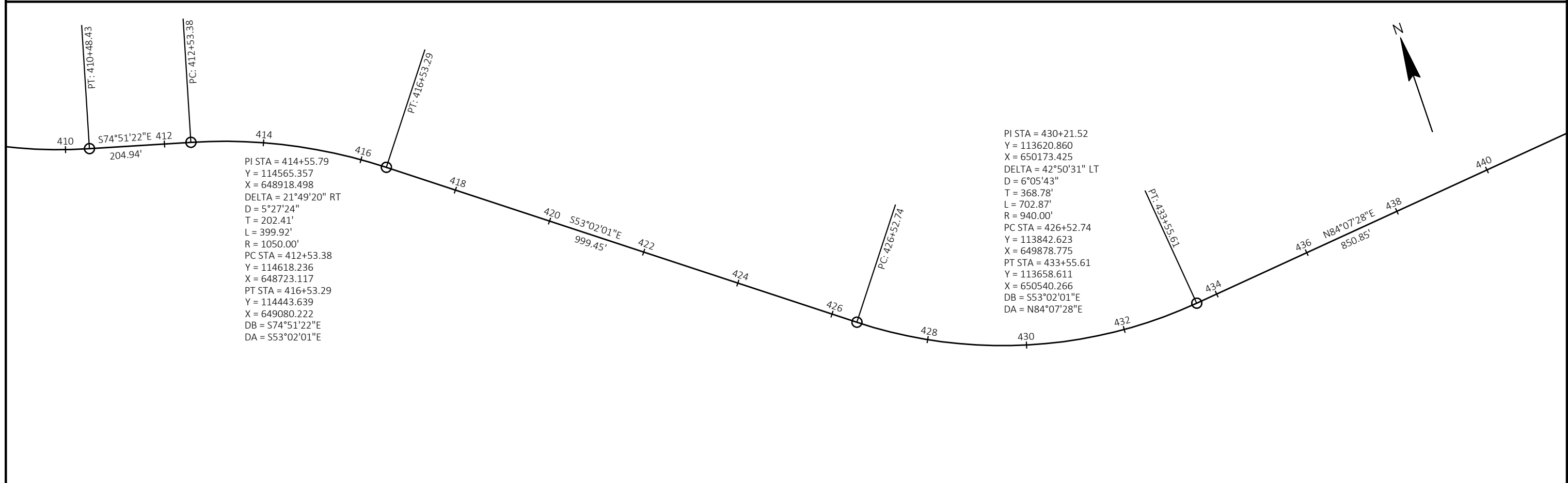
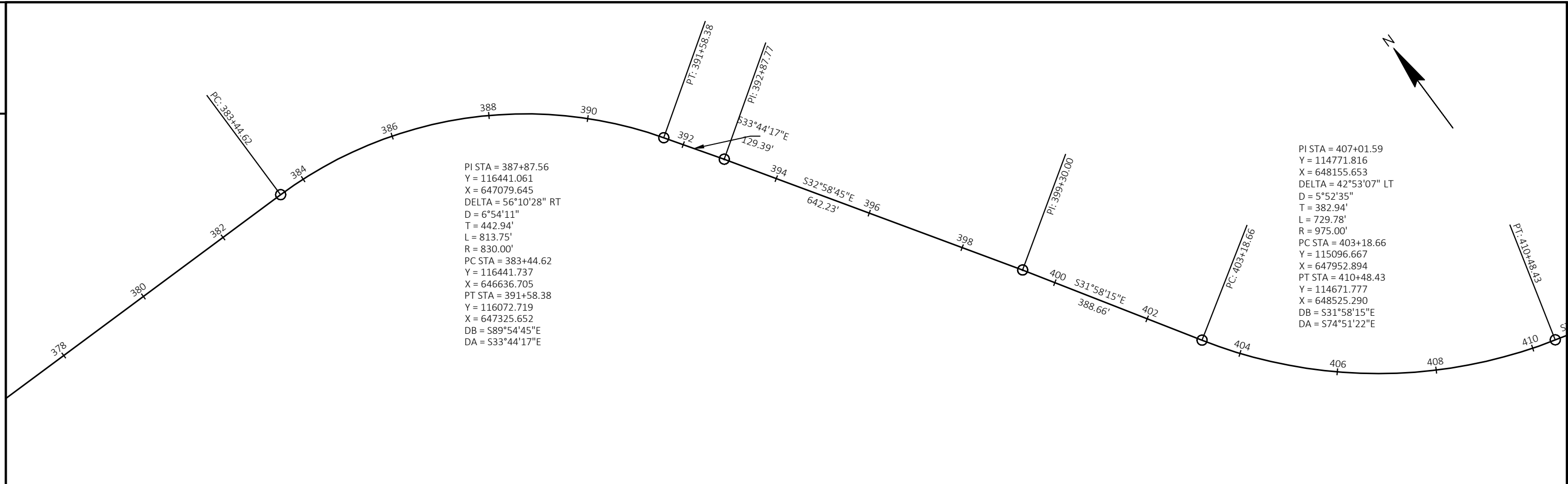
PI STA = 300+65.42  
 Y = 117131.633  
 X = 638451.901  
 DELTA = 34°49'05" LT  
 D = 6°49'15"  
 T = 263.39'  
 L = 510.46'  
 R = 840.00'  
 PC STA = 298+02.03  
 Y = 117284.860  
 X = 638237.674  
 PT STA = 303+12.49  
 Y = 117128.156  
 X = 638715.264  
 DB = S54°25'32"E  
 DA = S89°14'37"E

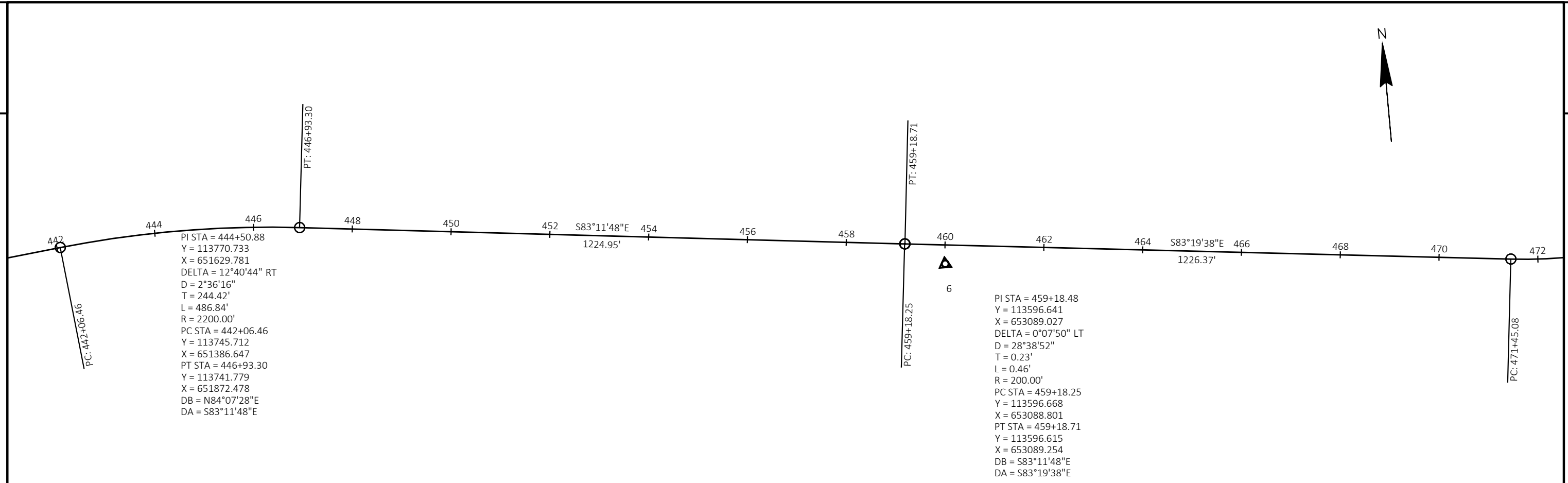
PI STA = 310+86.42  
 Y = 117120.637  
 X = 639489.154  
 DELTA = 16°23'43" RT  
 D = 3°24'38"  
 T = 242.02'  
 L = 480.74'  
 R = 1680.00'  
 PC STA = 308+44.40  
 Y = 117122.497  
 X = 639247.139  
 PT STA = 313+25.13  
 Y = 117050.541  
 X = 639720.803  
 DB = S89°33'35"E  
 DA = S73°09'52"E

POINT TABLE			
POINT NAME	Y	X	ELEVATION
2	117356.810	642570.341	1017.82
10	116454.415	642613.234	1138.11

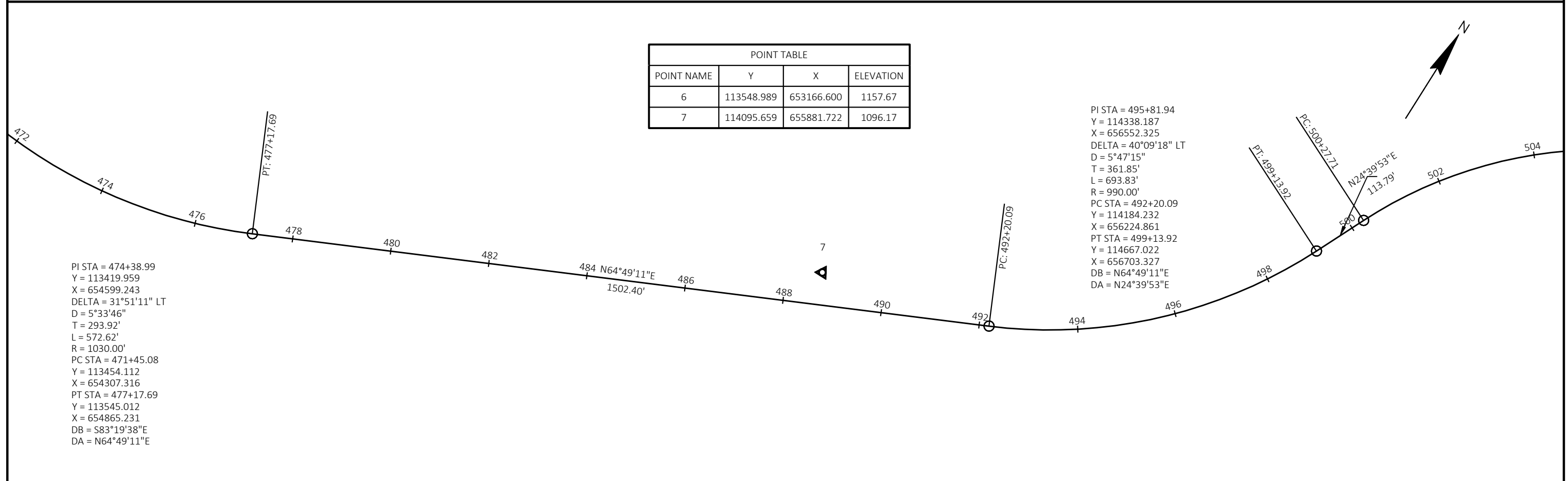


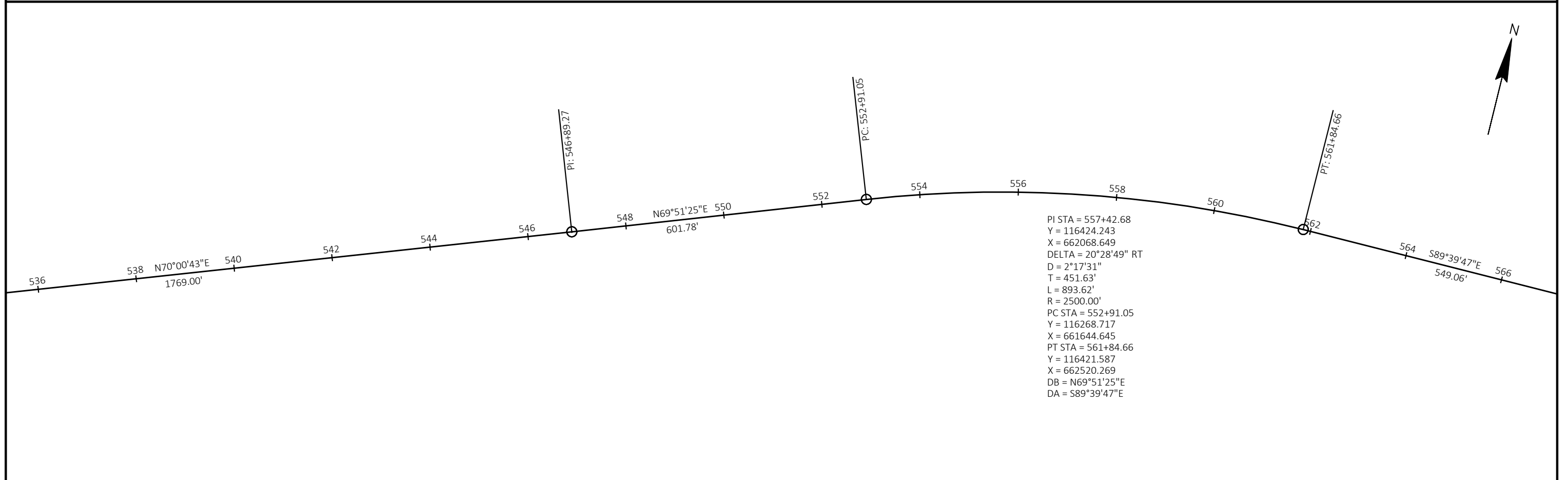
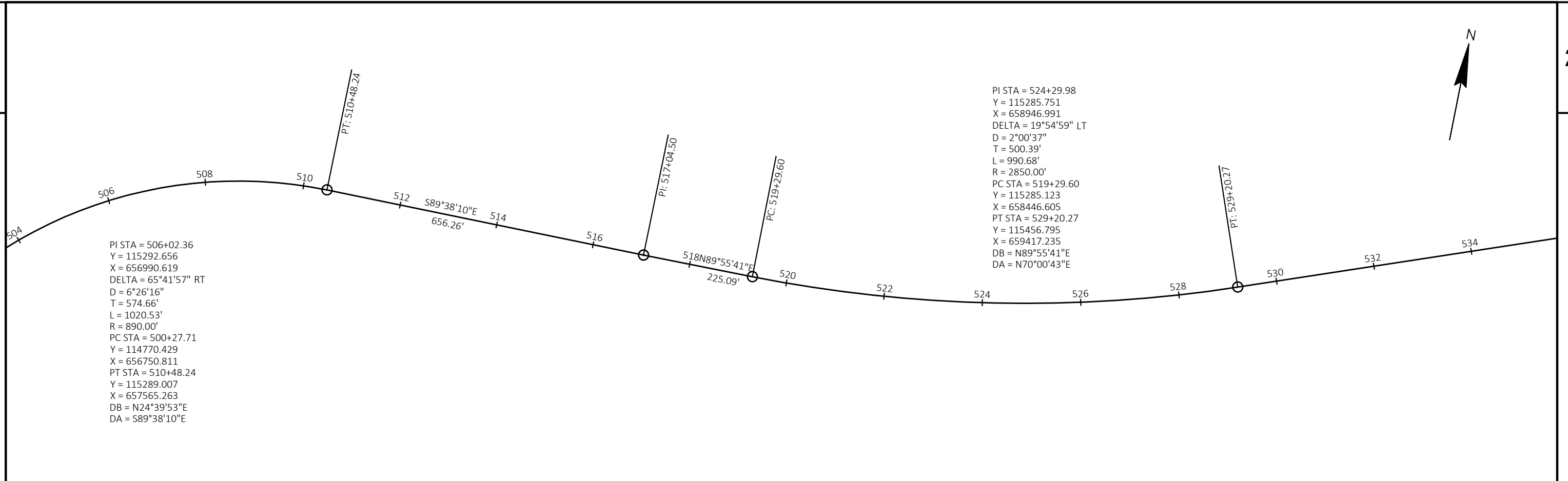




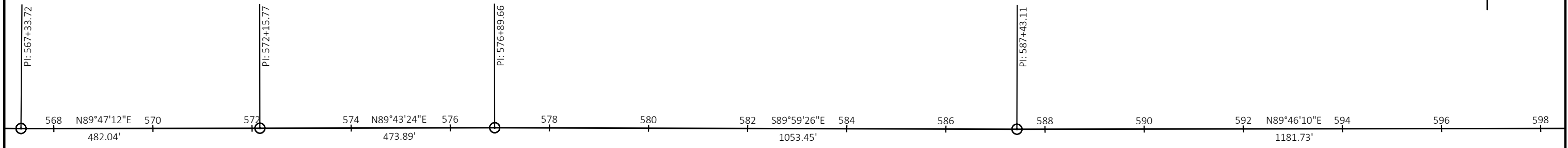


POINT TABLE			
POINT NAME	Y	X	ELEVATION
6	113548.989	653166.600	1157.67
7	114095.659	655881.722	1096.17

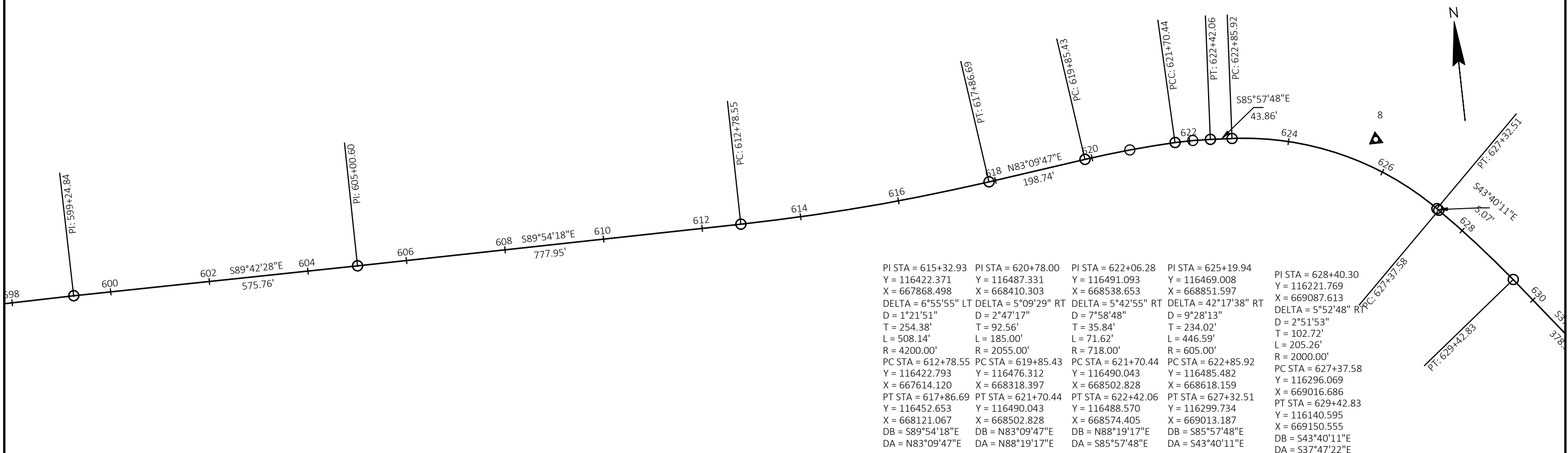


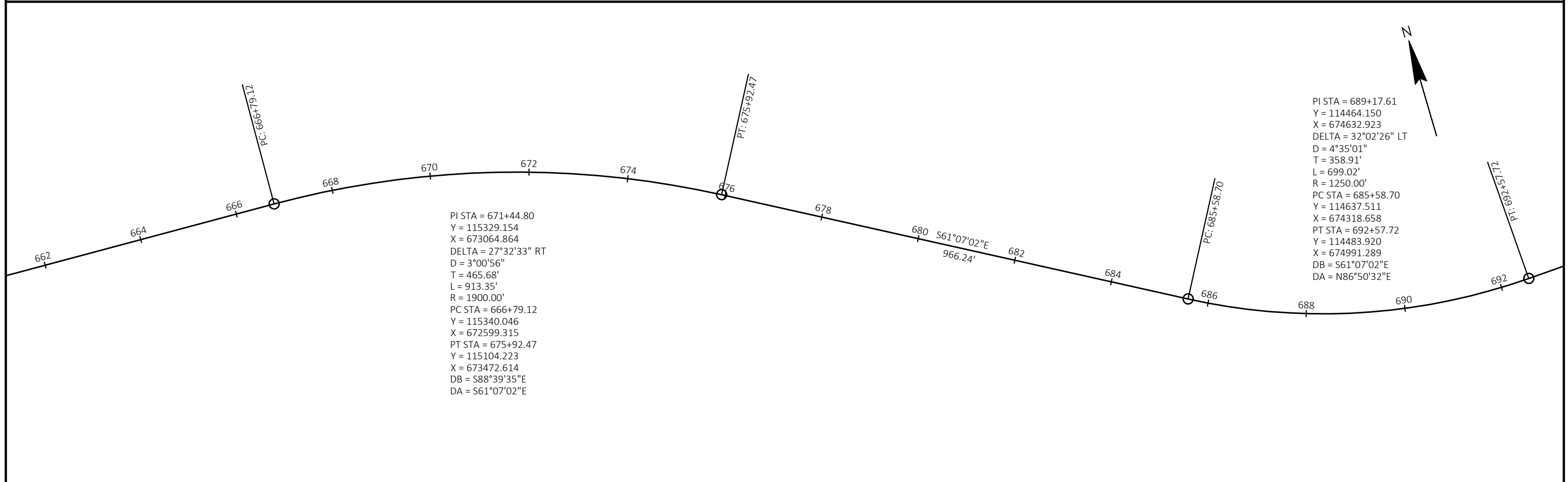
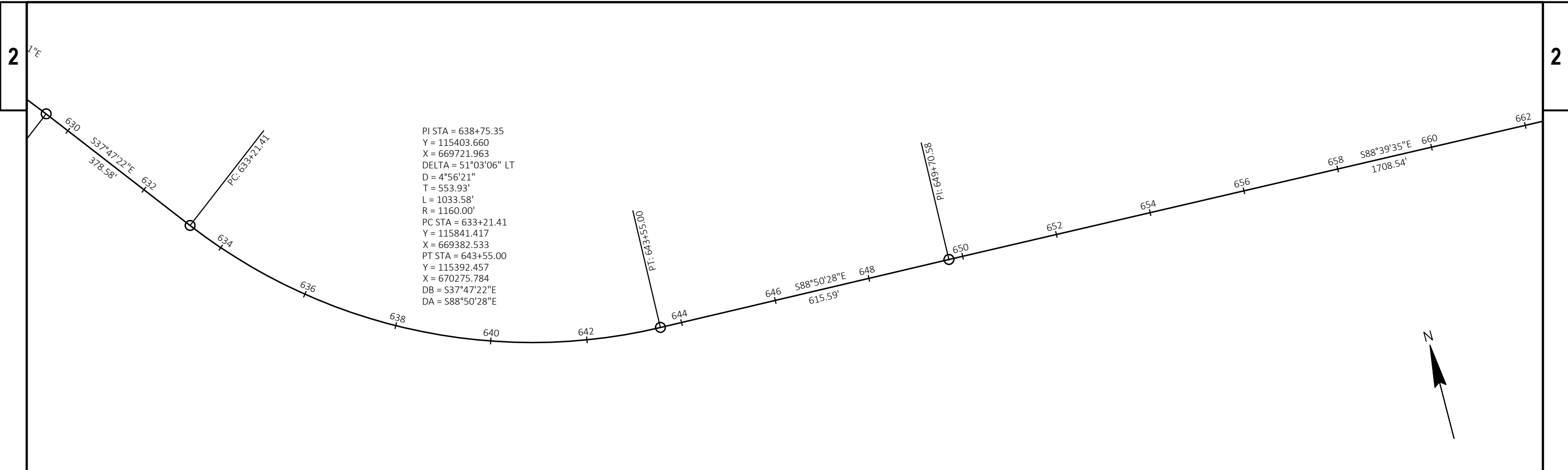


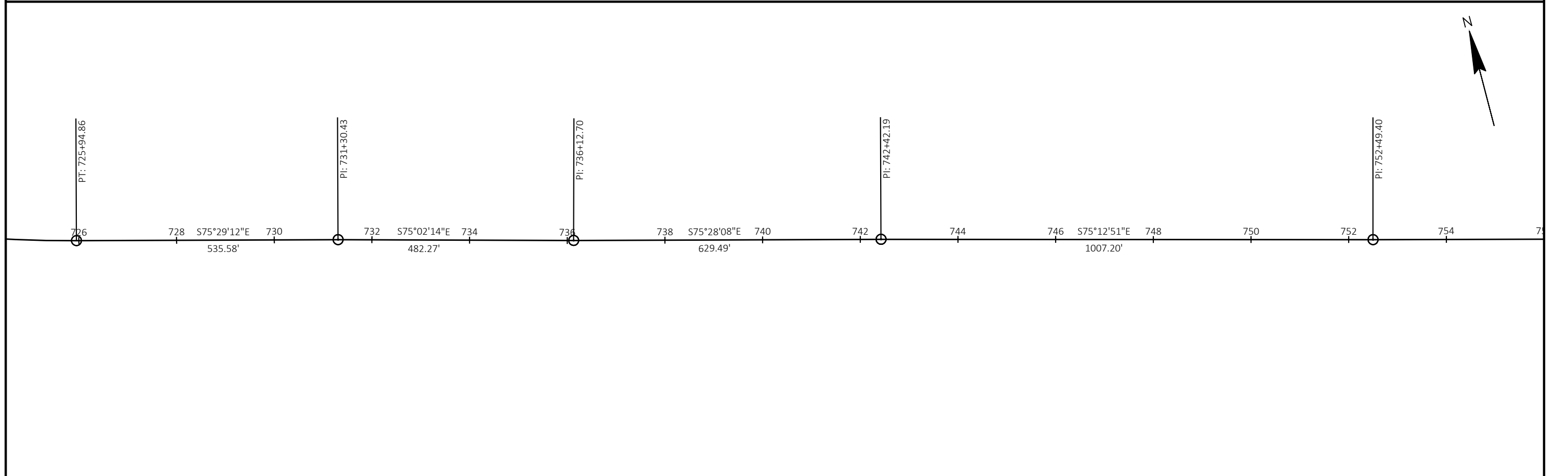
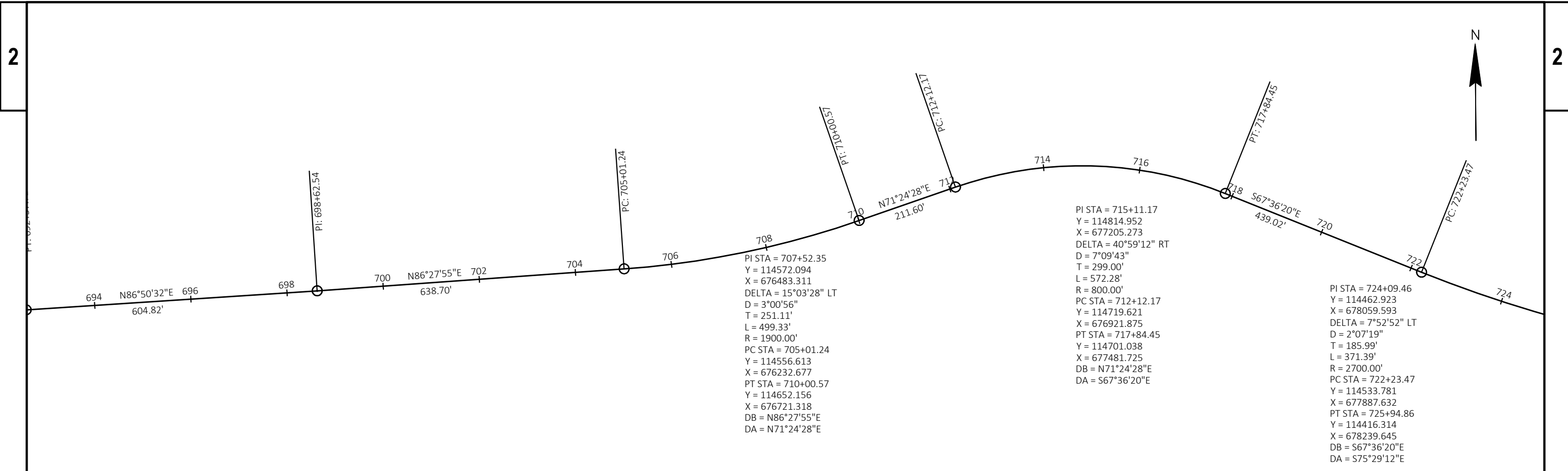
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	ALIGNMENT & CONTROL POINT DETAILS	SHEET	E
------------------------	-------------	----------------	-----------------------------------	-------	---

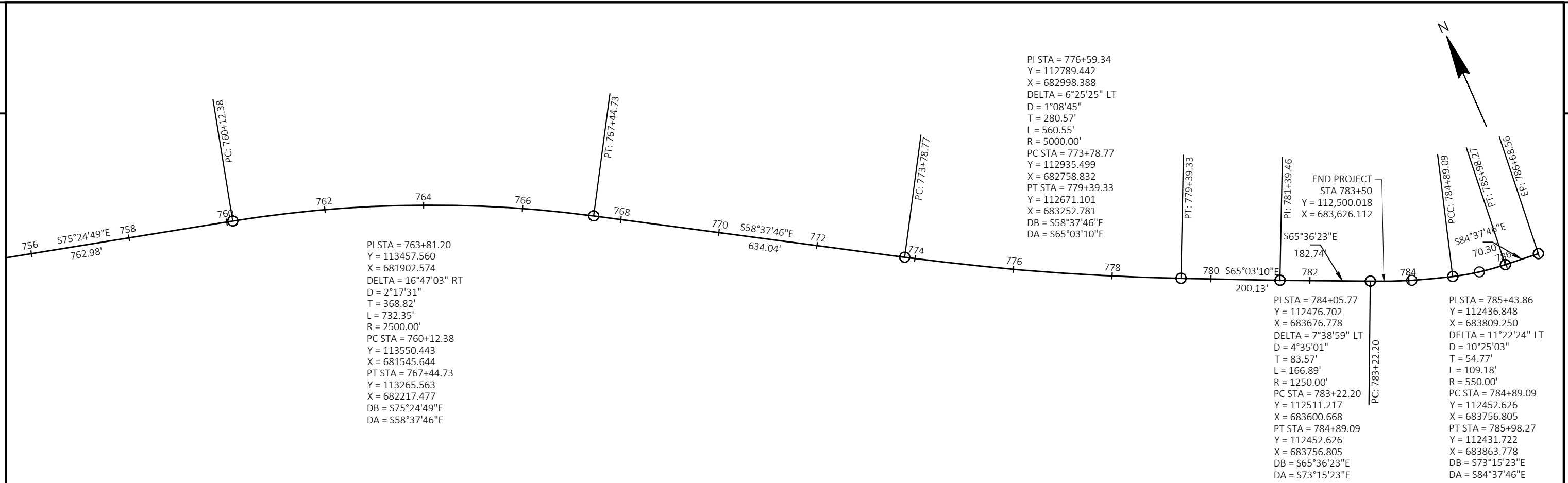


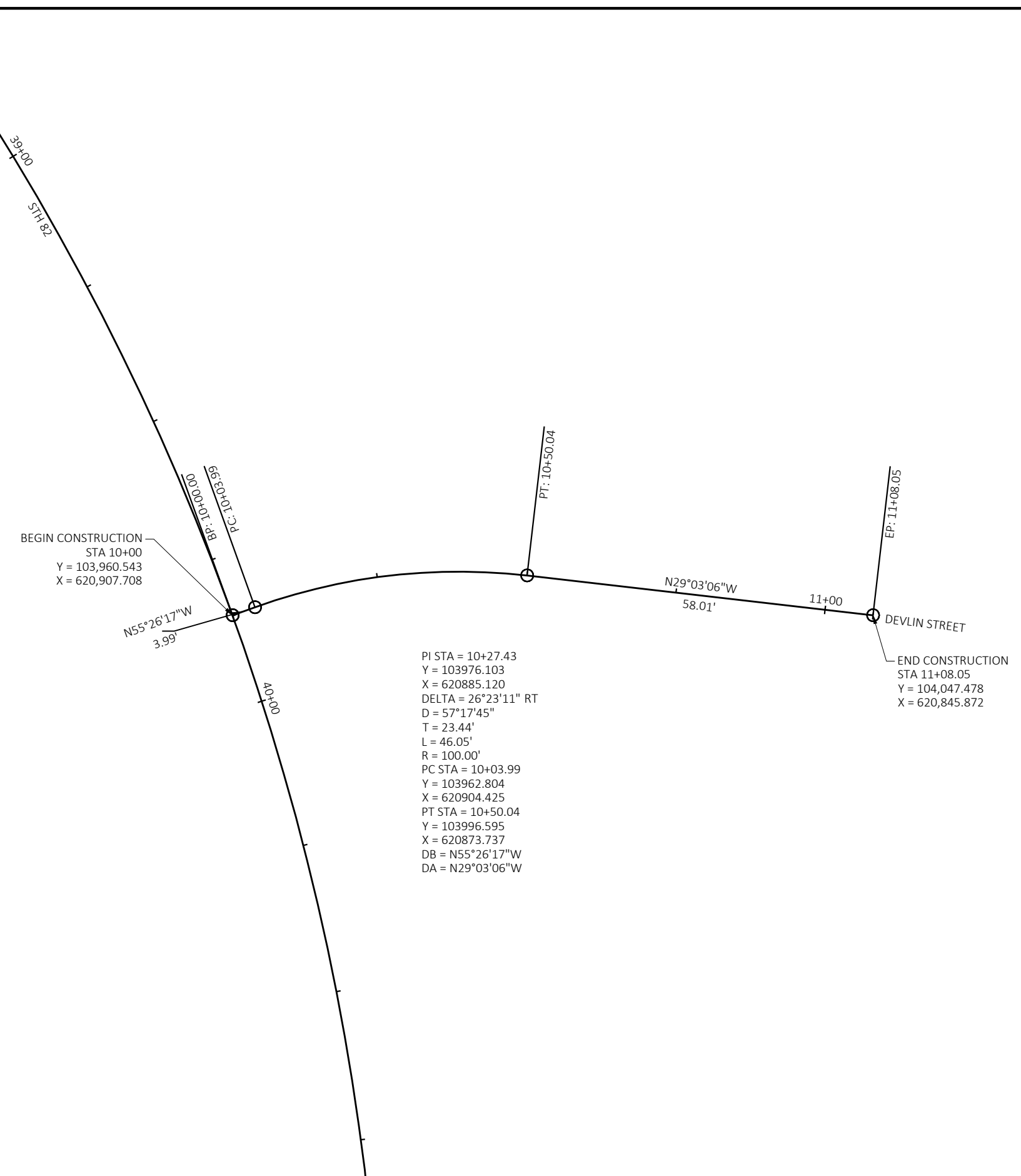
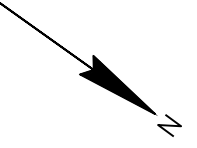
POINT TABLE			
POINT NAME	Y	X	ELEVATION
8	116451.833	668906.104	1211.19











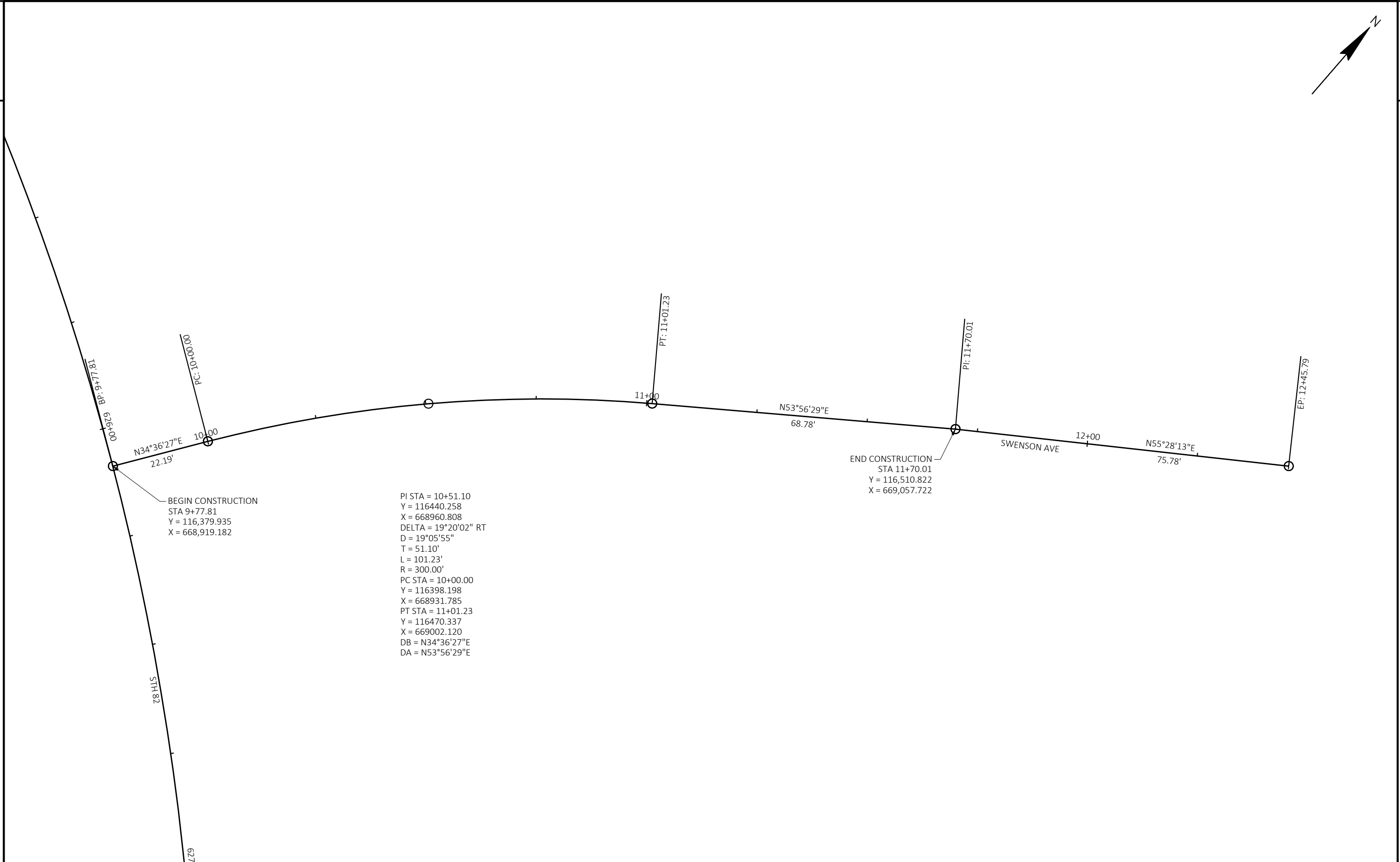
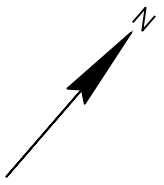
BEGIN CONSTRUCTION  
 STA 10+00  
 Y = 103,960.543  
 X = 620,907.708

END CONSTRUCTION  
 STA 11+08.05  
 Y = 104,047.478  
 X = 620,845.872

PI STA = 10+27.43  
 Y = 103976.103  
 X = 620885.120  
 DELTA = 26°23'11" RT  
 D = 57°17'45"  
 T = 23.44'  
 L = 46.05'  
 R = 100.00'  
 PC STA = 10+03.99  
 Y = 103962.804  
 X = 620904.425  
 PT STA = 10+50.04  
 Y = 103996.595  
 X = 620873.737  
 DB = N55°26'17"W  
 DA = N29°03'06"W

PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	ALIGNMENT & CONTROL POINT DETAILS - DEVLIN ST	SHEET	E
------------------------	-------------	----------------	---	-------	---

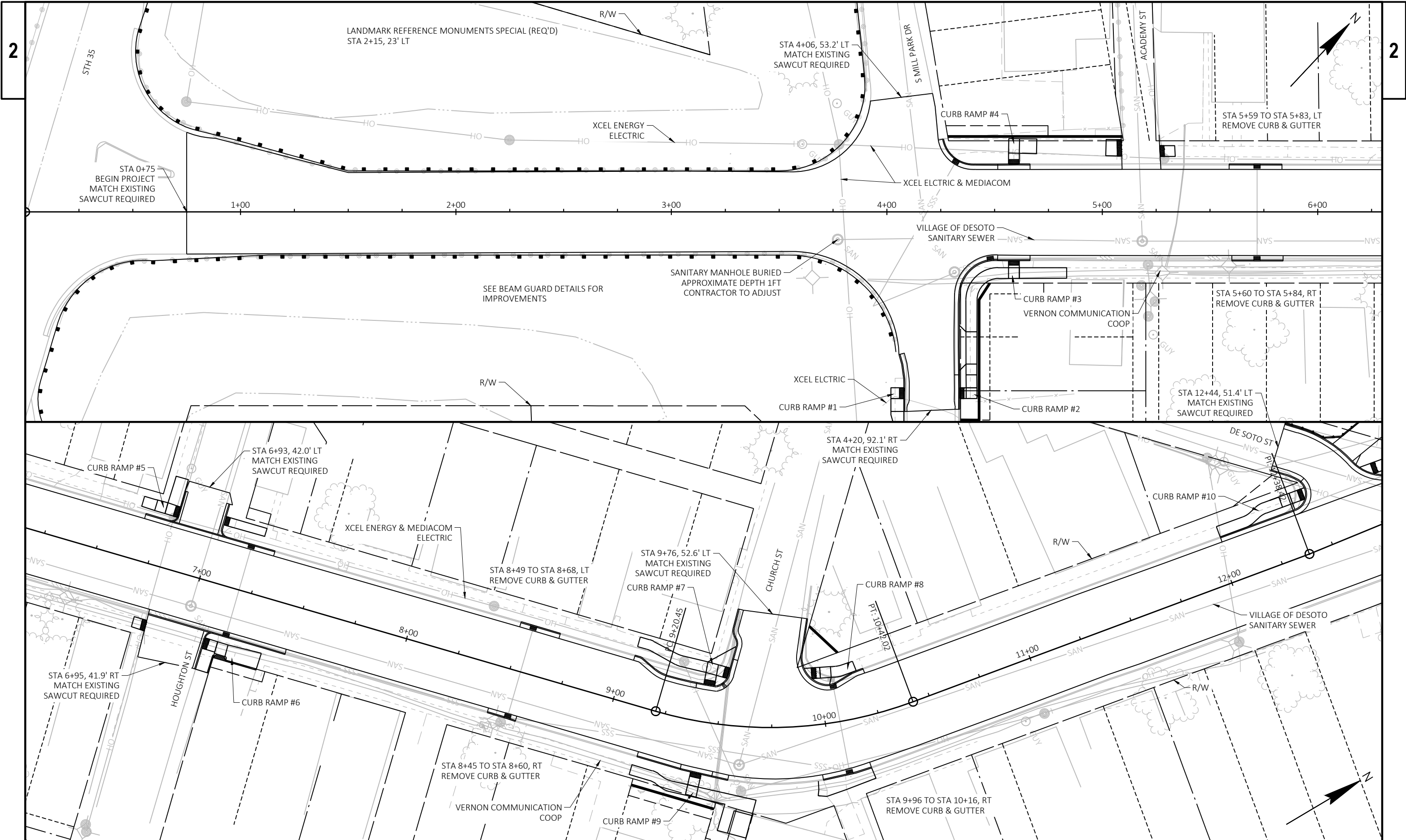




BEGIN CONSTRUCTION  
 STA 9+77.81  
 Y = 116,379.935  
 X = 668,919.182

PI STA = 10+51.10  
 Y = 116440.258  
 X = 668960.808  
 DELTA = 19°20'02" RT  
 D = 19°05'55"  
 T = 51.10'  
 L = 101.23'  
 R = 300.00'  
 PC STA = 10+00.00  
 Y = 116398.198  
 X = 668931.785  
 PT STA = 11+01.23  
 Y = 116470.337  
 X = 669002.120  
 DB = N34°36'27"E  
 DA = N53°56'29"E

END CONSTRUCTION  
 STA 11+70.01  
 Y = 116,510.822  
 X = 669,057.722



PROJECT NO: 5150-02-70

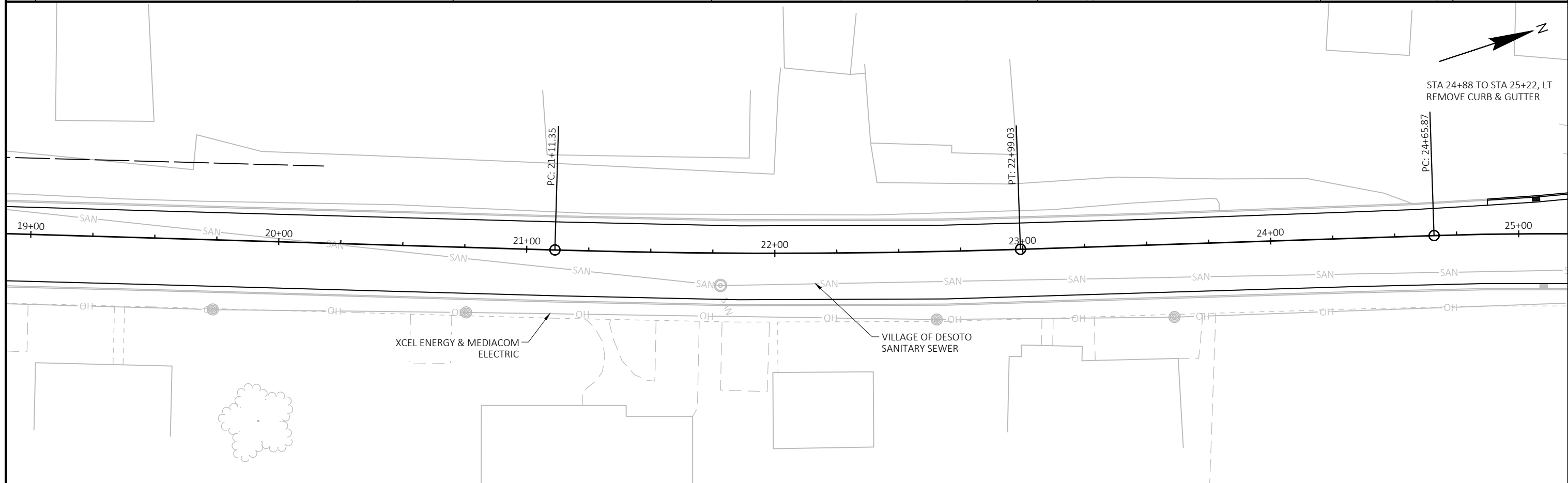
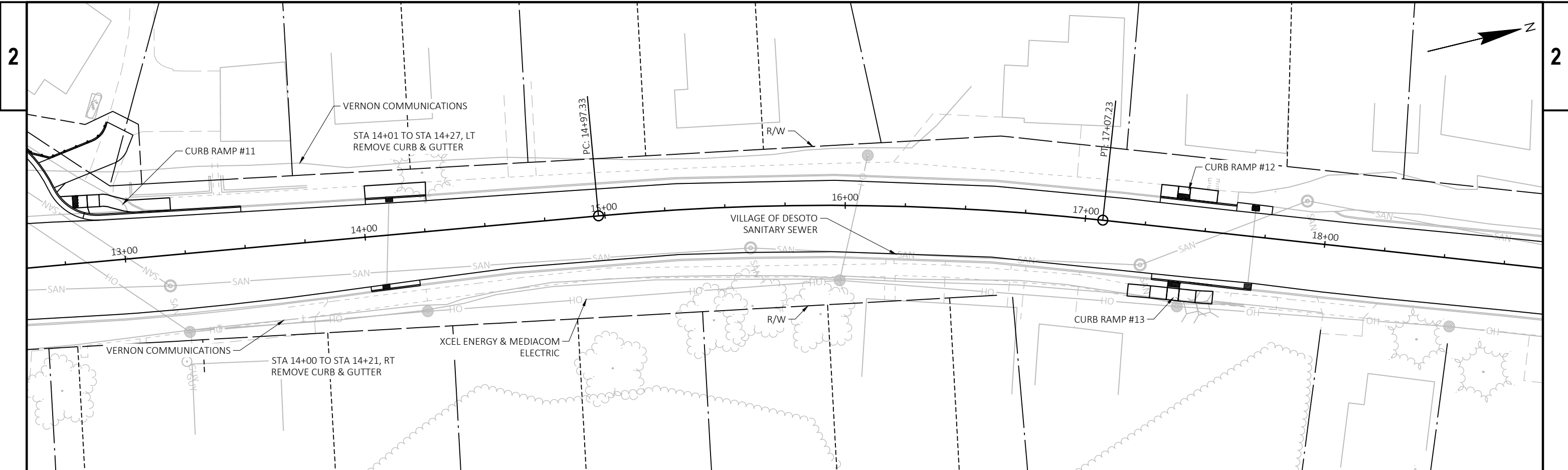
HWY: STH 82

COUNTY: VERNON

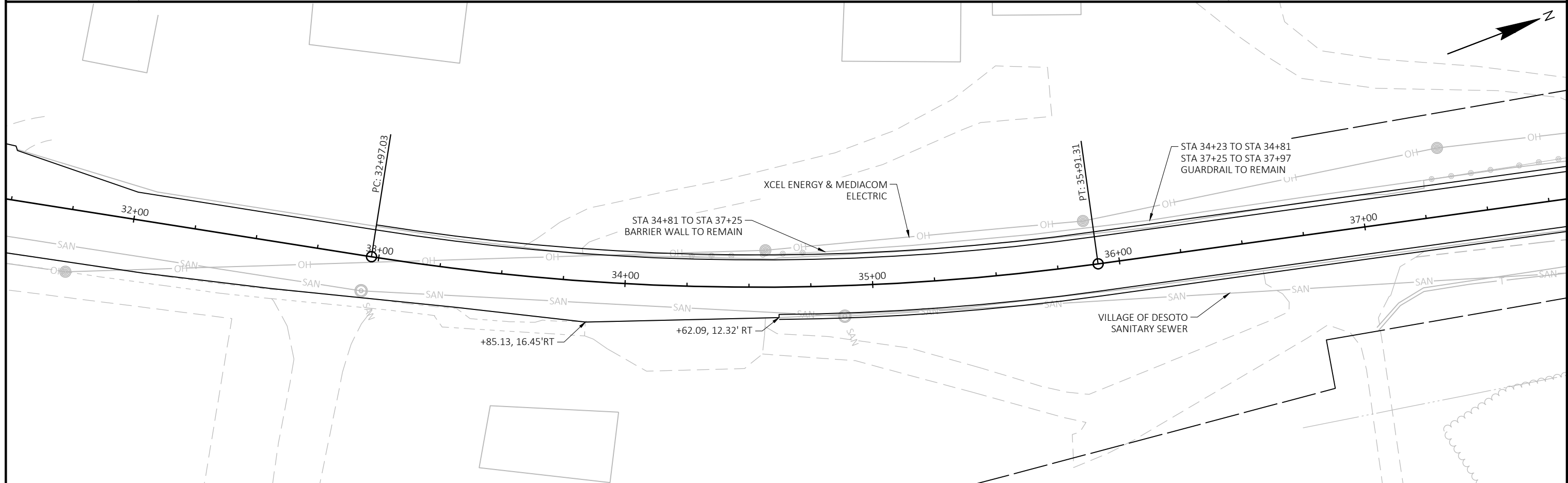
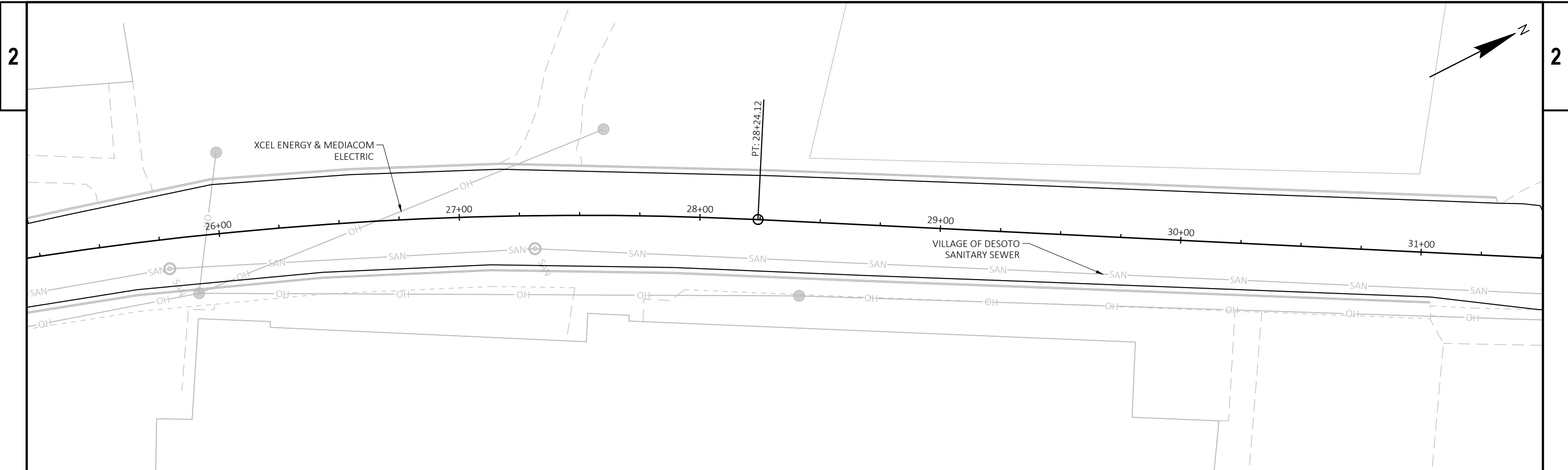
STH 82 PLAN

SHEET

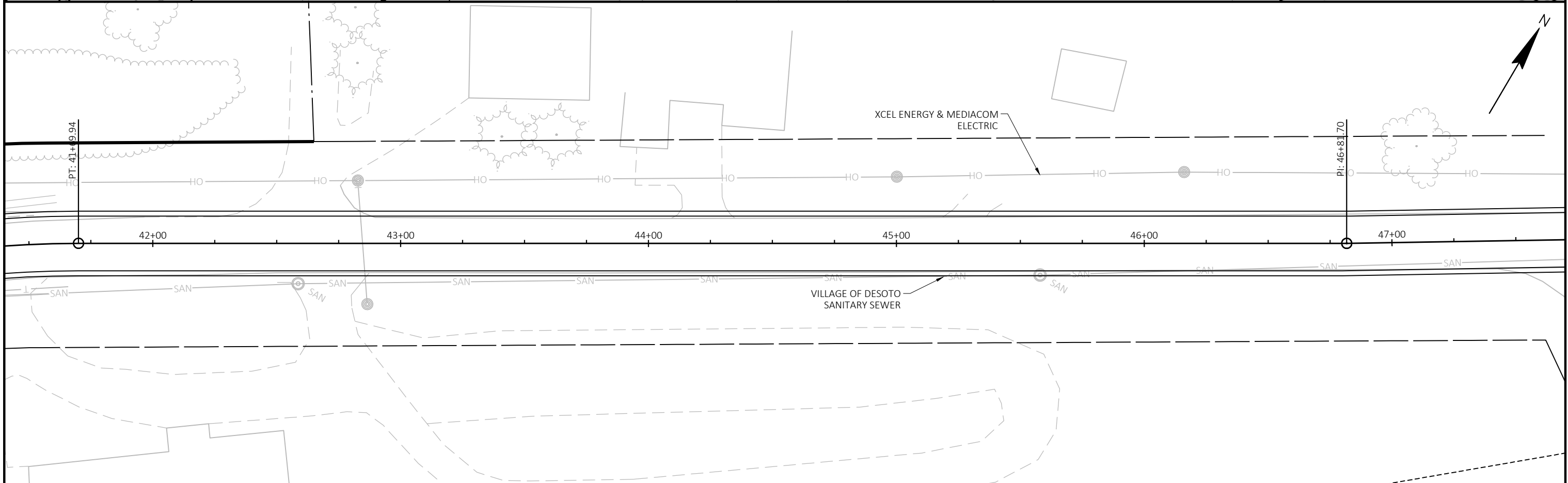
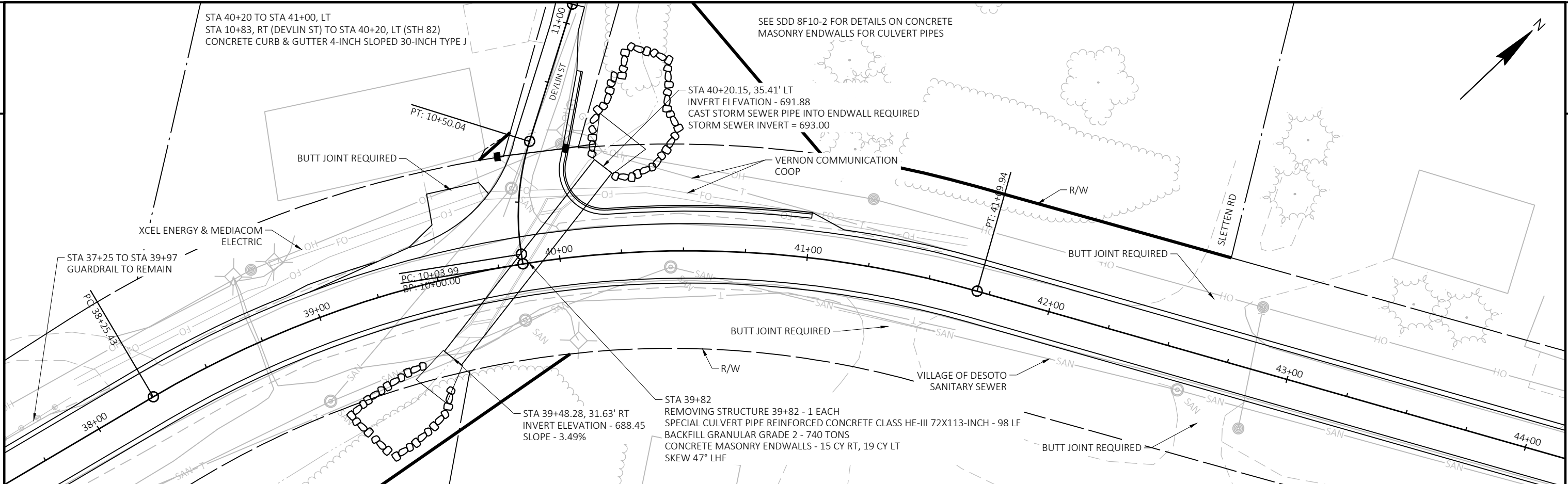
E



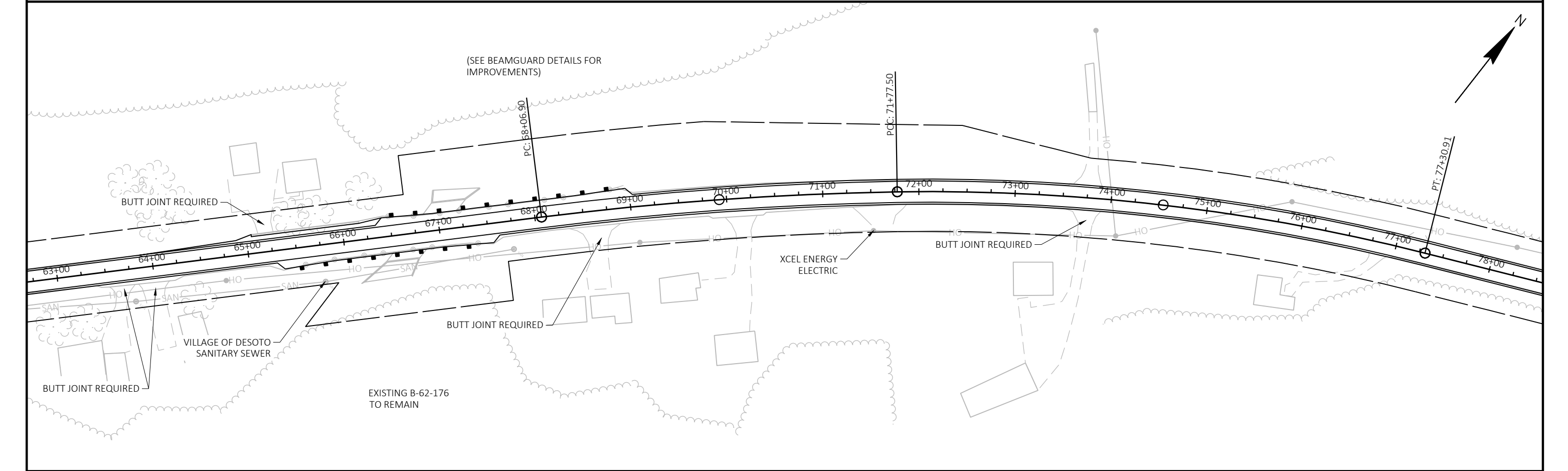
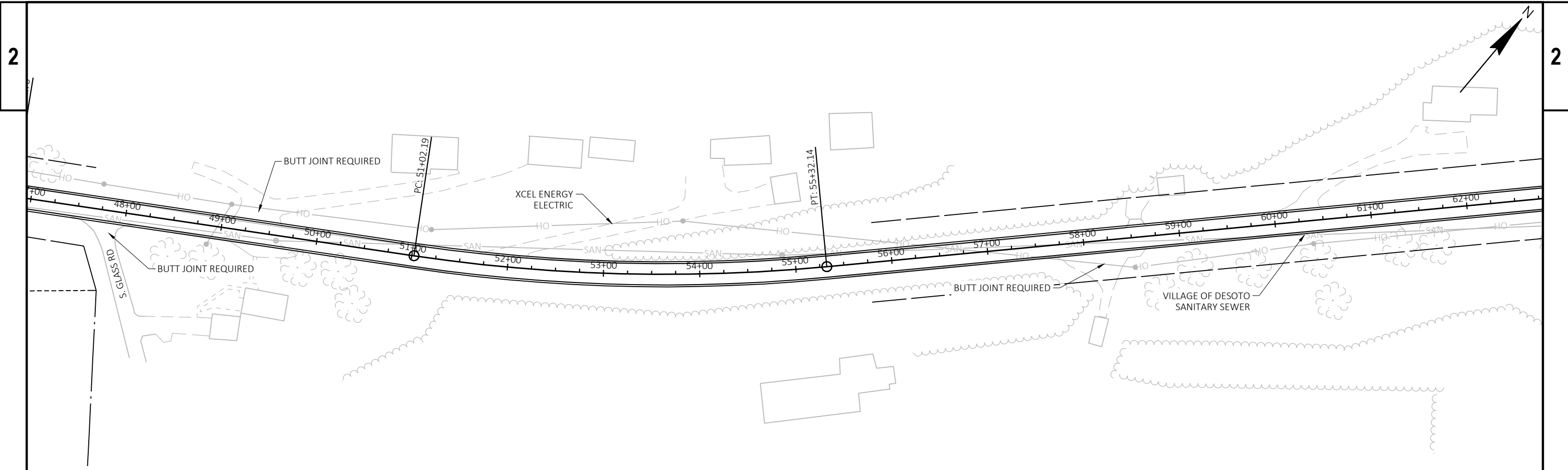
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



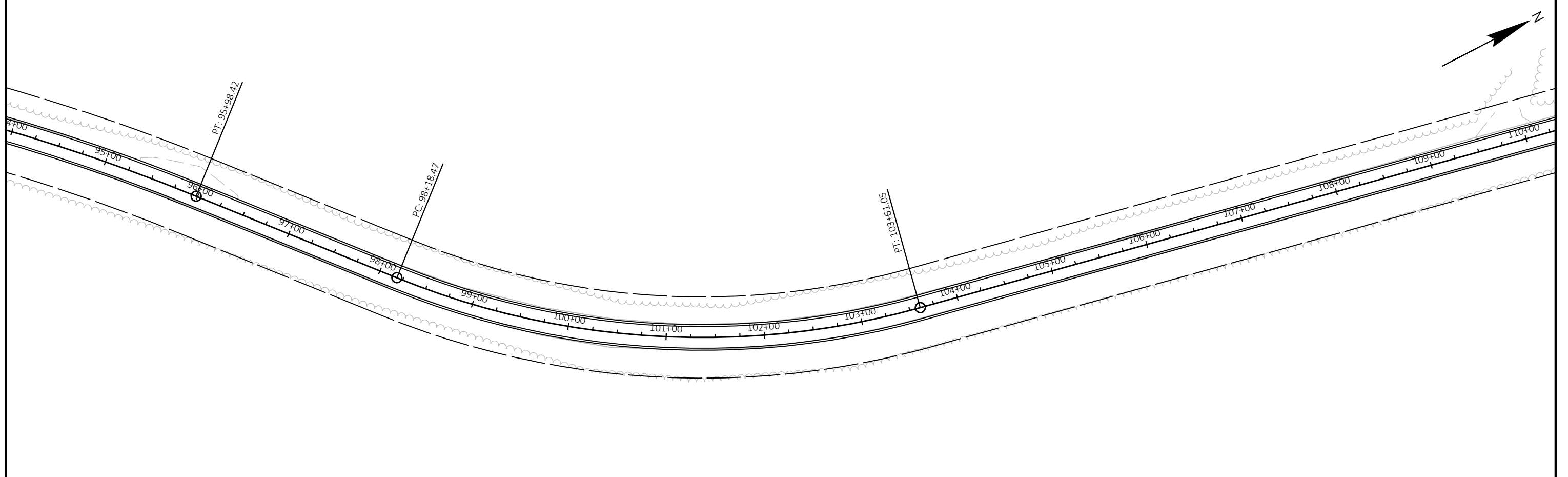
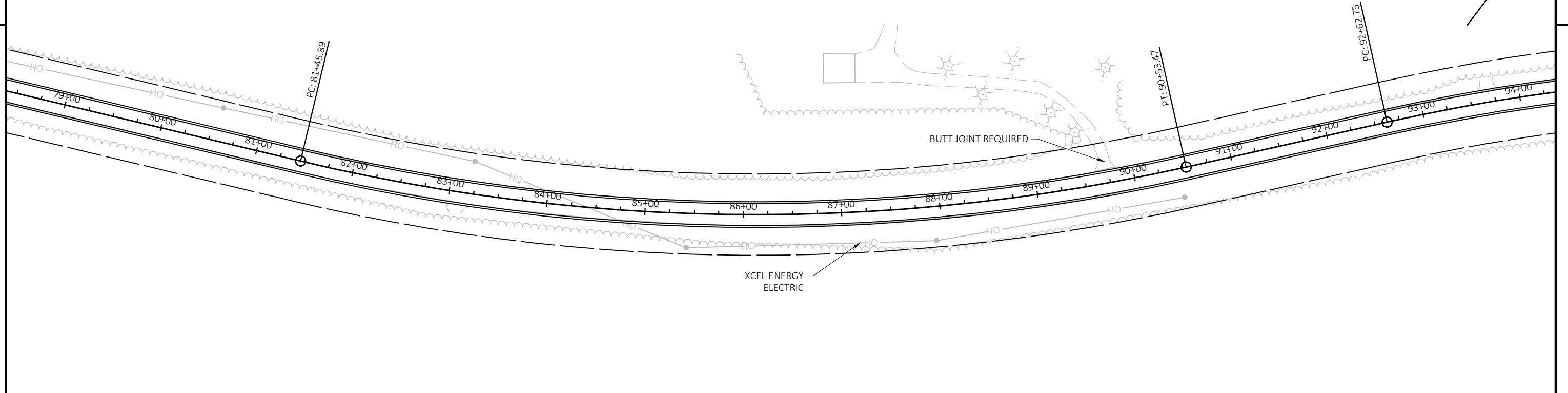
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	<b>E</b>
------------------------	-------------	----------------	-------------	-------	----------



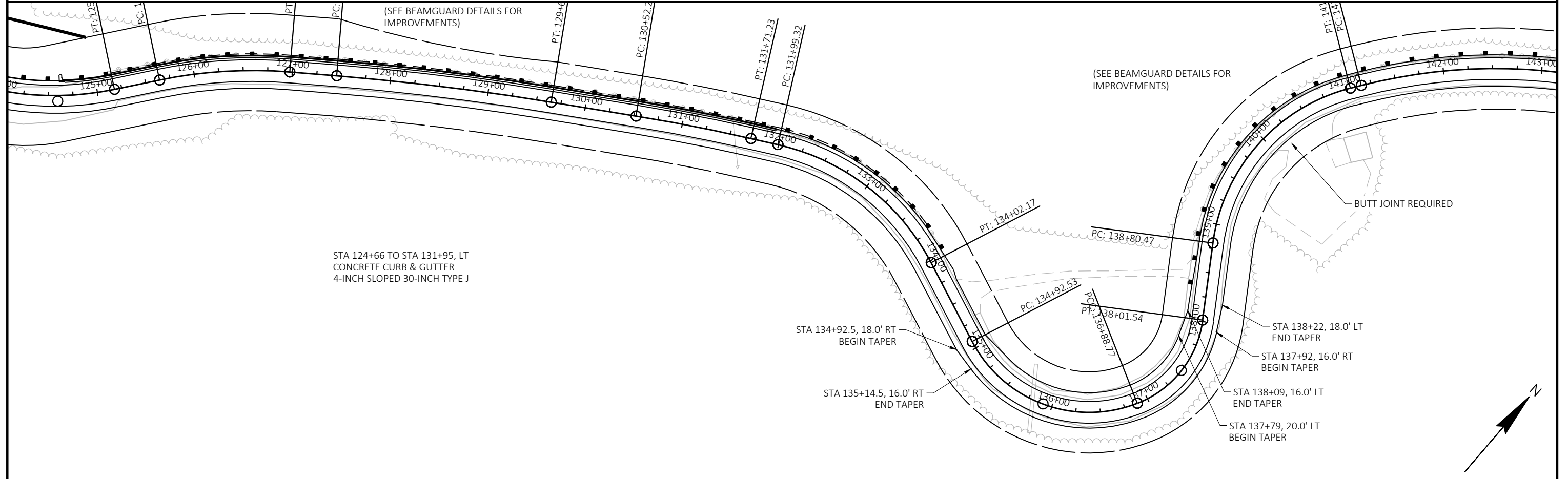
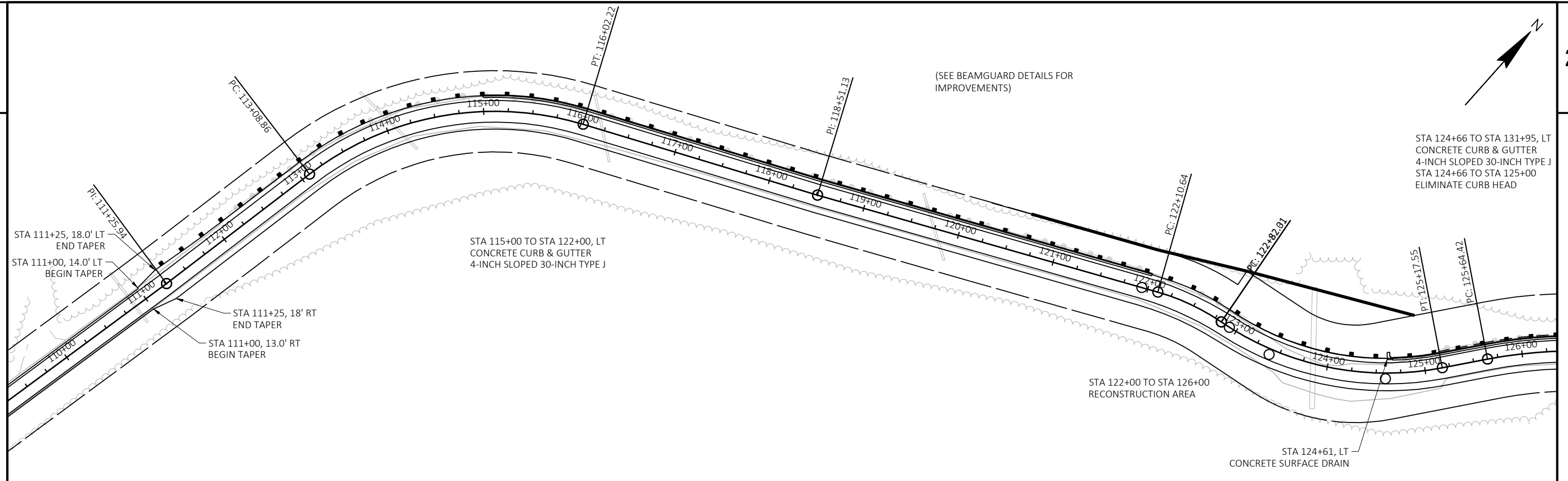
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

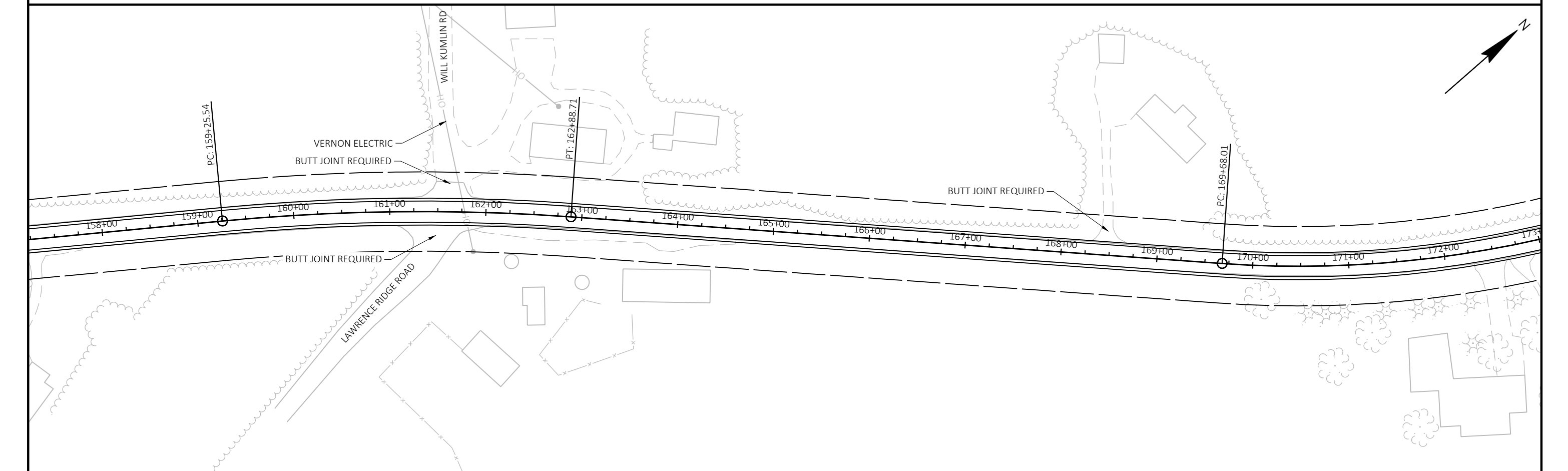
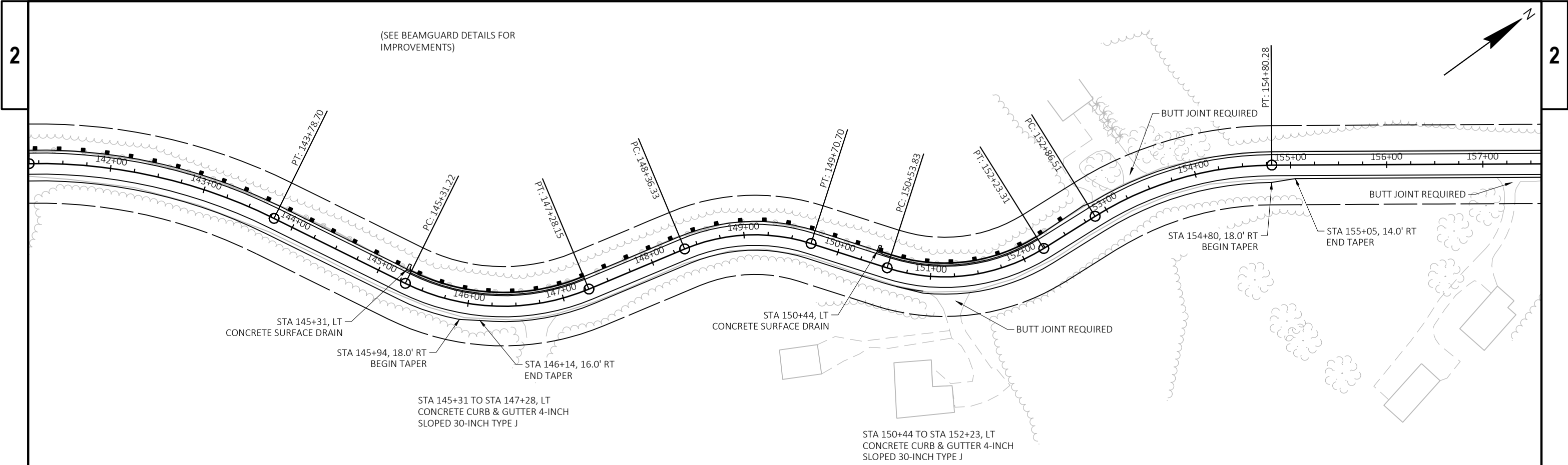


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

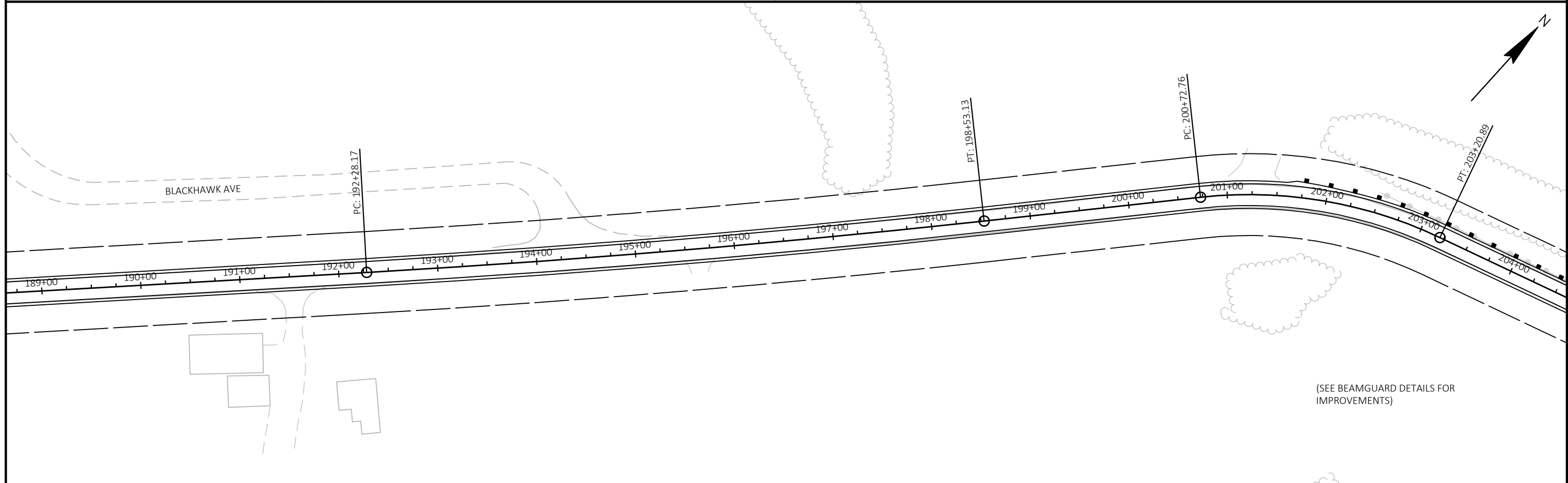
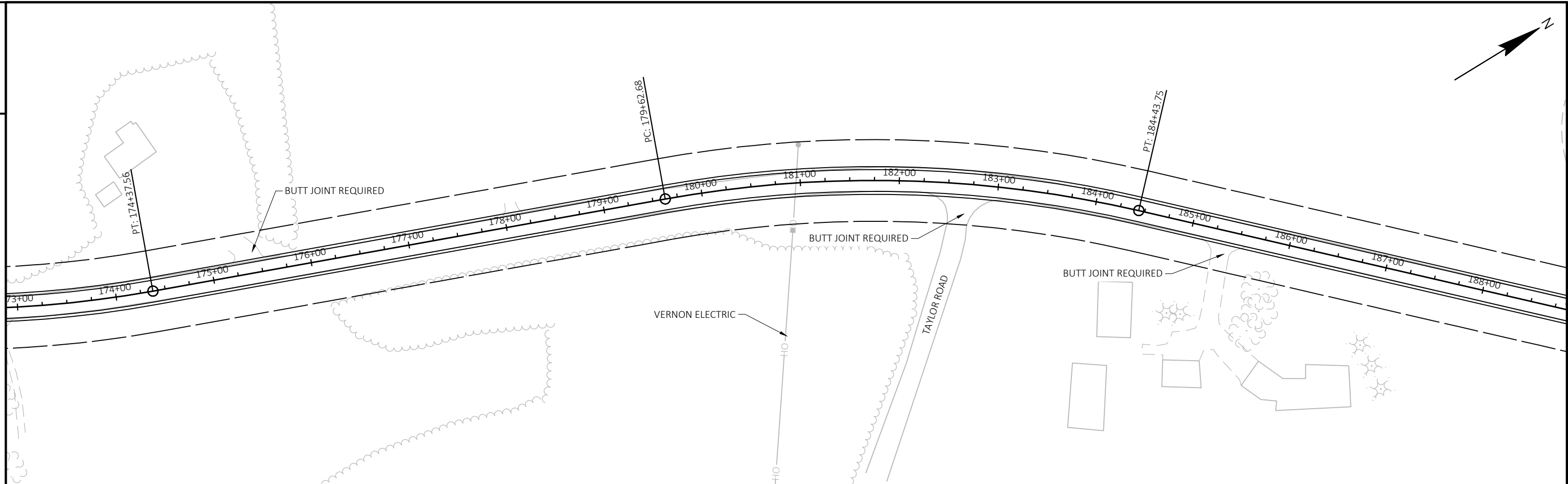


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



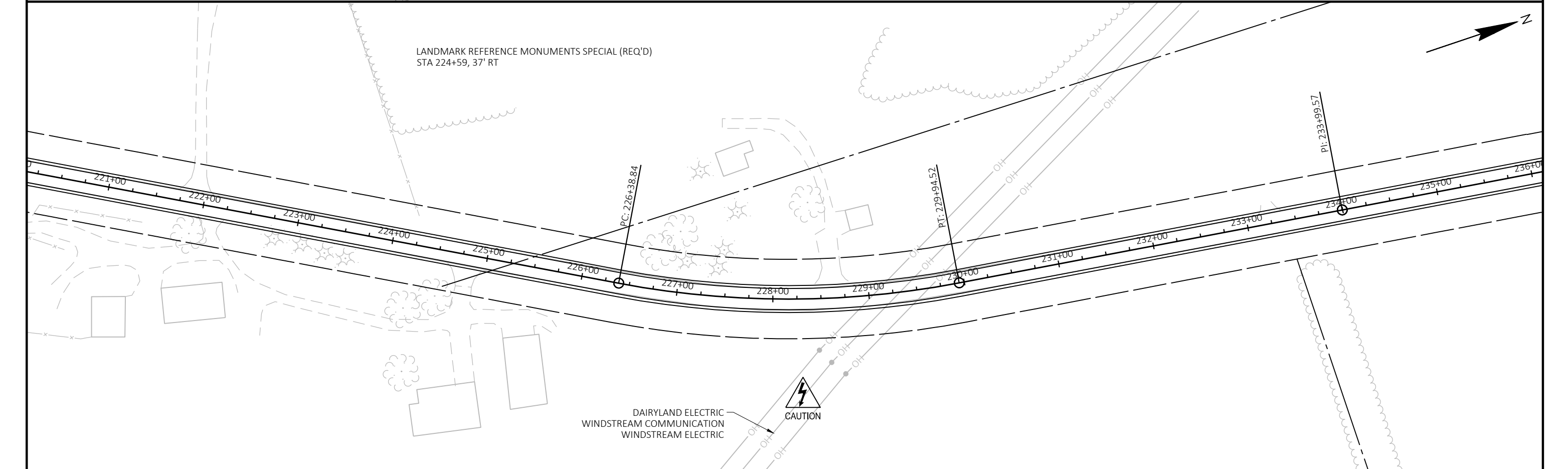
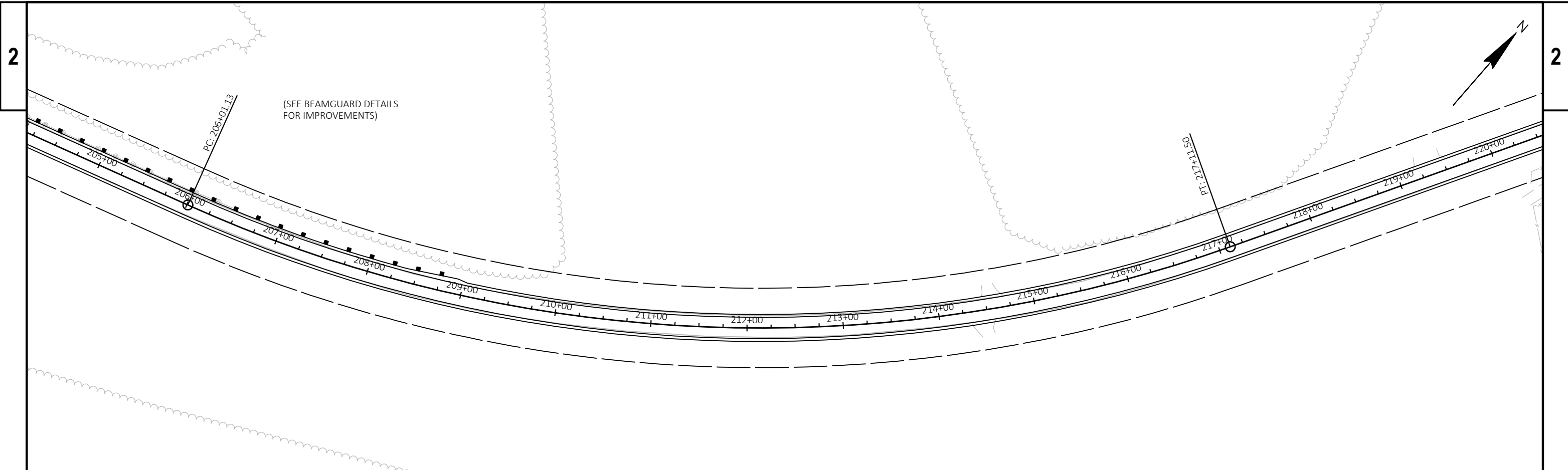


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

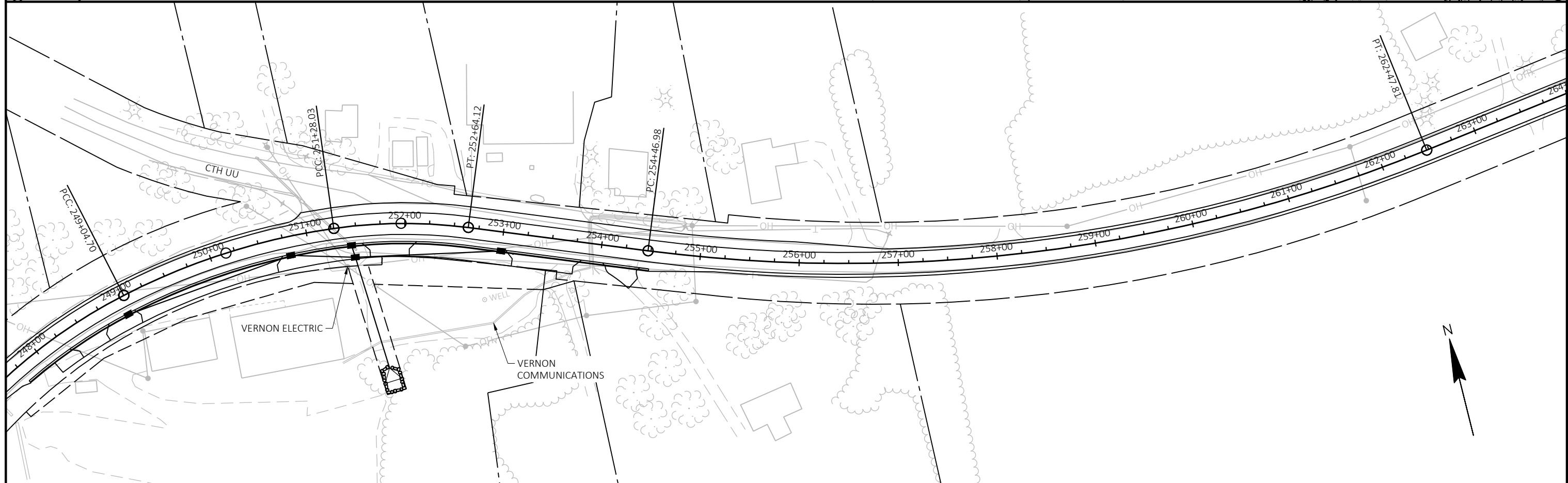
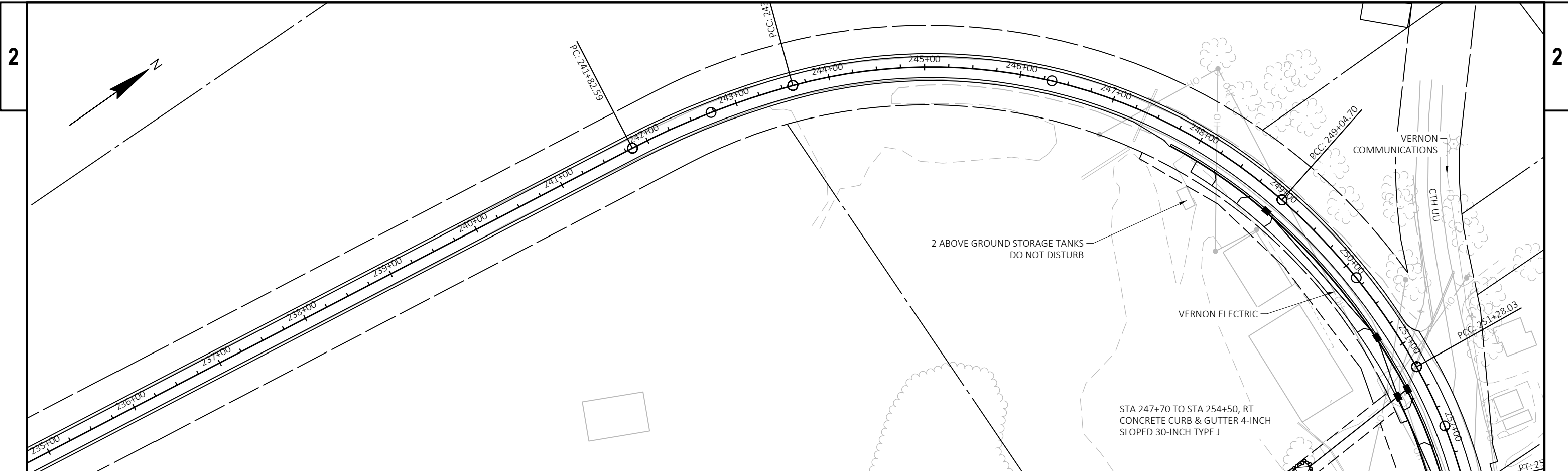


(SEE BEAMGUARD DETAILS FOR IMPROVEMENTS)

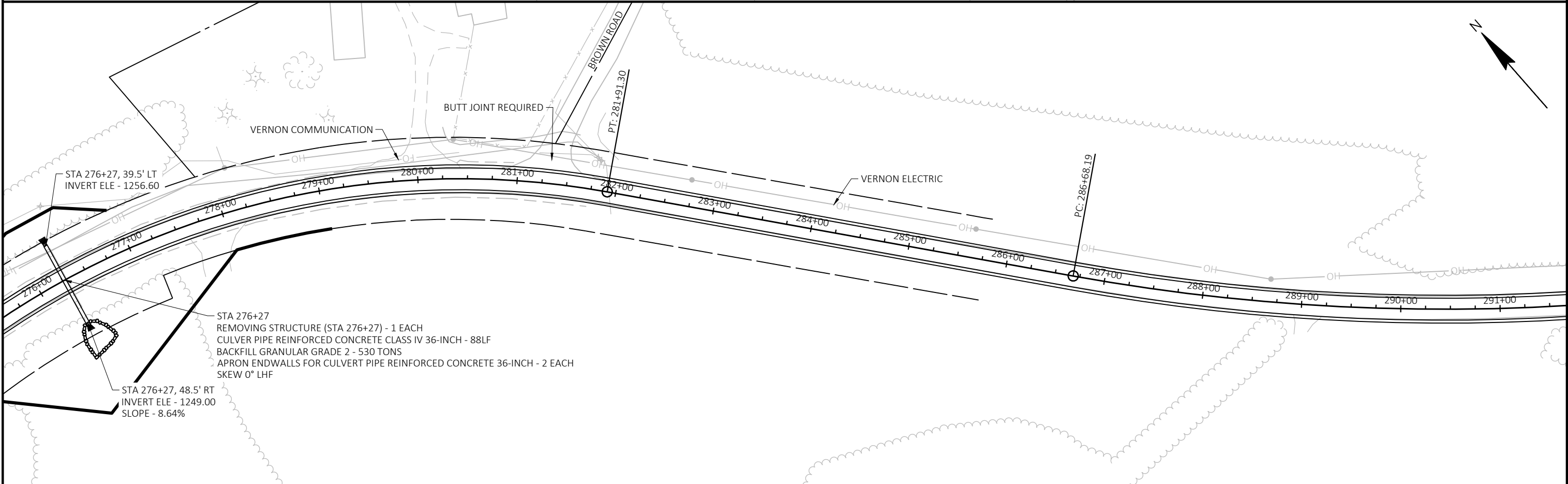
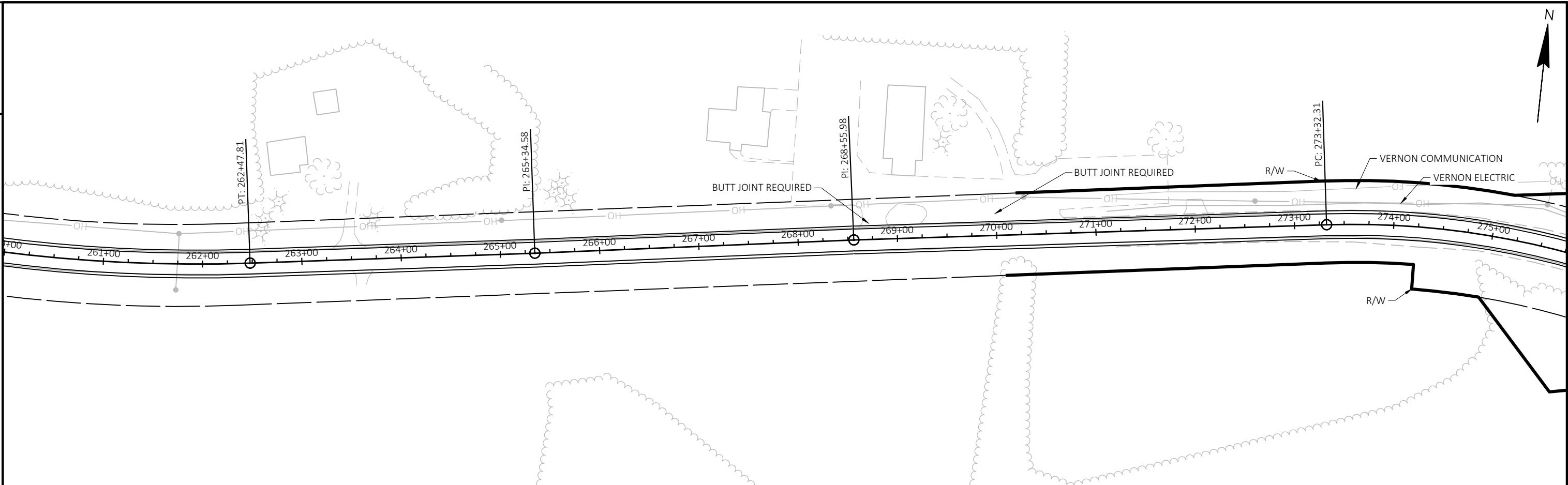
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



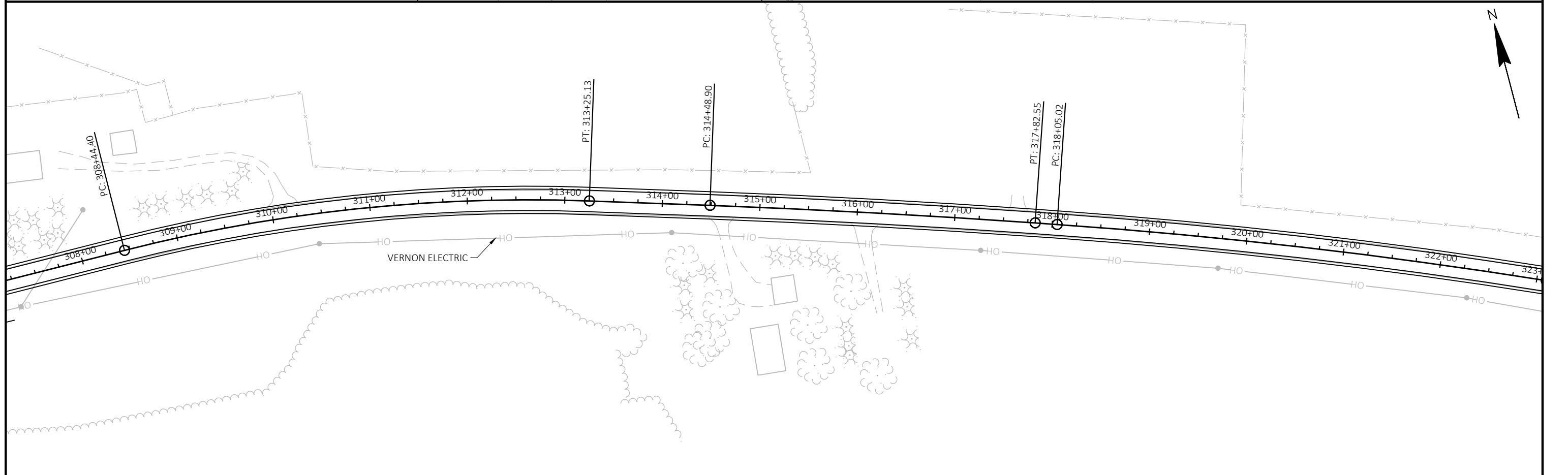
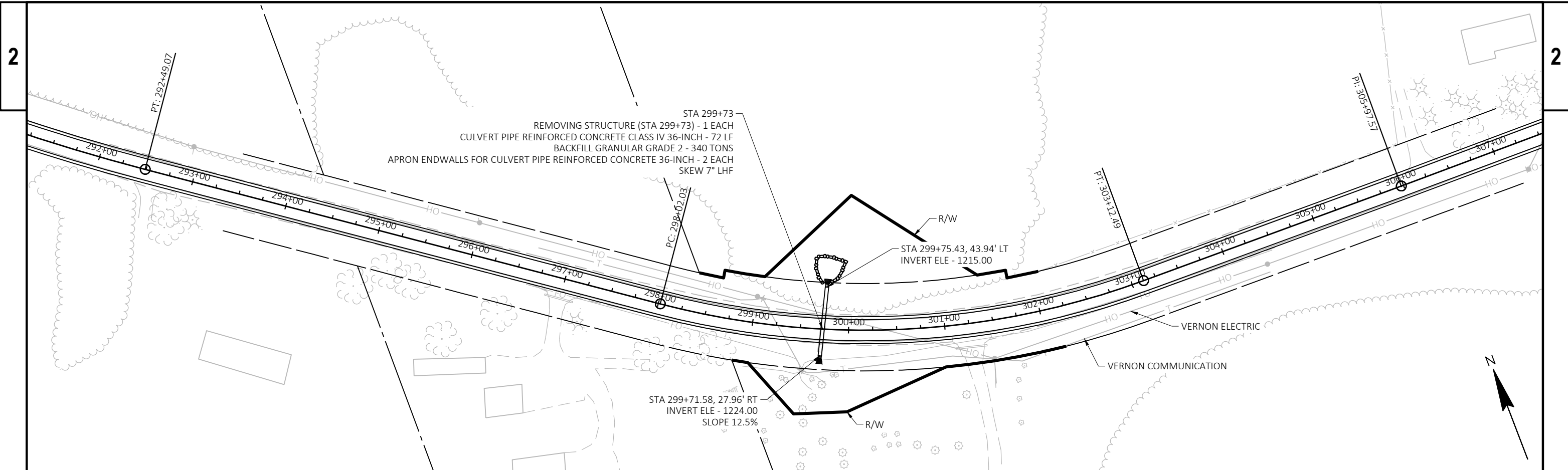
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



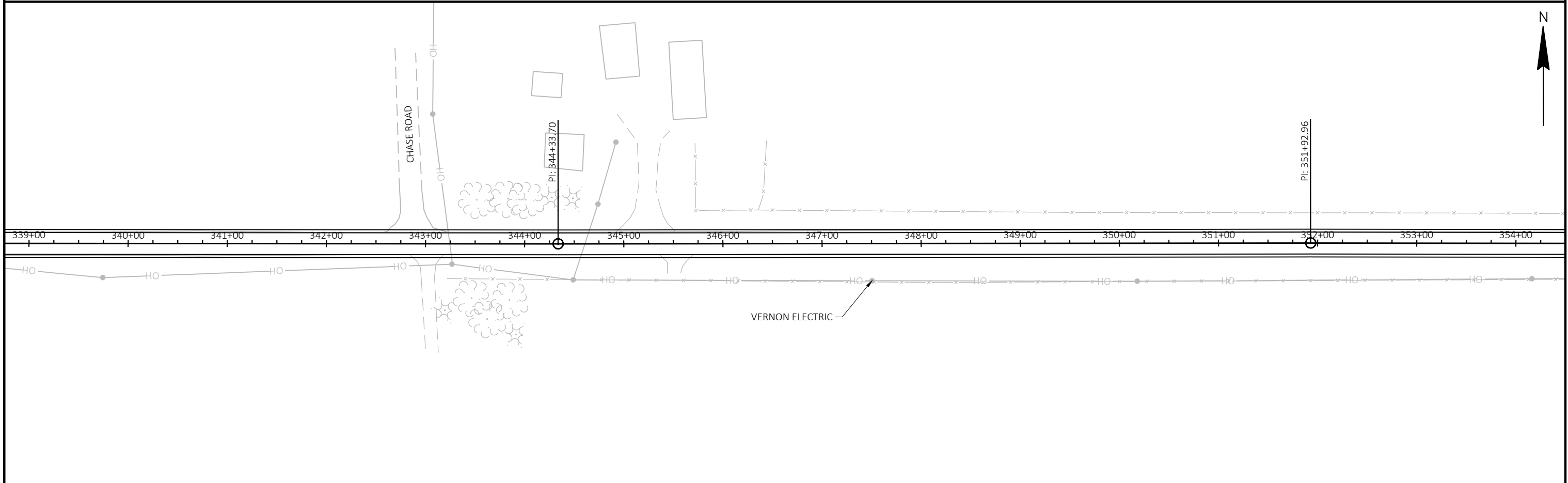
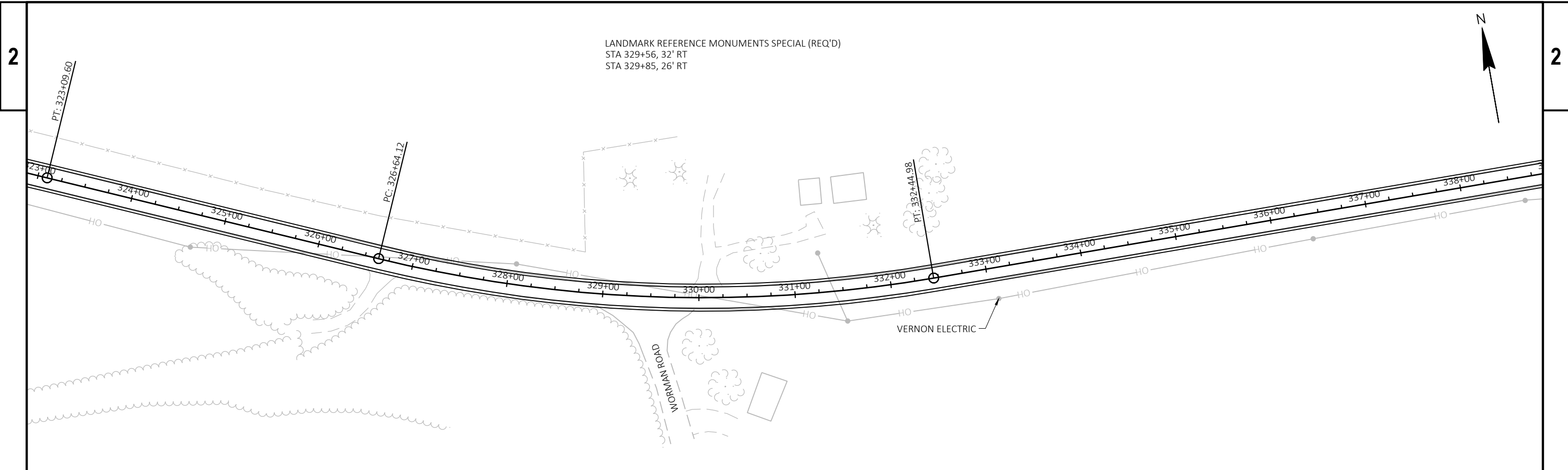
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

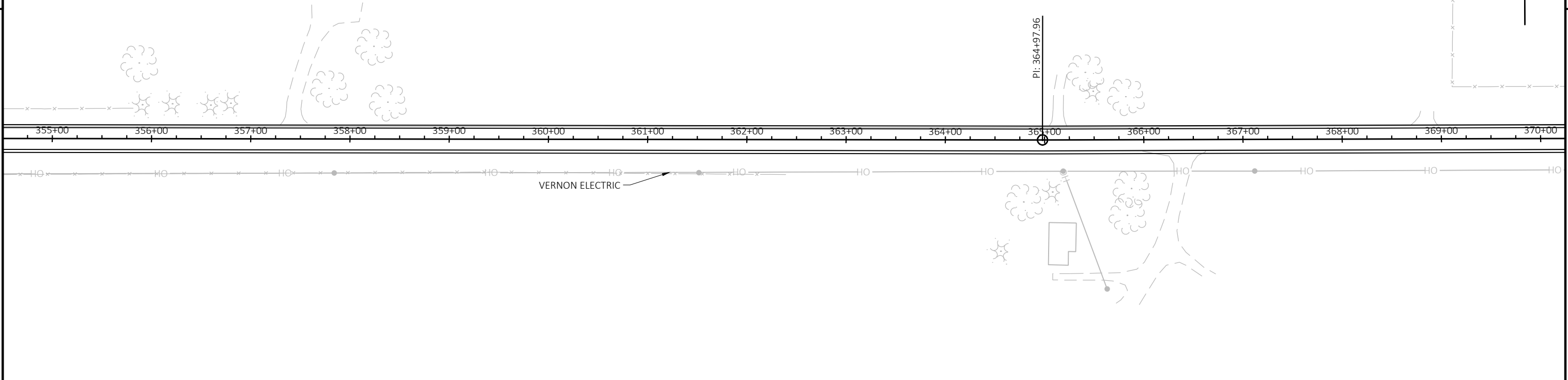


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

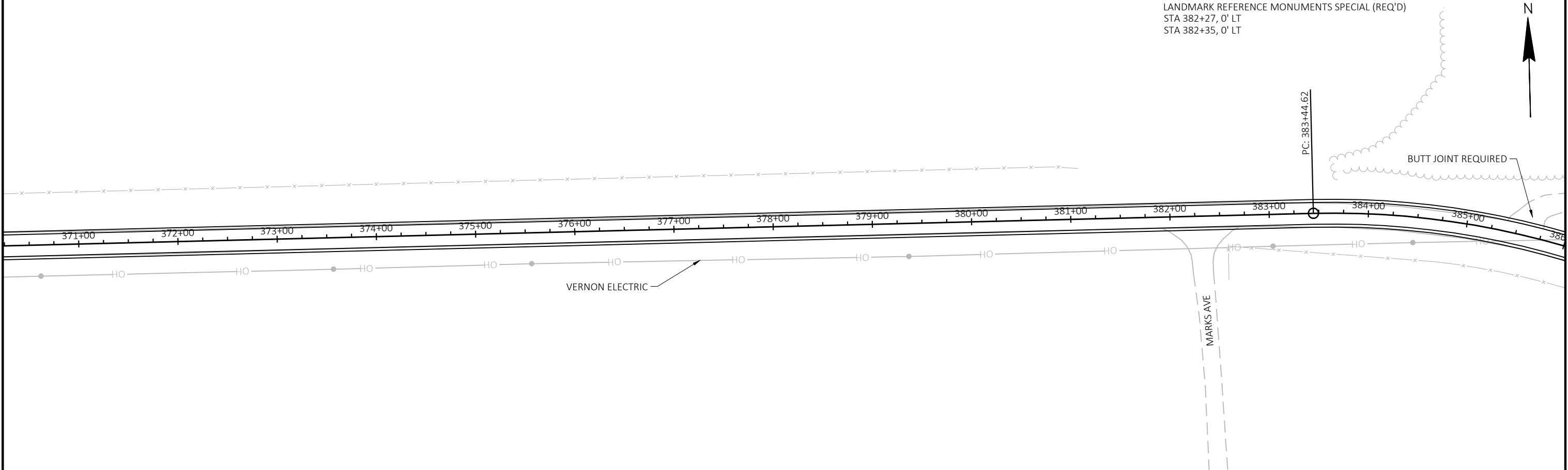


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

LANDMARK REFERENCE MONUMENTS SPECIAL (REQ'D)  
STA 355+86, 0' LT  
STA 356+15, 0' LT

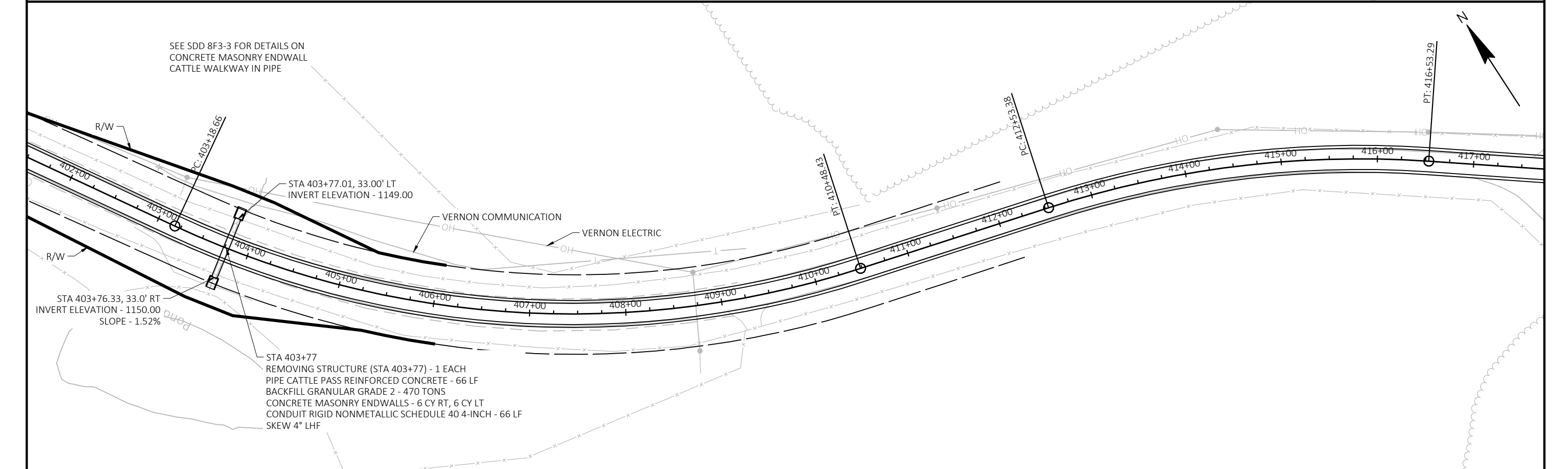
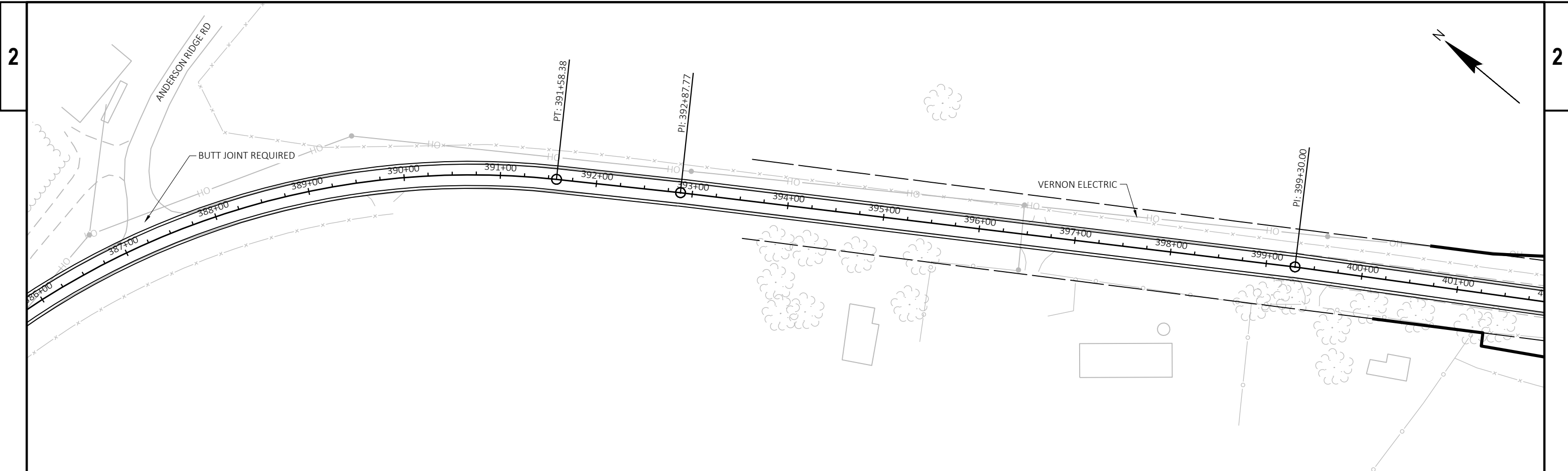


LANDMARK REFERENCE MONUMENTS SPECIAL (REQ'D)  
STA 382+27, 0' LT  
STA 382+35, 0' LT

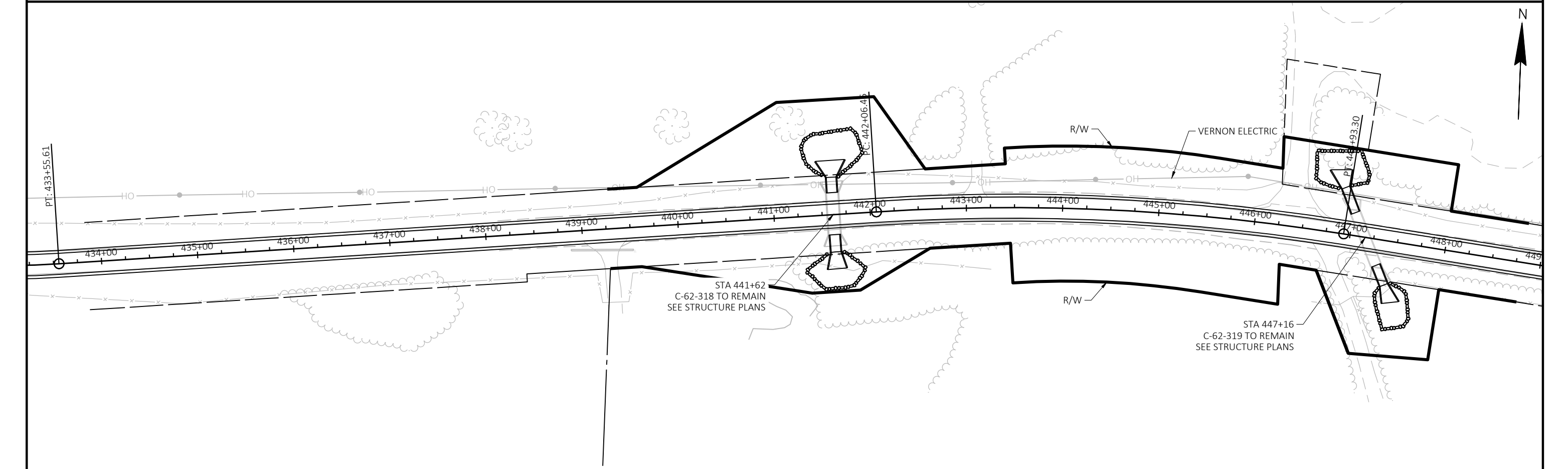
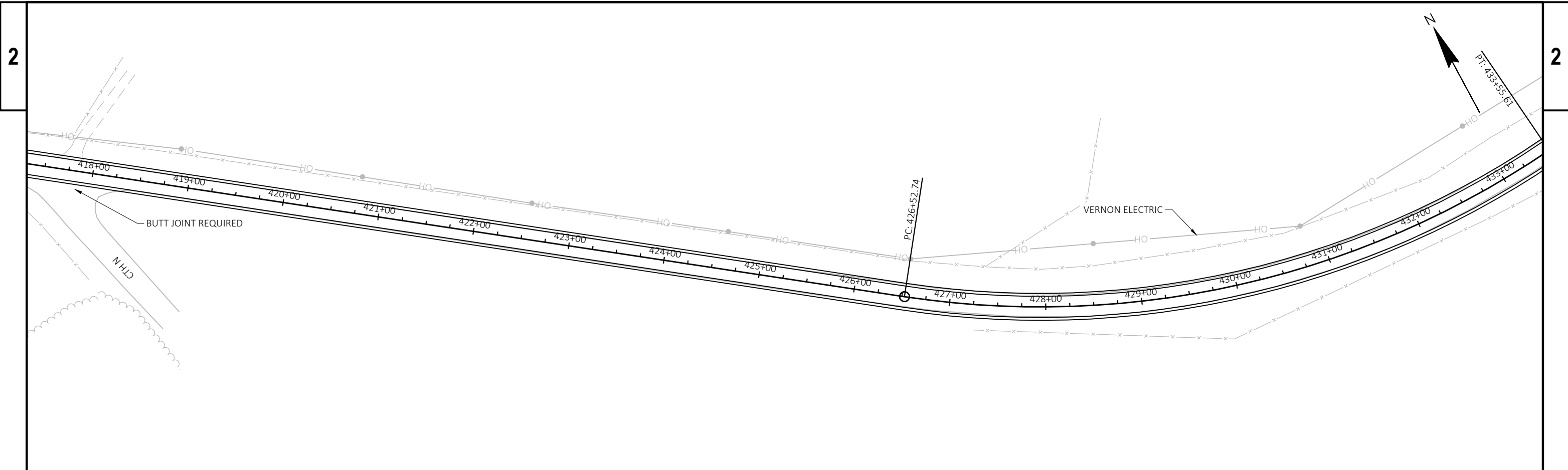


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

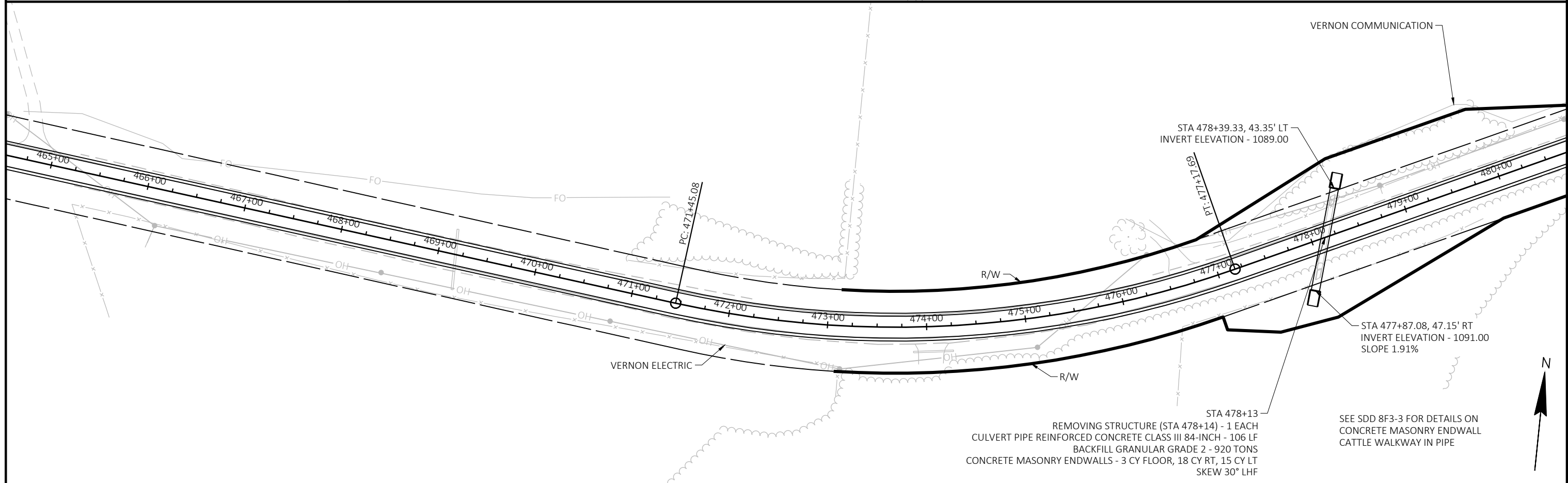
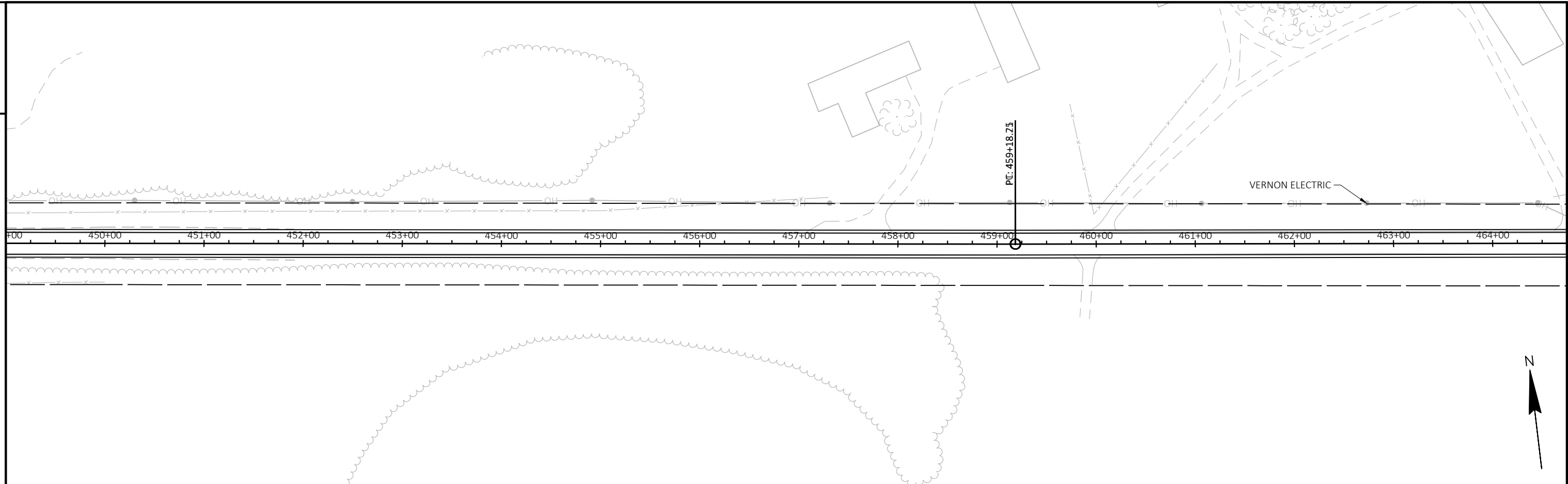




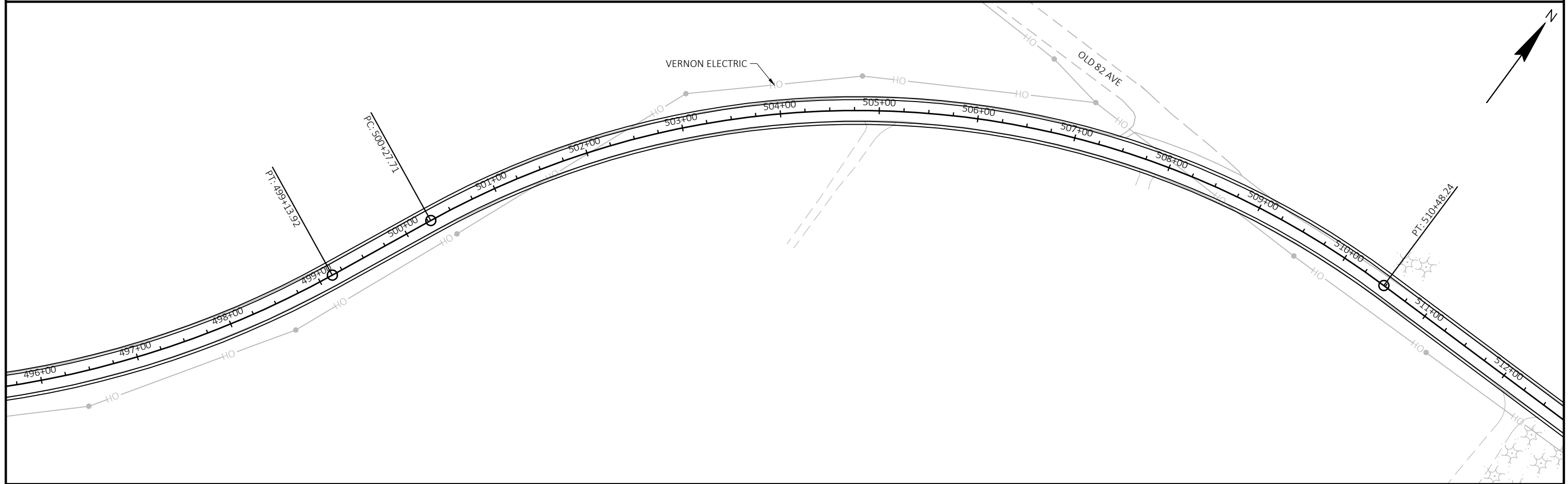
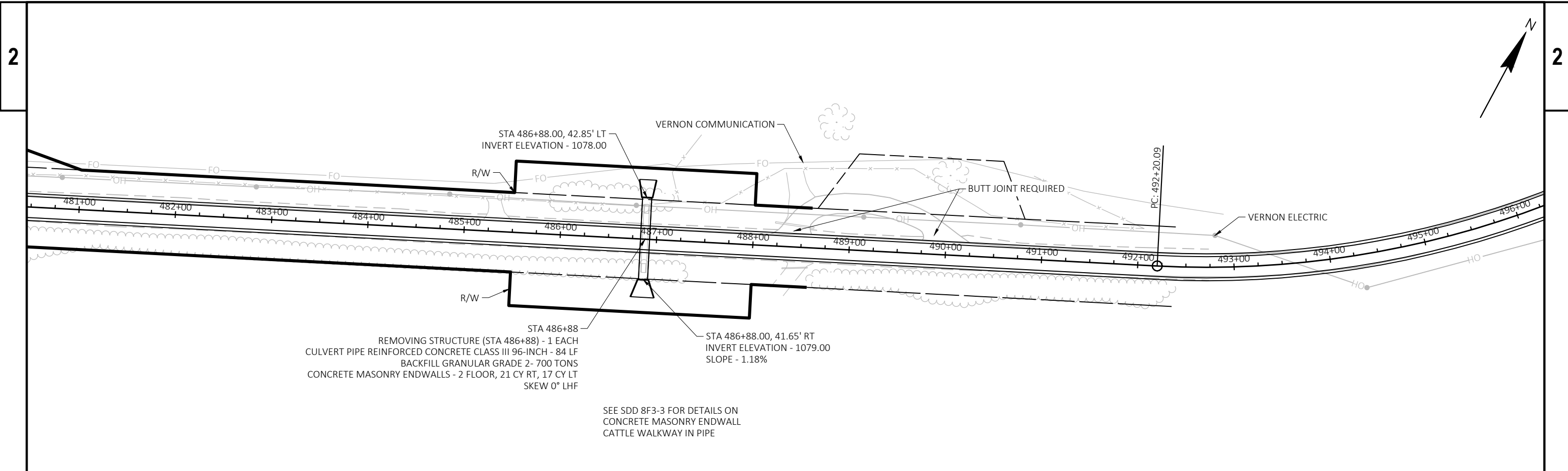
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	<b>E</b>
------------------------	-------------	----------------	-------------	-------	----------



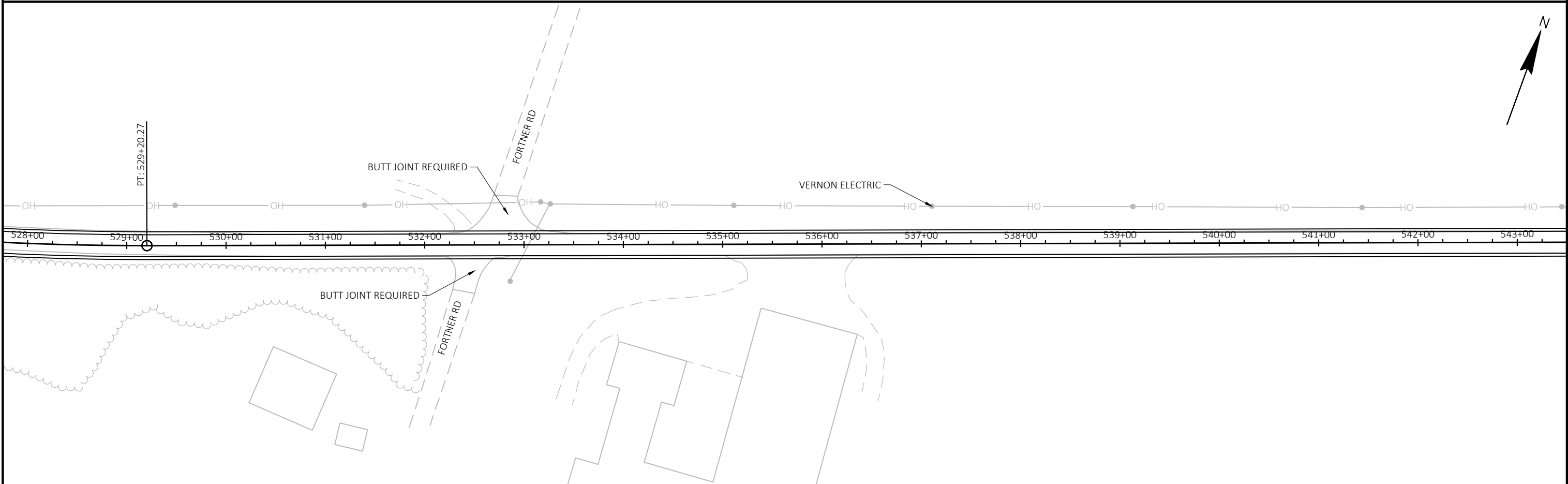
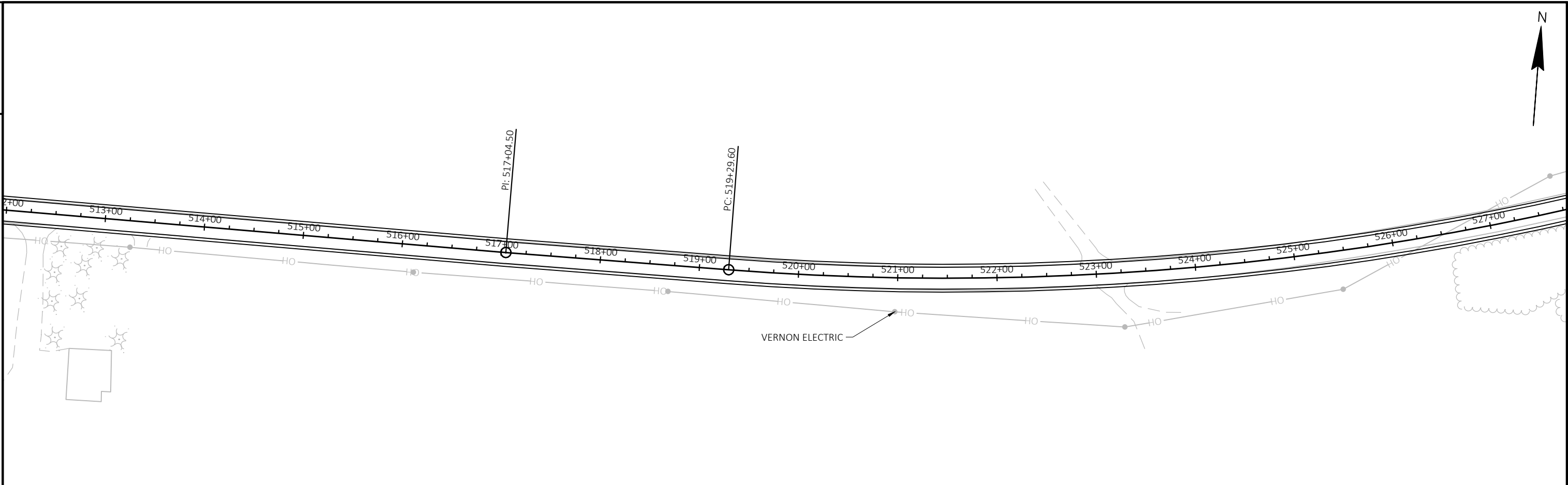
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	<b>E</b>
------------------------	-------------	----------------	-------------	-------	----------



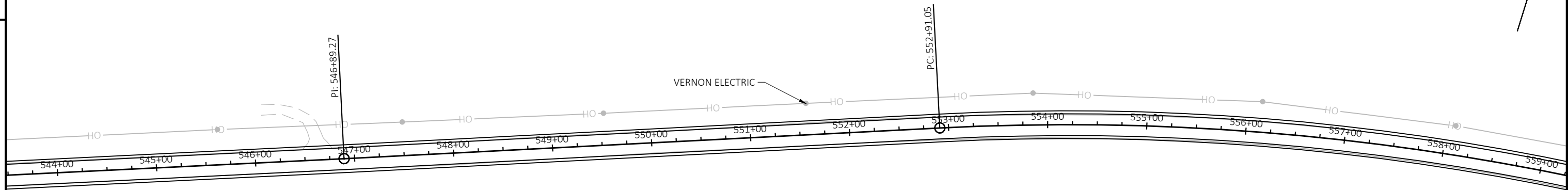
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



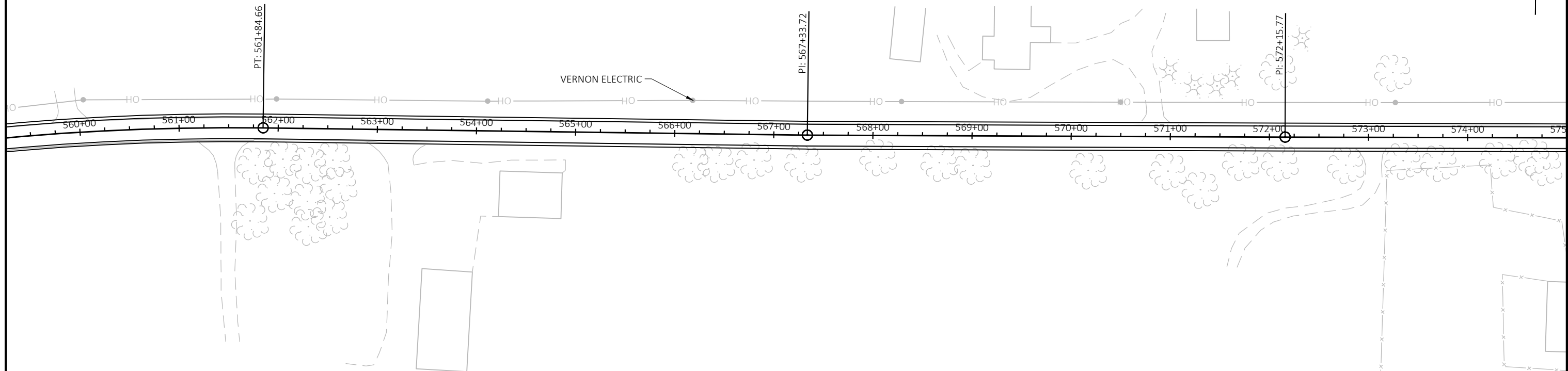
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



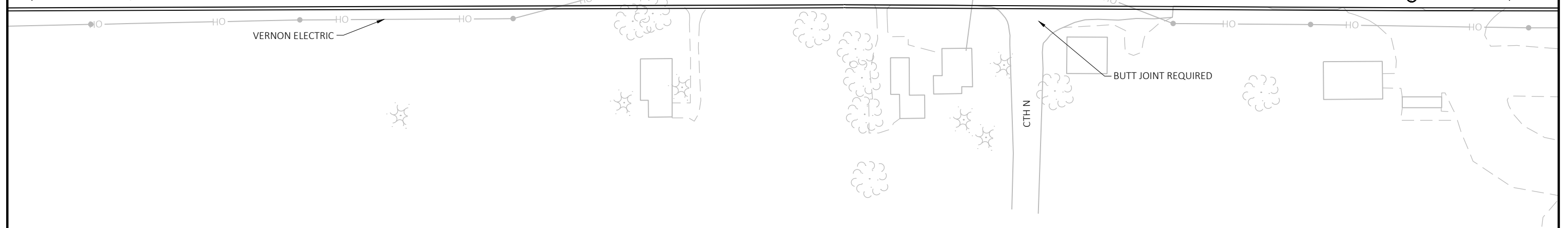
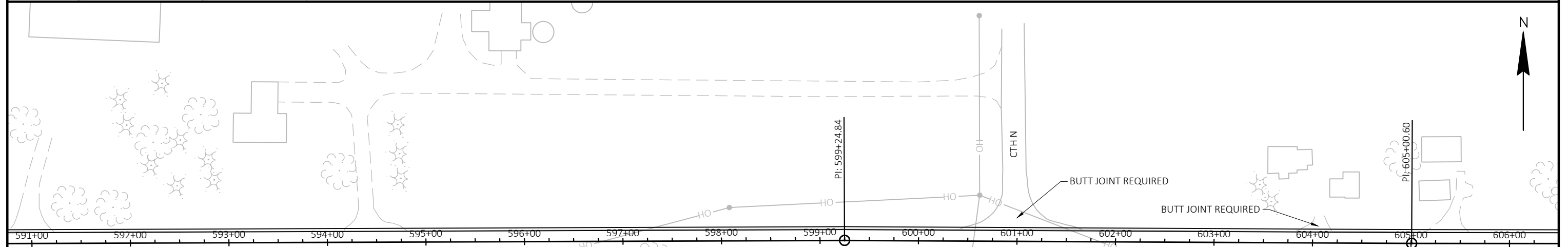
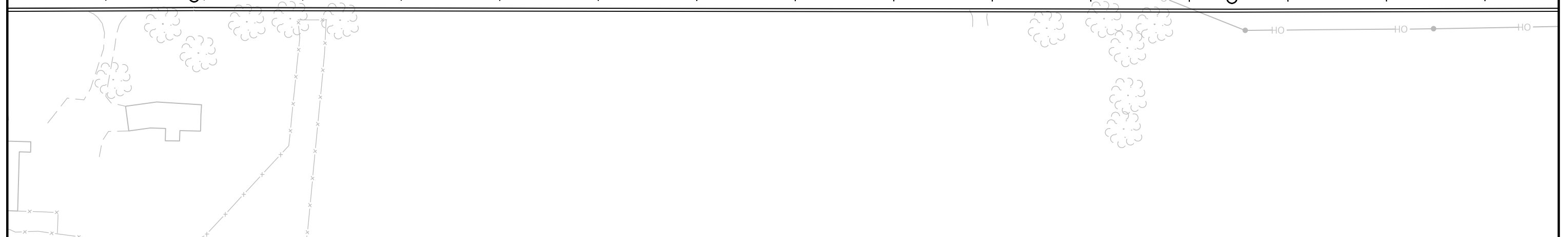
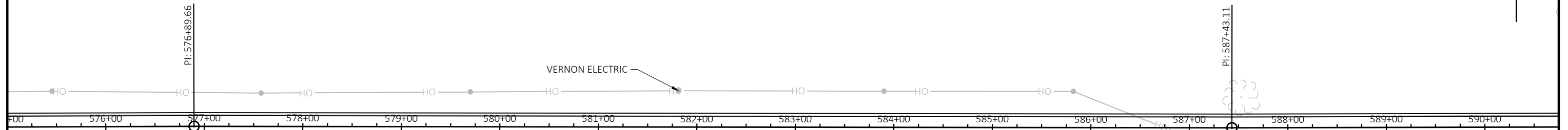
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



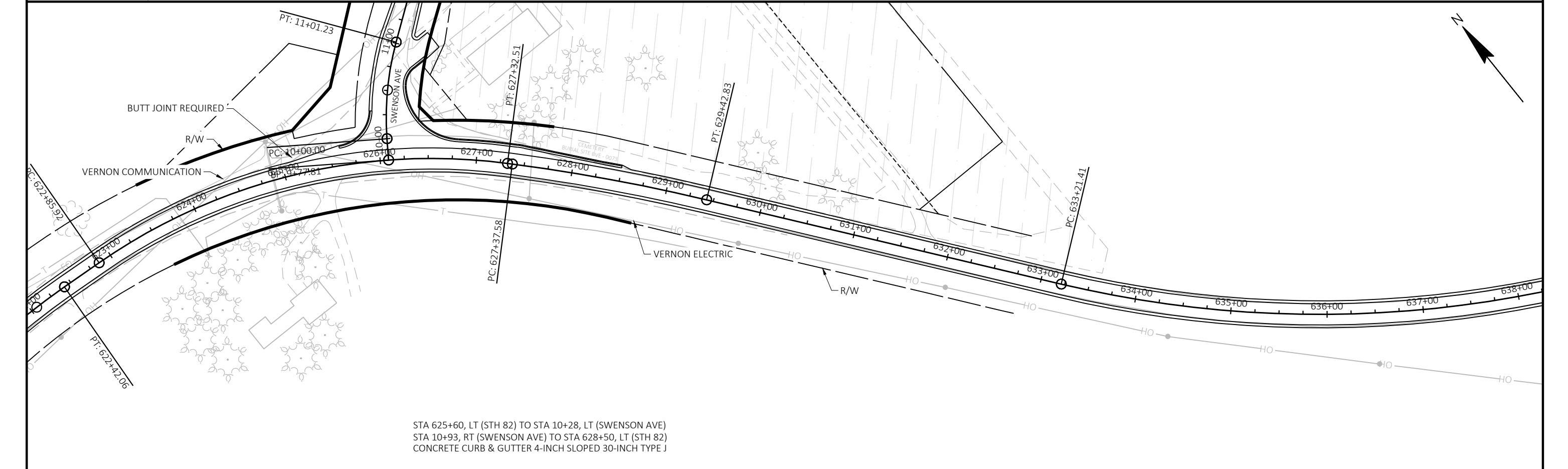
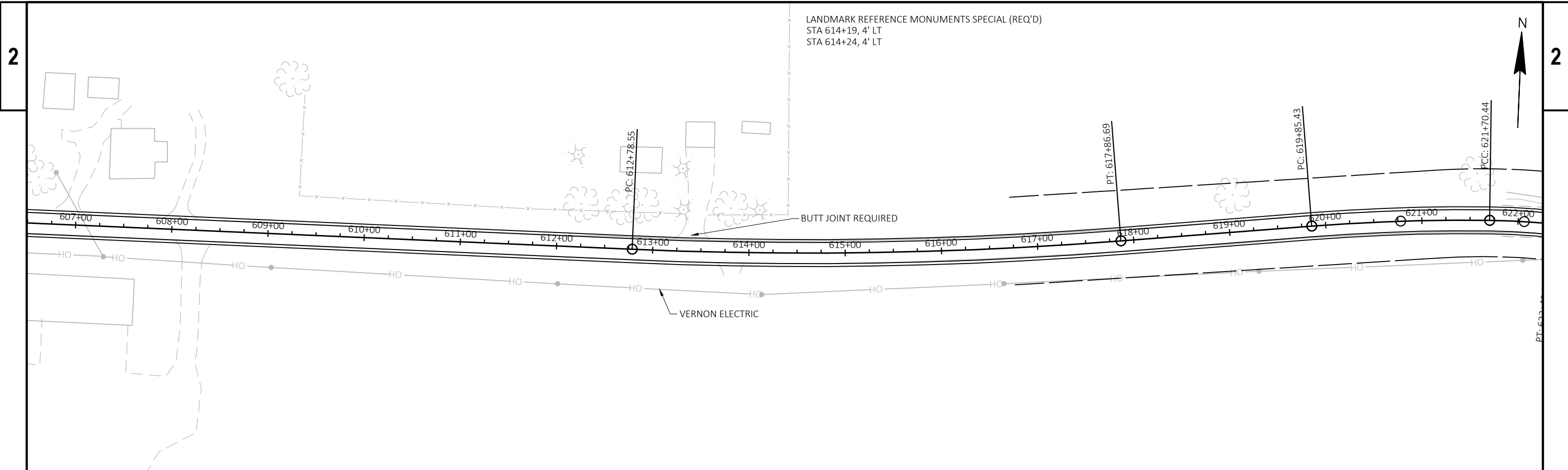
LANDMARK REFERENCE MONUMENTS SPECIAL (REQ'D)  
 STA 560+16, 1' RT  
 STA 560+36, 2' RT



LANDMARK REFERENCE MONUMENTS SPECIAL (REQ'D)  
STA 586+39, 2' LT



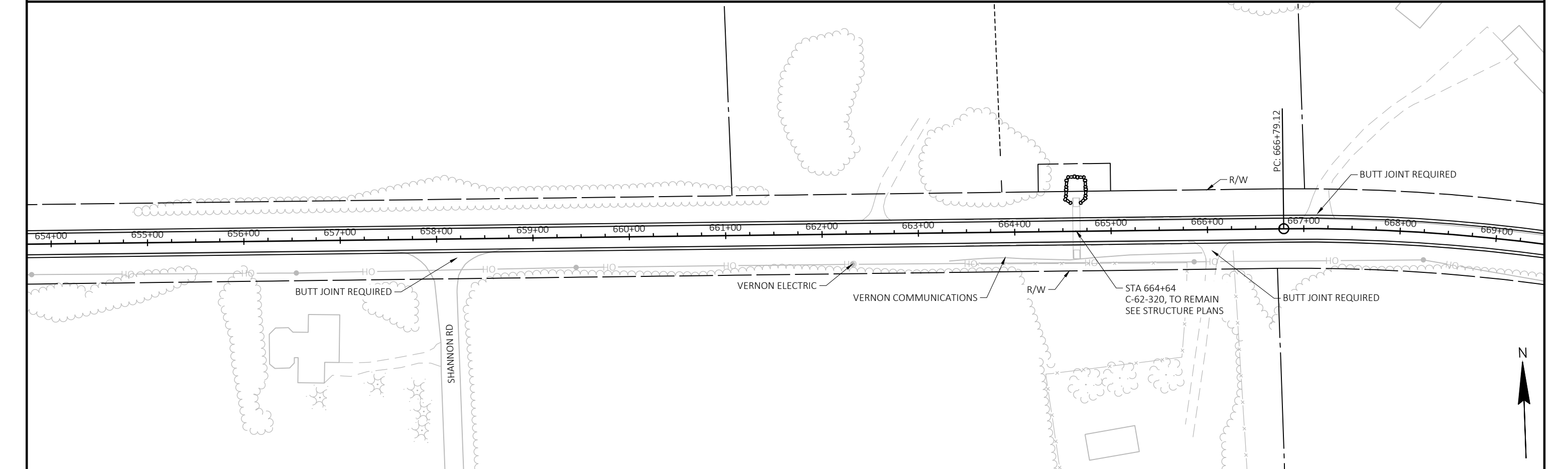
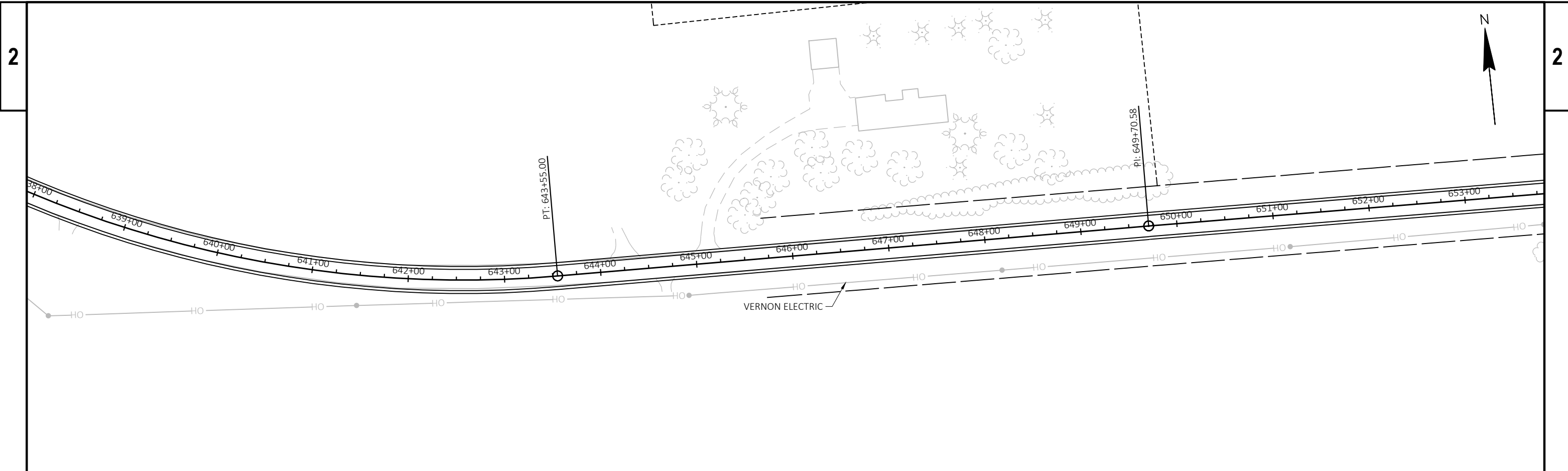
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	<b>E</b>
------------------------	-------------	----------------	-------------	-------	----------



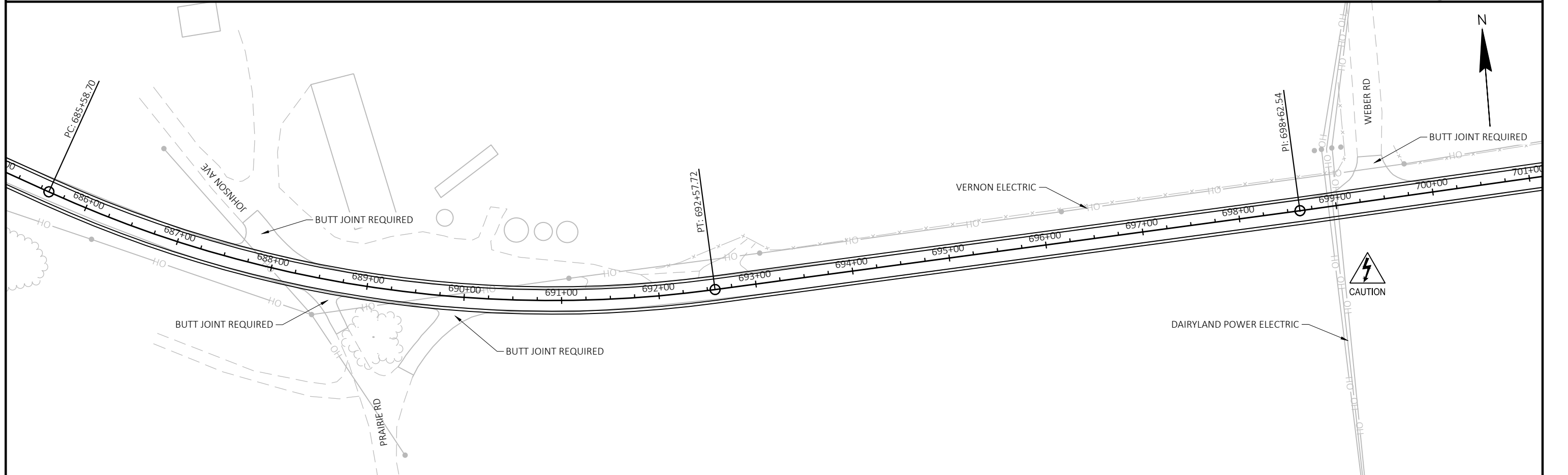
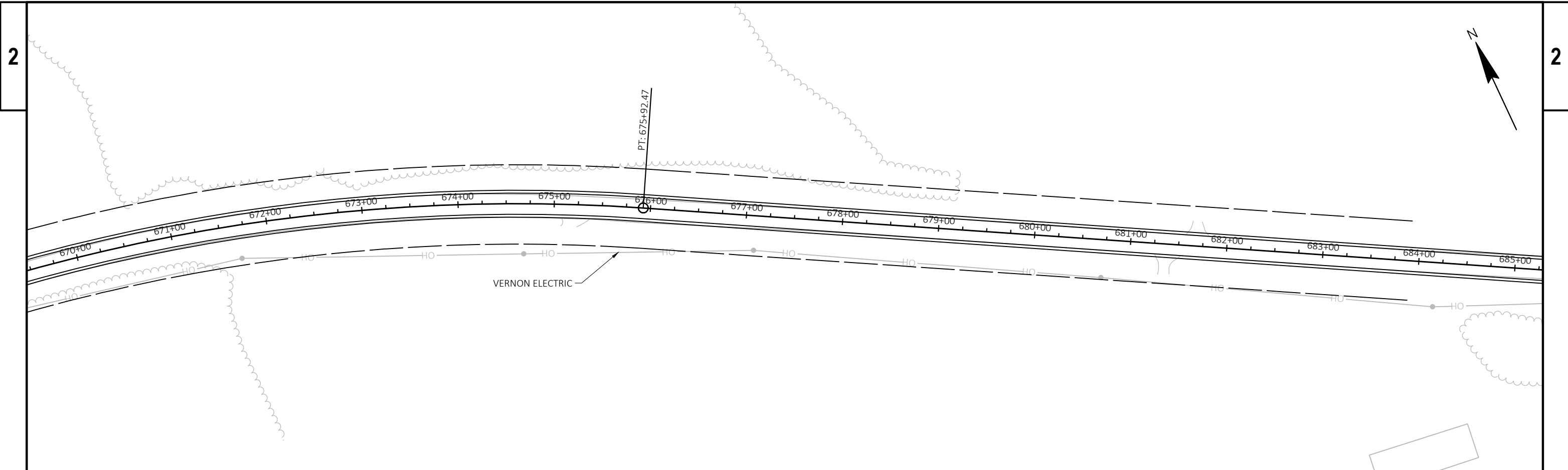
STA 625+60, LT (STH 82) TO STA 10+28, LT (SWENSON AVE)  
 STA 10+93, RT (SWENSON AVE) TO STA 628+50, LT (STH 82)  
 CONCRETE CURB & GUTTER 4-INCH SLOPED 30-INCH TYPE J

PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

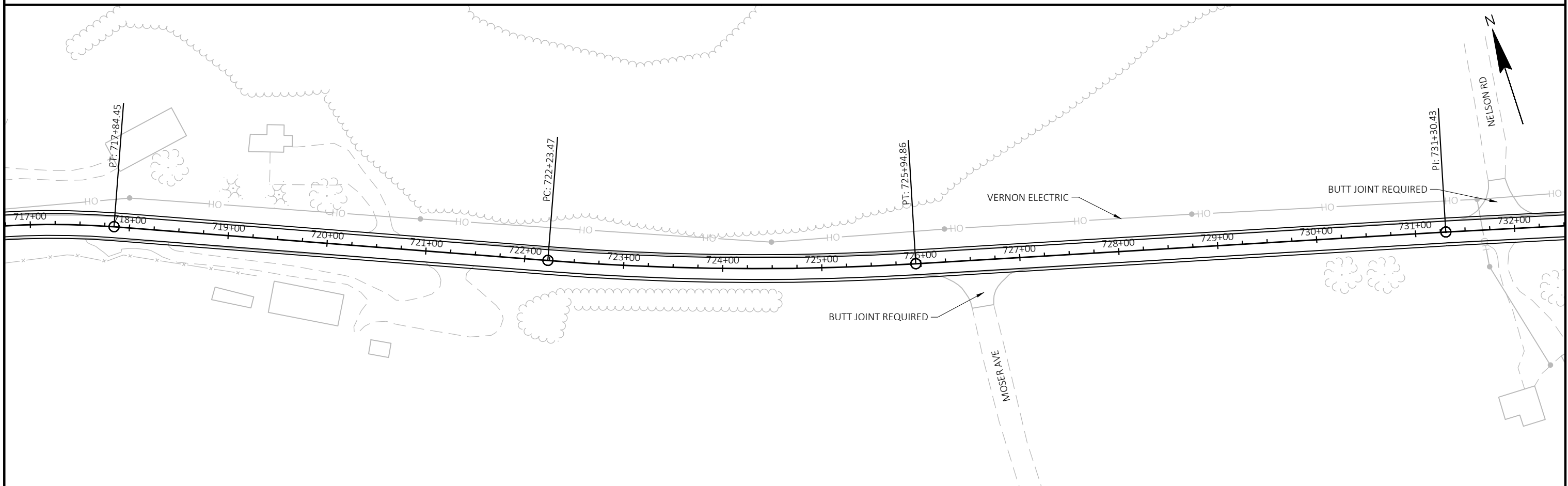
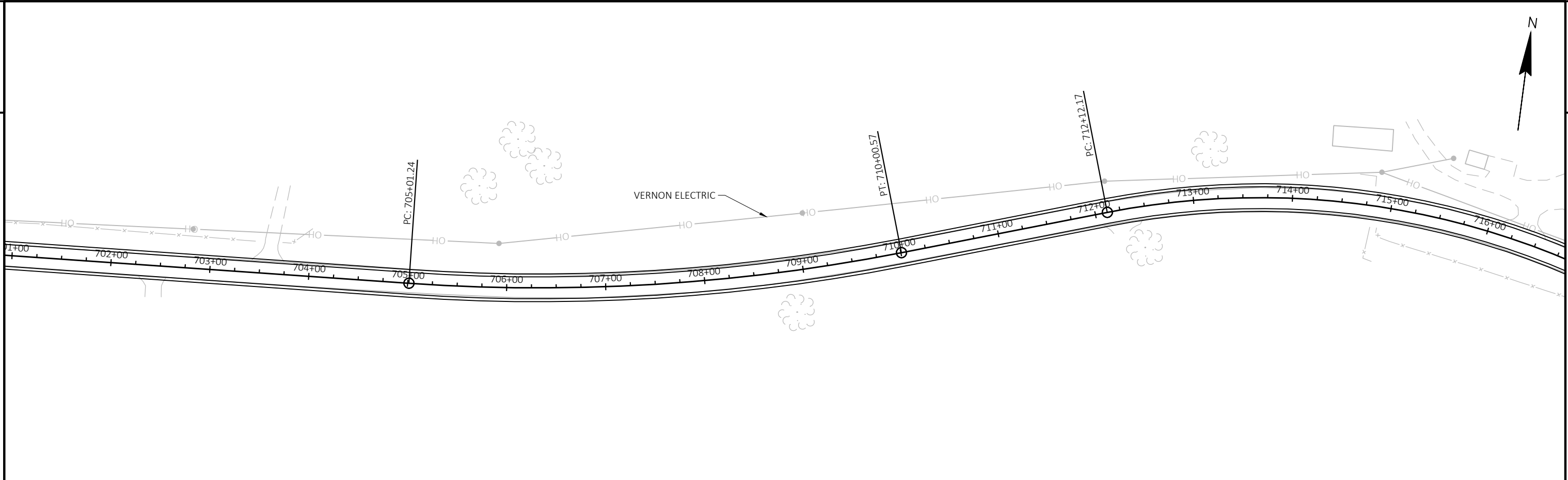




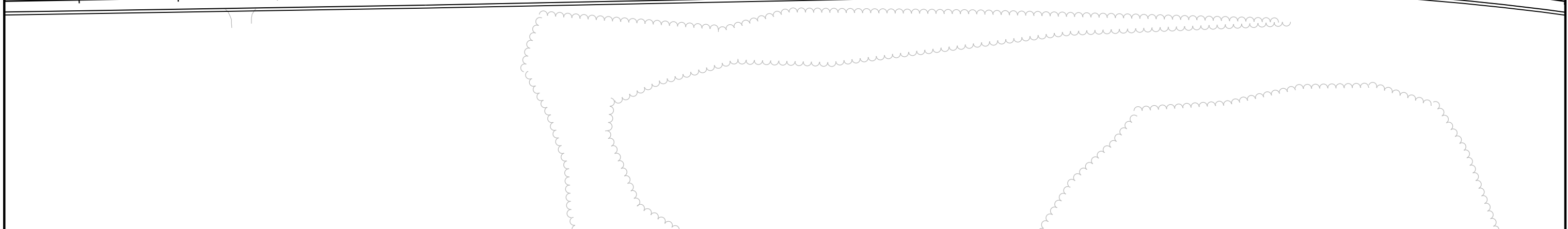
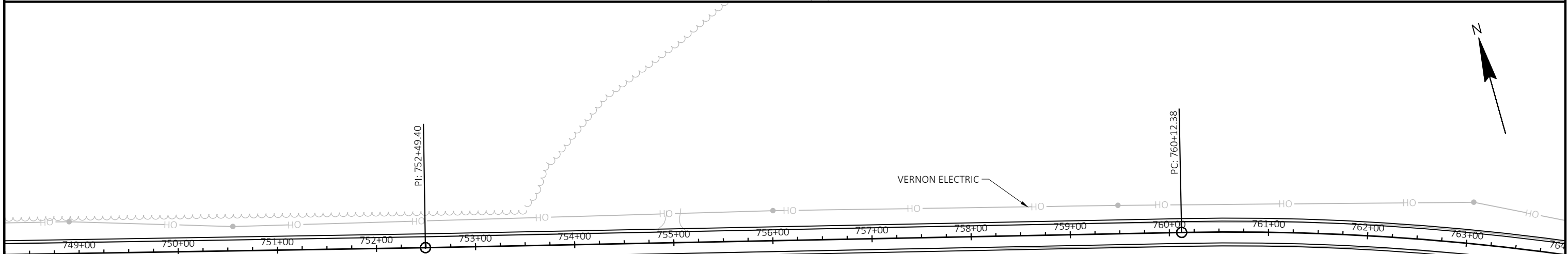
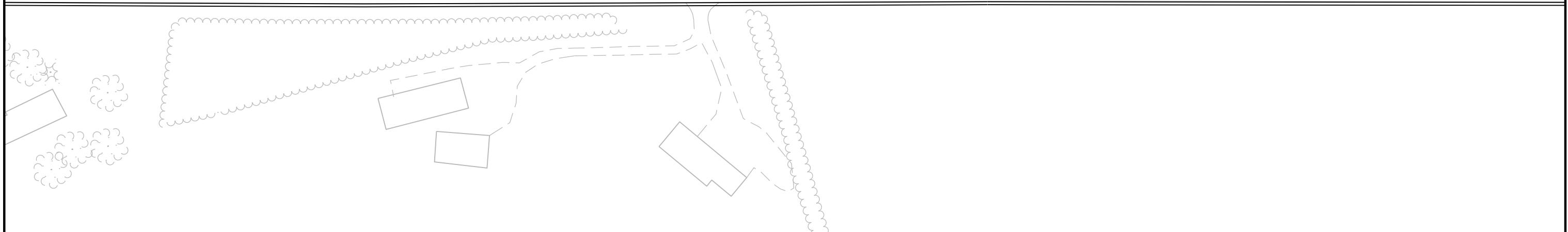
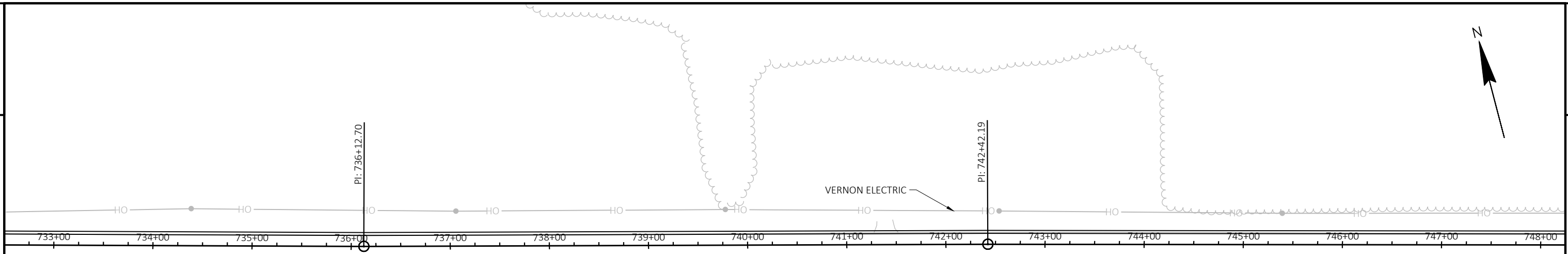
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	<b>E</b>
------------------------	-------------	----------------	-------------	-------	----------



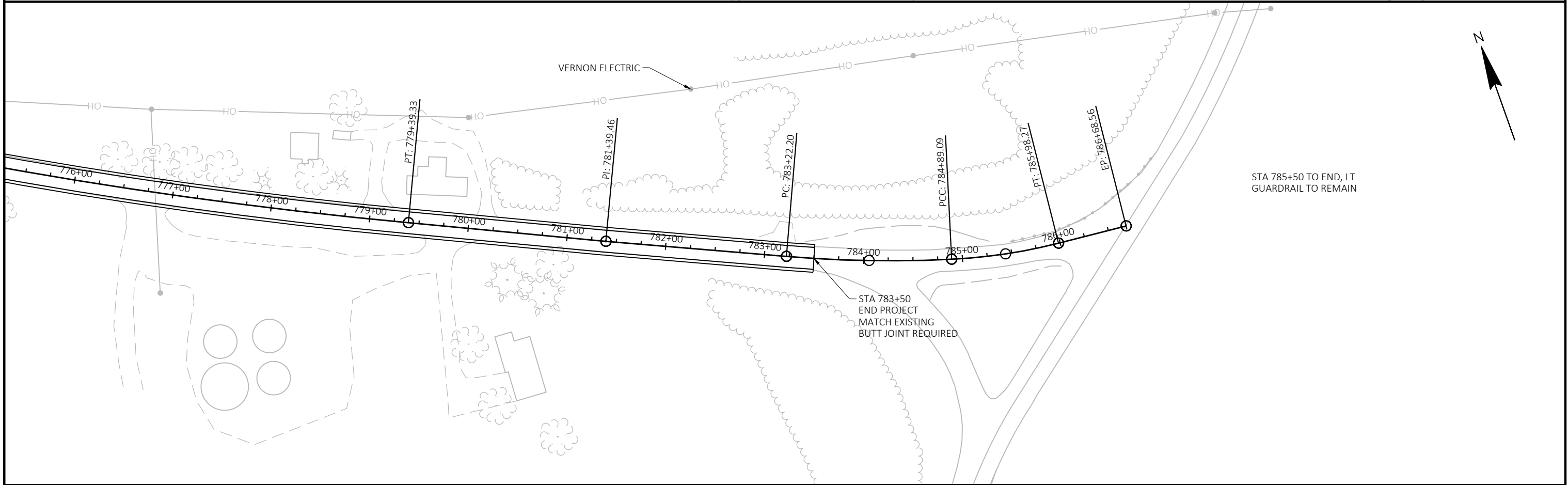
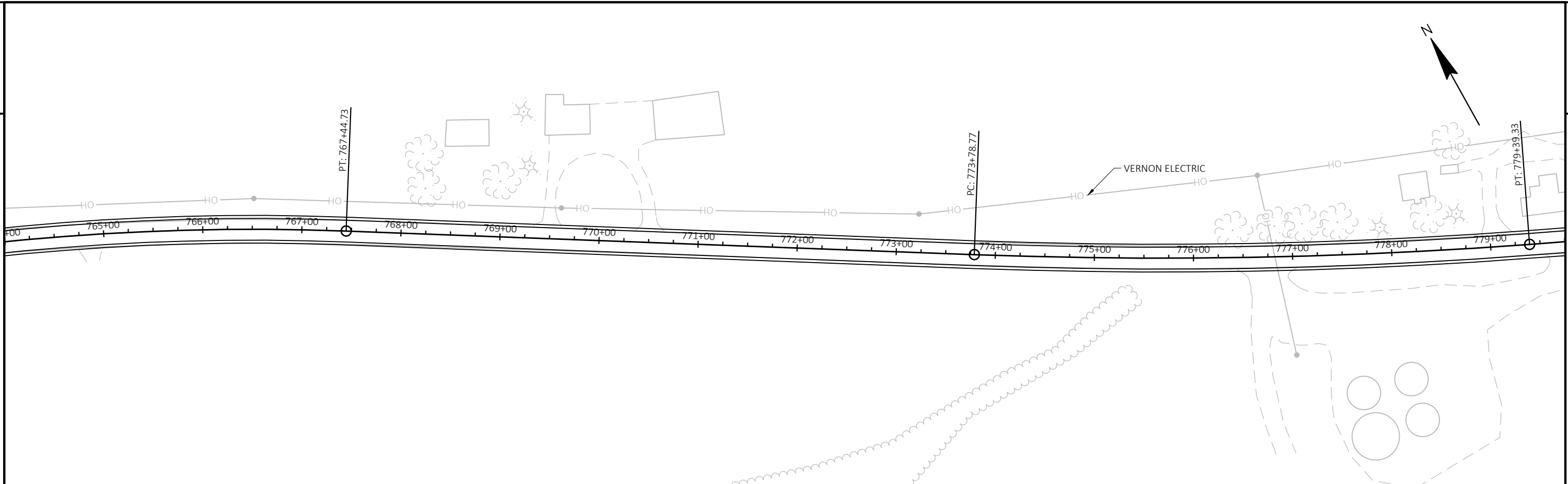
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	STH 82 PLAN	SHEET	E
------------------------	-------------	----------------	-------------	-------	---

## Estimate Of Quantities

5150-02-70

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	23.000	23.000
0004	201.0205	Grubbing	STA	23.000	23.000
0006	203.0220	Removing Structure (structure) 01. STA 39+82	EACH	1.000	1.000
0008	203.0220	Removing Structure (structure) 02. STA 276+27	EACH	1.000	1.000
0010	203.0220	Removing Structure (structure) 03. STA 299+73	EACH	1.000	1.000
0012	203.0220	Removing Structure (structure) 04. STA 403+77	EACH	1.000	1.000
0014	203.0220	Removing Structure (structure) 05. C-62-318	EACH	1.000	1.000
0016	203.0220	Removing Structure (structure) 06. C-62-319	EACH	1.000	1.000
0018	203.0220	Removing Structure (structure) 07. STA 478+14	EACH	1.000	1.000
0020	203.0220	Removing Structure (structure) 08. STA 486+88	EACH	1.000	1.000
0022	204.0110	Removing Asphaltic Surface	SY	12,733.000	12,733.000
0024	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,774.000	2,774.000
0026	204.0120	Removing Asphaltic Surface Milling	SY	199,174.000	199,174.000
0028	204.0150	Removing Curb & Gutter	LF	823.000	823.000
0030	204.0155	Removing Concrete Sidewalk	SY	393.000	393.000
0032	204.0165	Removing Guardrail	LF	5,149.000	5,149.000
0034	205.0100	Excavation Common	CY	6,356.000	6,356.000
0036	206.2001	Excavation for Structures Culverts (structure) 01. C-62-318	EACH	1.000	1.000
0038	206.2001	Excavation for Structures Culverts (structure) 02. C-62-319	EACH	1.000	1.000
0040	208.0100	Borrow	CY	8,694.000	8,694.000
0042	209.2500	Backfill Granular Grade 2	TON	3,700.000	3,700.000
0044	210.2500	Backfill Structure Type B	TON	2,180.000	2,180.000
0046	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 5150-02-70	EACH	1.000	1.000
0048	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1,485.000	1,485.000
0050	213.0100	Finishing Roadway (project) 01. 5150-02-70	EACH	1.000	1.000
0052	305.0110	Base Aggregate Dense 3/4-Inch	TON	10,457.000	10,457.000
0054	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	12,083.000	12,083.000
0056	311.0110	Breaker Run	TON	219.000	219.000
0058	312.0110	Select Crushed Material	TON	5,821.000	5,821.000
0060	455.0605	Tack Coat	GAL	34,294.000	34,294.000
0062	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0064	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0066	460.2000	Incentive Density HMA Pavement	DOL	5,000.000	5,000.000
0068	460.2005	Incentive Density PWL HMA Pavement	DOL	38,090.000	38,090.000
0070	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	70,610.000	70,610.000
0072	460.2010	Incentive Air Voids HMA Pavement	DOL	49,460.000	49,460.000
0074	460.5224	HMA Pavement 4 LT 58-28 S	TON	49,635.000	49,635.000
0076	465.0105	Asphaltic Surface	TON	1,400.000	1,400.000
0078	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	310.000	310.000
0080	465.0125	Asphaltic Surface Temporary	TON	500.000	500.000
0082	502.4205	Adhesive Anchors No. 5 Bar	EACH	152.000	152.000
0084	504.0100	Concrete Masonry Culverts	CY	199.000	199.000
0086	504.0900	Concrete Masonry Endwalls	CY	122.000	122.000
0088	505.0400	Bar Steel Reinforcement HS Structures	LB	13,180.000	13,180.000
0090	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	4,820.000	4,820.000
0092	511.1200	Temporary Shoring (structure) 01. C-62-318	SF	450.000	450.000
0094	511.1200	Temporary Shoring (structure) 02. C-62-319	SF	450.000	450.000
0096	516.0500	Rubberized Membrane Waterproofing	SY	59.000	59.000
0098	520.8000	Concrete Collars for Pipe	EACH	1.000	1.000

Estimate Of Quantities

5150-02-70

Line	Item	Item Description	Unit	Total	Qty
0100	522.0184	Culvert Pipe Reinforced Concrete Class III 84-Inch	LF	106.000	106.000
0102	522.0196	Culvert Pipe Reinforced Concrete Class III 96-Inch	LF	84.000	84.000
0104	522.0436	Culvert Pipe Reinforced Concrete Class IV 36-Inch	LF	160.000	160.000
0106	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0108	522.1036	Apron Endwalls for Culvert Pipe Reinforced Concrete 36-Inch	EACH	4.000	4.000
0110	522.1500	Pipe Cattle Pass Reinforced Concrete	LF	66.000	66.000
0112	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	995.000	995.000
0114	601.0576	Concrete Curb & Gutter 4-Inch Sloped 30-Inch Type J	LF	2,975.000	2,975.000
0116	601.0600	Concrete Curb Pedestrian	LF	15.000	15.000
0118	602.0405	Concrete Sidewalk 4-Inch	SF	3,316.000	3,316.000
0120	602.0415	Concrete Sidewalk 6-Inch	SF	77.000	77.000
0122	602.0515	Curb Ramp Detectable Warning Field Natural Patina	SF	180.000	180.000
0124	602.0810	Concrete Driveway 6-Inch	SY	9.000	9.000
0126	602.1500	Concrete Steps	SF	12.000	12.000
0128	602.3010	Concrete Surface Drains	CY	3.000	3.000
0130	606.0300	Riprap Heavy	CY	705.000	705.000
0132	608.0318	Storm Sewer Pipe Reinforced Concrete Class III 18-Inch	LF	439.000	439.000
0134	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	117.000	117.000
0136	611.0630	Inlet Covers Type HM-GJ	EACH	4.000	4.000
0138	611.0642	Inlet Covers Type MS	EACH	3.000	3.000
0140	611.3230	Inlets 2x3-FT	EACH	5.000	5.000
0142	611.3901	Inlets Median 1 Grate	EACH	1.000	1.000
0144	611.3902	Inlets Median 2 Grate	EACH	1.000	1.000
0146	611.8110	Adjusting Manhole Covers	EACH	13.000	13.000
0148	611.8115	Adjusting Inlet Covers	EACH	15.000	15.000
0150	612.0404	Pipe Underdrain Wrapped 4-Inch	LF	65.000	65.000
0152	614.0010	Barrier System Grading Shaping Finishing	EACH	4.000	4.000
0154	614.2300	MGS Guardrail 3	LF	3,077.000	3,077.000
0156	614.2330	MGS Guardrail 3 K	LF	1,948.000	1,948.000
0158	614.2350	MGS Guardrail Short Radius	LF	291.000	291.000
0160	614.2610	MGS Guardrail Terminal EAT	EACH	11.000	11.000
0162	614.2620	MGS Guardrail Terminal Type 2	EACH	1.000	1.000
0164	614.2630	MGS Guardrail Short Radius Terminal	EACH	2.000	2.000
0166	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5150-02-70	EACH	1.000	1.000
0168	619.1000	Mobilization	EACH	1.000	1.000
0170	624.0100	Water	MGAL	334.000	334.000
0172	625.0105	Topsoil	CY	137.000	137.000
0174	625.0500	Salvaged Topsoil	SY	16,565.000	16,565.000
0176	627.0200	Mulching	SY	12,283.000	12,283.000
0178	628.1504	Silt Fence	LF	6,795.000	6,795.000
0180	628.1520	Silt Fence Maintenance	LF	13,590.000	13,590.000
0182	628.1905	Mobilizations Erosion Control	EACH	12.000	12.000
0184	628.1910	Mobilizations Emergency Erosion Control	EACH	7.000	7.000
0186	628.2004	Erosion Mat Class I Type B	SY	18,565.000	18,565.000
0188	628.2008	Erosion Mat Urban Class I Type B	SY	355.000	355.000
0190	628.7005	Inlet Protection Type A	EACH	16.000	16.000
0192	628.7015	Inlet Protection Type C	EACH	4.000	4.000
0194	628.7504	Temporary Ditch Checks	LF	100.000	100.000
0196	628.7560	Tracking Pads	EACH	1.000	1.000

Estimate Of Quantities

5150-02-70

Line	Item	Item Description	Unit	Total	Qty
0198	628.7570	Rock Bags	EACH	80.000	80.000
0200	629.0210	Fertilizer Type B	CWT	14.670	14.670
0202	630.0120	Seeding Mixture No. 20	LB	678.000	678.000
0204	630.0140	Seeding Mixture No. 40	LB	16.000	16.000
0206	630.0200	Seeding Temporary	LB	494.000	494.000
0208	630.0300	Seeding Borrow Pit	LB	150.000	150.000
0210	630.0500	Seed Water	MGAL	169.700	169.700
0212	633.5100	Markers ROW	EACH	210.000	210.000
0214	633.5200	Markers Culvert End	EACH	28.000	28.000
0216	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	37.000	37.000
0218	638.2102	Moving Signs Type II	EACH	38.000	38.000
0220	638.3000	Removing Small Sign Supports	EACH	37.000	37.000
0222	642.5001	Field Office Type B	EACH	1.000	1.000
0224	643.0300	Traffic Control Drums	DAY	6,900.000	6,900.000
0226	643.0410	Traffic Control Barricades Type II	DAY	200.000	200.000
0228	643.0420	Traffic Control Barricades Type III	DAY	10,100.000	10,100.000
0230	643.0705	Traffic Control Warning Lights Type A	DAY	18,800.000	18,800.000
0232	643.0715	Traffic Control Warning Lights Type C	DAY	6,900.000	6,900.000
0234	643.0900	Traffic Control Signs	DAY	36,000.000	36,000.000
0236	643.0920	Traffic Control Covering Signs Type II	EACH	22.000	22.000
0238	643.1050	Traffic Control Signs PCMS	DAY	28.000	28.000
0240	643.3165	Temporary Marking Line Paint 6-Inch	LF	290,930.000	290,930.000
0242	643.5000	Traffic Control	EACH	1.000	1.000
0244	644.1410	Temporary Pedestrian Surface Asphalt	SF	64.000	64.000
0246	644.1440	Temporary Pedestrian Surface Matting	SF	32.000	32.000
0248	644.1601	Temporary Pedestrian Curb Ramp	DAY	132.000	132.000
0250	644.1605	Temporary Pedestrian Detectable Warning Field	SF	128.000	128.000
0252	644.1810	Temporary Pedestrian Barricade	LF	306.000	306.000
0254	645.0105	Geotextile Type C	SY	328.000	328.000
0256	645.0111	Geotextile Type DF Schedule A	SY	75.000	75.000
0258	645.0120	Geotextile Type HR	SY	1,065.000	1,065.000
0260	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	155,851.000	155,851.000
0262	646.4720	Marking Line Same Day Epoxy 6-Inch	LF	150,008.000	150,008.000
0264	646.7420	Marking Crosswalk Epoxy Transverse Line 6-Inch	LF	477.000	477.000
0266	646.7520	Marking Crosswalk Epoxy Block Style 24-Inch	LF	72.000	72.000
0268	648.0100	Locating No-Passing Zones	MI	14.820	14.820
0270	650.4000	Construction Staking Storm Sewer	EACH	9.000	9.000
0272	650.4500	Construction Staking Subgrade	LF	3,411.000	3,411.000
0274	650.5000	Construction Staking Base	LF	6,467.000	6,467.000
0276	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	3,970.000	3,970.000
0278	650.6000	Construction Staking Pipe Culverts	EACH	6.000	6.000
0280	650.6501	Construction Staking Structure Layout (structure) 01. C-62-318	EACH	1.000	1.000
0282	650.6501	Construction Staking Structure Layout (structure) 02. C-62-320	EACH	1.000	1.000
0284	650.8000	Construction Staking Resurfacing Reference	LF	78,275.000	78,275.000
0286	650.9000	Construction Staking Curb Ramps	EACH	13.000	13.000
0288	650.9500	Construction Staking Sidewalk (project) 01. 5150-02-70	EACH	1.000	1.000
0290	650.9911	Construction Staking Supplemental Control (project) 01. 5150-02-70	EACH	1.000	1.000
0292	650.9920	Construction Staking Slope Stakes	LF	3,411.000	3,411.000
0294	652.0240	Conduit Rigid Nonmetallic Schedule 40 4-Inch	LF	66.000	66.000



Estimate Of Quantities

5150-02-70

Line	Item	Item Description	Unit	Total	Qty
0296	690.0150	Sawing Asphalt	LF	625.000	625.000
0298	690.0250	Sawing Concrete	LF	357.000	357.000
0300	715.0502	Incentive Strength Concrete Structures	DOL	1,100.000	1,100.000
0302	740.0440	Incentive IRI Ride	DOL	60,170.000	60,170.000
0304	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,000.000	1,000.000
0306	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	500.000	500.000
0308	SPV.0060	Special 01. Landmark Reference Monuments Special	EACH	13.000	13.000
0310	SPV.0060	Special 02. Cleaning Box Culverts	EACH	3.000	3.000
0312	SPV.0090	Special 01. Culvert Pipe Reinforced Concrete Class HE-III, 72X113-INCH	LF	98.000	98.000
0314	SPV.0090	Special 02. Injected Chemical Grout Sealing for Concrete Crack Repair	LF	51.000	51.000
0316	SPV.0165	Special 01. Wall Modular Block Gravity Landscape (0+00 TO 0+55)	SF	215.000	215.000
0318	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	9,960.000	9,960.000

CLEARING AND GRUBBING

CATEGORY	STATION	TO	STATION	LOCATION	201.0105	201.0205	REMARKS
					CLEARING STA	GRUBBING STA	
0010	201+00	-	203+00	LT	2	2	BEAM GUARD GRADING
0010	208+00	-	210+00	LT	2	2	BEAM GUARD GRADING
0010	251+70	-	251+90	RT	1	1	STORM SEWER OUTFALL
0010	274+00	-	278+00	RT	4	4	CULVERT AND GRADING AREA
0010	298+00	-	301+00	LT	3	3	CULVERT AND GRADING AREA
0010	441+00	-	443+00	RT	2	2	C-318 EXTENSION
0010	446+00	-	448+00	LT/RT	2	2	C-319 EXTENSION
0010	477+00	-	481+00	LT/RT	4	4	CULVERT AND GRADING AREA
0010	485+00	-	488+00	LT/RT	3	3	CULVERT AND GRADING AREA
TOTAL 0010					23	23	

ASPHALT REMOVAL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	204.0110	204.0115	204.0120	690.0150	SPV.0180.01	REMARKS
					REMOVING ASPHALTIC SURFACE SY	REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	REMOVING ASPHALTIC SURFACE MILLING SY	SAWING ASPHALT LF	SPECIAL (01. (REMOVING DISTRESSED PAVEMENT MILLING)) SY	
0010	0+75	-	31+31	11'LT/RT	8,382	0	0	56	0	
0010	4+07	-	-	S MILL PARK DR, 53.2' LT	153	0	0	29	0	
0010	4+21	-	-	S MILL PARK DR, 92.1' RT	265	0	0	22	0	
0010	6+93	-	-	HOUGHTON ST, 42' LT	52	0	0	20	0	
0010	6+95	-	-	HOUGHTON ST, 42' RT	67	0	0	26	0	
0010	9+77	-	-	CHURCH ST, 52.6' LT	117	0	0	27	0	
0010	12+45	-	-	DESOTO ST, 51.4' LT	146	0	0	22	0	
0010	40+00	-	-	DEVLIN ST, LT	177	0	0	12	0	
0010	31+31	-	783+50	CL	0	62	199,174	23	9,960	EOP - 20FT BUTT JOINT
0010	41+40	-	-	PE RT	0	19	0	0	0	5FT BUTT JOINT
0010	42+72	-	-	PE RT	0	16	0	0	0	5FT BUTT JOINT
0010	42+70	-	-	SLETTEN RD, LT	0	40	0	0	0	10FT BUTT JOINT
0010	4+15	-	-	PE LT	0	10	0	0	0	5FT BUTT JOINT
0010	47+80	-	-	GLASS RD, RT	0	37	0	0	0	10FT BUTT JOINT
0010	49+50	-	-	PE LT	0	26	0	0	0	5FT BUTT JOINT
0010	58+00	-	-	PE RT	0	49	0	0	0	5FT BUTT JOINT
0010	63+85	-	-	PE RT	0	18	0	0	0	5FT BUTT JOINT
0010	64+10	-	-	PE RT	0	25	0	0	0	5FT BUTT JOINT
0010	65+25	-	-	PE LT	0	9	0	0	0	5FT BUTT JOINT
0010	68+75	-	-	PE RT	0	30	0	0	0	5FT BUTT JOINT
0010	73+90	-	-	PE RT	0	16	0	0	0	5FT BUTT JOINT
0010	89+85	-	-	PE LT	0	11	0	0	0	5FT BUTT JOINT
0010	140+00	-	-	PE RT	0	40	0	0	0	5FT BUTT JOINT
0010	151+50	-	-	PE RT	0	20	0	0	0	5FT BUTT JOINT
0010	153+50	-	-	PE LT	0	26	0	0	0	5FT BUTT JOINT
0010	157+50	-	-	PE RT	0	25	0	0	0	5FT BUTT JOINT
0010	161+50	-	-	WILL KUMLIN RD, LT	0	76	0	0	0	17FT BUTT JOINT
0010	161+50	-	-	LAWRENCE RIDGE RD, RT	0	75	0	0	0	10FT BUTT JOINT
0010	168+75	-	-	PE LT	0	16	0	0	0	5FT BUTT JOINT
0010	175+50	-	-	PE LT	0	16	0	0	0	5FT BUTT JOINT
0010	182+75	-	-	TAYLOR RD, RT	0	48	0	0	0	10FT BUTT JOINT
0010	185+50	-	-	PE RT	0	17	0	0	0	5FT BUTT JOINT
0010	268+85	-	-	PE LT	0	14	0	0	0	5FT BUTT JOINT
0010	269+50	-	270+75	PE LT	0	79	0	0	0	5FT BUTT JOINT
0010	281+50	-	-	BROWN RD, LT	0	62	0	0	0	10FT BUTT JOINT
0010	385+50	-	-	ANDERSON RIDGE RD, LT	0	36	0	0	0	10FT BUTT JOINT
0010	387+35	-	-	ANDERSON RIDGE RD, LT	0	64	0	0	0	10FT BUTT JOINT
0010	417+85	-	-	CTH N, RT	0	108	0	0	0	10FT BUTT JOINT
0010	488+50	-	-	BLACKHAWK WAYSIDE, LT	0	36	0	0	0	10FT BUTT JOINT
0010	490+00	-	-	BLACKHAWK WAYSIDE, LT	0	46	0	0	0	10FT BUTT JOINT
0010	532+80	-	-	FORTNER RD, RT	0	101	0	0	0	33FT BUTT JOINT
0010	532+80	-	-	FORTNER RD, LT	0	165	0	0	0	35FT BUTT JOINT
0010	601+00	-	-	CTH N, LT	0	93	0	0	0	10FT BUTT JOINT
0010	601+00	-	-	CTH N, RT	0	196	0	0	0	10FT BUTT JOINT
0010	604+25	-	-	PE RT	0	88	0	0	0	5FT BUTT JOINT
0010	613+50	-	-	PE LT	0	16	0	0	0	5FT BUTT JOINT
0010	625+50	-	-	PE LT	0	18	0	0	0	5FT BUTT JOINT
0010	658+25	-	-	SHANNON RD, RT	0	71	0	0	0	10FT BUTT JOINT
0010	666+00	-	-	PE RT	0	15	0	0	0	5FT BUTT JOINT
0010	667+25	-	-	PE LT	0	15	0	0	0	5FT BUTT JOINT
0010	688+00	-	-	JOHNSON AVE, LT	0	159	0	0	0	46FT BUTT JOINT
0010	688+50	-	-	PRAIRIE RD, RT	0	84	0	0	0	46FT BUTT JOINT
0010	690+00	-	-	PRAIRIE RD, LT	0	174	0	0	0	82FT BUTT JOINT
0010	699+50	-	-	WEBER RD, RT	0	144	0	0	0	32FT BUTT JOINT
0010	726+50	-	-	MOSER AVE, RT	0	137	0	0	0	33FT BUTT JOINT
0010	732+00	-	-	NELSON RD, LT	0	126	0	0	0	36FT BUTT JOINT
TOTAL 0010					9,359	2,774	199,174	237	9,960	
0020	4+41	-	6+79	LT	228	0	0	0	0	PARKING LANES
0020	4+49	-	6+81	RT	236	0	0	0	0	PARKING LANES
0020	7+03	-	9+81	LT	229	0	0	0	0	PARKING LANES
0020	10+06	-	12+42	LT	225	0	0	0	0	PARKING LANES
0020	7+09	-	31+31	RT	2,456	0	0	0	0	PARKING LANES
TOTAL 0020					3,374	0	0	0	0	
PROJECT TOTAL					12733	2774	199174	237	9960	

**\*\*NOTE: SAWING ASPHALT IS CONSIDERED INCIDENTAL TO REMOVING ASPHALTIC SURFACE BUTT JOINTS ITEM IF REQUIRED**

\*MORE QUANTITIES LISTED ELSEWHERE IN PLANS

3

3

DIVISION	FROM/TO STATION	205.0100 COMMON EXCAVATION (1)	UNEXPANDED FILL	EXPANDED FILL (3)	MASS ORDINATE +/- (4)	208.0100 BORROW	COMMENT
		CUT (2)		FACTOR 1.25			
DIVISION 1							
Area #1 Devlin Street	38+00 - 42+00	422	95	119	303		
Devlin Street (Sideroad)	10+11 - 11+08	84	87	109	-25		
72"x113" Culvert Pipe	39+82	235	0	0	235		
Area #2 Road Re-Alignment	122+00 - 125+50	987	17	21	966		
Area #3 Red Mound	248+00 - 254+50	310	311	389	-79		
Area #4	274+00 - 278+00	358	2,265	2,831	-2,473		
36" Culvert Pipe	276+27	160	0	0	160		
Area #5	298+00 - 301+50	213	1,775	2,219	-2,006		
36" Culvert Pipe	299+73	150	0	0	150		
Area #6	401+00 - 406+00	375	991	1,239	-864		
72" RC Cattle Pass	403+77	155	0	0	155		
Area #7	439+50 - 448+00	602	2,794	3,493	-2,891		
Area #8	476+50 - 488+00	718	3,688	4,610	-3,892		
84" Culvert Pipe	478+13	195	0	0	195		
96" Culvert Pipe	486+88	165	0	0	165		
Area #9 Swenson Road	625+00 - 629+00	453	15	19	434		
Swenson Ave (Sideroad)	9+90 - 11+70	774	2	3	772		
DIVISION 1 SUBTOTAL		6,356	12,040	15,050	-8,694		
GRAND TOTAL		<b>6,356</b>	12,040	15,050	-8,694	<b>8,694</b>	

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

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

(3) EXPANDED FILL FACTOR = 1.25

DEPENDING ON SELECTIONS:

- OR **EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) \* FILL FACTOR**
- OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) \* FILL FACTOR
- OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) \* FILL FACTOR
- OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) \* FILL FACTOR

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

BARRIER SYSTEM GRADING

CATEGORY	STATION	LOCATION	614.0010 BARRIER SYSTEM GRADING SHAPING FINISHING EACH	FOR INFORMATION ONLY								
				BORROW	EXCAVATION	SALVAGED	EROSION MAT	FERTILIZER	SEEDING	SEEDING	CONSTRUCTION	
				CY	COMMON	TOPSOIL	CLASS I TYPE B	TYPE B	MIXTURE	TEMPORARY	STAKING SLOPE	
				SY	SY	CWT	NO. 20	SEED WATER	STAKES			
							LB	MGAL	LF			
0010	67+55	RT	1	14	27	195	195	0.12	8	4	2	82
0010	68+96	LT	1	11	30	145	145	0.09	6	3	2	90
0010	201+69	LT	1	23	11	230	230	0.14	9	5	2	91
0010	208+94	LT	1	6	17	235	235	0.15	10	5	2	116
TOTAL 0010			4									

BASE AGGREGATE ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS STA	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4- INCH TON	312.0110 SELECT CRUSHED MATERIAL TON	624.0100 WATER MGAL	REMARKS
0010	0+75	-	4+00	LT	4	30	0	0	0	SHOULDERS
0010	0+75	-	4+00	RT	4	30	0	0	0	SHOULDERS
0010	0+75	-	31+31	CL	-	80	436	0	8	MAINLINE REPLACEMENT AND SIDEWALK AREAS
0010	31+31	-	162+00	STH 82	-	2,157	0	0	32	SHOULDERS
0010	162+00	-	390+00	STH 82	-	3,300	0	0	50	SHOULDERS
0010	390+00	-	625+60	STH 82	-	1,722	0	0	26	SHOULDERS
0010	625+60	-	783+50	STH 82	-	2,286	0	0	34	SHOULDERS
0010	31+31	-	40+00	LT	9	-	36	-	1	SHOULDERS WIDENING
0010	41+00	-	115+00	LT	74	-	296	-	5	SHOULDERS WIDENING
0010	131+95	-	145+31	LT	14	-	56	-	1	SHOULDERS WIDENING
0010	147+28	-	150+44	LT	4	-	16	-	1	SHOULDERS WIDENING
0010	152+23	-	251+00	LT	99	-	396	-	6	SHOULDERS WIDENING
0010	254+00	-	783+50	LT	530	-	2,120	-	32	SHOULDERS WIDENING
0010	31+31	-	247+75	RT	217	-	868	-	13	SHOULDERS WIDENING
0010	254+50	-	783+50	RT	530	-	2,120	-	32	SHOULDERS WIDENING
0010	39+00	-	41+00	LT/RT	-	-	249	248	4	
0010	DEVLIN ST	-	-	RT	-	5	98	98	1	
0010	67+00	-	67+65	RT	-	-	72	0	1	
0010	68+40	-	69+05	LT	-	-	72	0	1	
0010	122+00	-	124+00	CL	-	-	800	1,244	12	
0010	115+00	-	122+00	LT	-	159	369	490	8	
0010	124+66	-	131+95	LT	-	166	345	459	8	
0010	145+31	-	152+23	LT	-	85	156	208	4	
0010	201+60	-	202+25	LT	-	-	72	0	1	
0010	208+35	-	209+00	LT	-	-	72	0	1	
0010	247+75	-	254+50	RT	-	413	769	475	12	
0010	274+00	-	278+00	LT/RT	-	-	384	352	6	
0010	298+00	-	301+50	LT/RT	-	-	346	322	5	
0010	401+00	-	406+00	LT/RT	-	-	456	410	7	
0010	439+50	-	443+00	LT/RT	-	-	208	208	3	
0010	446+50	-	448+00	LT/RT	-	-	90	90	1	
0010	476+50	-	481+50	LT/RT	-	-	456	410	7	
0010	485+50	-	488+00	LT/RT	-	-	272	262	4	
0010	SWENSON RD	-	-	CL	-	24	453	545	7	
TOTAL 0010					1,485	10,457	12,083	5,821	334	

3

3

ASPHALT ITEMS		455.0605	460.0105.S	460.0110.S	460.5224	465.0105	465.0120	465.0125	690.0150	*
		TACK COAT	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH	HMA PAVEMENT 4 LT 58-28 S TON	ASPHALTIC SURFACE TON	ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON	ASPHALTIC SURFACE TEMPORARY TON	SAWING ASPHALT LF	
STATION	LOCATION	GAL	EACH	EACH	TON	TON	TON	TON	LF	REMARKS
31+31	CL	0	0	0	1,056	0	0	0	0	BINDER, 2.25" (NON-PWL)
-	S MILL PARK DR, LT	11	0	0	19	0	0	0	0	BINDER, 2.25" (NON-PWL)
-	S MILL PARK DR, RT	19	0	0	33	0	0	0	0	BINDER, 2.25" (NON-PWL)
-	HOUGHTON ST, LT	4	0	0	7	0	0	0	0	BINDER, 2.25" (NON-PWL)
-	HOUGHTON ST, RT	5	0	0	8	0	0	0	0	BINDER, 2.25" (NON-PWL)
-	CHURCH ST, LT	8	0	0	15	0	0	0	0	BINDER, 2.25" (NON-PWL)
-	DESOTO ST, LT	11	0	0	18	0	0	0	0	BINDER, 2.25" (NON-PWL)
783+50	CL	16,510	1	1	23,110	0	0	0	0	BINDER, 1.75"
31+31	CL	587	0	0	821	0	0	0	0	SURFACE, 1.75"
783+50	CL	16,510	0	0	23,110	0	0	0	0	SURFACE, 1.75"
-	S MILL PARK DR, LT	11	0	0	15	0	0	0	0	SURFACE, 1.75"
-	S MILL PARK DR, RT	19	0	0	26	0	0	0	0	SURFACE, 1.75"
-	HOUGHTON ST, LT	4	0	0	6	0	0	0	0	SURFACE, 1.75"
-	HOUGHTON ST, RT	5	0	0	7	0	0	0	0	SURFACE, 1.75"
-	CHURCH ST, LT	8	0	0	12	0	0	0	0	SURFACE, 1.75"
-	DESOTO ST, LT	11	0	0	15	0	0	0	0	SURFACE, 1.75"
-	DEVLIN ST, LT	12	0	0	40	0	0	0	0	BINDER / SURFACE, 3.5"
-	SLETTEN RD, LT	3	0	0	8	0	0	0	0	BINDER / SURFACE, 3.5"
-	GLASS RD, RT	3	0	0	8	0	0	0	0	BINDER / SURFACE, 3.5"
-	WILL KUMLIN RD, LT	6	0	0	15	0	0	0	0	BINDER / SURFACE, 3.5"
-	LAWRENCE RIDGE RD, RT	6	0	0	16	0	0	0	0	BINDER / SURFACE, 3.5"
-	TAYLOR RD, RT	4	0	0	10	0	0	0	0	BINDER / SURFACE, 3.5"
-	BROWN RD, LT	5	0	0	12	0	0	0	0	BINDER / SURFACE, 3.5"
-	ANDERSON RIDGE RD, LT	3	0	0	7	0	0	0	0	BINDER / SURFACE, 3.5"
-	ANDERSON RIDGE RD, LT	5	0	0	13	0	0	0	0	BINDER / SURFACE, 3.5"
-	CTH N, RT	8	0	0	21	0	0	0	0	BINDER / SURFACE, 3.5"
-	BLACKHAWK WAYSIDE, LT	3	0	0	7	0	0	0	0	BINDER / SURFACE, 3.5"
-	BLACKHAWK WAYSIDE, LT	3	0	0	9	0	0	0	0	BINDER / SURFACE, 3.5"
-	FORTNER RD, RT	7	0	0	20	0	0	0	0	BINDER / SURFACE, 3.5"
-	FORTNER RD, LT	12	0	0	32	0	0	0	0	BINDER / SURFACE, 3.5"
-	CTH N, LT	7	0	0	19	0	0	0	0	BINDER / SURFACE, 3.5"
-	CTH N, RT	14	0	0	38	0	0	0	0	BINDER / SURFACE, 3.5"
-	SWENSON RD	55	0	0	150	0	0	0	0	BINDER / SURFACE, 3.5"
-	SHANNON RD, RT	5	0	0	14	0	0	0	0	BINDER / SURFACE, 3.5"
-	JOHNSON AVE, LT	11	0	0	32	0	0	0	0	BINDER / SURFACE, 3.5"
-	PRAIRIE RD, RT	6	0	0	16	0	0	0	0	BINDER / SURFACE, 3.5"
-	PRAIRIE RD, LT	12	0	0	34	0	0	0	0	BINDER / SURFACE, 3.5"
-	WEBER RD, RT	11	0	0	28	0	0	0	0	BINDER / SURFACE, 3.5"
-	MOSER AVE, RT	11	0	0	27	0	0	0	0	BINDER / SURFACE, 3.5"
-	NELSON RD, LT	11	0	0	25	0	0	0	0	BINDER / SURFACE, 3.5"
254+50	PE RT	66	0	0	0	0	185	0	0	BINDER / SURFACE, 3.5"
783+50	PROJECT PE'S LT/RT (SEE BUTT JT ITEM)	45	0	0	0	0	125	0	0	BINDER / SURFACE, 3.5"
783+50	CL	0	0	0	0	1,400	0	0	0	FOR DISTRESSED MILLED AREAS ONLY, 2.5"
40+25	CL	0	0	0	0	0	0	42	90	STA 39+82, FOR CULVERTS PRIOR TO MILLING
126+00	CL	0	0	0	0	0	0	295	68	RECONSTRUCT AREA
276+50	CL	0	0	0	0	0	0	30	46	STA 276+27, FOR CULVERTS PRIOR TO MILLING
300+00	CL	0	0	0	0	0	0	30	46	STA 299+73, FOR CULVERTS PRIOR TO MILLING
404+00	CL	0	0	0	0	0	0	30	46	STA 403+77, FOR CULVERTS PRIOR TO MILLING
478+50	CL	0	0	0	0	0	0	43	46	STA 47813, FOR CULVERTS PRIOR TO MILLING
487+15	CL	0	0	0	0	0	0	30	46	STA 486+88, FOR CULVERTS PRIOR TO MILLING
TOTAL 0010		34,057	1	1	48,879	1,400	310	500	388	
31+31	LT/RT	0	0	0	425	0	0	0	0	BINDER, 2.25" (NON-PWL) PARKING LANES
31+31	LT/RT	237	0	0	331	0	0	0	0	SURFACE PARKING LANES
TOTAL 0020		237	0	0	756	0	0	0	0	
PROJECT TOTAL		34294	1	1	49635	1400	310	500	388	*MORE QUANTITIES LISTED ELSEWHERE IN PLANS

**PWL MIXTURE USE TABLE**

STATION - STATION	LOCATION	LAYER / USE	UNDERLYING SURFACE	BID ITEM	QUANTITY (TONS)	LAYER THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
0+75 TO 31+31	11' DRIVING LANE	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	821	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
	PARKING LANE / SHOULDER	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	331	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.
	INTERSECTIONS / SIDEROADS	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	81	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.
	11' DRIVING LANE	LOWER LAYER	EXISTING BASE AGGREGATE	4 LT 58-28 S	1056	2-1/4"	QMP AS PER SS 460	460.2000 INCENTIVE DENSITY HMA PAVEMENT
	PARKING LANE / SHOULDER	LOWER LAYER	EXISTING BASE AGGREGATE	4 LT 58-28 S	425	2-1/4"	QMP AS PER SS 460	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.
	INTERSECTIONS / SIDEROADS	LOWER LAYER	BASE AGGREGATE	4 LT 58-28 S	100	2-1/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.
31+31 TO 783+50	11' DRIVING LANE	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	18020	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
	SHOULDER WIDENING	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	5090	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.
	INTERSECTIONS / SIDEROADS	UPPER LAYER	4 LT 58-28 S	4 LT 58-28 S	253	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.
	11' DRIVING LANE	LOWER LAYER	MILLED EXISTING HMA SURFACE	4 LT 58-28 S	18020	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	460.2005 INCENTIVE DENSITY PWL HMA PAVEMENT
	SHOULDER WIDENING	LOWER LAYER	MILLED EXISTING HMA SURFACE	4 LT 58-28 S	5090	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.
	INTERSECTIONS / SIDEROADS	LOWER LAYER	MILLED EXISTING HMA SURFACE	4 LT 58-28 S	253	1-3/4"	460.2010 INCENTIVE AIR VOIDS HMA PAVEMENT (PWL)	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.
	DEVLIN STREET / SWENSON ROAD	LOWER LAYER	BASE AGGREGATE	4 LT 58-28 S	95	1-3/4"	QMP AS PER SS 460	ACCEPTANCE TESTING BY THE DEPARTMENT. NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE.

3

3

CULVERT PIPE ITEMS

CATEGORY	INLET			TO	OUTLET			SLOPE (%)	SEE SDD 08F10-05 & 08F3-3				209.2500	504.0900	522.0184	522.0196	522.0436	522.1036	522.1500	633.5200	650.6000	652.0240	SPV.0090.01
	STATION	OFFSET (FT)	ELEV (FT)		STATION	OFFSET (FT)	ELEV (FT)		LOCATION	X (deg)	LENGTH (FT)	Y (deg)	TON	CY	LF	LF	LF	EACH	LF	EACH	EACH	LF	LF
0010	40+20	35.41 LT	691.88	-	39+48	31.6 RT	688.45	3.49	-	-	-	-	740	0	0	0	0	0	0	4	1	0	98
0010	39+48	RT	-	-	-	-	-		OUTLET APRON	15	16	5	0	15	0	0	0	0	0	-	0	0	0
0010	40+20	LT	-	-	-	-			INLET APRON	30	16	15	0	19	0	0	0	0	0	-	0	0	0
0010	276+27	39.5 LT	1256.60	-	276+27	48.5 RT	1249.00	8.64	-	-	-	-	530	-	0	0	88	2	0	2	1	0	0
0010	299+72	27.96 LT	1224.00	-	299+75	43.94 LT	1218.00	12.50	-	-	-	-	340	-	0	0	72	2	0	2	1	0	0
0010	403+77	33 RT	1150.00	-	403+77	33 LT	1149.00	1.52	-	-	-	-	470	0	0	0	0	0	66	4	1	66	0
0010	403+77	RT	-	-	-	-	-		INLET APRON	90	11	90	0	6	0	0	0	0	0	-	0	0	0
0010	403+77	LT	-	-	-	-	-		OUTLET APRON	90	11	90	0	6	0	0	0	0	0	-	0	0	0
0010	441+37	LT	-	-	441+96	LT	-	-	C-62-318	-	-	-	-	-	0	0	0	0	0	2	0	0	0
0010	441+30	RT	-	-	441+91	RT	-	-	C-62-318	-	-	-	-	-	0	0	0	0	0	2	0	0	0
0010	446+57	LT	-	-	447+10	LT	-	-	C-62-319	-	-	-	-	-	0	0	0	0	0	2	0	0	0
0010	447+34	RT	-	-	447+73	RT	-	-	C-62-319	-	-	-	-	-	0	0	0	0	0	2	0	0	0
0010	477+87	47.2 RT	1091.00	-	478+39	43.5 LT	1089.00	1.91	-	-	-	-	920	0	106	0	0	0	0	4	1	0	0
0010	477+87	RT	-	-	-	-	-		INLET APRON	30	16	20	0	18	0	0	0	0	0	-	0	0	0
0010	487+13	CL	-	-	-	-	-		FLOOR (CATTLE PASS)	-	-	-	0	3	0	0	0	0	0	-	0	0	0
0010	478+39	LT	-	-	-	-	-		OUTLET APRON	15	16	10	0	15	0	0	0	0	0	-	0	0	0
0010	486+88	41.65 RT	1079.00	-	486+88	42.85 RT	1078.00	1.18	-	-	-	-	700	0	0	84	0	0	0	4	1	0	0
0010	486+88	RT	-	-	-	-	-		INLET APRON	30	16	30	0	21	0	0	0	0	0	-	0	0	0
0010	486+88	CL	-	-	-	-	-		FLOOR (CATTLE PASS)	-	-	-	0	2	0	0	0	0	0	-	0	0	0
0010	486+88	LT	-	-	-	-	-		OUTLET APRON	15	16	15	0	17	0	0	0	0	0	-	0	0	0
TOTAL 0010												3,700	122	106	84	160	4	66	28	6	66	98	



STORM SEWER PIPE ITEMS

CATEGORY	FROM STR	TO STR	LOCATION	520.8000	522.1024	608.0318	608.0324	650.4000	REMARKS
				CONCRETE COLLARS FOR PIPE EACH	APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 18-INCH LF	STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH LF	CONSTRUCTION STAKING STORM SEWER EACH	
0010	1D	2D	LT	0	0	28	0	0	
0010	2D	END	LT	0	0	12	0	1	
0010	1.0	2.0	RT	0	0	174	0	0	
0010	2.0	3.0	RT	0	0	65	0	0	
0010	3A	3.0	RT	1	0	13	0	0	
0010	3B	3.0	RT	0	0	147	0	0	
0010	3.0	4.0	RT	0	1	0	117	1	
TOTAL 0010				1	1	439	117	2	

STORM SEWER STRUCTURE ITEMS

CATEGORY	STATION	OFFSET	STRUCTURE NUMBER	611.0630	611.0642	611.3230	611.3901	611.3902	650.4000	REMARKS
				INLET COVERS TYPE HM-GJ EACH	INLET COVERS TYPE MS EACH	INLETS 2X3-FT EACH	INLETS MEDIAN 1 GRATE EACH	INLETS MEDIAN 2 GRATE EACH	CONSTRUCTION STAKING STORM SEWER EACH	
0010	39+82	44.4 LT	1D	0	1	0	1	0	1	
0010	40+07	44.0 LT	2D	1	0	1	0	0	1	
0010	249+00	19.2 RT	1.0	1	0	1	0	0	1	
0010	250+80	19.2 RT	2.0	1	0	1	0	0	1	
0010	251+44	19.2 RT	3A	1	0	1	0	0	1	
0010	253+00	19.2 RT	3B	0	0	1	0	0	1	
0010	251+47	31.6 RT	3.0	0	2	0	0	1	1	"STR 4.0 SEE STORM SEWER PIPE"
TOTAL 0010				4	3	5	1	1	7	

RIP RAP HEAVY ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	606.0300	645.0120	REMARKS
					RIPRAP HEAVY CY	GEOTEXTILE TYPE HR SY	
0010	39+48	-	40+20	LT/RT	145	215	CULVERT
0010	251+79	-	-	RT	30	45	CULVERT
0010	276+27	-	276+27	LT/RT	50	75	CULVERT
0010	299+72	-	299+75	LT/RT	45	65	CULVERT
0010	441+37	-	-	LT	140	205	C-62-318
0010	441+30	-	-	RT	90	135	C-62-318
0010	446+57	-	-	LT	110	165	C-62-319
0010	447+34	-	-	RT	70	105	C-62-319
TOTAL 0010					680	1,010	

CONCRETE CURB AND GUTTER ITEMS

CATEGORY	STATION	OFF	LOC	TO	STATION	OFF	LOC	204.0150	602.3010	601.0411	601.0576	611.8115	650.5500	* 690.0250	REMARKS
								REMOVING CURB & GUTTER LF	CONCRETE SURFACE DRAINS CY	CONCRETE CURB & GUTTER 30- INCH TYPE D LF	CONCRETE CURB & GUTTER 4- INCH SLOPED 30- INCH TYPE J LF	ADJUSTING INLET COVERS EACH	CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	SAWING CONCRETE LF	
0010	4+06	66.2	RT	-	4+09	92.6	RT	27	0	27	0	0	27	3	
0010	4+32	91.6	RT	-	4+67	22.6	RT	96	0	96	0	0	96	5	
0010	4+24	33.4	LT	-	4+67	22.3	LT	47	0	47	0	0	47	2	
0010	5+59	19.8	LT	-	5+83	19.7	LT	25	0	25	0	0	25	5	
0010	5+60	20.2	RT	-	5+84	20.3	RT	24	0	24	0	0	24	5	
0010	6+68	19.5	LT	-	7+30	19.6	LT	63	0	94	0	0	94	5	
0010	6+82	20.3	RT	-	7+48	20.3	RT	66	0	86	0	0	86	5	
0010	8+46	20.2	RT	-	8+59	20.2	RT	14	0	14	0	0	14	5	
0010	8+49	19.9	LT	-	8+68	19.9	RT	19	0	19	0	0	19	5	
0010	9+04	19.8	LT	-	9+57	53.9	LT	66	0	82	0	0	82	3	
0010	9+16	20.3	RT	-	9+57	23.0	RT	44	0	44	0	0	44	5	
0010	9+96	23.2	RT	-	10+16	20.8	RT	23	0	23	0	0	23	5	
0010	9+94	50.1	LT	-	10+24	19.6	LT	50	0	57	0	0	57	5	
0010	12+02	19.4	LT	-	12+35	42.4	LT	53	0	67	0	0	67	3	
0010	12+51	60.7	LT	-	13+50	17.7	LT	50	0	119	0	0	119	2	
0010	14+01	22.8	RT	-	14+21	19.8	RT	21	0	21	0	0	21	5	
0010	14+01	15.6	LT	-	14+27	15.3	LT	26	0	26	0	0	26	5	
0010	17+30	22.3	RT	-	17+72	22.4	RT	42	0	42	0	0	42	5	
0010	17+30	12.5	LT	-	17+77	13.3	LT	32	0	47	0	0	47	5	
0010	24+88	14.2	LT	-	25+22	16.7	LT	35	0	35	0	0	35	5	
0010	10+83 (DEVLIN ST)	-	RT	-	40+20 (STH 82)	-	LT	0	0	0	68	0	68	0	
0010	40+20	-	LT	-	41+00	-	LT	0	0	0	83	0	83	0	
0010	115+00	14.2	LT	-	122+00	14.2	LT	0	0	0	703	0	703	0	
0010	124+66	14.0	LT	-	131+95	14.0	LT	0	1	0	733	0	733	0	
0010	145+31	14.0	LT	-	147+28	14.0	LT	0	1	0	198	0	198	0	
0010	150+44	14.0	LT	-	152+23	14.0	LT	0	1	0	180	0	180	0	
0010	247+70	-	RT	-	254+50	-	RT	0	0	0	659	0	659	0	
0010	625+60 (STH 82)	-	LT	-	10+28 (SWENSON AVE)	-	LT	0	0	0	53	0	53	0	
0010	10+93 (SWENSON AVE)	-	LT	-	628+50 (STH 82)	-	LT	0	0	0	298	0	298	0	
0010	4+32	23.9	LT	-	-	-	-	0	0	0	0	1	0	0	
0010	4+48	22.2	RT	-	-	-	-	0	0	0	0	1	0	0	
0010	5+72	21.8	LT	-	-	-	-	0	0	0	0	1	0	0	
0010	5+72	22.3	RT	-	-	-	-	0	0	0	0	1	0	0	
0010	7+19	21.6	LT	-	-	-	-	0	0	0	0	1	0	0	
0010	7+19	22.3	RT	-	-	-	-	0	0	0	0	1	0	0	
0010	8+55	21.9	LT	-	-	-	-	0	0	0	0	1	0	0	
0010	8+55	22.1	RT	-	-	-	-	0	0	0	0	1	0	0	
0010	10+07	17.3	LT	-	-	-	-	0	0	0	0	1	0	0	
0010	10+07	24.5	RT	-	-	-	-	0	0	0	0	1	0	0	
0010	14+07	22.1	RT	-	-	-	-	0	0	0	0	1	0	0	
0010	14+11	15.3	LT	-	-	-	-	0	0	0	0	1	0	0	
0010	17+70	21.9	RT	-	-	-	-	0	0	0	0	1	0	0	
0010	17+70	11.9	LT	-	-	-	-	0	0	0	0	1	0	0	
0010	25+07	14.8	LT	-	-	-	-	0	0	0	0	1	0	0	

TOTAL 0010	823	3	995	2,975	15	3,970	88	*MORE QUANTITIES LISTED ELSEWHERE IN PLANS
------------	-----	---	-----	-------	----	-------	----	---

CONCRETE SIDEWALK ITEMS

CATEGORY	STATION	OFF	LOC	TO	STATION	OFF	LOC	204.0155 REMOVING CONCRETE SIDEWALK SY	602.0405 CONCRETE SIDEWALK 4- INCH SF	602.0415 CONCRETE SIDEWALK 6- INCH SF	602.0515 CURB RAMP DETECTABLE WARNING FIELD NATURAL PATINA SF	602.0810 CONCRETE DRIVEWAY 6- INCH SY	650.9000 CONSTRUCTION STAKING CURB RAMPS EACH	650.9500.01 CONSTRUCTION STAKING SIDEWALK (PROJECT) (01. 5150-02-70) EACH	* 690.0250 SAWING CONCRETE LF	REMARKS
0010	4+02	81.6	RT	-	4+08	102.4	RT	12	116	0	10	0	1	0	4	
0010	4+34	86.6	RT	-	4+84	25.9	RT	63	445	77	20	9	2	0	4	
0010	4+57	22.3	LT	-	4+70	33.9	LT	31	113	0	10	0	1	0	5	
0010	5+02	26.1	LT	-	5+09	33.5	LT	32	55	0	10	0	0	0	5	
0010	5+27	25.8	LT	-	5+34	30.7	LT	4	35	0	10	0	0	0	5	
0010	6+65	24.7	LT	-	6+82	42.6	LT	18	166	0	10	0	1	0	35	
0010	6+76	25.5	RT	-	6+82	30.5	RT	3	31	0	10	0	0	0	5	
0010	7+04	27.0	LT	-	7+23	31.0	LT	9	78	0	10	0	0	0	5	
0010	7+10	41.0	RT	-	7+37	25.3	RT	31	258	0	10	0	1	0	43	
0010	9+04	20.4	LT	-	9+55	36.8	LT	27	311	0	20	0	1	0	10	
0010	9+17	26.9	RT	-	9+65	51.6	RT	59	502	0	10	0	1	0	43	
0010	9+93	26.7	LT	-	10+19	26.2	LT	8	130	0	10	0	1	0	5	
0010	9+93	32.8	RT	-	1+07	29.1	RT	19	170	0	0	0	0	0	36	
0010	12+02	21.9	LT	-	12+48	29.4	LT	21	235	0	10	0	1	0	5	
0010	12+75	28.4	LT	-	13+21	23.8	LT	8	228	0	10	0	1	0	5	
0010	14+01	16.1	LT	-	14+27	20.5	LT	15	133	0	0	0	0	0	10	
0010	17+21	25.1	RT	-	17+56	29.6	RT	20	191	0	10	0	1	0	34	
0010	17+30	12.5	LT	-	17+54	17.4	LT	13	119	0	10	0	1	0	10	
0010	4+02		LT/RT	-	17+54		LT/RT	0	0	0	0	0	0	1	0	
TOTAL 0010								393	3,316	77	180	9	13	1	269	*MORE QUANTITIES LISTED ELSEWHERE IN PLANS

CATEGORY	STATION	LOC	601.0600 CONCRETE CURB PEDESTRIAN LF	602.1500 CONCRETE STEPS SF	REMARKS
0010	7+18	RT	0	12	CURB RAMP #6
0010	7+25	RT	15	0	CURB RAMP #6
TOTAL 0010			15	12	

3

3

MANHOLE ADJUSTMENTS

CATEGORY	STATION	OFFSET	LOCATION	611.8110 ADJUSTING MANHOLE COVERS EACH	REMARKS
0010	4+31	27.99	RT	1	
				TOTAL 0010	1
0030	3+76	12.82	RT	1	
0030	4+17	12.29	RT	1	
0030	5+18	13.58	RT	1	
0030	7+00	13.40	RT	1	
0030	9+61	17.89	RT	1	
0030	13+18	12.79	RT	1	
0030	15+60	17.17	RT	1	
0030	17+25	16.76	RT	1	
0030	38+92	32.20	RT	1	
0030	39+82	22.60	RT	1	
0030	39+85	30.89	LT	1	
0030	40+45	6.48	RT	1	
				TOTAL 0030	12
				PROJECT TOTAL	13

RETAINING WALL ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	612.0404 PIPE UNDERDRAIN WRAPPED 4- INCH LF	645.0111 GEOTEXTILE TYPE DF SCHEDULE A SY	SPV.0165.01 SPECIAL (WALL MODULAR BLOCK GRAVITY LANDSCAPE (0+00 TO 0+55)) SF	REMARKS
0010	0+00	-	0+55	LT	65	75	215	DESOTO STREET PE
				TOTAL 0010	65	75	215	

BEAM GUARD ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	204.0165 REMOVING GUARDRAIL LF	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	614.2620 MGS GUARDRAIL TERMINAL TYPE 2 EACH	614.2630 MGS GUARDRAIL SHORT RADIUS TERMINAL EACH	REMARKS
0010	0+07	-	3+04	RT	428	321	0	115	0	1	1	
0010	0+89	-	3+86	LT	428	276	0	176	1	0	1	
0010	65+36	-	67+55	RT	217	113	0	0	2	0	0	
0010	66+41	-	68+96	LT	254	149	0	0	2	0	0	
0010	111+25	-	134+19	LT	2,003	622	1,566	0	2	0	0	
0010	138+19	-	152+82	LT	1,419	975	382	0	2	0	0	
0010	201+69	-	208+94	LT	400	621	0	0	2	0	0	
				TOTAL 0010	5,149	3,077	1,948	291	11	1	2	

EROSION CONTROL

CATEGORY	STATION	TO	STATION	LOCATION	628.1504	628.1520	628.1905	628.1910	628.7005	628.7015	628.7504	628.7560	628.7570	REMARKS
					SILT FENCE LF	SILT FENCE MAINTENANCE LF	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EROSION CONTROL EACH	INLET PROTECTION TYPE A EACH	INLET PROTECTION TYPE C EACH	TEMPORARY DITCH CHECKS LF	TRACKING PADS EACH	ROCK BAGS EACH	
0010	3+95	-	4+05	RT	45	90	0	0	0	0	0	0	0	
0010	4+28	-	4+70	LT	45	90	0	0	0	0	0	0	0	
0010	4+32	-	4+32	LT	0	0	0	0	1	0	0	0	0	
0010	4+48	-	4+48	LT	0	0	0	0	1	0	0	0	0	
0010	5+72	-	5+72	RT	0	0	0	0	2	0	0	0	0	
0010	7+19	-	7+19	LT/RT	0	0	0	0	2	0	0	0	0	
0010	8+55	-	8+55	LT/RT	0	0	0	0	2	0	0	0	0	
0010	9+21	-	9+54	RT	50	100	0	0	0	0	0	0	0	
0010	10+07	-	10+07	LT/RT	0	0	0	0	2	0	0	0	0	
0010	14+07	-	14+07	RT	0	0	0	0	1	0	0	0	0	
0010	14+11	-	14+11	LT	0	0	0	0	1	0	0	0	0	
0010	17+18	-	17+57	RT	40	80	0	0	0	0	0	0	0	
0010	17+70	-	17+70	LT/RT	0	0	0	0	2	0	0	0	0	
0010	25+07	-	25+07	LT	0	0	0	0	1	0	0	0	0	
0010	38+44	-	41+27	RT	290	580	0	0	0	0	0	0	8	
0010	40+50	-	41+38	LT	115	230	0	0	0	0	0	0	0	
0010	66+76	-	67+88	RT	130	260	0	0	0	0	0	0	0	
0010	68+19	-	69+31	LT	130	260	0	0	0	0	0	0	0	
0010	121+80	-	125+54	LT	400	800	0	0	0	0	0	0	0	
0010	201+50	-	202+54	LT	130	260	0	0	0	0	0	0	0	
0010	207+99	-	209+49	LT	155	310	0	0	0	0	0	0	0	
0010	249+00	-	249+00	RT	0	0	0	0	0	1	0	0	0	
0010	250+78	-	250+78	RT	0	0	0	0	0	1	0	0	0	
0010	251+40	-	251+40	RT	0	0	0	0	1	1	0	0	0	
0010	253+00	-	253+00	RT	0	0	0	0	0	1	0	0	0	
0010	274+06	-	278+65	RT	470	940	0	0	0	0	0	0	4	
0010	298+23	-	301+25	LT	365	730	0	0	0	0	0	0	4	
0010	401+21	-	406+23	LT	495	990	0	0	0	0	0	0	8	
0010	401+13	-	406+29	RT	550	1,100	0	0	0	0	0	0	0	
0010	439+53	-	442+81	RT	300	600	0	0	0	0	0	0	20	
0010	439+54	-	442+80	LT	300	600	0	0	0	0	0	0	0	
0010	446+48	-	447+92	LT	165	330	0	0	0	0	0	0	20	
0010	447+00	-	448+01	RT	105	210	0	0	0	0	0	0	0	
0010	476+58	-	478+93	RT	260	520	0	0	0	0	0	0	8	
0010	476+74	-	481+20	LT	460	920	0	0	0	0	0	0	0	
0010	485+38	-	488+10	RT	305	610	0	0	0	0	0	0	8	
0010	485+40	-	488+07	LT	315	630	0	0	0	0	0	0	0	
0010	11+20	-	11+73	RT	55	110	0	0	0	0	0	0	0	
0010	664+26	-	665+07	LT	120	240	0	0	0	0	0	0	0	
0010	0+75	-	783+50	LT/RT	0	0	10	5	0	0	0	0	0	
0010	BORROW PIT	-	-	-	1,000	2,000	2	2	0	0	100	1	0	
TOTAL 0010					6,795	13,590	12	7	16	4	100	1	80	



PAVEMENT MARKING ITEMS

CATEGORY	STATION	TO	STATION	CONDITION	LOCATION	CONDITION	643.3165	646.2040	646.4720	646.7420	646.7520	648.0100	REMARKS
							TEMPORARY MARKING LINE PAINT 6-INCH (YELLOW) LF	MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE) LF	MARKING LINE SAME DAY EPOXY 6-INCH (YELLOW) LF	MARKING CROSSWALK EPOXY TRANSVERSE LINE 6-INCH (WHITE) LF	MARKING CROSSWALK EPOXY BLOCK STYLE 24-INCH (WHITE) LF	LOCATING NO-PASSING ZONES MI	
0010	0+75	-	31+31	SOLID	CL	SOLID	6112	-	6112	-	-	-	
0010	31+31	-	188+88	SOLID	CL	SOLID	63028	-	31514	-	-	-	
0010	188+88	-	193+60	SOLID	CL	SKIPS	1024	-	597	-	-	-	
0010	193+60	-	195+47	SOLID	CL	SOLID	406	-	237	-	-	-	
0010	195+47	-	201+75	SKIPS	CL	SOLID	1360	-	791	-	-	-	
0010	201+75	-	329+76	SOLID	CL	SOLID	51004	-	25502	-	-	-	
0010	329+76	-	337+07	SOLID	CL	SKIPS	1584	-	924	-	-	-	
0010	337+07	-	338+65	SOLID	CL	SOLID	632	-	316	-	-	-	
0010	338+65	-	345+19	SKIPS	CL	SOLID	1418	-	829	-	-	-	
0010	345+19	-	345+70	SOLID	CL	SOLID	204	-	102	-	-	-	
0010	345+70	-	355+00	SOLID	CL	SKIPS	2012	-	1168	-	-	-	
0010	355+00	-	357+12	NONE	CL	SKIPS	40	-	63	-	-	-	
0010	357+12	-	365+29	SKIPS	CL	SOLID	1770	-	1032	-	-	-	
0010	365+12	-	443+32	SOLID	CL	SOLID	31280	-	15640	-	-	-	
0010	443+32	-	451+90	SOLID	CL	SKIPS	1860	-	1084	-	-	-	
0010	451+90	-	459+75	SKIPS	CL	SOLID	1702	-	992	-	-	-	
0010	459+75	-	474+38	SOLID	CL	SOLID	5852	-	2926	-	-	-	
0010	474+38	-	483+08	SOLID	CL	SKIPS	1886	-	1099	-	-	-	
0010	483+08	-	484+85	NONE	CL	SKIPS	30	-	47	-	-	-	
0010	484+85	-	494+31	SKIPS	CL	SOLID	2050	-	1195	-	-	-	
0010	494+31	-	783+50	SOLID	CL	SOLID	115676	-	57838	-	-	-	
0010	0+75	-	3+55		LT/RT		-	563	-	-	-	-	
0010	4+62	-	9+40		LT/RT		-	956	-	-	-	-	
0010	9+40	-	12+40		LT/RT		-	537	-	-	-	-	
0010	12+40	-	17+36		LT/RT		-	896	-	-	-	-	
0010	17+42	-	23+90		LT/RT		-	1,238	-	-	-	-	
0010	23+90	-	27+20		LT/RT		-	602	-	-	-	-	
0010	27+20	-	39+41		LT/RT		-	2,412	-	-	-	-	
0010	39+41	-	40+20		LT/RT		-	97	-	-	-	-	
0010	40+20	-	47+57		LT/RT		-	1,474	-	-	-	-	
0010	47+57	-	161+38		LT/RT		-	22,704	-	-	-	-	
0010	161+38	-	182+44		LT/RT		-	4,160	-	-	-	-	
0010	182+44	-	194+00		LT/RT		-	2,312	-	-	-	-	
0010	194+00	-	783+50		LT/RT		-	117,900	-	-	-	-	
0010	4+23	-			RT		-	-	-	42	30	-	
0010	4+59	-			CL		-	-	-	80	-	-	
0010	6+93	-			LT		-	-	-	40	-	-	
0010	6+95	-			RT		-	-	-	54	-	-	
0010	9+39	-	9+93		LT/RT		-	-	-	147	-	-	
0010	12+61	-			LT		-	-	-	52	-	-	
0010	17+39	-			CL		-	-	-	62	42	-	
0010	0+75	-	783+50		CL		-	-	-	-	-	14.82	
TOTAL 0010							290,930	155,851	150,008	477	72	14.82	

TRAFFIC CONTROL ITEMS

CATEGORY	LOCATION	CALENDAR DAYS	643.0300 TRAFFIC CONTROL DRUMS		643.0410 TRAFFIC CONTROL BARRICADES TYPE II		643.0420 TRAFFIC CONTROL BARRICADES TYPE III		643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A		643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C		643.0900 TRAFFIC CONTROL SIGNS		643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II EACH		643.1050 TRAFFIC CONTROL SIGNS PCMS		REMARKS
			NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	NO.	DAY	
0010	PRIOR TO DETOUR ROUTE	14	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	28	
0010	DETOUR ROUTE	114	-	-	-	-	14	1,596	18	2,052	-	-	200	22,800	22	-	-		
0010	SIDEROADS DURING DETOUR	114	-	-	-	-	66	7,524	132	15,048	-	-	85	9,690	-	-	-		
0010	CULVERT REPLACEMENTS	42	-	-	-	-	12	504	18	756	-	-	4	168	-	-	-		
0010	ROAD WORK SIGNAGE	43	-	-	-	-	6	258	12	516	-	-	58	2,494	-	-	-		
0010	BEAMGUARD AREAS	123	40	4,920	-	-	-	-	-	-	40	4,920	-	-	-	-	-		
0010	PEDESTRIAN ACCOMMODATIONS	10	20	200	8	80	-	-	-	-	20	200	8	80	-	-	-	STAGE 1A	
0010	PEDESTRIAN ACCOMMODATIONS	4	7	28	4	16	-	-	-	-	7	28	4	16	-	-	-	STAGE 1B	
0010	PEDESTRIAN ACCOMMODATIONS	10	33	330	8	80	-	-	-	-	33	330	8	80	-	-	-	STAGE 2A	
0010	PEDESTRIAN ACCOMMODATIONS	4	17	68	6	24	-	-	-	-	17	68	6	24	-	-	-	STAGE 2B	
0010	CONCRETE BOX CULVERT EXTENSIONS	80	12	960	-	-	-	-	-	-	12	960	-	-	-	-	-		
0010	CONCRETE MASONRY ENDWALLS	20	12	240	-	-	-	-	-	-	12	240	-	-	-	-	-		
0010	UNDISTRIBUTED	-	-	154	-	-	218	218	-	428	-	154	-	648	-	-	-		
TOTAL 0010			6,900		200		10,100		18,800		6,900		36,000		22		28		

TEMPORARY PEDESTRIAN ITEMS

CATEGORY	STAGE	EST DAYS	SIZE	644.1410 TEMPORARY PEDESTRIAN SURFACE ASPHALT		644.1440 TEMPORARY PEDESTRIAN SURFACE MATTING		644.1601 TEMPORARY PEDESTRIAN CURB RAMP			644.1605 TEMPORARY PEDESTRIAN DETECTABLE WARNING FIELD		644.1810 TEMPORARY PEDESTRIAN BARRICADE		REMARKS
				SF	SIZE	SF	NO	DAY	SIZE	SF	LF				
0010	STAGE 1A	10	-	0	4X8	32	6	60	2X4	48	274				
0010	STAGE 1B	4	4X8	64	-	0	3	12	2X4	48	0				
0010	STAGE 2A	10	-	0	-	0	6	60	2X4	32	32				
0010	STAGE 2B	4	-	0	-	0	0	0	-	0	0				
TOTAL 0010				64		32		132			128		306		



3

SIGN ITEMS

634.0616 638.2102 638.3000  
 POSTS MOVING REMOVING  
 WOOD 4X6- SIGNS SMALL SIGN  
 INCH X 16-FT TYPE II SUPPORTS

CATEGORY	STATION	LOCATION	EACH	EACH	EACH	SIGN NUMBER	REMARKS
0010	0+17	RT	1	1	1	J3-1	"EAST STH 82 ARROW"
0010	4+40	RT	1	1	1	R1-1	"STOP" SIGN
0010	4+42	LT	1	1	1	J1-2	"GREAT RIVER ROAD"
0010	6+75	LT	1	1	1	R1-1	"STOP" SIGN
0010	7+15	RT	1	1	1	R1-1	"STOP" SIGN
0010	9+40	LT	1	1	1	R1-1	"STOP" SIGN
0010	12+35	LT	1	1	1	R1-1	"STOP" SIGN
0010	13+85	LT	1	1	1	R7-1R	"NO PARKING ANYTIME"
0010	39+80	LT	1	1	1	R1-1	"STOP" SIGN
0010	40+05	LT	1	1	1	W14-1	"DEAD END" SIGN
0010	40+45	LT	1	1	1	R2-1	"SPEED LIMIT 25"
0010	122+45	LT	1	1	1	W1-6	CHEVRON ARROW
0010	123+10	LT	1	1	1	W1-6	CHEVRON ARROW
0010	193+60	LT	1	1	1	W14-3	EB "NO PASSING ZONE"
0010	194+50	RT	1	1	1	W14-3	WB "NO PASSING ZONE"
0010	202+10	LT	1	1	1	W1-6	CHEVRON ARROW
0010	202+30	LT	1	1	1	W1-6	CHEVRON ARROW
0010	209+00	LT	1	1	1	W11-5	TRACTOR SIGN
0010	247+50	RT	1	1	1	R2-1	"SPEED LIMIT 45"
0010	251+35	RT	1	2	1	J13-1	"COUNTY UU" & ARROW
0010	337+07	LT	1	1	1	W14-3	EB "NO PASSING ZONE"
0010	338+65	RT	1	1	1	W14-3	WB "NO PASSING ZONE"
0010	355+00	RT	1	1	1	W14-3	WB "NO PASSING ZONE"
0010	357+12	LT	1	1	1	W14-3	EB "NO PASSING ZONE"
0010	451+85	LT	1	1	1	W14-3	EB "NO PASSING ZONE"
0010	451+95	RT	1	1	1	W14-3	WB "NO PASSING ZONE"
0010	483+08	RT	1	1	1	W14-3	WB "NO PASSING ZONE"
0010	486+60	LT	1	1	1	W14-3	EB "NO PASSING ZONE"
0010	625+40	LT	1	1	1	R1-1	"STOP" SIGN
0010	625+60	LT	1	1	1	W1-6	CHEVRON ARROW
0010	626+20	LT	1	1	1	R1-1	"STOP" SIGN
0010	654+70	RT	1	1	1	W14-3	WB "NO PASSING ZONE"
0010	662+40	LT	1	1	1	W14-3	EB "NO PASSING ZONE"
0010	699+75	RT	1	1	1	W14-3	WB "NO PASSING ZONE"
0010	700+10	LT	1	1	1	W14-3	EB "NO PASSING ZONE"
0010	730+80	RT	1	1	1	W14-3	WB "NO PASSING ZONE"
0010	750+50	LT	1	1	1	W14-3	EB "NO PASSING ZONE"
TOTAL 0010			37	38	37		

ROW MARKER POSTS

633.5100  
MARKERS ROW

CATEGORY	ROW PLAT POINT NC	TO	ROW PLAT POINT NC	PLAT SHEET	EACH	REMARKS
0010	500	TO	517	4.03	17	SEE R/W PLAT 5150-02-20
0010	600	TO	611	4.04	12	SEE R/W PLAT 5150-02-20
0010	700	TO	718	4.05	19	SEE R/W PLAT 5150-02-20
0010	800	TO	807	4.05	8	SEE R/W PLAT 5150-02-20
0010	900	TO	916	4.06	17	SEE R/W PLAT 5150-02-20
0010	1000	TO	1015	4.07	16	SEE R/W PLAT 5150-02-20
0010	1100	TO	1114	4.08	15	SEE R/W PLAT 5150-02-20
0010	1200	TO	1227	4.09	28	SEE R/W PLAT 5150-02-20
0010	1300	TO	1302	4.09	3	SEE R/W PLAT 5150-02-20
0010	1400	TO	1414	4.10	15	SEE R/W PLAT 5150-02-20
0010	1420	TO	1431	4.11	12	SEE R/W PLAT 5150-02-20
0010	1500	TO	1526	4.12	27	SEE R/W PLAT 5150-02-20
0010	1600	TO	1602	4.12	3	SEE R/W PLAT 5150-02-20
0010	1700	TO	1710	4.13	11	SEE R/W PLAT 5150-02-20
0010	1900	TO	1906	4.14	7	SEE R/W PLAT 5150-02-20

TOTAL 0010 210

SPV.0060.01  
SPECIAL (01. LANDMARK REFERENCE  
MONUMENTS SPECIAL, )

CATEGORY	STATION	OFFSET	TOWN/RANGE/SECTIC	EACH	REMARKS
0010	STA 2+15	23' LT	11N 7W Sect 15	1	
0010	STA 224+59	37' RT	12N 7W Sect 36	1	
0010	STA 329+56	32' RT	12N 6W Sect 32	1	
0010	STA 329+85	26' RT	11N 6W Sect 5	1	
0010	STA 355+86	0' LT	12N 6W Sect 32	1	
0010	STA 356+15	0' LT	11N 6W Sect 5	1	
0010	STA 382+27	0' LT	16N 6W Sect 33	1	
0010	STA 382+35	0' LT	11N 6W Sect 4	1	
0010	STA 560+16	1' RT	12N 6W Sect 36	1	
0010	STA 560+36	2' RT	11N 5W Sect 1	1	
0010	STA 586+39	2' LT	11N 5W Sect 6	1	
0010	STA 614+19	4' LT	11N 5W Sect 6	1	
0010	STA 614+24	4' LT	12N 5W Sect 31	1	

13

3

STAKING ITEMS

CATEGORY	STATION	TO	STATION	LOCATION	650.4500	650.5000	650.8000	650.9920	REMARKS
					CONSTRUCTION STAKING SUBGRADE LF	CONSTRUCTION STAKING BASE LF	CONSTRUCTION STAKING RESURFACING REFERENCE LF	CONSTRUCTION STAKING SLOPE STAKES LF	
0010	0+75	-	783+50	CL	0	0	78,275	0	
0010	0+75	-	31+31	STH 82	0	3,056	0	0	
0010	39+00	-	41+00	STH 82	200	200	0	200	
0010	122+00	-	126+00	STH 82	400	400	0	400	
0010	248+00	-	254+50	STH 82	650	650	0	650	
0010	274+50	-	277+50	STH 82	300	300	0	300	
0010	298+50	-	301+00	STH 82	250	250	0	250	
0010	401+50	-	405+50	STH 82	400	400	0	400	
0010	440+00	-	442+50	STH 82	250	250	0	250	
0010	446+89	-	447+50	STH 82	61	61	0	61	
0010	477+00	-	481+00	STH 82	400	400	0	400	
0010	486+00	-	487+50	STH 82	150	150	0	150	
0010	626+00	-	628+00	STH 82	200	200	0	200	
0010	10+50	-	11+00	DEVLIN ST.	50	50	0	50	
0010	10+50	-	11+50	SWENSON AVE.	100	100	0	100	
TOTAL 0010					3,411	6,467	78,275	3,411	

# STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION TRANSPORTATION PROJECT PLAT TITLE SHEET 5150-02-20 DE SOTO - VIROQUA STH 35 TO STH 27 STH 82 VERNON COUNTY



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 5150-02-20

**NOTES:**

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

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

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

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

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

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

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

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

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

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

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

4

4

**CONVENTIONAL SYMBOLS**

SECTION LINE	---	SECTION CORNER SYMBOL		R/W MONUMENT (TO BE SET)	●
QUARTER LINE	---	NON-MONUMENTED R/W POINT	○	FOUND IRON PIN (1-INCH UNLESS NOTED)	IP
SIXTEENTH LINE	---	SECTION CORNER MONUMENT		OFF-PREMISE SIGN	
NEW REFERENCE LINE	---	GEODETIC SURVEY MONUMENT			
NEW R/W LINE	---	SIXTEENTH CORNER MONUMENT			
EXISTING R/W OR HE LINE	---	SIGN			
PROPERTY LINE	---				
LOT, TIE & OTHER MINOR LINES	---				
SLOPE INTERCEPT	---				
CORPORATE LIMITS	---	ELECTRIC POLE		TELEPHONE POLE	
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	---	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)			
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)	---	ACCESS RESTRICTED BY ACQUISITION		NO ACCESS (BY STATUTORY AUTHORITY)	
TEMPORARY LIMITED EASEMENT AREA	---	ACCESS RESTRICTED BY PREVIOUS PROJECT OR CONTROL		NO ACCESS (NEW HIGHWAY)	
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)	---	NO ACCESS (NEW HIGHWAY)			
TRANSMISSION STRUCTURES	---	PARCEL NUMBER		UTILITY NUMBER	
BUILDING TO BE REMOVED	---	PARALLEL OFFSETS			
BRIDGE	---				
CULVERT	---				

**CONVENTIONAL ABBREVIATIONS**

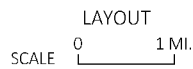
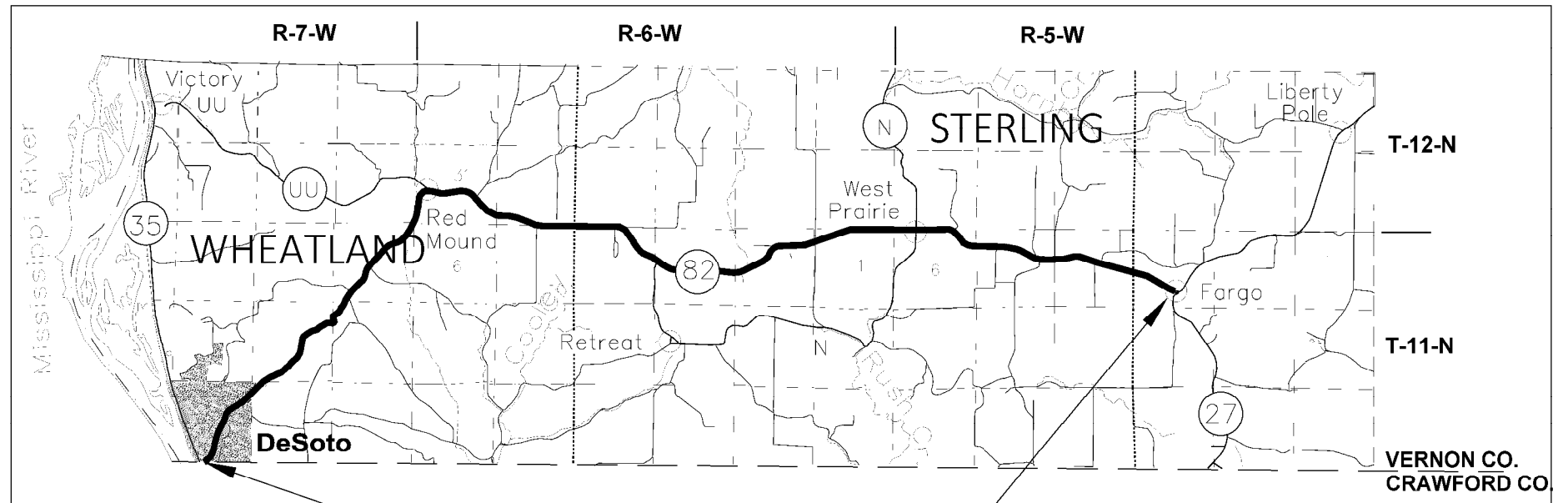
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS (100')	
AND OTHERS	ET AL	REEL / IMAGE	R/I
BACK	BK	REFERENCE LINE	R/L
BLOCK	BLK	REMAINING	REM
CENTERLINE	C/L	RESTRICTIVE DEVELOPMENT	RDE
CERTIFIED SURVEY MAP	CSM	EASEMENT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

**CURVE DATA ABBREVIATIONS**

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

**CONVENTIONAL UTILITY SYMBOLS**

WATER	
GAS	
TELEPHONE	
OVERHEAD TRANSMISSION LINES	
ELECTRIC	
CABLE TELEVISION	
FIBER OPTIC	
SANITARY SEWER	
STORM SEWER	
ELECTRIC TOWER	



PROJECT LOCATION

PROJECT NUMBER 5150-02-20 -4.01  
SHEET 2 OF 2

# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.01

PART OF LOT 1, BLOCK 6, AND PART OF LOT 1 BLOCK 5, AND PART OF LOT 1, BLOCK 2, AND PART OF LOTS 1, 2 & 3 BLOCK 1, OF ORIGINAL PLAT OF DE SOTO ALL LOCATED IN PART OF GOVERNMENT LOT 4 OF SECTION 15, TOWNSHIP 11 NORTH, RANGE 7 WEST, VILLAGE OF DE SOTO, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

### NOTES:

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

NGS POINT UTILIZED: PID: DH4971, DESIGNATION DE SOTO GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"X24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

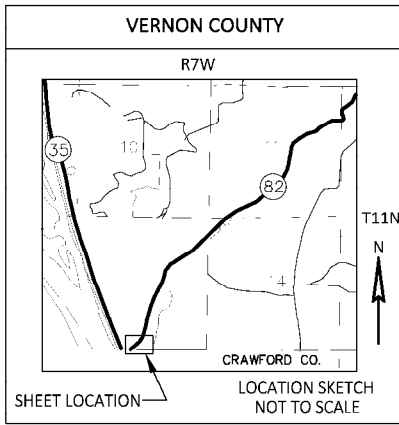
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 AND SIDE ROADS ESTABLISHED FROM ORIGINAL PLAT OF DE SOTO, CSM 922, PLATS OF SURVEYS AND FOUND MONUMENTATION IN THE FIELD.

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

TLE'S ARE REQUIRED FOR GRADING AND MAY EXTEND TO BUILDING FACES, BUILDINGS WILL NOT BE ADVERSELY AFFECTED.

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

QUARTER LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.



## VILLAGE

## ORIGINAL PLAT OF DE SOTO BLOCK 5

## GOV'T LOT 4

## ORIGINAL PLAT OF DE SOTO BLOCK 6

## OF

## ORIGINAL PLAT OF DE SOTO BLOCK 2

## ORIGINAL PLAT OF DE SOTO BLOCK 1

## DE SOTO

### SCHEDULE OF LANDS & INTERESTS REQUIRED

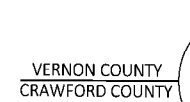
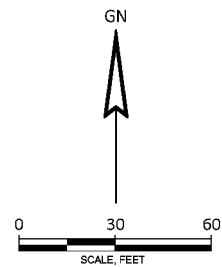
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED S.F.			TLE S.F.
			NEW	EXISTING	TOTAL	
1	JAMES A. BOARDMAN AND PHYLLIS A. BOARDMAN	FEE, TLE	162	--	162	235
2	DONNA J. LOUTCSCI	TLE	--	--	--	53
3	DARWIN L. KUMLIN AND LENAY J. KUMLIN	TLE	--	--	--	125
4	JAMES J. HOSTERT	FEE, TLE	451	--	451	356
6	MARK P. ARNESON	FEE, TLE	118	--	118	68

COURSE	BEARING	DISTANCE
102 - 103	N46°53'34"E	81.14'
103 - 104	N52°42'45"W	12.97'
104 - 105	N46°12'47"E	17.28'
105 - 4	S44°37'54"E	15.00'
106 - 107	N43°06'26"W	12.00'
108 - 6	S43°06'26"E	12.00'
112 - 113	S43°06'26"E	12.00'
114 - 115	N43°06'26"W	12.00'
116 - 117	S10°22'58"E	9.25'
117 - 118	S43°06'26"E	55.84'
118 - 119	S46°53'34"W	8.63'
119 - 120	S43°06'26"E	15.00'

STATION & OFFSET/COORDINATE TABLE					STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
100	10+57.18	72.90' LT	100,740.975	619,395.060	118	11+82.12	96.62' RT	100,702.594	619,602.120
101	11+58.22	90.03' LT	100,822.538	619,457.121	119	11+73.49	96.62' RT	100,696.698	619,595.822
102	11+67.56	35.00' LT	100,788.737	619,501.544	120	11+73.49	111.62' RT	100,685.747	619,606.072
103	12+48.69	35.00' LT	100,844.183	619,560.779	121	10+73.39	90.00' RT	100,633.127	619,518.215
104	12+46.53	47.79' LT	100,852.041	619,550.459	122	10+73.39	0.00' RT	100,698.833	619,456.712
105	12+63.81	48.00' LT	100,864.001	619,562.935	200	11+66.71	40.00' LT	100,791.808	619,497.508
106	14+12.08	33.00' LT	100,954.376	619,681.430	201	12+14.11	40.00' LT	100,824.199	619,532.112
107	14+12.08	45.00' LT	100,963.136	619,673.229	202	12+14.11	35.00' LT	100,820.549	619,535.529
108	14+52.08	45.00' LT	100,990.471	619,702.432	203	14+52.08	38.00' LT	100,985.361	619,707.216
109	15+48.38	33.00' LT	101,047.518	619,780.939	204	14+62.74	38.00' LT	100,992.648	619,715.001
110	15+48.38	0.00' RT	101,023.426	619,803.490	205	14+62.74	33.00' LT	100,988.997	619,718.418
111	15+48.38	33.00' RT	100,999.333	619,826.041	206	14+80.41	33.00' RT	100,952.885	619,776.418
112	14+55.41	33.00' RT	100,935.801	619,758.166	207	14+80.41	38.00' RT	100,949.235	619,779.835
113	14+55.41	45.00' RT	100,927.040	619,766.367	208	14+55.41	38.00' RT	100,932.150	619,761.583
114	14+15.41	45.00' RT	100,899.705	619,737.164	209	12+12.12	33.00' RT	100,769.544	619,580.545
115	14+15.41	33.00' RT	100,908.466	619,728.963	210	12+12.12	38.00' RT	100,765.893	619,583.962
116	11+87.12	33.00' RT	100,752.460	619,562.294	211	11+87.12	38.00' RT	100,748.809	619,565.710
117	11+82.12	40.78' RT	100,743.362	619,563.960	212	11+87.12	96.62' RT	100,706.011	619,605.771

EXISTING MONUMENTATION					
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	DESCRIPTION
1	11+67.90	33.00' LT	100,787.509	619,503.158	DRILL HOLE
2	12+49.03	33.00' LT	100,842.954	619,562.393	DRILL HOLE
3	12+61.20	33.00' LT	100,851.270	619,571.278	3/4" REBAR
4	12+64.21	33.00' LT	100,853.326	619,573.474	3/4" REBAR
5	14+51.21	85.76' LT	101,019.631	619,673.947	3/4" REBAR
6	14+52.08	33.00' LT	100,981.710	619,710.633	3/4" REBAR
7	14+78.27	33.00' LT	100,999.608	619,729.754	3/4" REBAR
8	12+53.14	32.90' RT	100,797.653	619,610.424	1" IRON PIPE
9	12+62.35	103.00' LT	100,903.158	619,524.278	3/4" REBAR
10	11+50.68	134.49' LT	100,849.841	619,421.239	PK NAIL



FOUND 4" BRASS CAP  
Y = 100,634.090  
X = 619,354.562

ALIGNMENT INFORMATION  
BP STA = 9+78.36  
Y = 100,633.896  
X = 619,387.337

CORNER FALLS IN BUILDING  
Y = 100,631.237  
X = 619,838.994  
(COORDINATES FROM TIE SHEET)



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

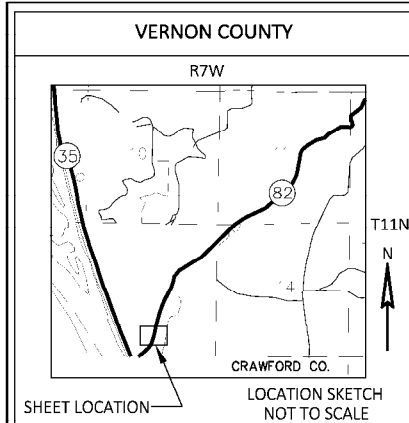
SIGNATURE: *Steven A. Alt* DATE: 12/13/2021  
PRINT NAME: STEVEN A. ALT  
REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlager* DATE: 12/13/2021  
PRINT NAME: CORY SCHLAGEL

MARILYN HAUGE  
REGISTER OF DEEDS  
VERNON COUNTY, WI  
524768  
12/14/2021 12:17 PM  
RECORDING FEE: 25.00  
TRANSFER FEE: 0.00  
PAGE COUNT: 2

RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.01  
SHEET 1 OF 2



# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.02

PART OF BLOCK 4, AND PART OF LOTS 18 & 19 BLOCK 8, AND PART OF LOTS 3 & 4, BLOCK 3, OF ORIGINAL PLAT OF DE SOTO AND PART OF LOT 1 OF CSM # 463, V.7, PG.189 RECORDED AS DOCUMENT #416178. ALL LOCATED IN THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 15, TOWNSHIP 11 NORTH, RANGE 7 WEST, VILLAGE OF DE SOTO, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

### NOTES:

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

NGS POINT UTILIZED: PID: DH4971, DESIGNATION DE SOTO GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

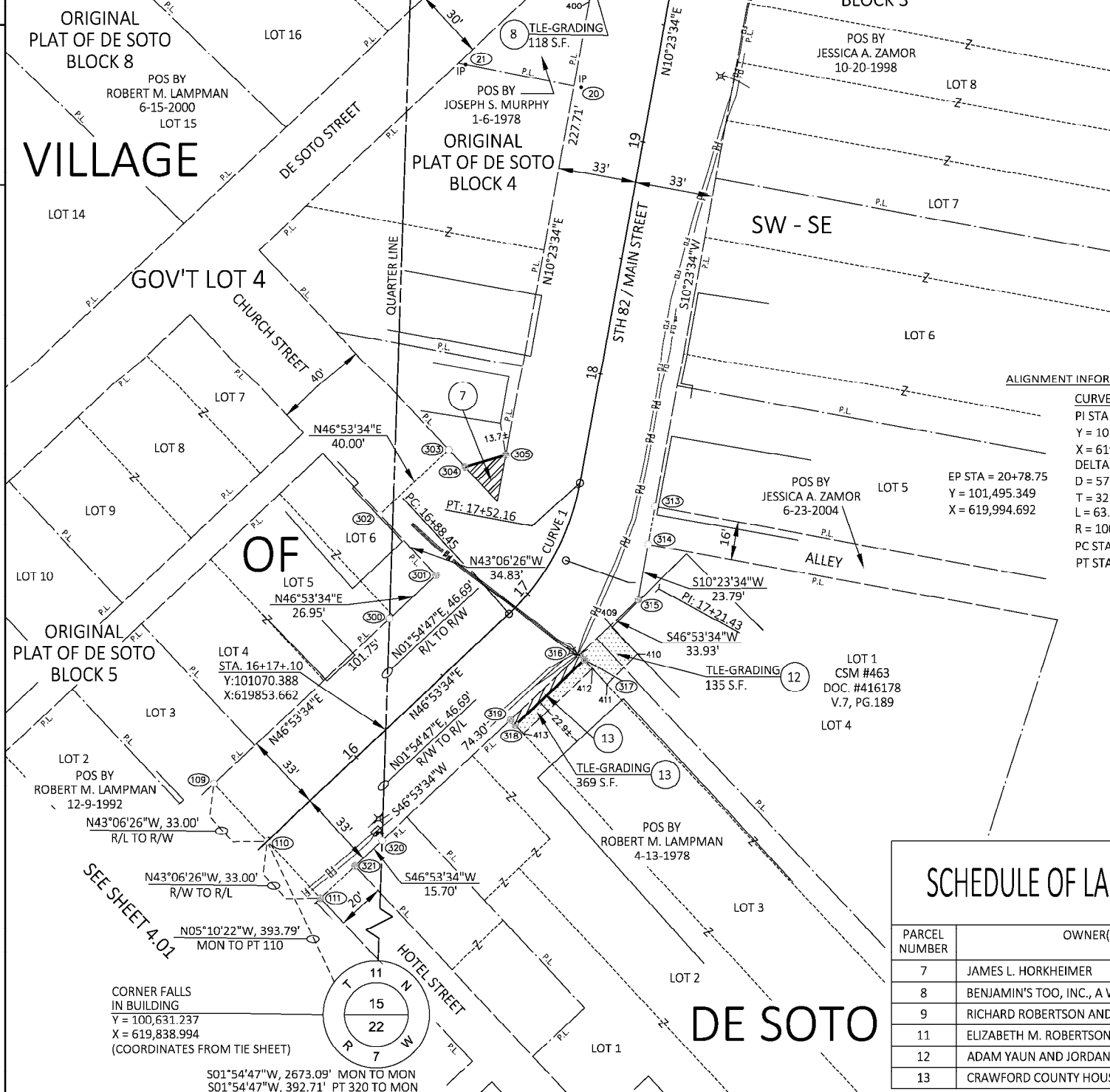
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 AND SIDE ROADS ESTABLISHED FROM ORIGINAL PLAT OF DE SOTO, CSM 463, PLATS OF SURVEYS AND FOUND MONUMENTATION IN THE FIELD.

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

TLE'S ARE REQUIRED FOR GRADING AND MAY EXTEND TO BUILDING FACES, BUILDINGS WILL NOT BE ADVERSELY AFFECTED.

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

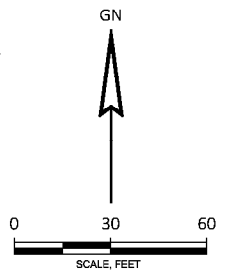
RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.02  
SHEET 1 OF 1



R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
303 - 304	S43°06'26"E	10.00'
304 - 305	N73°38'34"E	18.00'
306 - 307	S46°53'34"W	25.00'
309 - 310	N10°23'34"E	21.42'
313 - 314	S10°23'34"W	16.00'
316 - 317	S43°06'26"E	3.00'
317 - 318	S46°53'34"W	40.00'
318 - 319	N43°06'26"W	3.00'
321 - 111	S46°53'34"W	20.00'

STATION & OFFSET/COORDINATE TABLE					STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
109	15+48.38	33.00' LT	101,047.518	619,780.939	317	16+95.74	36.36' RT	101,099.648	619,937.603
110	15+48.38	0.00' RT	101,023.426	619,803.490	318	16+58.38	36.00' RT	101,072.314	619,908.400
111	15+48.38	33.00' RT	100,999.333	619,826.041	319	16+58.38	33.00' RT	101,074.504	619,906.349
300	16+50.13	33.00' LT	101,117.052	619,855.225	320	15+84.08	33.00' RT	101,023.733	619,852.108
301	16+77.08	33.00' LT	101,135.468	619,874.900	321	15+68.38	33.00' RT	101,013.001	619,840.643
302	16+77.08	67.84' LT	101,160.900	619,851.095	400	19+53.95	33.00' LT	101,378.556	619,939.721
303	17+56.04	57.12' LT	101,188.234	619,880.298	401	19+75.94	40.37' LT	101,401.509	619,936.434
304	17+48.10	49.04' LT	101,180.934	619,887.132	402	19+88.50	68.40' LT	101,418.920	619,911.135
305	17+58.19	33.00' LT	101,186.004	619,904.407	403	19+89.84	70.22' LT	101,420.572	619,909.589
306	19+85.90	33.00' LT	101,409.981	619,945.485	404	19+94.47	66.79' LT	101,424.507	619,913.793
307	19+65.81	47.87' LT	101,392.897	619,927.233	405	20+27.55	59.09' LT	101,455.651	619,927.334
308	19+83.65	71.99' LT	101,414.799	619,906.732	406	20+39.30	63.88' LT	101,468.068	619,924.748
309	20+36.34	33.00' LT	101,459.589	619,954.583	407	20+49.64	57.88' LT	101,477.163	619,932.516
310	20+57.75	33.00' LT	101,480.654	619,958.446	408	20+49.64	33.00' LT	101,472.676	619,956.983
311	20+57.75	0.00' RT	101,474.701	619,990.905	409	17+09.21	35.92' RT	101,114.196	619,948.755
312	20+57.75	33.00' RT	101,468.748	620,023.363	410	17+06.96	52.21' RT	101,102.070	619,960.105
313	17+49.10	33.06' RT	101,164.162	619,967.502	411	16+95.06	50.34' RT	101,089.420	619,947.176
314	17+37.18	34.51' RT	101,148.425	619,964.615	412	16+95.48	41.35' RT	101,095.998	619,941.019
315	17+20.30	40.04' RT	101,125.025	619,960.324	413	16+58.38	41.00' RT	101,068.663	619,911.816
316	16+95.90	33.37' RT	101,101.838	619,935.552					

**ALIGNMENT INFORMATION**  
**CURVE DATA CURVE 1**  
 PI STA = 17+21.43  
 Y = 101,141.681  
 X = 619,929.828  
 DELTA = 36°30'00", LT  
 D = 57°17'45"  
 T = 32.98'  
 L = 63.70'  
 R = 100.00'  
 PC STA = 16+88.45  
 PT STA = 17+52.16



EXISTING MONUMENTATION					
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	DESCRIPTION
20	19+17.91	29.90' LT	101,432.543	619,936.265	1" IRON PIPE
21	19+18.58	79.71' LT	101,352.190	619,887.400	1" IRON PIPE
22	19+60.20	30.16' LT	101,384.188	619,943.644	1" IRON PIPE
23	20+07.30	33.91' RT	101,418.961	620,015.157	3/4" REBAR

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
102	12/13	VERNON TELEPHONE COOP. BLANKET EASEMENT	DOC. 246911 V. 187, P. 478

UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
102	VERNON COMMUNICATIONS COOP.	RELEASE OF RIGHTS

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED S.F.			TLE S.F.
			NEW	EXISTING	TOTAL	
7	JAMES L. HORKHEIMER	FEE	161	--	161	--
8	BENJAMIN'S TOO, INC., A WISCONSIN CORPORATION	TLE	--	--	--	118
9	RICHARD ROBERTSON AND ELIZABETH M. ROBERTSON	TLE	--	--	--	745
11	ELIZABETH M. ROBERTSON	TLE	--	--	--	235
12	ADAM YAUN AND JORDAN YAUN	TLE	--	--	--	135
13	CRAWFORD COUNTY HOUSING AUTHORITY	FEE, TLE	120	--	120	369

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

**TEAM ENGINEERING**

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

SIGNATURE: *Steven A. Alt* DATE: 2/14/22  
 PRINT NAME: STEVEN A. ALT  
 REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlage* DATE: 2/14/22  
 PRINT NAME: CORY SCHLAGE

TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.03

PART OF LOT 1 OF CSM # 601, V.8, PG.215 RECORDED AS DOCUMENT #429765 AND OTHER LANDS IN THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 15, TOWNSHIP 11 NORTH, RANGE 7 WEST, VILLAGE OF DE SOTO, VERNON COUNTY, WISCONSIN.  
RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

NOTES:

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

NGS POINT UTILIZED: PID: DH4971, DESIGNATION DE SOTO GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 AND SIDE ROADS ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5150, CSM #601, PLATS OF SURVEYS AND FOUND MONUMENTATION IN THE FIELD.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

SIXTEENTH LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.

VILLAGE

R/W CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
30 - 502	369.11'	141.15'	S48°15'46"W	140.29'
507 - 508	451.61'	178.98'	N22°23'51"E	177.81'
512 - 513	451.61'	62.05'	N55°16'56"E	62.00'

EXISTING MONUMENTATION					
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	DESCRIPTION
30	34+81.31	41.25' RT	104,042.710	621,051.855	PK NAIL
31	32+78.78	41.25' RT	103,915.381	620,924.171	3/4" REBAR
32	31+36.28	41.25' RT	103,796.308	620,878.481	3/4" REBAR
33	33+37.31	127.28' LT	104,064.764	620,823.593	2" IRON PIPE
34	32+31.03	149.06' LT	103,955.579	620,730.792	3/4" IRON PIPE
35	32+44.60	101.03' RT	103,862.018	620,963.129	3/4" REBAR
36	34+41.42	151.33' RT	103,934.219	621,087.221	3/4" REBAR
37	30+00.00	41.25' RT	103,662.553	620,852.375	3/4" REBAR

STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
500	36+60.86	0.00' RT	104,170.037	621,184.999
501	36+37.03	41.25' RT	104,122.407	621,185.643
502	33+24.38	41.25' RT	103,949.314	620,947.167
503	31+73.05	83.35' RT	103,816.713	620,926.697
504	31+22.86	41.25' RT	103,783.135	620,875.910
505	31+23.05	0.00' RT	103,791.226	620,835.461
506	31+23.10	41.25' LT	103,799.176	620,794.984
507	31+36.28	41.25' LT	103,812.112	620,797.509
508	32+98.91	41.25' LT	103,976.509	620,865.261
509	33+11.68	50.43' LT	103,993.400	620,865.776
510	33+57.53	117.50' LT	104,078.366	620,848.079
511	33+66.24	113.79' LT	104,084.080	620,858.366
512	34+24.93	41.25' LT	104,078.278	620,958.673
513	34+81.31	41.25' LT	104,113.588	621,009.634
514	36+84.68	41.25' LT	104,217.668	621,184.355
515	33+01.74	45.24' LT	103,981.337	620,863.697
516	35+75.07	41.25' LT	104,161.573	621,090.188
517	36+05.09	41.25' LT	104,176.935	621,115.975

R/W COURSE TABLE		
COURSE	BEARING	DISTANCE
508 - 509	N01°44'52"E	16.90'
508 - 515	N17°56'46"W	5.07'
515 - 509	N09°46'38"E	12.24'

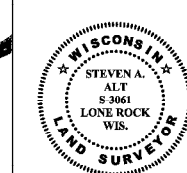
SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED S.F.			PLE S.F.
			NEW	EXISTING	TOTAL	
14	DESOTO EVANGELICAL LUTHERAN CHURCH	FEE	495	--	495	--
16	RALPH L. HICKS AND BONNIE J. HICKS	FEE	3866	--	3866	--
17	SCOTT J. DUCHARME AND KRISTIN A. DUCHARME	FEE/PLE	45	--	45	14
18	RONALD L. VON GLAHN AND TAMERA K. VON GLAHN	FEE	3977	10774	14751	--



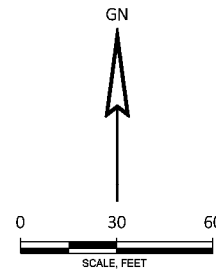
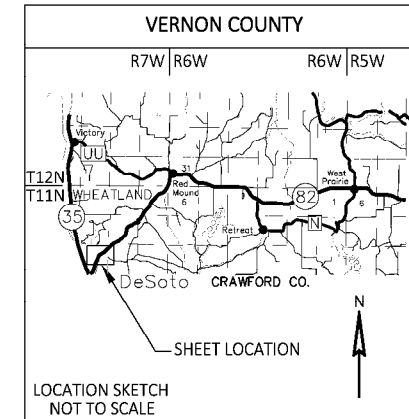
I, STEVEN A. ALT, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS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



SIGNATURE: *Steven A. Alt* DATE: 2/14/22  
 PRINT NAME: STEVEN A. ALT  
 REGISTRATION NUMBER: S-3061  
 THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE  
 SIGNATURE: *Cory Schlage* DATE: 2/14/22  
 PRINT NAME: CORY SCHLAGE

MARILYN HAUGE  
 REGISTER OF DEEDS  
 VERNON COUNTY, WI  
 525774  
 02/17/2022 02:38 PM  
 RECORDING FEE: 25.00  
 TRANSFER FEE: 0.00  
 PAGE COUNT: 1

RESERVED FOR REGISTER OF DEEDS  
 PROJECT NUMBER 5150-02-20-4.03  
 SHEET 1 OF 1



4

4

# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.04

PART OF THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 11, TOWNSHIP 11 NORTH, RANGE 7 WEST, TOWN OF WHEATLAND, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

**NOTES:**

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

NGS POINT UTILIZED: PID: DH4971, DESIGNATION DE SOTO GPS, VERNON COUNTY, WI NAD 1983(2011).

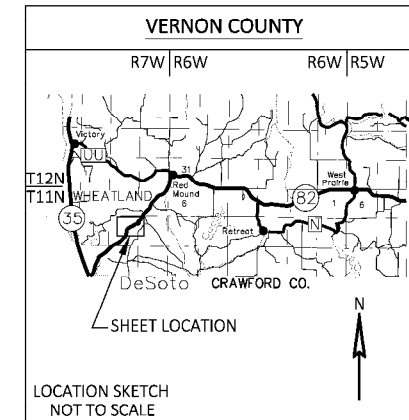
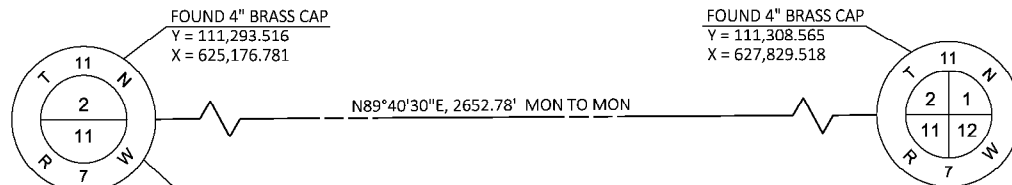
ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5150, AND EXISTING ROADWAY CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

SIXTEENTH LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.

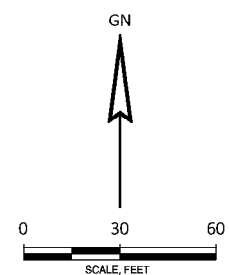
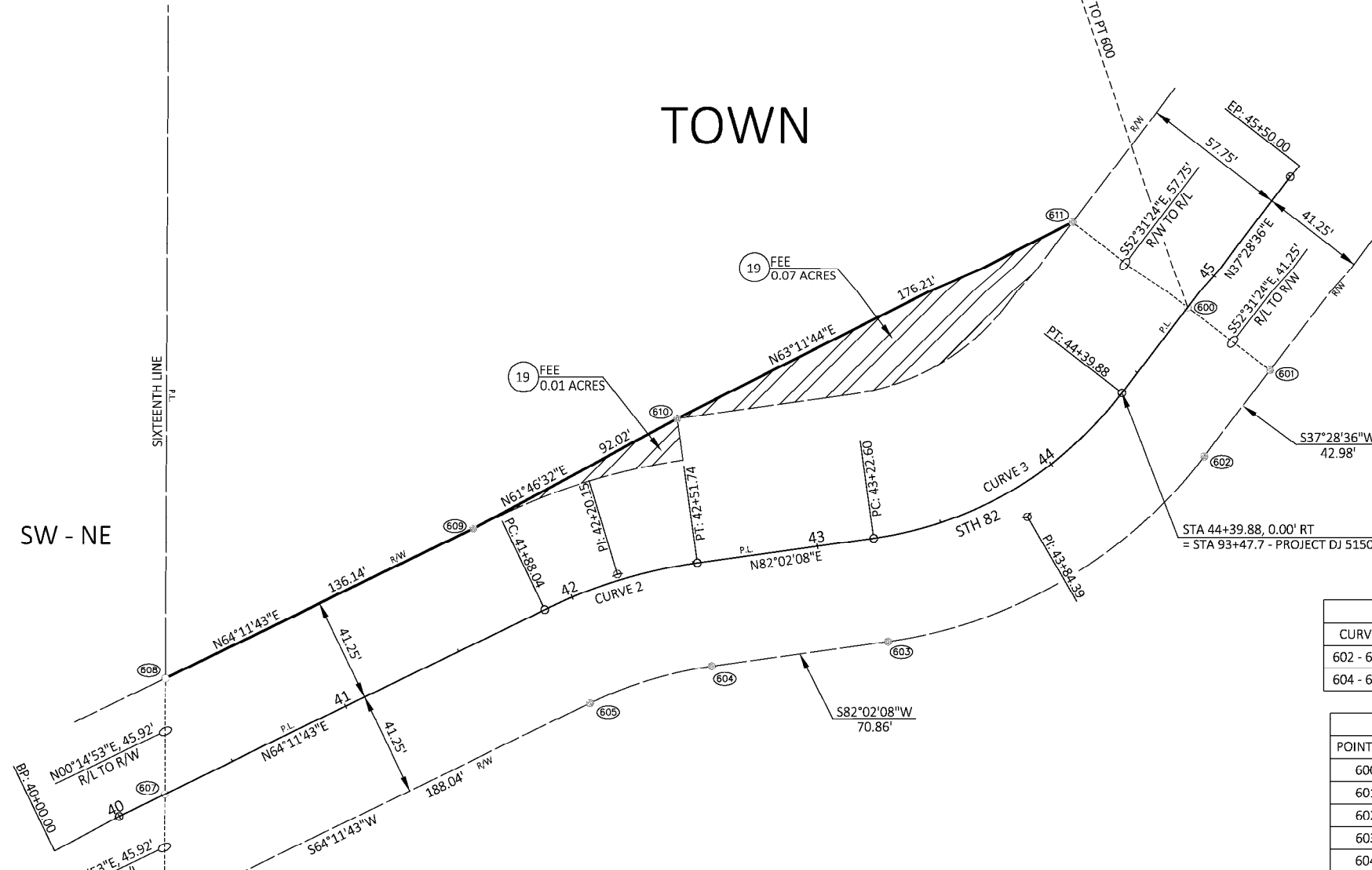


RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.04  
SHEET 1 OF 1

MARILYN HAUGE  
REGISTER OF DEEDS  
VERNON COUNTY, WI  
525775  
02/17/2022 02:38 PM  
RECORDING FEE: 25.00  
TRANSFER FEE: 0.00  
PAGE COUNT: 1

4

4



**ALIGNMENT INFORMATION**

CURVE DATA	CURVE 2	CURVE DATA	CURVE 3
PI STA =	42+20.15	PI STA =	43+84.39
Y =	109,409.049	Y =	109,431.878
X =	626,674.622	X =	626,837.791
DELTA =	17°50'25", RT	DELTA =	44°33'32", LT
D =	28°00'14"	D =	37°59'40"
T =	32.12'	T =	61.79'
L =	63.71'	L =	117.28'
R =	204.60'	R =	150.80'

BP STA = 40+00.00  
Y = 109,313.218  
X = 626,476.427  
EP STA = 45+50.00  
Y = 109,568.302  
X = 626,942.385

**R/W CURVE TABLE**

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
602 - 603	192.05'	149.36'	S59°45'22"W	145.62'
604 - 605	163.35'	50.86'	S73°06'55"W	50.66'

**STATION & OFFSET/COORDINATE TABLE**

POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
600	44+82.86	0.00' RT	109,515.016	626,901.531
601	44+82.86	41.25' RT	109,489.918	626,934.268
602	44+39.88	41.25' RT	109,455.812	626,908.119
603	42+51.74	41.25' RT	109,372.647	626,712.141
604	41+88.04	41.25' RT	109,357.934	626,663.668
605	40+00.00	41.25' RT	109,276.081	626,494.383
606	40+20.17	0.00' RT	109,321.996	626,494.582
607	40+40.33	41.25' LT	109,367.911	626,494.781
608	41+76.47	41.25' LT	109,427.173	626,617.345
609	42+51.74	57.75' LT	109,470.692	626,698.424
610	44+82.86	57.75' LT	109,550.154	626,855.701

**SCHEDULE OF LANDS & INTERESTS REQUIRED**

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

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES
			NEW	EXISTING	TOTAL	
19	VERNON COUNTY	FEE	0.08	0.49	0.57	--

# WHEATLAND



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

SIGNATURE: *Steven A. Alt* DATE: 2/14/22  
PRINT NAME: STEVEN A. ALT  
REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlagel* DATE: 2/14/22  
PRINT NAME: CORY SCHLAGEL

# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.05

PART OF LOT 1 OF CSM # 111, V.4, PG.239 RECORDED AS DOCUMENT #372597 LOCATED IN AND PART OF THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 31, TOWNSHIP 12 NORTH, RANGE 6 WEST, TOWN OF WHEATLAND, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

**NOTES:**

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

NGS POINT UTILIZED: PID: DHS168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 AND SIDE ROADS ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5236 AND DJ 5307, CSM 111, 123, 219 AND 296, PLATS OF SURVEYS, MONUMENTATION IN THE FIELD AND EXISTING CENTERLINE.

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

TLE'S ARE REQUIRED FOR GRADING AND MAY EXTEND TO BUILDING FACES. BUILDINGS WILL NOT BE ADVERSELY AFFECTED.

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

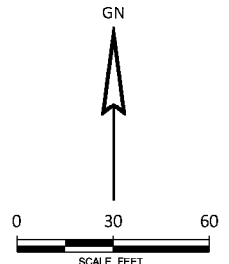
FOUND 1 1/4" IRON ROD  
Y = 119,093.526  
X = 636,000.832

FOUND 2 1/4" IRON PIPE  
Y = 119,004.539  
X = 633,199.653

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	21/22	VERNON ELECTRIC COOP	DOC. 354150 V. 425, P. 174
102	21	VERNON TELEPHONE COOP.	DOC. 246787 V. 187, P. 312

UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS
102	VERNON COMMUNICATIONS COOP.	RELEASE OF RIGHTS

RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.05  
SHEET 1 OF 1



EXISTING MONUMENTATION					
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	DESCRIPTION
40	61+33.77	33.00' LT	118,687.187	634,375.845	3/4" REBAR
41	62+88.09	33.00' LT	118,634.291	634,520.818	3/4" REBAR
42	61+52.21	41.25' RT	118,611.114	634,367.719	3/4" REBAR
43	61+22.50	33.00' RT	118,629.048	634,342.636	3/4" REBAR

POS BY  
F. CURTIS CROOK  
3-26-97  
NW - SW

**ALIGNMENT SUB-CURVE**  
STA 50+00.00 - STA 55+00.00  
L = 500.00'  
R = 573.00'  
LCH = 484.29'  
LCB = N32°46'18"E

**ALIGNMENT INFORMATION**

<b>CURVE DATA CURVE 5</b>	<b>CURVE DATA CURVE 13</b>
PI STA = 57+11.04	PI STA = 66+61.54
Y = 118,937.944	Y = 118,475.288
X = 633,592.315	X = 634,860.325
DELTA = 102°16'19", RT	DELTA = 28°18'19", LT
D = 09°59'57"	D = 03°59'59"
T = 711.05'	T = 361.22'
L = 1022.80'	L = 707.68'
R = 573.00'	R = 1432.50'
PC STA = 50+00.00	PC STA = 63+00.32
PT STA = 60+22.80	PT STA = 70+08.00
DB = N07°46'24"E	DA = N81°44'25"E

STATION & OFFSET/COORDINATE TABLE				
POINT	STATION	OFFSET	Y COORDINATE	X COORDINATE
800	55+24.34	41.25' RT	118617.385	633799.637
801	55+24.34	48.25' RT	118611.311	633803.116
802	56+27.40	48.25' RT	118650.613	633888.784
803	57+30.45	53.25' RT	118669.020	633980.900
804	58+76.62	53.25' RT	118673.354	634113.056
805	61+22.41	53.25' RT	118610.057	634335.605
806	59+19.80	58.93' RT	118662.589	634150.906
807	59+43.33	60.75' RT	118656.802	634171.252

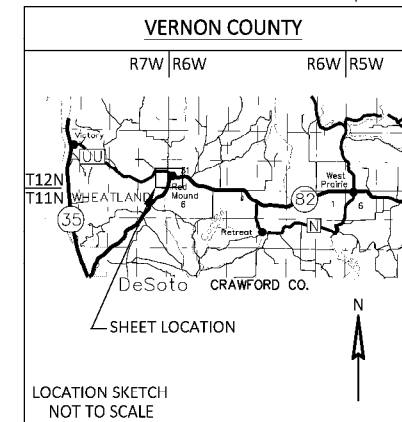
STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
700	63+00.31	0.00' RT	118,599.101	634,520.989
701	63+00.31	41.25' RT	118,560.350	634,506.850
702	61+33.97	41.25' RT	118,617.367	634,350.581
703	61+33.97	33.00' RT	118,625.117	634,353.409
704	60+22.80	33.00' RT	118,663.224	634,248.970
705	59+52.73	33.00' RT	118,682.011	634,185.716
706	59+52.73	41.25' RT	118,673.974	634,183.855
707	59+37.62	41.25' RT	118,676.959	634,170.149
708	59+84.20	166.18' RT	118,546.627	634,177.283
709	59+57.20	172.35' RT	118,545.534	634,157.313
710	59+15.45	41.25' RT	118,680.679	634,149.915
711	55+00.00	51.25' RT	118,605.749	633,780.283
712	55+00.00	0.00' RT	118,640.643	633,758.283
713	55+00.00	41.25' LT	118,675.537	633,736.283
714	60+22.80	41.25' LT	118,732.976	634,274.420
715	60+22.80	33.00' LT	118,725.225	634,271.593
716	63+00.31	33.00' LT	118,630.102	634,532.300
717	58+19.34	41.25' LT	118,770.178	634,060.678
718	60+06.01	41.25' LT	118,738.894	634,257.432

R/W CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
704 - 705	540.00'	66.03'	N73°27'27"W	65.99'
706 - 707	531.75'	14.03'	N77°42'57"W	14.03'
707 - 710	531.75'	20.57'	N79°34'48"W	20.57'
710 - 711	531.75'	385.54'	S78°32'26"W	377.15'
706 - 711	531.75'	420.14'	S80°24'17"W	409.30'
713 - 717	614.25'	342.33'	N73°44'08"E	337.92'
718 - 714	614.25'	17.99'	S70°47'37"E	17.99'

## SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			PLE ACRES	TLE ACRES
			NEW	EXISTING	TOTAL		
21	TOWN OF WHEATLAND	FEE/TLE/PLE	--	0.54	0.54	0.06	0.20
22	WAYNE WILLIAMS	TLE	--	--	--	--	0.006

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



MARILYN HAUGE  
REGISTER OF DEEDS  
VERNON COUNTY, WI  
525782  
02/18/2022 09:12 AM  
RECORDING FEE: 25.00  
TRANSFER FEE: 0.00  
PAGE COUNT: 1



TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.06

PART OF THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 31, TOWNSHIP 12 NORTH, RANGE 6 WEST, TOWN OF WHEATLAND, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

NOTES:

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

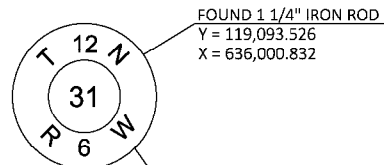
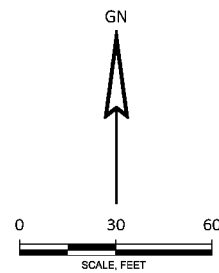
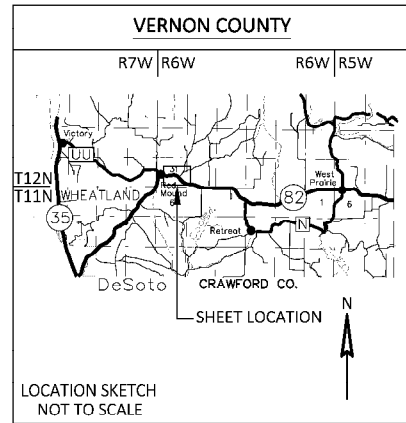
NGS POINT UTILIZED: PID: DHS168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"X24" IRON REBAR) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5307 AND EXISTING CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.



FOUND 1 1/4" IRON ROD  
Y = 119,093.526  
X = 636,000.832

S58°30'22"E, 1007.39'  
MON TO POINT 908

ALIGNMENT INFORMATION

CURVE DATA CURVE 6

PI STA = 77+88.35  
Y = 118,752.178  
X = 636,767.695  
DELTA = 59°25'26", RT  
D = 06°59'57"  
T = 467.14'  
L = 849.00'  
R = 818.60'  
PC STA = 73+21.20  
PT STA = 81+70.21  
DA = S38°50'09"E

ALIGNMENT SUB-CURVE

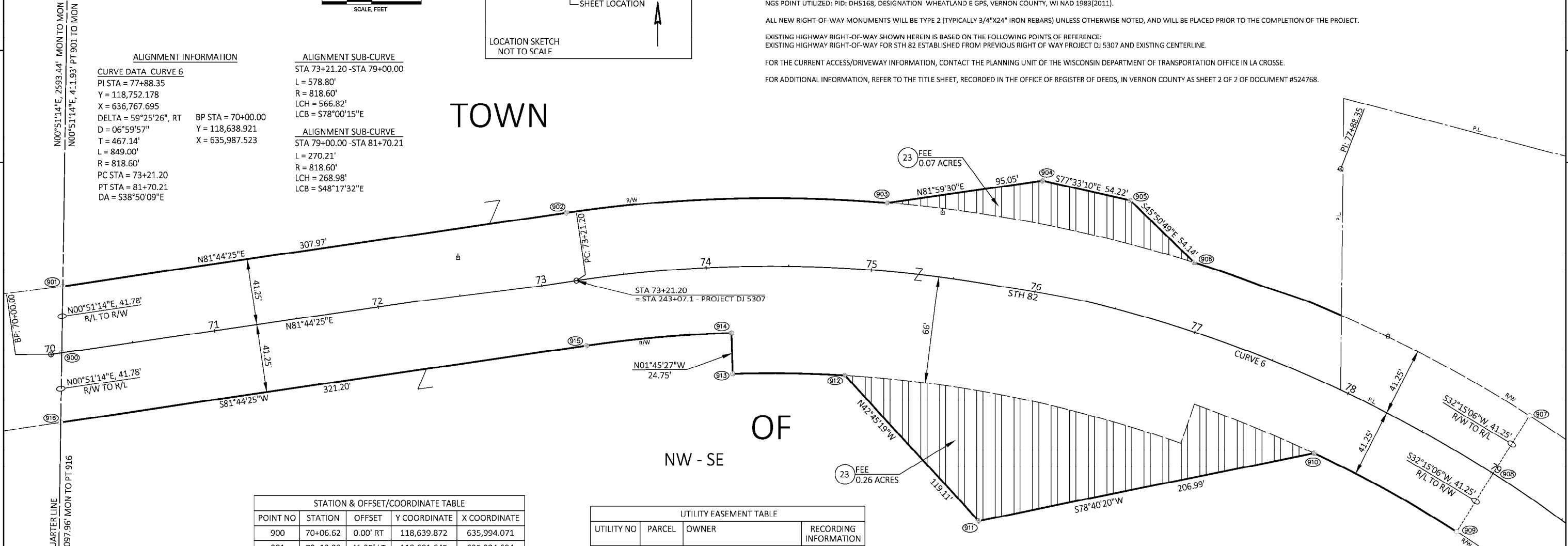
STA 73+21.20 - STA 79+00.00  
L = 578.80'  
R = 818.60'  
LCH = 566.82'  
LCB = S78°00'15"E

ALIGNMENT SUB-CURVE

STA 79+00.00 - STA 81+70.21  
L = 270.21'  
R = 818.60'  
LCH = 268.98'  
LCB = S48°17'32"E

TOWN

OF  
NW - SE



STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
900	70+06.62	0.00' RT	118,639.872	635,994.071
901	70+13.23	41.25' LT	118,681.645	635,994.694
902	73+21.20	41.25' LT	118,725.888	636,299.467
903	75+06.12	41.25' LT	118,731.937	636,493.197
904	75+91.99	67.00' LT	118,745.179	636,587.319
905	76+42.11	67.00' LT	118,733.493	636,640.261
906	76+86.79	41.25' LT	118,695.780	636,679.105
907	79+00.00	41.25' LT	118,602.144	636,881.844
908	79+00.00	0.00' RT	118,567.258	636,859.831
909	79+00.00	41.25' RT	118,532.373	636,837.819
910	77+96.53	41.25' RT	118,579.423	636,751.631
911	75+92.38	143.00' RT	118,538.766	636,548.671
912	74+87.99	66.00' RT	118,626.222	636,467.813
913	74+14.10	66.00' RT	118,627.204	636,399.913
914	74+14.10	41.25' RT	118,651.942	636,399.154
915	73+21.20	41.25' RT	118,644.244	636,311.319
916	70+00.00	41.25' RT	118,598.099	635,993.449

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	23	VERNON ELECTRIC COOP BLANKET EASEMENT	DOC. 165150 V. 98, P. 23
101	23	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 500892

UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS

R/W CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
902 - 903	859.85'	194.24'	N88°12'42"E	193.82'
906 - 907	859.85'	223.95'	S65°12'35"E	223.32'
909 - 910	777.35'	98.26'	N61°22'11"W	98.19'
912 - 913	752.60'	67.93'	N89°10'18"W	67.91'
914 - 915	777.35'	88.22'	S84°59'29"W	88.17'

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES
			NEW	EXISTING	TOTAL	
23	IVAN A. KUNERT AND LINDA A. KUNERT TRUST	FEE	0.33	1.74	2.07	--

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

WHEATLAND



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

SIGNATURE: *Steven A. Alt* DATE: 2/14/22  
PRINT NAME: STEVEN A. ALT  
REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlagel* DATE: 2/14/22  
PRINT NAME: CORY SCHLAGEL

TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.07

PART OF THE SOUTHEAST QUARTER (SE 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 31, TOWNSHIP 12 NORTH, RANGE 6 WEST, TOWN OF WHEATLAND, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	24	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165147 V. 99, P. 170

UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS

ALIGNMENT INFORMATION

CURVE DATA CURVE 7

PI STA = 83+21.99  
 Y = 117,131.573  
 X = 638,451.611  
 DELTA = 34°52'14", LT BP STA = 80+00.00  
 D = 06°59'57" Y = 117,318.979  
 T = 257.09' X = 638,189.777  
 L = 498.21' EP STA = 86+50.00  
 R = 818.60' Y = 117,127.237  
 PC STA = 80+64.90 X = 638,795.563  
 PT STA = 85+63.11

ALIGNMENT SUB-CURVE

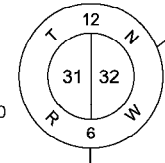
STA 80+64.90 - STA 81+17.95 L = 53.04'  
 R = 818.60' LCH = 53.03'  
 LCB = S56°15'49"E

ALIGNMENT SUB-CURVE

STA 81+17.95 - STA 84+70.29 L = 352.34'  
 R = 818.60' LCH = 349.63'  
 LCB = S70°27'02"E

ALIGNMENT SUB-CURVE

STA 84+70.29 - STA 85+63.11 L = 92.82'  
 R = 818.60' LCH = 92.77'  
 LCB = S86°01'46"E



FOUND 4" BRASS CAP  
 Y = 119,107.640  
 X = 638,633.758

RESERVED FOR REGISTER OF DEEDS  
 PROJECT NUMBER 5150-02-20-4.07  
 SHEET 1 OF 1

MARILYN HALICE  
 REGISTER OF DEEDS  
 VERNON COUNTY, WI  
 525859  
 02/23/2022 11:10 AM  
 RECORDING FEE: 25.00  
 TRANSFER FEE: 0.00  
 PAGE COUNT: 1

TOWN

4

4

STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
1000	84+70.29	0.00' RT	117,134.756	638,616.131
1001	84+74.91	41.25' RT	117,093.237	638,615.760
1002	83+54.17	41.25' RT	117,117.677	638,491.435
1003	82+57.04	84.00' RT	117,110.847	638,378.768
1004	82+07.12	89.00' RT	117,128.629	638,326.285
1005	81+57.82	41.25' RT	117,195.477	638,300.961
1006	81+41.64	41.25' RT	117,203.885	638,286.194
1007	81+17.95	0.00' RT	117,251.749	638,286.658
1008	80+91.24	41.25' LT	117,300.520	638,287.131
1009	81+18.39	41.25' LT	117,286.556	638,308.800
1010	81+18.39	49.50' LT	117,293.563	638,313.154
1011	81+63.00	49.50' LT	117,272.426	638,349.344
1012	82+56.70	141.00' LT	117,319.358	638,463.313
1013	83+98.39	49.50' LT	117,195.282	638,555.795
1014	84+30.29	49.50' LT	117,189.495	638,585.198
1015	84+30.29	41.25' LT	117,181.371	638,583.763

STA 80+64.90  
 = STA 268+25.1 - PROJECT DJ 5307

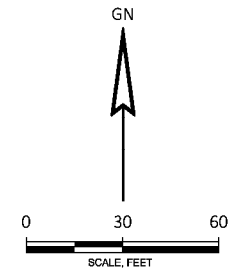
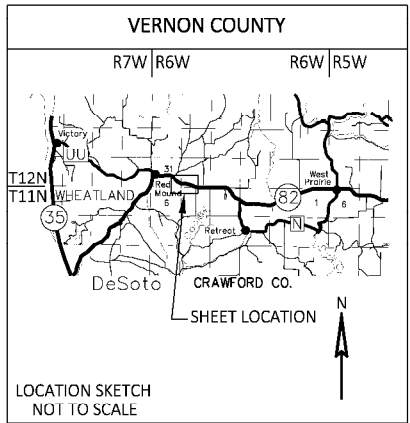
PARCEL 2  
 POS BY  
 LAURENCE E. JOHNS III  
 6-29-16

SE - SE

OF

24 FEE  
 0.13 ACRES

PARCEL 1  
 POS BY  
 LAURENCE E. JOHNS III  
 6-29-16



POS BY  
 JESSICA A. SANDRY  
 8-26-2010

SW - SW

NOTES:

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

NGS POINT UTILIZED: PID: DHS168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
 EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5307, PLATS OF SURVEY AND EXISTING CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES
			NEW	EXISTING	TOTAL	
24	GLORIA J. BINGER, TRUSTEE OF THE GLORIA J. BINGER TRUST	FEE	0.37	0.72	1.09	--

EXISTING MONUMENTATION					
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	DESCRIPTION
50	84+65.18	41.25' LT	117,176.304	638,616.503	3/4" REBAR
51	85+64.56	41.25' LT	117,169.561	638,710.650	3/4" REBAR

R/W CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1001 - 1002	859.85'	126.82'	N78°52'44"W	126.70'
1005 - 1006	859.85'	16.99'	N60°20'40"W	16.99'
1008 - 1009	777.35'	25.78'	S57°12'02"E	25.78'
1010 - 1011	769.10'	41.92'	S59°42'44"E	41.91'
1013 - 1014	769.10'	29.97'	S78°51'54"E	29.97'
1015 - 50	777.35'	33.13'	S81°12'09"E	33.13'



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

SIGNATURE: *Steven A. Alt* DATE: 2/21/22  
 PRINT NAME: STEVEN A. ALT  
 REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlager* DATE: 2/21/22  
 PRINT NAME: CORY SCHLAGEL

TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.08

PART OF THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) AND THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 4, TOWNSHIP 11 NORTH, RANGE 6 WEST, TOWN OF STERLING, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

NOTES:

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

NGS POINT UTILIZED: PID: DH5168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5353 AND EXISTING CENTERLINE.

FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN LA CROSSE.  
FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

SIXTEENTH LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.

RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.08  
SHEET 1 OF 1

FRACTIONAL  
NW - NE

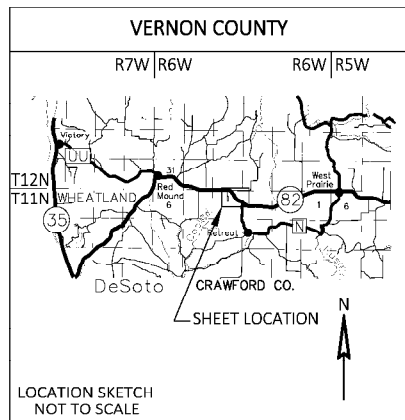
FRACTIONAL  
NE - NE

TOWN

SW - NE

SE - NE

STERLING



STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
1100	96+12.15	0.00' RT	114,877.739	648,139.614
1101	96+12.15	41.25' RT	114,846.809	648,112.321
1102	95+37.18	41.25' RT	114,900.797	648,055.775
1103	94+12.15	65.00' RT	114,986.016	647,952.351
1104	93+62.15	65.00' RI	115,029.716	647,921.666
1105	91+37.15	55.00' RT	115,225.506	647,808.144
1106	91+37.15	41.25' RT	115,232.914	647,819.728
1107	90+19.92	41.25' RT	115,331.668	647,756.570
1108	90+44.99	0.00' RT	115,332.778	647,804.825
1109	90+70.05	41.25' LT	115,333.887	647,853.080
1110	91+37.15	41.25' LT	115,277.363	647,889.230
1111	93+62.15	60.00' LT	115,098.846	648,025.810
1112	94+12.15	60.00' LT	115,060.501	648,052.735
1113	95+37.18	41.25' LT	114,958.186	648,115.043
1114	96+12.15	41.25' LT	114,908.669	648,166.907

R/W CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1101 - 1102	996.25'	78.20'	N46°19'33"W	78.18'
1113 - 1114	913.75'	71.72'	S46°19'33"E	71.71'

SCHEDULE OF LANDS & INTERESTS REQUIRED

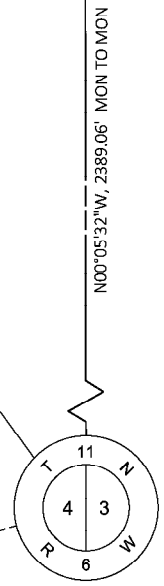
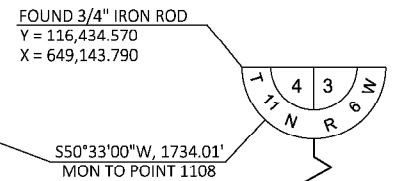
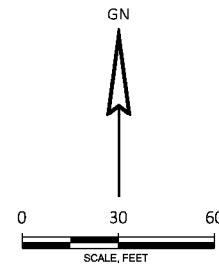
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES
			NEW	EXISTING	TOTAL	
26	CLEMENT J. WALLESER	FEE	0.26	1.07	1.33	--

ALIGNMENT INFORMATION		ALIGNMENT SUB-CURVE	
PI STA = 97+17.12	Y = 114,766.544	STA 93+45.90 - STA 96+12.15	L = 266.25'
X = 648,166.958	DELTA = 42°29'00", LT	R = 955.00'	R = 955.00'
D = 05°59'58"	T = 371.22'	LCH = 265.39'	LCH = 265.39'
L = 708.11'	L = 708.11'	LCB = S40°35'16"E	LCB = S40°35'16"E
R = 955.00'	PC STA = 93+45.90	ALIGNMENT SUB-CURVE	STA 96+12.15 - STA 100+54.01
PT STA = 100+54.01	DA = S75°05'03"E	L = 441.86'	L = 441.86'
		R = 955.00'	R = 955.00'
		LCH = 437.93'	LCH = 437.93'
		LCB = S61°49'46"E	LCB = S61°49'46"E
		BP STA = 90+00.00	Y = 115,370.677
		Y = 115,370.677	X = 647,780.587
		X = 647,780.587	

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	26	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165140 V. 98, P. 20
102	26	VERNON TELEPHONE COOP. BLANKET EASEMENT	DOC. 229269 V. 147, P. 626

UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS
102	VERNON COMMUNICATIONS COOP.	RELEASE OF RIGHTS



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

SIGNATURE: *Steven A. Alt* DATE: 2/21/22  
 PRINT NAME: STEVEN A. ALT  
 REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlager* DATE: 2/21/22  
 PRINT NAME: CORY SCHLAGEL

# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.09

PART OF THE NORTHEAST QUARTER (NE 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) AND THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 3, TOWNSHIP 11 NORTH, RANGE 6 WEST, TOWN OF STERLING, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

### NOTES:

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

NGS POINT UTILIZED: PID: DHS168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

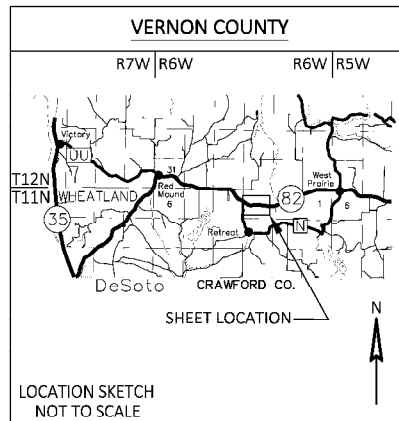
ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 AND ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5353 AND EXISTING CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

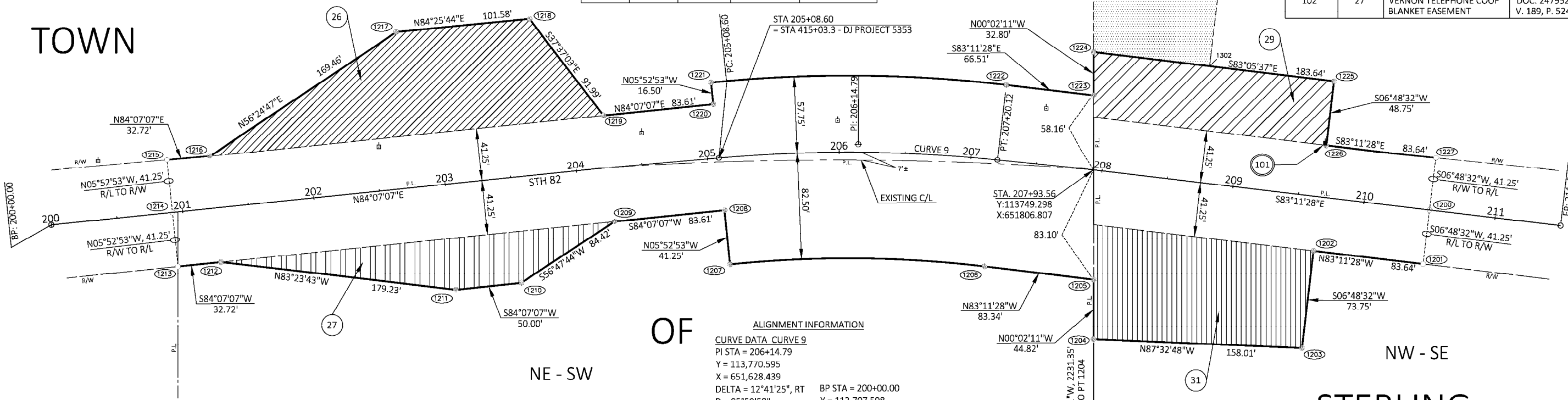
QUARTER LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.



CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1206 - 1207	872.50'	193.25'	N89°32'11"W	192.85'
1221 - 1222	1012.75'	224.31'	S89°32'11"E	223.85'



UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	29/31	VERNON ELECTRIC COOP	DOC. 165137 V. 99, P. 166
101	27	VERNON ELECTRIC COOP	DOC. 165139 V. 99, P. 167
101	26	VERNON ELECTRIC COOP	DOC. 165140 V. 98, P. 20
102	26	VERNON TELEPHONE COOP	DOC. 229269 V. 147, P. 626
102	27	VERNON TELEPHONE COOP	DOC. 247952 V. 189, P. 524



**ALIGNMENT INFORMATION**

**CURVE DATA CURVE 9**  
 PI STA = 206+14.79  
 Y = 113,770.595  
 X = 651,628.439  
 DELTA = 12°41'25", RT  
 D = 05°59'58"  
 T = 106.19'  
 L = 211.52'  
 R = 955.00'  
 PC STA = 205+08.60  
 PT STA = 207+20.12

BP STA = 200+00.00  
 Y = 113,707.598  
 X = 651,016.881

EP STA = 211+50.00  
 Y = 113,707.040  
 X = 652,160.733

STATION & OFFSET/COORDINATE TABLE					STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
1200	210+50.00	0.00' RT	113,718.895	652,061.438	1216	201+25.00	41.25' LT	113,761.439	651,136.996
1201	210+50.00	41.25' RT	113,677.936	652,056.548	1217	202+75.03	120.03' LT	113,855.182	651,278.160
1202	209+66.36	41.25' RT	113,687.853	651,973.494	1218	203+76.61	119.48' LT	113,865.043	651,379.263
1203	209+66.36	115.00' RT	113,614.623	651,964.751	1219	204+24.99	41.25' LT	113,792.179	651,435.411
1204	208+08.81	127.00' RT	113,621.386	651,806.888	1220	205+08.60	41.25' LT	113,800.746	651,518.577
1205	208+03.46	82.50' RT	113,666.206	651,806.860	1221	205+08.60	57.75' LT	113,817.159	651,516.886
1206	207+20.12	82.50' RT	113,676.087	651,724.102	1222	207+20.12	57.75' LT	113,815.348	651,740.730
1207	205+08.60	82.50' RT	113,677.648	651,531.257	1223	207+86.63	57.75' LT	113,807.462	651,806.770
1208	205+08.60	41.25' RT	113,718.680	651,527.031	1224	207+82.72	90.31' LT	113,840.259	651,806.749
1209	204+24.99	41.25' RT	113,710.113	651,443.865	1225	209+66.36	90.00' LT	113,818.177	651,989.055
1210	203+49.99	80.00' RT	113,663.882	651,373.228	1226	209+66.36	41.25' LT	113,769.771	651,983.275
1211	202+99.99	80.00' RT	113,658.759	651,323.491	1227	210+50.00	41.25' LT	113,759.854	652,066.329
1212	201+25.00	41.25' RT	113,679.373	651,145.450	1300	207+73.12	170.31' LT	113,920.832	651,806.698
1213	200+92.28	41.25' RT	113,676.021	651,112.902	1301	208+71.34	170.00' LT	113,908.878	651,904.193
1214	200+92.28	0.00' RT	113,717.053	651,108.675	1302	208+71.34	90.16' LT	113,829.602	651,894.728
1215	200+92.28	41.25' LT	113,758.086	651,104.449					

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES
			NEW	EXISTING	TOTAL	
26	CLEMENT J. WALLESER	FEE	0.36	0.78	1.14	--
27	HARLESS GRAVEL INC.	FEE	0.16	0.89	1.05	--
29	RONALD AND NATALIA SCOVILLE	FEE/TLE	0.20	0.25	0.45	0.17
31	GARY F. SCOVILLE	FEE	0.30	0.24	0.54	--

UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS
102	VERNON COMMUNICATIONS COOP.	RELEASE OF RIGHTS

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

SIGNATURE: *Steven A. Alt* DATE: 2/21/22  
 PRINT NAME: STEVEN A. ALT  
 REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlagel* DATE: 2/21/22  
 PRINT NAME: CORY SCHLAGEL



# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.10

PART OF THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 2, TOWNSHIP 11 NORTH, RANGE 6 WEST, TOWN OF STERLING, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

**NOTES:**

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

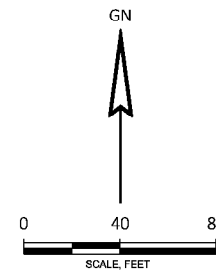
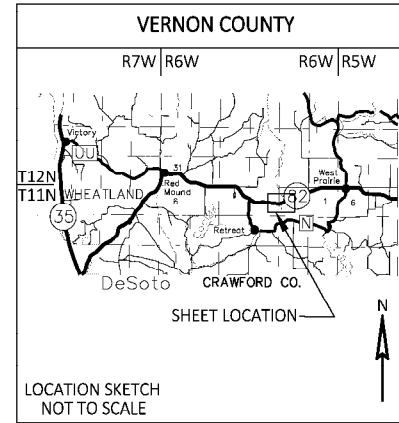
NCS POINT UTILIZED: PID: DHS168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"X24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5353 AND EXISTING CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.



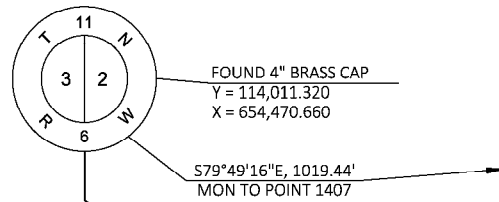
ALIGNMENT INFORMATION	
<b>CURVE DATA CURVE 10</b>	<b>ALIGNMENT SUB-CURVE</b>
PI STA = 302+40.46	STA 299+66.62 - STA 301+18.60
Y = 113,416.650	L = 151.98'
X = 654,592.828	R = 955.00'
DELTA = 32°00'01", LT	LCH = 151.82'
D = 05°59'58"	LCB = S87°45'01"E
T = 273.85'	
L = 533.38'	<b>ALIGNMENT SUB-CURVE</b>
R = 955.00'	STA 301+18.60 - STA 305+00.00
PC STA = 299+66.62	L = 381.40'
PT STA = 305+00.00	R = 955.00'
DB = S83°11'28"E	LCH = 378.87'
	LCB = N76°14'59"E

MARILYN HAUGE  
REGISTER OF DEEDS  
VERNON COUNTY, WI  
525901  
02/25/2022 02:09 PM  
RECORDING FEE: 25.00  
TRANSFER FEE: 0.00  
PAGE COUNT: 1

RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.010  
SHEET 1 OF 1

4

4



FOUND 4" BRASS CAP  
Y = 114,011.320  
X = 654,470.660

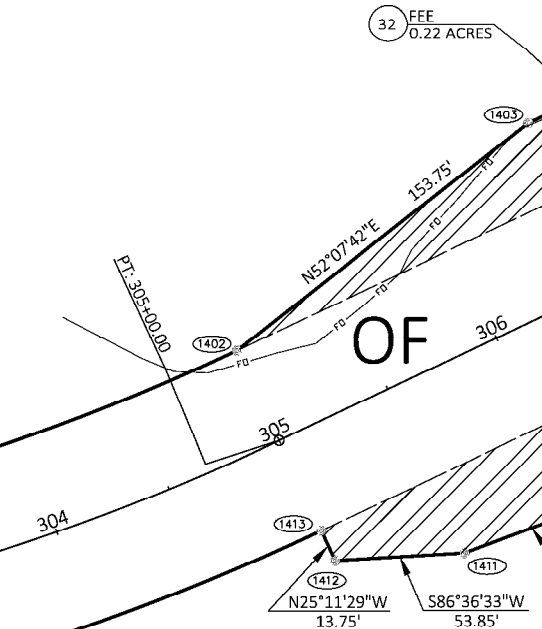
S79°49'16"E, 1019.44'  
MON TO POINT 1407

## TOWN

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
102	32	VERNON TELEPHONE COOP. BLANKET EASEMENT	DOC. 246788 V. 187, P. 213
101	32	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165136 V. 99, P. 165

UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
102	VERNON COMMUNICATIONS COOP.	RELEASE OF RIGHTS
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS

R/W CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1401 - 1402	913.75'	363.40'	N76°12'07"E	361.02'
1413 - 1414	996.25'	399.40'	S76°17'36"W	396.73'



STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
1400	301+18.60	0.00' RT	113,443.156	654,472.615
1401	301+20.19	41.25' LT	113,484.435	654,472.473
1402	305+00.00	41.25' LT	113,570.537	654,823.070
1403	306+50.00	75.00' LT	113,664.925	654,944.440
1404	308+00.00	75.00' LT	113,728.771	655,080.174
1405	309+10.00	41.25' LT	113,745.052	655,194.077
1406	312+00.00	41.25' LT	113,868.489	655,456.495
1407	312+00.00	0.00' RT	113,831.163	655,474.053
1408	312+00.00	41.25' RT	113,793.836	655,491.611
1409	308+00.00	41.25' RT	113,623.578	655,129.655
1410	306+09.57	80.00' RT	113,507.460	654,973.834
1411	305+50.00	75.00' RT	113,486.627	654,917.798
1412	305+00.00	55.00' RT	113,483.441	654,864.038
1413	305+00.00	41.25' RT	113,495.884	654,858.186
1414	301+17.14	41.25' RT	113,401.879	654,472.757

## SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLF ACRES
			NEW	EXISTING	TOTAL	
32	EDWARD D. AND VIVAN S. WALLESER	FEE	0.38	2.05	2.43	--

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



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

SIGNATURE: *Steven A. Alt* DATE: 2/24/22  
PRINT NAME: STEVEN A. ALT  
REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlagel* DATE: 2/24/22  
PRINT NAME: CORY SCHLAGEL

# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.11

PART OF THE SOUTHWEST QUARTER (SW 1/4) OF THE NORTHWEST QUARTER (NW 1/4), THE SOUTHEAST QUARTER (SE 1/4) OF THE NORTHWEST QUARTER (NW 1/4), THE NORTHEAST QUARTER (NE 1/4) OF THE SOUTHWEST QUARTER (SW 1/4), AND THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) OF SECTION 2, TOWNSHIP 11 NORTH, RANGE 6 WEST, TOWN OF STERLING, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

**NOTES:**

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

NGS POINT UTILIZED: PID: DH5168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

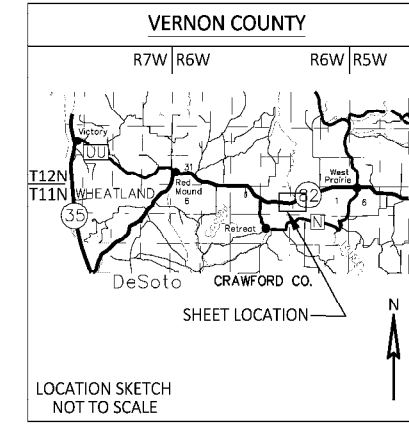
ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 AND ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5353 AND EXISTING CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

SIXTEENTH LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.



MARILYN HAUGE  
REGISTER OF DEEDS  
VERNON COUNTY, WI  
525902  
02/25/2022 02:09 PM  
RECORDING FEE: 25.00  
TRANSFER FEE: 0.00  
PAGE COUNT: 1

RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.011  
SHEET 1 OF 1

TOWN

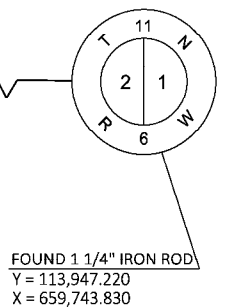
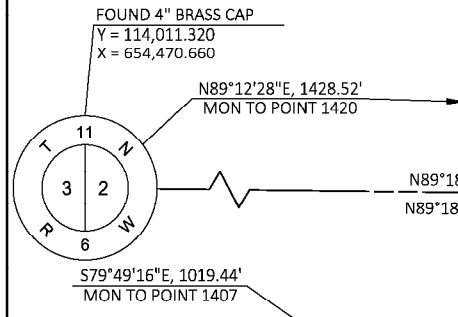
SE - NW

SW - NW

ALIGNMENT INFORMATION  
EP STA = 317+00.00  
Y = 114,043.985  
X = 655,926.498

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
102	32	VERNON TELEPHONE COOP. BLANKET EASEMENT	DOC. 246788 V. 187, P. 213
101	32	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165136 V. 99, P. 165

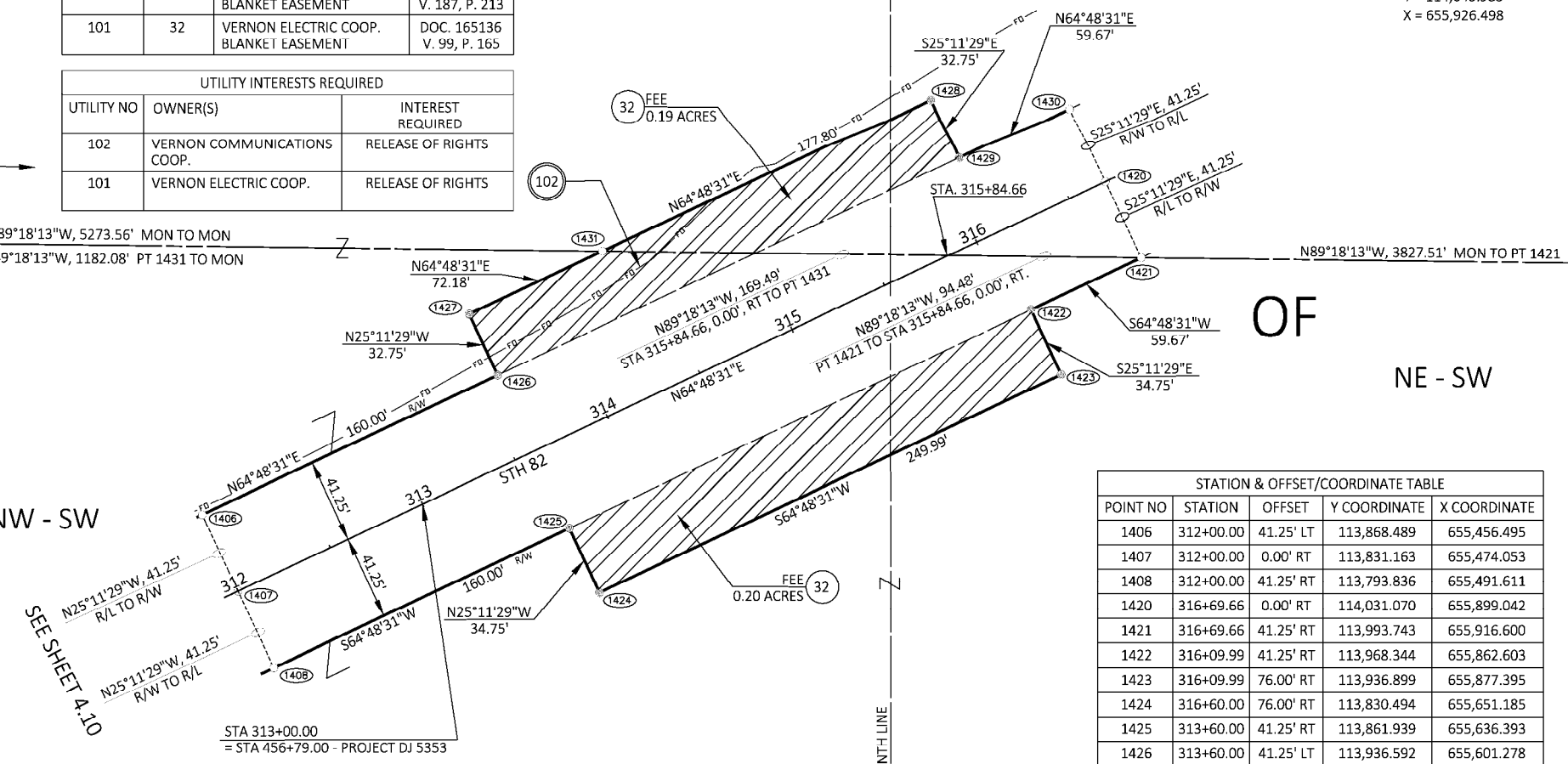
UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
102	VERNON COMMUNICATIONS COOP.	RELEASE OF RIGHTS
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS



NW - SW

NE - SW

STERLING



STATION & OFFSET/COORDINATE TABLE					
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	
1406	312+00.00	41.25' LT	113,868.489	655,456.495	
1407	312+00.00	0.00' RT	113,831.163	655,474.053	
1408	312+00.00	41.25' RT	113,793.836	655,491.611	
1420	316+69.66	0.00' RT	114,031.070	655,899.042	
1421	316+69.66	41.25' RT	113,993.743	655,916.600	
1422	316+09.99	41.25' RT	113,968.344	655,862.603	
1423	316+09.99	76.00' RT	113,936.899	655,877.395	
1424	316+60.00	76.00' RT	113,830.494	655,651.185	
1425	313+60.00	41.25' RT	113,861.939	655,636.393	
1426	313+60.00	41.25' LT	113,936.592	655,601.278	
1427	313+60.00	74.00' LT	113,966.228	655,587.338	
1428	316+09.99	74.00' LT	114,072.633	655,813.548	
1429	316+09.99	41.25' LT	114,042.998	655,827.488	
1430	316+69.66	41.25' LT	114,068.397	655,881.484	
1431	314+32.18	74.00' LT	113,996.952	655,652.655	

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES
			NEW	EXISTING	TOTAL	
32	EDWARD D. AND VIVAN S. WALLESER	FEE	0.39	0.89	1.28	--

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

**TEAM ENGINEERING**

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

SIGNATURE: *Steven A. Alt* DATE: 2/24/22  
 PRINT NAME: STEVEN A. ALT  
 REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlager* DATE: 2/24/22  
 PRINT NAME: CORY SCHLAGEL

# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.12

PART OF THE SOUTHWEST QUARTER (SW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 31, TOWNSHIP 12 NORTH, RANGE 5 WEST AND THE FRACTIONAL NORTHWEST QUARTER (NW 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 6, TOWNSHIP 11 NORTH, RANGE 5 WEST, TOWN OF STERLING, VERNON COUNTY, WISCONSIN

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

**NOTES:**

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

NGS POINT UTILIZED: PID: DH5168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

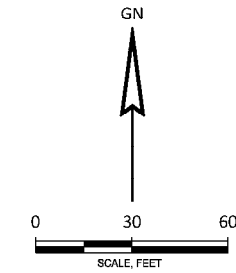
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 AND SIDE ROADS ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5353 AND EXISTING CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

SIXTEENTH LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.

R/W CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1508 - 1509	675.05'	460.24'	N57°24'22"W	451.38'
1511 - 1518	766.30'	23.08'	S76°04'30"E	23.08'
1518 - 1512	766.30'	149.57'	S69°37'14"E	149.34'
1502 - 1503	355.73'	34.76'	S52°40'49"W	34.74'
1503 - 1504	355.73'	7.90'	S49°14'41"W	7.90'
1523 - 1505	757.55'	90.65'	S46°53'36"E	90.60'
1504 - 1524	757.55'	8.01'	S47°57'46"W	8.01'
1524 - 1525	355.73'	33.73'	S44°36'05"W	33.71'
1526 - 1523	757.55'	34.46'	S51°39'46"E	35.46'



MARILYN HAUGE  
REGISTER OF DEEDS  
VERNON COUNTY, WI  
526139  
03/16/2022 09:34 AM  
RECORDING FEE: 25.00  
TRANSFER FEE: 0.00  
PAGE COUNT: 1

RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.12  
SHEET 1 OF 1

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	33	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165128 V. 99, P.162
101	34	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165129 V. 98, P. 16
102	33	VERNON TELEPHONE COOP. BLANKET EASEMENT	DOC. 247095 V. 187, P. 730

UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP	RELEASE OF RIGHTS
102	VERNON COMMUNICATIONS COOP	RELEASE OF RIGHTS

4

4

FOUND 1 1/4" IRON ROD  
Y = 116,429.182  
X = 667,759.698

S88°39'58"W, 4.81'  
MON TO MON

FOUND 1 1/4" IRON ROD  
Y = 116,429.070  
X = 667,754.888

FOUND 4" BRASS CAP  
Y = 116,446.837  
X = 670393.479

STATION & OFFSET/COORDINATE TABLE					STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
1500	409+75.95	213.59' LT	116,524.756	669,078.732	1515	409+47.49	208.46' LT	116,541.929	669,045.732
1501	409+95.03	181.26' LT	116,484.295	669,078.493	1516	409+58.17	246.53' LT	116,565.218	669,078.972
1502	409+84.12	138.53' LT	116,458.613	669,041.837	1518	407+03.94	50.00' LT	116,518.619	668,720.612
1503	409+76.03	105.10' LT	116,437.550	669,014.207	1519	408+57.79	138.93' LT	116,539.084	668,914.535
1504	409+74.50	97.39' LT	116,432.389	669,008.220	1520	408+98.23	118.45' LT	116,498.211	668,946.535
1505	411+00.83	41.25' LT	116,298.831	669,074.845	1521	410+15.12	41.25' LT	116,360.740	669,008.703
1506	411+46.34	0.00' RT	116,236.453	669,075.142	1522	410+77.00	66.12' LT	116,334.538	669,074.676
1507	411+99.37	41.25' RT	116,169.530	669,075.461	1523	410+15.12	41.25' LT	116,360.740	669,008.703
1508	411+70.73	41.25' RT	116,192.135	669,057.880	1524	409+73.08	89.54' LT	116,427.024	669,002.268
1509	406+82.37	41.25' RT	116,435.283	668,677.591	1525	409+68.57	56.20' LT	116,403.020	668,978.596
1510	406+82.37	0.00' RT	116,475.466	668,686.914	1526	409+81.59	41.25' LT	116,382.737	668,980.888
1511	406+82.37	50.00' LT	116,524.172	668,698.215	1600	410+01.15	171.47' LT	116,471.886	669,078.419
1512	408+43.75	50.00' LT	116,466.615	668,860.599	1601	409+93.98	121.19' LT	116,437.768	669,040.488
1513	408+86.88	86.25' LT	116,476.752	668,919.249	1602	409+80.14	88.95' LT	116,421.809	669,008.291
1514	409+28.13	218.35' LT	116,564.042	669,030.239					

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES
			NEW	EXISTING	TOTAL	
33	MEZITZNER FARMS, LLC	FEE/TLE	0.062	1.288	1.350	0.020
34	NORTHWEST PRAIRIE CEMETERY ASSOCIATION	FEE/TLE	-	0.022	0.022	0.005

FILE NAME : T:\PROJECTS\2018\18-1712-1 STH 82\STH 82 RW\AUTOCAD\51500200\_TPP.DWG  
APPRAISAL PLAT DATE : 3-15-22

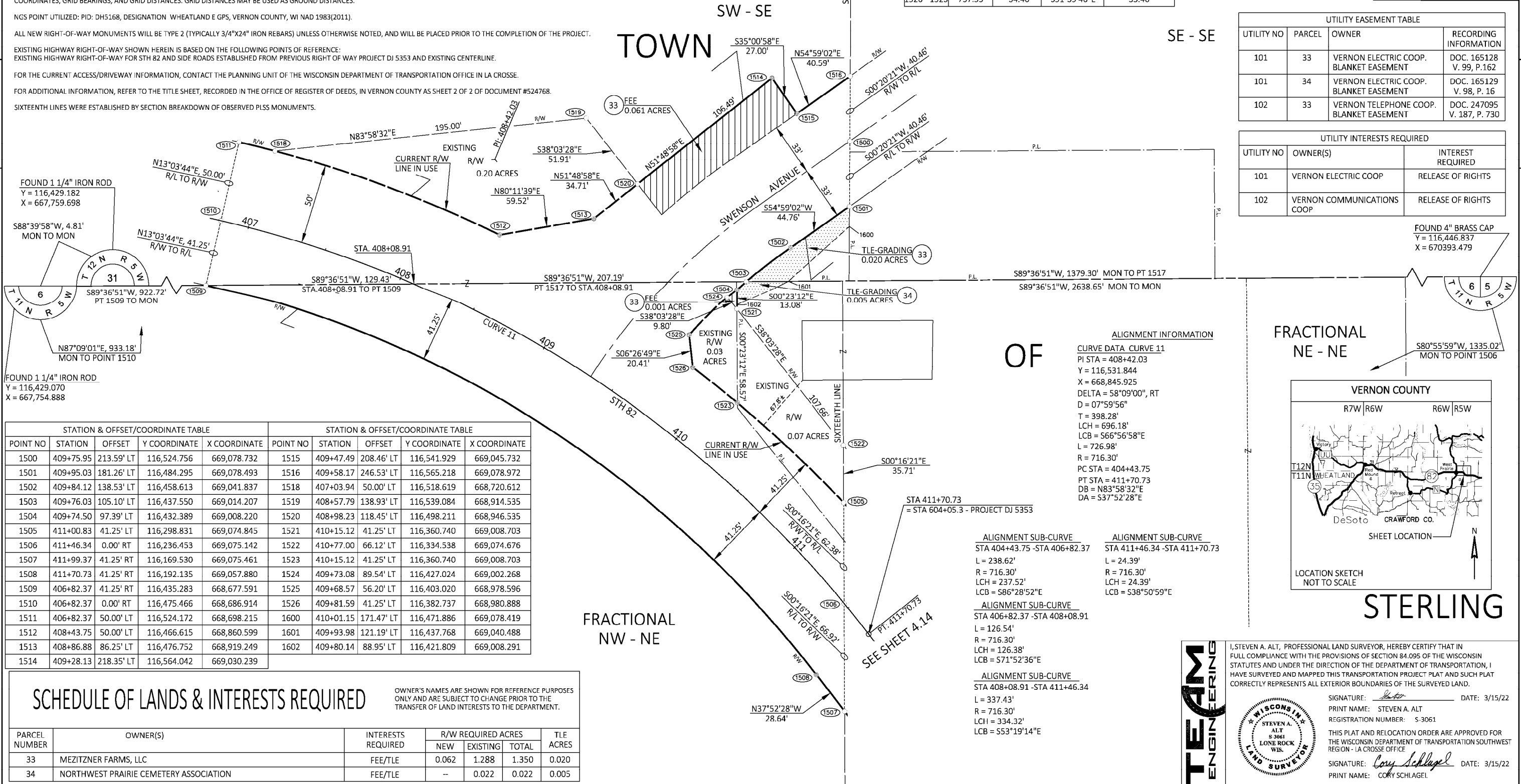
PLOT DATE : 3/15/2022 2:41 PM

PLOT BY : STEVE ALT

PLOT NAME :

PLOT SCALE : 1 IN=30FT

5150-02-20-4.12



TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.13

PART OF THE FRACTIONAL NORTHEAST QUARTER (NE 1/4) OF THE NORTHWEST QUARTER (NW 1/4) OF SECTION 5, TOWNSHIP 11 NORTH, RANGE 5 WEST, TOWN OF STERLING, VERNON COUNTY, WISCONSIN

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

NOTES:

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

NGS POINT UTILIZED: PID: DH5168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5353, FOUND MONUMENTATION AND EXISTING CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

SIXTEENTH LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED S.F.			PLE ACRES
			NEW	EXISTING	TOTAL	
36	MATTHEW T. JOHNSON	PLE	--	--	--	0.05

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

MARILYN HAUGE  
REGISTER OF DEEDS  
VERNON COUNTY, WI  
525903  
02/25/2022 02:09 PM  
RECORDING FEE: 25.00  
TRANSFER FEE: 0.00  
PAGE COUNT: 1

RESERVED FOR REGISTER OF DEEDS  
PROJECT NUMBER 5150-02-20-4.13  
SHEET 1 OF 1

R/W CURVE TABLE				
CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1700 - 1701	1868.75'	434.46'	N82°01'16"W	433.48
1708 - 1709	1951.25'	432.15'	S82°20'12"E	431.27'

UTILITY INTERESTS REQUIRED		
UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS
102	VERNON COMMUNICATIONS COOP.	RELEASE OF RIGHTS

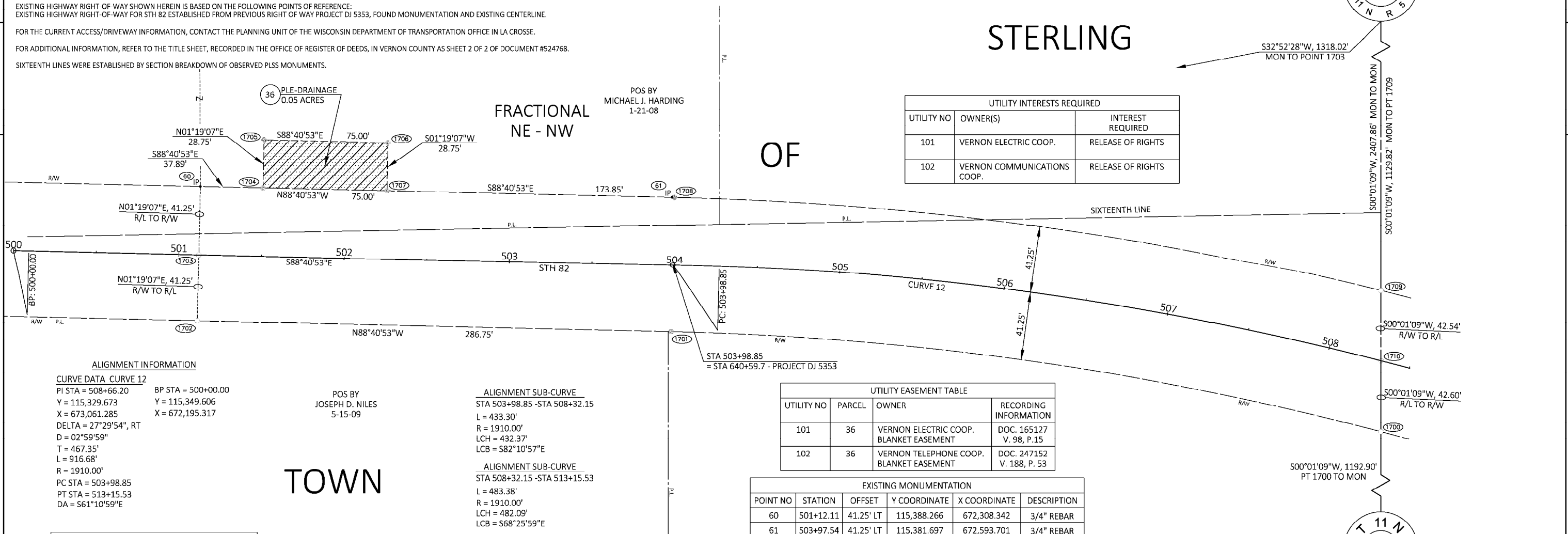
STERLING

FRACTIONAL NE - NW

OF

TOWN

SE - NW



ALIGNMENT INFORMATION

**CURVE DATA CURVE 12**  
 PI STA = 508+66.20 BP STA = 500+00.00  
 Y = 115,329.673 Y = 115,349.606  
 X = 673,061.285 X = 672,195.317  
 DELTA = 27°29'54", RT  
 D = 02°59'59"  
 T = 467.35'  
 L = 916.68'  
 R = 1910.00'  
 PC STA = 503+98.85  
 PT STA = 513+15.53  
 DA = S61°10'59"E

POS BY  
JOSEPH D. NILES  
5-15-09

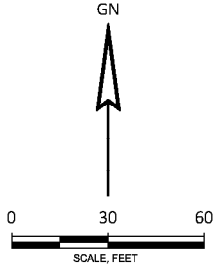
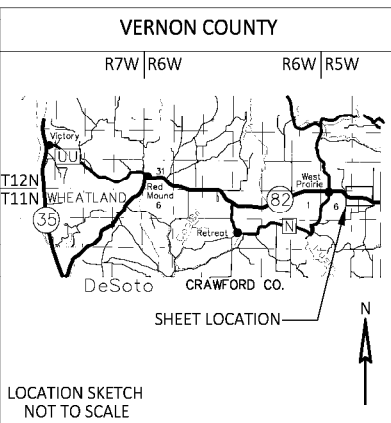
**ALIGNMENT SUB-CURVE**  
 STA 503+98.85 - STA 508+32.15  
 L = 433.30'  
 R = 1910.00'  
 LCH = 432.37'  
 LCB = S82°10'57"E

**ALIGNMENT SUB-CURVE**  
 STA 508+32.15 - STA 513+15.53  
 L = 483.38'  
 R = 1910.00'  
 LCH = 482.09'  
 LCB = S68°25'59"E

UTILITY EASEMENT TABLE			
UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	36	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165127 V. 98, P. 15
102	36	VERNON TELEPHONE COOP. BLANKET EASEMENT	DOC. 247152 V. 188, P. 53

EXISTING MONUMENTATION					
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	DESCRIPTION
60	501+12.11	41.25' LT	115,388.266	672,308.342	3/4" REBAR
61	503+97.54	41.25' LT	115,381.697	672,593.701	3/4" REBAR

STATION & OFFSET/COORDINATE TABLE					
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	
1700	508+42.90	41.25' RT	115,239.018	673,022.401	
1701	503+98.85	41.25' RT	115,299.189	672,593.114	
1702	501+12.11	41.25' RT	115,305.788	672,306.444	
1703	501+12.11	0.00' RT	115,347.027	672,307.393	
1704	501+50.00	41.25' LT	115,387.394	672,346.227	
1705	501+50.00	70.00' LT	115,416.136	672,346.888	
1706	502+25.00	70.00' LT	115,414.410	672,421.868	
1707	502+25.00	41.25' LT	115,385.668	672,421.206	
1708	503+98.85	41.25' LT	115,381.667	672,595.012	
1709	508+21.87	41.25' LT	115,324.156	673,022.429	
1710	508+32.15	0.00' RT	115,281.617	673,022.415	



FOUND STONE  
Y = 114,046.119  
X = 673,021.999



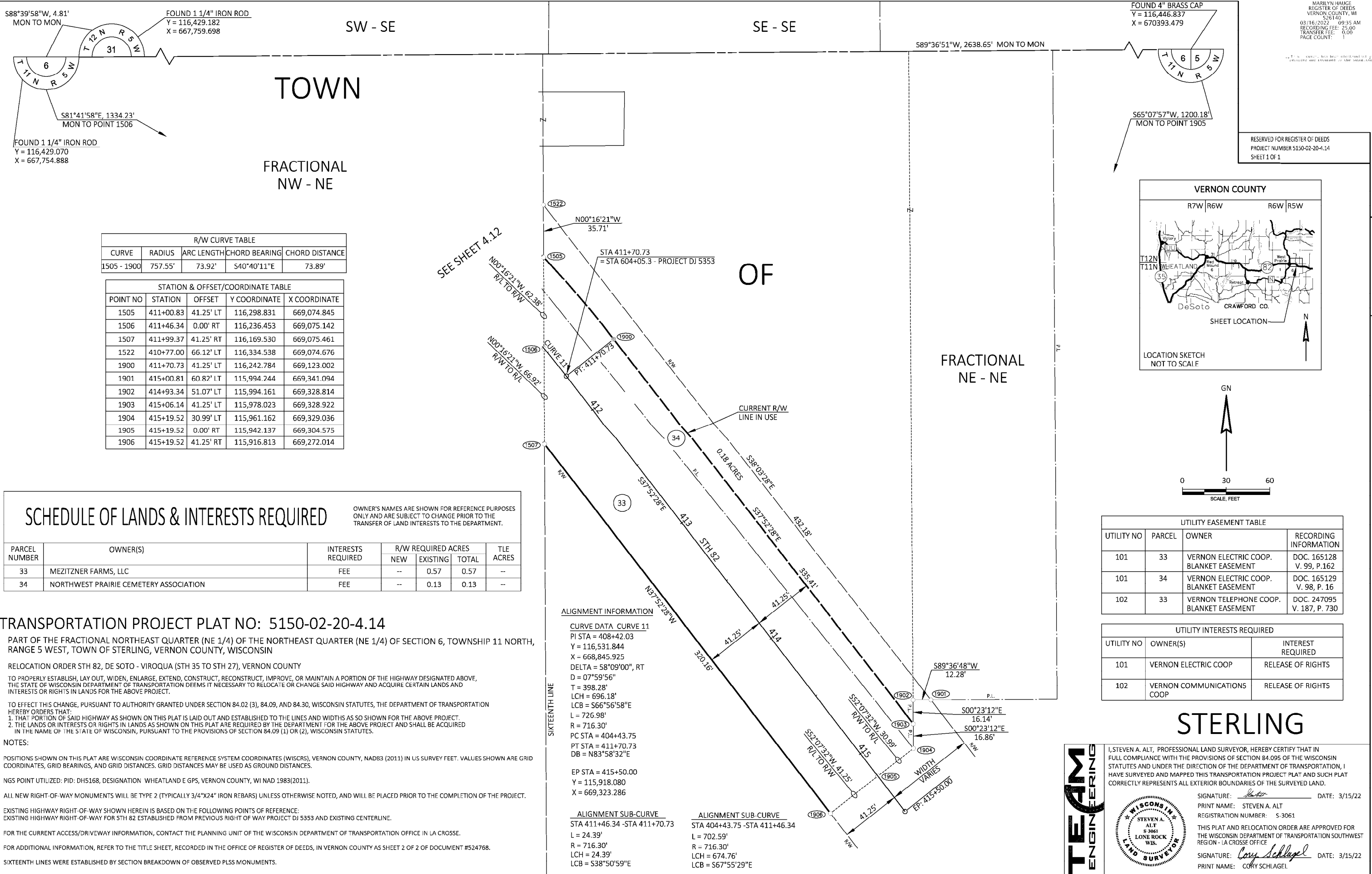
I, STEVEN A. ALT, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS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

SIGNATURE: *Steven A. Alt* DATE: 2/24/22  
 PRINT NAME: STEVEN A. ALT  
 REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

SIGNATURE: *Cory Schlager* DATE: 2/24/22  
 PRINT NAME: CORY SCHLAGEL





TOWN

FRACTIONAL  
NW - NE

OF

FRACTIONAL  
NE - NE

STERLING

R/W CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1505 - 1900	757.55'	73.92'	S40°40'11"E	73.89'

STATION & OFFSET/COORDINATE TABLE

POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
1505	411+00.83	41.25' LT	116,298.831	669,074.845
1506	411+46.34	0.00' RT	116,236.453	669,075.142
1507	411+99.37	41.25' RT	116,169.530	669,075.461
1522	410+77.00	66.12' LT	116,334.538	669,074.676
1900	411+70.73	41.25' LT	116,242.784	669,123.002
1901	415+00.81	60.82' LT	115,994.244	669,341.094
1902	414+93.34	51.07' LT	115,994.161	669,328.814
1903	415+06.14	41.25' LT	115,978.023	669,328.922
1904	415+19.52	30.99' LT	115,961.162	669,329.036
1905	415+19.52	0.00' RT	115,942.137	669,304.575
1906	415+19.52	41.25' RT	115,916.813	669,272.014

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES
			NEW	EXISTING	TOTAL	
33	MEZITZNER FARMS, LLC	FEE	--	0.57	0.57	--
34	NORTHWEST PRAIRIE CEMETERY ASSOCIATION	FEE	--	0.13	0.13	--

UTILITY EASEMENT TABLE

UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	33	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165128 V. 99, P.162
101	34	VERNON ELECTRIC COOP. BLANKET EASEMENT	DOC. 165129 V. 98, P. 16
102	33	VERNON TELEPHONE COOP. BLANKET EASEMENT	DOC. 247095 V. 187, P. 730

UTILITY INTERESTS REQUIRED

UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP	RELEASE OF RIGHTS
102	VERNON COMMUNICATIONS COOP	RELEASE OF RIGHTS

TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.14

PART OF THE FRACTIONAL NORTHEAST QUARTER (NE 1/4) OF THE NORTHEAST QUARTER (NE 1/4) OF SECTION 6, TOWNSHIP 11 NORTH, RANGE 5 WEST, TOWN OF STERLING, VERNON COUNTY, WISCONSIN

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

NOTES:

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

NGS POINT UTILIZED: PID: DH5168, DESIGNATION WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"x24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:  
EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 ESTABLISHED FROM PREVIOUS RIGHT-OF-WAY PROJECT DJ 5353 AND EXISTING CENTERLINE.

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

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

SIXTEENTH LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.

ALIGNMENT INFORMATION

CURVE DATA CURVE 11  
 PI STA = 408+42.03  
 Y = 116,531.844  
 X = 668,845.925  
 DELTA = 58°09'00", RT  
 D = 07°59'56"  
 T = 398.28'  
 LCH = 696.18'  
 LCB = 566°56'58"E  
 L = 726.98'  
 R = 716.30'  
 PC STA = 404+43.75  
 PT STA = 411+70.73  
 DB = N83°58'32"E

EP STA = 415+50.00  
 Y = 115,918.080  
 X = 669,323.286

ALIGNMENT SUB-CURVE  
 STA 411+46.34 - STA 411+70.73  
 L = 24.39'  
 R = 716.30'  
 LCH = 24.39'  
 LCB = S38°50'59"E

ALIGNMENT SUB-CURVE  
 STA 404+43.75 - STA 411+46.34  
 L = 702.59'  
 R = 716.30'  
 LCH = 674.76'  
 LCB = S67°55'29"E

# TRANSPORTATION PROJECT PLAT NO: 5150-02-20-4.09 AMENDMENT NO. 1

AMENDS PARCEL 31 OF TRANSPORTATION PROJECT PLAT 5150-02-20 4.09 RECORDED AS DOCUMENT 525865.

PART OF THE NORTHEAST QUARTER (NE 1/4) OF THE SOUTHWEST QUARTER (SW 1/4) AND THE NORTHWEST QUARTER (NW 1/4) OF THE SOUTHEAST QUARTER (SE 1/4) OF SECTION 3, TOWNSHIP 11 NORTH, RANGE 6 WEST, TOWN OF STERLING, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 82, DE SOTO - VIROQUA (STH 35 TO STH 27), VERNON COUNTY

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

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

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

## NOTES:

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

NGS POINT UTILIZED: PID: DHS168, DESIGNATION: WHEATLAND E GPS, VERNON COUNTY, WI NAD 1983(2011).

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4"X24" IRON REBARS) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

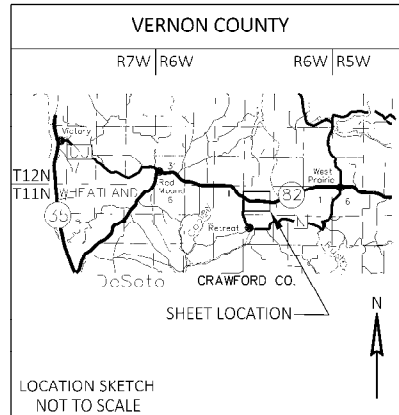
EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE:

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 82 AND ESTABLISHED FROM PREVIOUS RIGHT OF WAY PROJECT DJ 5353 AND EXISTING CENTERLINE.

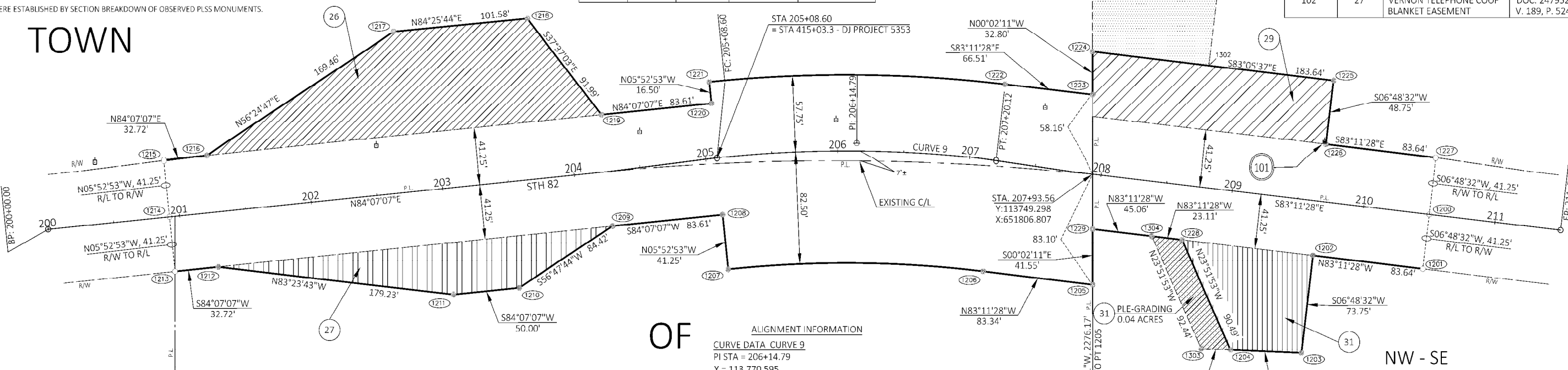
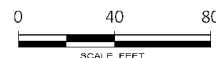
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN LA CROSSE.

FOR ADDITIONAL INFORMATION, REFER TO THE TITLE SHEET, RECORDED IN THE OFFICE OF REGISTER OF DEEDS, IN VERNON COUNTY AS SHEET 2 OF 2 OF DOCUMENT #524768.

QUARTER LINES WERE ESTABLISHED BY SECTION BREAKDOWN OF OBSERVED PLSS MONUMENTS.



CURVE	RADIUS	ARC LENGTH	CHORD BEARING	CHORD DISTANCE
1206 - 1207	872.50'	193.25'	N89°32'11"W	192.85'
1221 - 1222	1012.75'	224.31'	S89°32'11"E	223.85'



## ALIGNMENT INFORMATION

### CURVE DATA - CURVE 9

PI STA = 206+14.79  
 Y = 113,770.595  
 X = 651,628.439  
 DELTA = 12°41'25", RT  
 D = 05°59'58"  
 T = 106.19'  
 L = 211.52'  
 R = 955.00'  
 PC STA = 205+08.60  
 PT STA = 207+20.12

BP STA = 200+00.00  
 Y = 113,707.598  
 X = 651,016.881  
 EP STA = 211+50.00  
 Y = 113,707.040  
 X = 652,160.733

FOUND 4" BRASS CAP  
 Y = 111,390.035  
 X = 651,808.303

STATION & OFFSET/COORDINATE TABLE					STATION & OFFSET/COORDINATE TABLE				
POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE	POINT NO	STATION	OFFSET	Y COORDINATE	X COORDINATE
1200	210+50.00	0.00' RT	113,718.895	652,061.438	1217	202+75.03	120.03' LT	113,855.182	651,278.160
1201	210+50.00	41.25' RT	113,677.936	652,056.548	1218	203+76.61	119.48' LT	113,865.043	651,379.263
1202	209+66.36	41.25' RT	113,687.853	651,973.494	1219	204+24.99	41.25' LT	113,792.179	651,435.411
1203	209+66.36	115.00' RT	113,614.623	651,964.751	1220	205+08.60	41.25' LT	113,800.746	651,518.577
1204	209+12.84	119.08' RT	113,616.920	651,911.128	1221	205+08.60	57.75' LT	113,817.159	651,516.886
1205	208+03.46	82.50' RT	113,666.206	651,806.860	1222	207+20.12	57.75' LT	113,815.348	651,740.730
1206	207+20.12	82.50' RT	113,676.087	651,724.102	1223	207+86.63	57.75' LT	113,807.462	651,806.770
1207	205+08.60	82.50' RT	113,677.648	651,531.257	1224	207+82.72	90.31' LT	113,840.259	651,806.749
1208	205+08.60	41.25' RT	113,718.680	651,527.031	1225	209+66.36	90.00' LT	113,818.177	651,989.055
1209	204+24.99	41.25' RT	113,710.113	651,443.865	1226	209+66.36	41.25' LT	113,769.771	651,983.275
1210	203+49.99	80.00' RT	113,663.882	651,373.228	1227	210+50.00	41.25' LT	113,759.854	652,066.329
1211	202+99.99	80.00' RT	113,658.759	651,323.491	1228	208+66.68	41.25' RT	113,699.670	651,874.520
1212	201+25.00	41.25' RT	113,679.373	651,145.450	1229	207+98.51	41.25' RT	113,707.752	651,806.833
1213	200+92.28	41.25' RT	113,676.021	651,112.902	1300	207+73.12	170.31' LT	113,920.832	651,806.698
1214	200+92.28	0.00' RT	113,717.053	651,108.675	1301	208+71.34	170.00' LT	113,908.878	651,904.193
1215	200+92.28	41.25' LT	113,758.086	651,104.449	1302	208+71.34	90.16' LT	113,829.602	651,894.728
1216	201+25.00	41.25' LT	113,761.439	651,136.996	1303	208+90.73	120.76' RT	113,617.869	651,888.978
					1304	208+43.57	41.25' RT	113,702.409	651,851.578

## SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER(S)	INTERESTS REQUIRED	R/W REQUIRED ACRES			TLE ACRES	PLE ACRES
			NEW	EXISTING	TOTAL		
26	CLEMENT J. WALLESER	FEE	0.36	0.78	1.14	--	--
27	HARLESS GRAVEL INC.	FEE	0.16	0.89	1.05	--	--
29	RONALD AND NATALIA SCOVILLE	FEE/TLE	0.20	0.25	0.45	0.17	--
31	GARY F. SCOVILLE	FEE/PLE	0.13	0.24	0.37	--	0.04

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

UTILITY NO	PARCEL	OWNER	RECORDING INFORMATION
101	29/31	VERNON ELECTRIC COOP BLANKET EASEMENT	DOC. 165137 V. 99, P. 166
101	27	VERNON ELECTRIC COOP BLANKET EASEMENT	DOC. 165139 V. 99, P. 167
101	26	VERNON ELECTRIC COOP BLANKET EASEMENT	DOC. 165140 V. 98, P. 20
102	26	VERNON TELEPHONE COOP BLANKET EASEMENT	DOC. 229269 V. 147, P. 626
102	27	VERNON TELEPHONE COOP BLANKET EASEMENT	DOC. 247952 V. 189, P. 524

UTILITY NO	OWNER(S)	INTEREST REQUIRED
101	VERNON ELECTRIC COOP.	RELEASE OF RIGHTS
102	VERNON COMMUNICATIONS COOP.	RELEASE OF RIGHTS

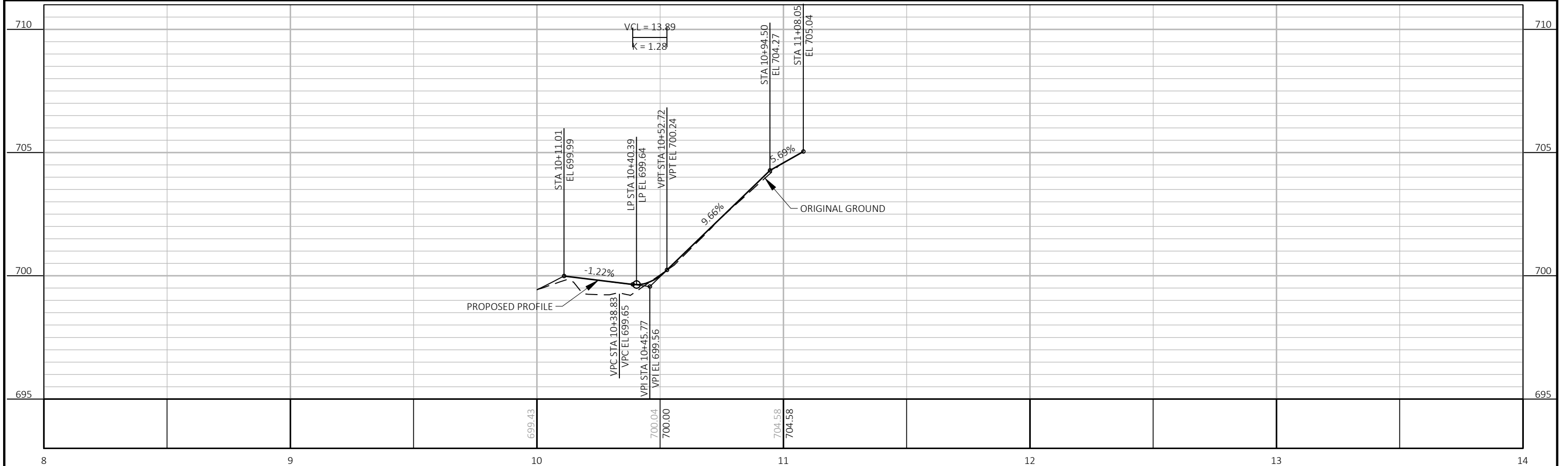
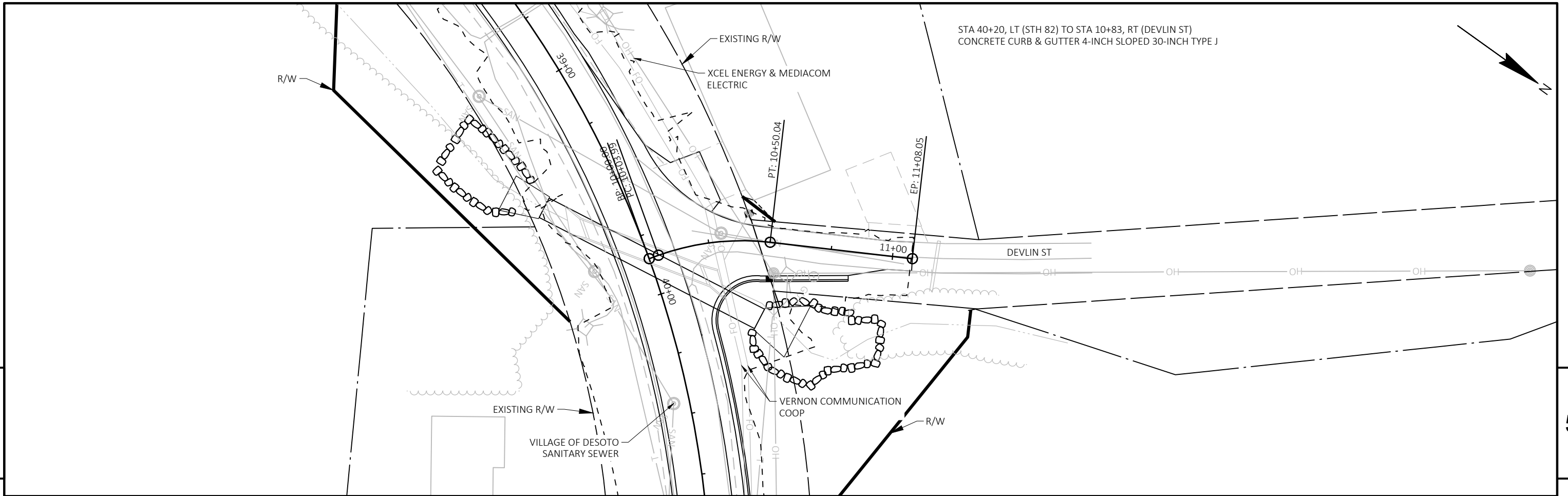


I, STEVEN A. ALT, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS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

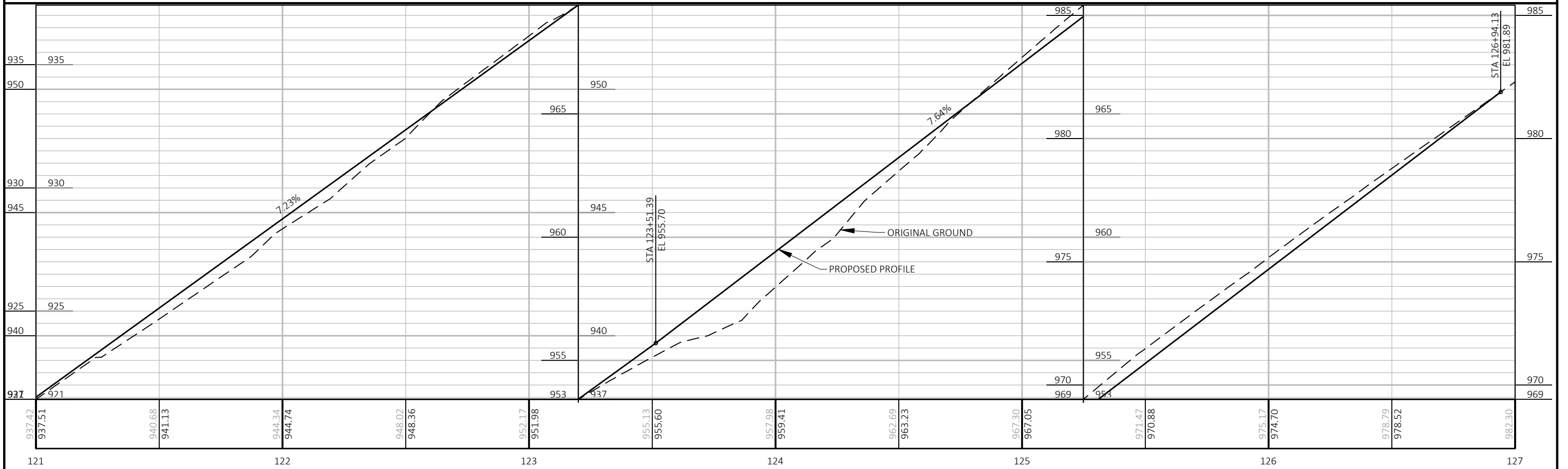
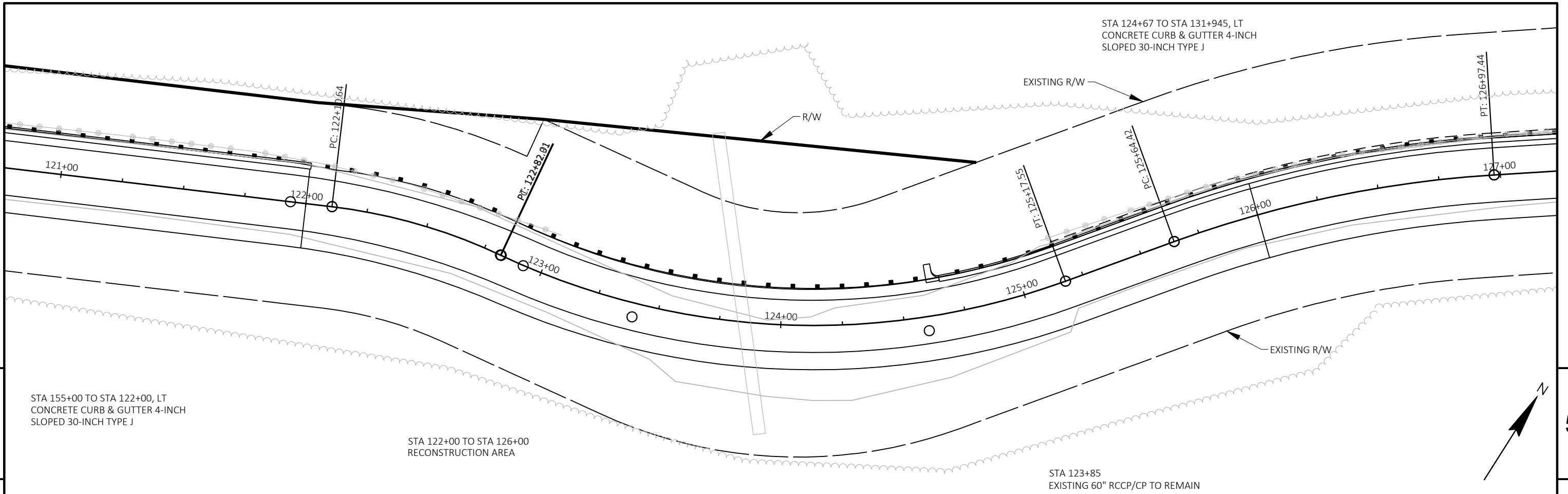
SIGNATURE: *Steven A. Alt* DATE: 2/7/23  
 PRINT NAME: STEVEN A. ALT  
 REGISTRATION NUMBER: S-3061

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION - LA CROSSE OFFICE

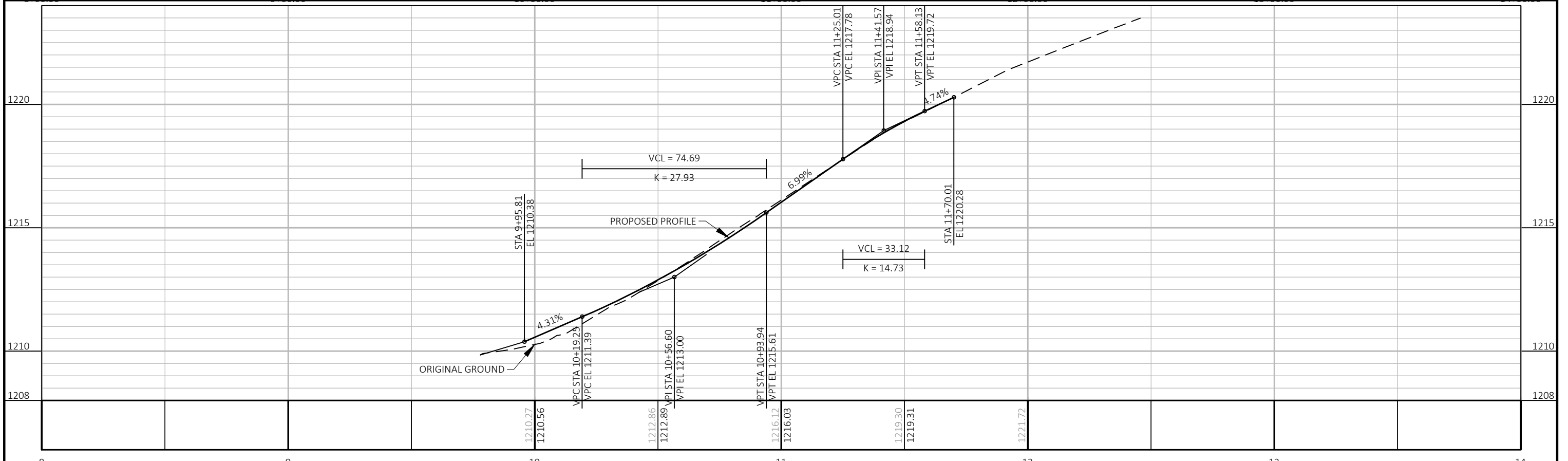
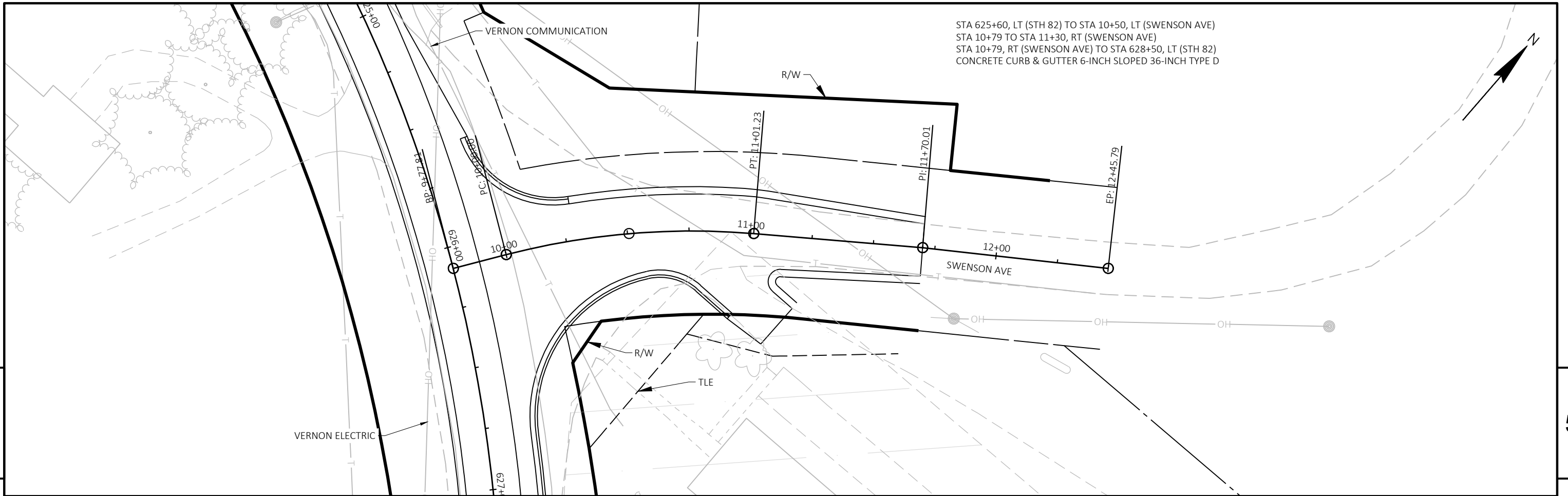
SIGNATURE: *Cory Schlagel* DATE: 2/7/23  
 PRINT NAME: CORY SCHLAGEL



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN AND PROFILE: DEVLIN STREET	SHEET	<b>E</b>
------------------------	-------------	----------------	---------------------------------	-------	----------



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN AND PROFILE: ROAD REALIGNMENT	SHEET	<b>E</b>
------------------------	-------------	----------------	------------------------------------	-------	----------



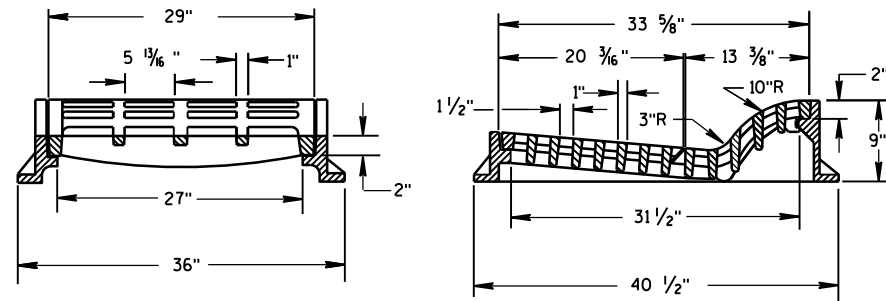
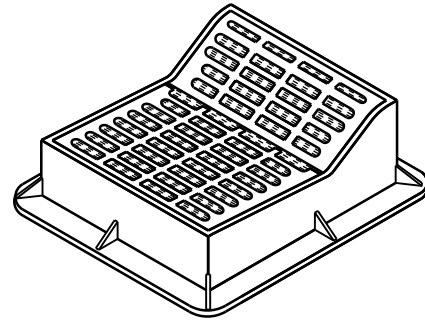
PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	PLAN AND PROFILE: SWENSON AVENUE	SHEET	<b>E</b>
------------------------	-------------	----------------	----------------------------------	-------	----------

## Standard Detail Drawing List

08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08C07-02	INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-07	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D18-03	DRIVEWAY AND SIDEWALK RAMPS TYPES X & Y
08D19-03	DRIVEWAY AND SIDEWALK RAMPS TYPE Z
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E14-01	TRACKING PAD
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F03-03	DETAILS FOR PIPE CATTLE PASS, CONCRETE ENDWALLS AND STEPS
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F10-02	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
09B02-10	CONDUIT
13C19-03	HMA LONGITUDINAL JOINTS
14B42-07A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-07D	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-04A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-04C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B47-05A	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05B	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05C	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05D	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05E	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05F	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
14B47-05G	MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL
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)
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A01-13B	FLEXIBLE MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGITUDINAL PAVEMENT MARKING
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15D30-09A	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09B	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09C	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION
15D30-09D	TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION

## Standard Detail Drawing List

15D30-09E	TRAFFI C CONTROL, PEDESTRI AN ACCOMMODATI ON
15D30-09F	TRAFFI C CONTROL, PEDESTRI AN ACCOMMODATI ON
15D30-09G	TRAFFI C CONTROL, PEDESTRI AN ACCOMMODATI ON
15D30-09H	TRAFFI C CONTROL, PEDESTRI AN ACCOMMODATI ON
15D30-09I	TRAFFI C CONTROL, PEDESTRI AN ACCOMMODATI ON
15D30-09J	TRAFFI C CONTROL, PEDESTRI AN ACCOMMODATI ON
15D30-09K	TRAFFI C CONTROL, PEDESTRI AN ACCOMMODATI ON
15D30-09L	TRAFFI C CONTROL, PEDESTRI AN ACCOMMODATI ON



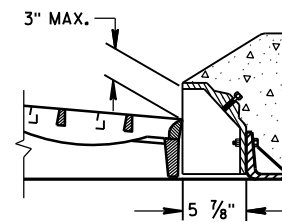
**TYPE "F"**

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

**GENERAL NOTES**

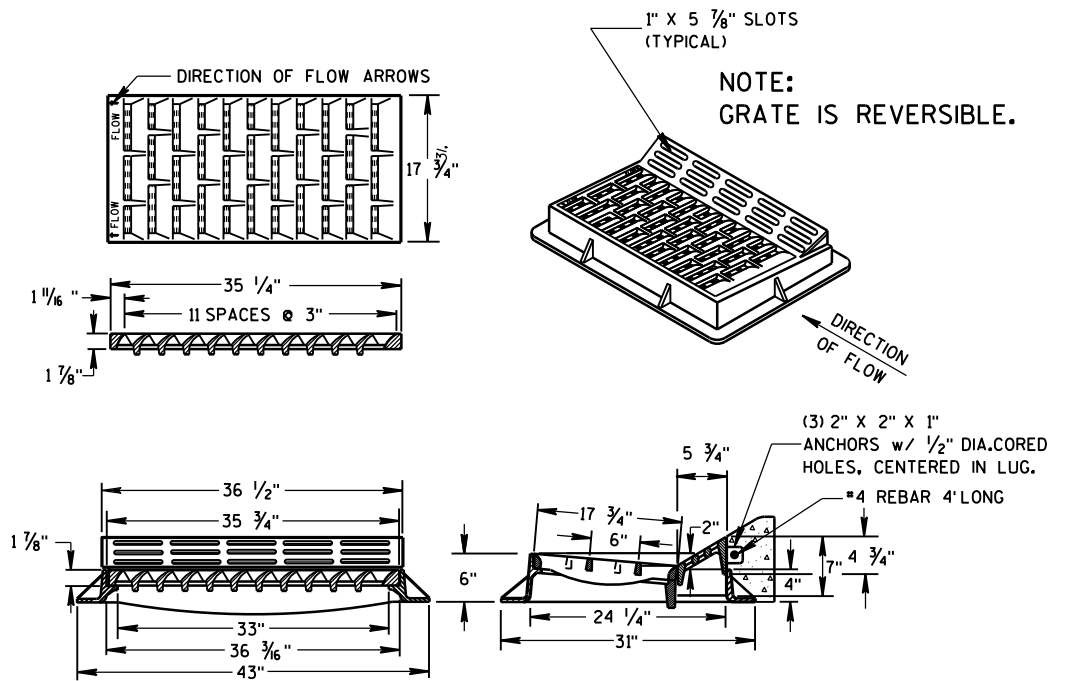
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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



**ALTERNATIVE CURB BOX FOR TYPE "HM" COVER**

USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH NOTED AS TYPE HM-GJ ON DRAINAGE TABLE



**TYPE "HM"**

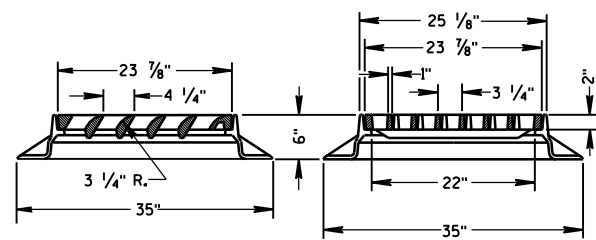
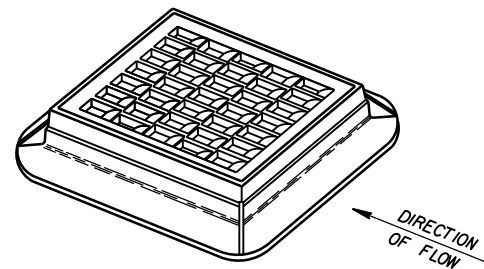
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

NOTE: SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM" COVER NOTED AS TYPE HM-S ON DRAINAGE TABLE

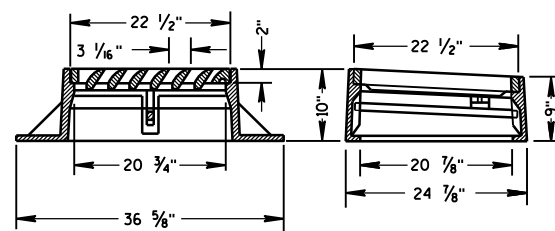
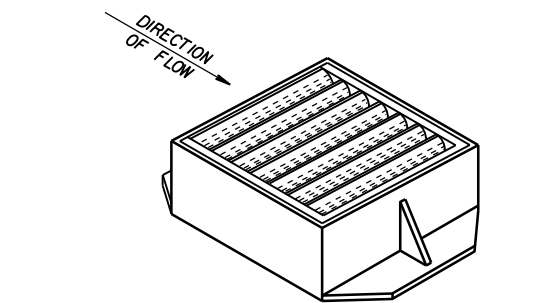
NOTE: SPECIAL GRATE FOR THE TYPE "H" COVER MAY ALSO BE USED FOR THE TYPE "HM-GJ" COVER NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

6

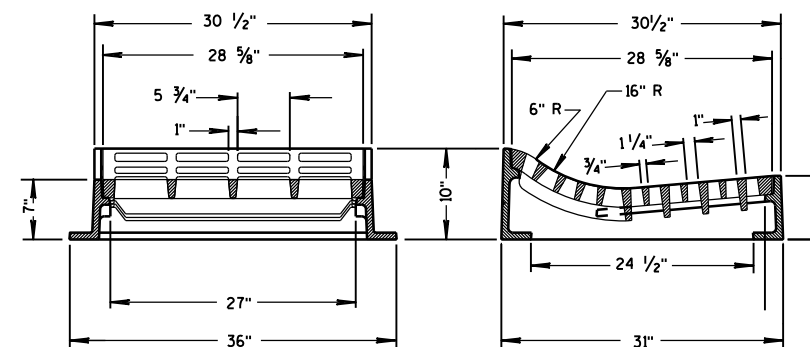
6



**TYPE "S"**

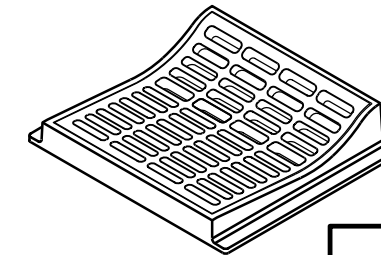


**TYPE "V"**



**TYPE "T"**

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.



**INLET COVERS**  
TYPE F, HM, HM-S, S, T, V,  
HM-GJ, & HM-GJ-S

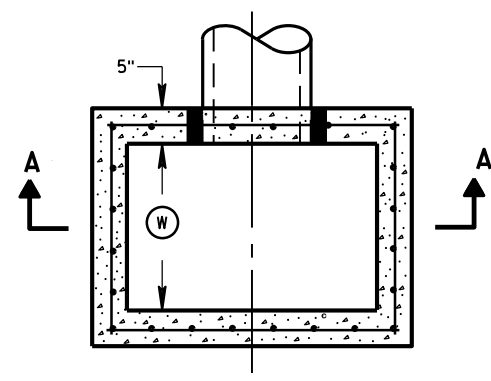
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
11/27/2013 DATE /s/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT ENGINEER  
FHWA

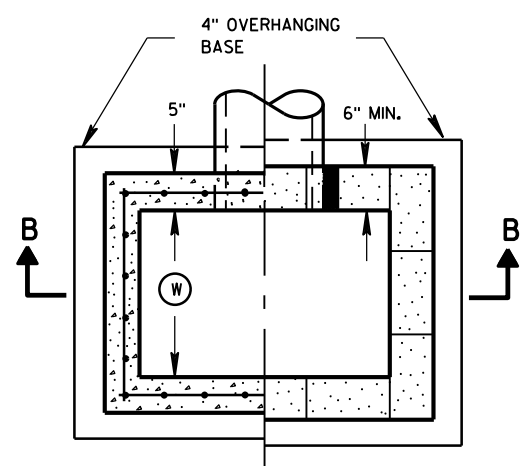
S.D.D. 8 A 5-19C

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

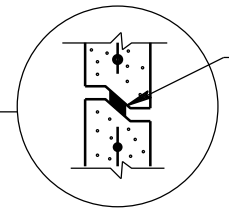




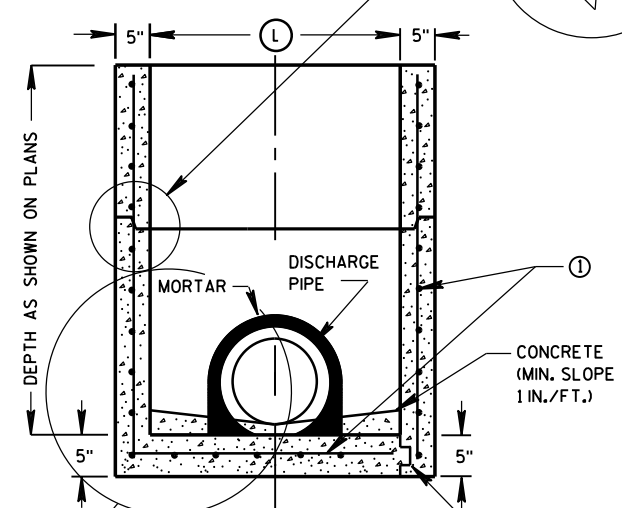
PLAN VIEW



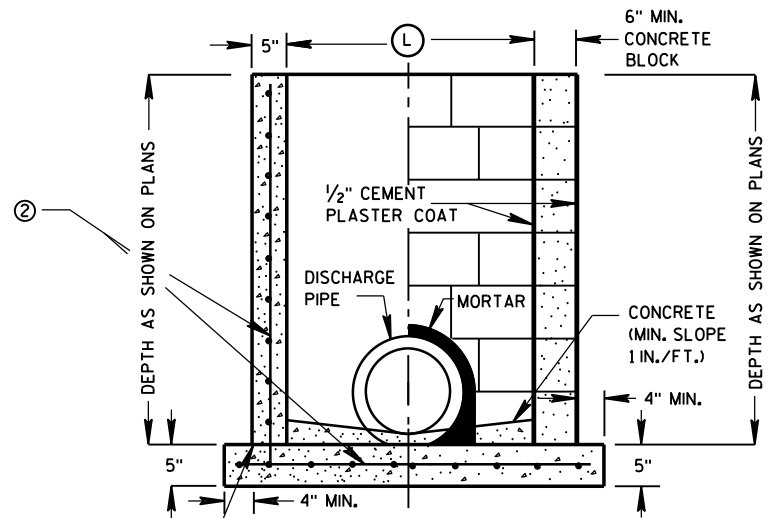
PLAN VIEW



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



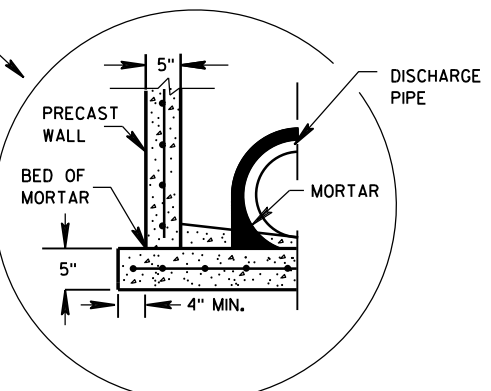
SECTION A-A



SECTION B-B

PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE  
 PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE  
 KEYWAY

CONSTRUCTION JOINT  
 CAST-IN-PLACE REINFORCED CONCRETE  
 CONCRETE BLOCK WITH CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ①



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

**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 UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATES THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

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

4" OVERHANGING BASES ARE REQUIRED FOR CAST-IN-PLACE REINFORCED CONCRETE AND CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3 INCH 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.

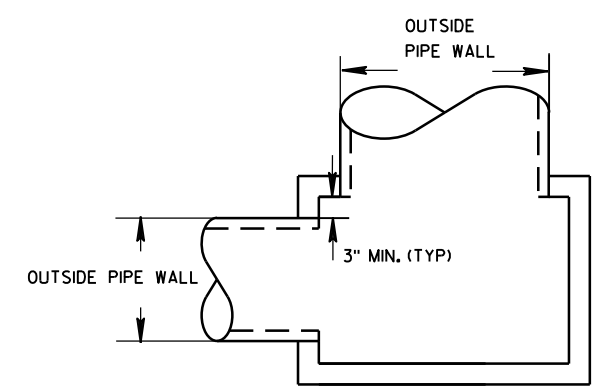
② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

**INLET COVER MATRIX**

INLET SIZE	INLET COVER TYPE		ALL A'S	ALL B'S	BW	F	ALL H'S	S	T	V	WM
	WIDTH (W) (FT)	LENGTH (L) (FT)									
2X2-FT	2	2	X	X				X		X	
2X2.5-FT	2	2.5			X			X	X	X	X
2X3-FT	2	3					X				
2.5X3-FT	2.5	3				X					

**PIPE MATRIX**

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	WIDTH (IN)	LENGTH (IN)
2X2-FT	12	12
2X2.5-FT	12	18
2X3-FT	12	24
2.5X3-FT	18	24



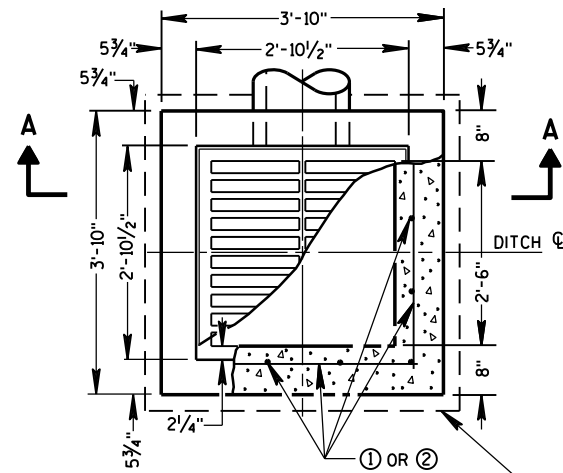
DETAIL "A"

**INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT**

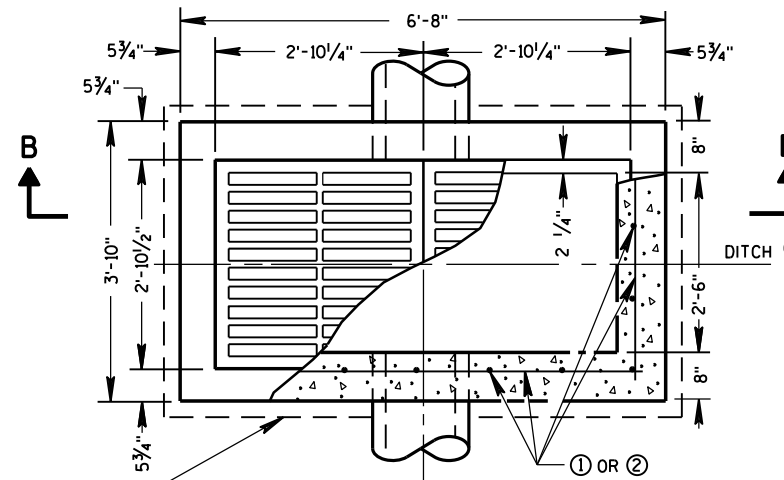
INLETS 2X2-FT, 2X2.5-FT, 2X3-FT AND 2.5X3-FT

STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

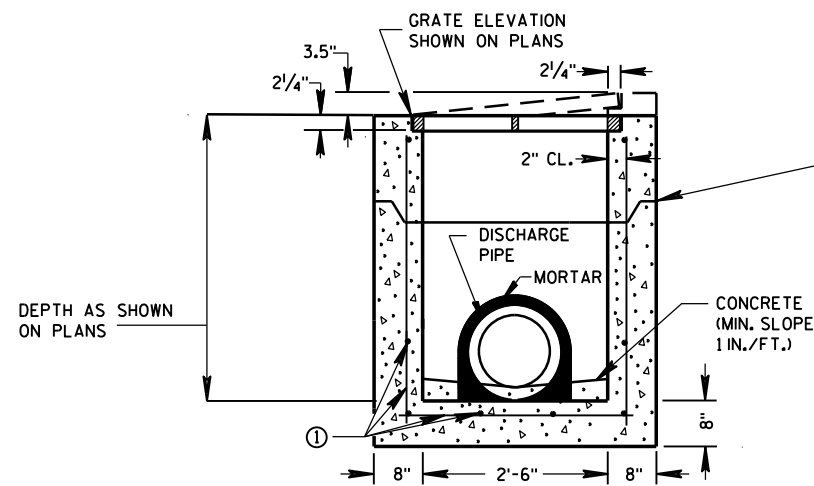
APPROVED  
 Sept., 2016 /S/ Rodney Taylor  
 DATE ROADWAY STANDARDS DEVELOPMENT  
 FHWA UNIT SUPERVISOR



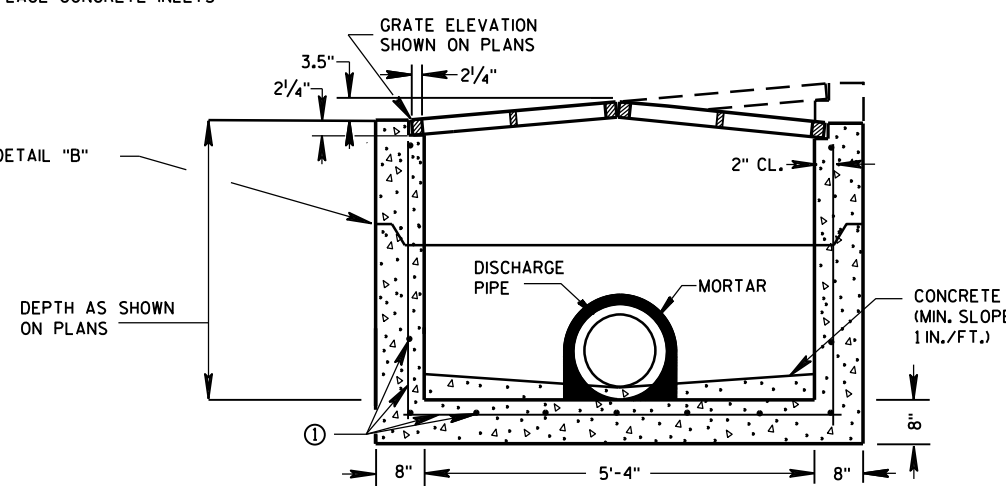
PLAN VIEW



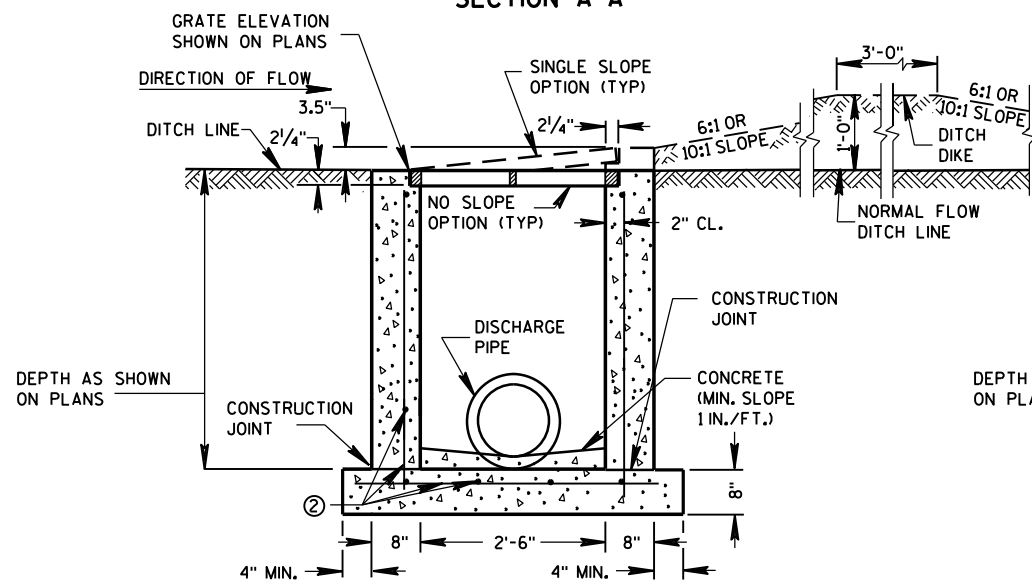
PLAN VIEW



PRECAST REINFORCED CONCRETE SECTION A-A

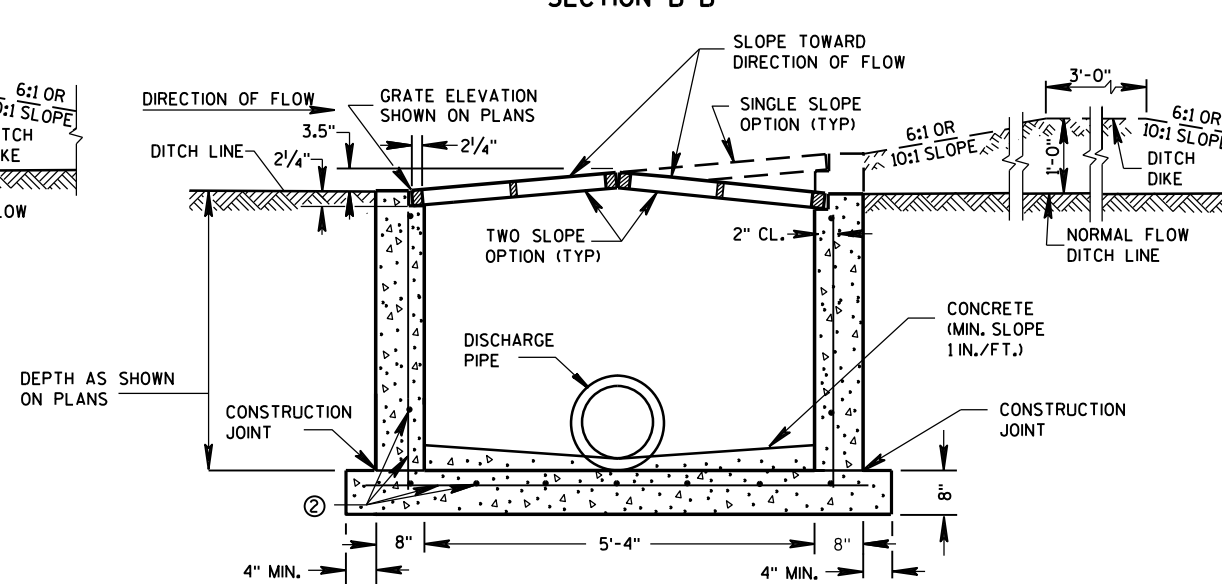


PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A

INLETS MEDIAN 1 GRATE



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

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.

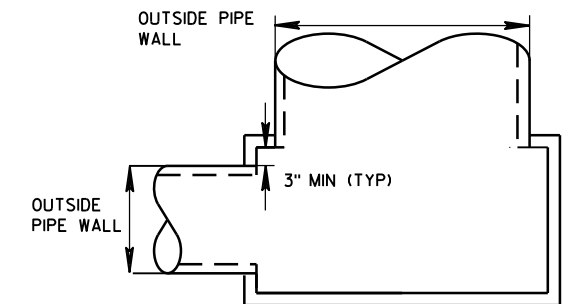
ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

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.

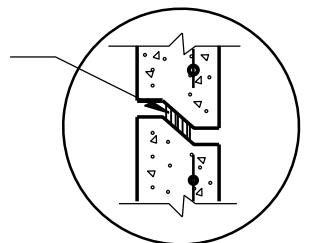
**PIPE MATRIX**

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER	
	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)

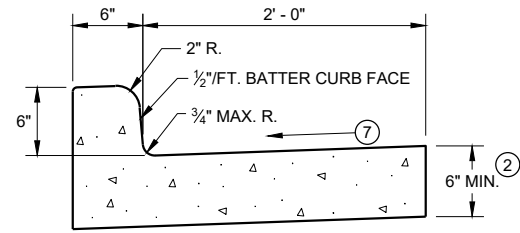


DETAIL "B"

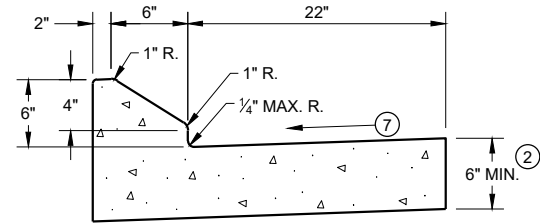
**INLETS MEDIAN 1 AND 2 GRATE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

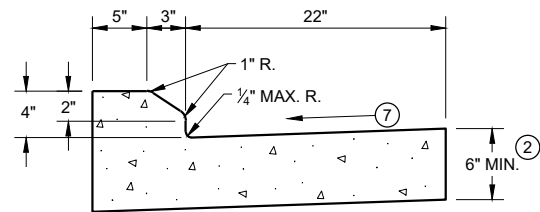
APPROVED  
Sept., 2016 /S/ Rodney Taylor  
DATE ROADWAY STANDARDS DEVELOPMENT  
FHWA UNIT SUPERVISOR



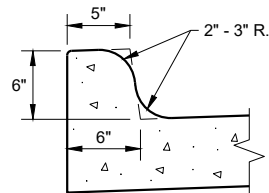
**TYPES A<sup>1</sup> & D**



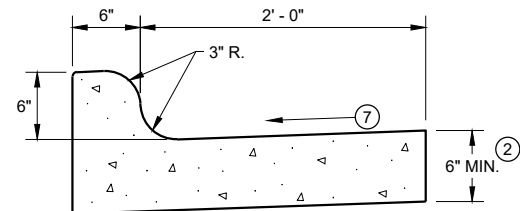
**6" SLOPED CURB TYPES G<sup>1</sup> & J**



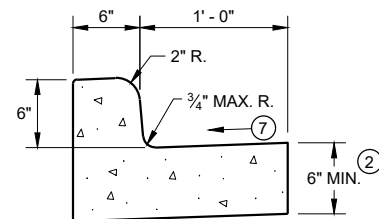
**4" SLOPED CURB TYPES G<sup>1</sup> & J**



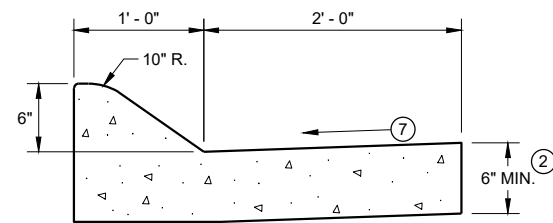
**TYPES K<sup>1</sup> & L**  
(OPTIONAL CURB SHAPE)



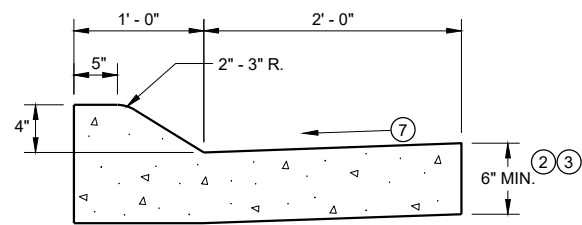
**TYPES K<sup>1</sup> & L**  
**CONCRETE CURB AND GUTTER 30"**



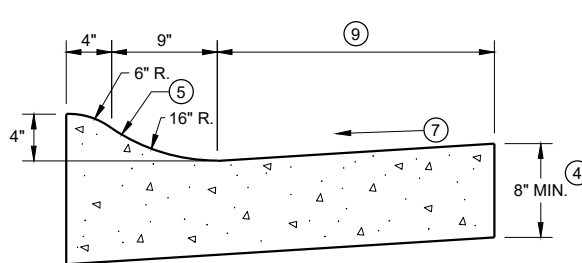
**TYPES A<sup>1</sup> & D**  
**CONCRETE CURB AND GUTTER 18"**



**6" SLOPED CURB TYPES A<sup>1</sup> & D**

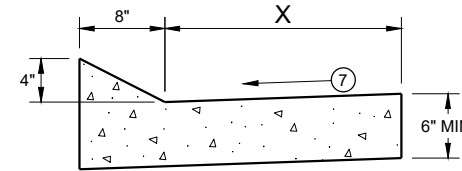


**4" SLOPED CURB TYPES A<sup>1</sup> & D**  
**CONCRETE CURB AND GUTTER 36"**



**4" SLOPED CURB TYPES R<sup>1</sup> & T**

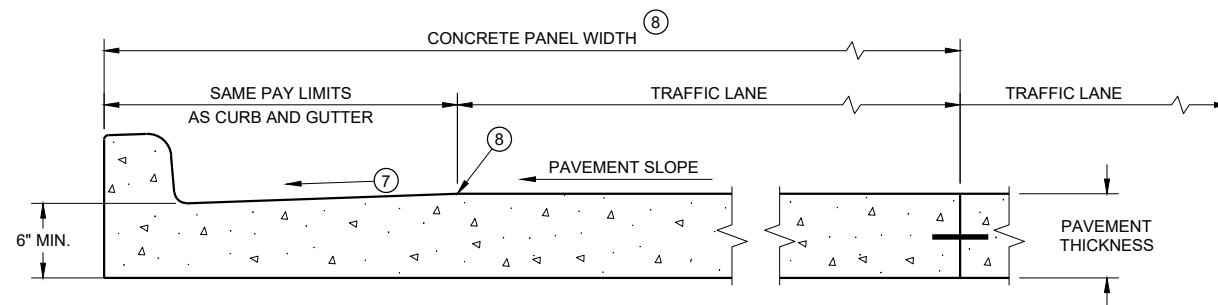
TBT & TBTT	X
30"	22"
36"	28"



**TYPES TBT & TBTT<sup>1</sup>**  
**CONCRETE CURB AND GUTTER**

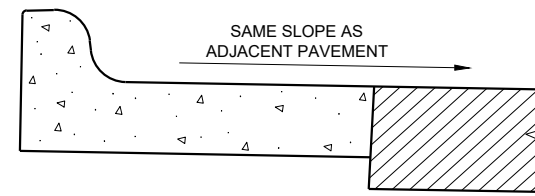
**PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE**

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



**PARTIAL SECTION OF PAVEMENT\* WITH INTEGRAL CURB AND GUTTER**

\* BIKE LANE IS NOT SHOWN



**REVERSE SLOPE GUTTER<sup>6</sup>**  
(TYPICAL FOR ALL CURB & GUTTER TYPES)

**GENERAL NOTES**

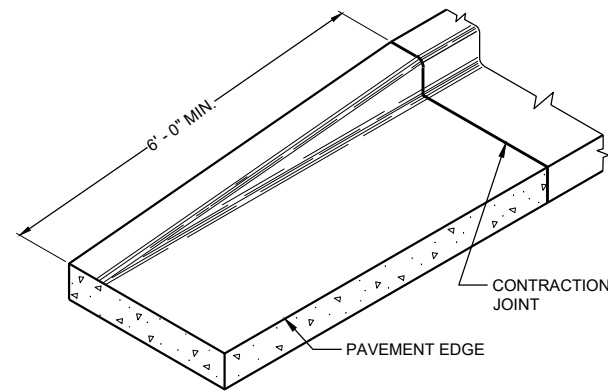
DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

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

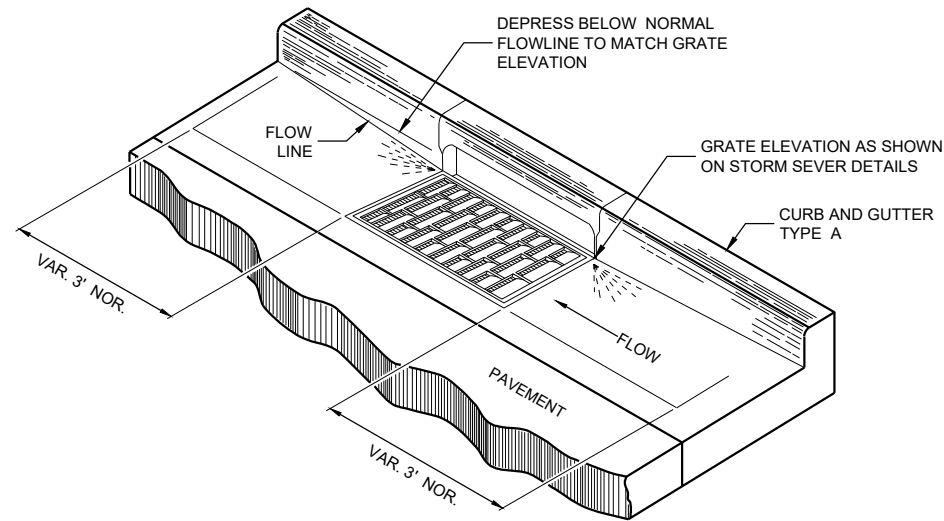
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
- ④ THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑤ UNLESS OTHERWISE NOTED, FOR STAKING PURPOSES THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
- ⑥ WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
- ⑦ USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
- ⑧ INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.
- ⑨ CONCRETE CURB AND GUTTER 4-INCH SLOPED 30-INCH TYPE "R" AND "T" = 17 INCHES  
CONCRETE CURB AND GUTTER 4-INCH SLOPED 36-INCH TYPE "R" AND "T" = 23 INCHES



**END SECTION CURB AND GUTTER**



**DETAIL OF CURB AND GUTTER AT INLETS**

(TYPICAL H INLET COVER SHOWN)

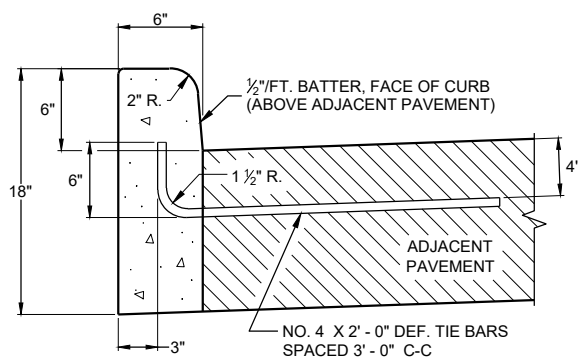
**GENERAL NOTES**

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

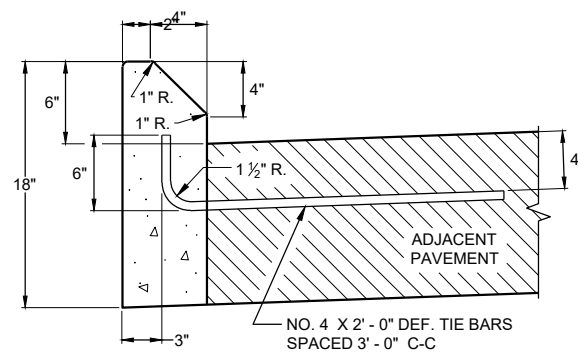
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

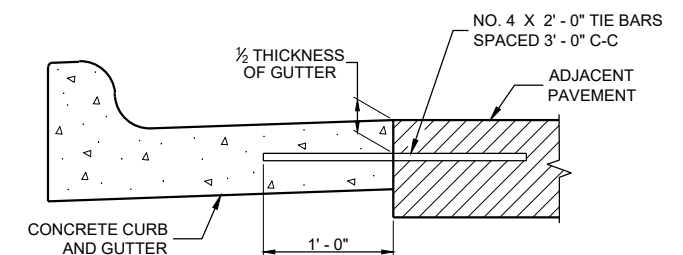
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑩ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.
- ⑪ PLACE 1" THICK EXPANSION JOINT MATERIAL BETWEEN VERTICAL FACE CURB TYPES EXTENDING FROM THE TOP OF CURB TO 1 INCH BELOW THE ADJOINING CONCRETE SURFACE. RIGID CONCRETE STRUCTURES INCLUDE RAISED CONCRETE MEDIANS, CONCRETE SAFETY ISLANDS, SPLITTER ISLANDS, OR LOCATIONS IDENTIFIED ON THE PLANS.



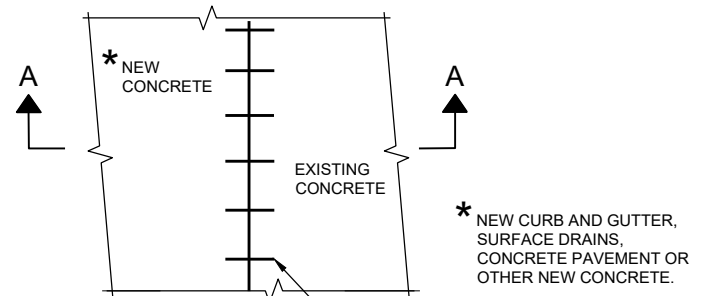
**TYPES A<sup>①</sup> & D**



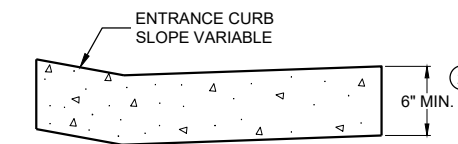
**TYPES G<sup>①</sup> & J  
CONCRETE CURB**



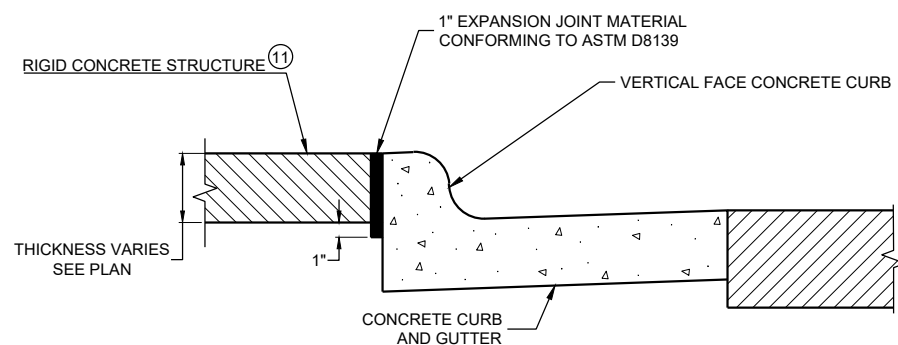
**TYPICAL TIE BAR LOCATION<sup>①</sup>**



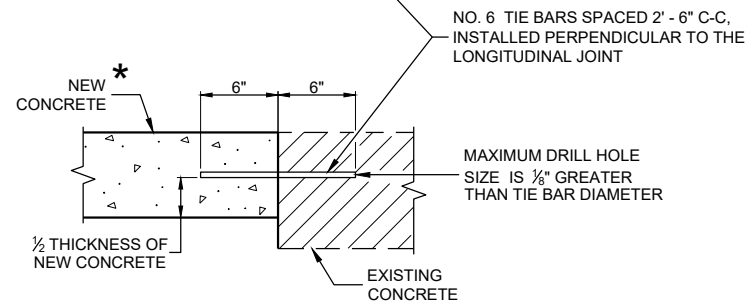
**PLAN VIEW**



**DRIVEWAY ENTRANCE CURB<sup>⑩</sup>  
(WHEN DIRECTED BY THE ENGINEER)**



**EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE<sup>⑪</sup>**



**SECTION A - A  
TIE BARS DRILLED INTO EXISTING PAVEMENT**

**CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS**

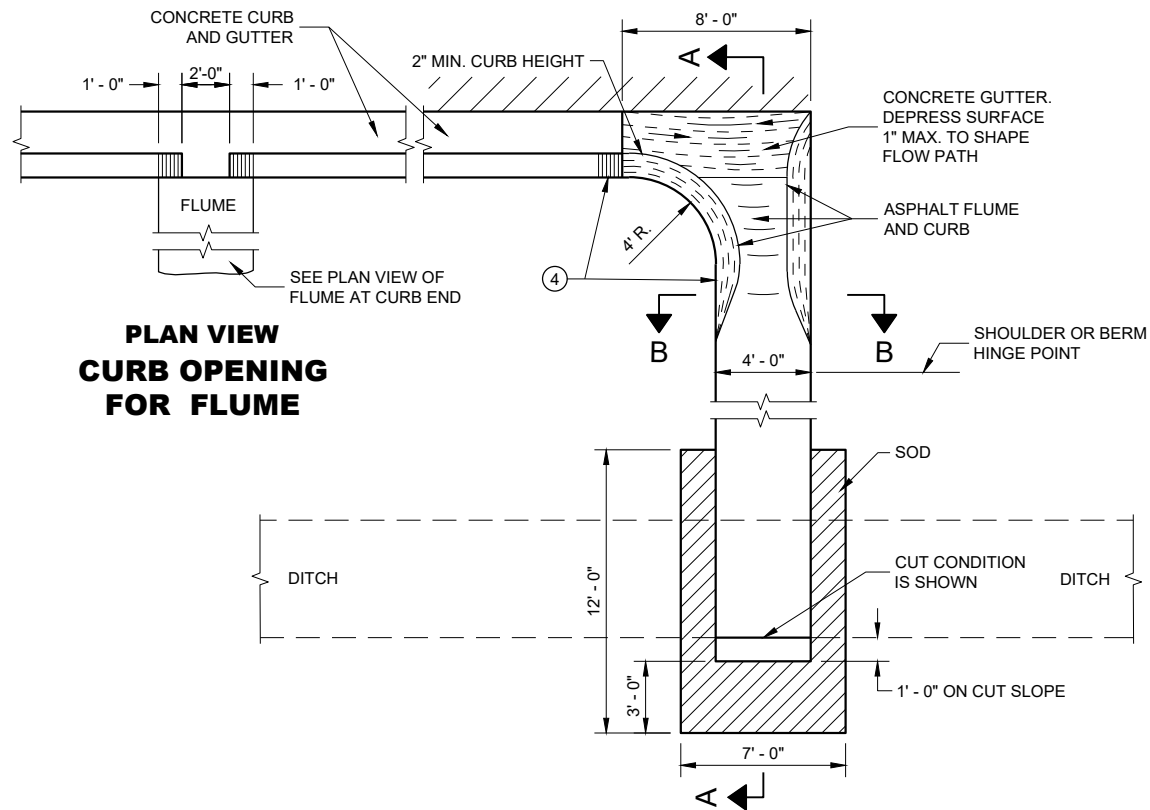
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE May 2023 /S/ Rodney Taylor  
ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

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

### ASPHALTIC FLUME



**PLAN VIEW  
CURB OPENING  
FOR FLUME**

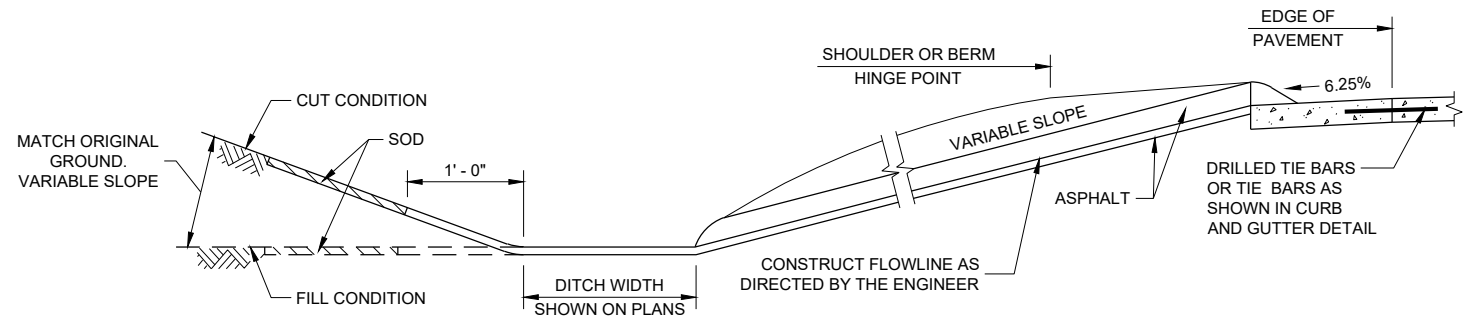
**PLAN VIEW  
FLUME AT CURB END**

### GENERAL NOTES

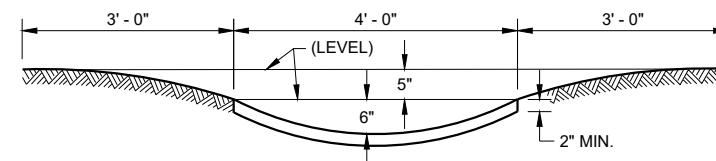
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

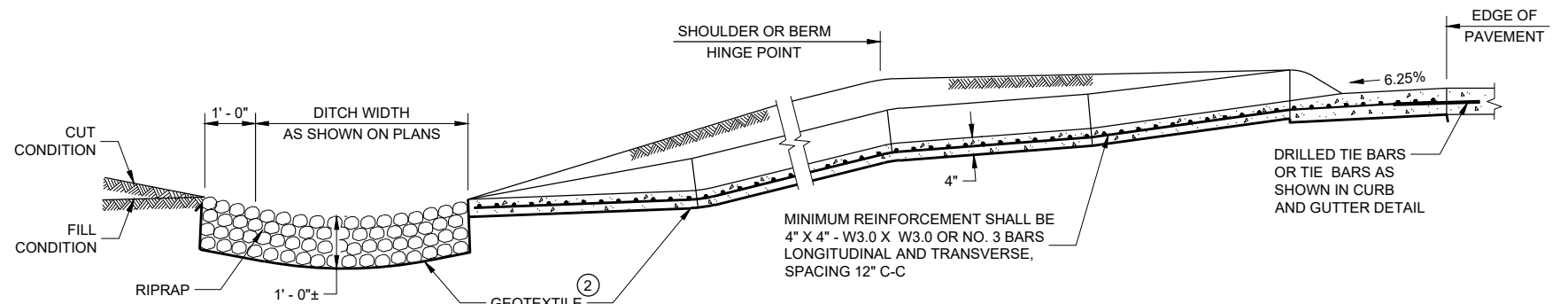
- ① JOINTS SHALL BE 1/8" TO 1/4" WIDE BY 1 1/2" DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.
- ③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED.
- 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.



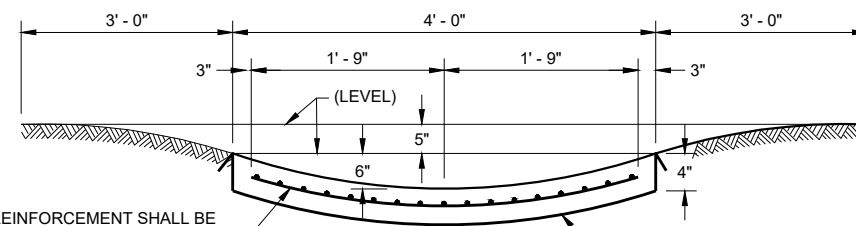
**SECTION A - A**



**SECTION B - B**



**SECTION C - C**



**SECTION D - D**

MINIMUM REINFORCEMENT SHALL BE 4" X 4" - W3.0 X W3.0 OR NO. 3 BARS LONGITUDINAL AND TRANSVERSE, SPACING 12" C-C

6

6

SDD 08D04 - 07

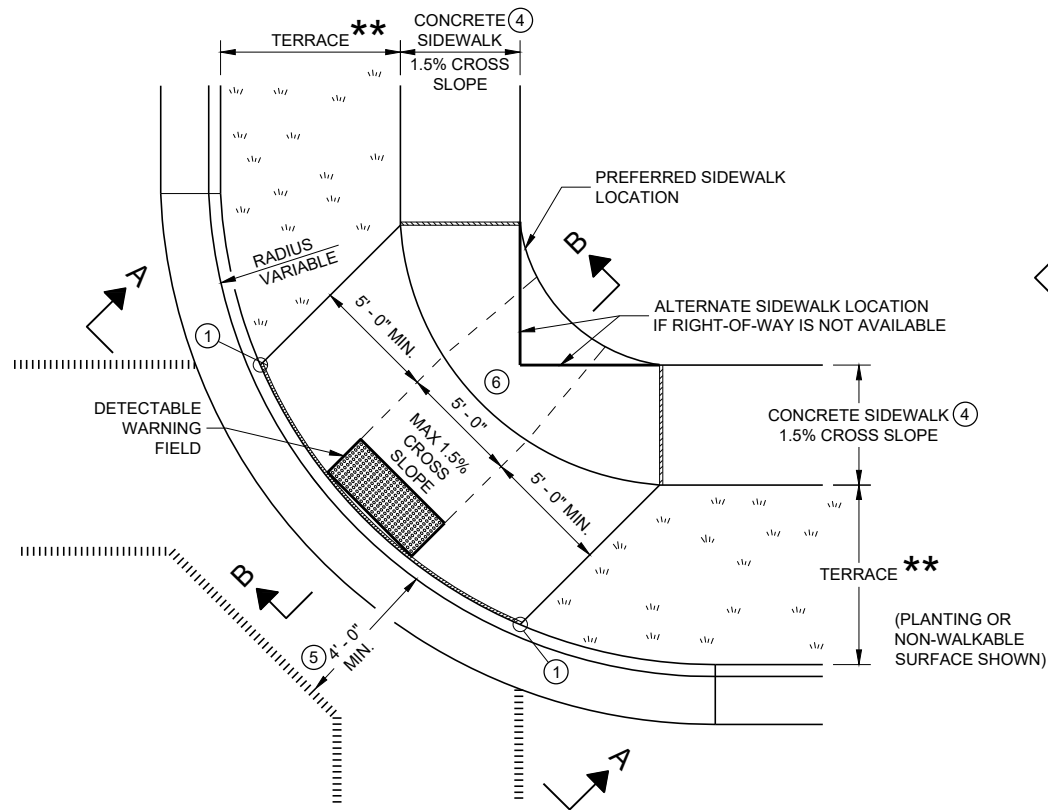
SDD 08D04 - 07

### CONCRETE SURFACE DRAINS AND ASPHALTIC FLUMES

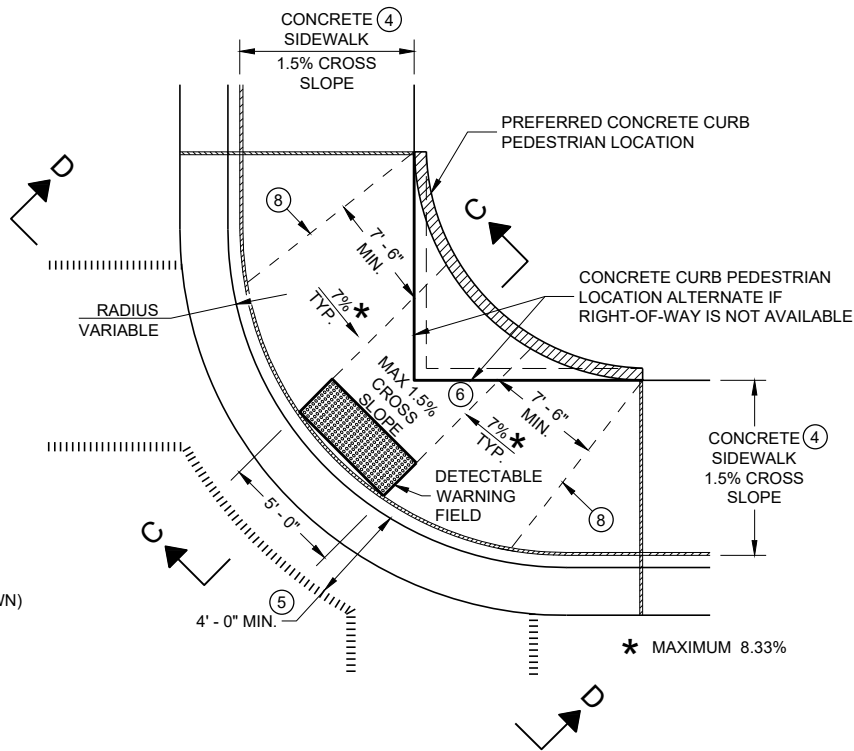
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2023 /S/ Rodney Taylor  
DATE ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

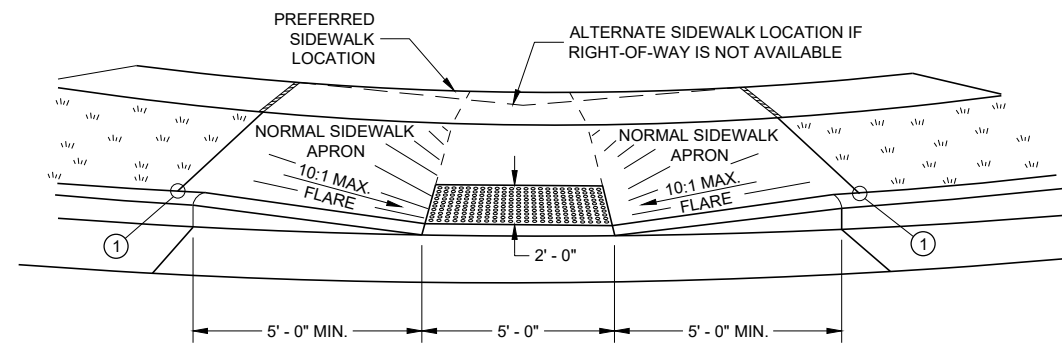
FHWA



**PLAN VIEW  
CURB RAMP TYPE 1  
(CENTER OF CORNER RADIUS)**

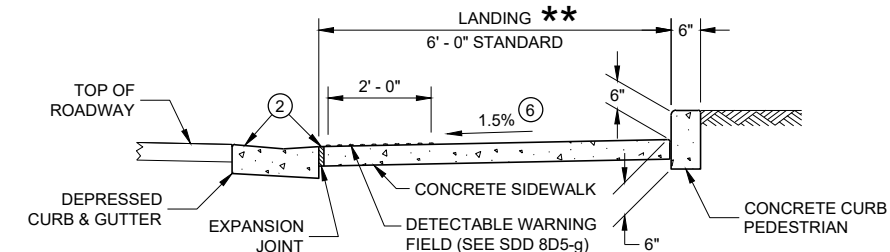


**PLAN VIEW  
CURB RAMP TYPE 1 - A  
(NO TERRACE)**

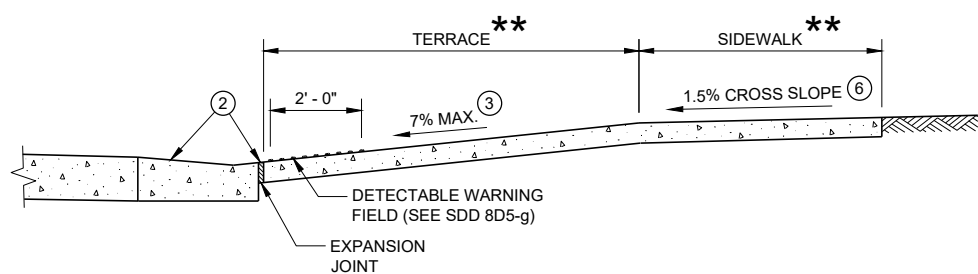


**VIEW A - A FOR TYPE 1**

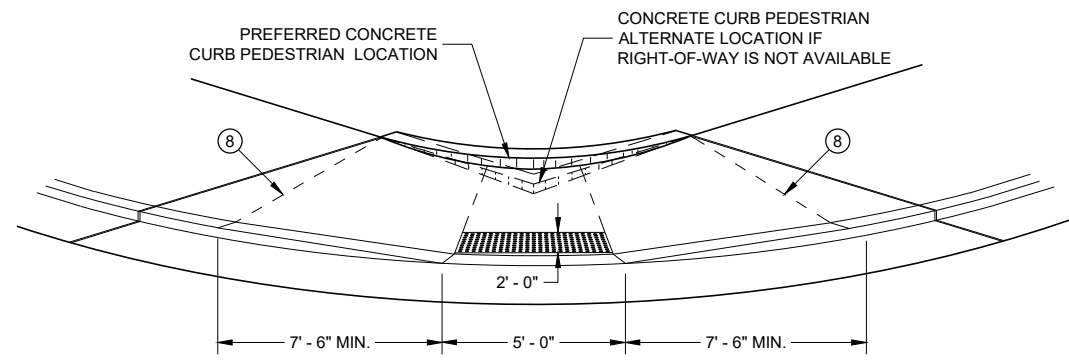
\*\* WIDTH SHOWN ELSEWHERE  
IN THE PLANS



**SECTION C - C FOR TYPE 1 - A**



**SECTION B - B FOR TYPE 1**



**VIEW D - D FOR TYPE 1 - A**

**GENERAL NOTES**

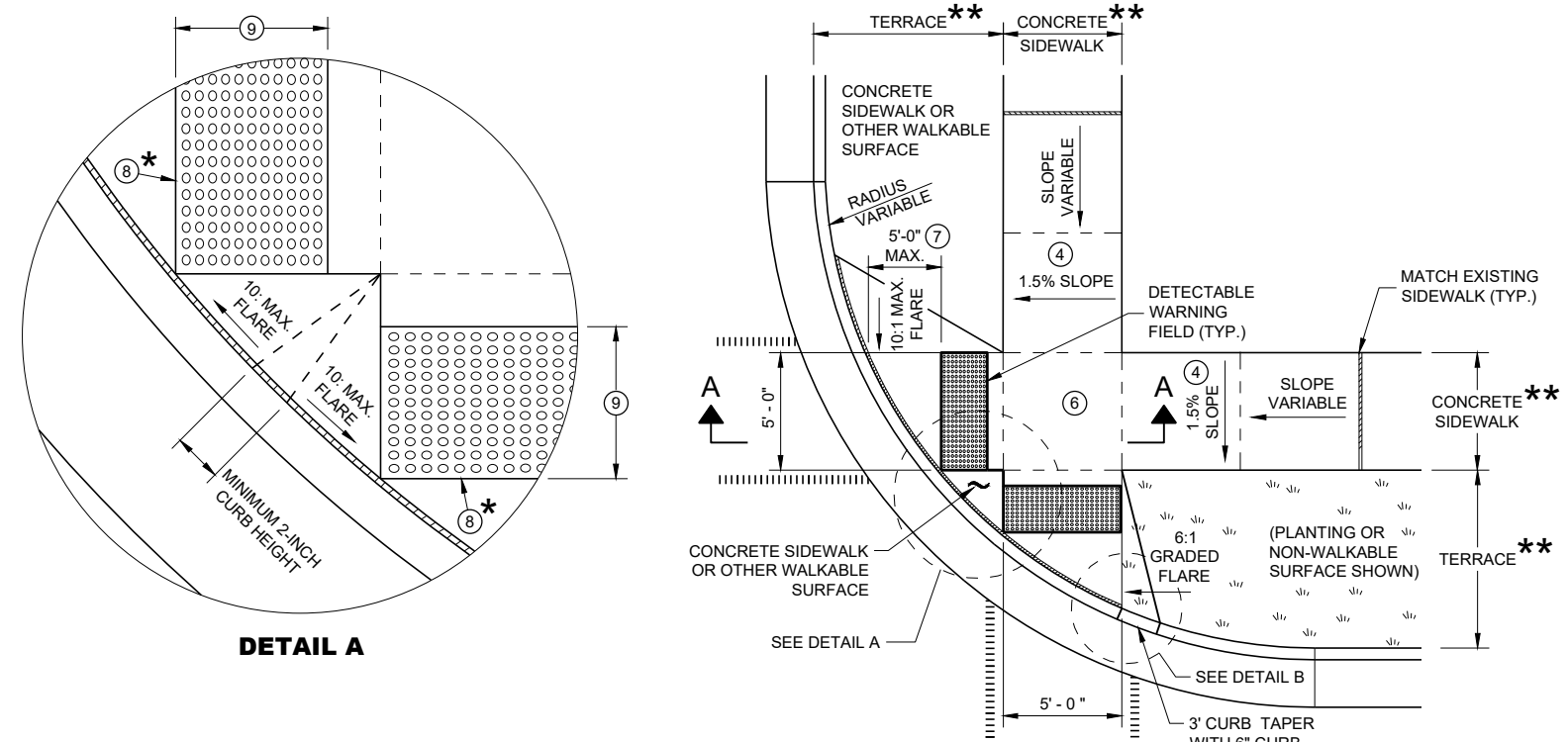
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.
- TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.
- DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.
- SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.
- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

**LEGEND**

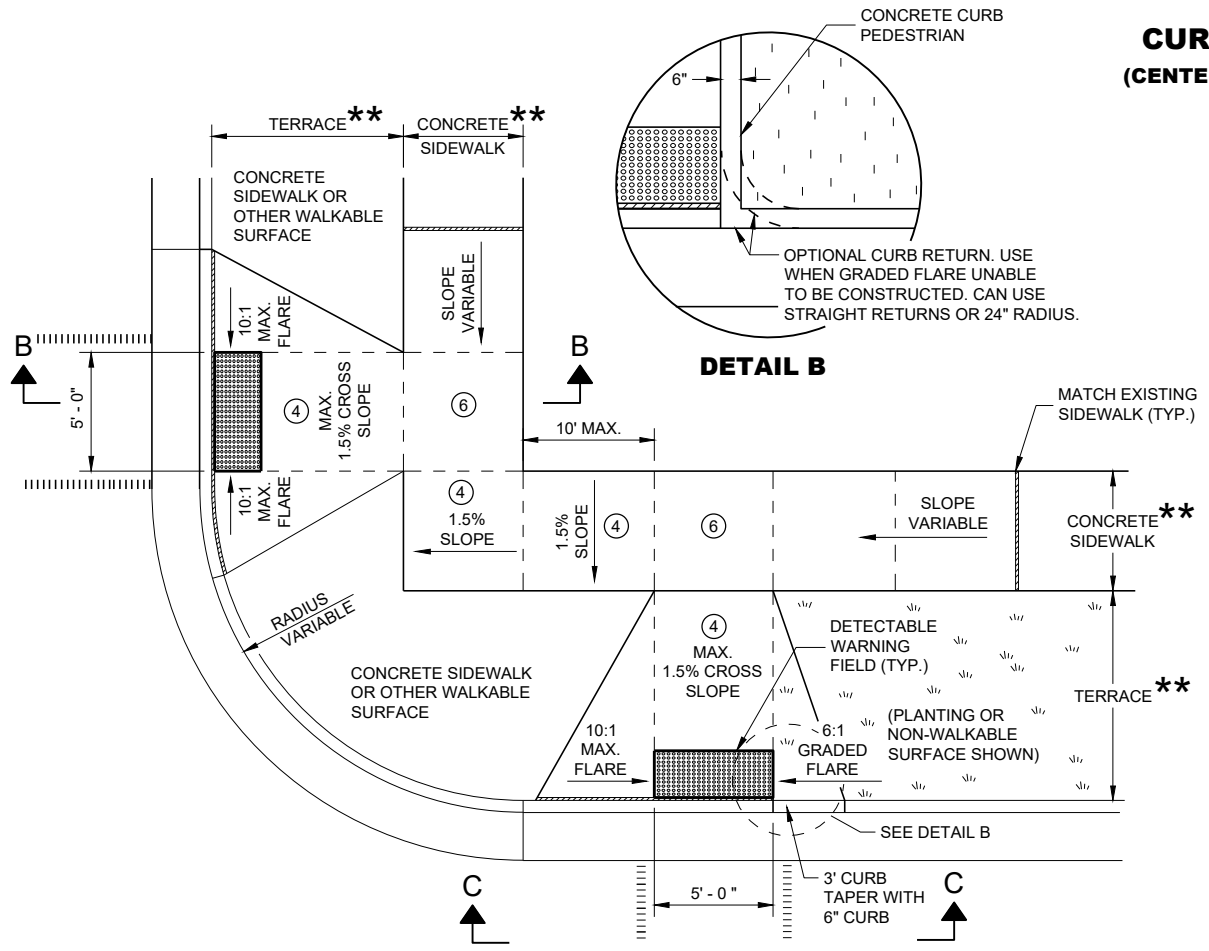
- 1/2" EXPANSION JOINT SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||||| PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS  
TYPE 1 AND 1-A**

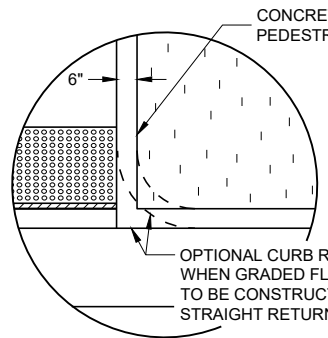
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**PLAN VIEW CURB RAMP TYPE 2 (CENTER OF CORNER RADIUS)**



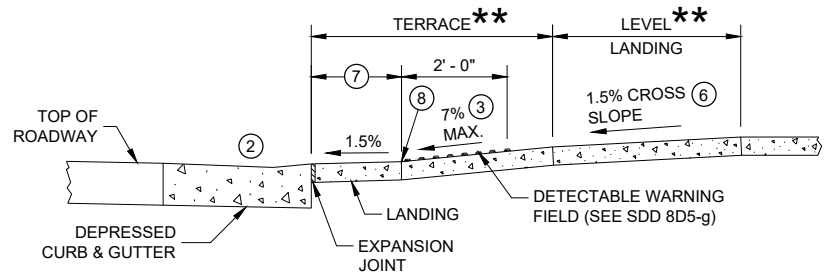
**PLAN VIEW CURB RAMP TYPE 3 (OUTSIDE OF CROSSWALK AREA)**



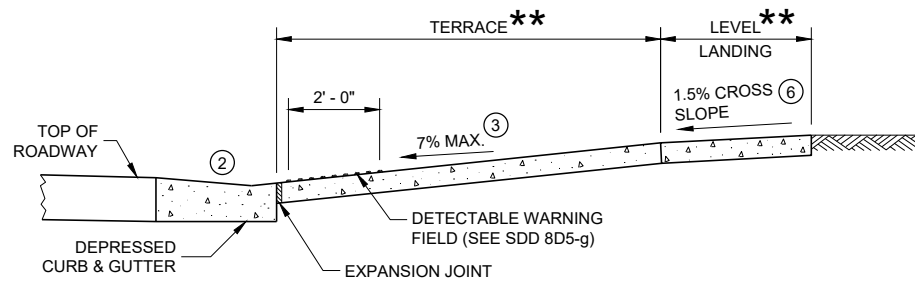
**DETAIL B**

**GENERAL NOTES**

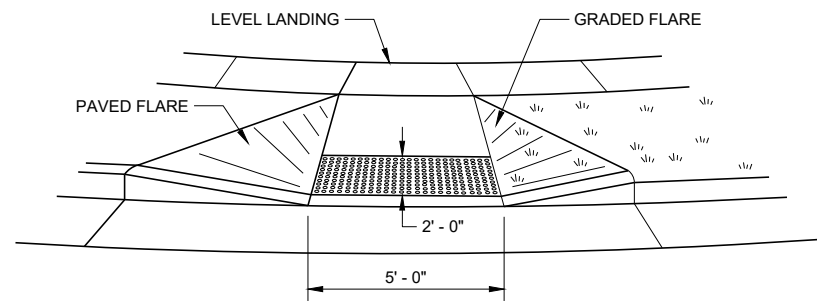
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



**SECTION A - A FOR TYPE 2**



**SECTION B - B FOR TYPE 3**



**VIEW C - C FOR TYPE 3**

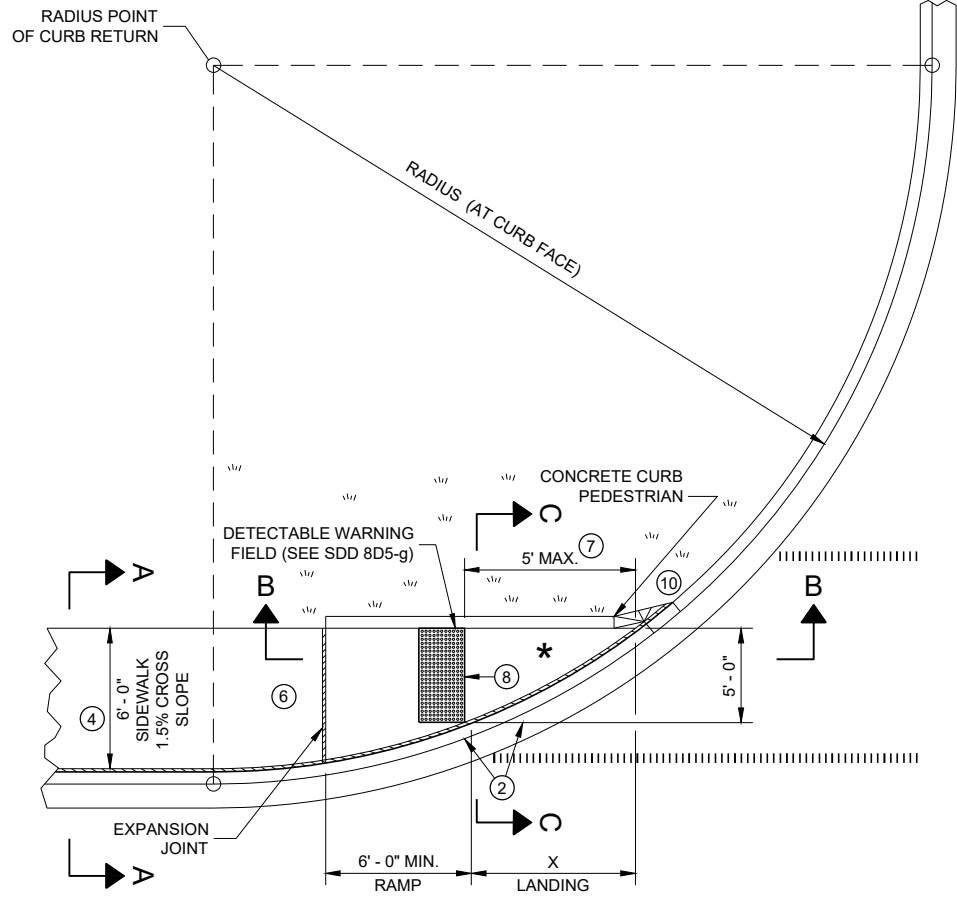
- \* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- \*\* WIDTH SHOWN ELSEWHERE IN THE PLANS

**LEGEND**

- 1/2" EXPANSION JOINT SIDEWALK
- - - - - CONTRACTION JOINT SIDEWALK
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS  
TYPE 2 AND 3**

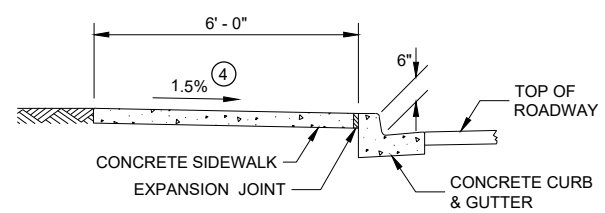
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**PLAN VIEW  
CURB RAMP TYPE 4A**

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5 1/2"

INTERMEDIATE RADII CAN BE INTERPOLATED



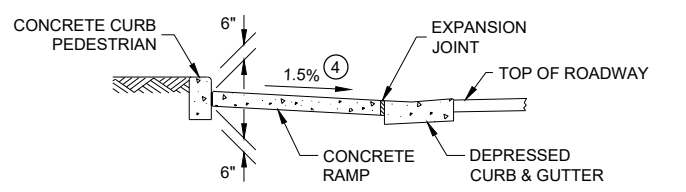
**SECTION A - A FOR TYPE 4A**

**GENERAL NOTES**

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4" INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

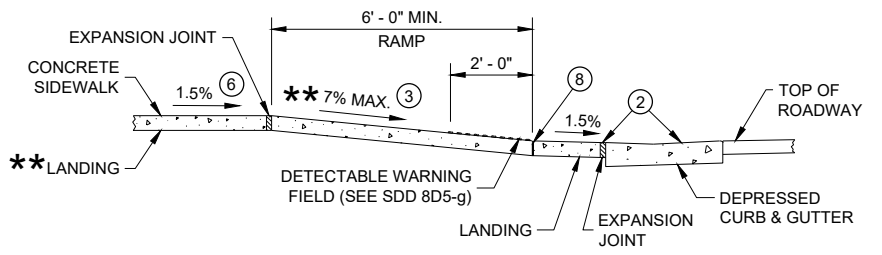
**LEGEND**

- 1/2" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)



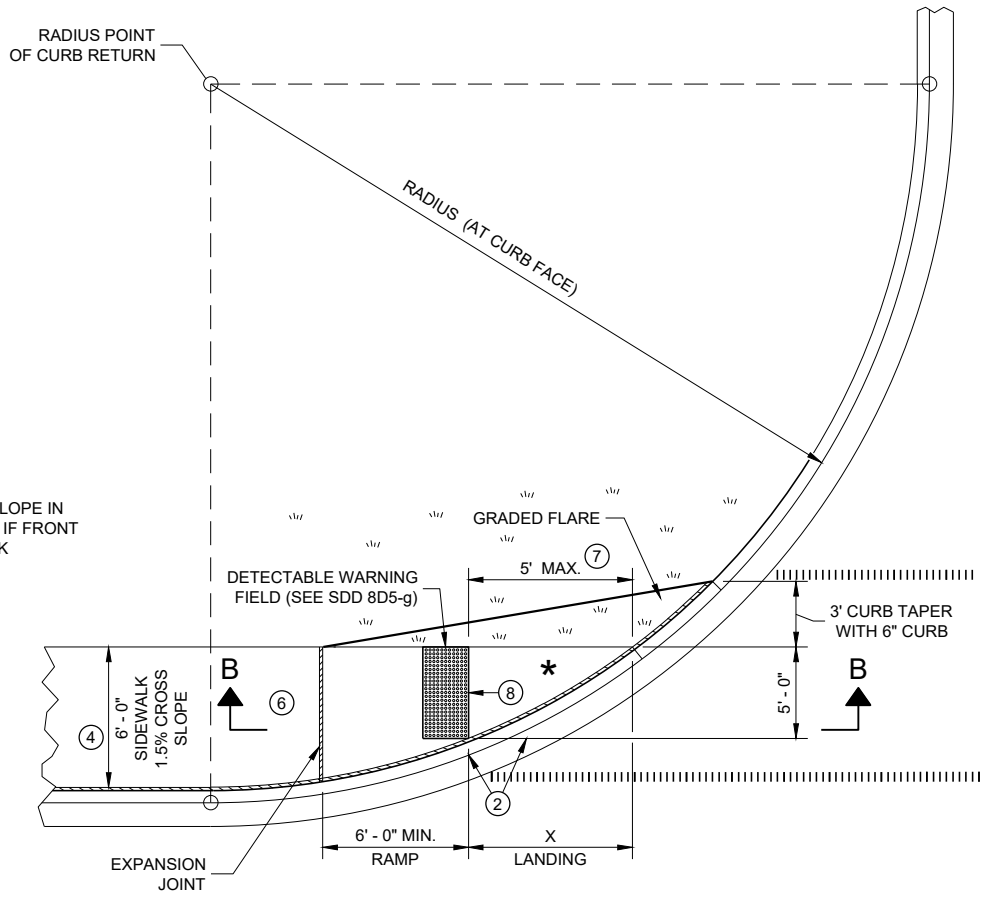
**SECTION C - C FOR TYPE 4A**

\* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

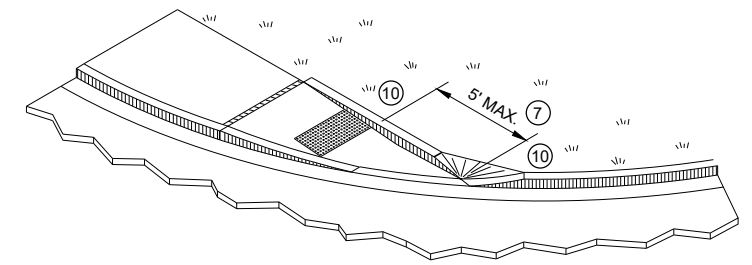


**SECTION B - B FOR  
TYPE 4A AND TYPE 4A1**

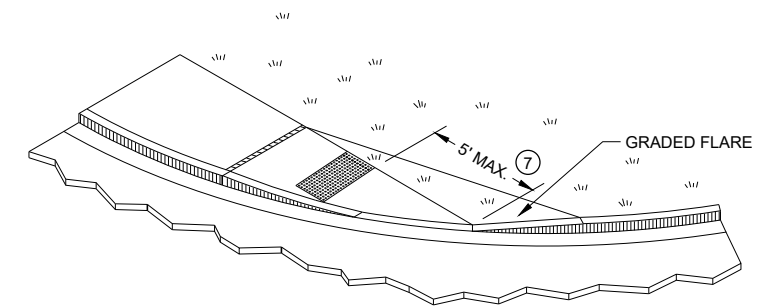
\*\* IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



**PLAN VIEW  
CURB RAMP TYPE 4A1**



**ISOMETRIC VIEW FOR TYPE 4A**

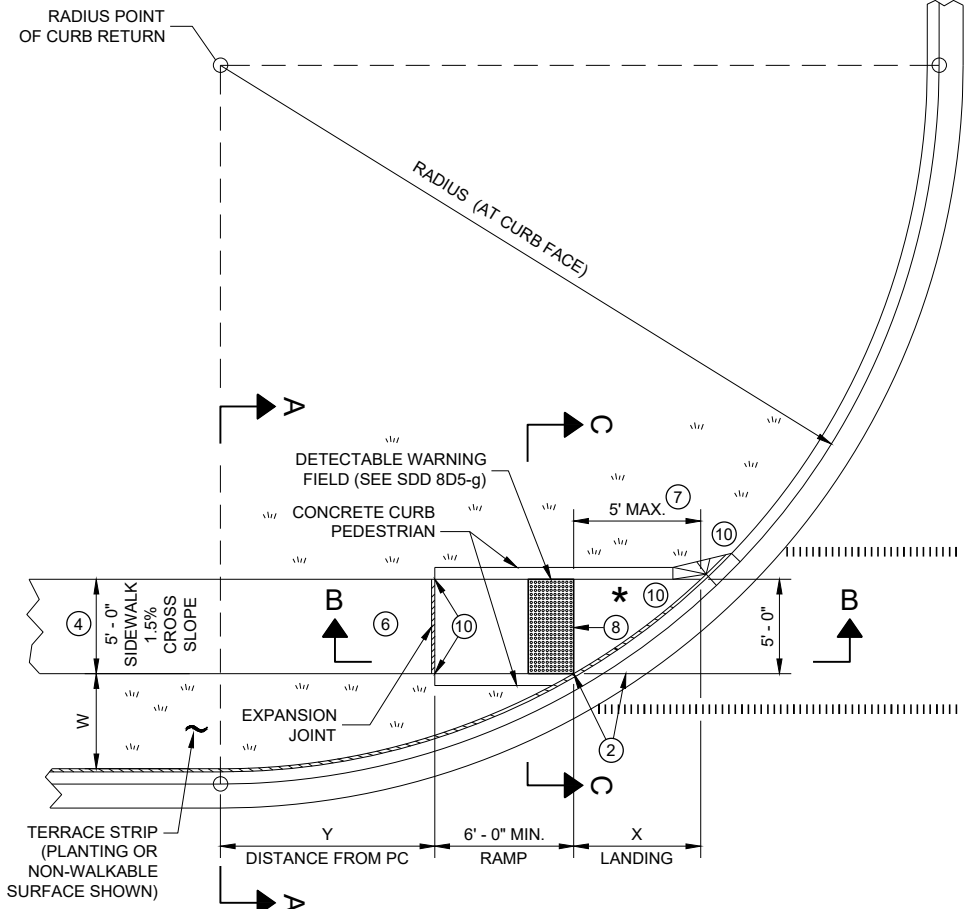


**ISOMETRIC VIEW FOR TYPE 4A1**

**CURB RAMPS  
TYPE 4A AND 4A1**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION





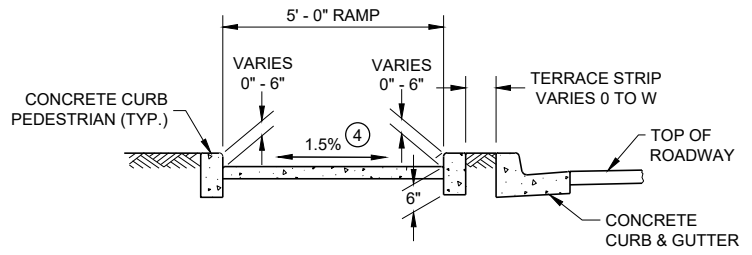
RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 1/4"	0' - 5"	2' - 1"	1' - 4 1/2"	1' - 5"	2' - 1"	0' - 10"	2' - 7 1/2"	0' - 3 1/4"	3' - 0 1/4"						
15 FEET	4' - 6 3/4"	2' - 1 3/4"	3' - 9"	3' - 5 3/4"	3' - 1 1/4"	4' - 6"	2' - 6 3/4"	5' - 4 1/2"	2' - 1"	6' - 1"	1' - 8"	6' - 8 1/2"	1' - 3 1/4"	7' - 2 1/2"	0' - 10 3/4"	7' - 7 1/4"
20 FEET	5' - 9 3/4"	3' - 6 1/2"	4' - 11 1/2"	5' - 1 3/4"	4' - 3 3/4"	6' - 5 1/2"	3' - 8 3/4"	7' - 7"	3' - 3"	8' - 6 1/2"	2' - 10"	9' - 4 1/2"	2' - 5 1/2"	10' - 1 1/4"	2' - 1 1/4"	10' - 9"
30 FEET			6' - 9 1/4"	7' - 11 1/4"	6' - 0 1/4"	9' - 8"	5' - 5"	11' - 1 3/4"	4' - 10 3/4"	12' - 5 3/4"	4' - 5 1/2"	13' - 7 3/4"	4' - 0 3/4"	14' - 8 1/2"	3' - 8 1/2"	15' - 8 1/4"
40 FEET									6' - 1 3/4"	15' - 8 1/2"	5' - 8"	17' - 2"	5' - 3"	18' - 5 3/4"	4' - 10 3/4"	19' - 8 1/4"
50 FEET															5' - 10 1/4"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED  
 DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH  
 DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

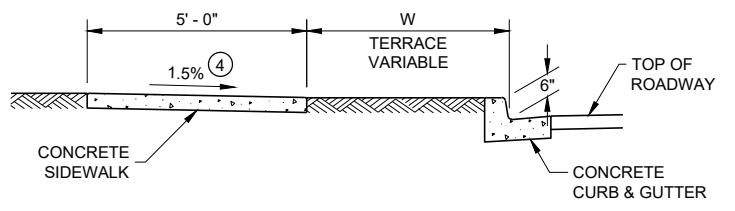
- LEGEND**
- ===== 1/2" EXPANSION JOINT SIDEWALK
  - - - - - CONTRACTION JOINT SIDEWALK
  - ||||||| PAVEMENT MARKING CROSSWALK (WHITE)

**GENERAL NOTES**

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/2 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- (7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- (8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- (10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

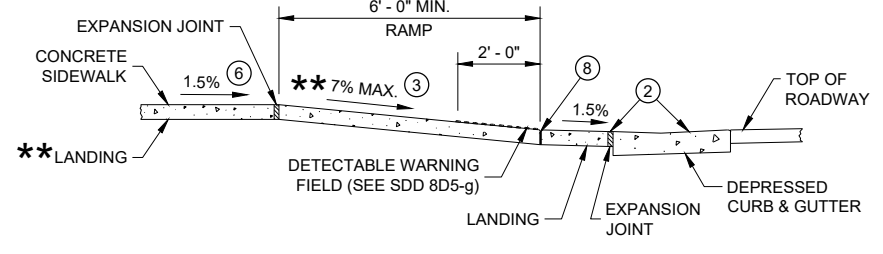


**SECTION C - C FOR TYPE 4B**



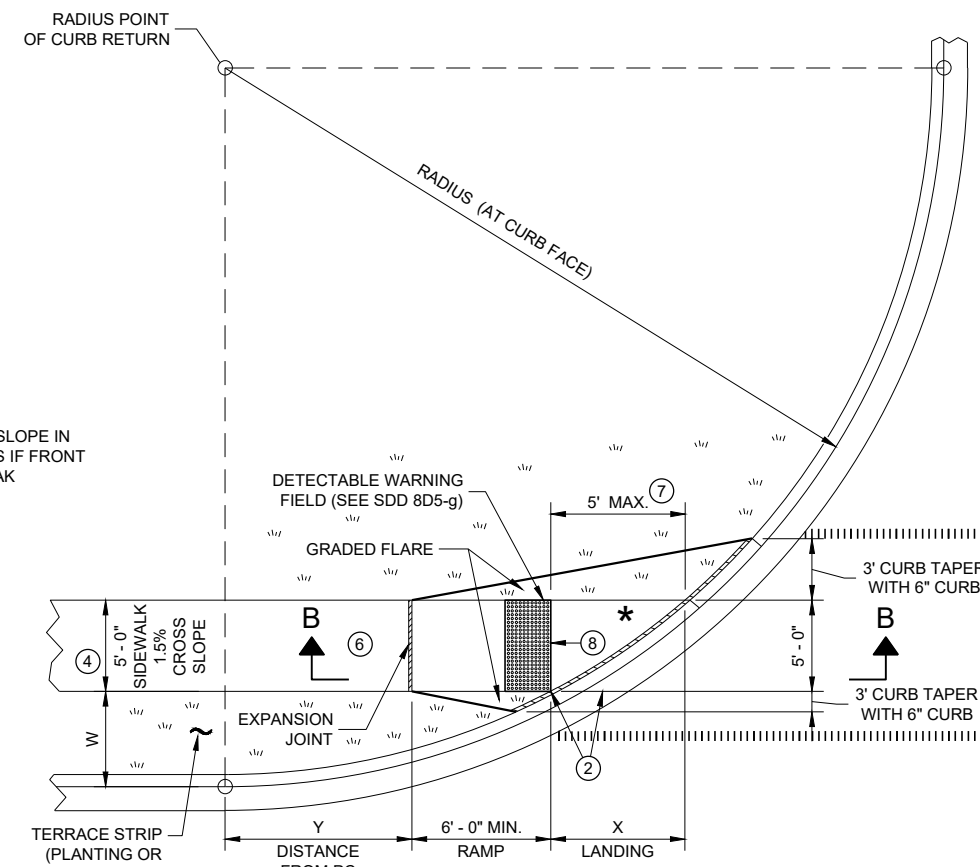
**SECTION A - A FOR TYPE 4B**

\* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

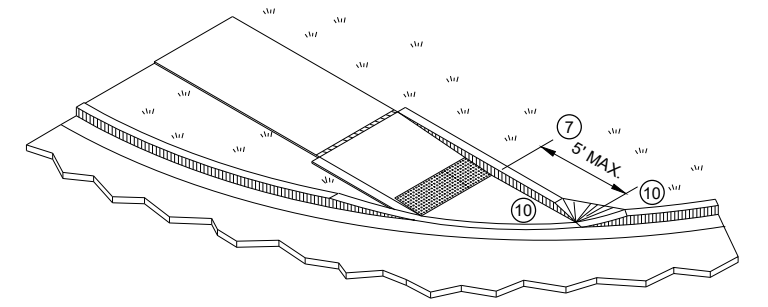


**SECTION B - B FOR TYPE 4B AND TYPE 4B1**

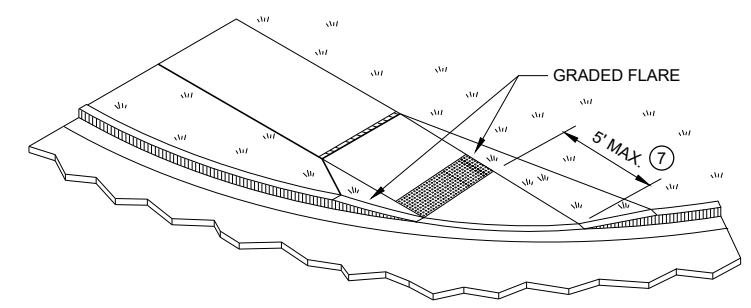
\*\* IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



**PLAN VIEW CURB RAMP TYPE 4B1**



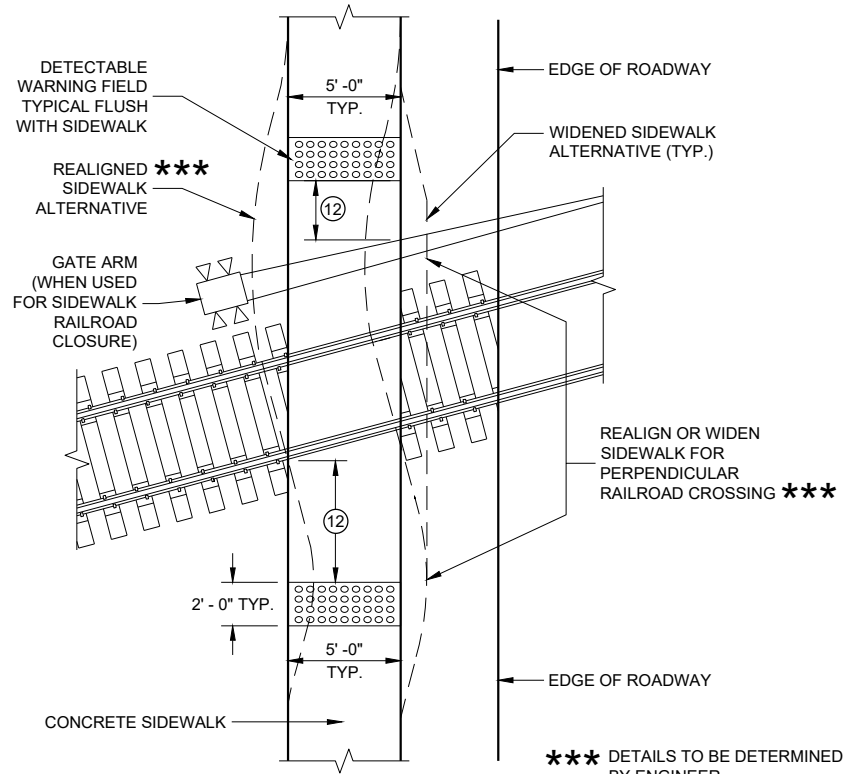
**ISOMETRIC VIEW FOR TYPE 4B**



**ISOMETRIC VIEW FOR TYPE 4B1**

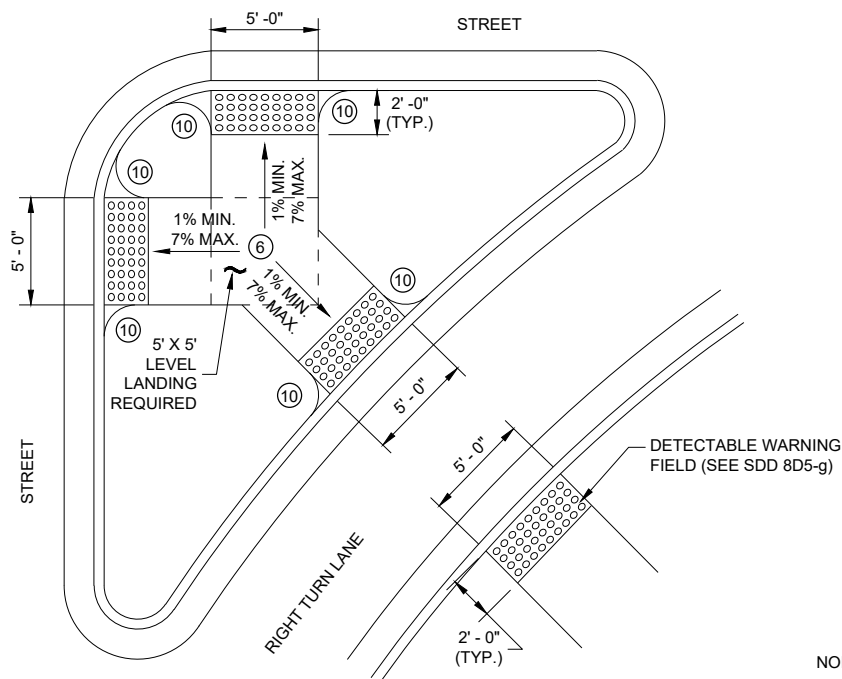
**CURB RAMPS TYPE 4B AND 4B1**

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



**CURB RAMP TYPE 8**

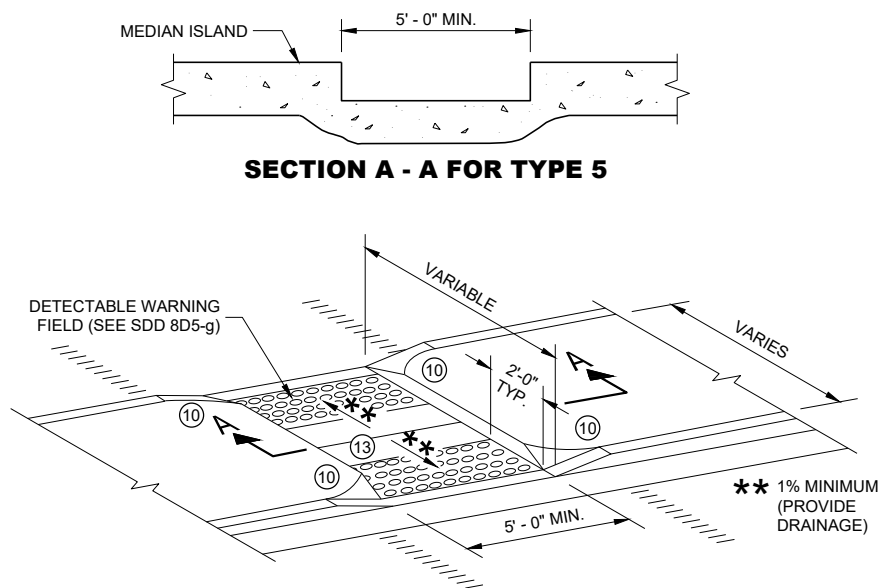
**DETECTABLE WARNINGS AT RAILROAD CROSSING**



**CURB RAMP TYPE 6**

**DETECTABLE WARNING AT ISLANDS**

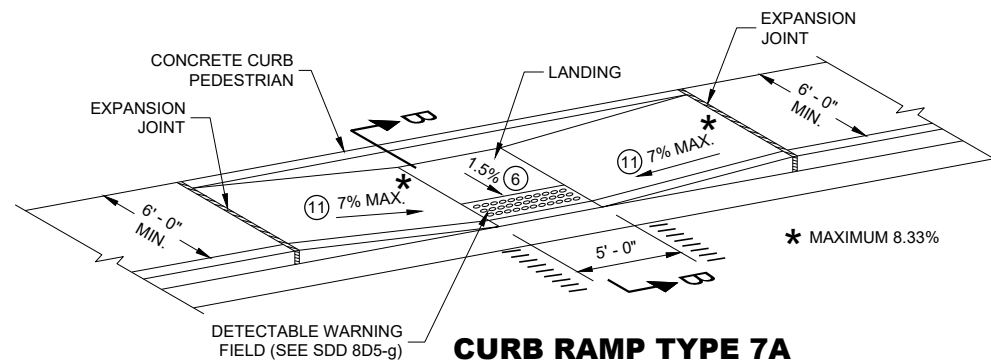
REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



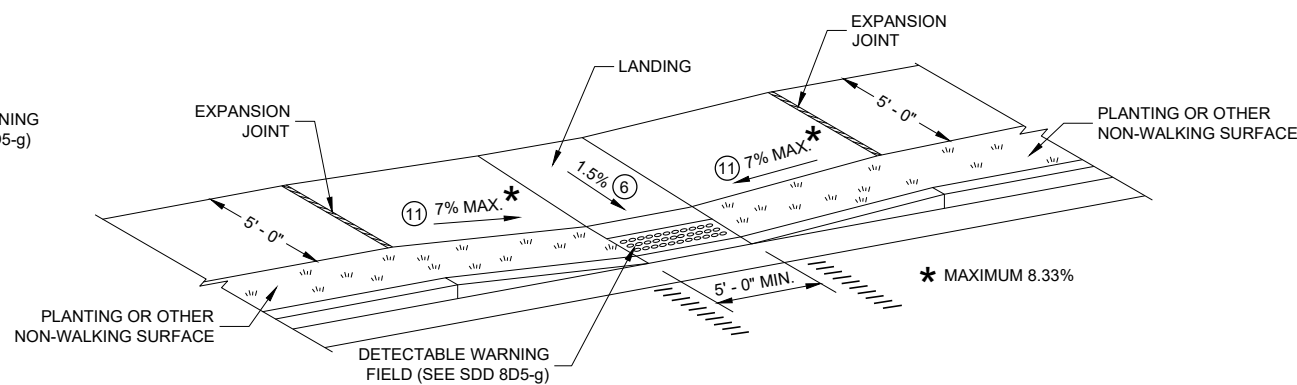
**SECTION A - A FOR TYPE 5**

**CURB RAMP TYPE 5**

**MEDIAN ISLAND  
NON-ELEVATED PEDESTRIAN CROSSING**



**CURB RAMP TYPE 7A  
MID BLOCK CROSSING**



**CURB RAMP TYPE 7B  
MID BLOCK CROSSING**

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.

**GENERAL NOTES**

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

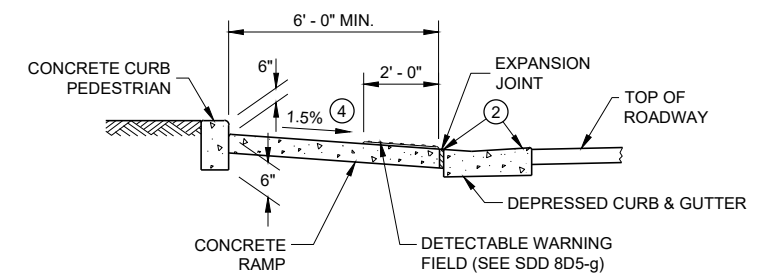
SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

- (2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- (3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- (4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- (6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.
- (10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.
- (11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.
- (12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.
- (13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STREET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

**LEGEND**

- ===== 1/2" EXPANSION JOINT SIDEWALK
- - - - - CONTRACTION JOINT FIELD LOCATED
- ||||||| PAVEMENT MARKING CROSSWALK (WHITE)

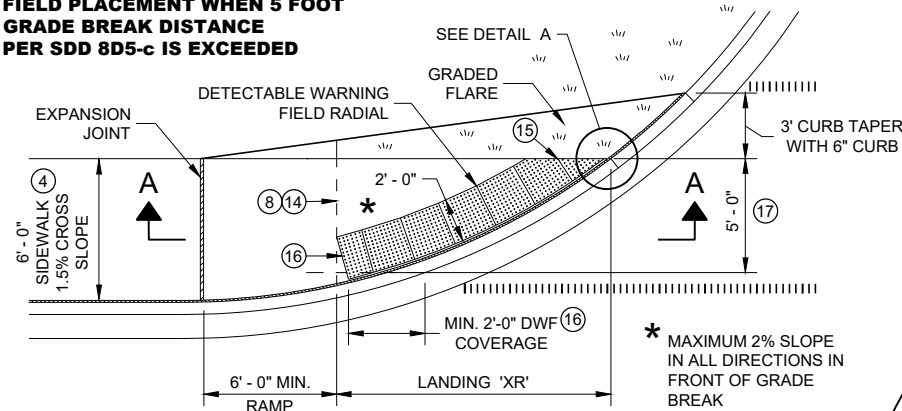


**SECTION B - B FOR TYPE 7A**

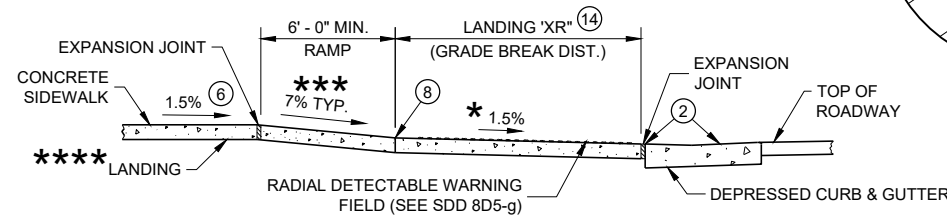
**CURB RAMPS  
TYPE 5, 6, 7A, 7B & 8**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED**



**PLAN VIEW CURB RAMP TYPE 4A1 (GRADE BREAK DISTANCE GREATER THAN 5 FEET)**

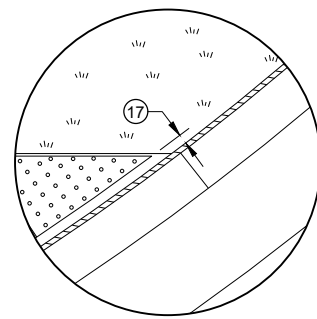


**SECTION A - A FOR TYPE 4A1**

\*\*\*\* IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

\*\*\* MAXIMUM 8.33%

- LEGEND**
- 1/2" EXPANSION JOINT SIDEWALK
  - - - - CONTRACTION JOINT SIDEWALK
  - ||||| PAVEMENT MARKING CROSSWALK (WHITE)

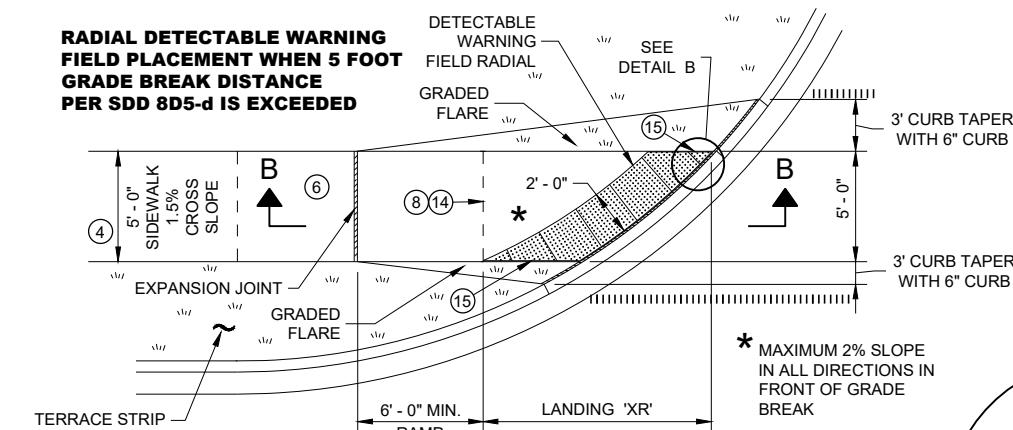


**DETAIL A**

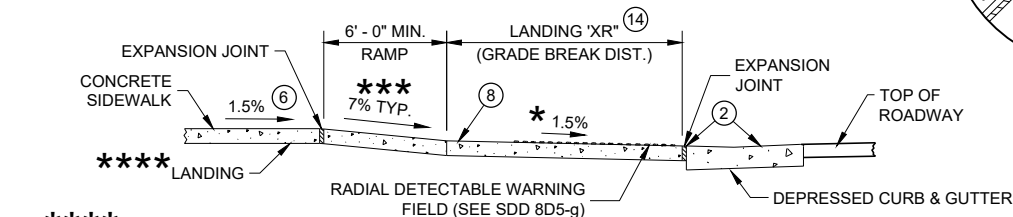
**GENERAL NOTES**

- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B RAMPS ARE NOT SHOWN.
- REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.
- FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.
- DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.
- 2 GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4 - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
  - 3 AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
  - 4 ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
  - 6 PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.
  - 8 PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
  - 14 CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
  - 15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
  - 16 USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
  - 17 A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED**



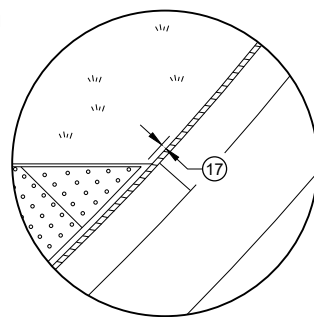
**PLAN VIEW CURB RAMP TYPE 4B1 (GRADE BREAK DISTANCE GREATER THAN 5 FEET)**



**SECTION B - B FOR TYPE 4B1**

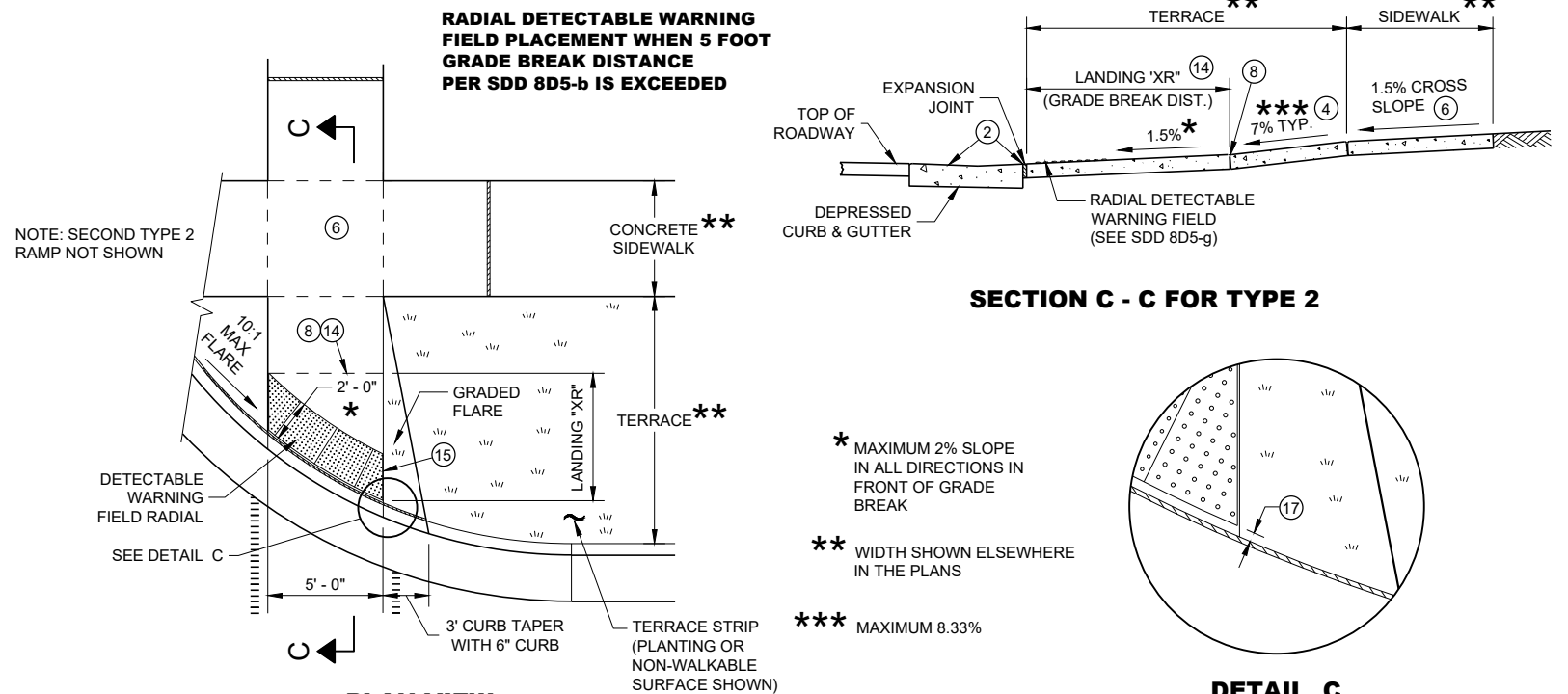
\*\*\*\* IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

\*\*\* MAXIMUM 8.33%



**DETAIL B**

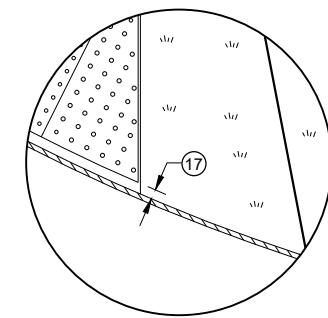
**RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED**



**PLAN VIEW CURB RAMP TYPE 2 (GRADE BREAK DISTANCE GREATER THAN 5 FEET) (ON LINE WITH SIDEWALK)**

NOTE: SECOND TYPE 2 RAMP NOT SHOWN

- \* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK
- \*\* WIDTH SHOWN ELSEWHERE IN THE PLANS
- \*\*\* MAXIMUM 8.33%



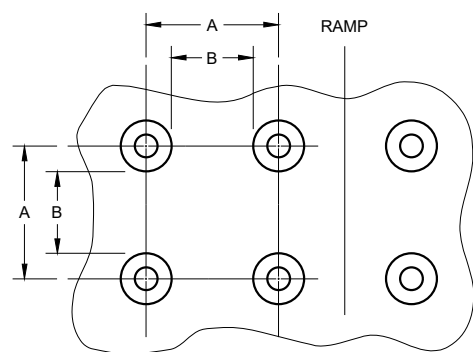
**DETAIL C**

**CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS**

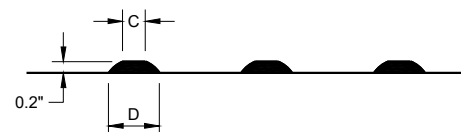
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

\* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

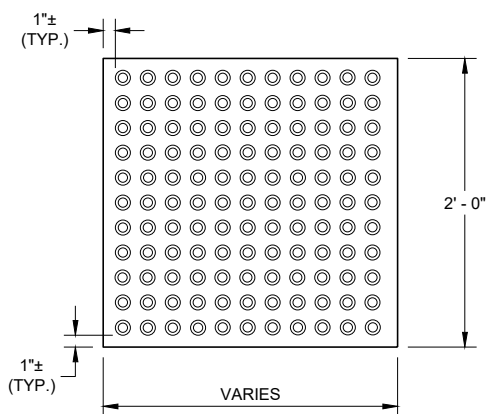


**PLAN VIEW**

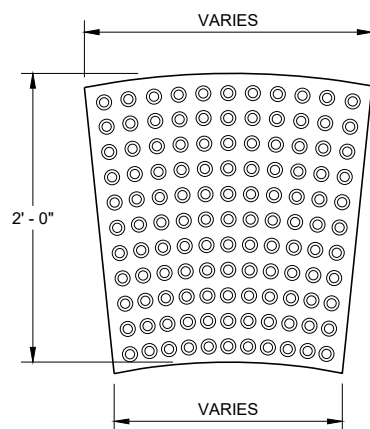


**ELEVATION VIEW**

**TRUNCATED DOMES  
DETECTABLE WARNING PATTERN DETAIL**

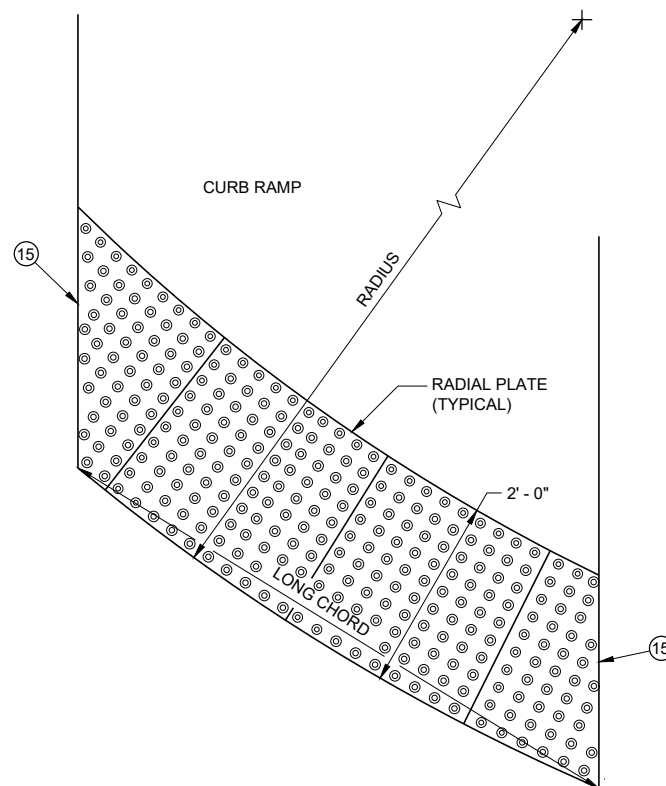


**RECTANGULAR  
PLATES**

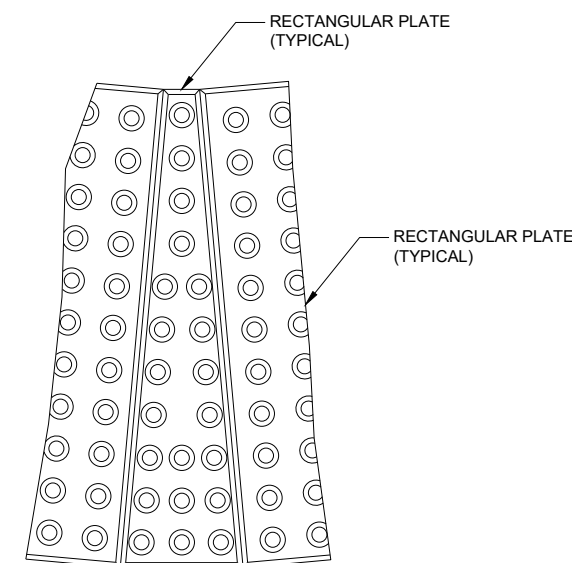


**RADIAL  
PLATES**

**PLAN VIEW  
DETECTABLE WARNING FIELDS (TYPICAL)**



**PLAN VIEW  
RADIAL DETECTABLE  
WARNING FIELD ATTRIBUTES**



**PLAN VIEW  
RADIAL WEDGE PLATE  
CONNECTION DETAIL**

**GENERAL NOTES**

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

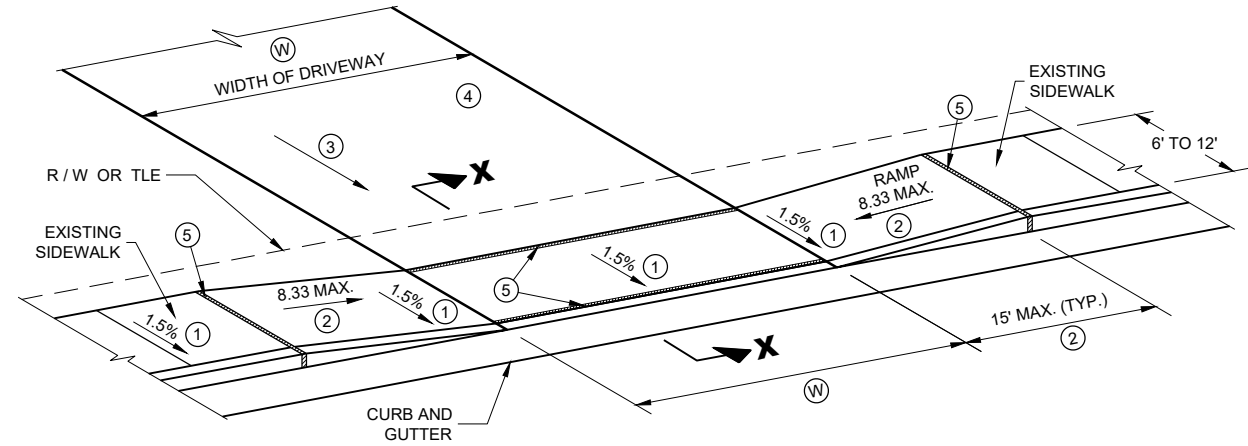
FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

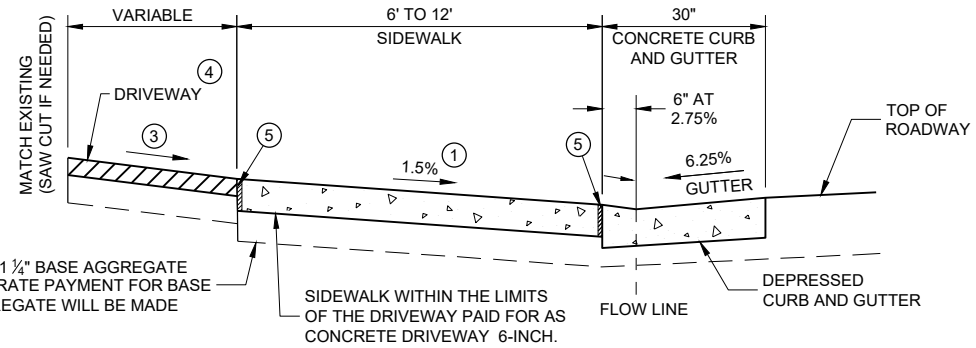
DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

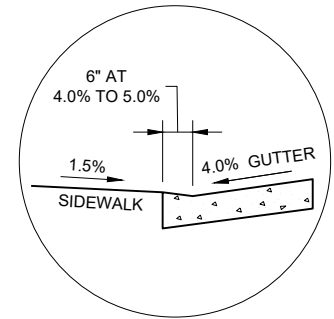
<b>CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
<small>FHWA</small>	



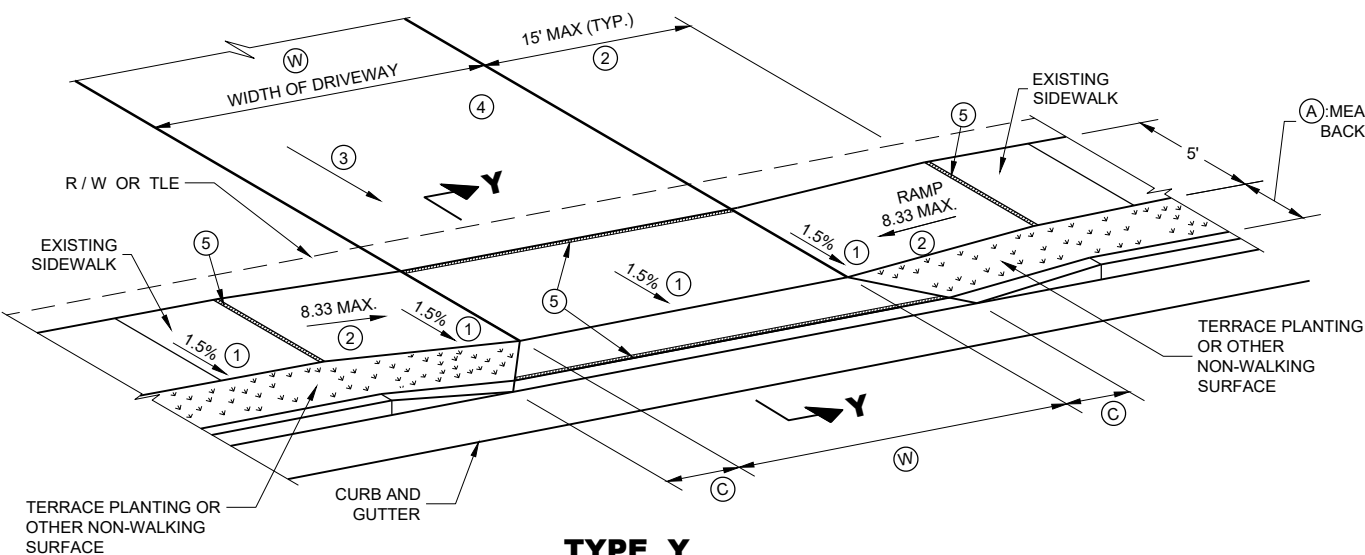
**TYPE X**  
**SIDEWALK ABUTS CURB AND GUTTER**  
**TERRACE VARIES 0 TO 3 FEET**



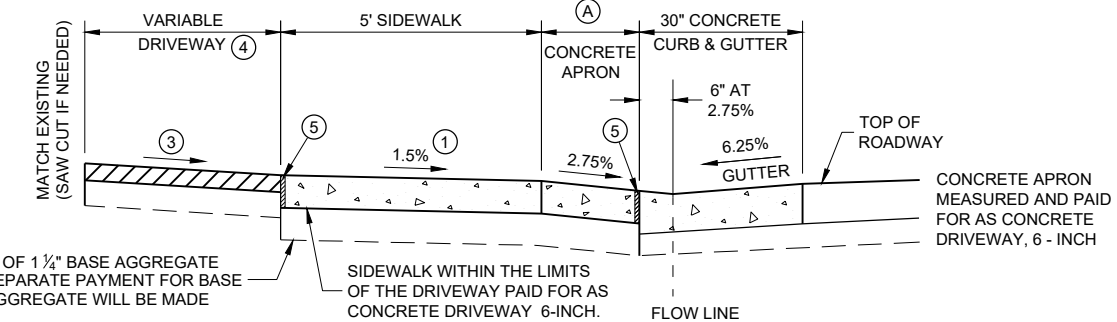
**SECTION X - X**



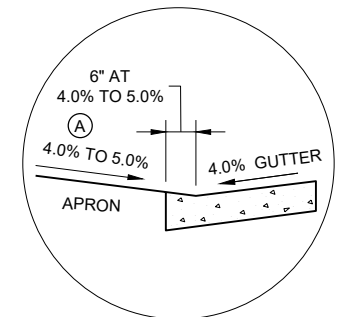
**SECTION X - X**  
**4% GUTTER SLOPE**



**TYPE Y**  
**SIDEWALK WITH NARROWER TERRACE**  
**TERRACE VARIES 4 TO 6 FEET**



**SECTION Y - Y**  
**DRIVEWAY DETAIL WITH CONCRETE**  
**CURB AND GUTTER**  
**(URBAN AND SUBURBAN)**



**SECTION Y - Y**  
**4% GUTTER SLOPE**

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)  
 16' MIN. - 35' MAX. COMMERCIAL (CE)

**TABLE Y**

(A) FEET	(C) FEET
3.5'	2.0'
4.5'	3.0'
5.5'	3.5'

(A): MEASURE FROM BACK OF CURB

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS

**GENERAL NOTES**

PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

(W) IS SHOWN ON PLAN AND PROFILE SHEETS.

OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.

- ① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- ② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY. SLOPE SIDEWALK RAMP TOWARD APRON AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

- ③ **DRIVEWAY SLOPES: DESIRABLE MAXIMUM**  
 10.5% UP AWAY FROM SIDEWALK (SAG)  
 8.5% DOWN AWAY FROM SIDEWALK (CREST)  
 ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG

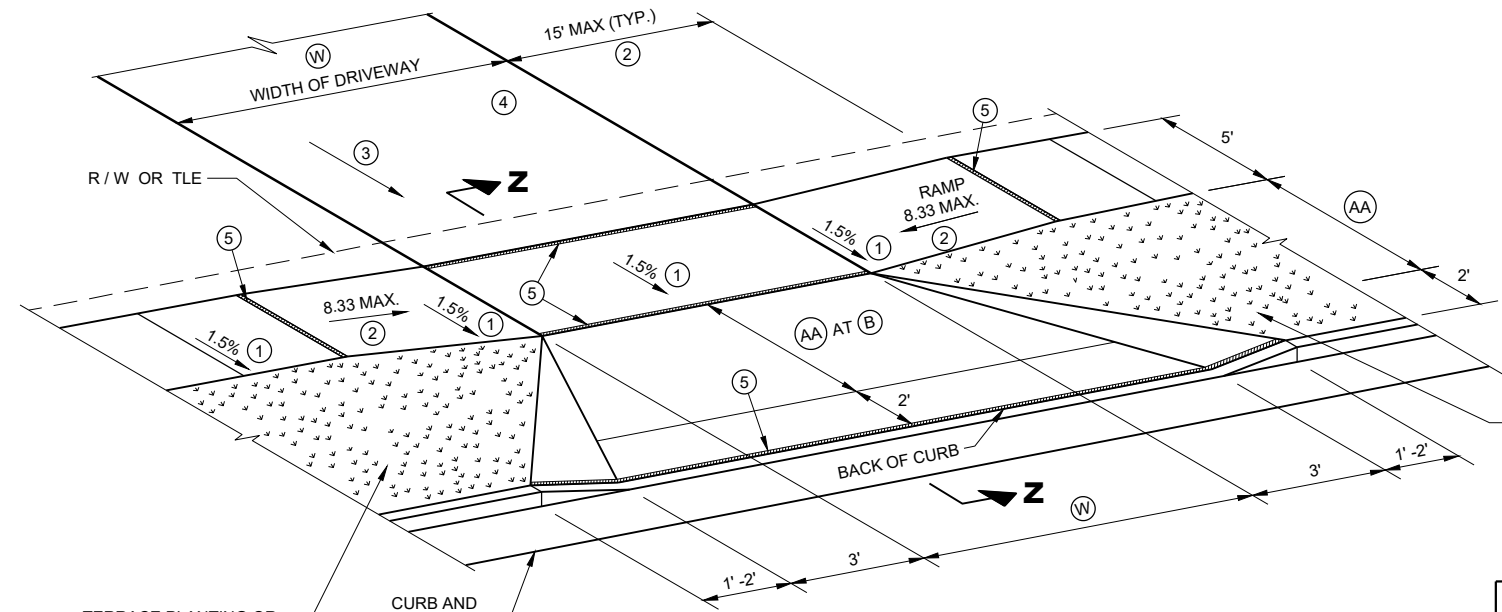
- ④ **DRIVEWAY TYPES**  
 • 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE  
 • 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE  
 • 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)

- ⑤ ½" EXPANSION JOINT FILLER

**DRIVEWAY AND**  
**SIDEWALK RAMPS**  
**TYPES X AND Y**

STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

APPROVED  
 February 2022 /S/ Rodney Taylor  
 DATE ROADWAY STANDARDS DEVELOPMENT  
 ENGINEER



**TYPE Z**  
**SIDEWALK WITH WIDER TERRACE**  
**TERRACE VARIES 7 TO 12 FEET**

**GENERAL NOTES**

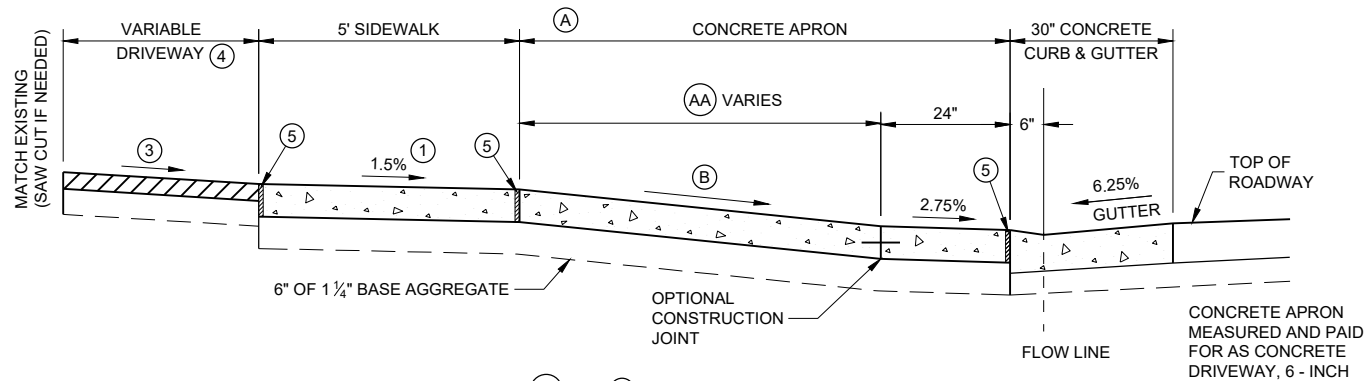
PROVIDE CONSTRUCTION JOINTS ALONG THE CENTER OF THE CONCRETE FOR DRIVEWAYS UNDER 20 FEET IN WIDTH AND AT THE THIRD POINTS OVER 20 FEET IN WIDTH.

- (W) IS SHOWN ON PLAN AND PROFILE SHEETS.
- OFFSETS, ELEVATIONS, AND PERCENT GRADE ARE SHOWN ON THE CROSS SECTIONS.
- ① CONSTRUCTION TOLERANCE OF 0.5%± FOR SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
- ② THE SIDEWALK RAMP MAXIMUM RUNNING SLOPE SHALL NOT REQUIRE THE RAMP LENGTH TO EXCEED 15 FEET TO AVOID CHASING THE SLOPE INDEFINITELY WHEN CONNECTING TO STEEP GRADES. WHEN APPLYING THE 15 FOOT MAXIMUM LENGTH, THE RUNNING SLOPE OF THE SIDEWALK SHALL BE AS FLAT AS FEASIBLE AND NOT EXCEED THE LONGITUDINAL GRADE OF THE ROADWAY.
- ③ DRIVEWAY SLOPES: DESIRABLE MAXIMUM  
 10.5% UP AWAY FROM SIDEWALK (SAG)  
 8.5% DOWN AWAY FROM SIDEWALK (CREST)  
 ABSOLUTE MAXIMUM 15% FOR BOTH CREST AND SAG
- ④ DRIVEWAY TYPES  
 · 6-INCH CONCRETE DRIVEWAY PAVEMENT OVER 6-INCH BASE AGGREGATE  
 · 2-INCH TO 3-INCH ASPHALTIC SURFACE OVER 6-INCH BASE AGGREGATE  
 · 6-INCH BASE AGGREGATE (MAY BE INCREASED FOR CLAY SUBGRADES.)
- ⑤ ½" EXPANSION JOINT FILLER.

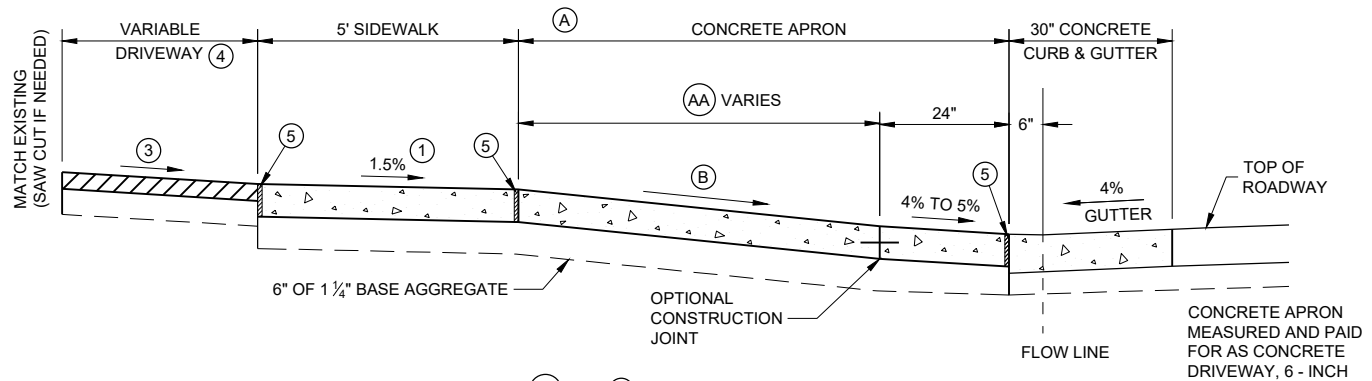
**TABLE Z**

(AA) FEET	(B) % 6.25% GUTTER	(B) % 4% GUTTER
4.5'	11.5%	9% TO 11.5%
5.5'	9% TO 11.5%	8% TO 11.5%
6.5'	8% TO 11.5%	6% TO 11.5%
7.5'	7% TO 11.5%	6% TO 11.5%
8.5'	6% TO 11.5%	5% TO 11.5%
9.5'	5% TO 11.5%	4% TO 11.5%

(W): 12' MIN. - 24' MAX. RESIDENTIAL AND NON-COMMERCIAL (PE & FE)  
 16' MIN. - 35' MAX. COMMERCIAL (CE)



**6.25% GUTTER SLOPE**



**4% GUTTER SLOPE**

NOTE: SIDEWALK MAY BE DEPRESSED IN DRIVEWAY AREAS FOR (B) VALUES NOT SHOWN IN TABLE Z.  
 SIDEWALK WITHIN THE LIMITS OF THE DRIVEWAY PAID FOR AS CONCRETE DRIVEWAY 6-INCH.  
 SEPARATE PAYMENT FOR BASE AGGREGATE WILL BE MADE.

**SECTION Z - Z**  
**DRIVEWAY DETAIL WITH CONCRETE CURB AND GUTTER**  
**(URBAN AND SUBURBAN)**

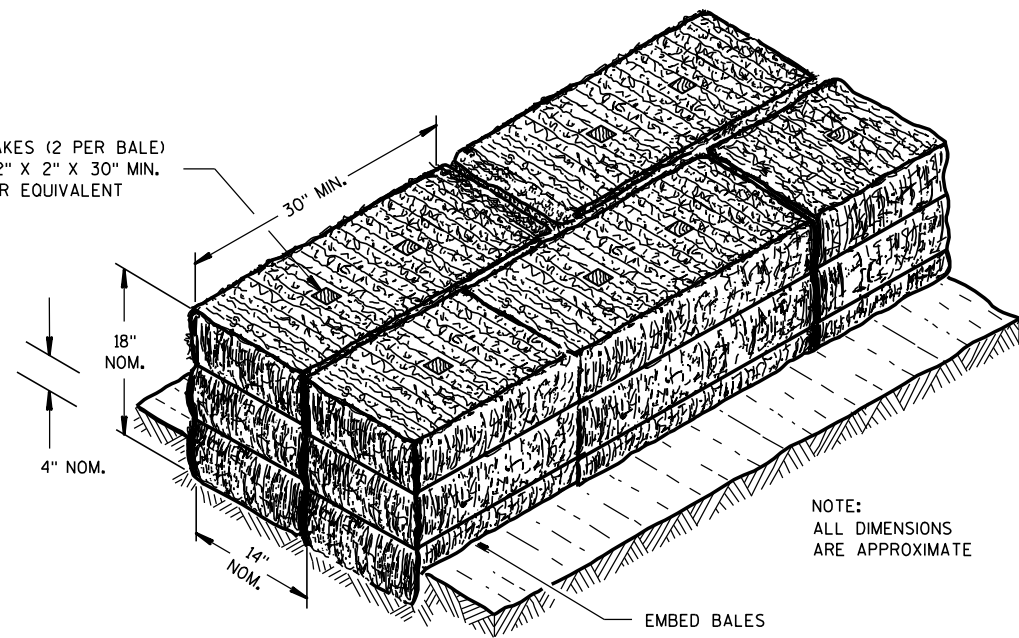
**DRIVEWAY AND SIDEWALK RAMPS TYPE Z**

STATE OF WISCONSIN  
 DEPARTMENT OF TRANSPORTATION

APPROVED  
 February 2022 DATE /S/ Rodney Taylor  
 ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

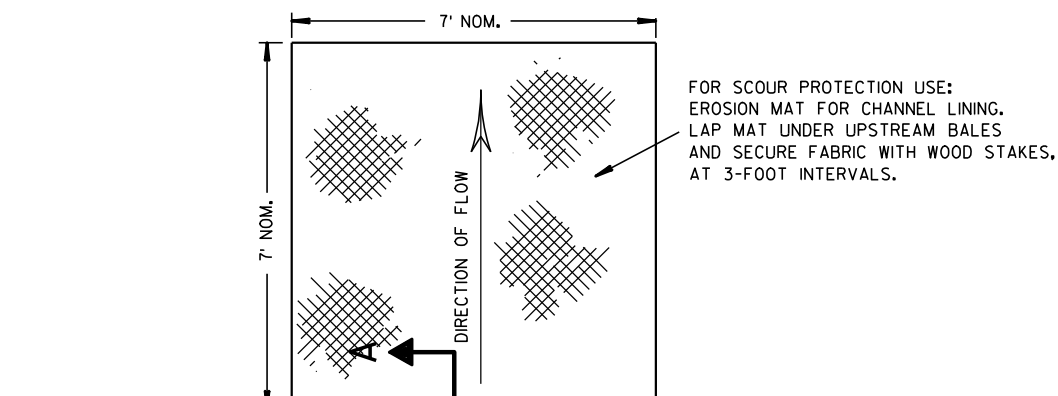
WOOD STAKES (2 PER BALE)  
NOMINAL 2" X 2" X 30" MIN.  
LENGTH OR EQUIVALENT



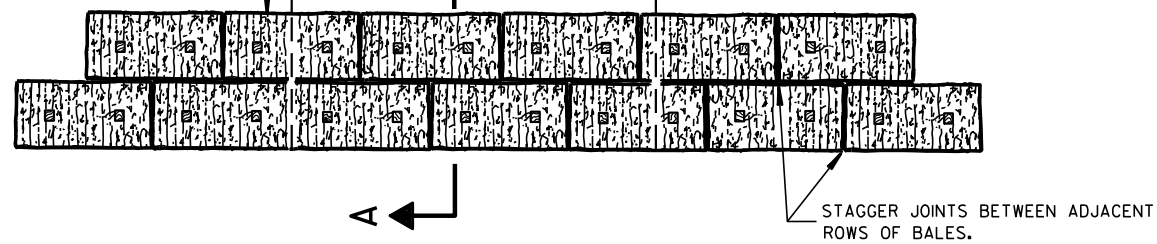
NOTE:  
ALL DIMENSIONS  
ARE APPROXIMATE

EMBED BALES

SECTION A-A



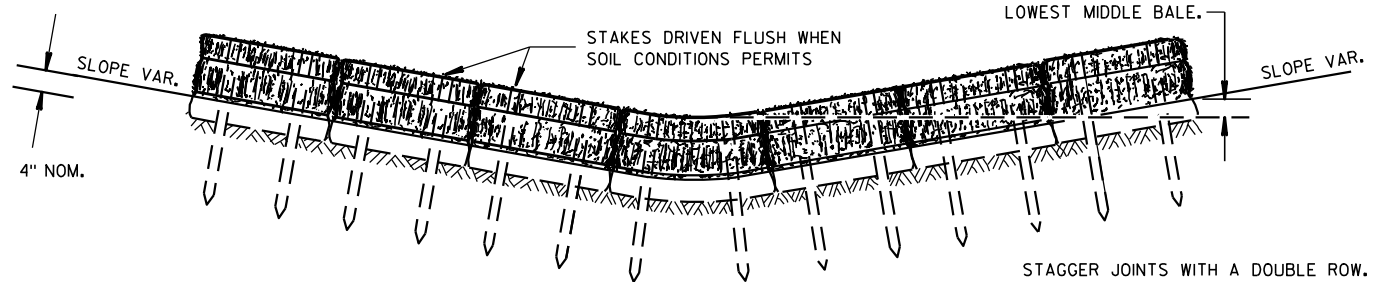
FOR SCOUR PROTECTION USE:  
EROSION MAT FOR CHANNEL LINING.  
LAP MAT UNDER UPSTREAM BALES  
AND SECURE FABRIC WITH WOOD STAKES,  
AT 3-FOOT INTERVALS.



STAGGER JOINTS BETWEEN ADJACENT  
ROWS OF BALES.

PLAN VIEW

BOTTOM ELEVATION OF END BALE SHALL  
BE EQUAL TO OR GREATER THAN TOP OF  
LOWEST MIDDLE BALE.



FRONT ELEVATION

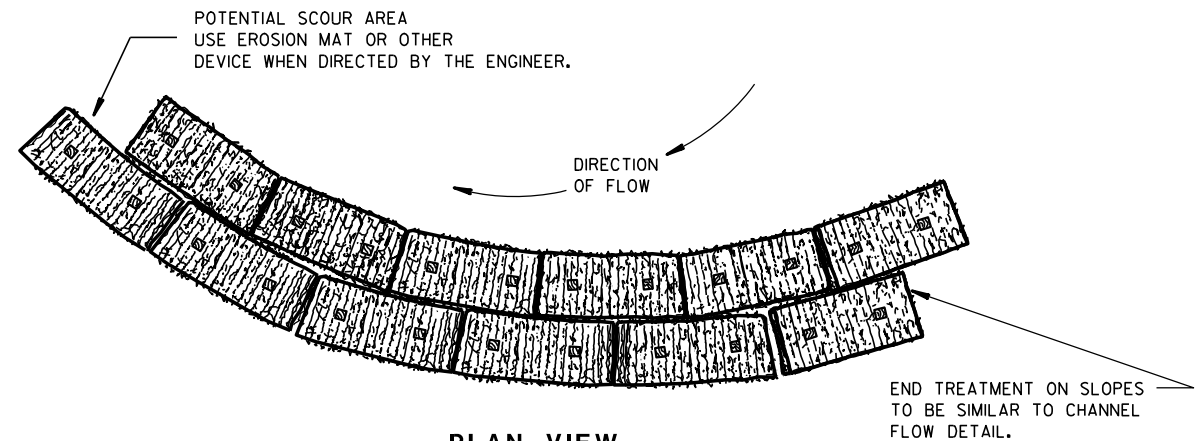
STAGGER JOINTS WITH A DOUBLE ROW.

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

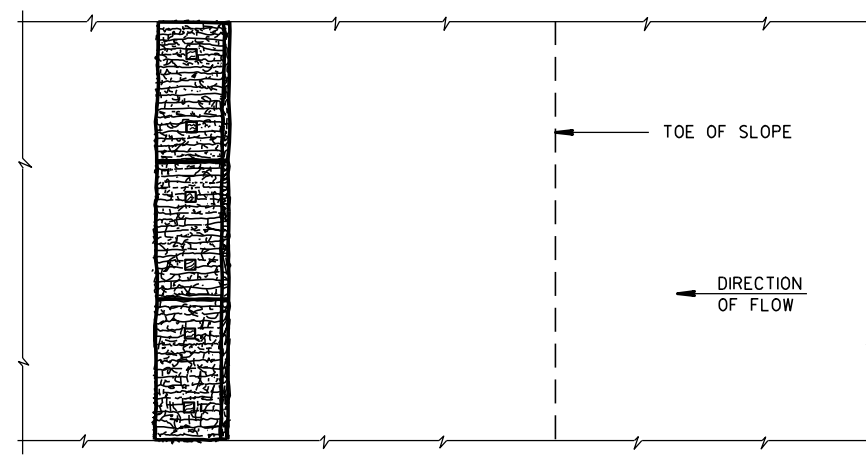
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- 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.

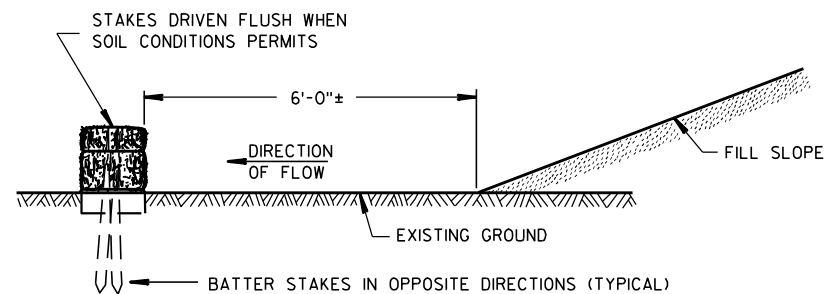


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

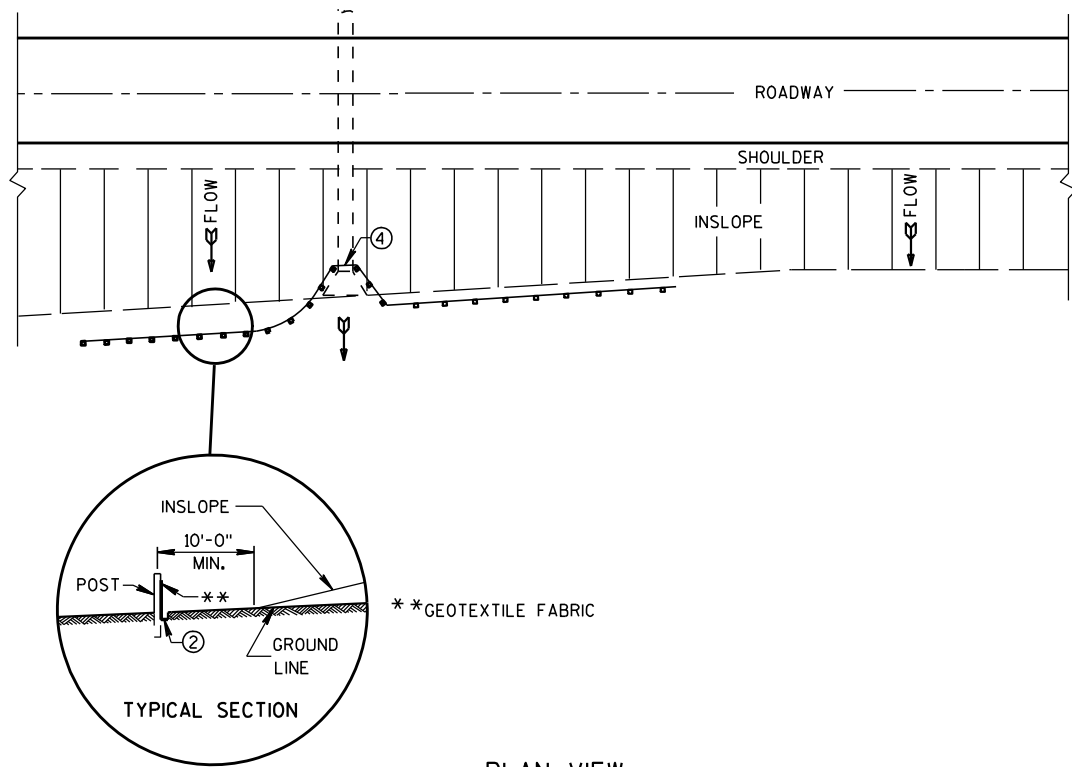
WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

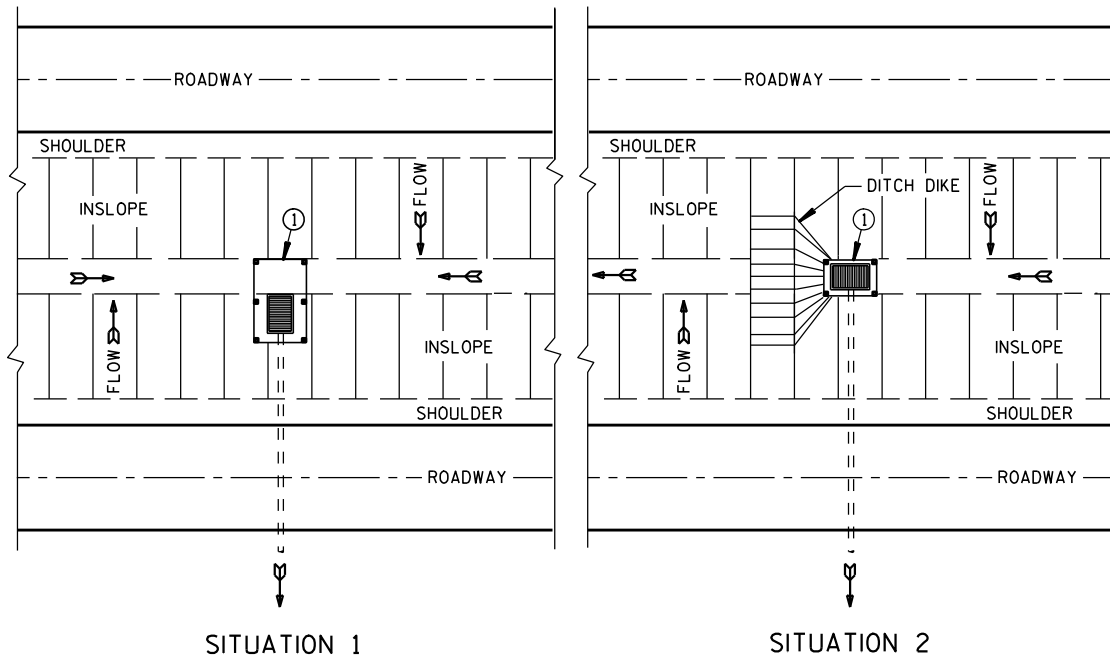
TYPICAL INSTALLATIONS OF  
EROSION BALES / TEMPORARY  
DITCH CHECKS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
 6/04/02 /S/ Beth Canestra  
 DATE CHIEF ROADWAY DEVELOPMENT ENGINEER  
 FHWA



PLAN VIEW  
TYPICAL APPLICATION OF SILT FENCE

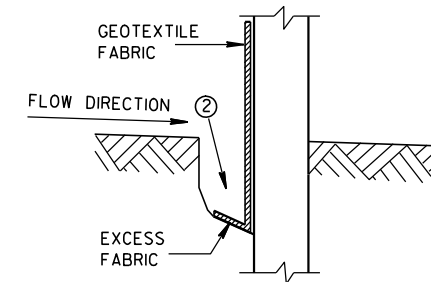


SITUATION 1 SITUATION 2  
PLAN VIEW  
SILT FENCE AT MEDIAN SURFACE DRAINS

**GENERAL NOTES**

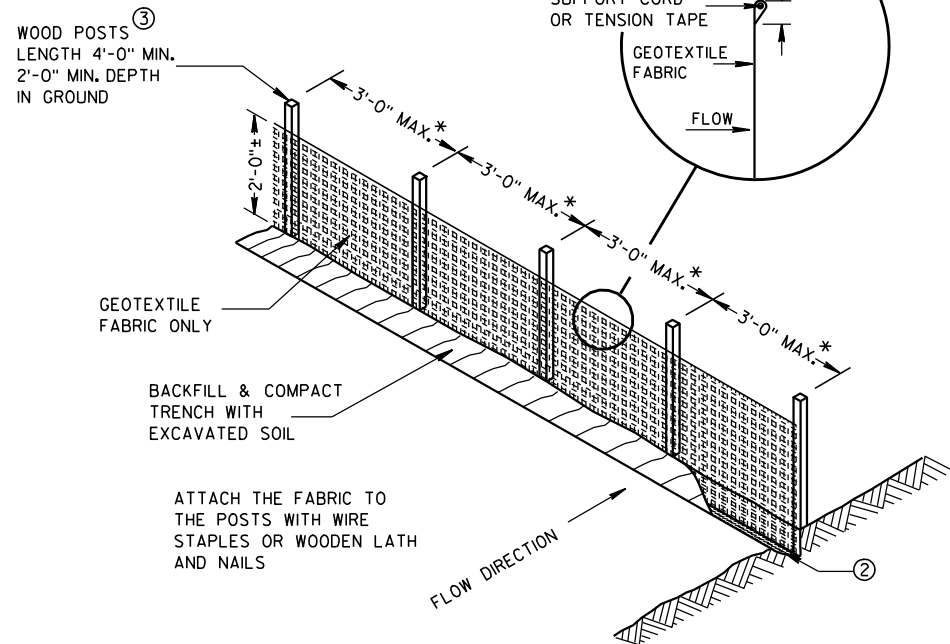
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

- 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 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.

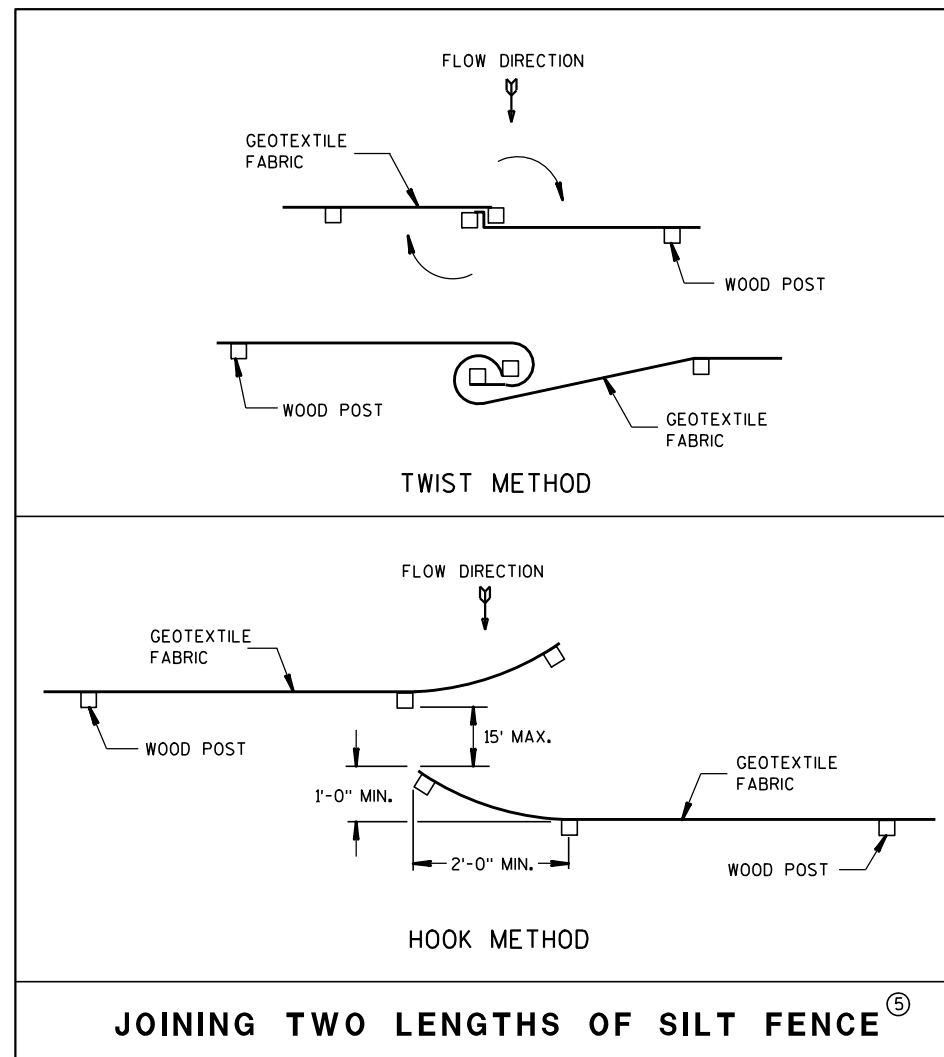


TRENCH DETAIL

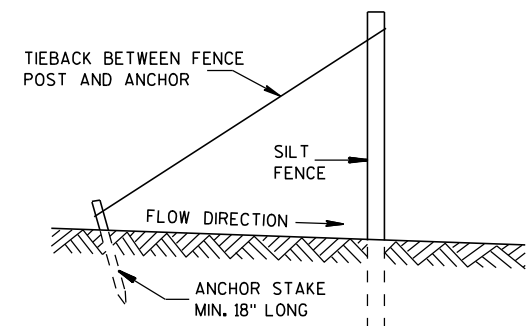
NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE ⑤



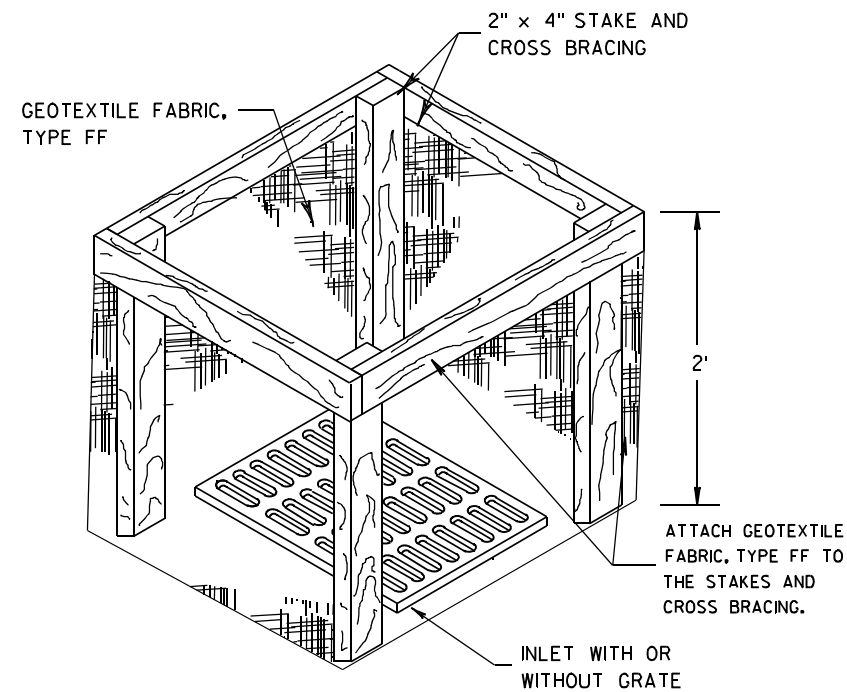
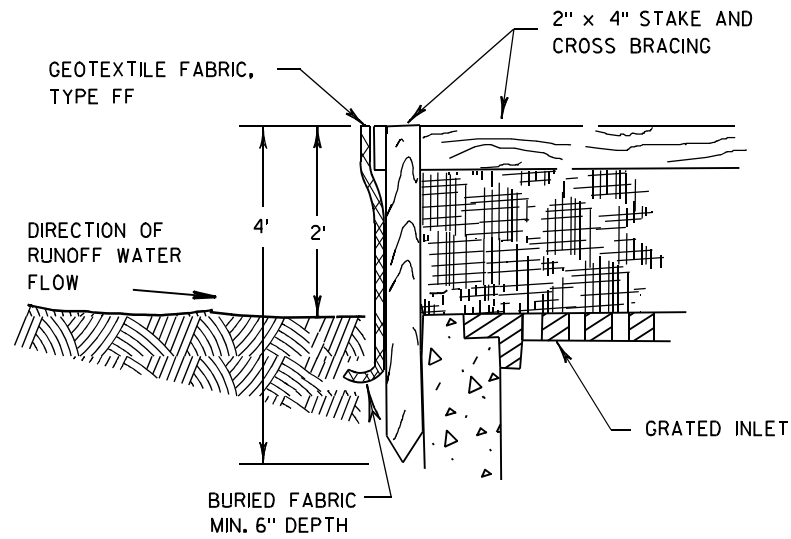
SILT FENCE TIE BACK  
(WHEN REQUIRED BY THE ENGINEER)

**SILT FENCE**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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





**INLET PROTECTION, TYPE A**

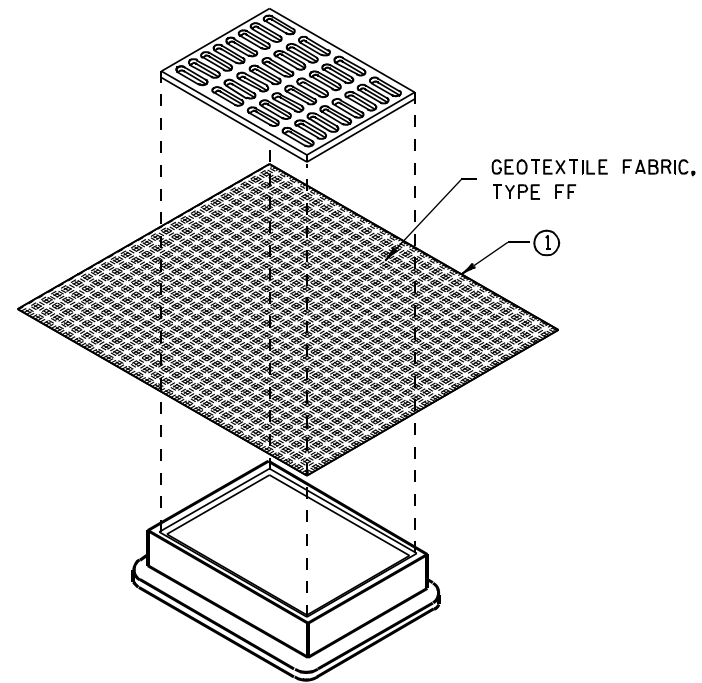
**GENERAL NOTES**

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.

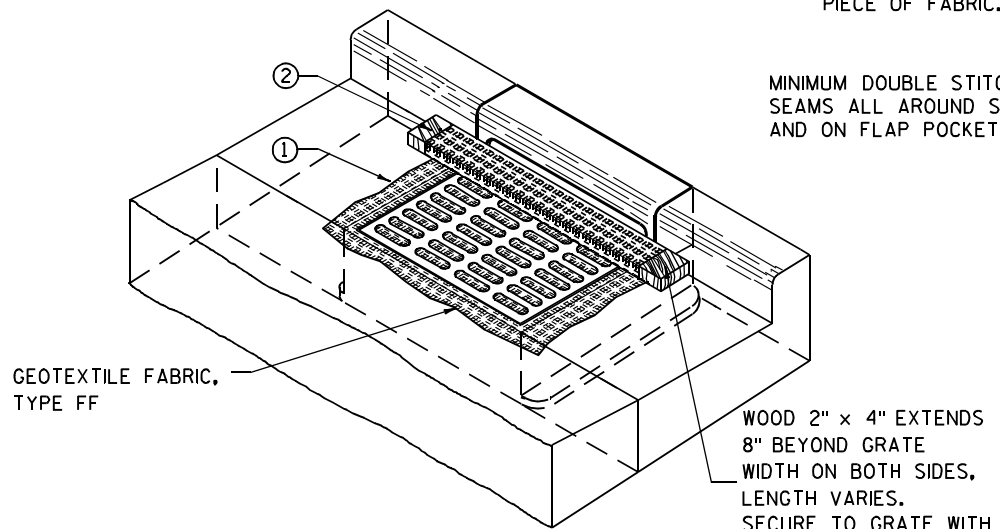
WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

- 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.



**INLET PROTECTION, TYPE B  
(WITHOUT CURB BOX)**

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



**INLET PROTECTION, TYPE C (WITH CURB BOX)**

**INSTALLATION NOTES**

**TYPE B & C**

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

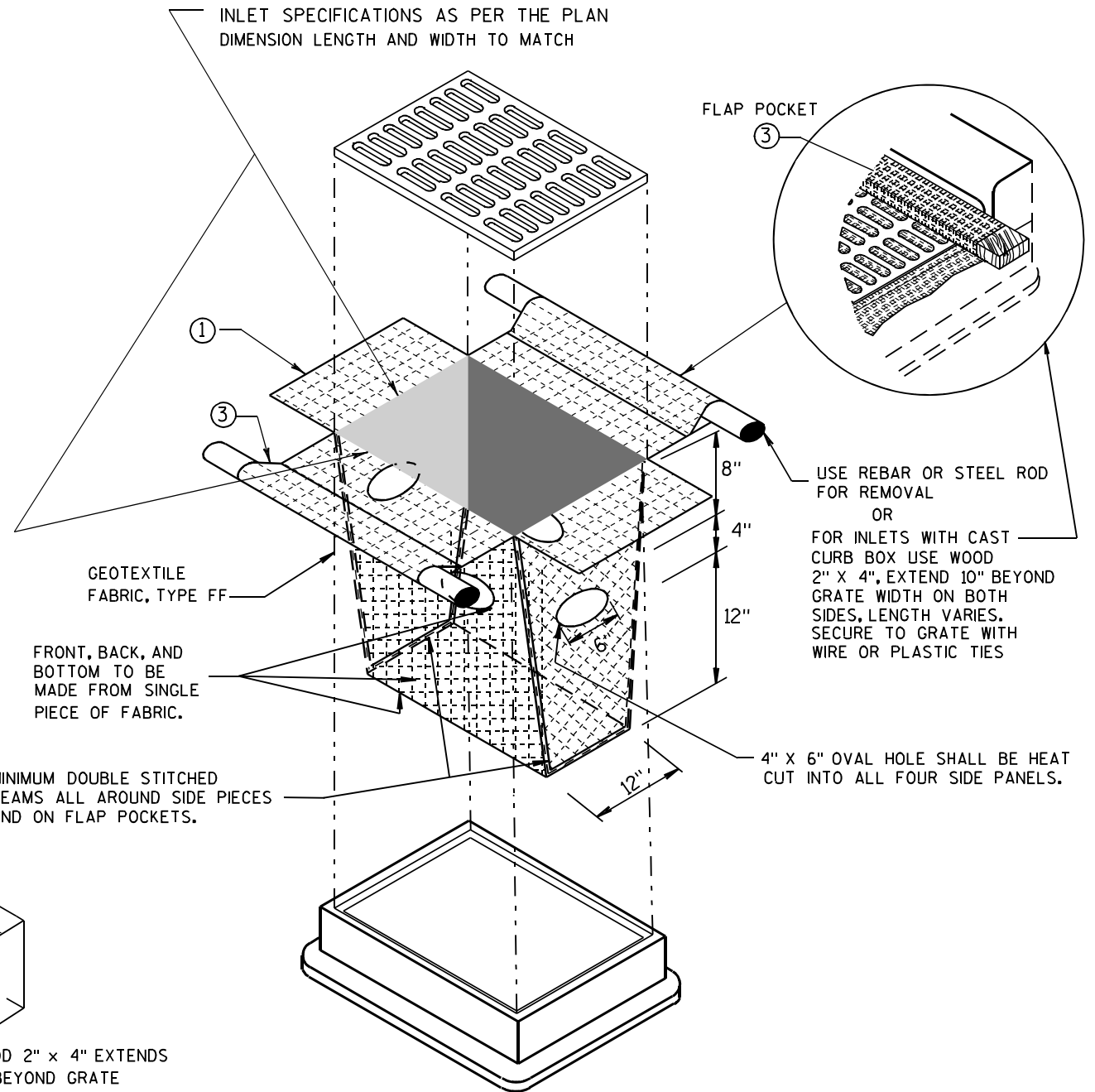
THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

**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 D**

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

<b>INLET PROTECTION TYPE A, B, C, AND D</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/16/02 DATE	/s/ Beth Connestra CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA	

**GENERAL NOTES**

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

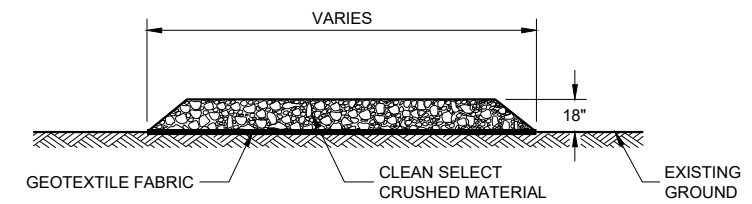
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

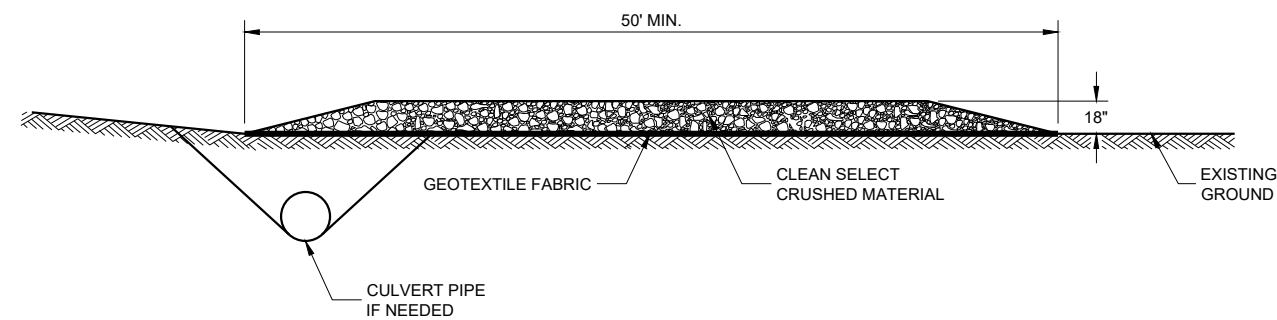
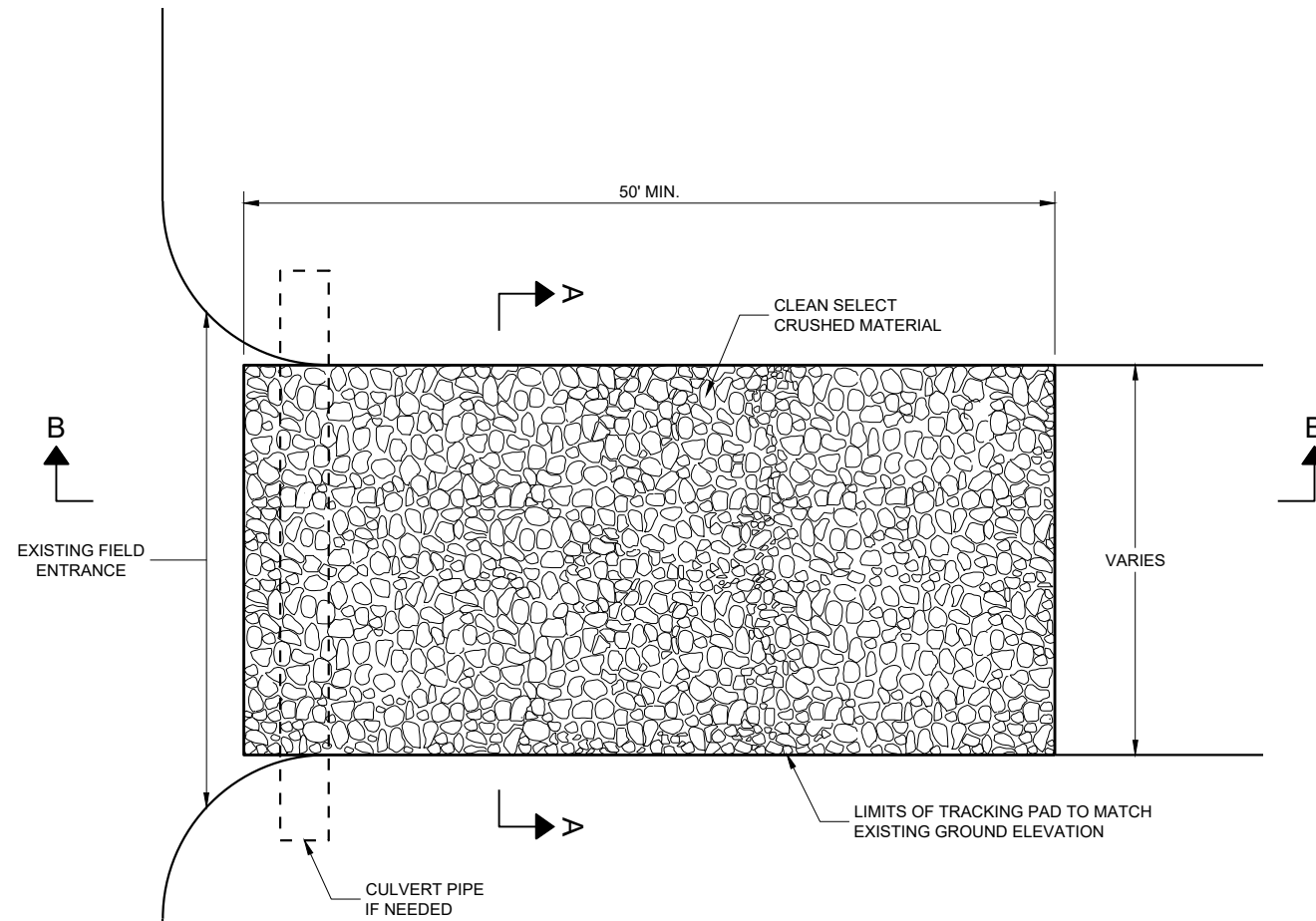
SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



**SECTION A - A**



**SECTION B - B**

**TRACKING PAD**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
3/24/2011 DATE /S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT ENGINEER

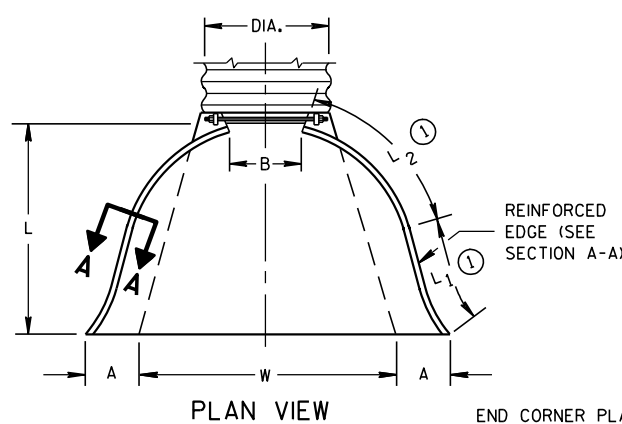
FHWA

METAL APRON ENDWALLS											
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1	L2	W (±2")		
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	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

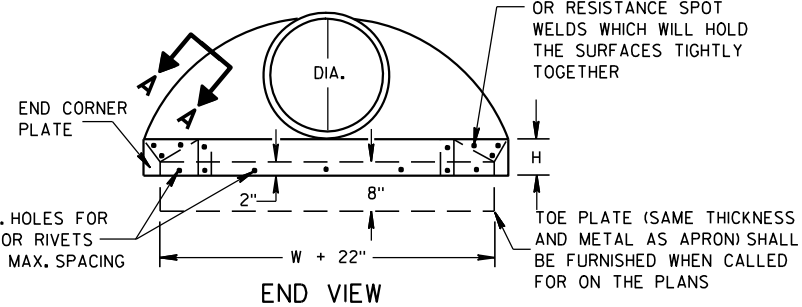
\* EXCEPT CENTER PANEL SEE GENERAL NOTES

REINFORCED CONCRETE APRON ENDWALLS									
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE	
	T	A	B	C	D	E	G		
12	2	4	24	48 1/8	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 1/2 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	

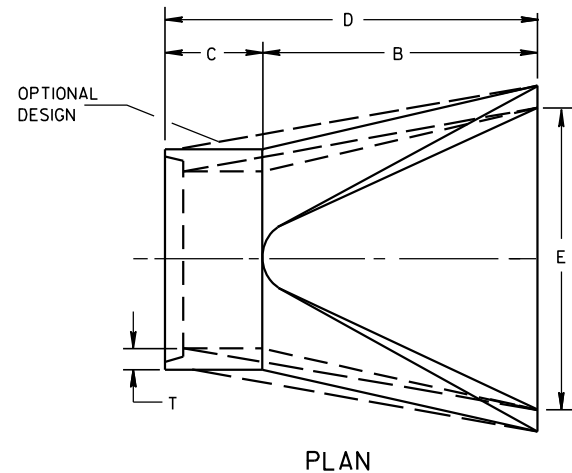
\* MINIMUM  
\*\* MAXIMUM



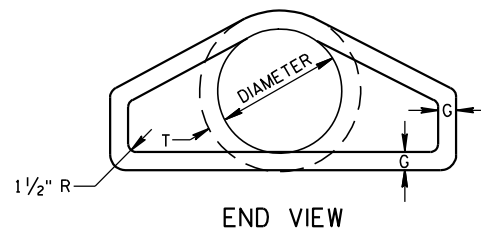
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



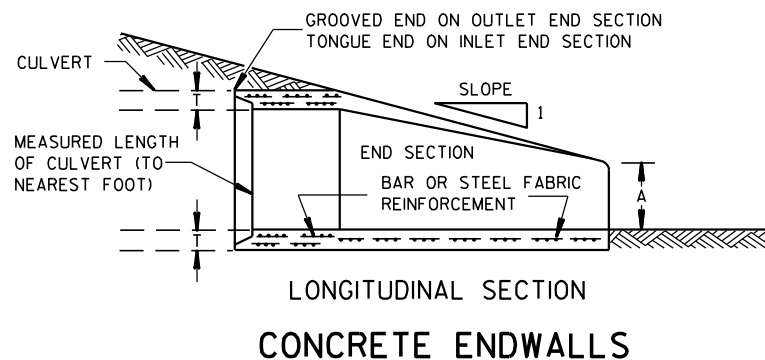
SIDE ELEVATION  
METAL ENDWALLS



PLAN

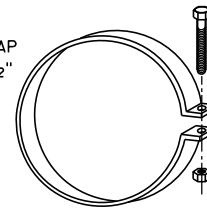


END VIEW

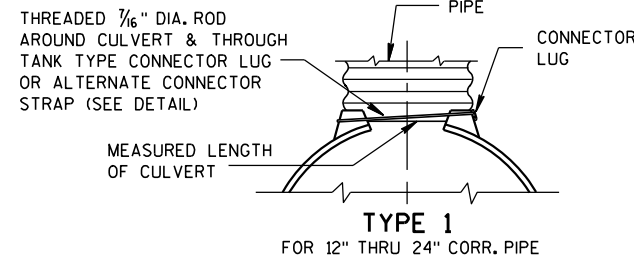


LONGITUDINAL SECTION  
CONCRETE ENDWALLS

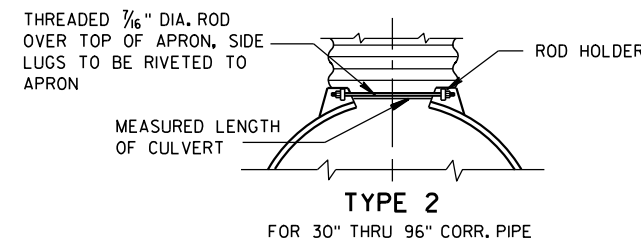
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



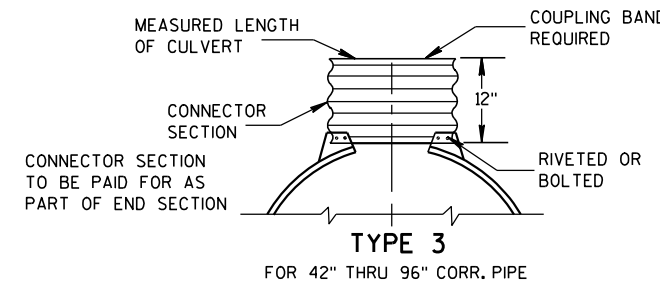
ALTERNATE FOR TYPE 1 CONNECTION  
END SECTION CONNECTOR STRAP



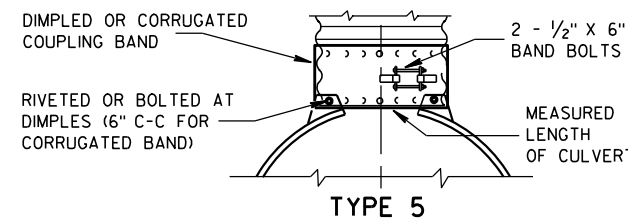
TYPE 1  
FOR 12" THRU 24" CORR. PIPE



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

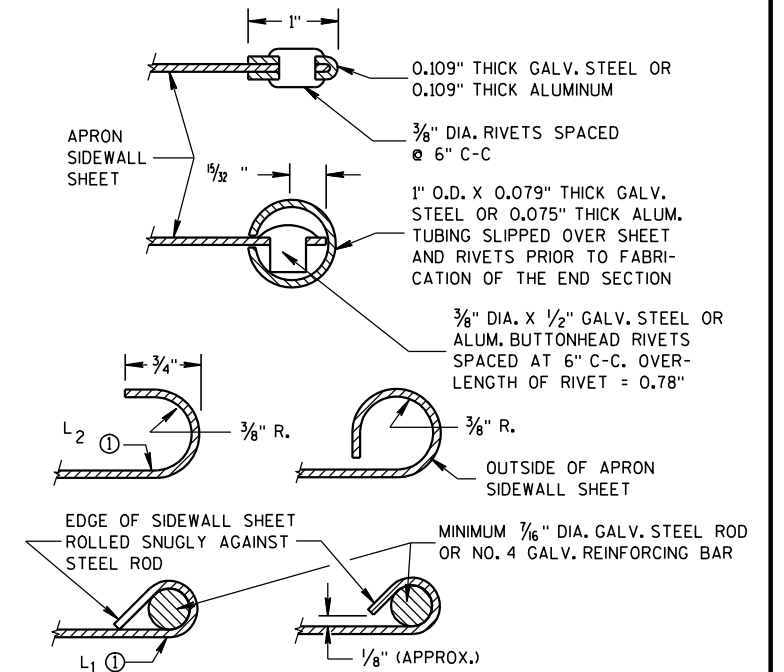
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 VICE 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.

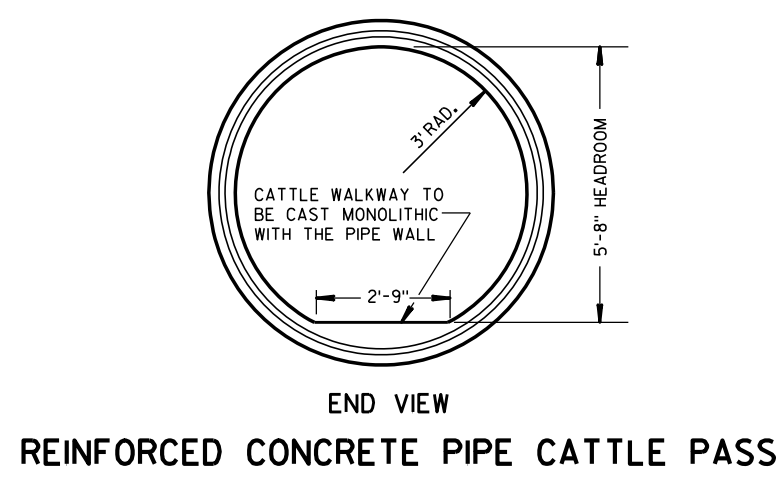
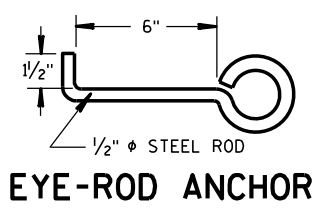
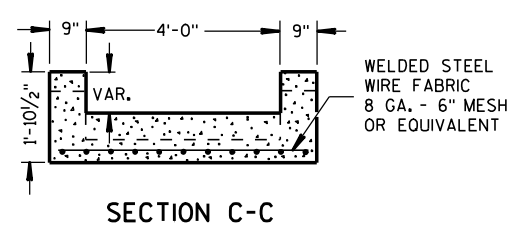
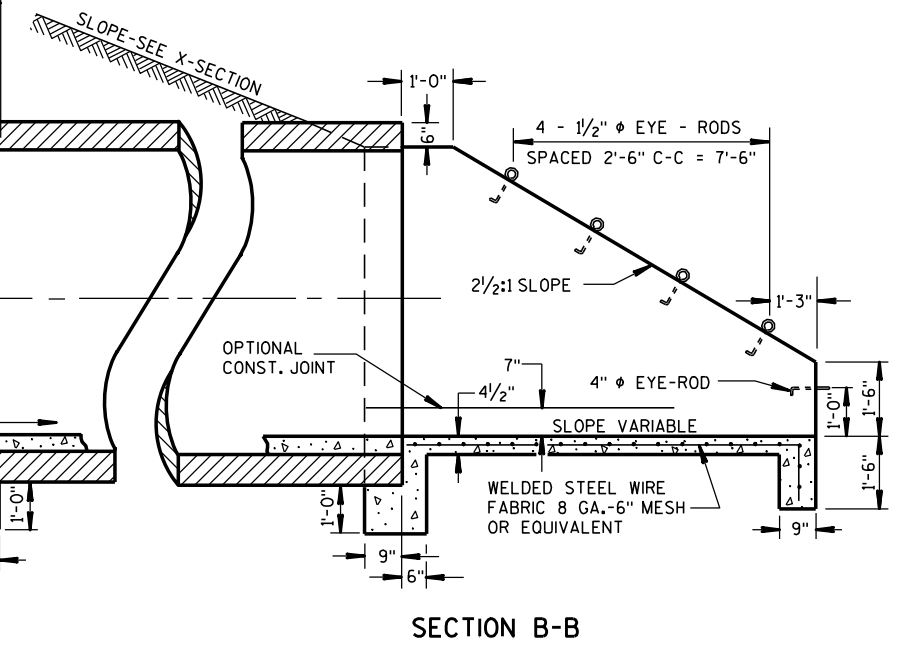
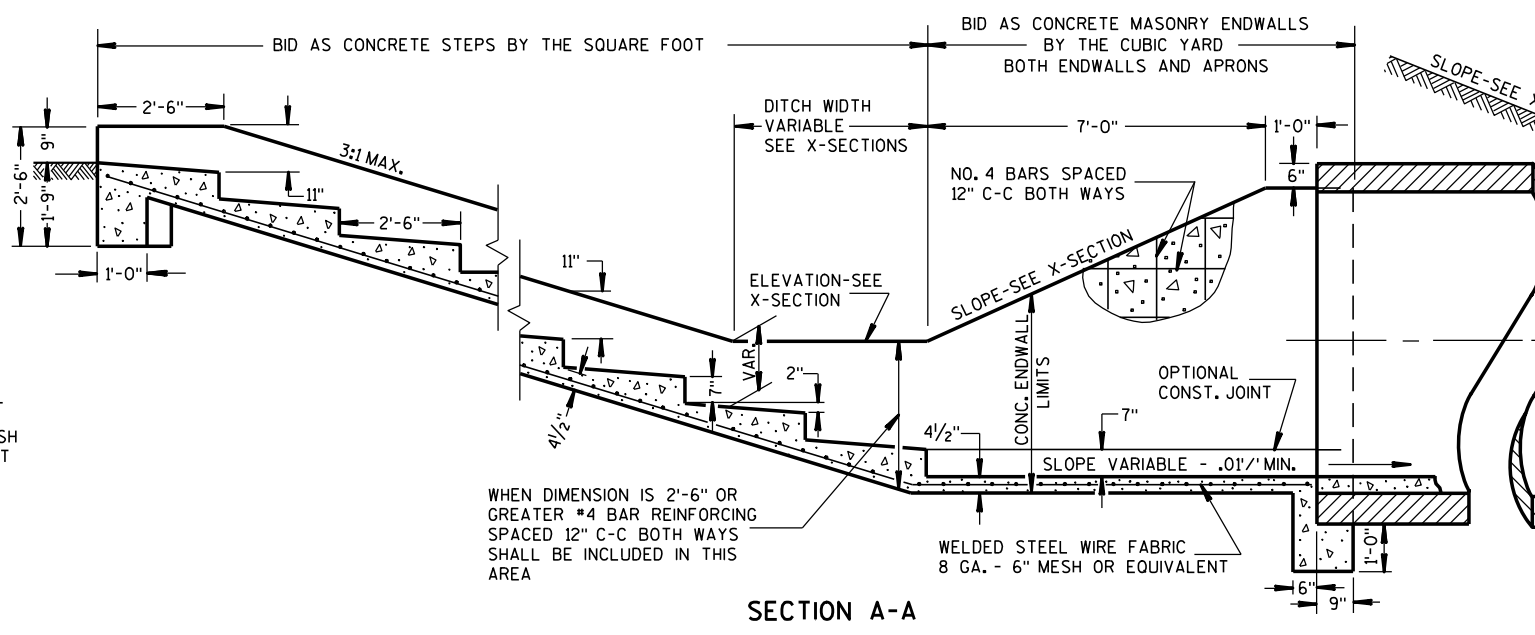
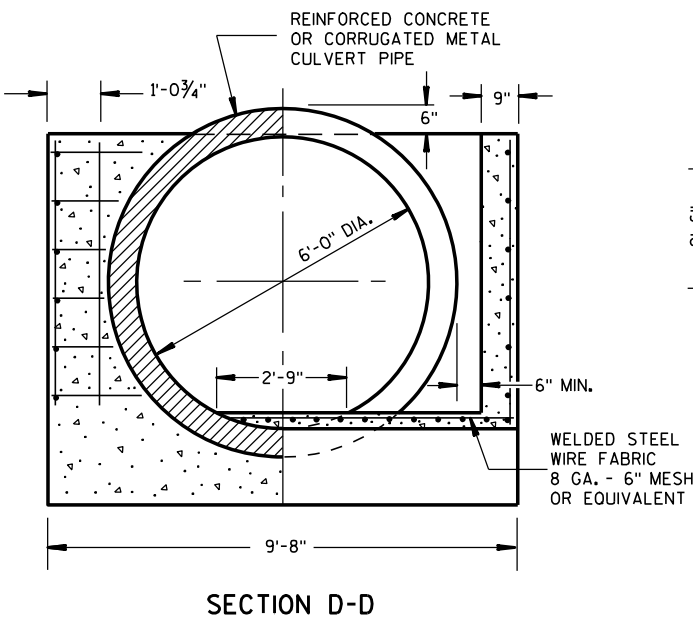
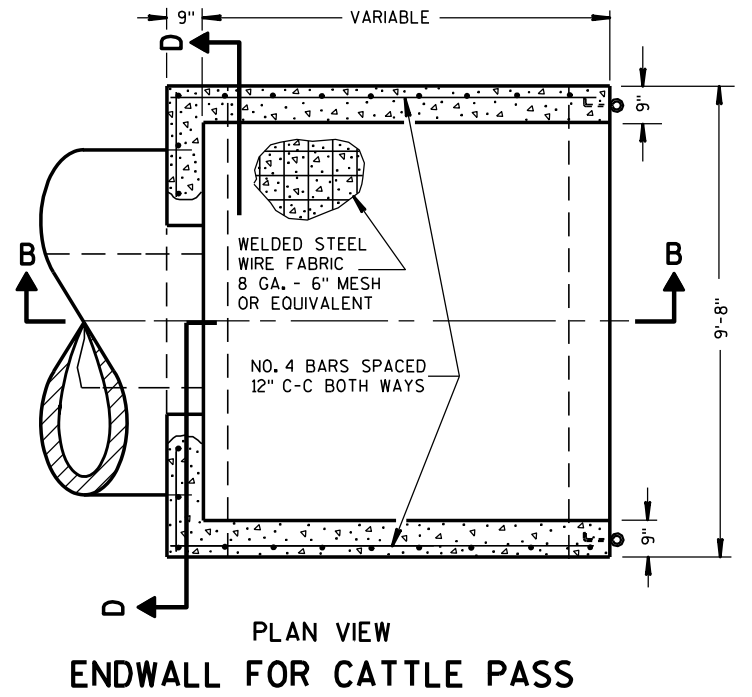
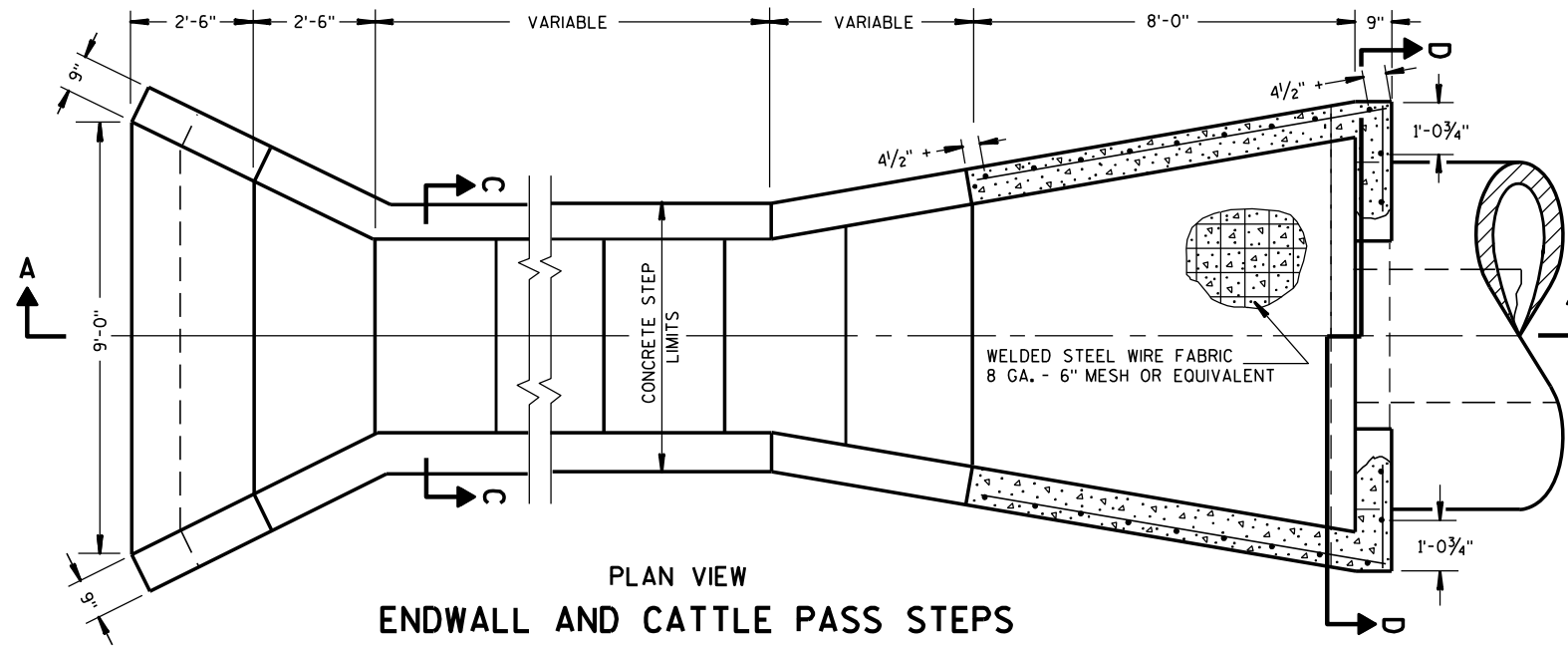
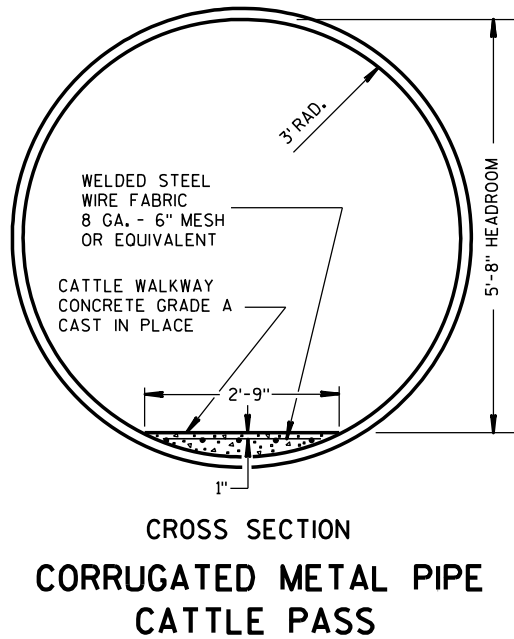
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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 /S/ Rory L. Rhinesmith  
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER  
FHWA



**GENERAL NOTES**

- DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.
- ALL STEEL REINFORCEMENT IN ENDWALLS AND CATTLE PASS STEPS SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.
- ALL STEEL REINFORCEMENT OR FABRIC USED AS SHOWN ABOVE SHALL BE INCIDENTAL TO THE BID ITEM OF WHICH IT IS AN INTEGRAL PART.
- EYE-RODS FOR FENCE CONNECTIONS SHALL BE PROVIDED BY THE CONTRACTOR AS AN INCIDENTAL TO THE BID ITEM OF CONCRETE MASONRY, ENDWALLS AND SHALL BE GALVANIZED.
- CONCRETE USED FOR THE CATTLE WALKWAY WITHIN THE PIPE SHALL BE INCIDENTAL TO THE BID ITEM OF PIPE CATTLE PASS.

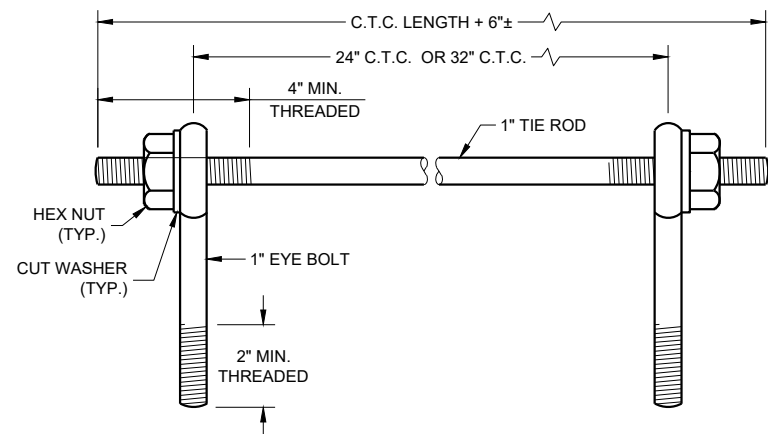
<b>DETAILS FOR PIPE CATTLE PASS, CONCRETE ENDWALL AND STEPS</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 6/6/75 DATE	/S/ Harold Fleider STATE DESIGN ENGINEER FOR HWYS
FHWA	

6

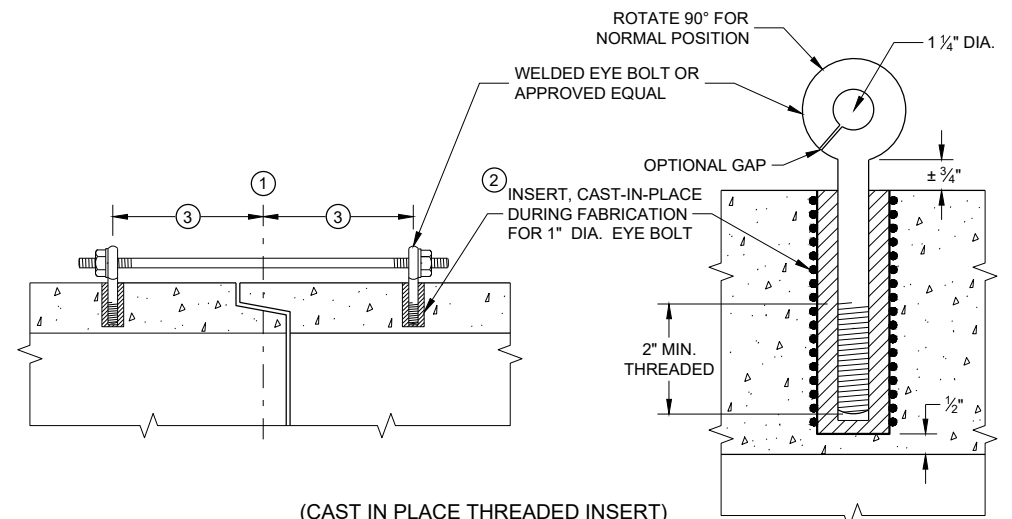
6

S.D.D. 8 F 3-3

S.D.D. 8 F 3-3



**EYE BOLTS AND TIE ROD**  
**EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)**



(CAST IN PLACE THREADED INSERT)  
**LONGITUDINAL SECTIONS**

**GENERAL NOTES**

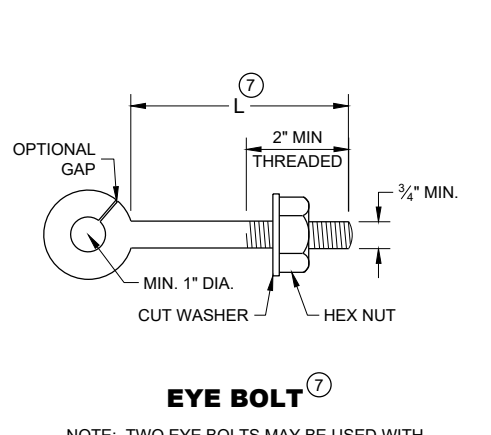
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

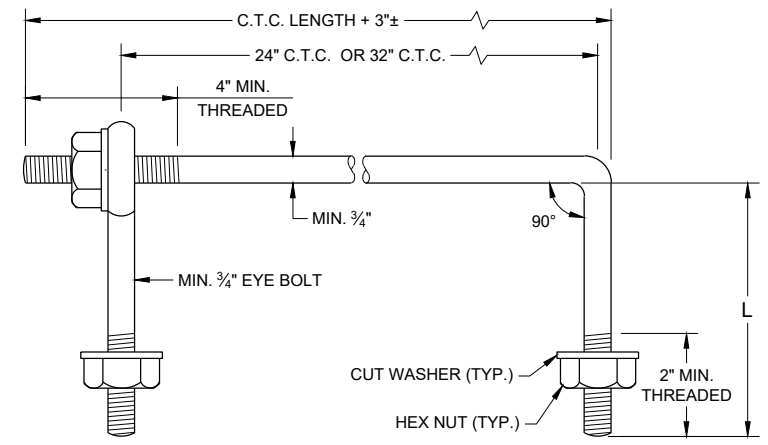
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 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 1/2 INCH OF THE INNER SURFACE OF THE PIPE.
- ⑦ EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

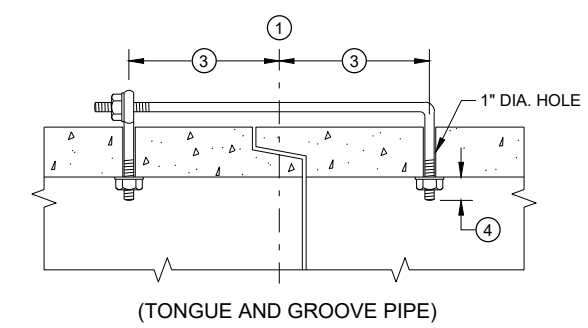


**EYE BOLT**

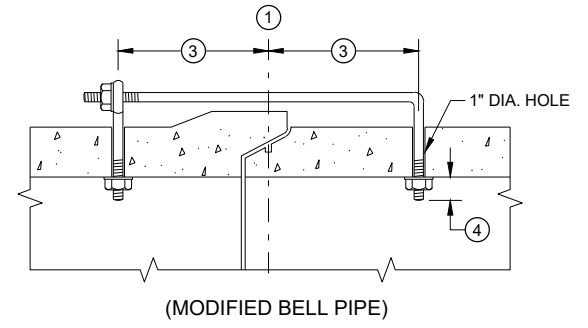
NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" OR 38" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



**EYE BOLT AND TIE ROD**



(TONGUE AND GROOVE PIPE)



(MODIFIED BELL PIPE)

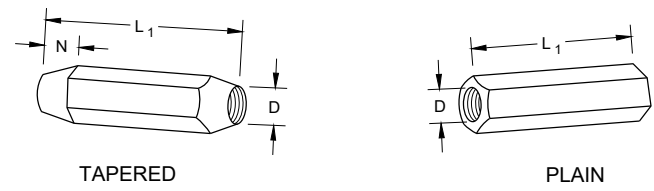
**LONGITUDINAL SECTION**  
 (JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

**EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)**

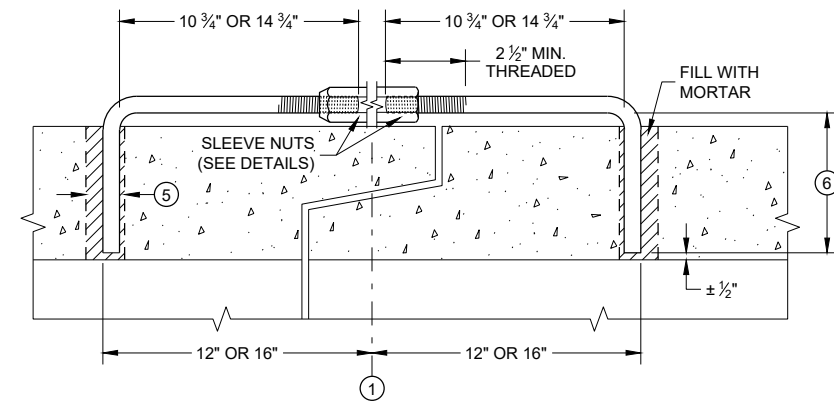
**ADJUSTABLE TIE ROD TABLE**

PIPE DIAMETER	TIE ROD DIAMETER	D	L <sub>1</sub>	N
12 - 60	5/8	5/8	5	1/2
66 - 84	3/4	3/4	5	1/2
90 - 144	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES

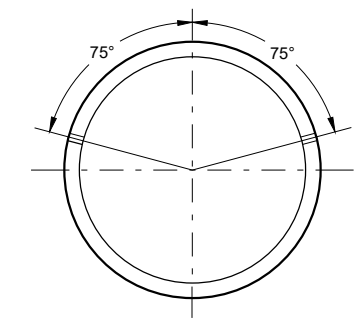


**RIGHT AND LEFT THREADS SLEEVE NUTS**



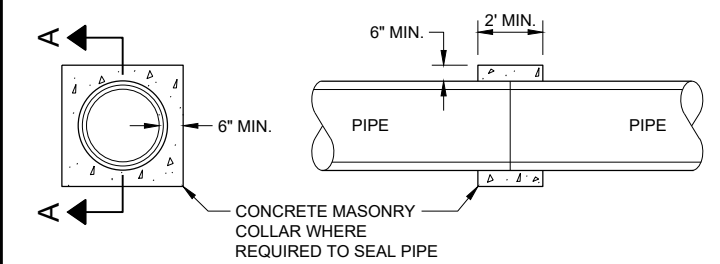
**LONGITUDINAL SECTION**

**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 /S/ Rodney Taylor  
 DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER  
 FHWA

**GENERAL NOTES**

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

FILL SLOPES FLATTER THAN 2 1/2:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

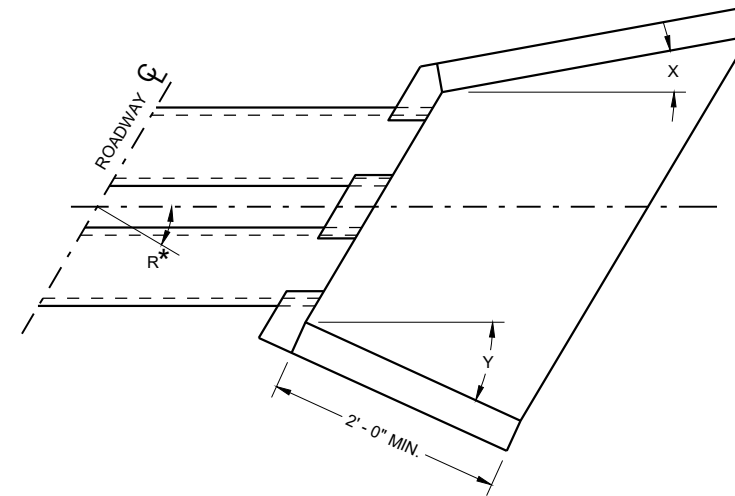
ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

① MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.

② THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2' - 0"
OVER 48" TO 72"	1/2 DIA. OR SPAN
OVER 72"	3' - 0"

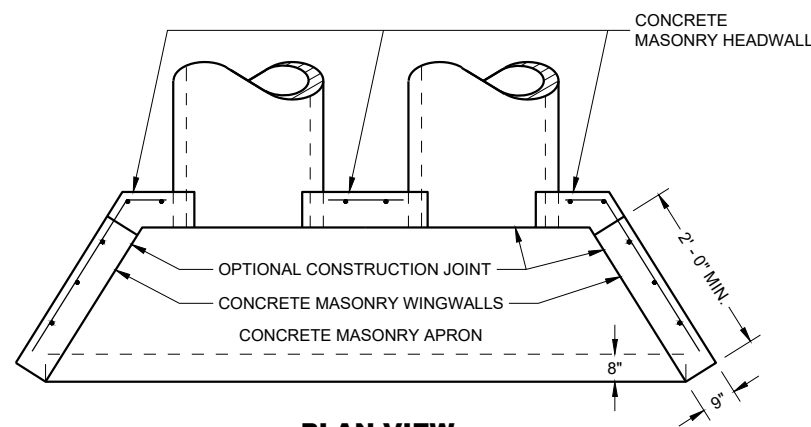
- ③ LIMITS OF TRENCH BACKFILL
- ④ LIMITS OF FOUNDATION BACKFILL
- ⑤ FOUNDATION AND TRENCH BACKFILL ARE MATERIALS INCLUDED IN PAYMENT FOR CULVERT PIPE, PIPE ARCH, CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPSE OR CONCRETE MASONRY ENDWALLS.
- ⑥ DO NOT PLACE FOUNDATION BACK FILL OR ANY OTHER GRANULAR BACKFILL AROUND OR BELOW CUT OFF WALL. POUR CUT OFF WALL AGAINST NATIVE SOIL
- ⑦ MINIMUM HEIGHT SHALL BE THE GREATER OF 1'- 0" OR 1/4 HEIGHT OF CULVERT PIPE.



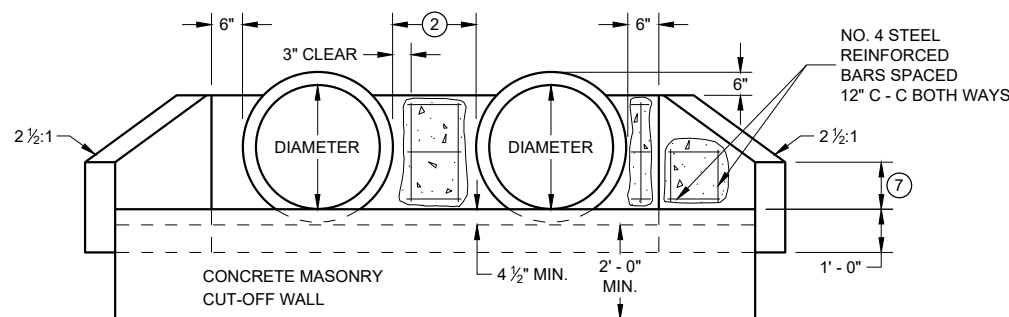
INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	30°	16 - 45°	10°	15°
23 - 37°	20°	30°	46 - 75°	5°	15°
38 - 52°	15°	30°	OVER 75°	0°	15°
53 - 67°	10°	30°			
68 - 82°	5°	30°			
OVER 82°	0°	30°			

R\* = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

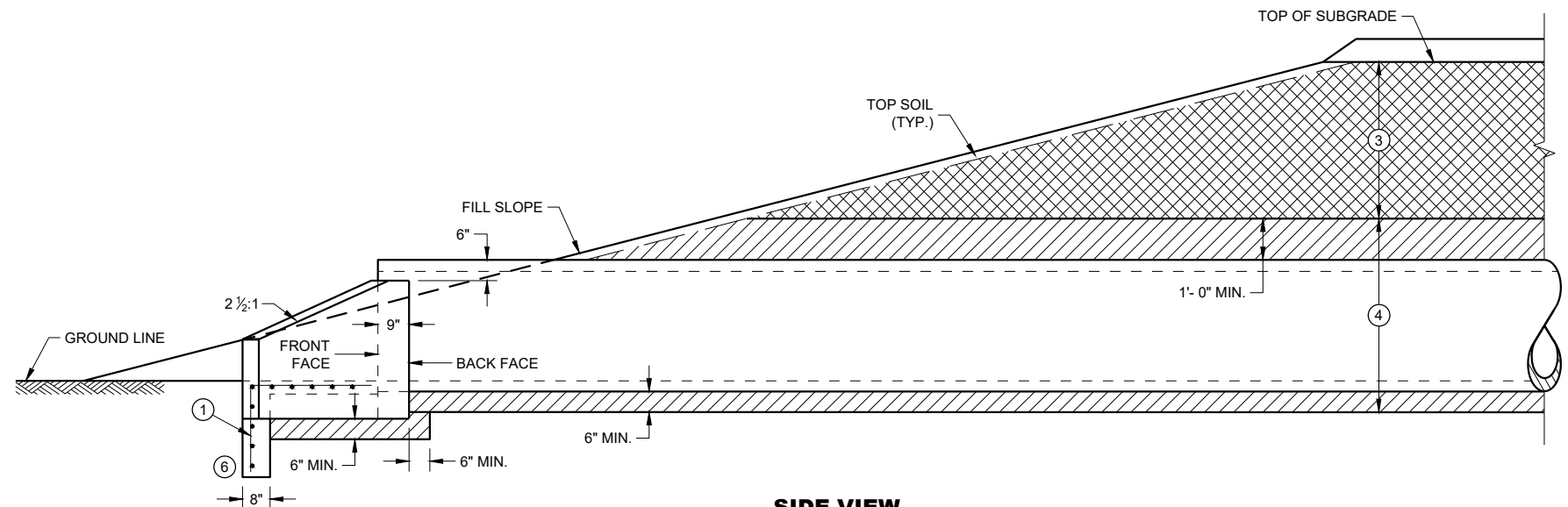
**WINGWALL ANGLE DETAILS**



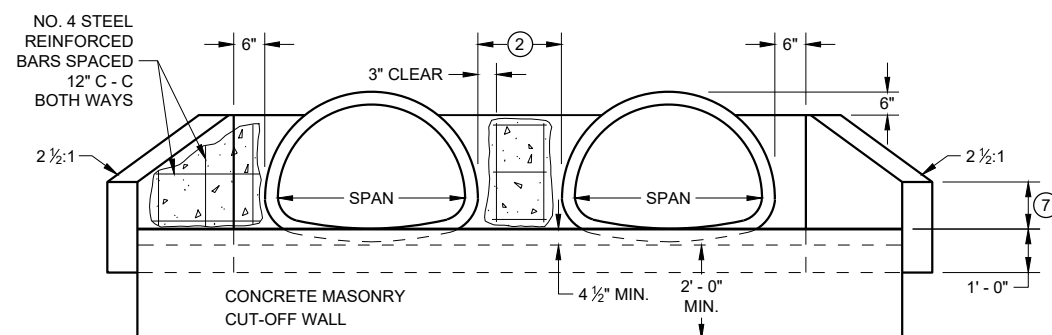
**PLAN VIEW**



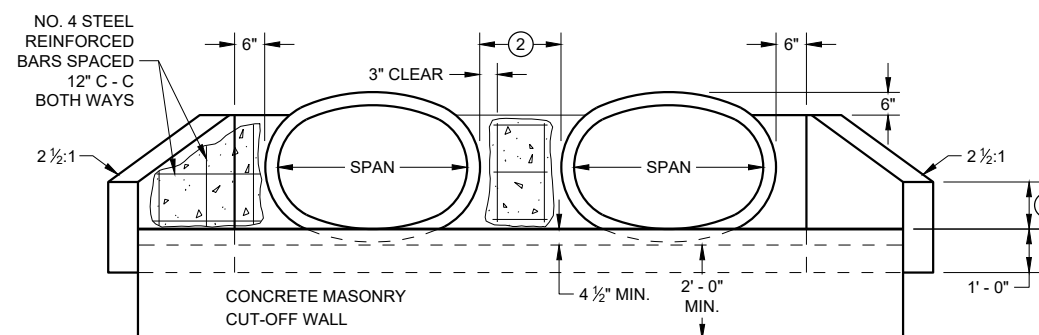
**END VIEW  
CIRCULAR PIPE**



**SIDE VIEW  
CIRCULAR PIPE, PIPE ARCH OR HORIZONTAL ELLIPSE**



**END VIEW  
PIPE ARCH**



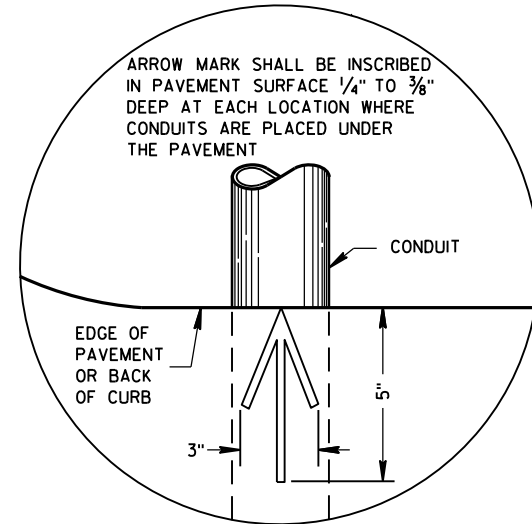
**END VIEW  
HORIZONTAL ELLIPSE**

**CONCRETE MASONRY  
ENDWALLS FOR CULVERT  
PIPE AND PIPE ARCH**

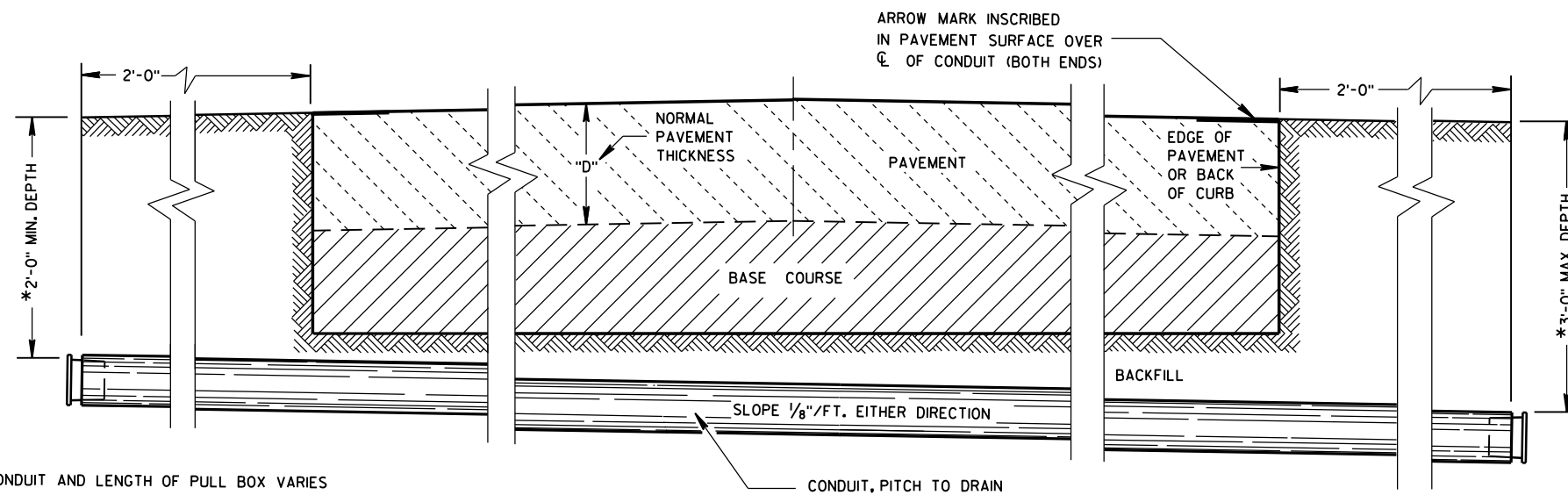
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2022 /S/ Rodney Taylor  
DATE ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

FHWA



PLAN VIEW  
ARROW MARK



SIDE ELEVATION  
DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

\*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

### GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSON TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

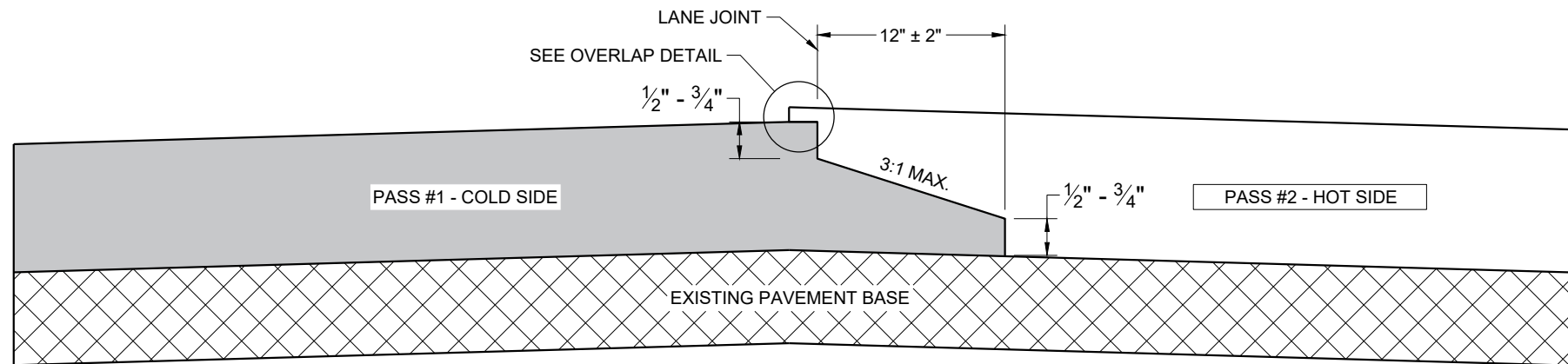
6

6

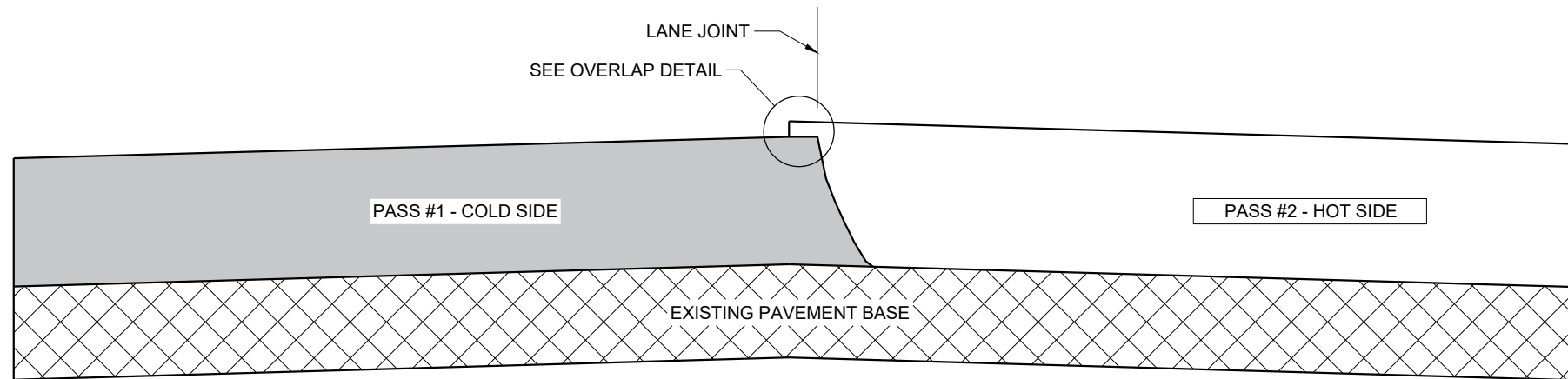
S.D.D. 9 B 2-10

S.D.D. 9 B 2-10

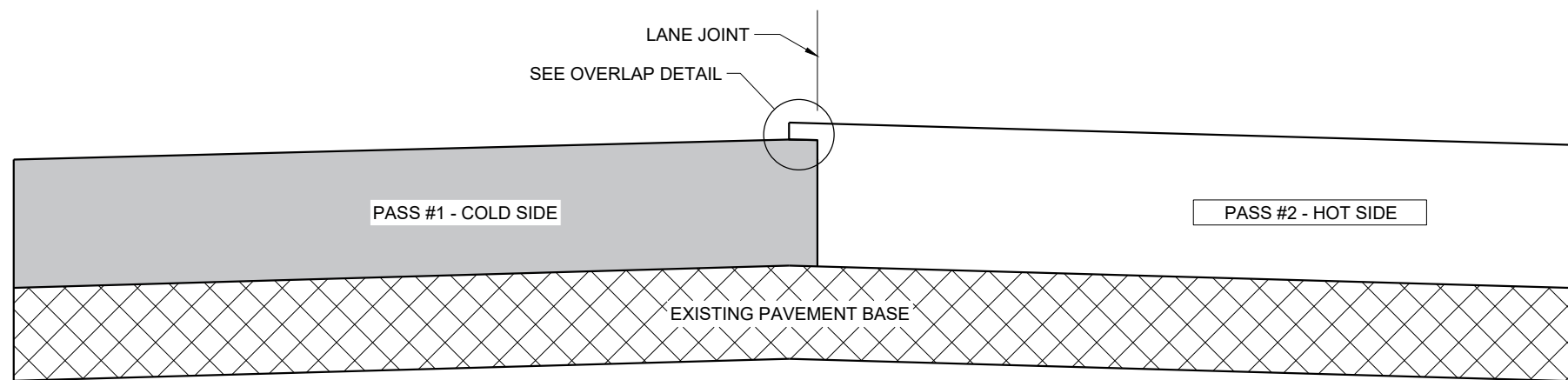
<b>CONDUIT</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March, 2017 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL ENGINEER
FHWA	



**TYPICAL PAVEMENT CROSS SECTION  
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION  
VERTICAL JOINT (MILLED)**

**GENERAL NOTES**

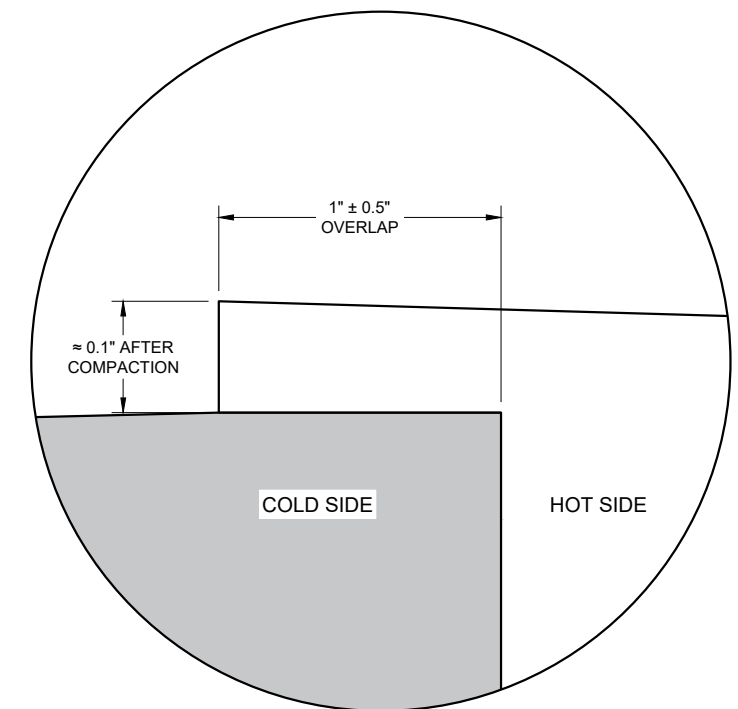
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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



**OVERLAP DETAIL (TYPICAL)**

6

6

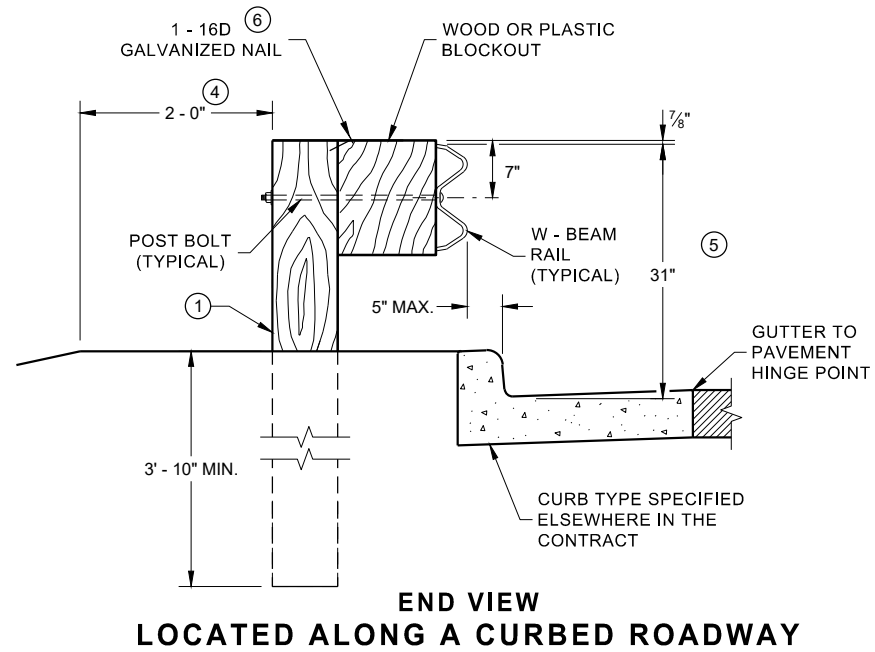
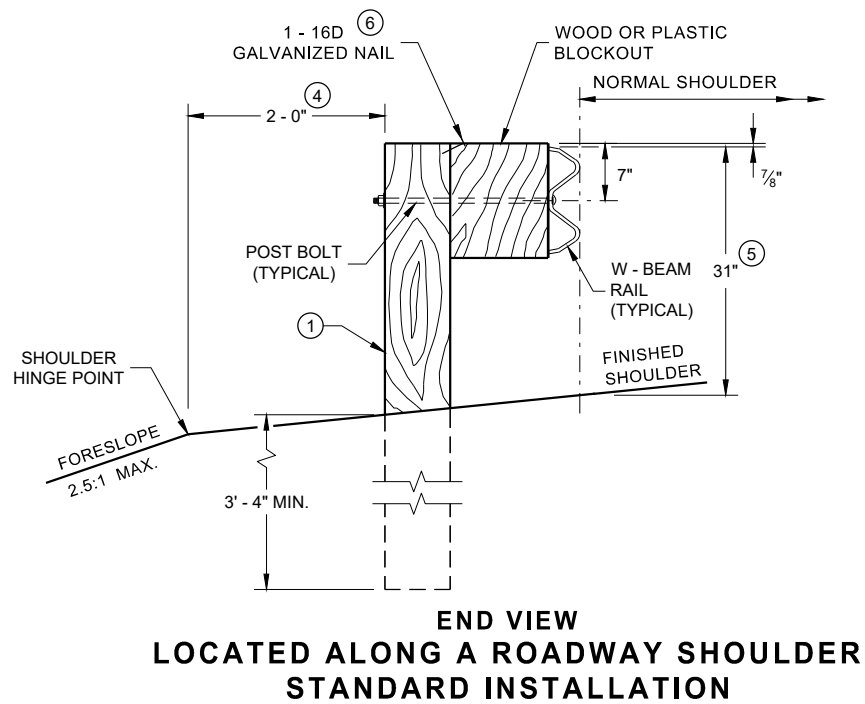
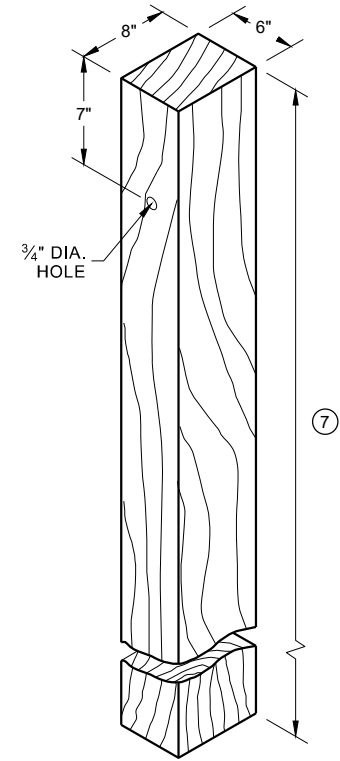
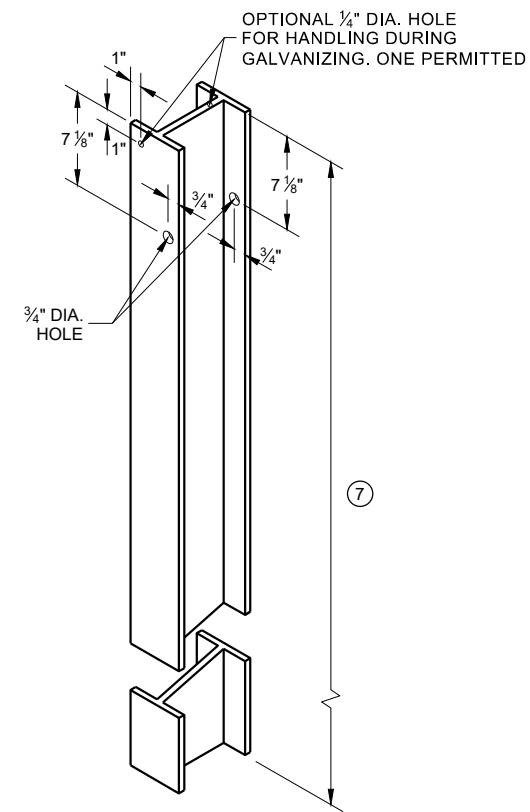
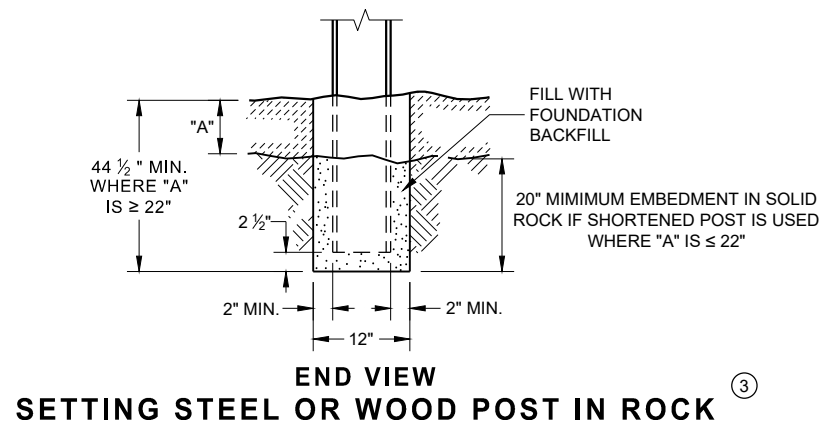
SDD 13C19 - 03

SDD 13C19 - 03

<b>HMA LONGITUDINAL JOINTS</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Steven Hefel HMA PAVEMENT ENGINEER
FHWA	

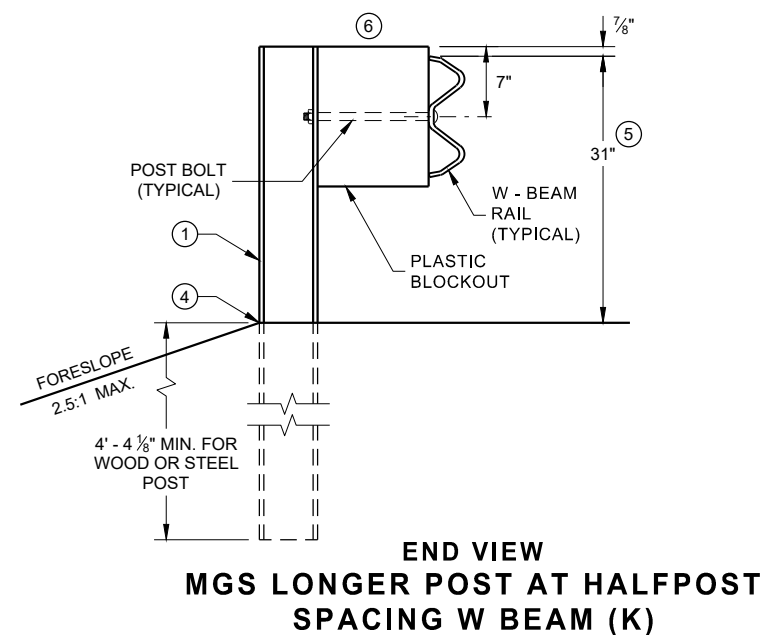
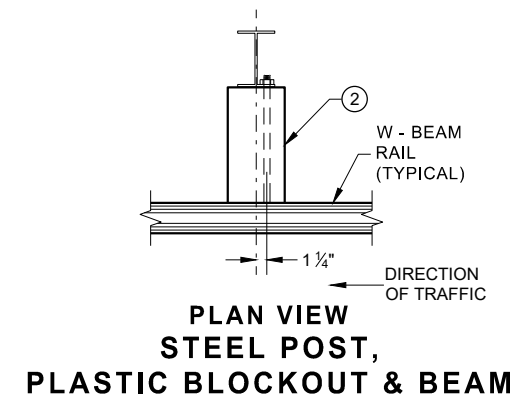
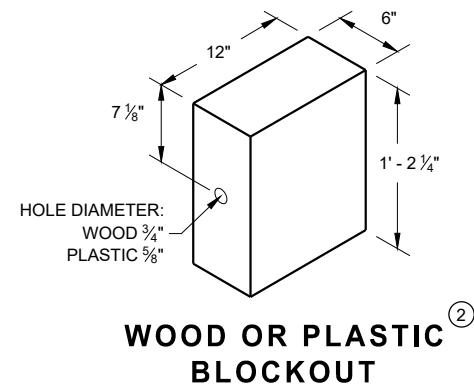
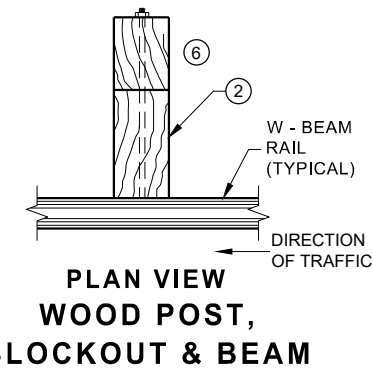


- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND 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 3/4" 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".



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

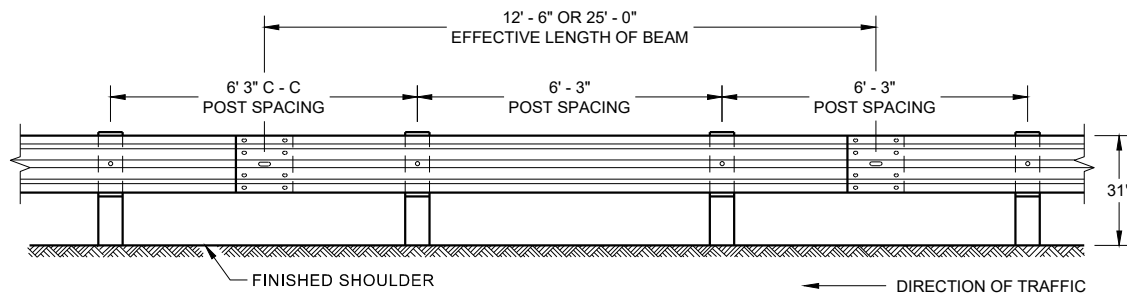
**WOOD POST (6" X 8") NOMINAL ①**



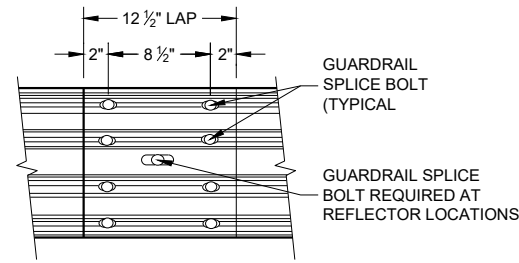
**PLAN VIEW STEEL POST, PLASTIC BLOCKOUT & BEAM**

**MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



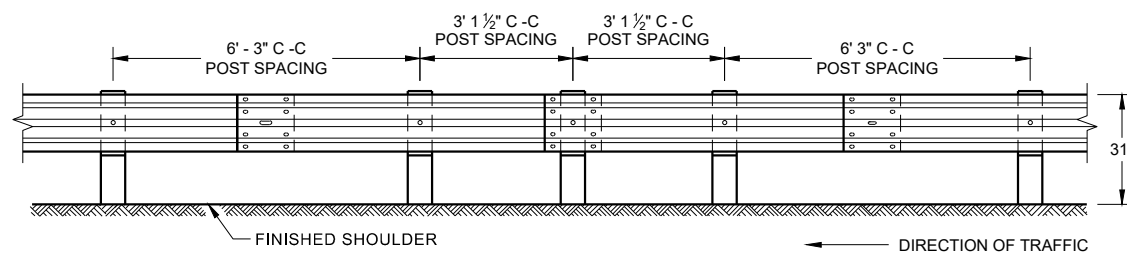
**FRONT VIEW  
POST SPACING STANDARD INSTALLATION**



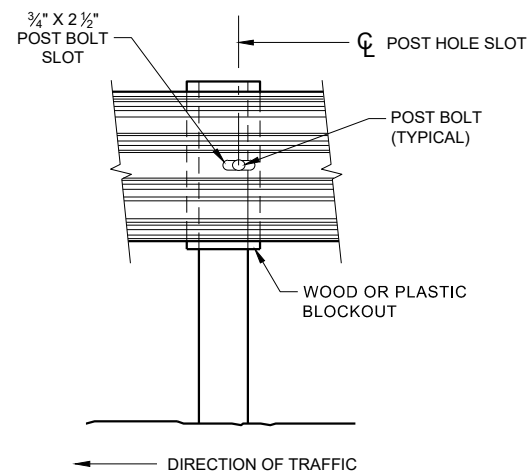
**FRONT VIEW  
MID-SPAN BEAM SPLICE**

**GENERAL NOTES**

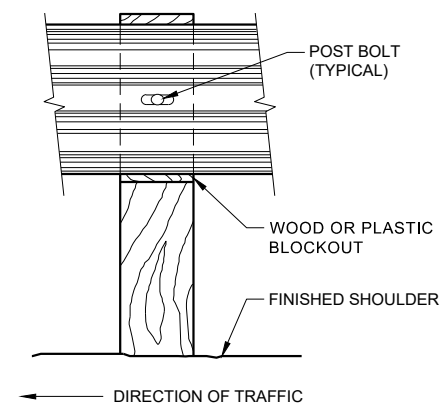
- ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
  - ⑨ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES 3/4" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND 3/8" DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 3/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



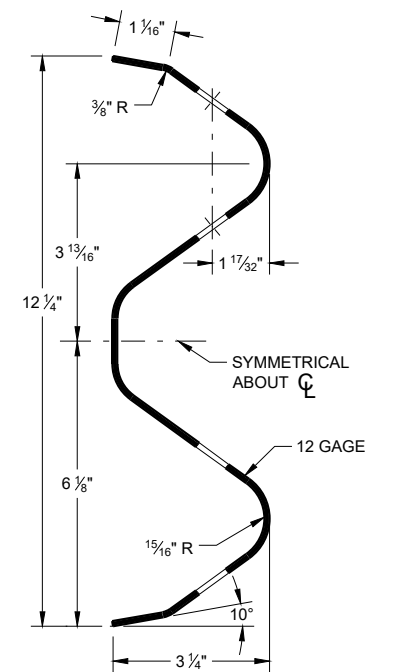
**FRONT VIEW  
HALF POST SPACING (HS) AND  
HALF POST SPACING WITH LONGER POSTS (K)**



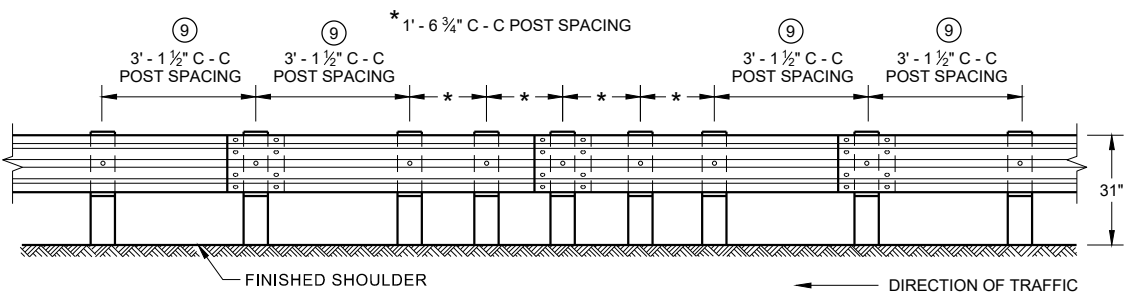
**FRONT VIEW AT STEEL POST**



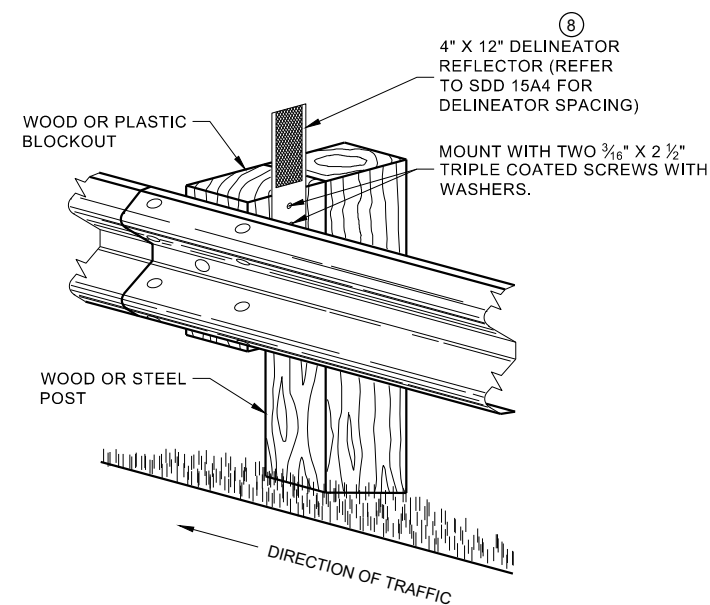
**FRONT VIEW AT WOOD POST**



**SECTION THRU W-BEAM RAIL**



**FRONT VIEW  
QUARTER POST SPACING (QS)**



**ONE SIDED REFLECTOR DETAIL  
AND TYPICAL INSTALLATION**

**MIDWEST GUARDRAIL SYSTEM  
(MGS) GUARDRAIL**

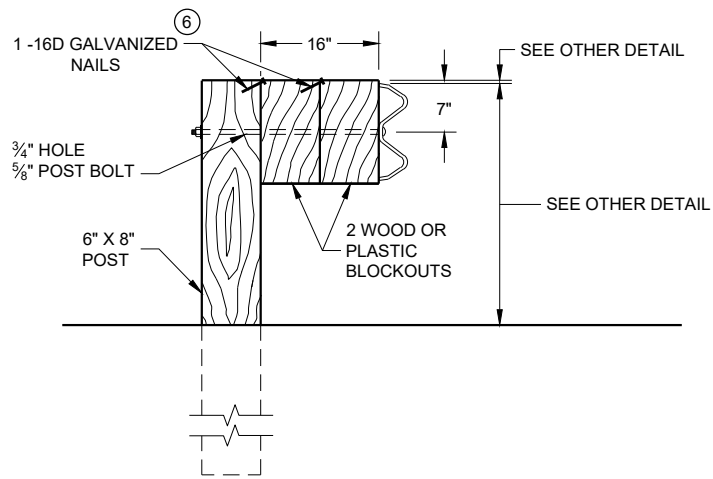
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

6

6

SDD 14B42 - 07b

SDD 14B42 - 07b

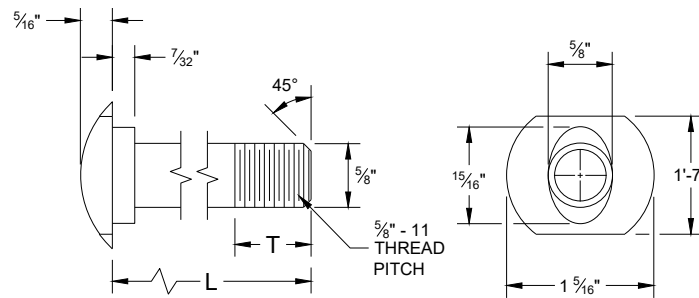


**DETAIL FOR 16" BLOCKOUT DEPTH**

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

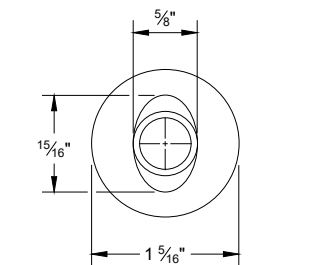
**NOTE:**

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF 3/16".
2. IF THE BOLT EXTENDS MORE THAN 1/4" FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

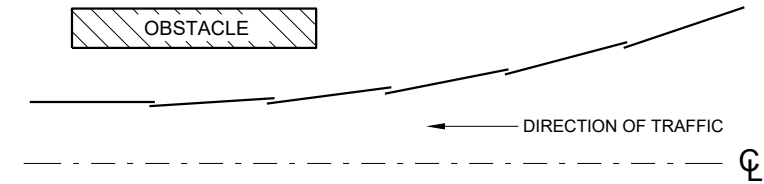


**POST BOLT TABLE**

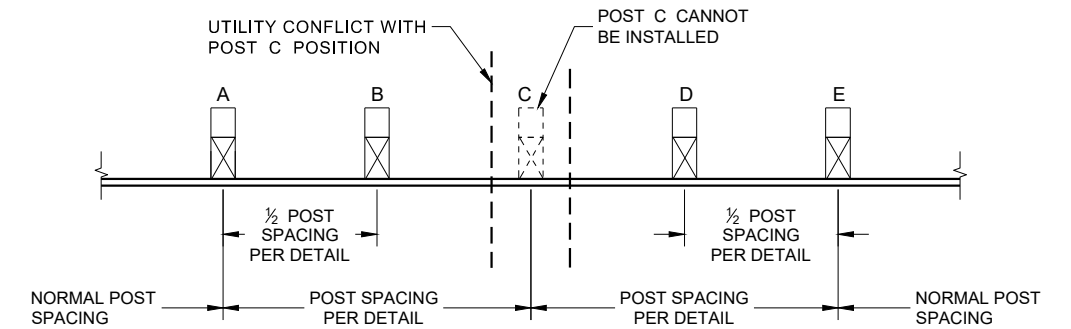
L	T (MIN.)
1 1/4"	1 1/8"
2"	1 3/4"
10"	4"
14"	4 1/16"
18"	4"
21"	4 1/16"
25"	4"



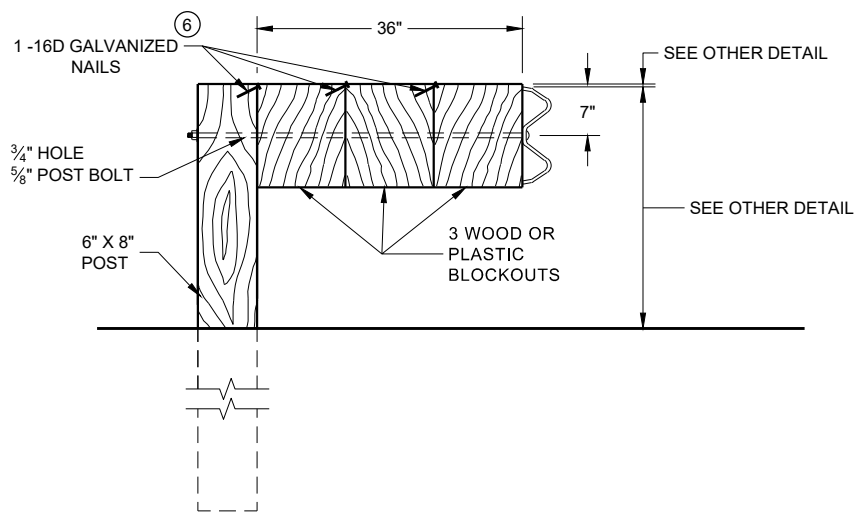
**ALTERNATE BOLT HEAD**



**PLAN VIEW  
BEAM LAPPING DETAIL**

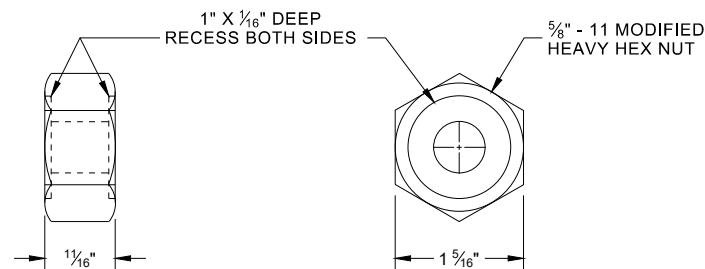


**POST DRIVING FOR CONTINUOUS  
UNDERGROUND OBSTRUCTION**

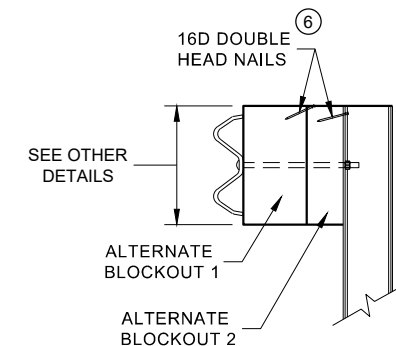


**DETAIL FOR 36" BLOCKOUT DEPTH**

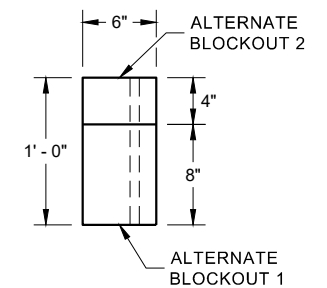
NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.  
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



**POST BOLT, SPLICE BOLT  
AND RECESS NUT**



**SIDE VIEW**



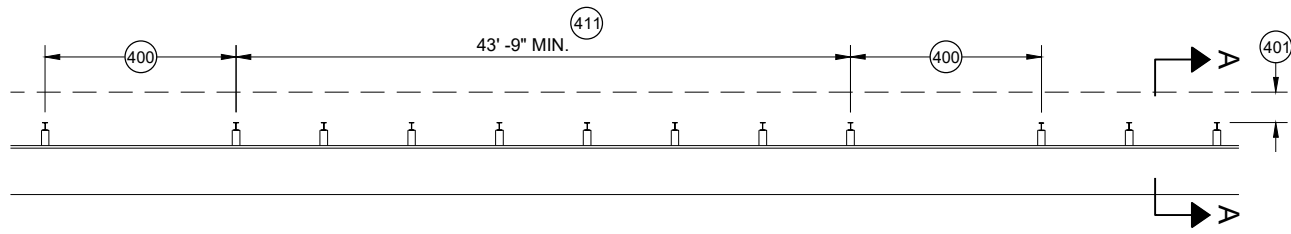
**PLAN VIEW**

**ALTERNATE WOOD  
BLOCKOUT DETAIL**

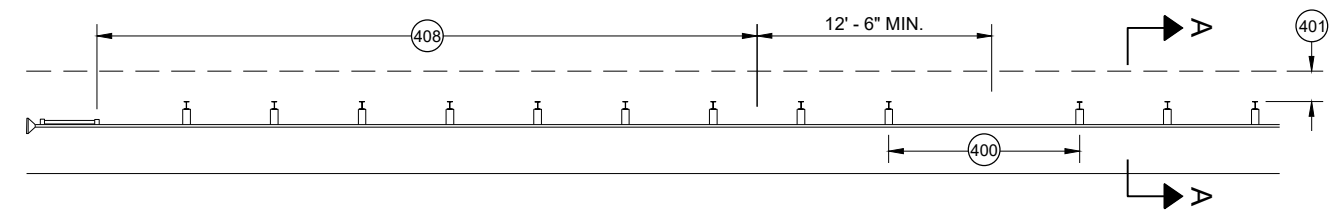
6 WHEN USING STEEL POST AND WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.

**MIDWEST GUARDRAIL SYSTEM  
(MGS) GUARDRAIL**

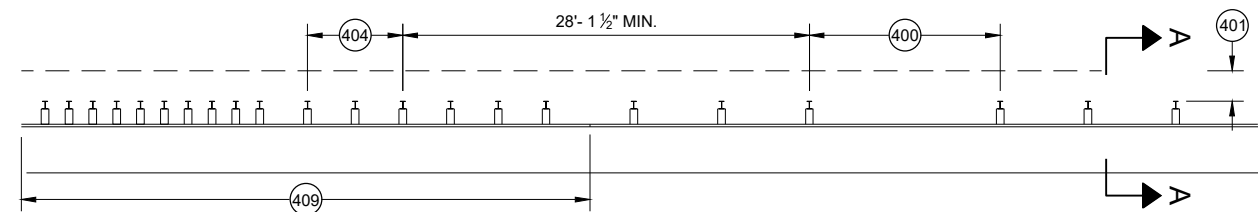
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



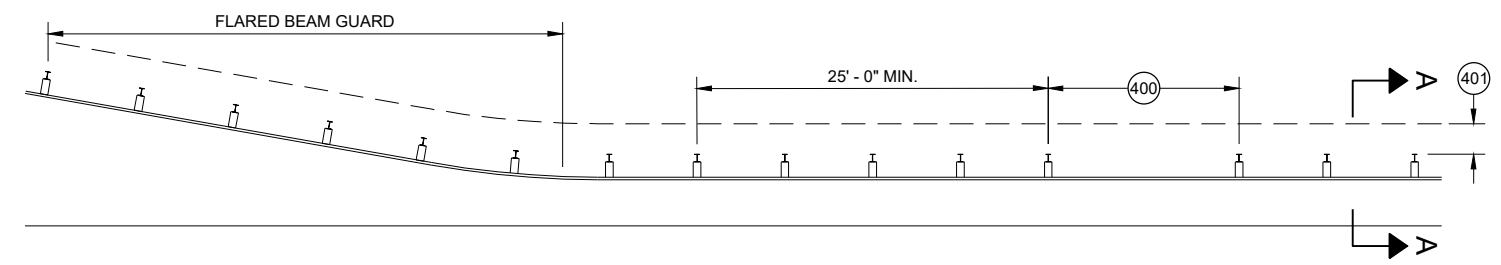
**MISSING POST IN MGS GUARDRAIL**



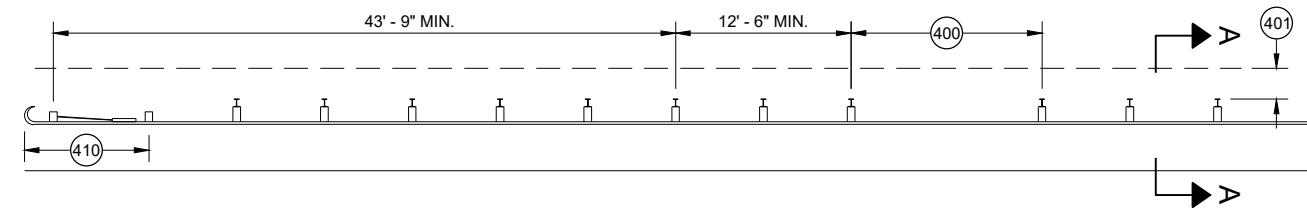
**MISSING POST IN MGS GUARDRAIL NEAR EAT**



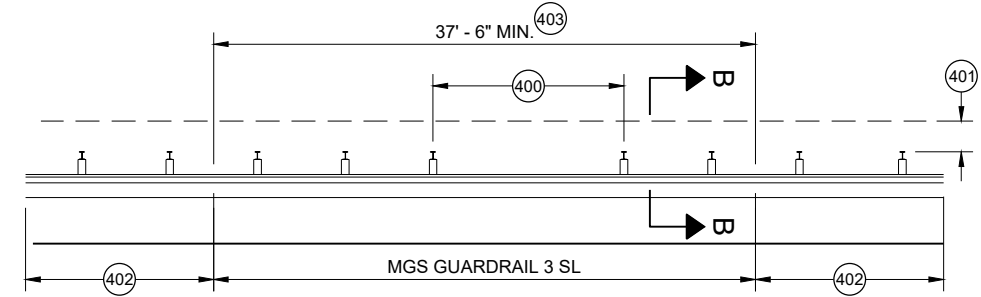
**MISSING POST IN MGS GUARDRAIL NEAR AN APPROACH TRANSITION**



**MISSING POST IN MGS GUARDRAIL NEAR FLARED BEAM GUARD**

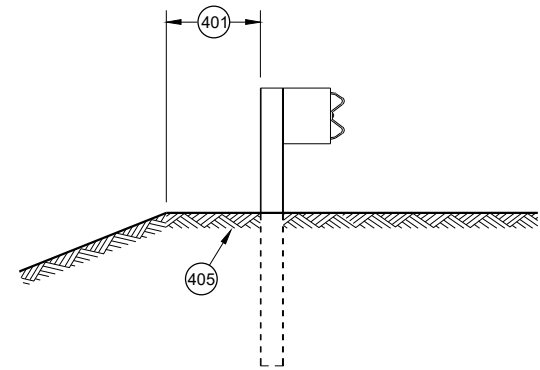


**MISSING POST IN MGS GUARDRAIL NEAR A TYPE 2 END TERMINAL**

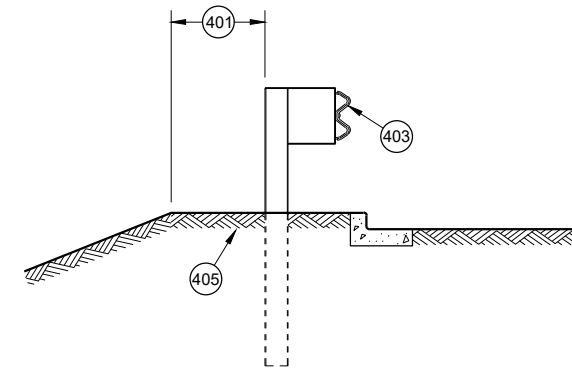


**MISSING POST IN SHORT SPAN MGS GUARDRAIL NEAR CURB (SL)**

- 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**



**SECTION B - B**

<b>MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2021 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
<small>FHWA</small>	

**GENERAL NOTES**

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE 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.

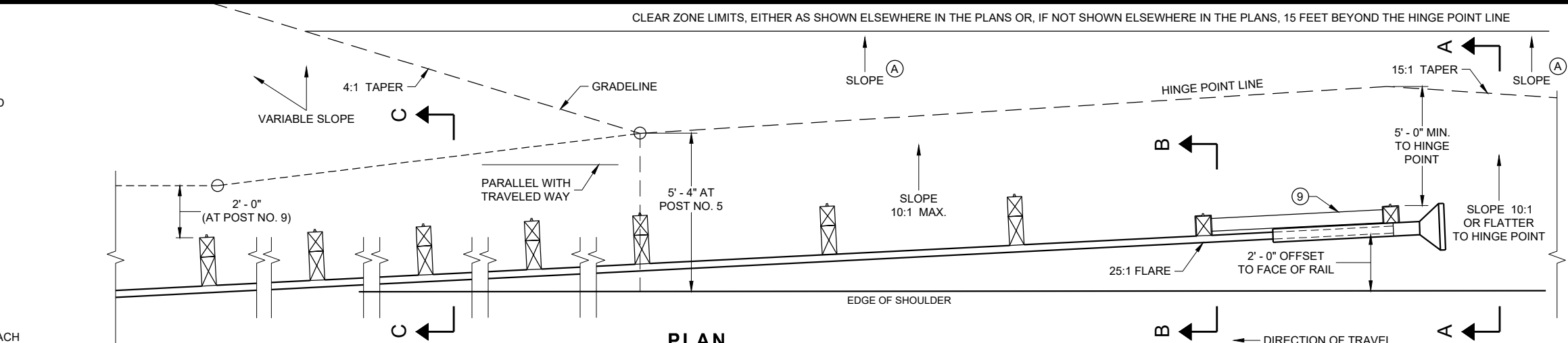
SEE SDD 14B42 FOR MORE INFORMATION.

\* DO NOT ATTACH BLOCKOUTS TO POST 1 AND 2.

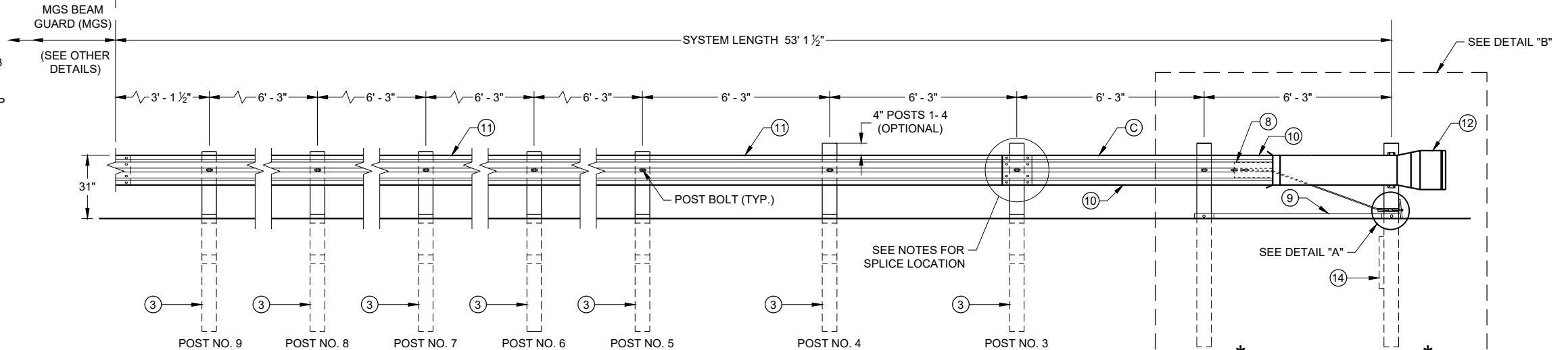
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

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

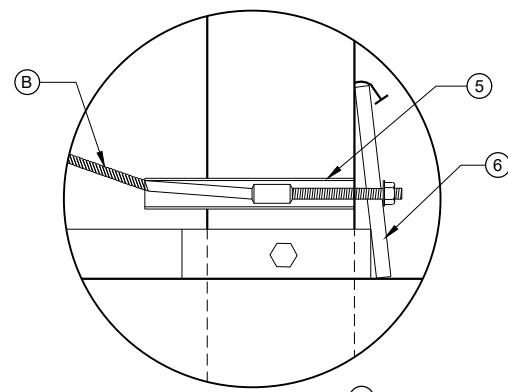
THE CENTER OF THE UPPER 3 1/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE. WOOD BLOCKS ON POSTS NUMBERED 3 THROUGH 9 MAY BE ADJUSTED UP TO 3" ABOVE THE TOP OF POST.



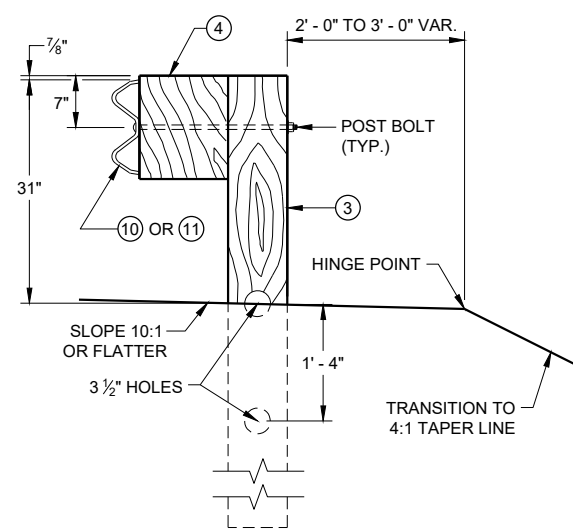
**PLAN**



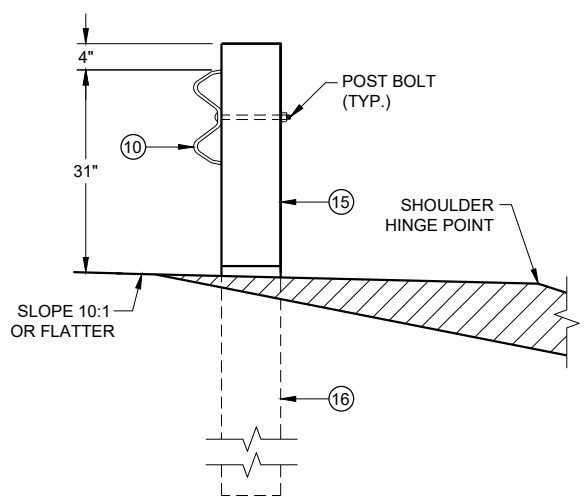
**ELEVATION**



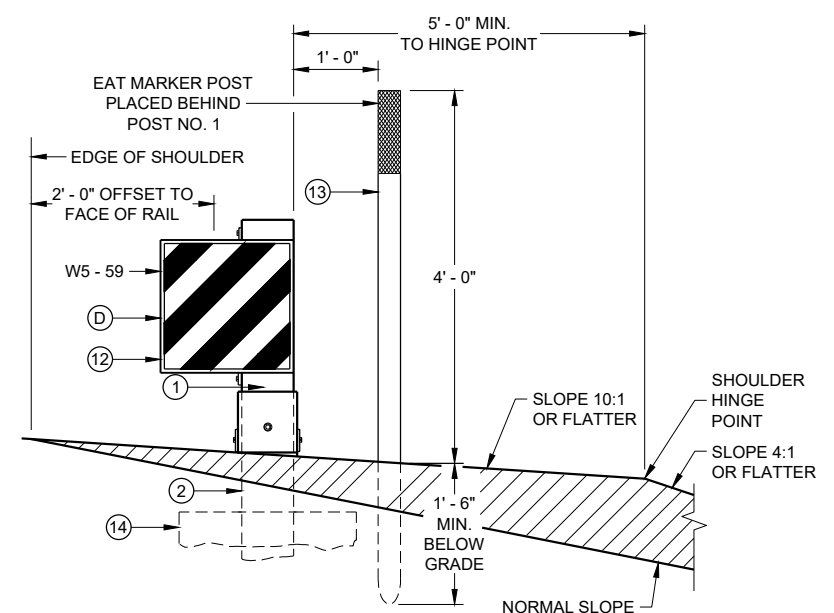
**DETAIL "A"**



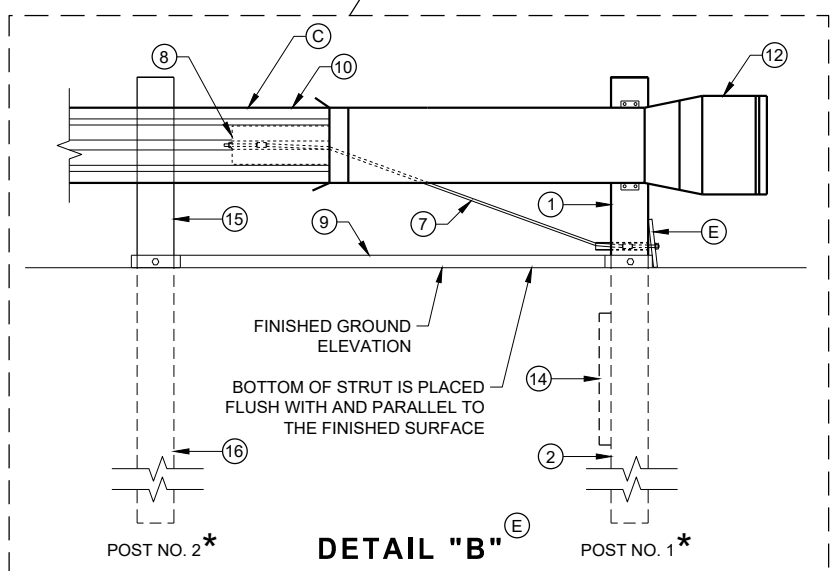
**SECTION C - C  
TYPICAL AT POST NOS. 3 - 9**



**SECTION B - B  
TYPICAL AT POST NO. 2\***



**SECTION A - A  
TYPICAL AT POST NO. 1\***



**DETAIL "B"**

**MIDWEST GUARDRAIL SYSTEM  
ENERGY ABSORBING TERMINAL  
(MGS)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

6

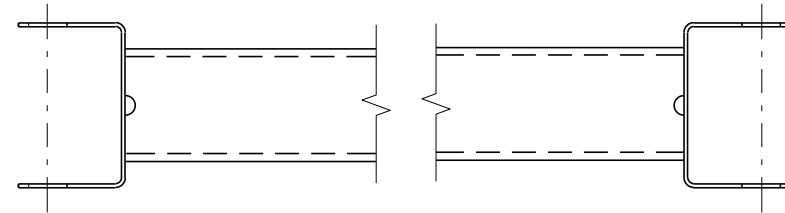
6

SDD 14B44 - 04a

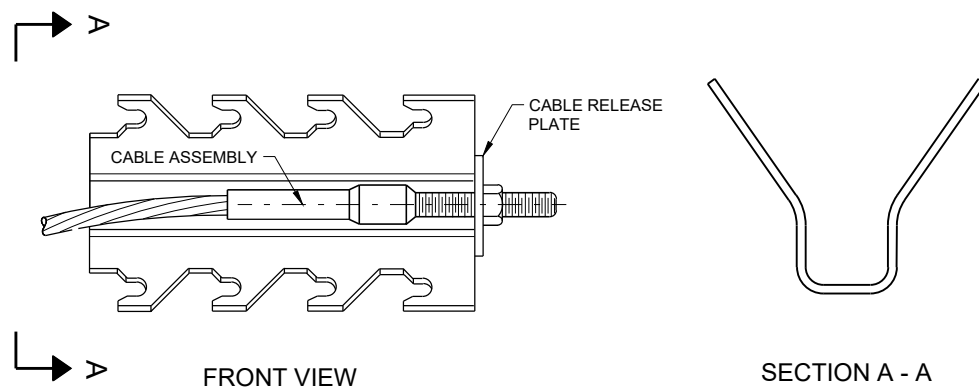
SDD 14B44 - 04a

**BILL OF MATERIALS**

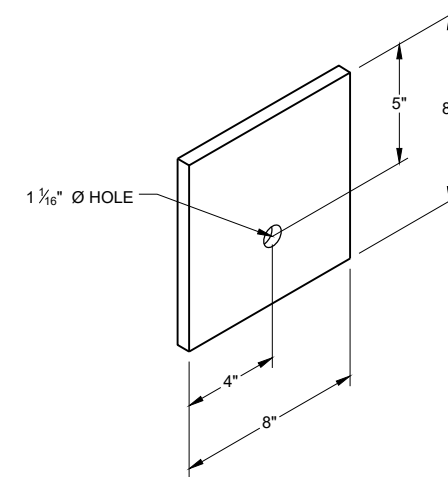
PART NO.	DESCRIPTION MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.
①	UPPER POST NO. 1 6" X 6" TUBE
②	LOWER POST NO. 1
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL 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 GROUND STRUT** ⑨ ⑤



**GENERIC ANCHOR CABLE BOX** ⑨ ⑤



**BEARING PLATE** ⑥ ⑤

6

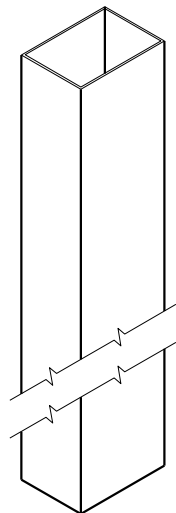
6

SDD 14B44 - 04b

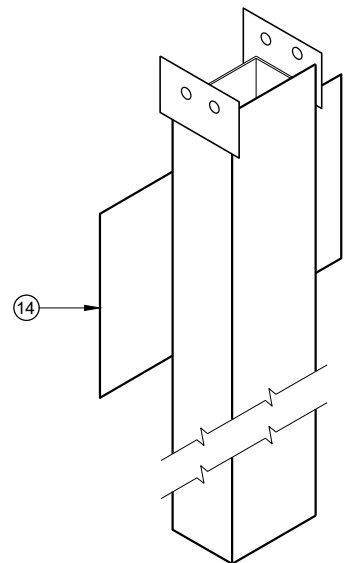
SDD 14B44 - 04b

**MIDWEST GUARDRAIL SYSTEM  
ENERGY ABSORBING TERMINAL  
(MGS)**

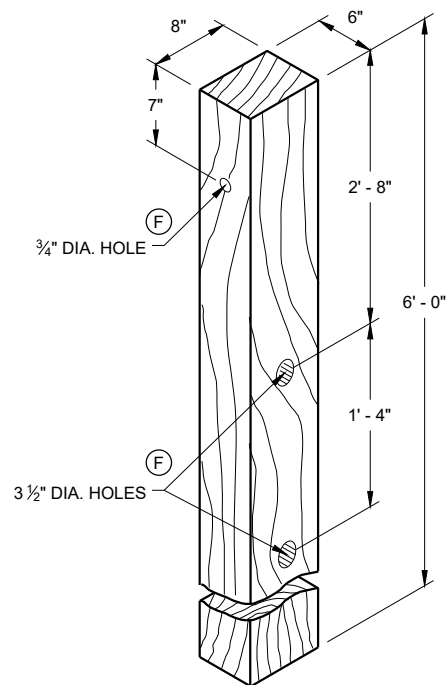
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



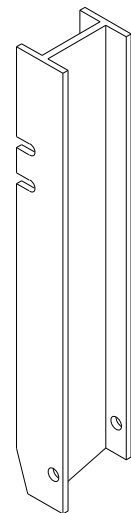
UPPER POST NO. 1 <sup>(1)</sup> (E)



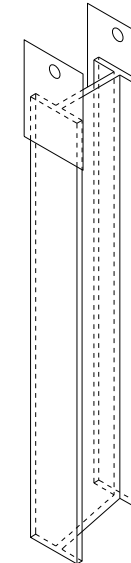
LOWER POST NO. 1 <sup>(2)</sup> (E)



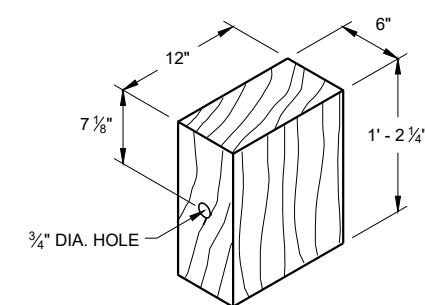
WOOD CRT POST <sup>(3)</sup> (E)  
POSTS NUMBER 3-9



UPPER POST NO. 2 <sup>(15)</sup> (E)

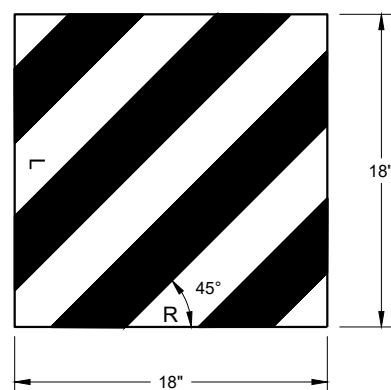


LOWER POST NO. 2 <sup>(16)</sup> (E)



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

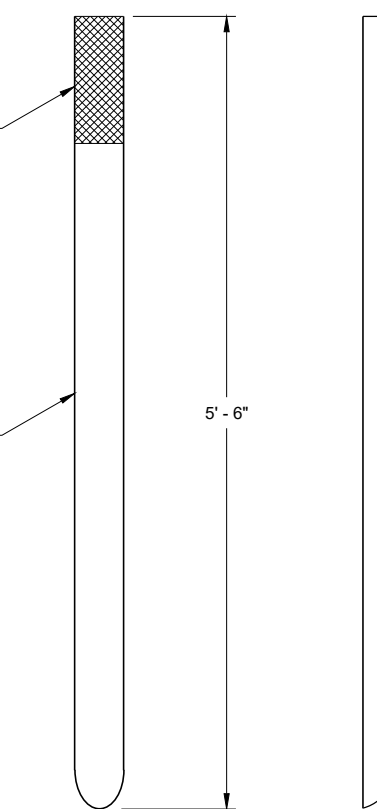
6



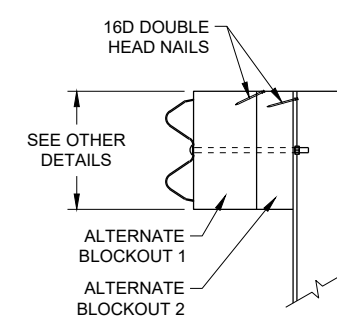
REFLECTIVE SHEETING DETAIL <sup>(E)</sup>

TYPE H  
YELLOW REFLECTIVE  
SHEETING 3" X 9".  
SEE STANDARD  
SPECIFICATION 637.

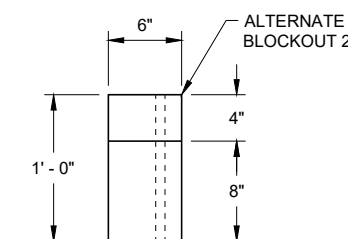
E.A.T. MARKER  
POST (YELLOW)



FRONT VIEW SIDE VIEW  
E.A.T. MARKER POST <sup>(13)</sup>



SIDE VIEW



TOP VIEW

ALTERNATE WOOD  
BLOCKOUT DETAIL

6

SDD 14B44 - 04c

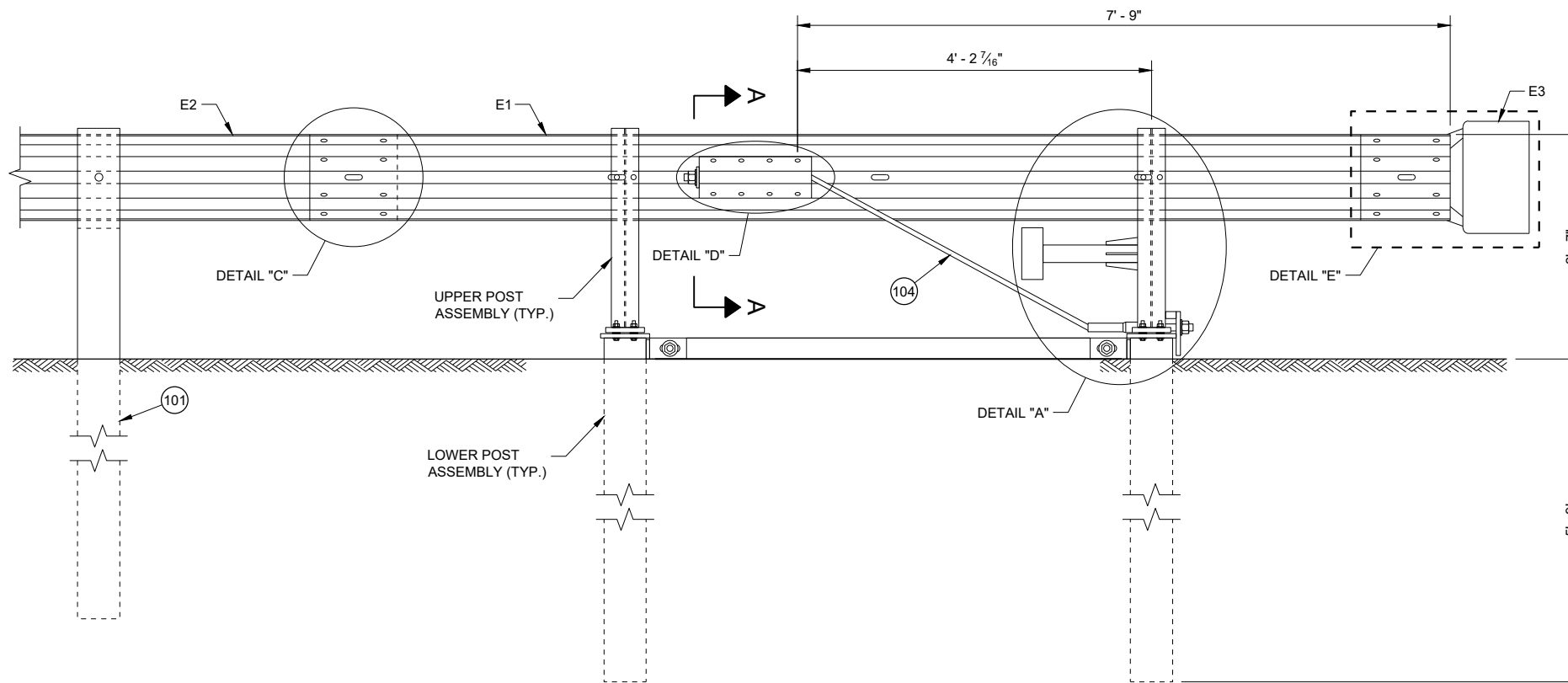
SDD 14B44 - 04c

**MIDWEST GUARDRAIL SYSTEM  
ENERGY ABSORBING TERMINAL  
(MGS)**

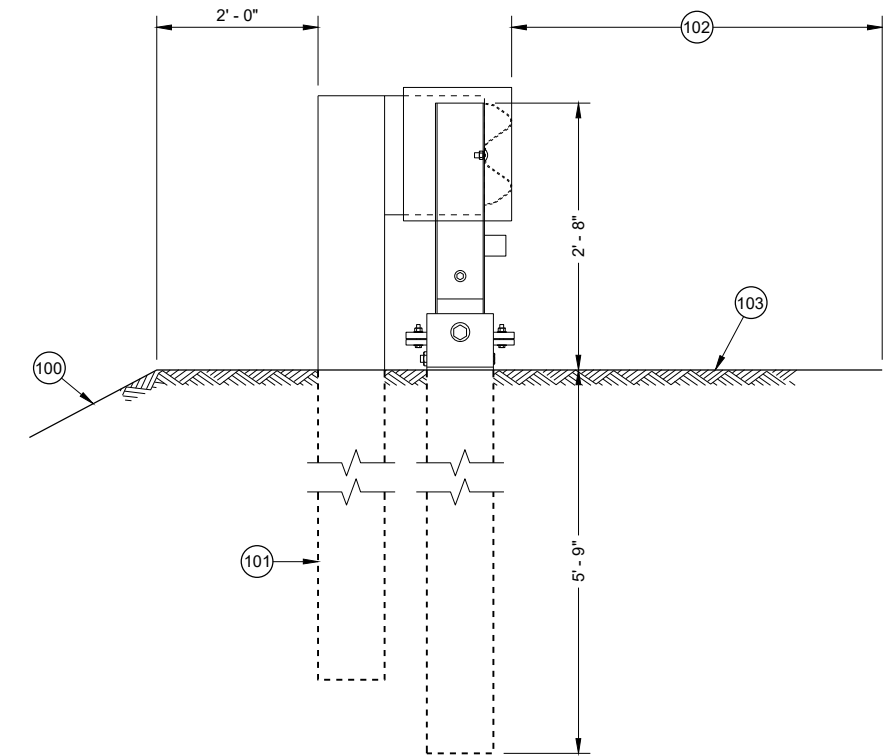
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

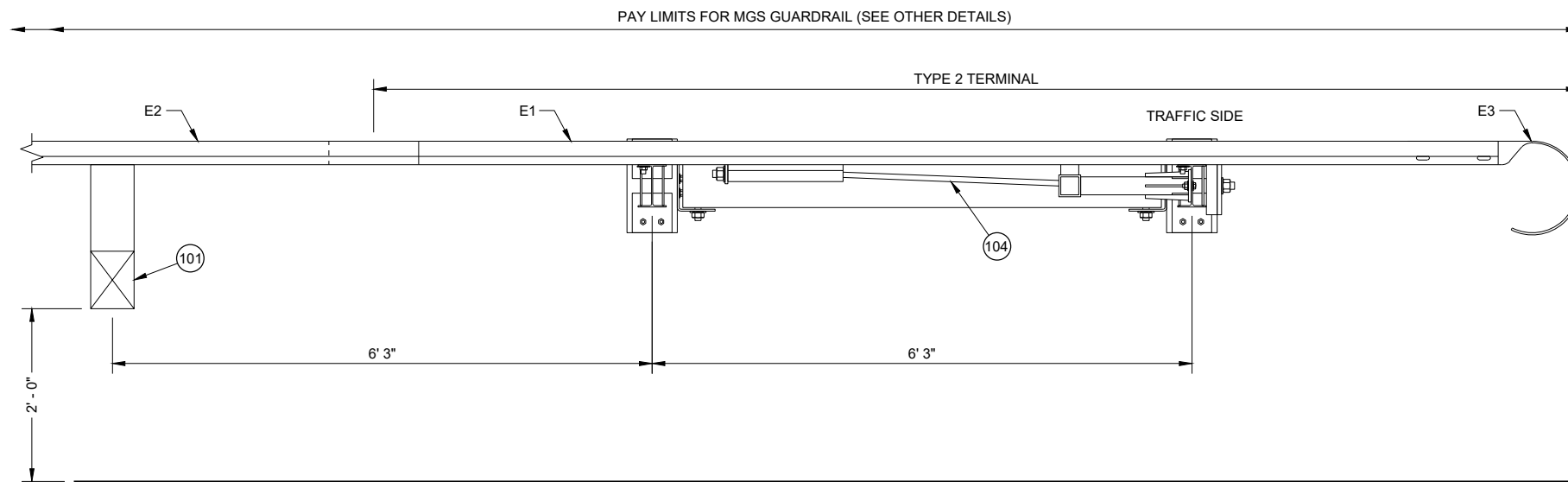
FHWA



**BACK VIEW  
TYPE 2 TERMINAL**



**SIDE VIEW  
TYPE 2 TERMINAL**



**TOP VIEW  
TYPE 2 TERMINAL**

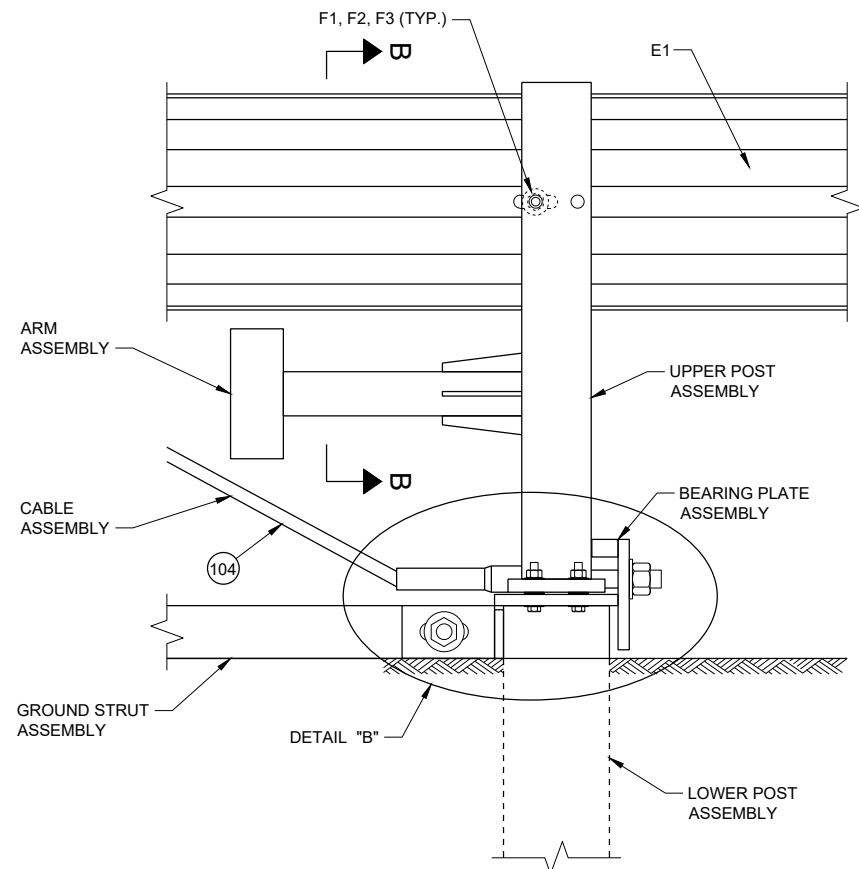
**GENERAL NOTES**

- (100) MAXIMUM SLOPE IS 2.5:1.
- (101) SEE SDD 14B42 FOR MORE INFORMATION.
- (102) SHOULDER
- (103) MAXIMUM SLOPE IS 10:1.
- (104) AFTER ASSEMBLY, CABLE IS TO BE TIGHTENED WITHOUT TWISTING THE CABLE.

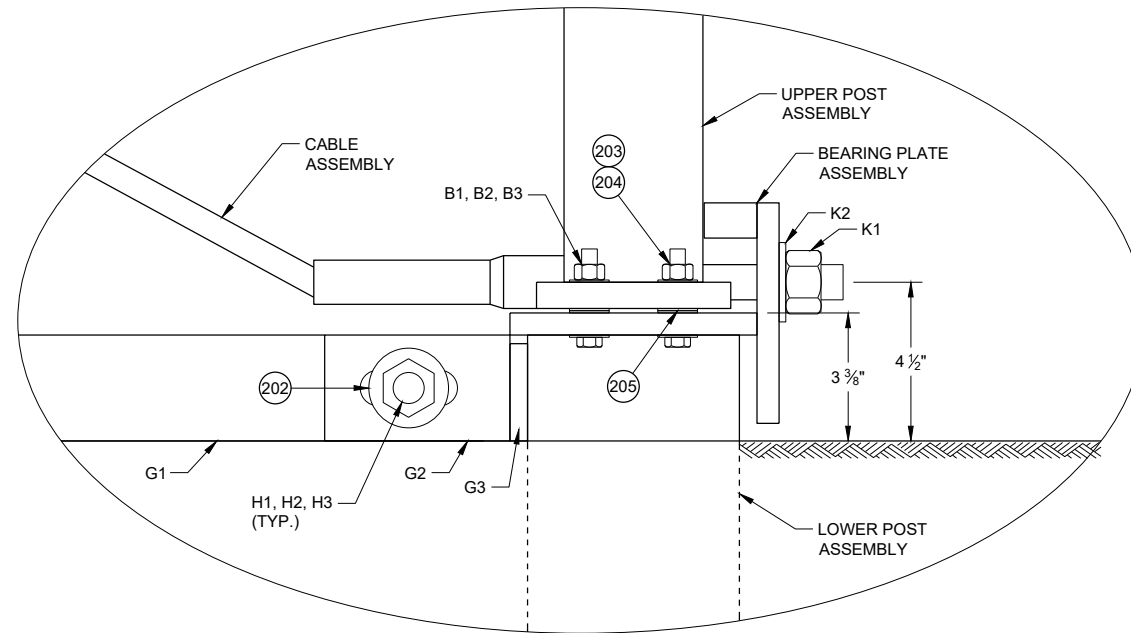
**MIDWEST GUARDRAIL  
SYSTEM (MGS)  
TYPE 2 TERMINAL**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

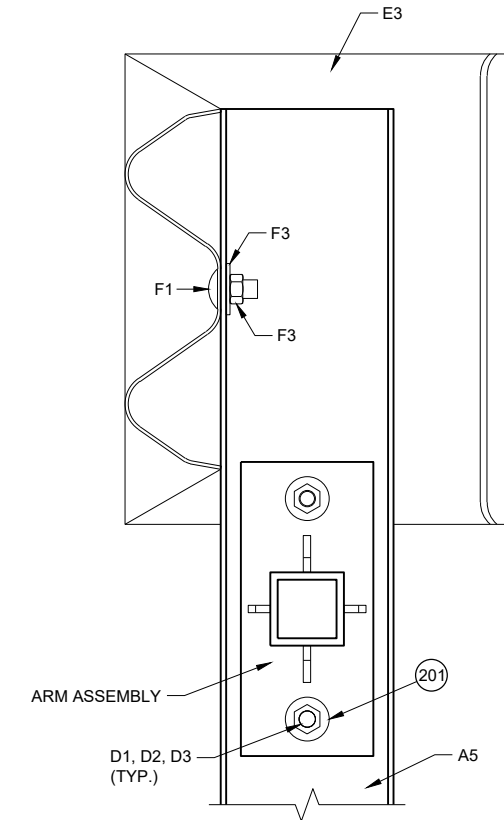




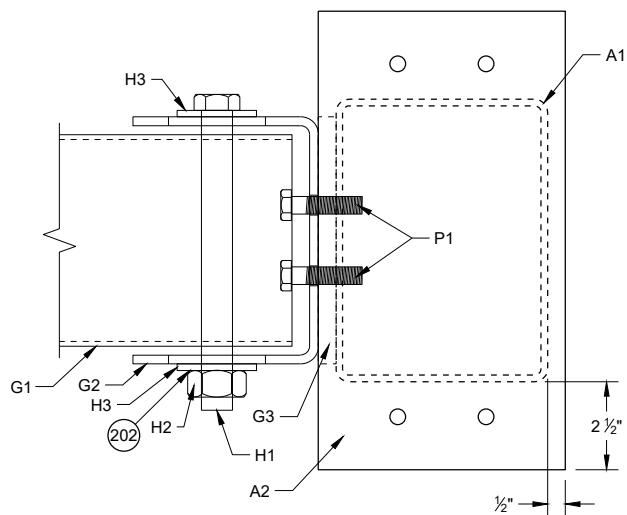
**DETAIL "A"**



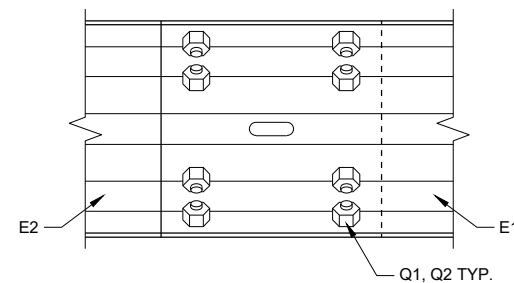
**DETAIL "B"**



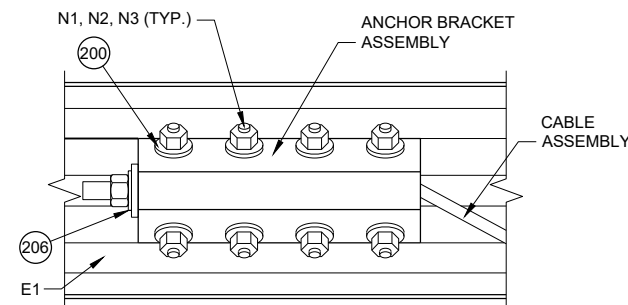
**SECTION B - B**



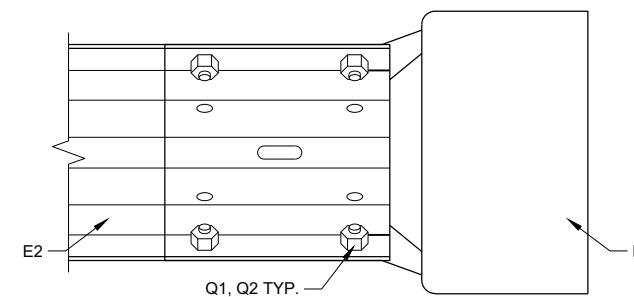
**TOP VIEW  
GROUND STRUT  
CONNECTION DETAIL**



**DETAIL "C"**



**DETAIL "D"**



**DETAIL "E"**

**GENERAL NOTES**

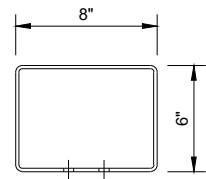
- 200 INSTALL ONE WASHER UNDER BOLT HEAD AND RAIL AND ON WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.
- 201 INSTALL ONE WASHER UNDER BOLT HEAD AND UPPER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND ARM PLATE.
- 202 INSTALL ONE WASHER UNDER BOLT HEAD AND GROUND STRUT CONNECTOR AND ONE WASHER BETWEEN NUT AND GROUND STRUT CONNECTOR.
- 203 INSTALL ONE WASHER UNDER BOLT HEAD AND LOWER POST ASSEMBLY AND ONE WASHER BETWEEN NUT AND UPPER POST ASSEMBLY.
- 204 TORQUE VALUE IS BETWEEN 60 - 75 FT-LB.
- 205 TWO WASHERS BETWEEN UPPER AND LOWER POST ASSEMBLY.
- 206 INSTALL ONE WASHER BETWEEN NUT AND ANCHOR BRACKET ASSEMBLY.

**MIDWEST GUARDRAIL  
SYSTEM (MGS)  
TYPE 2 TERMINAL**

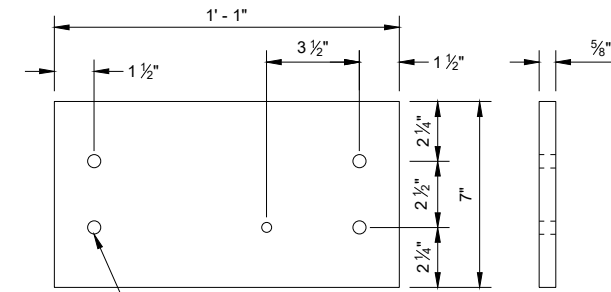
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**GENERAL NOTES**

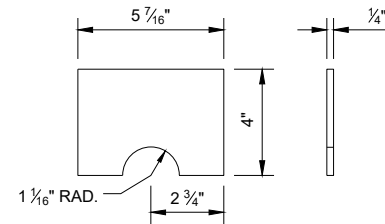
(300) TAP FOR 1/2" AFTER GALVANIZATION



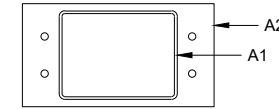
**TOP VIEW**



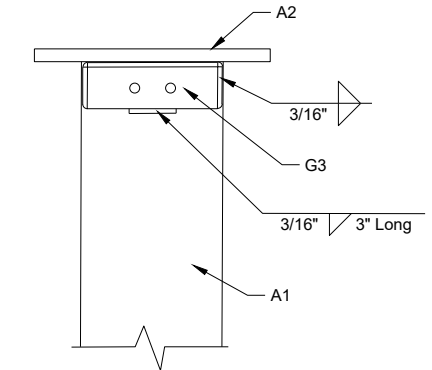
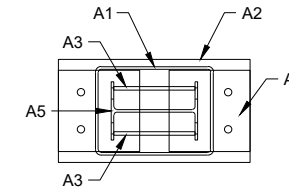
**LOWER PLATE (A2)**



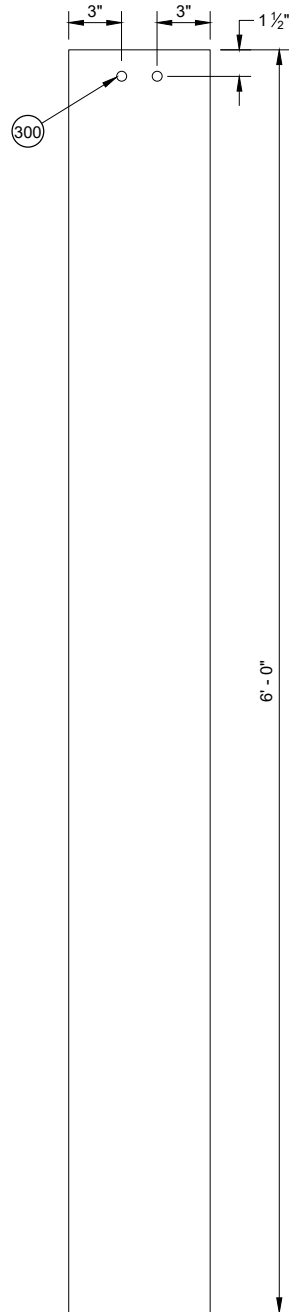
**POST GUSSET (A3)**



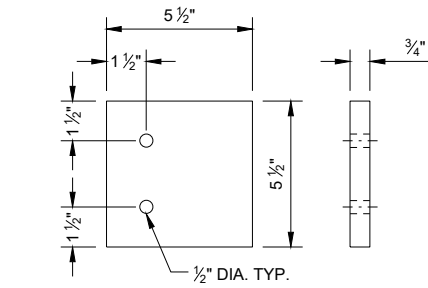
**PLAN VIEW**



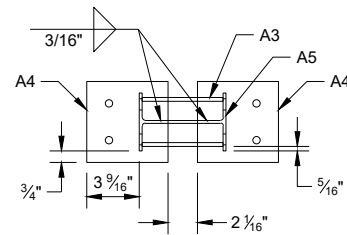
**WELDING DETAIL G3 AND A1**



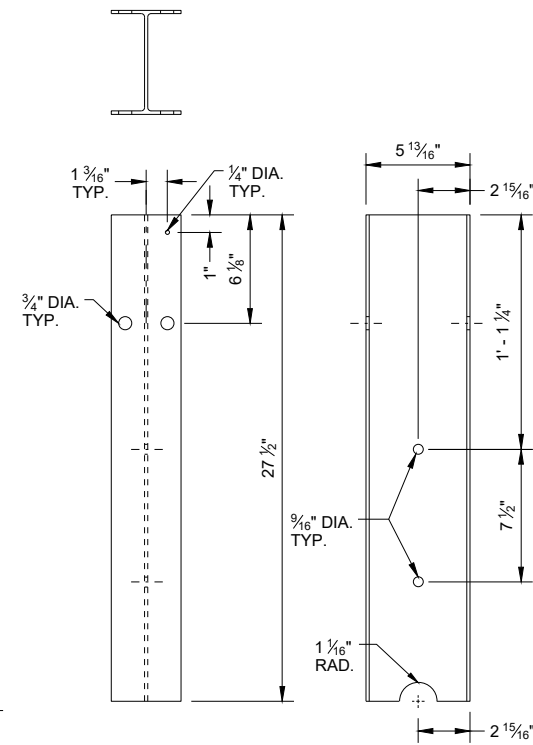
**FOUNDATION TUBE (A1)**



**UPPER PLATE (A4)**



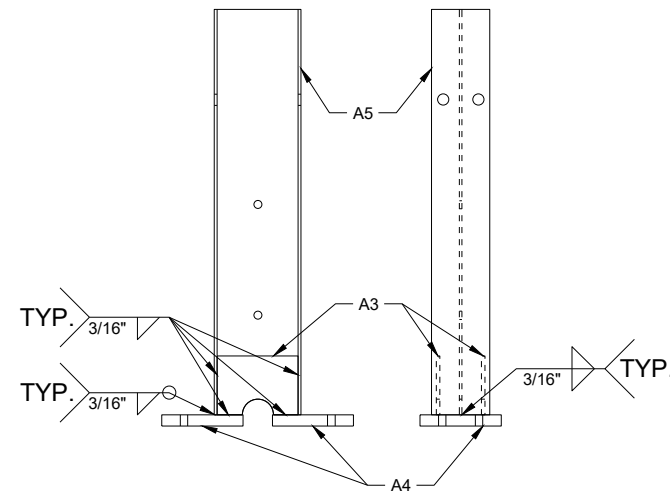
**PLAN VIEW**



**FRONT VIEW**

**SIDE VIEW**

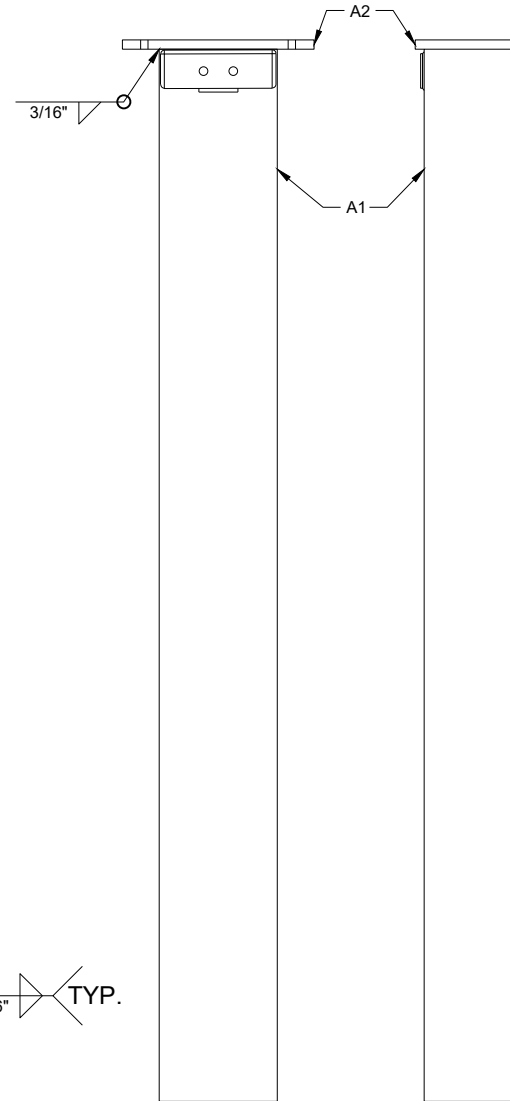
**TYPE 2 POST (A5)**



**SIDE VIEW**

**FRONT VIEW**

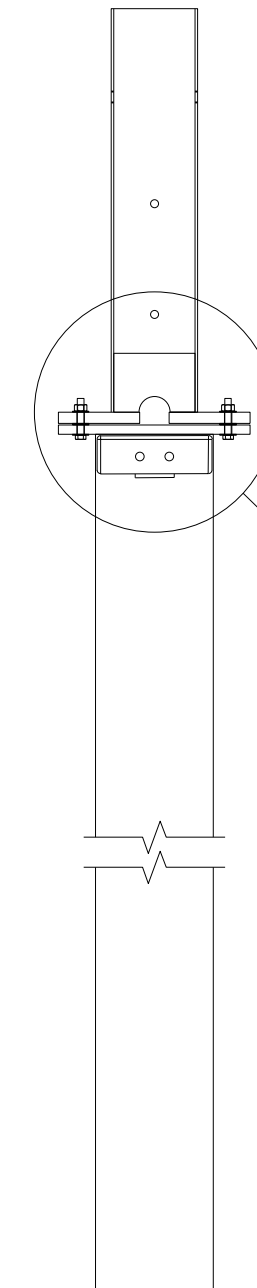
**UPPER POST ASSEMBLY**



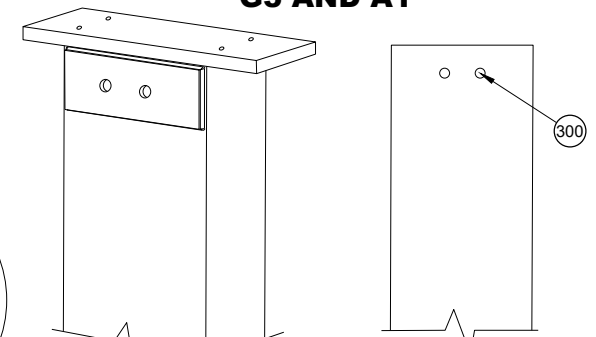
**FRONT VIEW**

**SIDE VIEW**

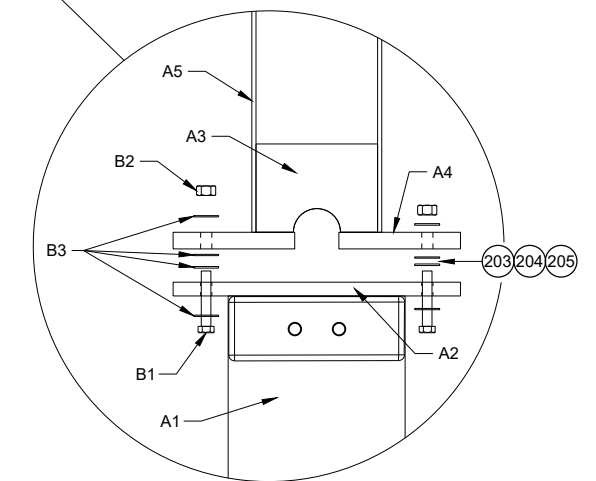
**LOWER POST ASSEMBLY**



**ASSEMBLED POST**



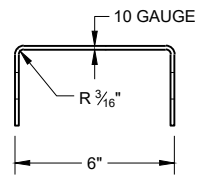
**ASSEMBLY DETAIL ISOMETRIC**



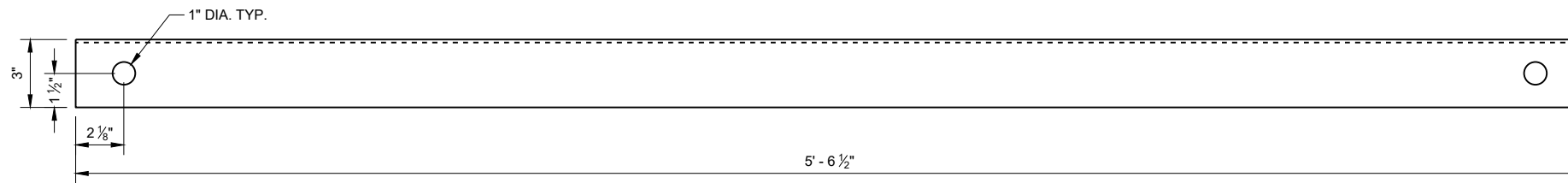
**POST CONNECTION DETAIL**

**MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL**

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

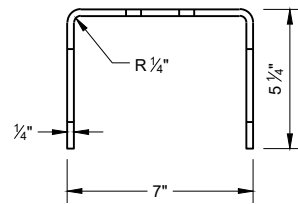


**SIDE VIEW**

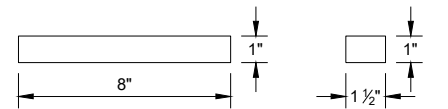


**FRONT VIEW**

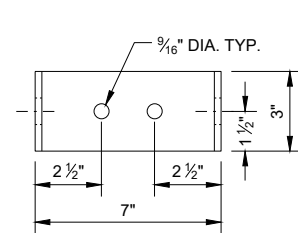
**GROUND STRUT CHANNEL (G1)**



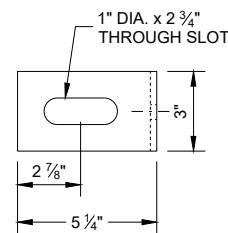
**TOP VIEW**



**BEARING PLATE FLANGE (L2)**

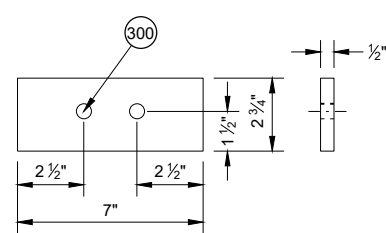


**FRONT VIEW**

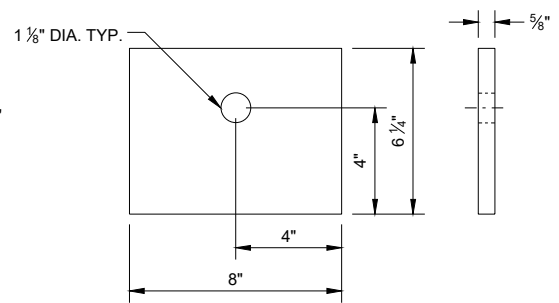


**SIDE VIEW**

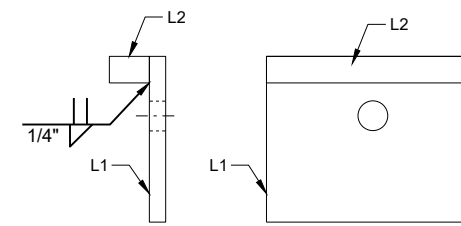
**GROUND STRUT CONNECTOR (G2)**



**GROUND STRUT PLATE (G3)**



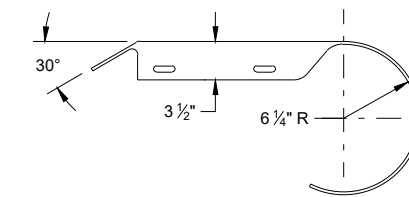
**BEARING PLATE (L1)**



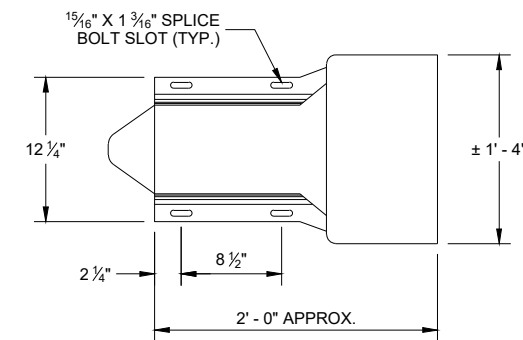
**SIDE VIEW**

**FRONT VIEW**

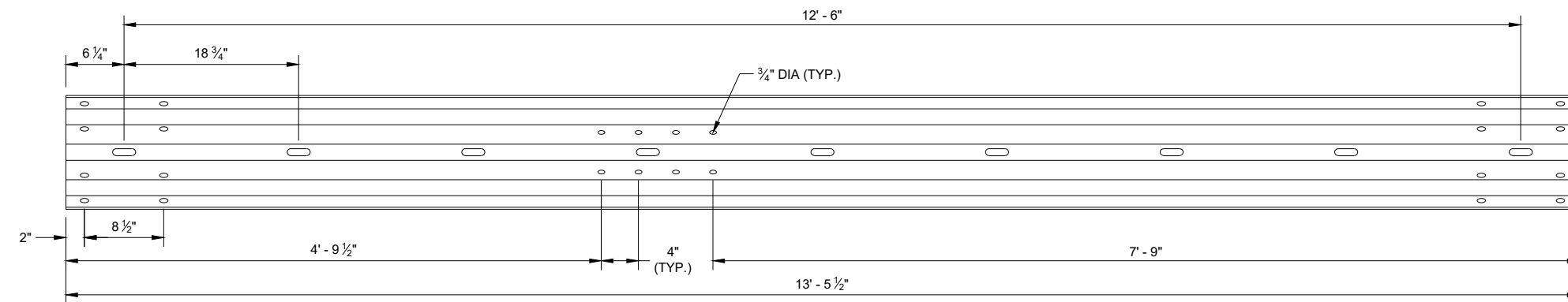
**BEARING PLATE ASSEMBLY**



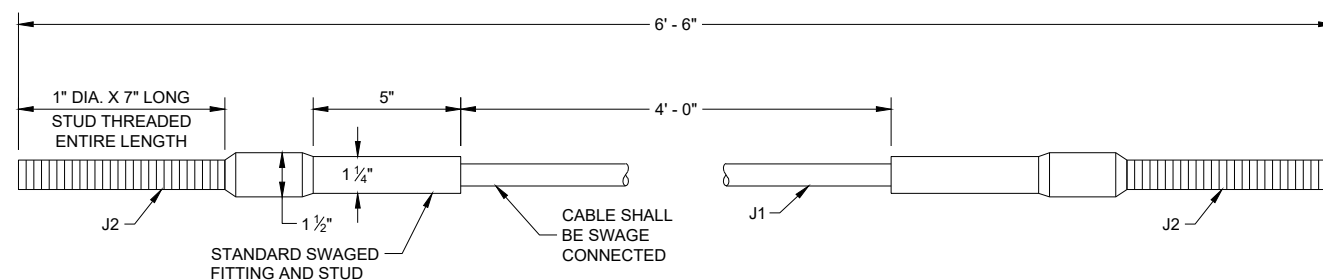
**PLAN VIEW**



**ELEVATION VIEW  
ROUNDED BUFFER END (E3)**



**TYPE 2 GUARDRAIL (E1)**



**CABLE ASSEMBLY**

6

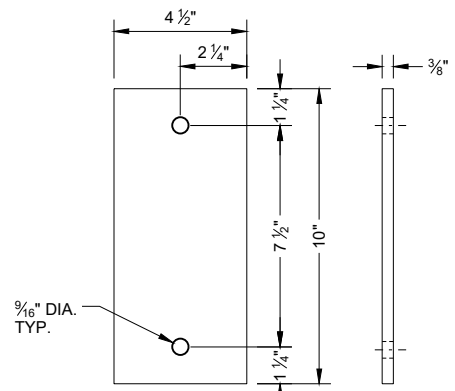
6

SDD 14B47 - 05d

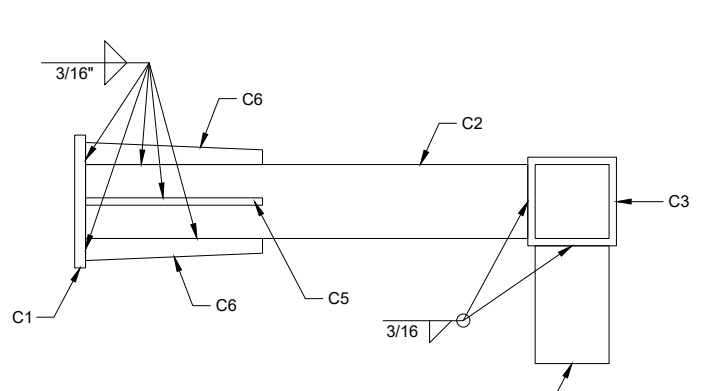
SDD 14B47 - 05d

**MIDWEST GUARDRAIL  
SYSTEM (MGS)  
TYPE 2 TERMINAL**

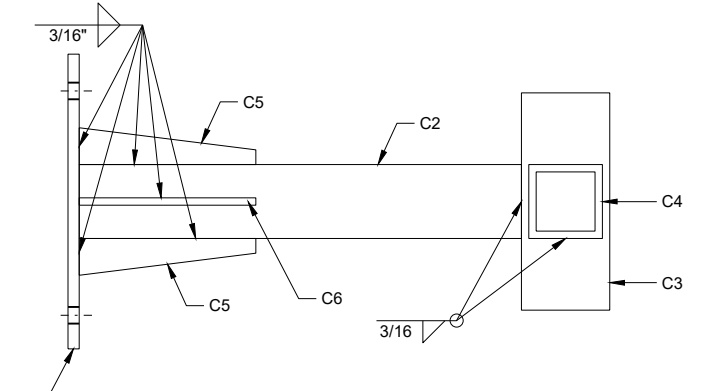
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



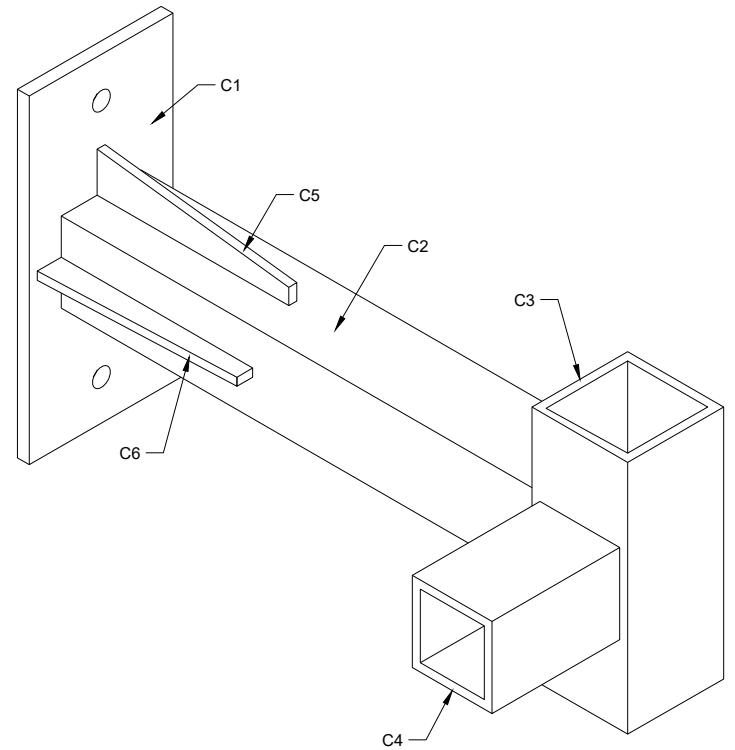
**ARM PLATE (C1)**



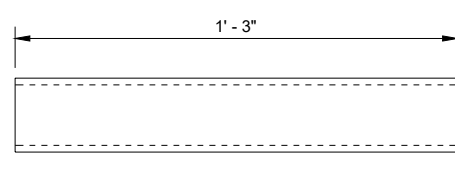
**TOP VIEW  
ARM ASSEMBLY**



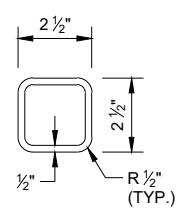
**SIDE VIEW  
ARM ASSEMBLY**



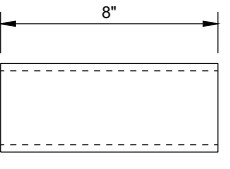
**ISOMETRIC VIEW  
ARM ASSEMBLY**



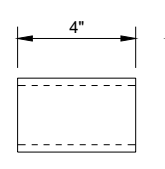
**ARM TUBE 1 (C2)**



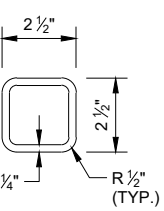
**ARM TUBE 2 (C3)**



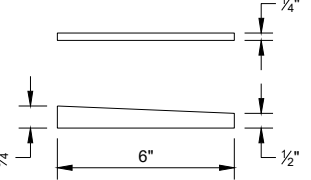
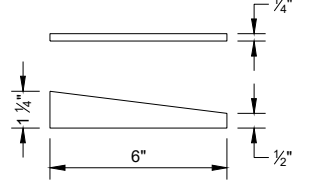
**ARM TUBE 3 (C4)**



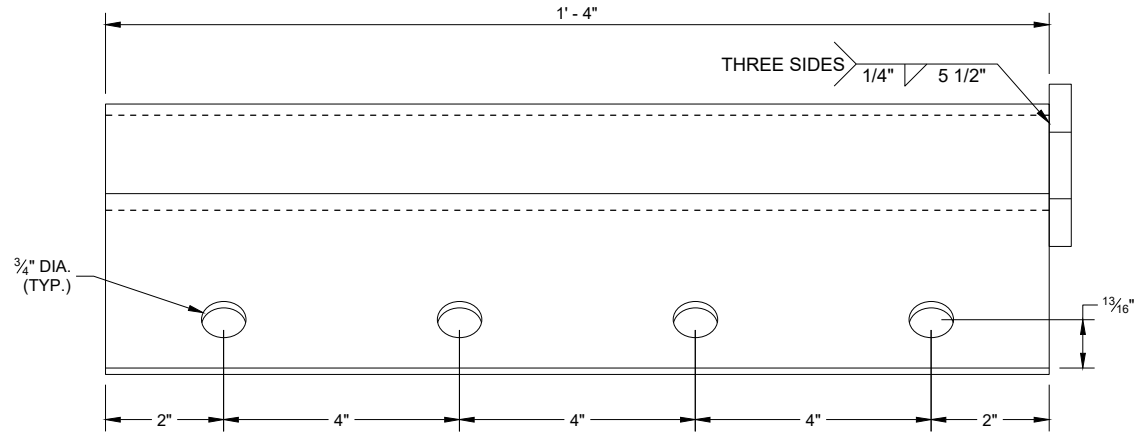
**ARM GUSSET  
PLATE 1 (C5)**



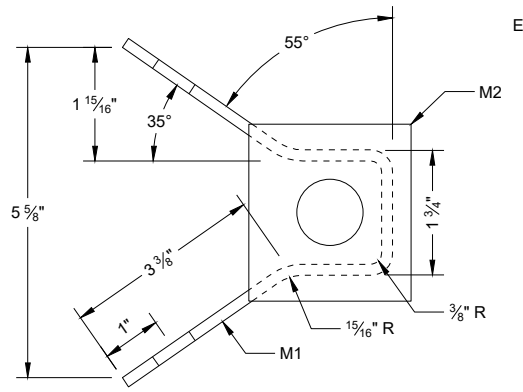
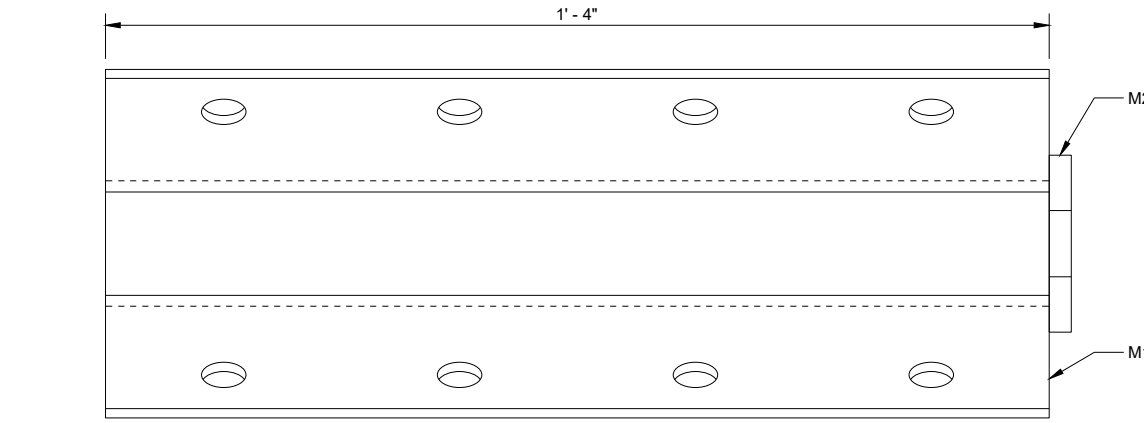
**ARM GUSSET  
PLATE 2 (C6)**



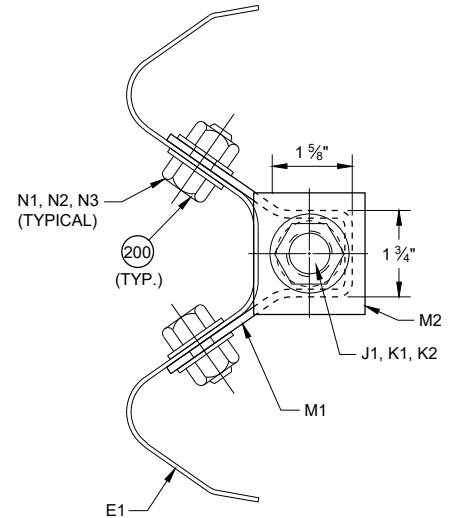
6



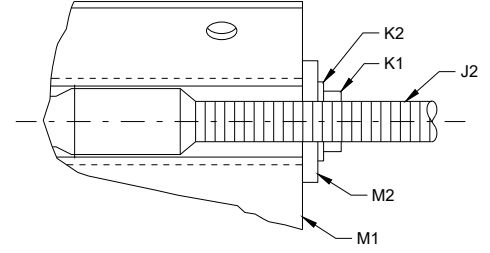
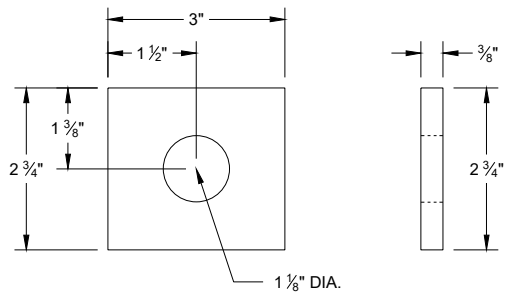
**ANCHOR BRACKET (M1, M2)**



**ANCHOR BRACKET BEARING PLATE (M2)**



**SECTION A - A**



**MIDWEST GUARDRAIL  
SYSTEM (MGS)  
TYPE 2 TERMINAL**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

SDD 14B47 - 05e

SDD 14B47 - 05e

6

**BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)**

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
A1	TYPE 2 FOUNDATION TUBE	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
A2	LOWER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
A3	POST GUSSET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
A4	UPPER PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/4" THICKNESS
A5	TYPE 2 POST	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI, w6x9 or w6x8.5	
B1	BREAKAWAY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM F3125 GRADE A325 TYPE 1 HEAVY HEX HEAD OR SAE J429 GRADE 5 HEAVY HEX HEAD / ASTM A449 TYPE 1 HEAVY HEX HEAD. BOLTS MAY BE FULLY THREADED . PROVIDE ENOUGH THREADING FOR PROPER TIGHTENING OF BOLT.	7/16" DIA.
B2	BREAKAWAY BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/16" DIA.
B3	BREAKAWAY BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
C1	ARM ASSEMBLY PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
C2	ARM ASSEMBLY TUBE 1	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 8" x 6" x 3/16"
C3	ARM ASSEMBLY TUBE 2	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 3" x 3" x 1/4"
C4	ARM ASSEMBLY TUBE 3	AASHTO M111 / ASTM A123 ASTM A500 GRADE B OR ASTM A-501	TS 2 1/2" x 2 1/2" X 1/4"
C5	ARM ASSEMBLY GUSSET PLATE 1	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
C6	ARM ASSEMBLY GUSSET PLATE 2	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
D1	ARM ASSEMBLY BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	1/2" DIA.
D2	ARM ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	1/2" DIA.
D3	ARM ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
E1	TYPE 2 GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E2	BEAM GUARD RAIL	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
E3	BEAM GUARD ROUNDED BUFFER END	AASHTO M180 CLASS A TYPE 2 12 GAUGE APPROVED PRODUCER	
F1	POST BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
F2	POST BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
F3	POST BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291/ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
G1	GROUND STRUT CHANNEL	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" x 11 3/4" x 10 GAUGE
G2	GROUND STRUT CONNECTOR	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/4" THICKNESS
G3	GROUND STRUT PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1/2" THICKNESS

6

6

SDD 14B47 - 05f

SDD 14B47 - 05f

**MIDWEST GUARDRAIL  
SYSTEM (MGS)  
TYPE 2 TERMINAL**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**BILL OF MATERIALS - TYPE 2 TERMINAL (MGS)**

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
H1	GROUND STRUT BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	7/8" DIA.
H2	GROUND STRUT BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	7/8" DIA.
H3	GROUND STRUT BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC HEAVY HEX HEAD 5/8" ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
J1	BCT CABLE	AASHTO M30 / ASTM A741 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS), 6 x 19 INDEPENDENT WIRE CORE (IWRC) IMPROVED PLOW STEEL (IPS) TYPE II OR IIC, CLASS C ZINC COATED MIN. BREAKING STRENGTH OF 42.7 KIPS	3/4" DIA.
J2	BCT CABLE	UNC 1" ASTM A576 GRADE 1035 SWAGE FITTINGS ARE TO BE FACTORY SWEDGED. MIN BREAKING STRENGTH OF 42.7 KIPS ASME B30.26 "FORGED, CAST, OR DIE STAMPED WITH THE FOLLOWING IN TO CONNECTION: NAME OF MANUFACTURE OR TRADEMARK OF CONNECTION'S MANUFACTURER, SIZE OR RATED LOAD, GRADE FOR ALLOY EYEBOLTS."	
K1	CABLE ASSEMBLY NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1" DIA.
K2	CABLE ASSEMBLY WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1	1" DIA.
L1	BEARING PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	5/8" THICKNESS
L2	BEARING PLATE FLANGE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	1" THICKNESS
M1	BEAM GUARD ANCHOR BRACKET	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	
M2	BEAM GUARD ANCHOR END PLATE	AASHTO M111 / ASTM A123 ASTM A36 MIN. STRENGTH 36 KSI, OR ASTM A529 MAX. STRENGTH 50 KSI, OR ASTM A572 MAX STRENGTH 50 KSI, OR ASTM A709 MAX STRENGTH 50 KSI, OR ASTM A992 MAX STRENGTH 50 KSI	3/8" THICKNESS
N1	ANCHOR BRACKET BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	5/8" DIA.
N2	ANCHOR BRACKET BOLT WASHER	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 F436 TYPE 1 (HARDEN WASHER ONLY)	5/8" DIA.
N3	ANCHOR BRACKET BOLT NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	
P1	FOUNDATION TUBE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	1/2" DIA.
Q1	SPLICE BOLT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC AASHTO M180 HEAD ASTM A307 GRADE B OR SAE J429 GRADE 2 OR ASTM F1554 GRADE 36	
Q2	SPLICE NUT	HOT DIP AASHTO M232 CLASS / ASTM A153 CLASS C / ASTM F2329 C OR MECHANICAL GAL. TO AASHTO M298 CLASS 50 TYPE 1 / ASTM B695 CLASS 50 TYPE 1 UNC OVER TAP NUTS AS SPECIFIED IN AASHTO 291 / ASTM A 563 AASHTO M180 RECESSED HEAVY HEX HEAD ASTM A563DH OR SAE J995 GRADE 5	5/8" DIA.

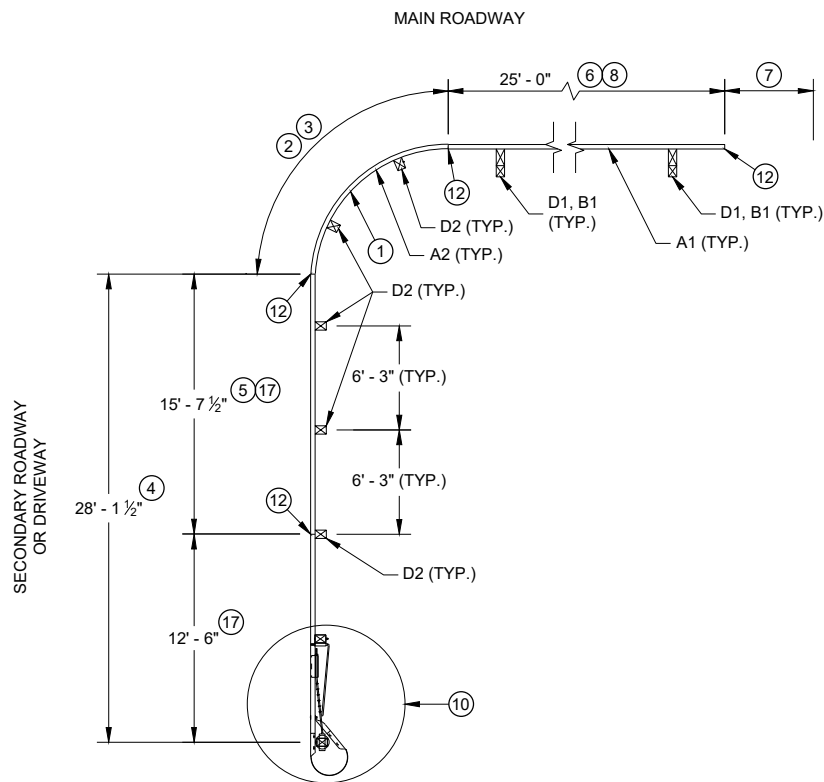
6

6

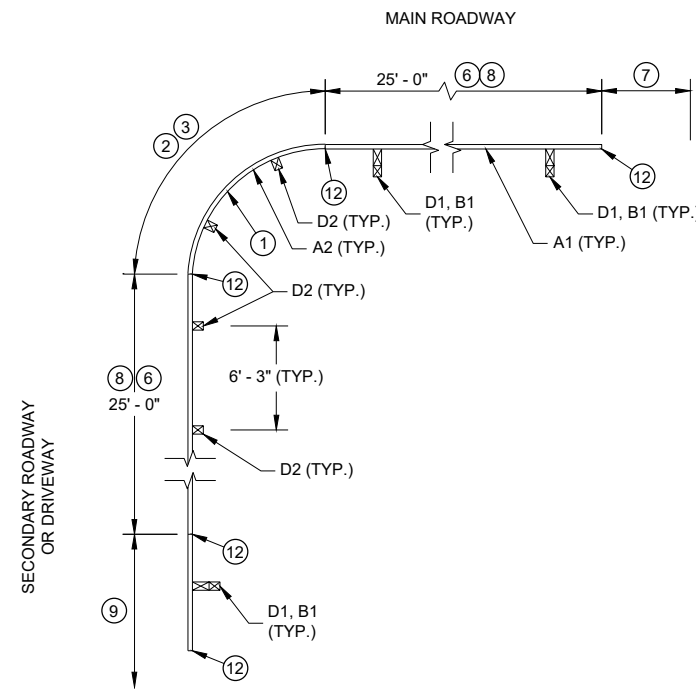
SDD 14B47 - 05g

SDD 14B47 - 05g

<b>MIDWEST GUARDRAIL SYSTEM (MGS) TYPE 2 TERMINAL</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Rodney Taylor ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



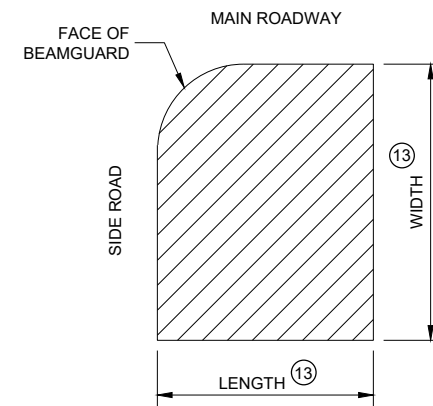
**PLAN VIEW**  
**SHORT RADIUS BEAM GUARD WITH**  
**SHORT RADIUS TERMINAL ON**  
**SECONDARY ROAD OR DRIVEWAY**



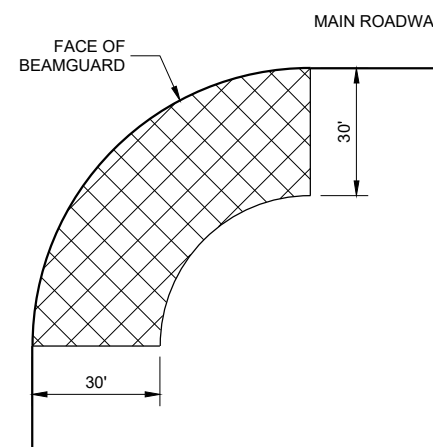
**PLAN VIEW**  
**SHORT RADIUS BEAM GUARD WITH**  
**EAT, ADDITIONAL BEAM GUARD**  
**OR**  
**TRANSITION TO RIGID BARRIER ON**  
**SECONDARY ROAD OR DRIVEWAY**

**TABLE FOR RADIUS OF 32' AND LESS**

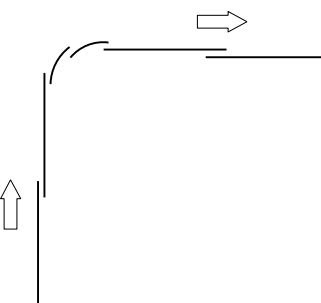
RADIUS (FT)	LENGTH (FT)	WIDTH (FT)
8	25	15
16	30	15
24	40	20
32	50	30



**AREA FREE OF FIXED**  
**OBJECTS FOR RADIUS**  
**32' AND LESS**



**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 1/4" TO 1/2" BEYOND THE NUT.
- DRAWINGS ARE NOT TO SCALE.

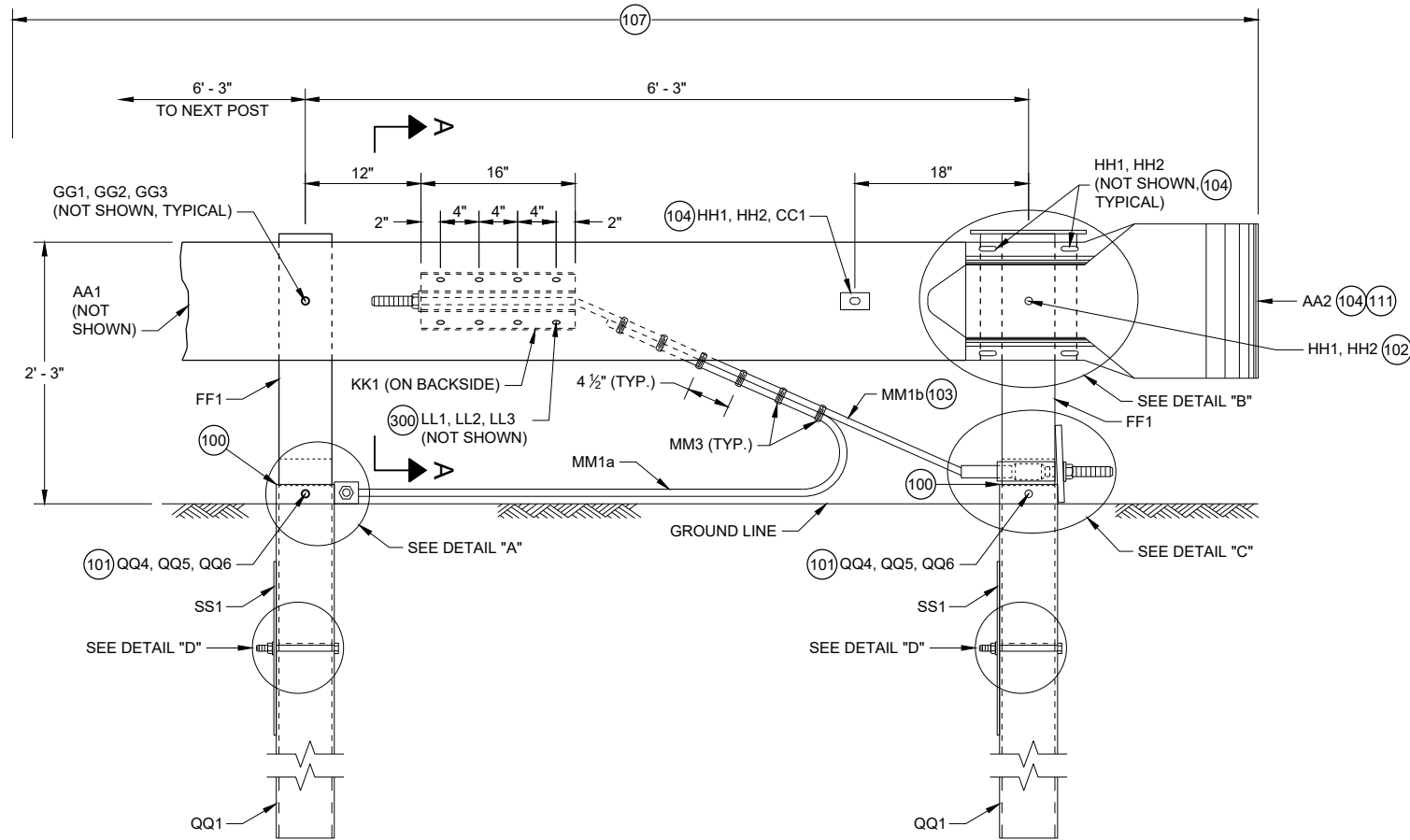
- ① RADIUS MEASURE FROM INSIDE OF RAIL. LENGTH OF BEAM GUARD SHORT RADIUS GUARD MEASURED ALONG TRAFFIC SIDE OF RAIL. RADIUS BETWEEN 8 FEET TO 150 FEET. SEE PLAN FOR REQUIRED RADIUS. BEAM GUARD RAIL IN RADIUS IS SHOP BENT. ODD RAIL LENGTH OR FIELD CUTS MAY BE REQUIRED.
- ② CONTROLLED RELEASE TERMINAL (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 3/4" ABOVE FINISHED GROUND ±1".
- ⑮ DRILL POST 1 5/8" 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).

6

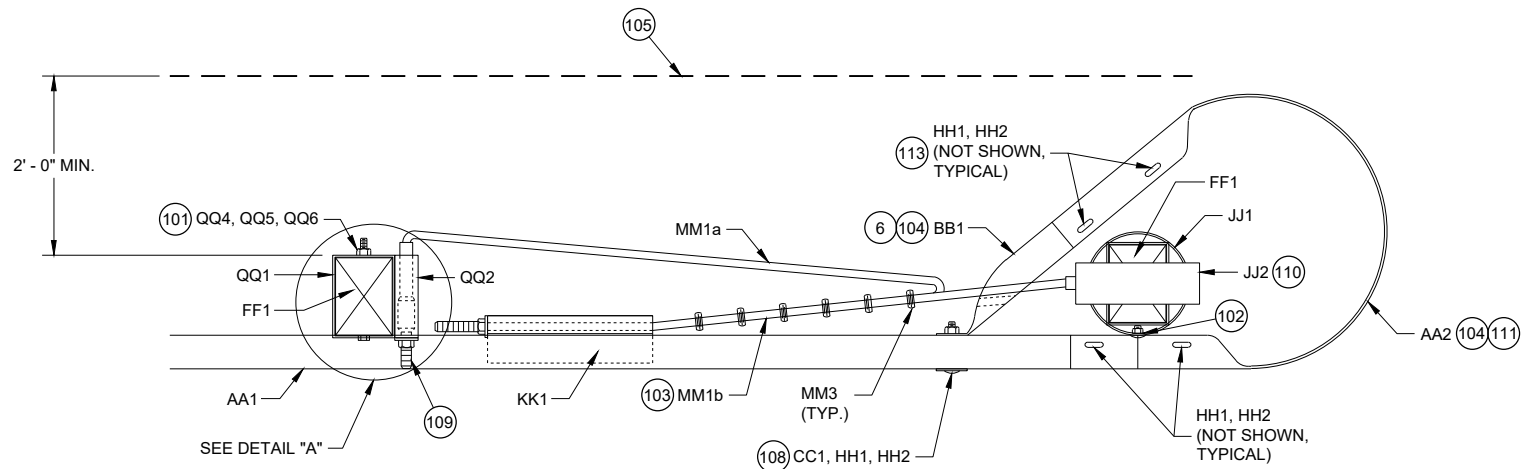
6

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

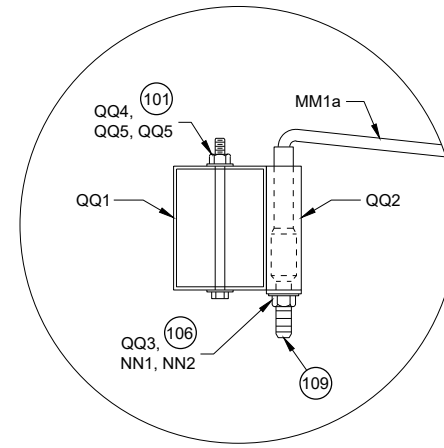
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



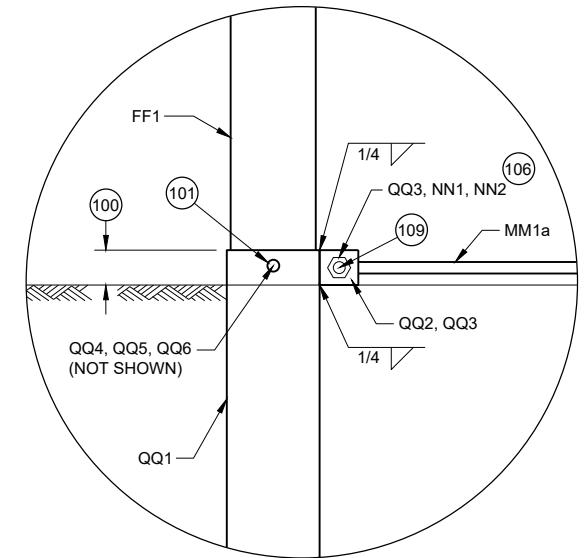
**PROFILE VIEW  
SHORT RADIUS TERMINAL**



**TOP VIEW  
SHORT RADIUS TERMINAL**



**TOP VIEW  
DETAIL "A"  
(WOOD BREAKAWAY AND BEAM  
GUARD RAIL POSTS NOT SHOWN)**



**PROFILE VIEW  
DETAIL "A"**

**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 1/2" 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.

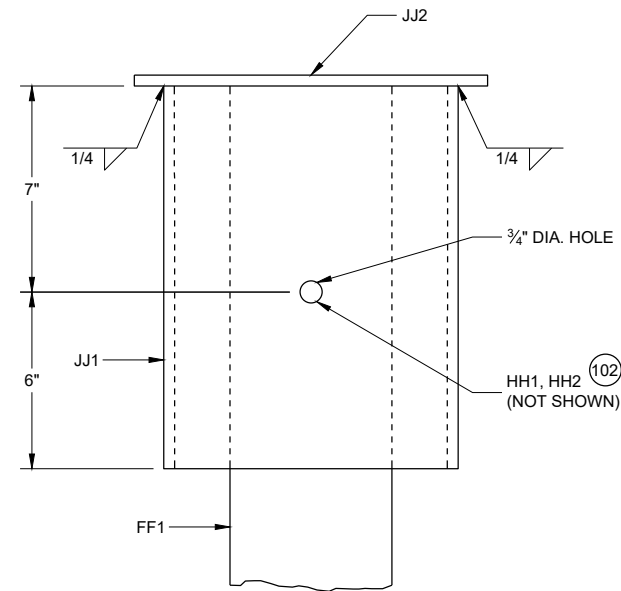
**SHORT RADIUS BEAM  
GUARD (MGS) SHORT  
RADIUS TERMINAL (MGS)**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

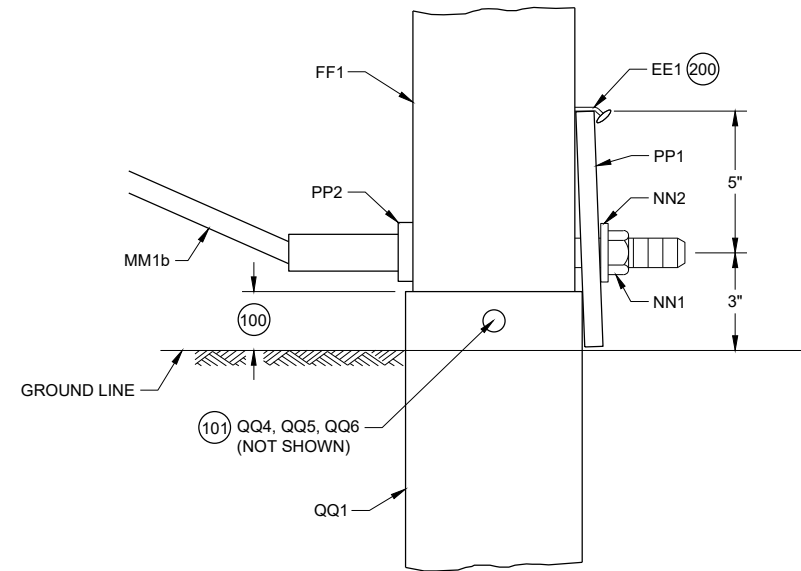


**GENERAL NOTES**

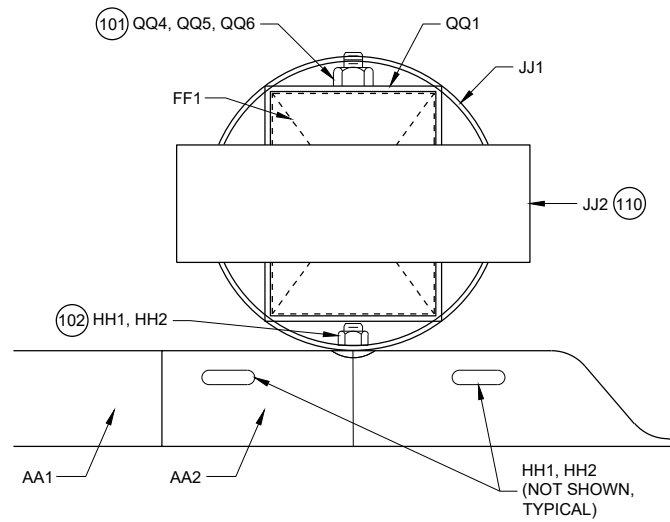
(200) TWO (2) NAILS SPACED 4 INCHES CENTER TO CENTER.



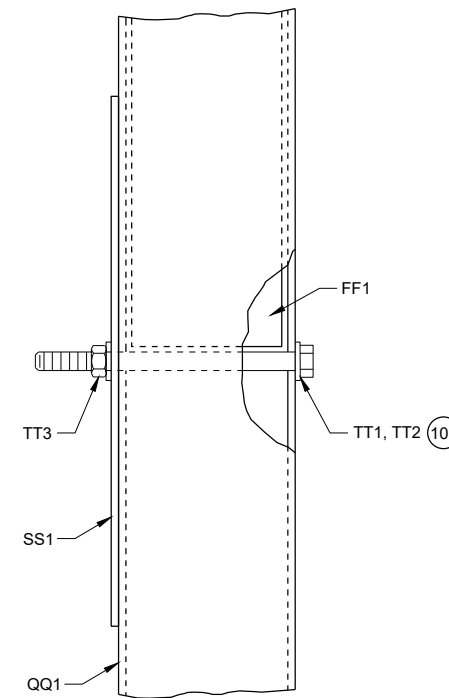
**PROFILE VIEW  
DETAIL "B"  
STEEL PIPE ASSEMBLY  
(BEAM GUARD AND W BEAM  
END SECTION NOT SHOWN)**



**PROFILE VIEW  
DETAIL "C"**



**PLAN VIEW  
DETAIL "B"  
STEEL PIPE ASSEMBLY**



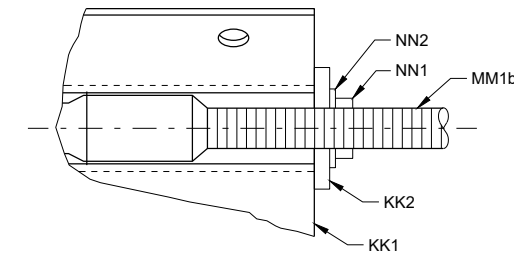
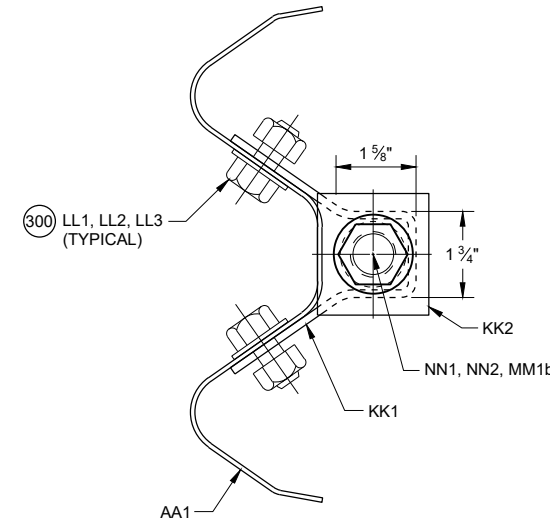
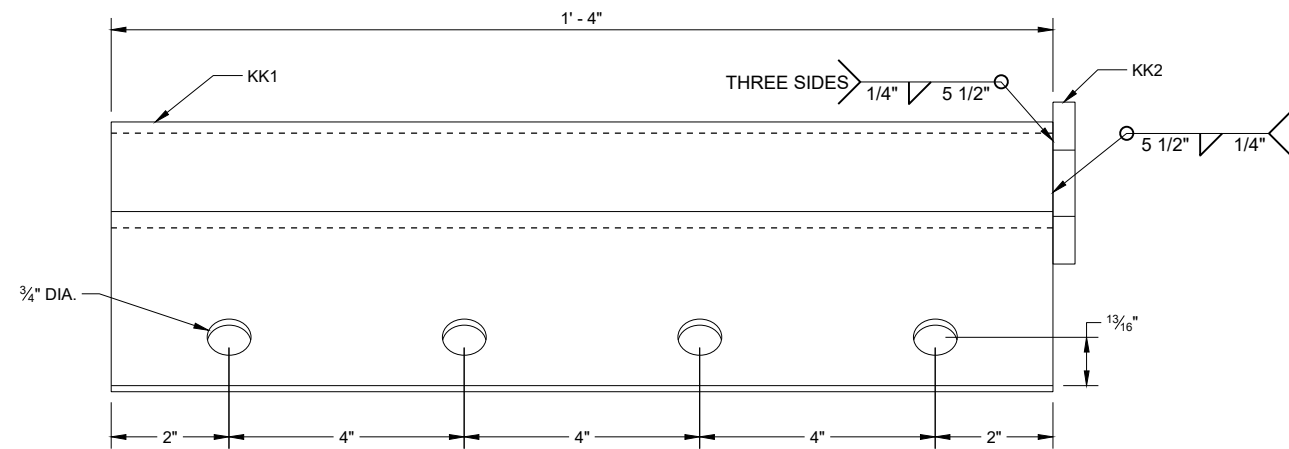
**PROFILE VIEW  
DETAIL "D"**

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

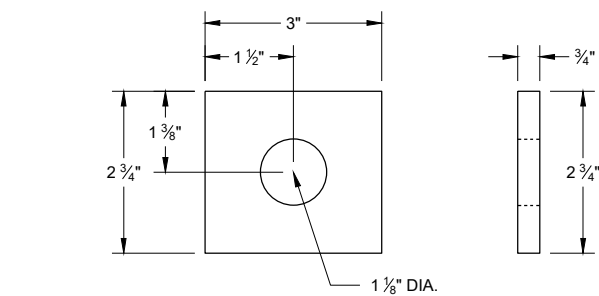
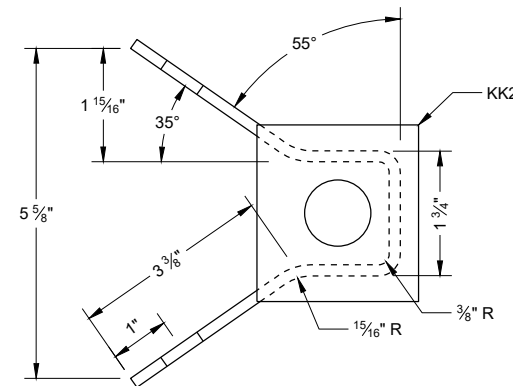
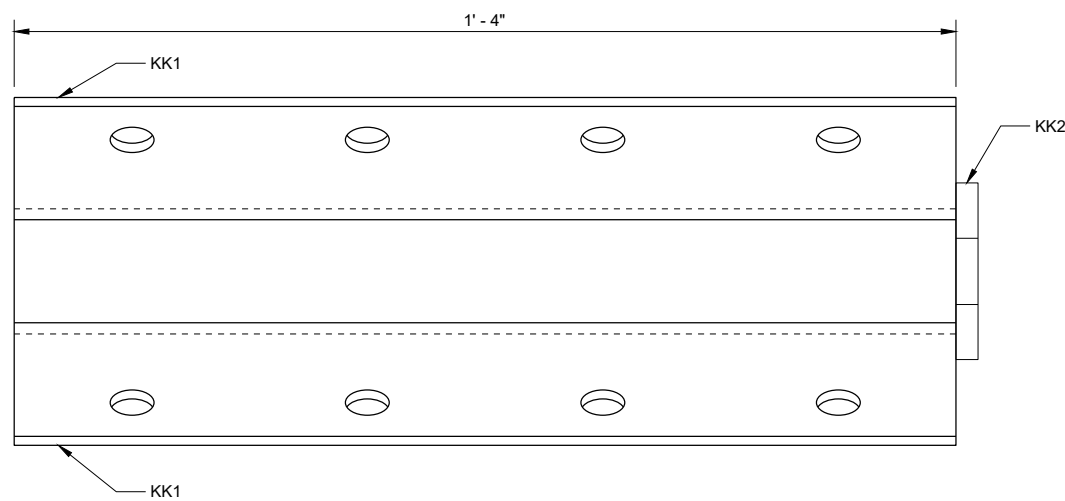
**GENERAL NOTES**

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**

6



**ANCHOR BRACKET BEARING PLATE (KK2)**

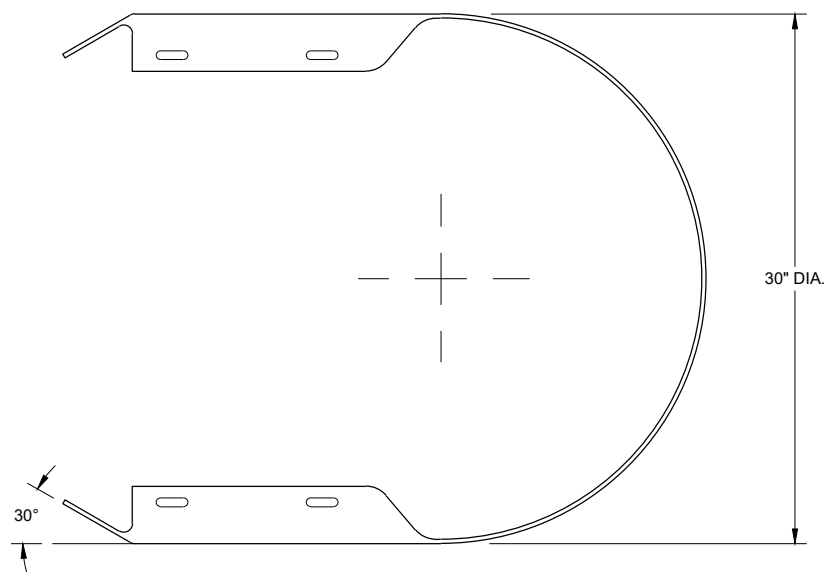
**ANCHOR BRACKET (KK1, KK2)**

SDD 14B53 - 02d

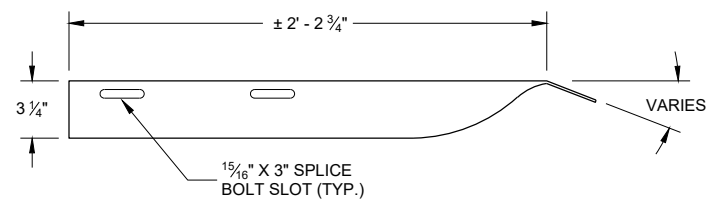
SDD 14B53 - 02d

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



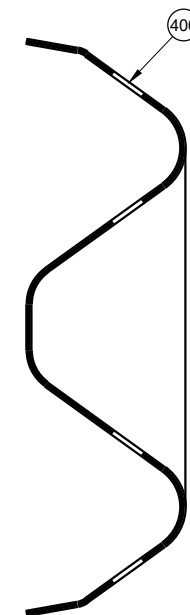
**TOP VIEW**



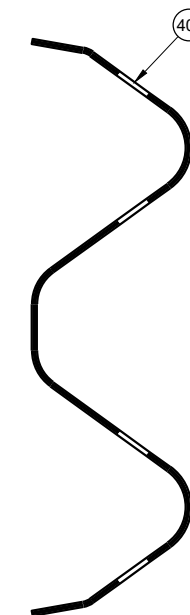
**TOP VIEW**

**GENERAL NOTES**

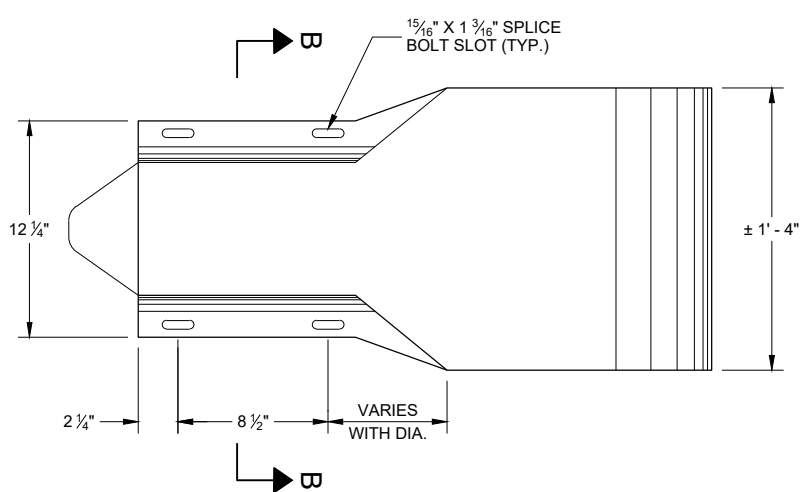
- (400) CROSS SECTION OF PART IS TO FIT OVER AA1 .
- (401) CROSS SECTION OF PART IS TO FIT OVER OR UNDER AA1 .



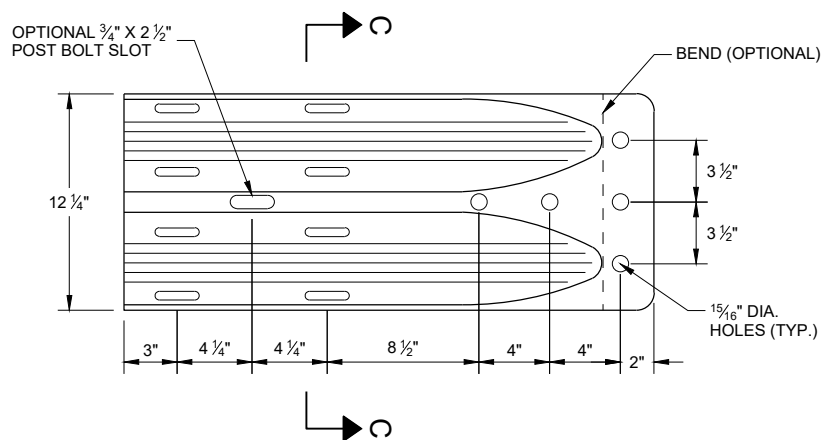
**SECTION B - B**



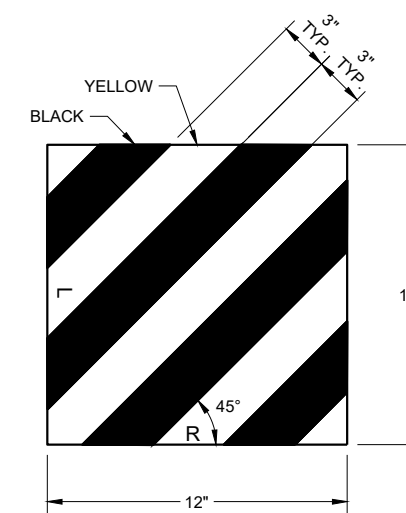
**SECTION C - C**



**PROFILE VIEW  
W BEAM  
END SECTION BUFFER (AA2)**



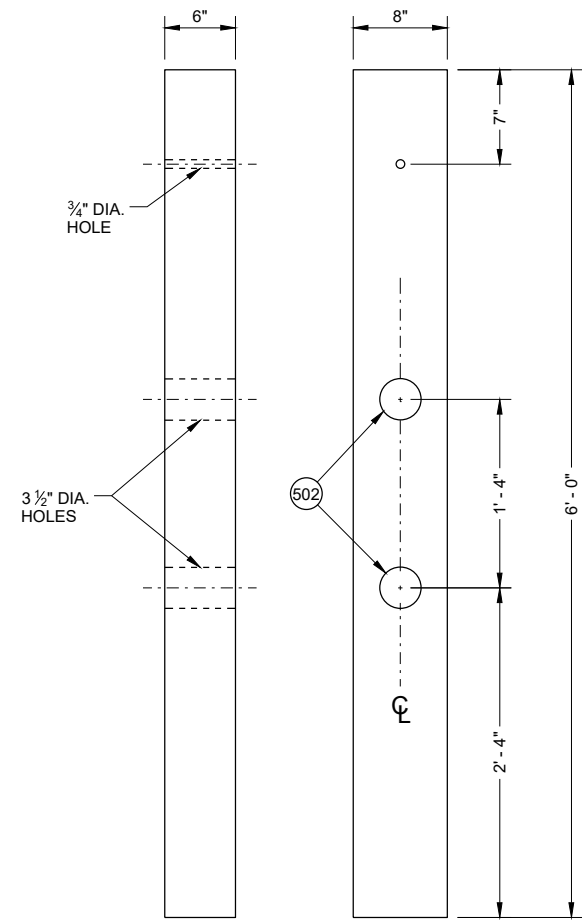
**PROFILE VIEW  
W BEAM  
TERMINAL CONNECTOR (BB1)**



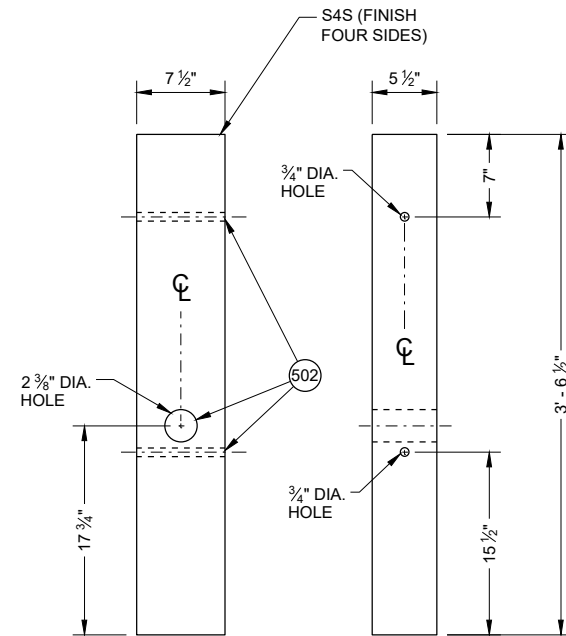
**REFLECTIVE SHEETING (UU1, UU2)**

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

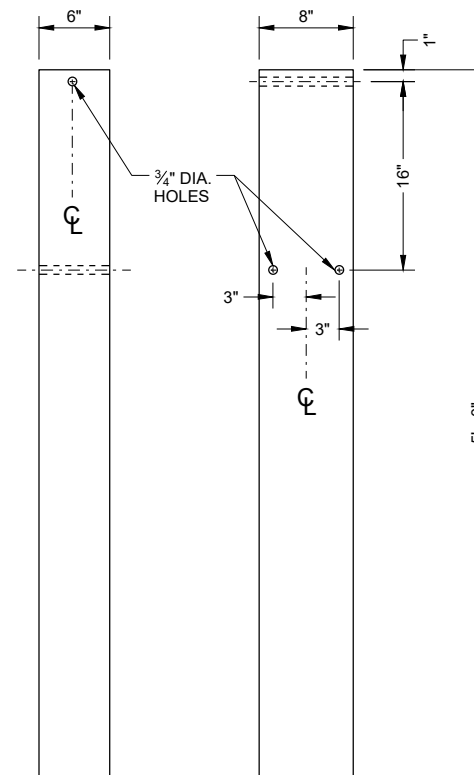
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



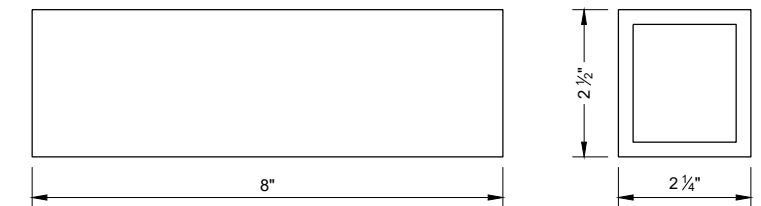
**FRONT VIEW SIDE VIEW  
CONTROLLED RELEASE  
POST (CRT) (DD2)**



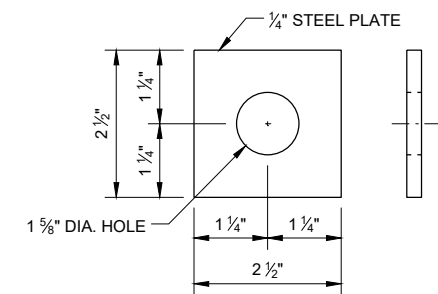
**FRONT VIEW SIDE VIEW  
WOOD BREAKAWAY POST (FF1)**



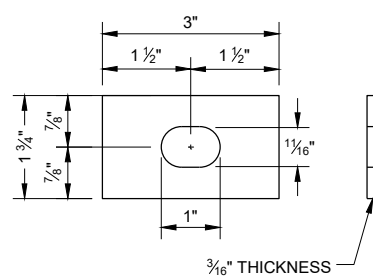
**FRONT VIEW SIDE VIEW  
FOUNDATION TUBE (QQ1)**



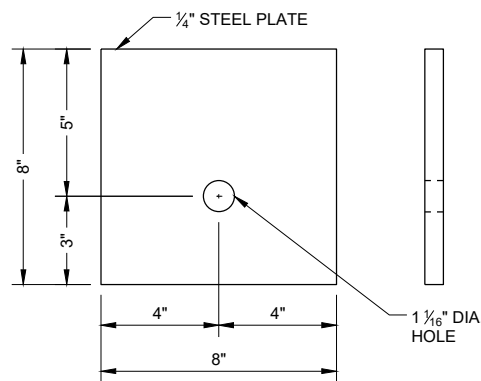
**FOUNDATION TUBE -  
ANCHOR CABLE TUBE (QQ2)**



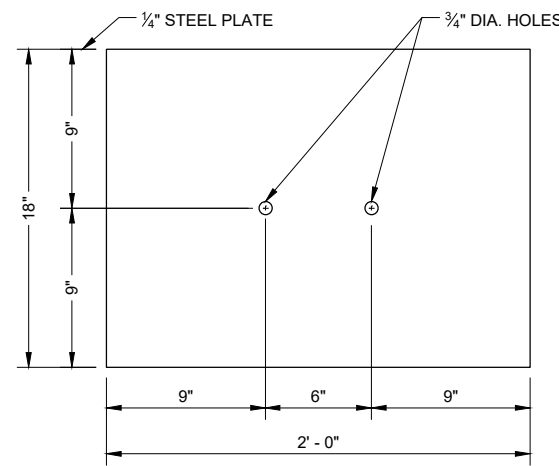
**ANCHOR CABLE TUBE  
END PLATE (QQ3)**



**RECTANGULAR PLATE  
WASHER (CC1)**

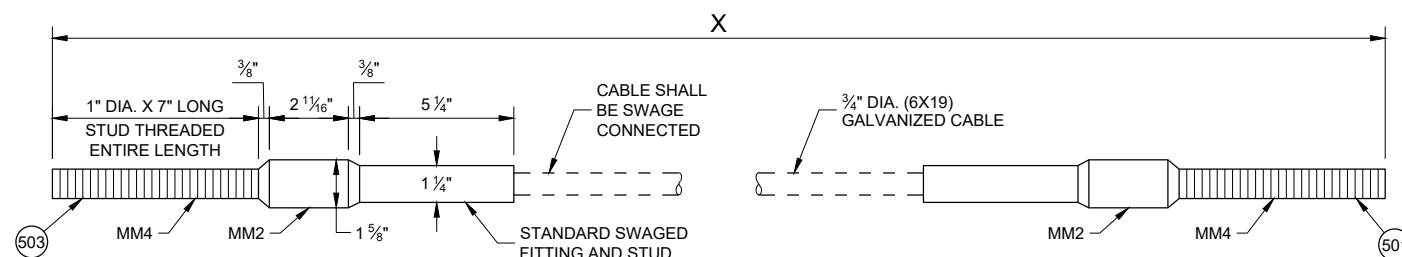


**BEARING PLATE (PP1)**



**SOIL PLATE (SS1)**

- 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).



**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

**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	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	
GG2	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	

6

6

SDD 14B53 - 02g

SDD 14B53 - 02g

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**BILL OF MATERIALS - SHORT RADIUS BEAM GUARD (MGS)**

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
GG3	POST BOLT - NUT	ASTM A563 GRADE A	$\frac{3}{8}$ " 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	$\frac{3}{8}$ " 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	$\frac{3}{8}$ " 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	
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 $\frac{3}{8}$ " 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	$\frac{3}{8}$ " 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	

PART	DESCRIPTION	MATERIALS SPECIFICATIONS	NOTES
LL2	ANCHOR BRACKET - WASHER	ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	$\frac{3}{8}$ " 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	$\frac{3}{8}$ " 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	
		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	$\frac{3}{4}$ "
		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	
NN2	ANCHOR CABLE - NUT - WASHER	UNC	1" DIA.
		ASTM F436 TYPE 1 (HARDEN WASHER ONLY)	
		GALV. AASHTO M111 / ASTM A123 OR GALV. HOT DIP TO AASHTO M232 CLASS C / ASTM A153 CLASS C / ASTM F2329	

6

6

SDD 14B53 - 02h

SDD 14B53 - 02h

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**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 3/8"
		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	

6

6

SDD 14B53 - 02i

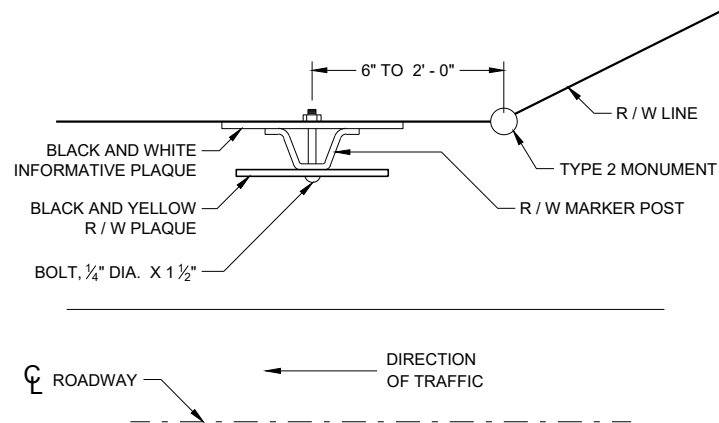
SDD 14B53 - 02i

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

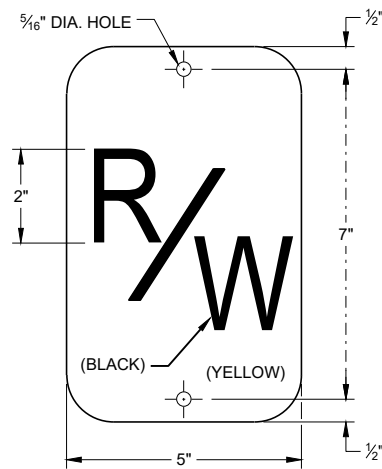
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2022 /S/ Rodney Taylor  
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER

FHWA

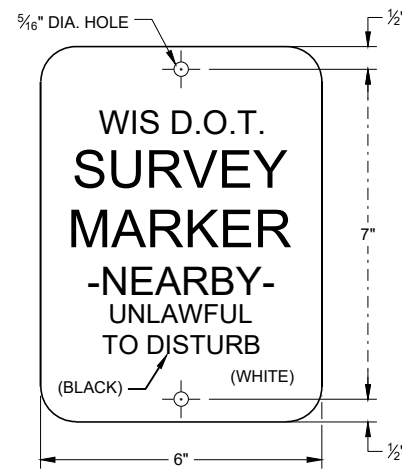


**PLAN VIEW  
STEEL MARKER POST**



**R / W PLAQUE**

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



**INFORMATIVE PLAQUE**

**GENERAL NOTES**

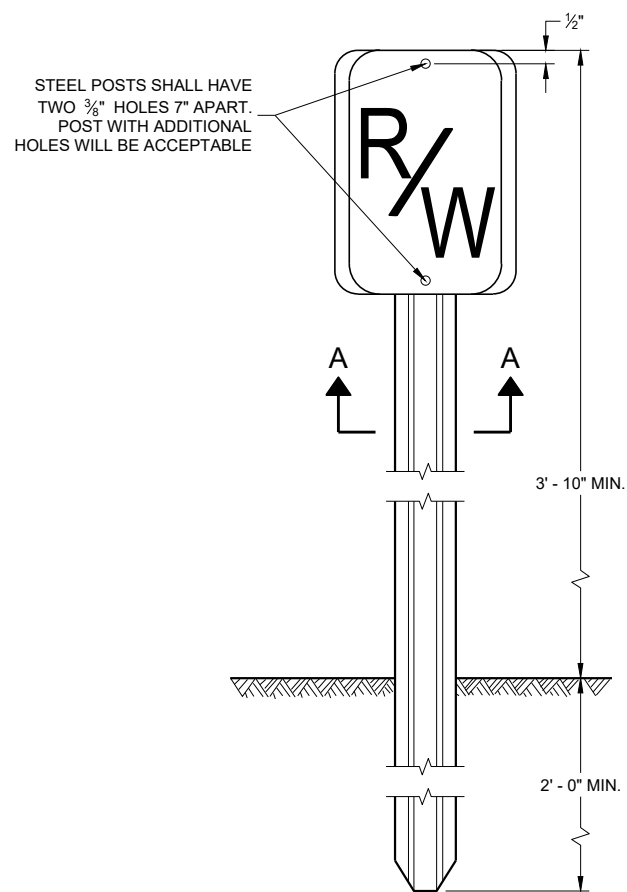
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

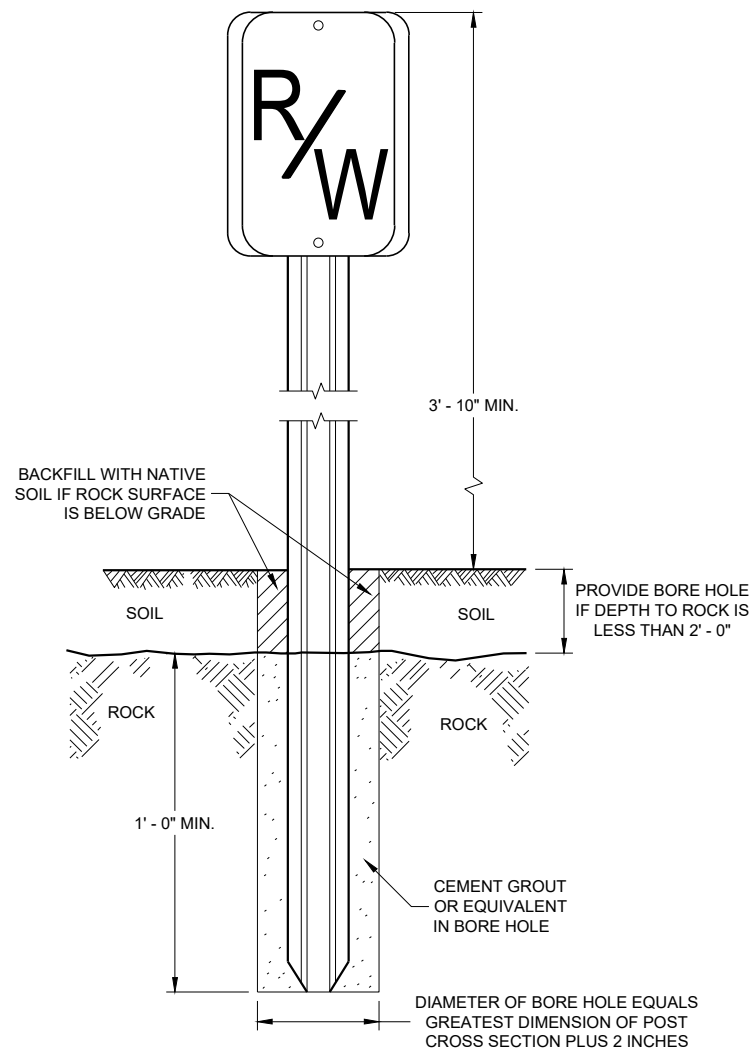
THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFORMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

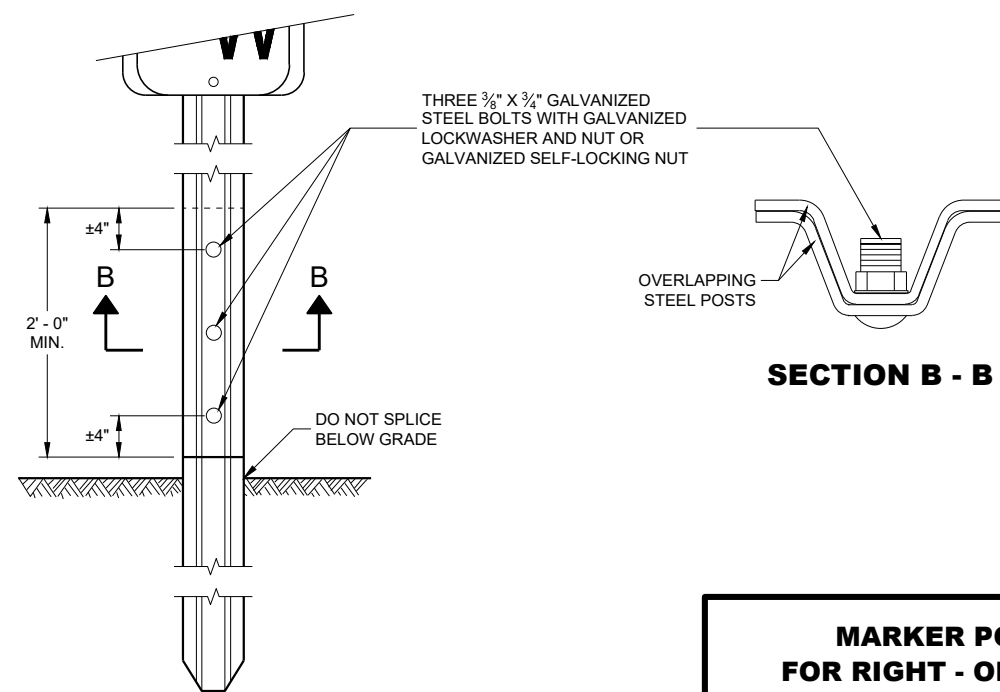
- ① IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



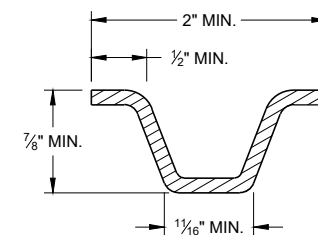
**FRONT VIEW  
STEEL MARKER POST**



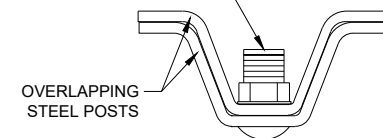
**FRONT VIEW  
ROCK INSTALLATION** ①



**FRONT VIEW  
SPLICE DETAIL**



MIN. WEIGHT 1.12 LB./FT.  
**SECTION A - A**



**SECTION B - B**

**MARKER POST  
FOR RIGHT - OF - WAY**

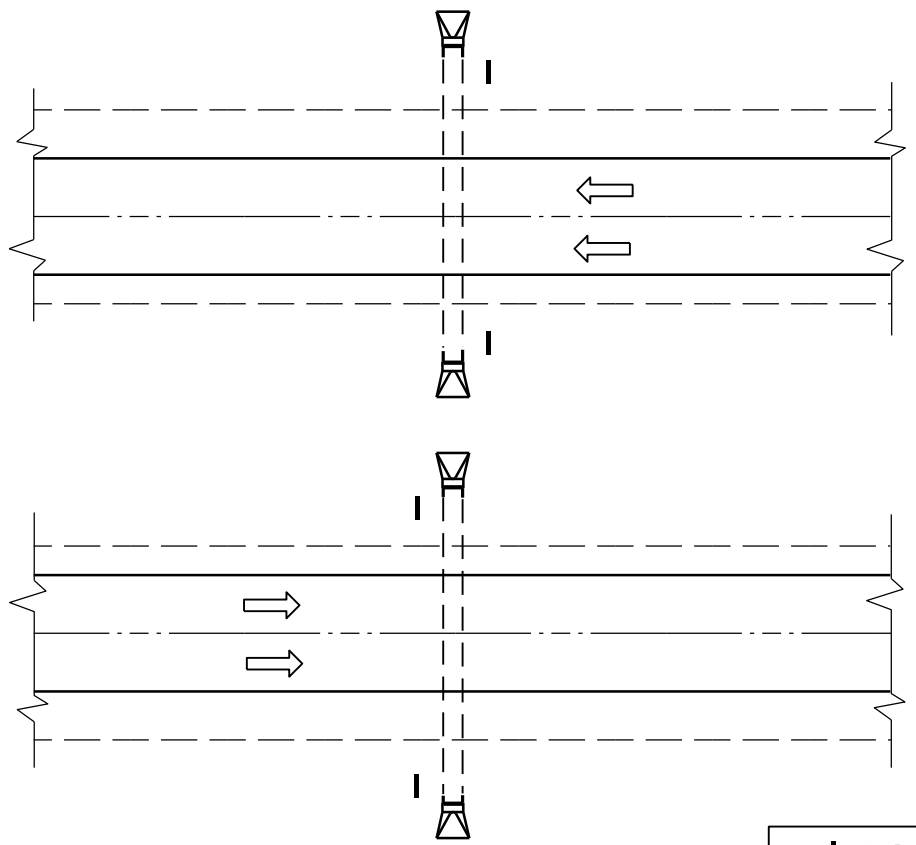
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
2/18/2016 DATE /S/ Ray Kumapayi  
DATE CHIEF SURVEYING AND MAPPING ENGINEER

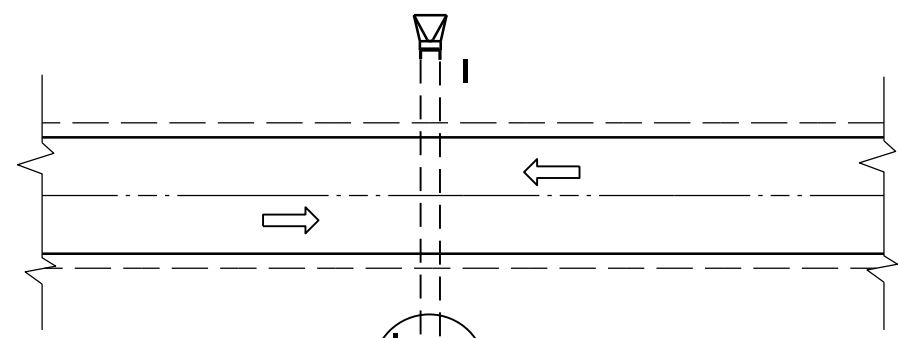
FHWA



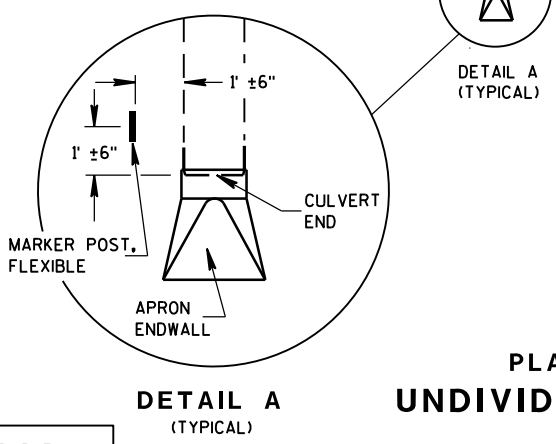




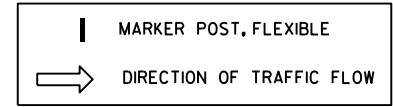
PLAN VIEW  
DIVIDED HIGHWAY



PLAN VIEW  
UNDIVIDED HIGHWAY

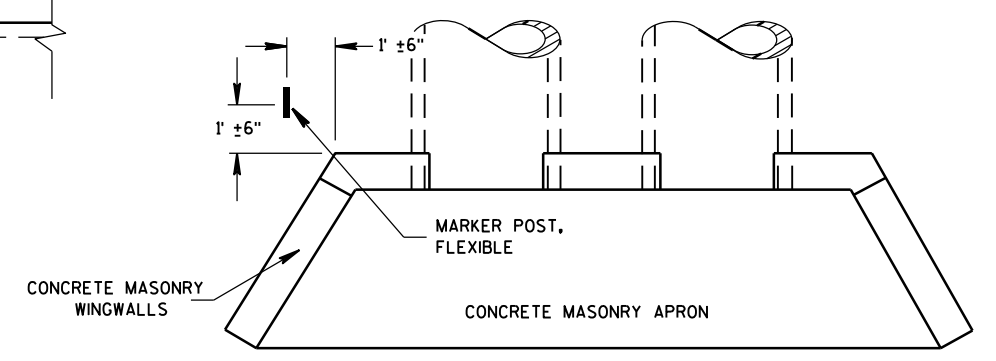


DETAIL A  
(TYPICAL)



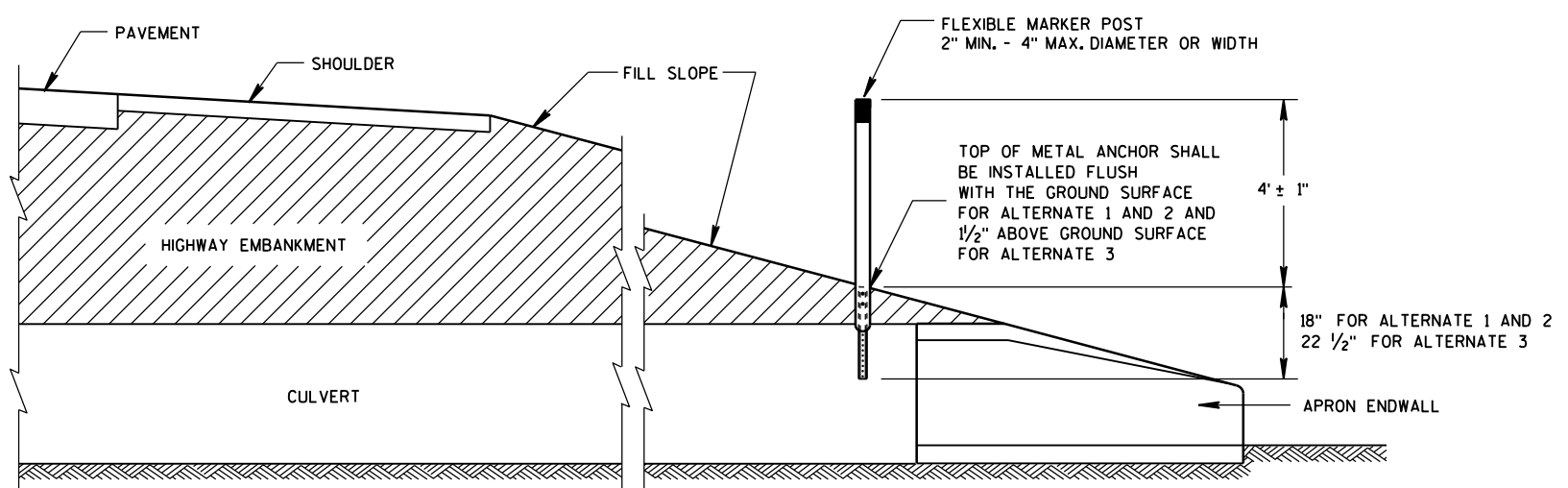
**GENERAL NOTES**

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**

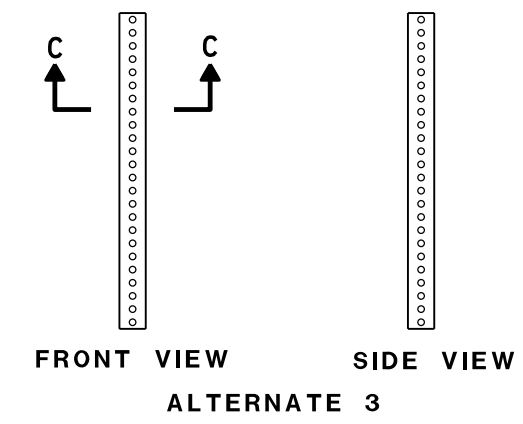
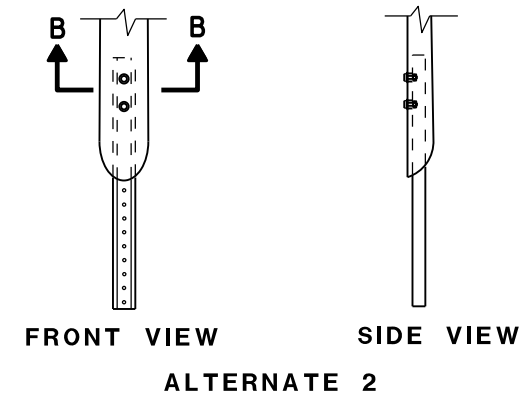
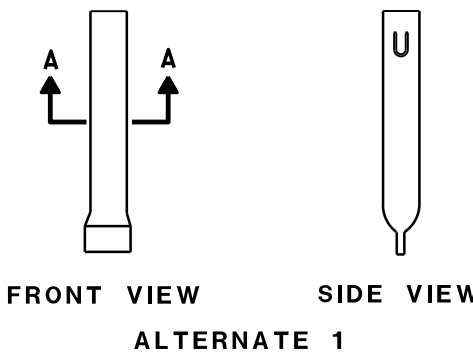
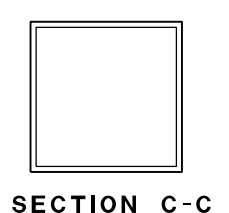
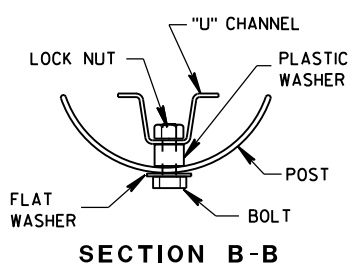
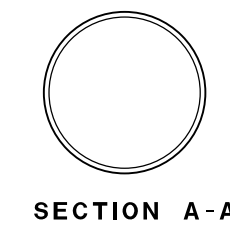
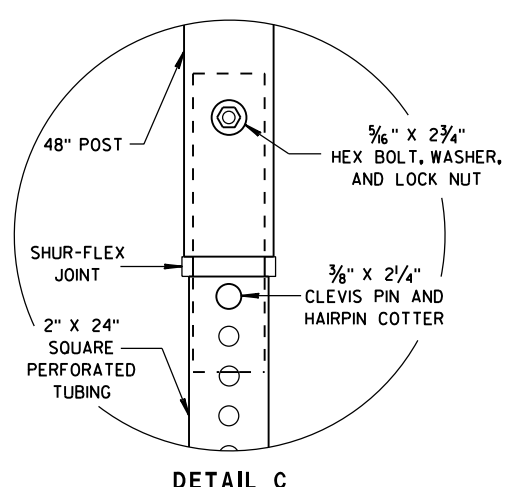
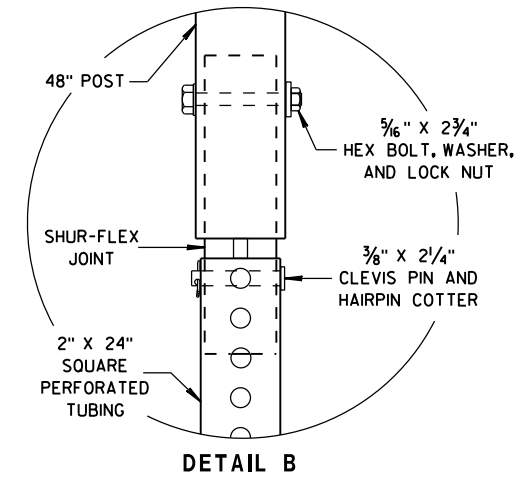
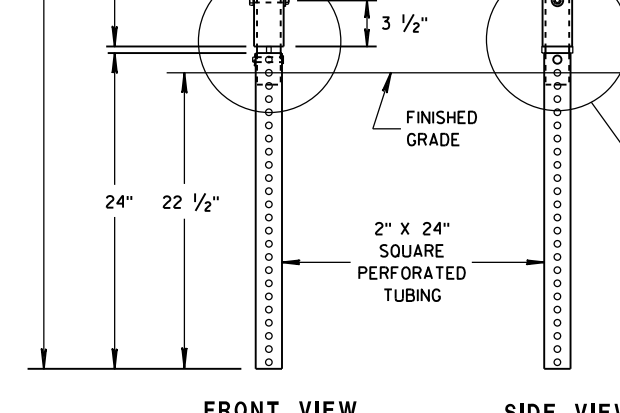
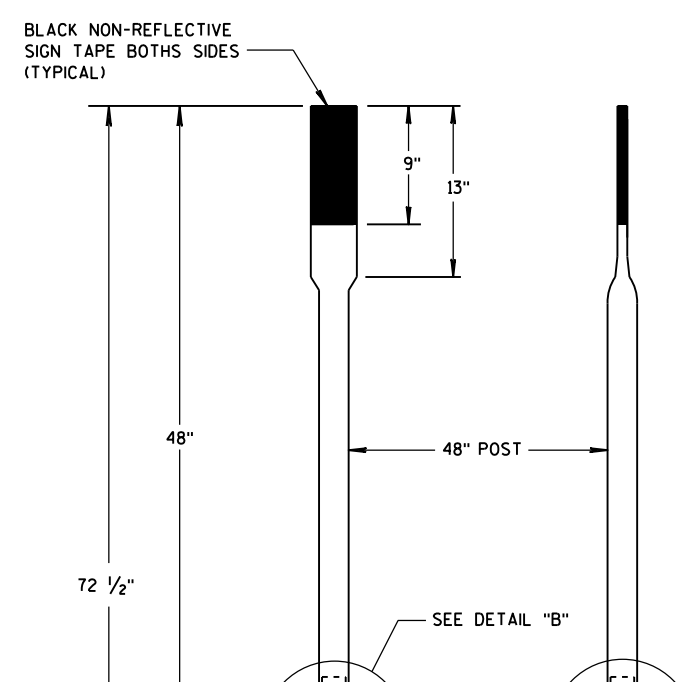
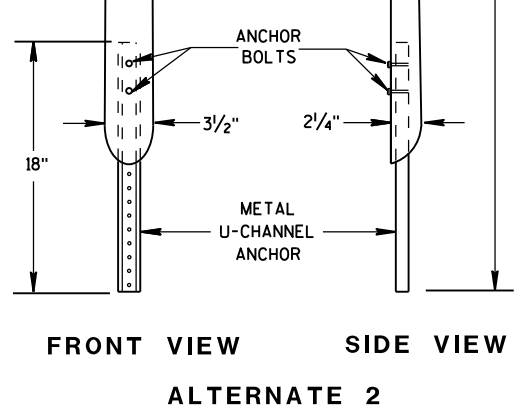
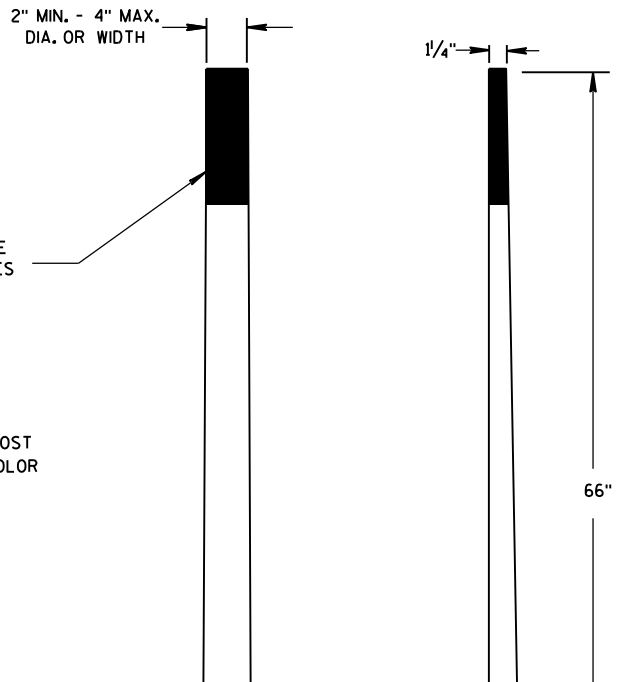
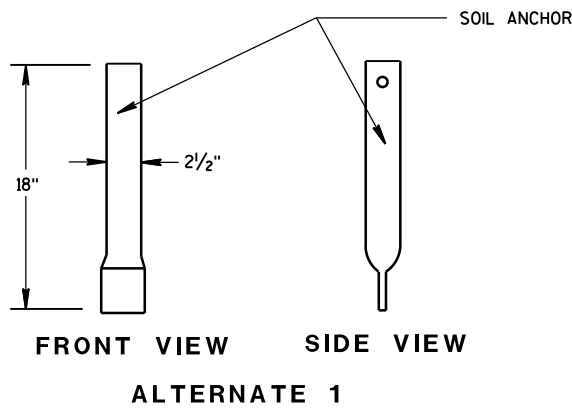
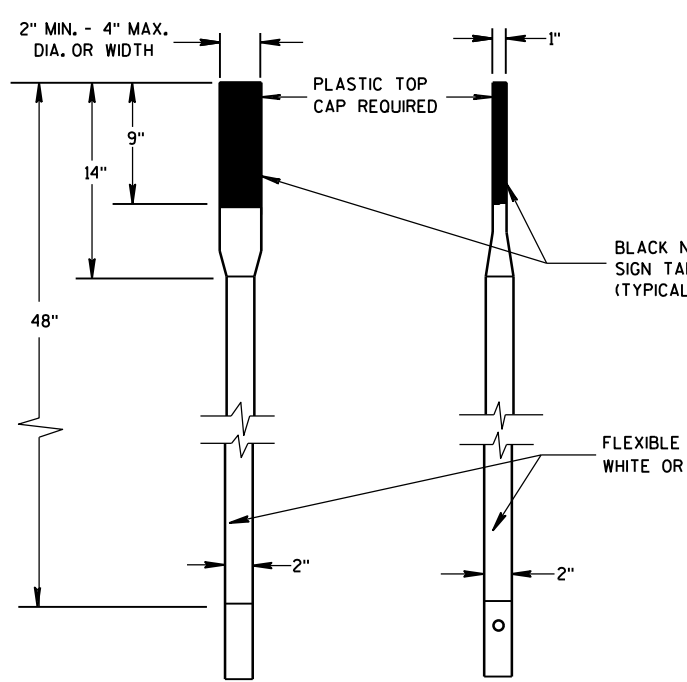
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

6

6

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

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

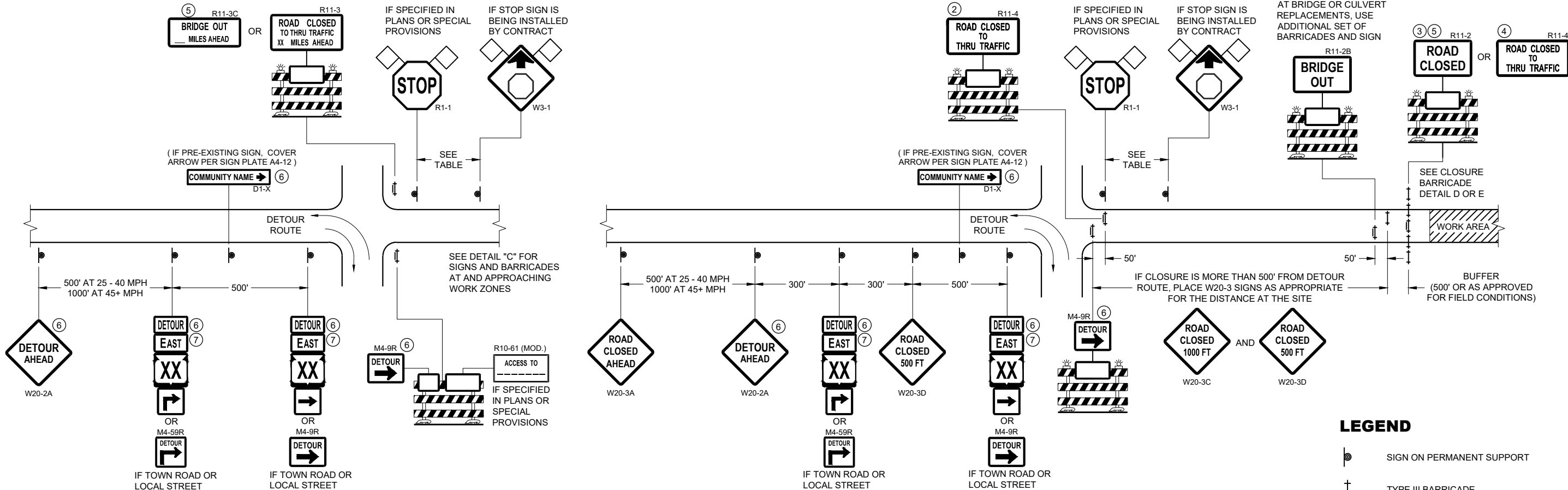


**FLEXIBLE MARKER POST ANCHORS**

**FLEXIBLE MARKER POST FOR CULVERT END**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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



**DETAIL A  
MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN OR EQUAL TO 1/2 MILE FROM  
DETOUR ROUTE ( 1000 FEET IF URBAN )

**DETAIL B  
MAINLINE CLOSURE WITH POSTED DETOUR**

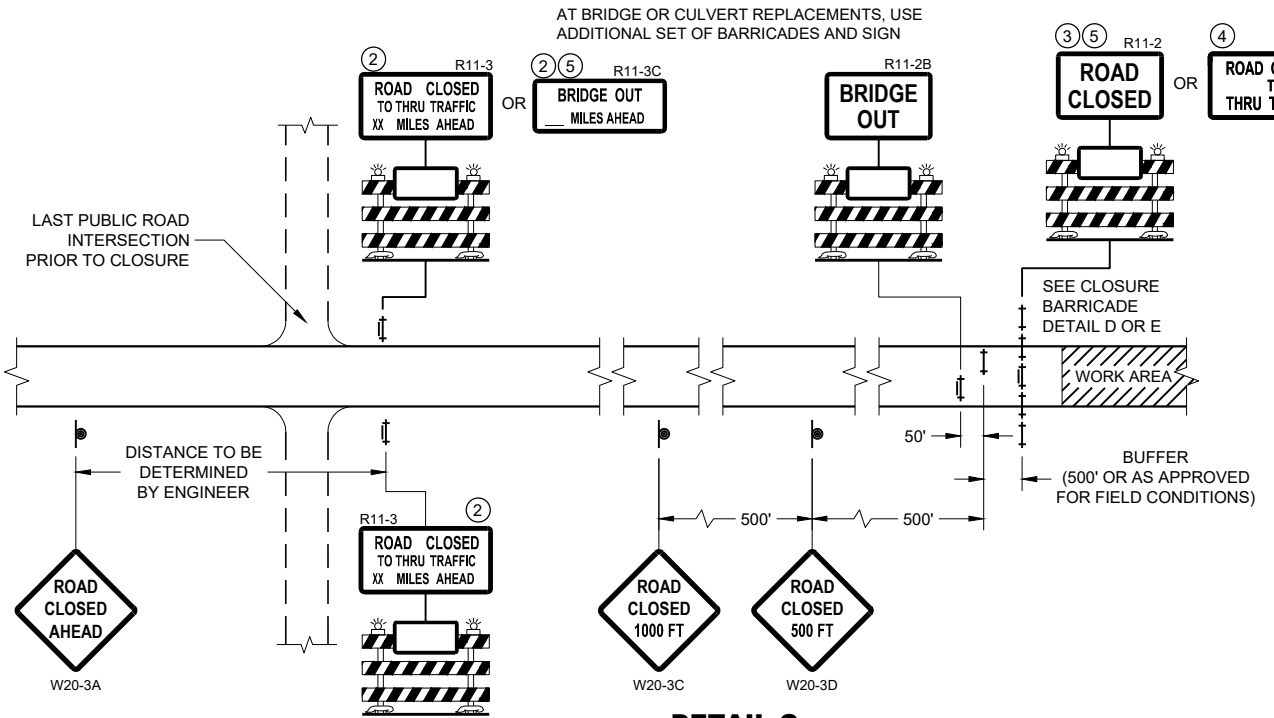
WORK ZONE LESS THAN 1/2 MILE FROM  
DETOUR ROUTE ( 1000 FEET IF URBAN )

**LEGEND**

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1



**DETAIL C  
MAINLINE CLOSURE, NO POSTED DETOUR**

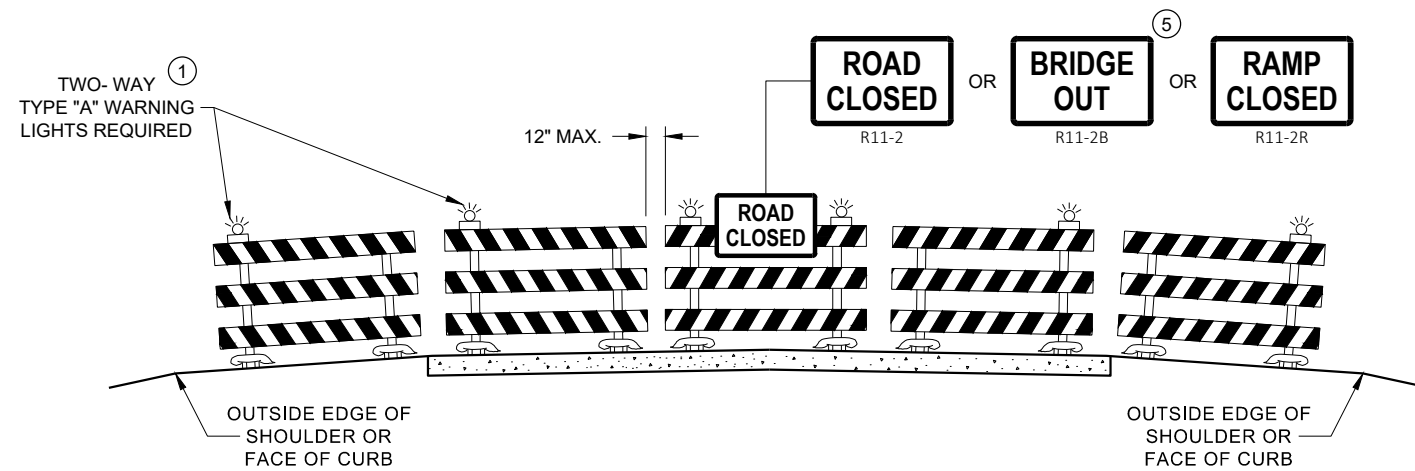
SEE SDD 15C2-SHEET "b"  
FOR GENERAL NOTES  
AND FOOTNOTES ① THROUGH ⑦

**BARRICADES AND SIGNS  
FOR MAINLINE CLOSURES**

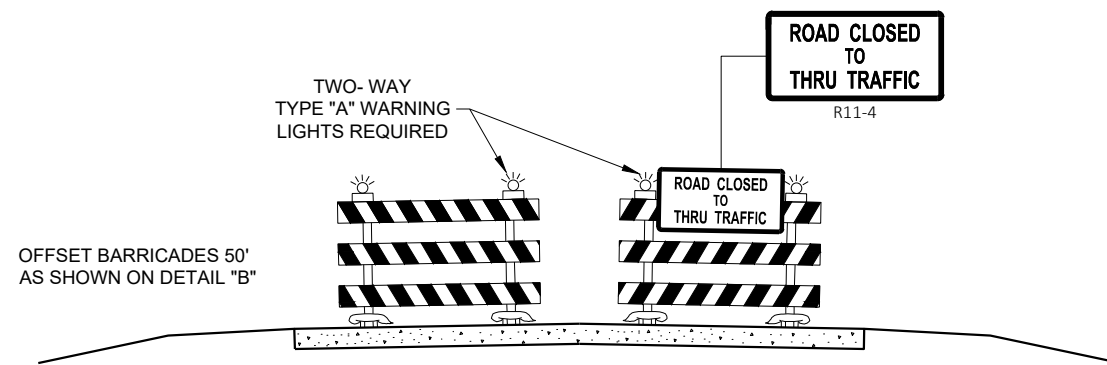
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2023 /S/ Andrew Heidtke  
DATE DATE WORK ZONE ENGINEER

FHWA



**DETAIL D  
ROAD CLOSURE BARRICADE DETAIL  
APPROACH VIEW**



**DETAIL E  
LANE CLOSURE BARRICADE DETAIL  
APPROACH VIEW**

SEE SDD 15C2 - SHEET "a" FOR LEGEND

**GENERAL NOTES**

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

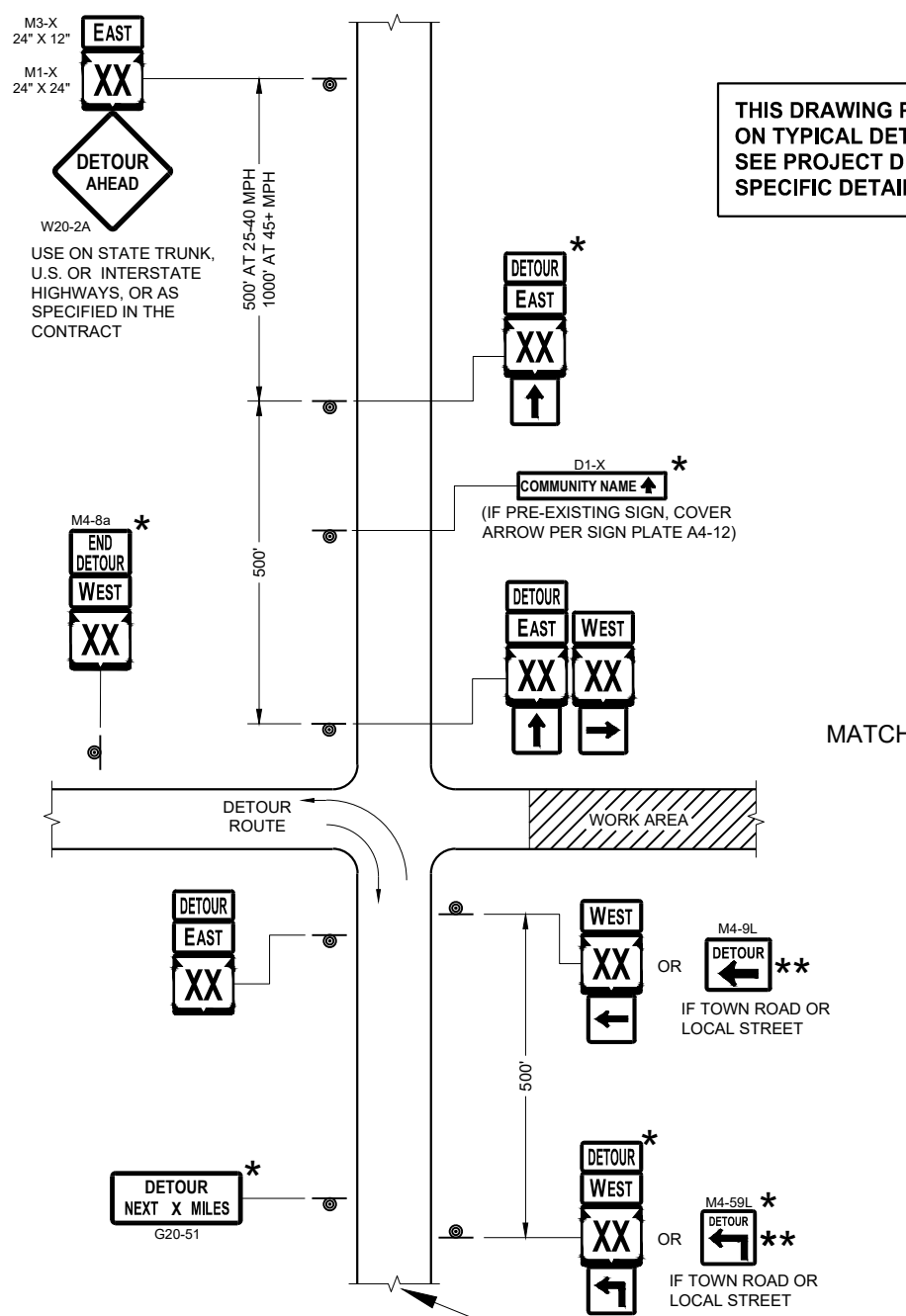
- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60" X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

**BARRICADES AND SIGNS  
FOR  
VARIOUS CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2023 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER



**THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.**

**LEGEND**

- SIGN ON PERMANENT SUPPORT
- WORK AREA
- M4 - 8
- M3 - X
- M1 - 4
- M1 - 6
- M1 - 5A
- M05 - 1
- M06 - 1
- M06 - 1

**GENERAL NOTES**

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. MODIFY EXISTING SIGNS WHERE POSSIBLE.

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

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

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

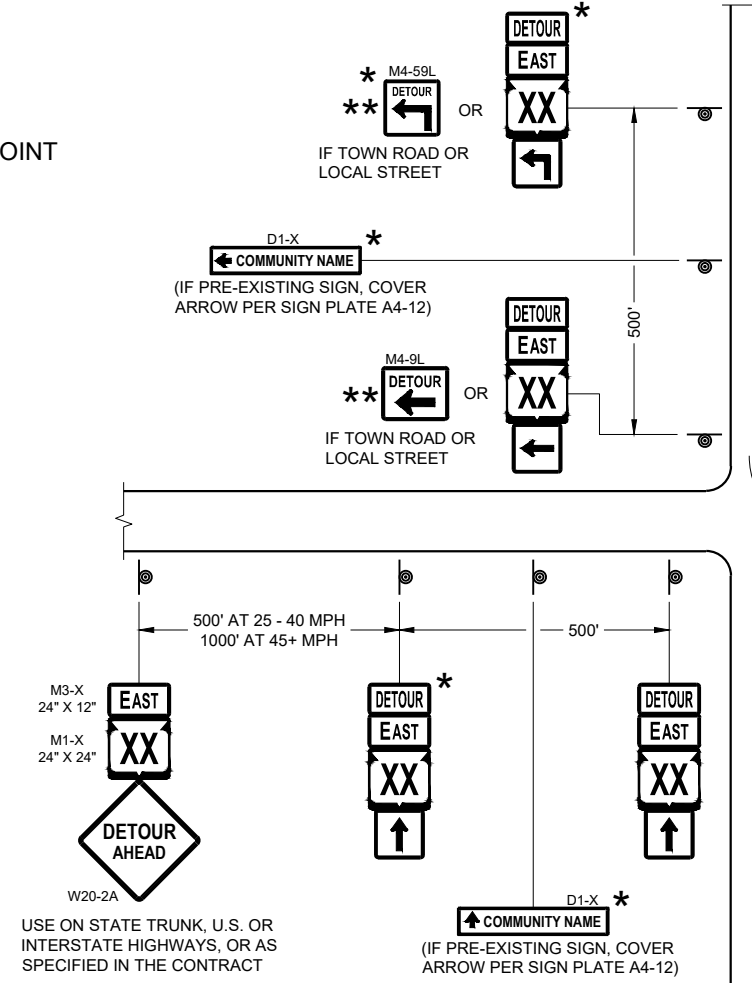
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

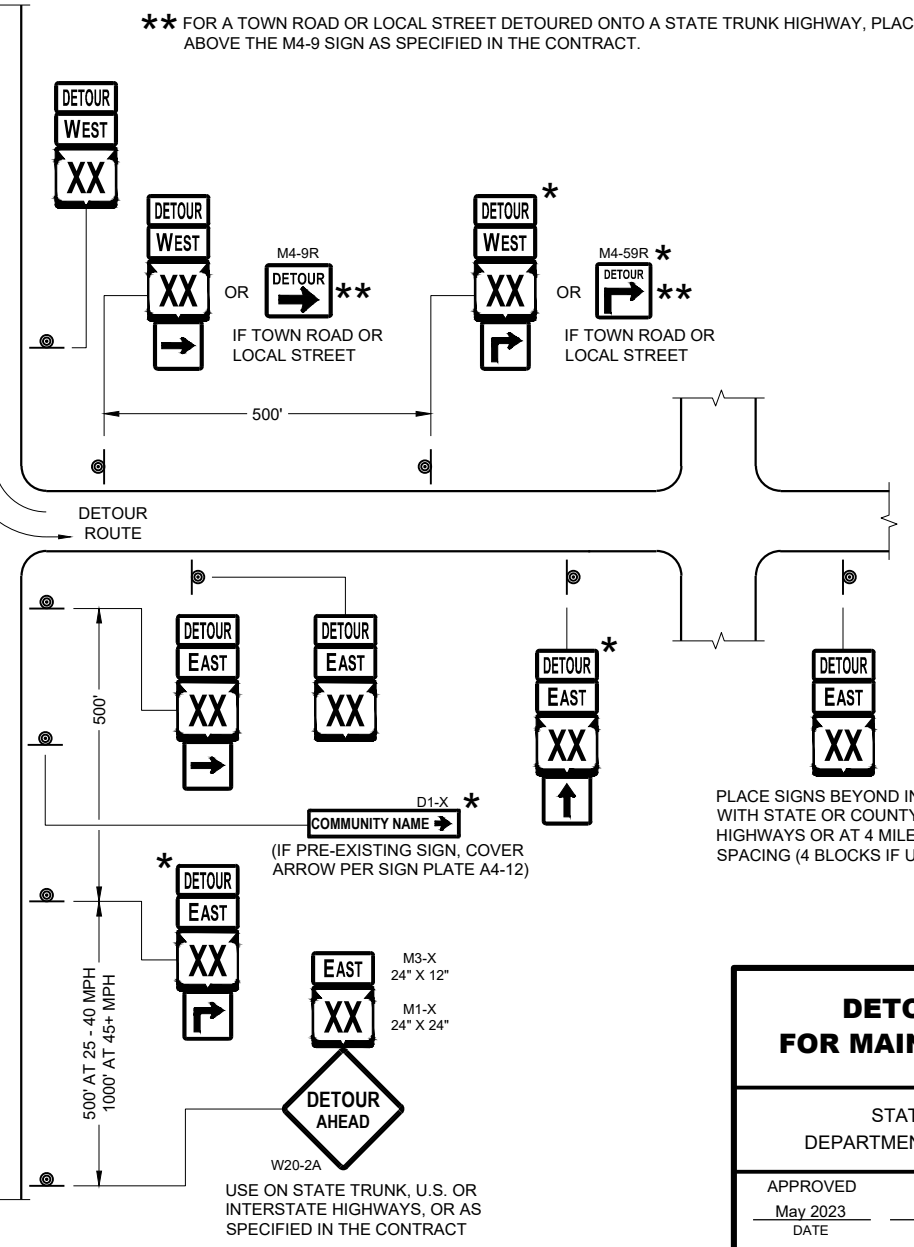
- M3-X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1-4, M1-5A AND M1-6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-9R SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

- \* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- \*\* FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

MATCH POINT



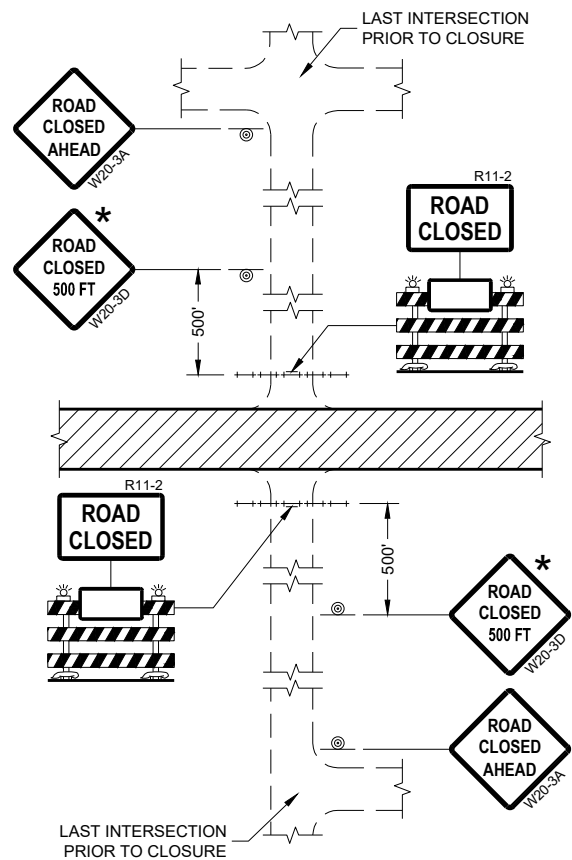
**DETAIL F  
DETOUR SIGNING**



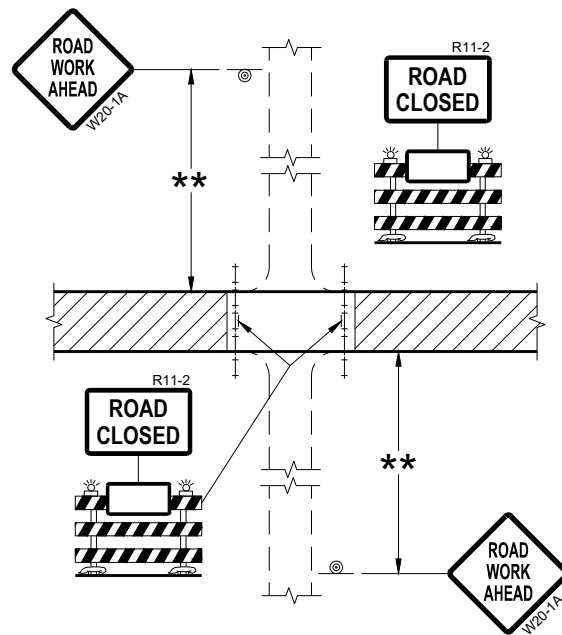
PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA)

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

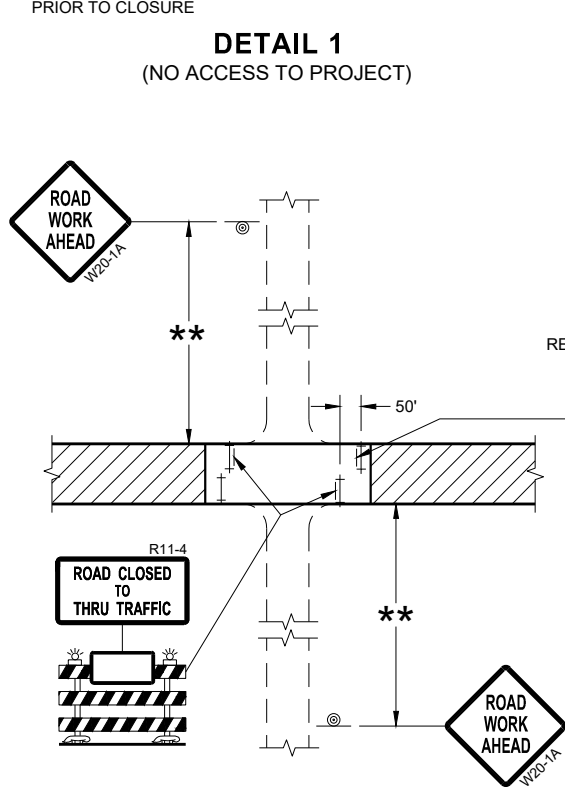
<b>DETOUR SIGNING FOR MAINLINE CLOSURES</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
<small>FHWA</small>	



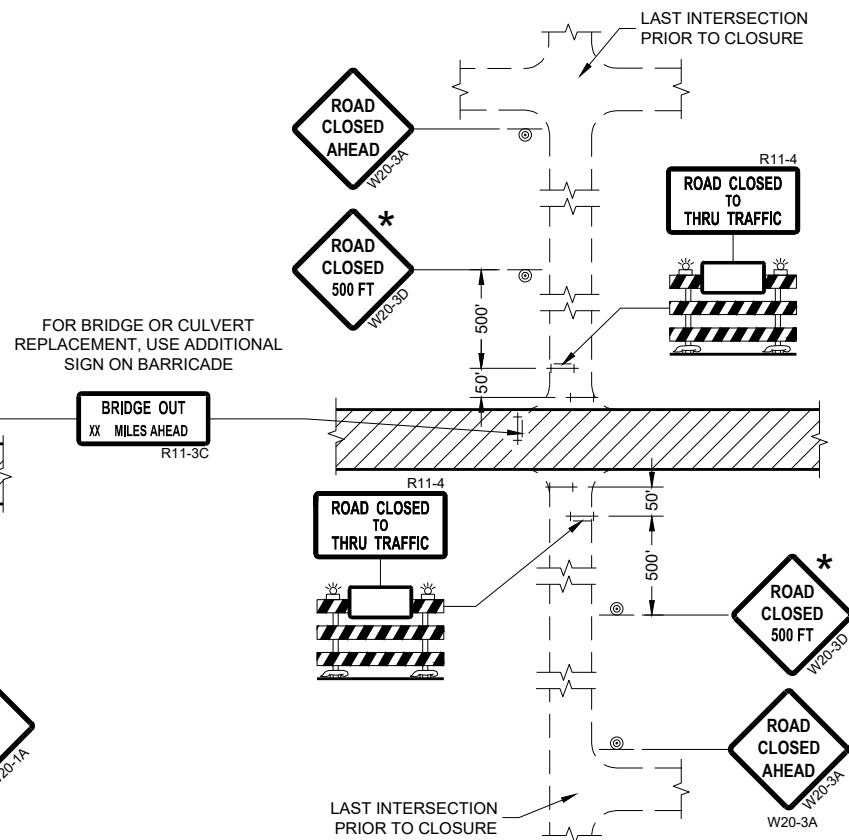
**DETAIL 1**  
(NO ACCESS TO PROJECT)



**DETAIL 2**  
(PUBLIC CROSS-TRAFFIC MAINTAINED.  
NO ACCESS TO PROJECT)



**DETAIL 3**  
(PUBLIC CROSS-TRAFFIC MAINTAINED.  
CONTRACTOR, LOCAL BUSINESS AND  
RESIDENT ACCESS TO PROJECT)



**DETAIL 4**  
(CONTRACTOR, LOCAL BUSINESS AND  
RESIDENT ACCESS TO PROJECT)

**GENERAL NOTES**

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

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

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

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, AND R11-4 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:  
R11-2 SHALL BE 48" X 30".  
R11-4 AND R11-3 SHALL BE 60" X 30".

- \* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.
- \*\* 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

**LEGEND**

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊥ TYPE III BARRICADE
- ⊥ TYPE III BARRICADE WITH ATTACHED SIGN
- ⚡ TYPE "A" WARNING LIGHT (FLASHING)
- ▨ WORK AREA

**BARRICADES AND SIGNS  
FOR  
SIDEROAD CLOSURES**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
July 2018 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER

**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.

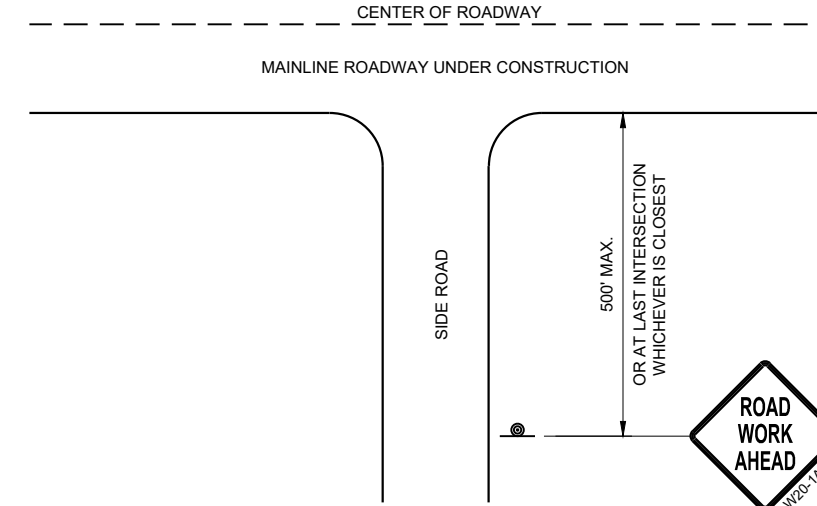
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

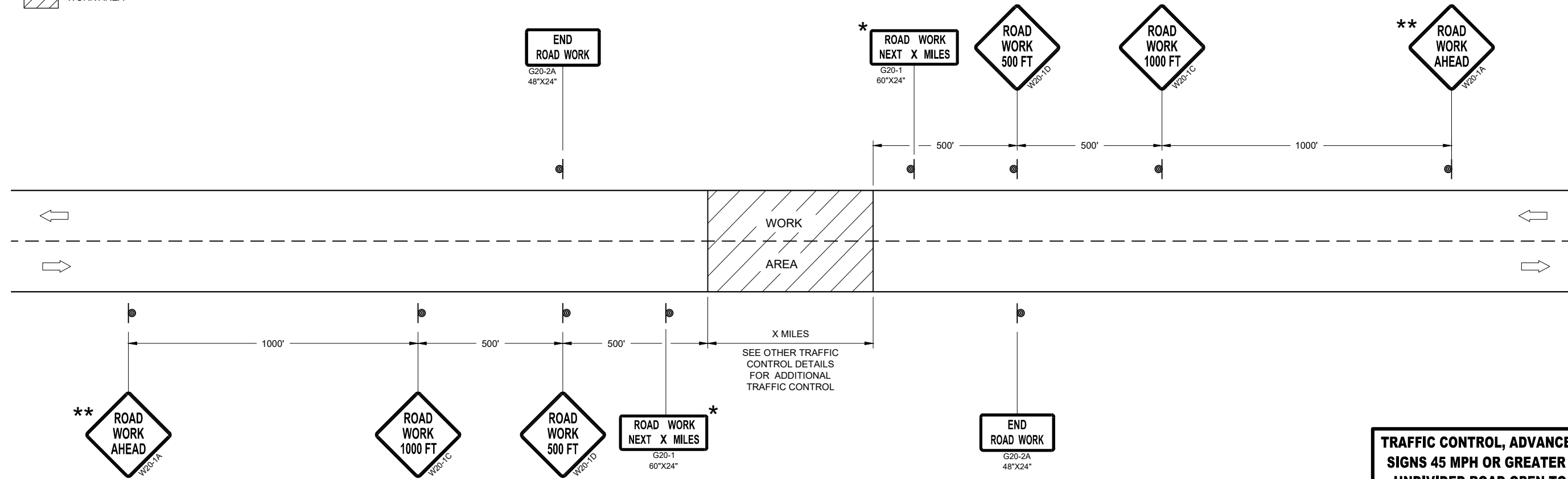
- \* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- \*\* PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

**LEGEND**

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



**TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL**



**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER**

<b>TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



**GENERAL NOTES**

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

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




ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

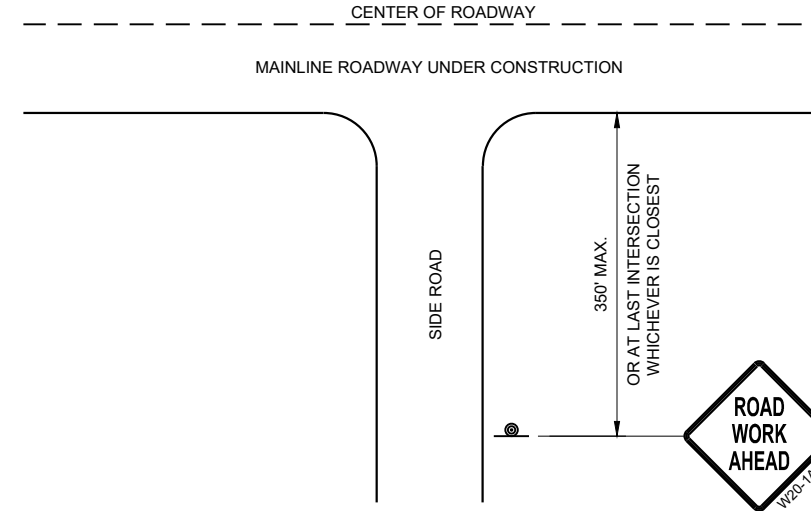
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

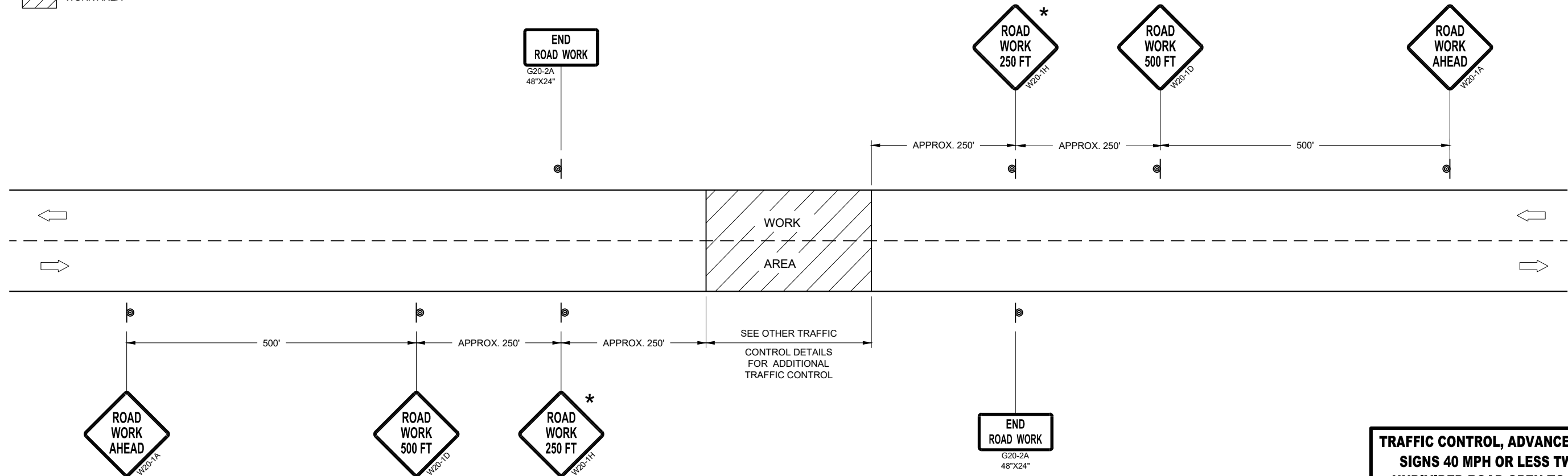
\* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

**LEGEND**

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



**TYPICAL SIDE ROAD APPROACH  
WARNING SIGN DETAIL**



**TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS**

**TRAFFIC CONTROL, ADVANCE WARNING  
SIGNS 40 MPH OR LESS TWO-WAY  
UNDIVIDED ROAD OPEN TO TRAFFIC**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
July 2018 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER




FHWA

**GENERAL NOTES**

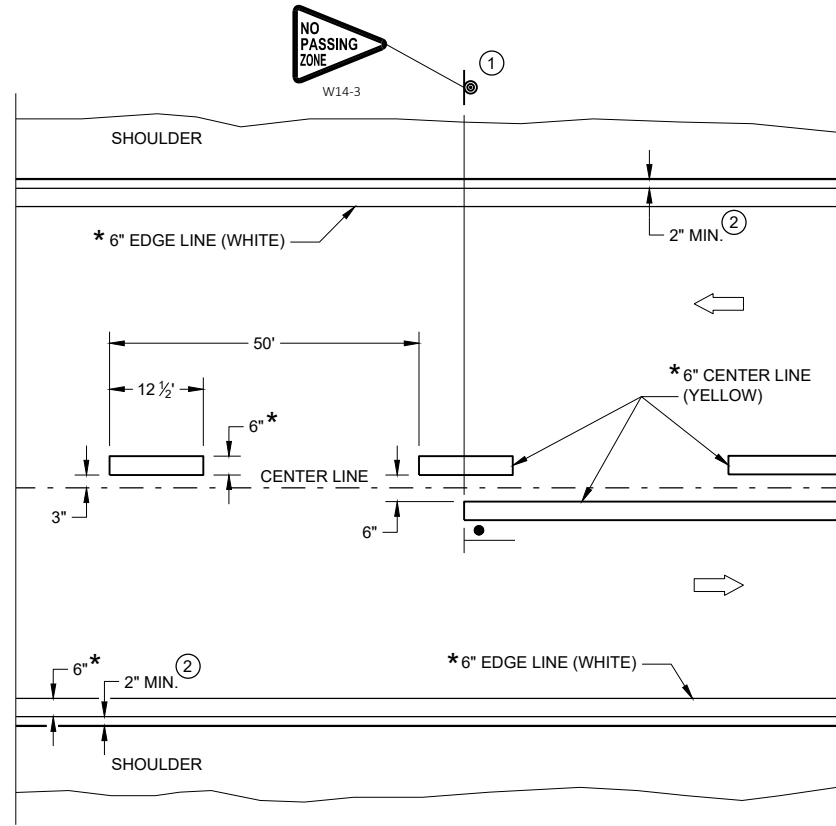
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

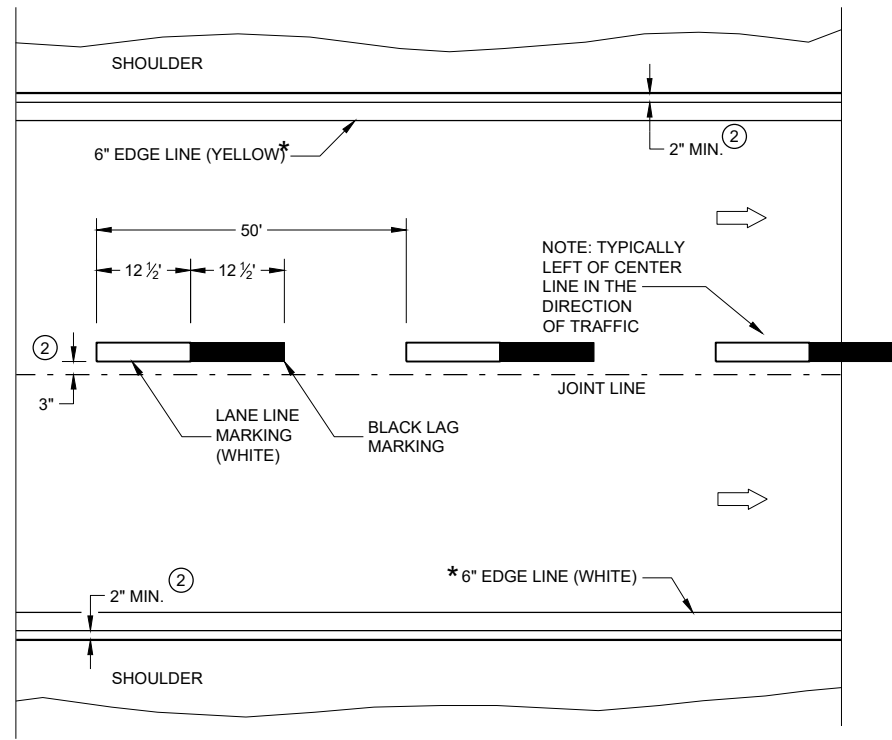
**LEGEND**

-  "T" MARKING
-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC

\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



**TWO WAY TRAFFIC**



**ONE WAY TRAFFIC**

**PERMANENT PAVEMENT MARKING**

6

6

SDD 15C08-23a

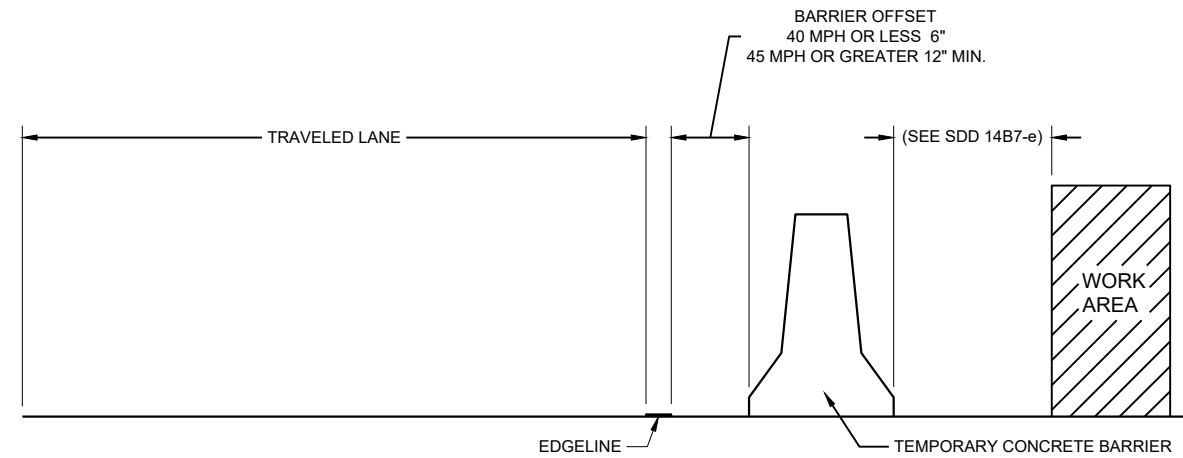
SDD 15C08-23a

**PERMANENT LONGITUDINAL PAVEMENT MARKINGS**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
May 2023 /S/ Jeannie Silver  
DATE STATEWIDE SIGNING AND MARKING ENGINEER

FHWA



**TEMPORARY BARRIER OFFSET FROM EDGELINE**

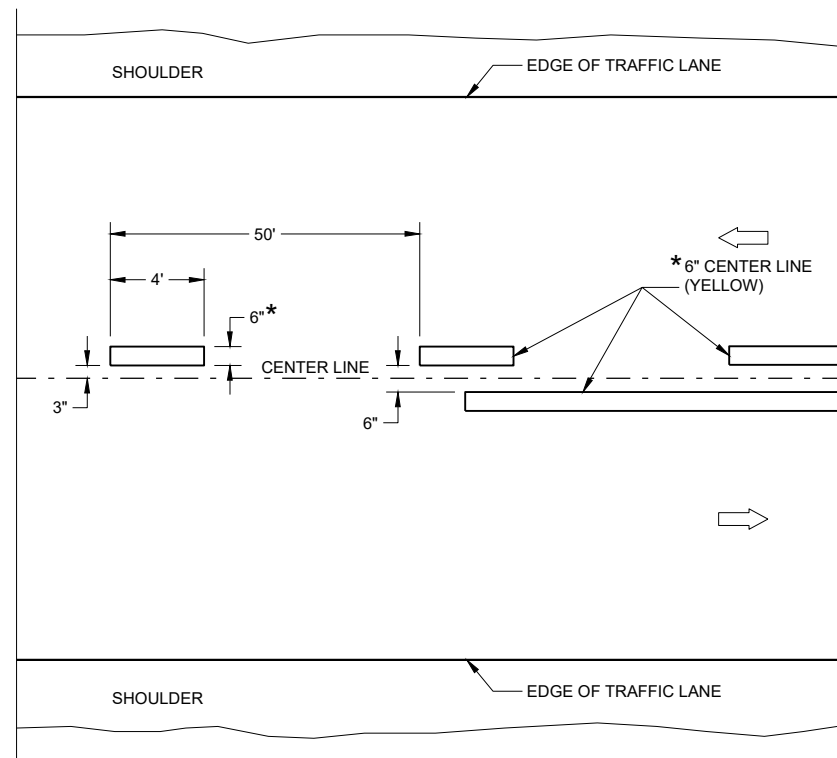
**GENERAL NOTES**

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

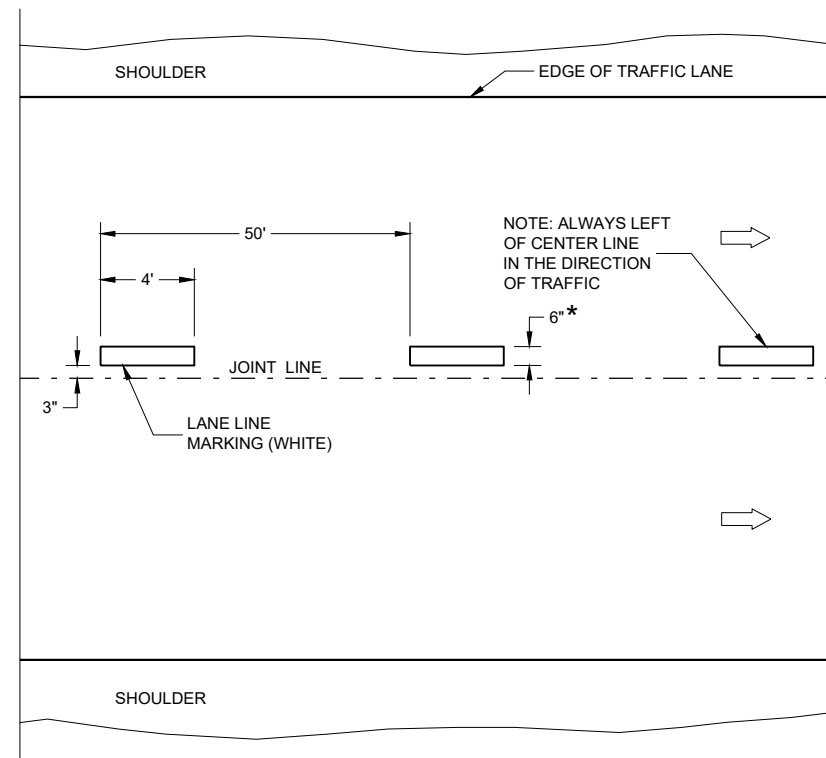
**LEGEND**

➡ DIRECTION OF TRAFFIC

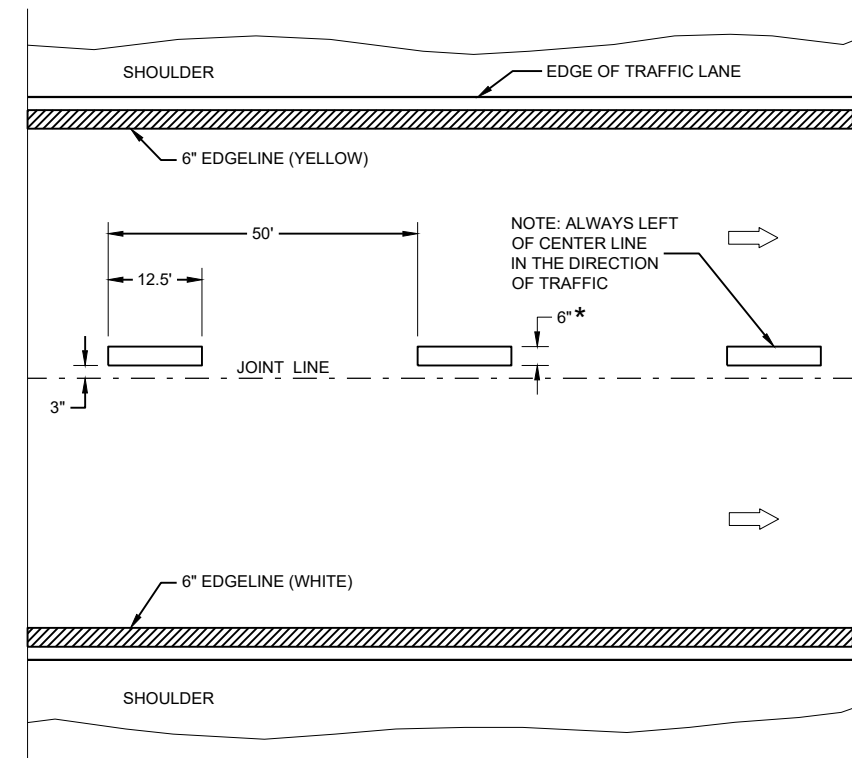
\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES



**TWO WAY TRAFFIC**



**ONE WAY TRAFFIC**



**FREEWAYS AND EXPRESSWAYS**






**TEMPORARY PAVEMENT MARKING**

**TEMPORARY LONGITUDINAL PAVEMENT MARKING**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
DATE: May 2023 /S/ Jeannie Silver  
STATEWIDE SIGNING AND MARKING ENGINEER

**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.

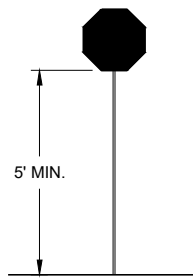
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER

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**

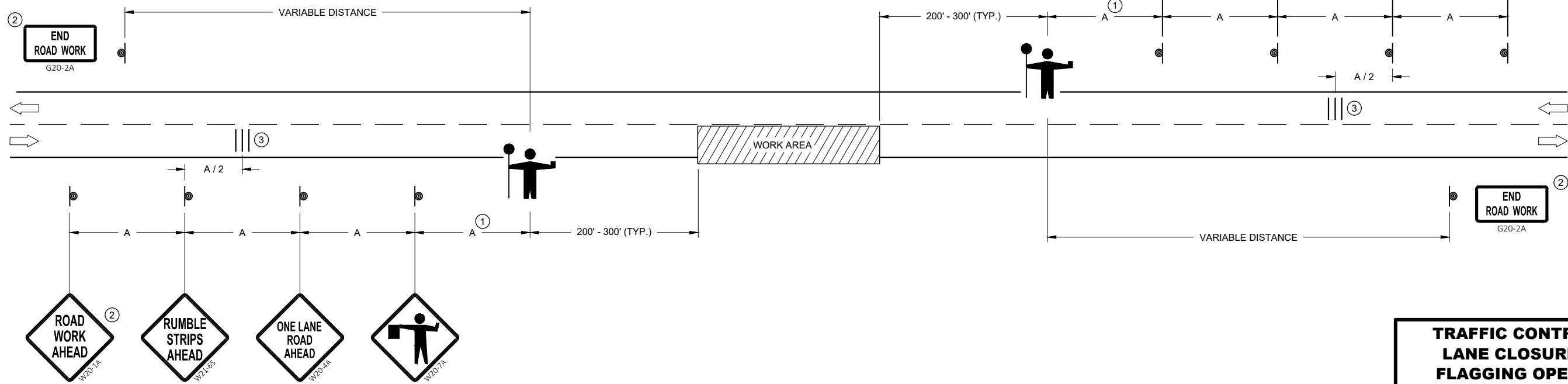
**SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE**

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



W03-4

USE OF W03-4 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

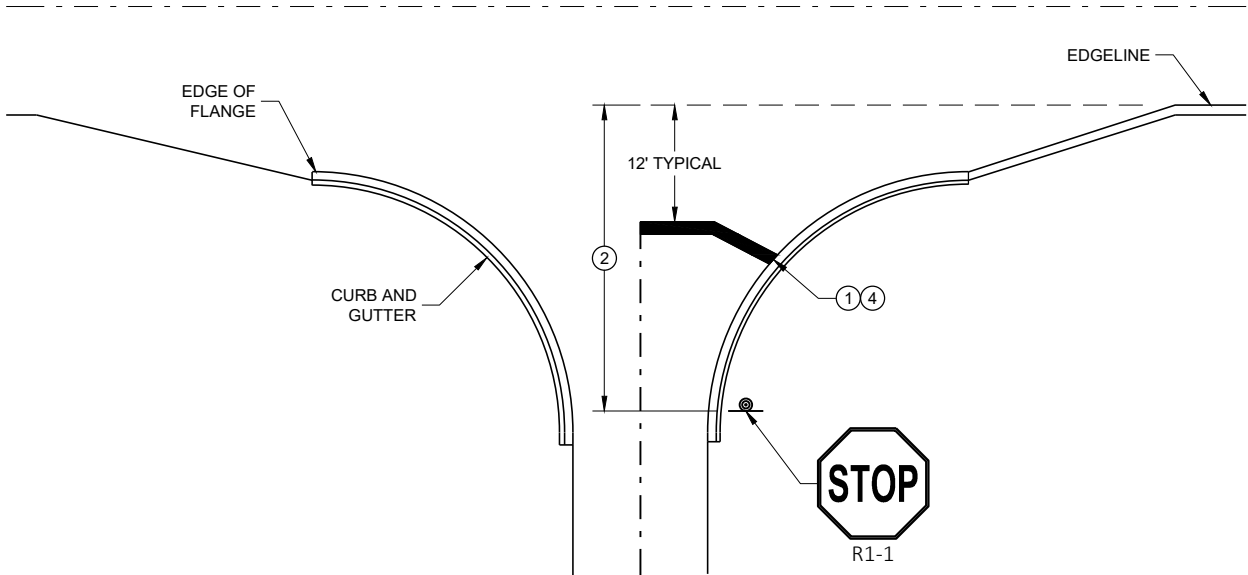
APPROVED  
DATE: May 2022 /S/ Andrew Heidtke  
WORK ZONE ENGINEER

FHWA

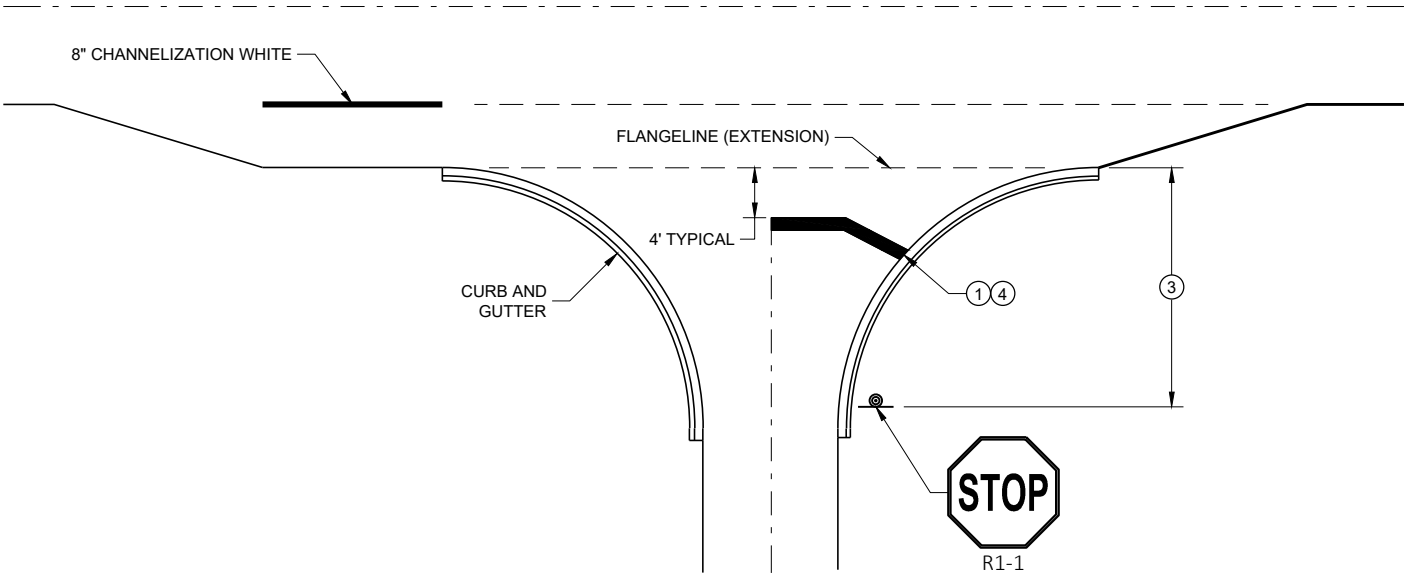
**GENERAL NOTES**

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

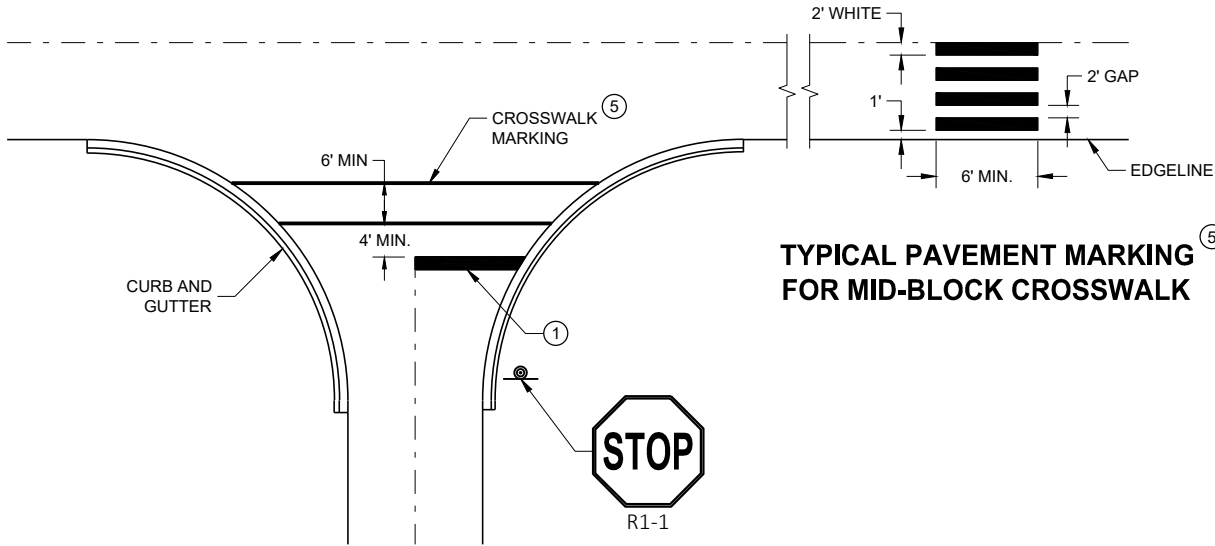
- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
- ③ NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE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



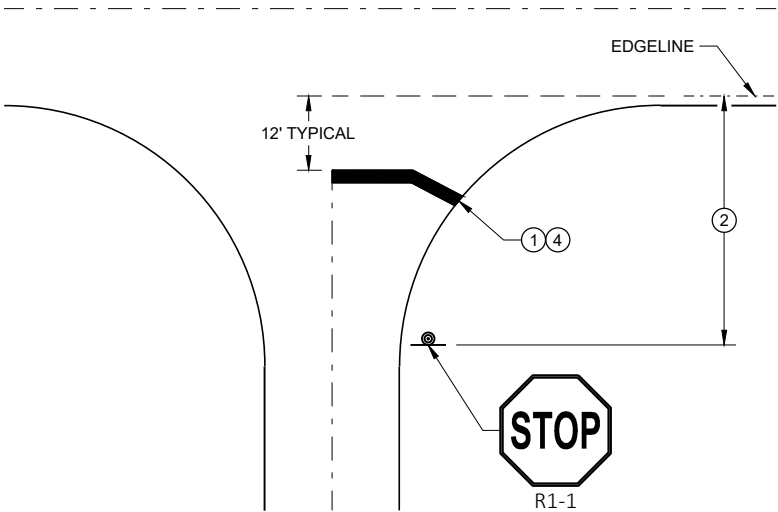
**TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER**



**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE**



**TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING**



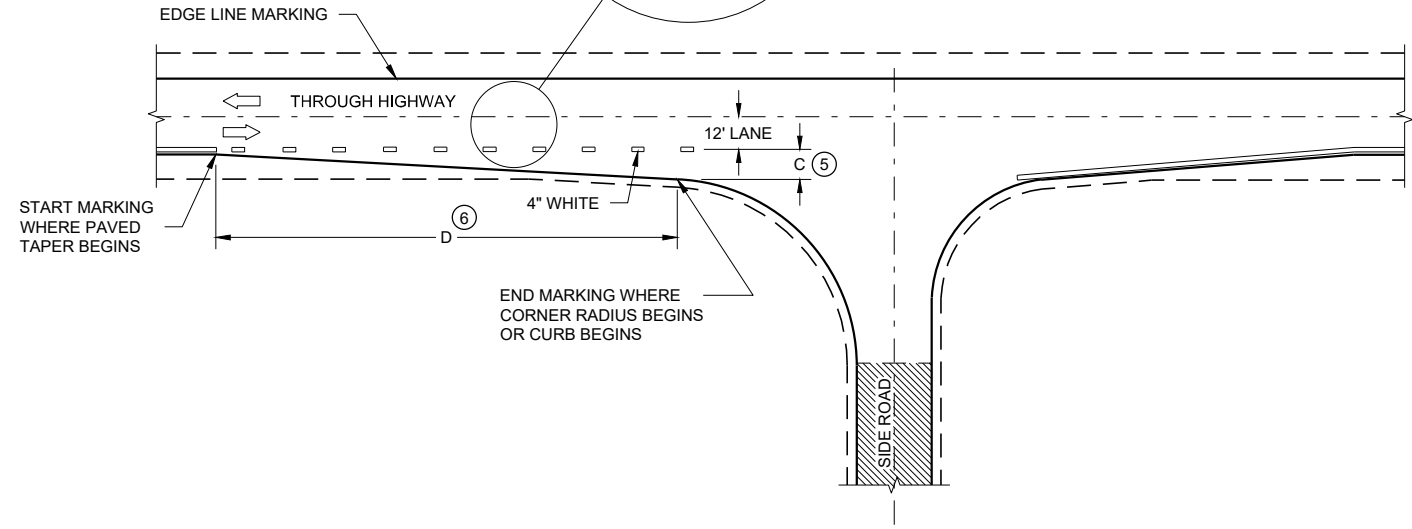
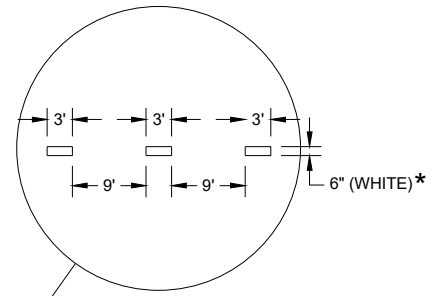
**TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER**

**STOP LINE AND CROSSWALK PAVEMENT MARKING**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

FHWA



**MINOR INTERSECTION**

\* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

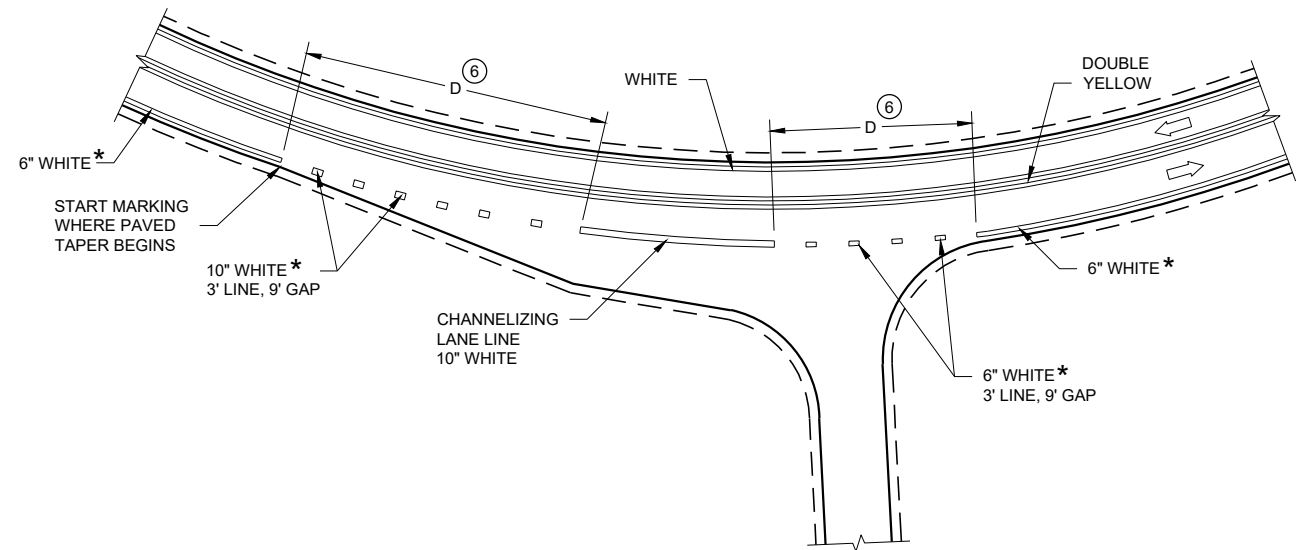
**GENERAL NOTES**

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

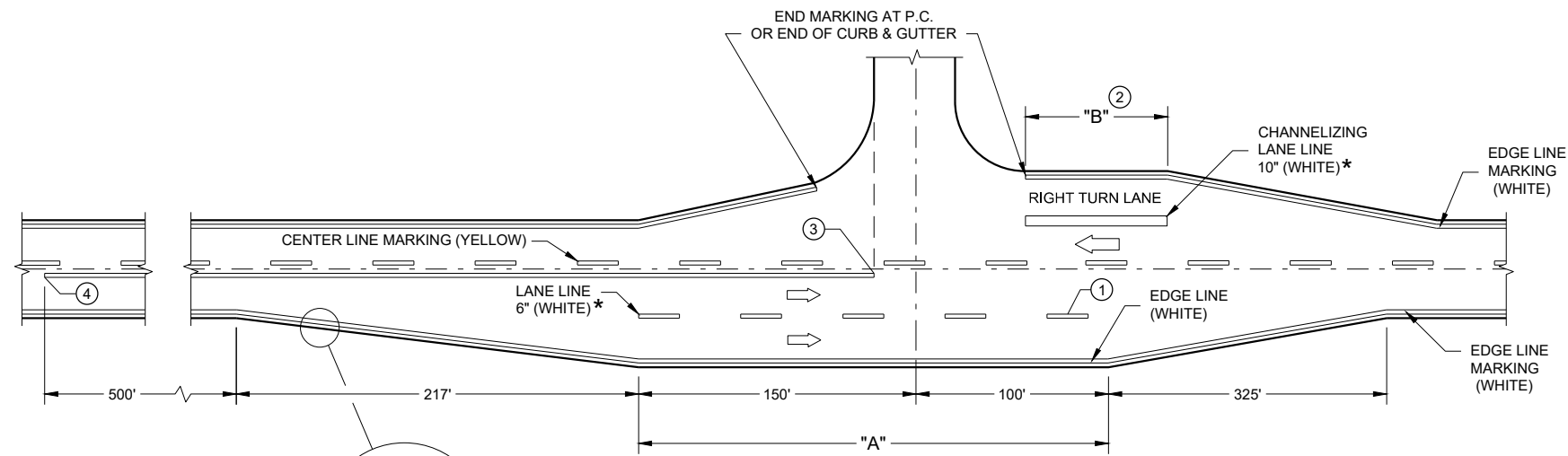
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
- ⑤ WHEN DISTANCE "C" IS LESS THAN 4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

**LEGEND**

➔ DIRECTION OF TRAVEL



**INTERSECTION ON OUTSIDE OF CURVE**



**MAJOR INTERSECTIONS  
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)**

6

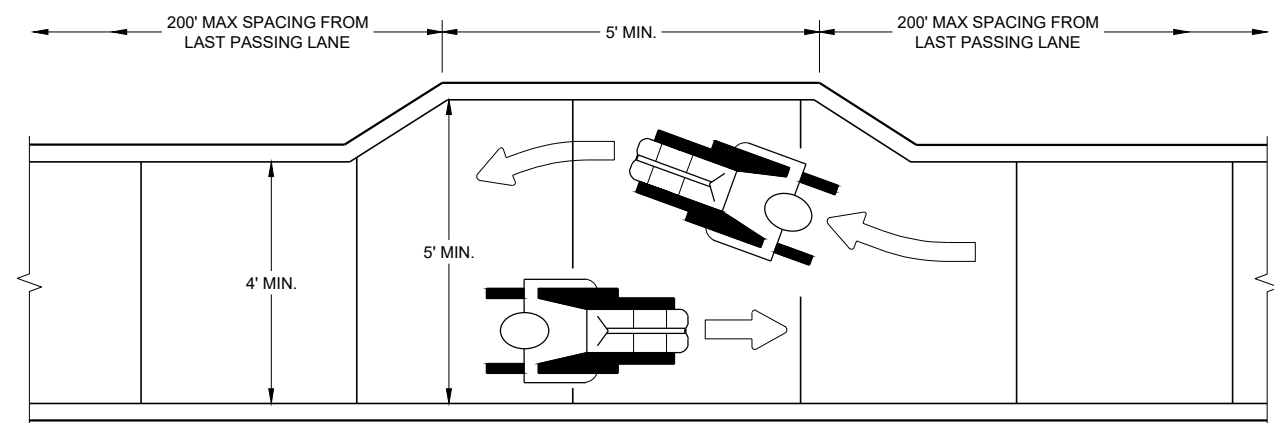
6

SDD 15C35-06a

SDD 15C35-06a

**PAVEMENT MARKING  
(INTERSECTIONS)**

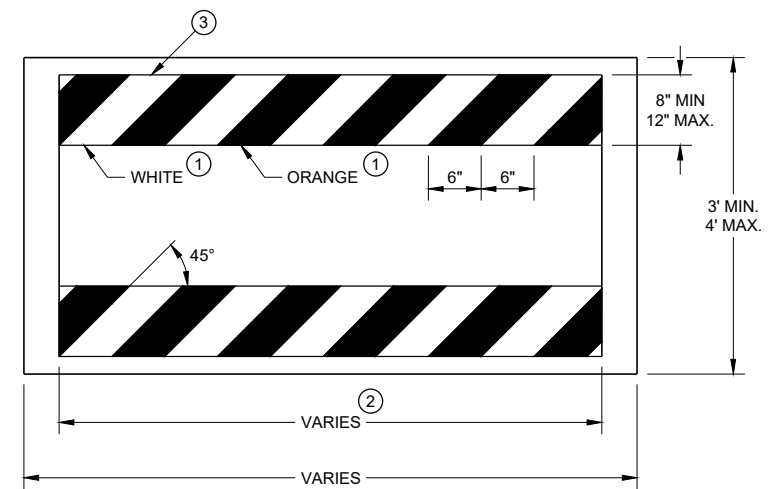
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



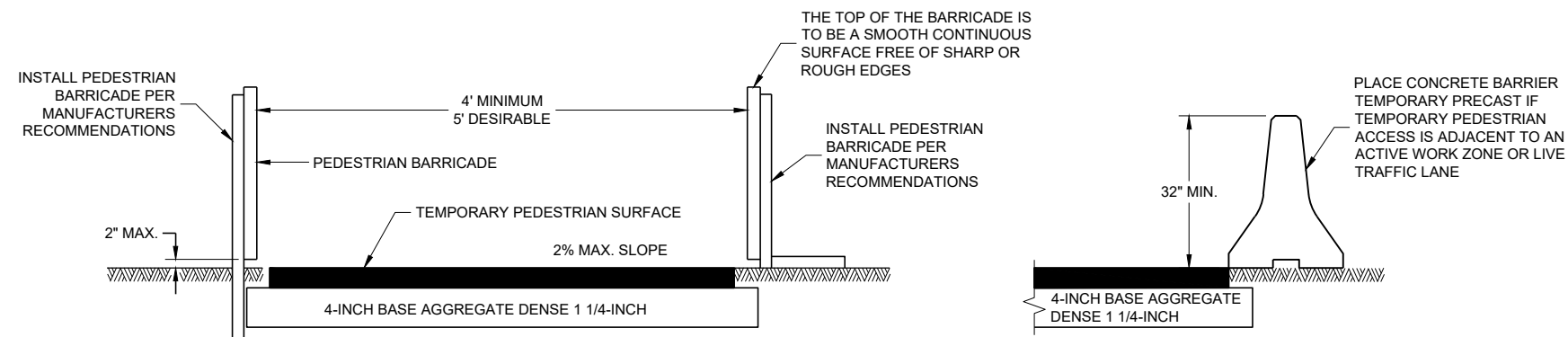
**NARROW SIDEWALK PASSING DETAIL**

**GENERAL NOTES**

- BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST
- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
- \* USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



**TEMPORARY PEDESTRIAN BARRICADE\***

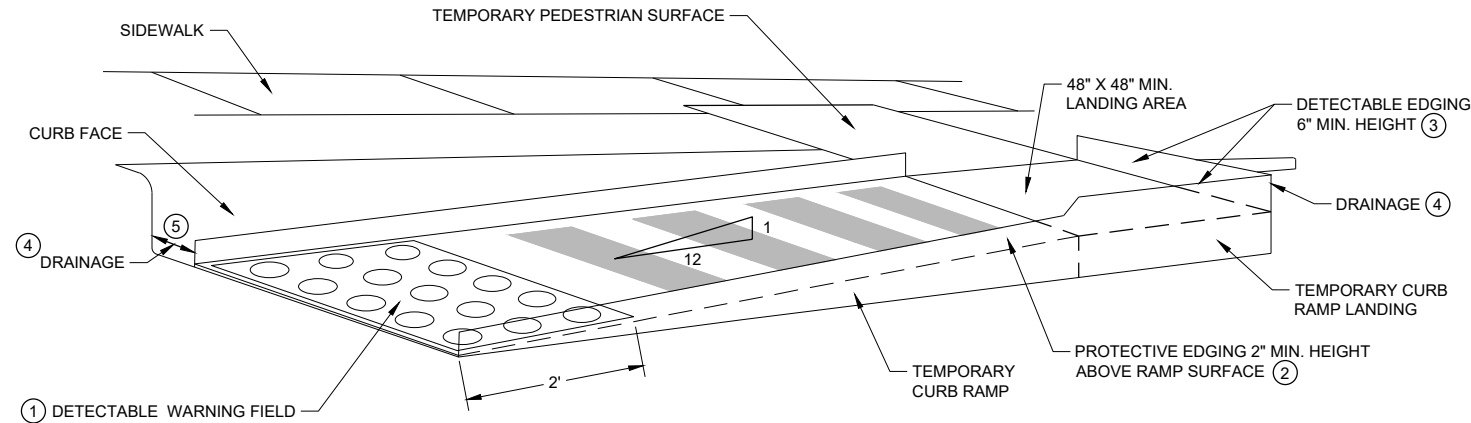


**TEMPORARY PEDESTRIAN ACCESS**

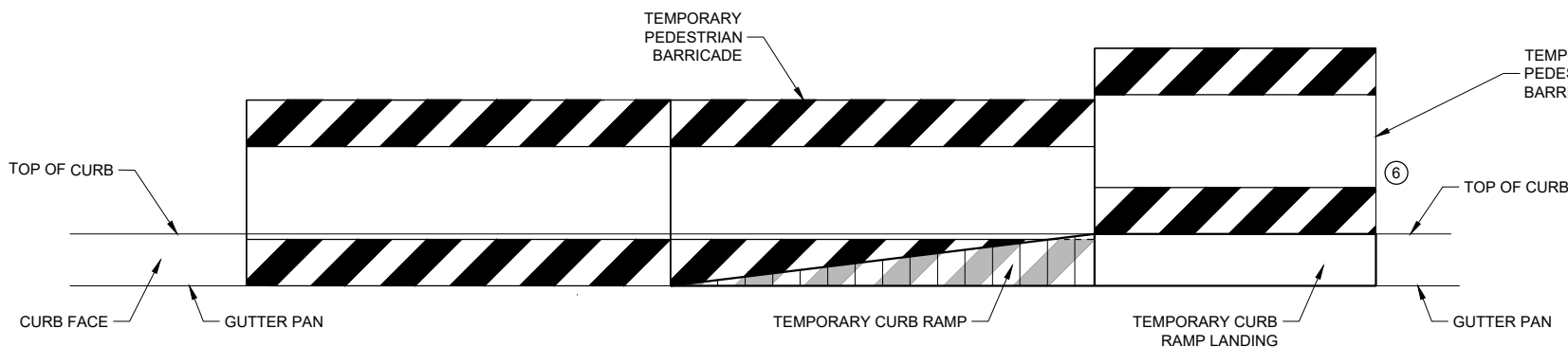
**GENERAL NOTES**

CURB RAMPS SHALL BE 48" MIN. WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.  
 CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.  
 CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.  
 LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.  
 CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

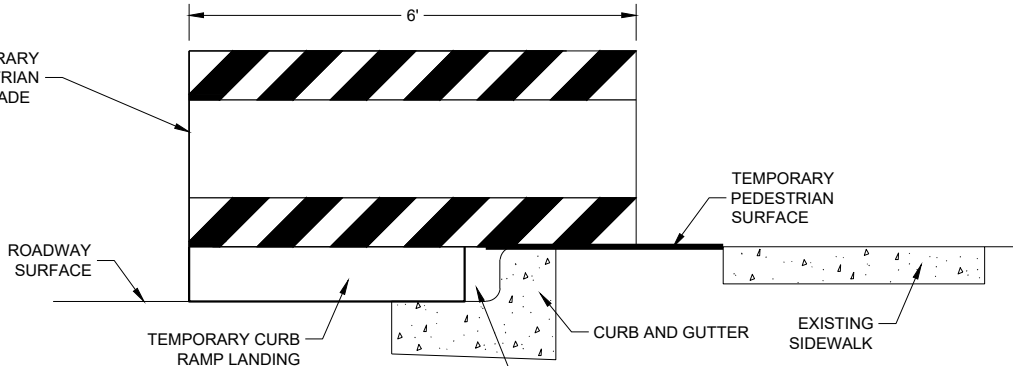
- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS.
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ ENSURE CURB RAMP IS OUT OF THE GUTTER PAN.
- ⑥ IF ONLY PART OF THE END PANEL OF TEMPORARY PEDESTRIAN BARRICADE PANEL IS NEEDED, EXTEND EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL HERE.



**PERSPECTIVE VIEW**



**FRONT VIEW**

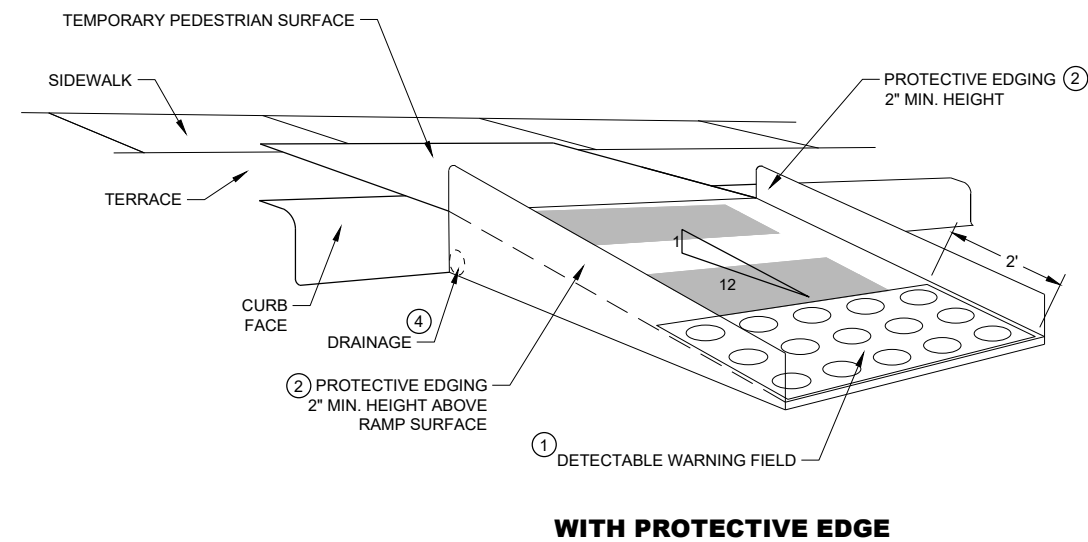
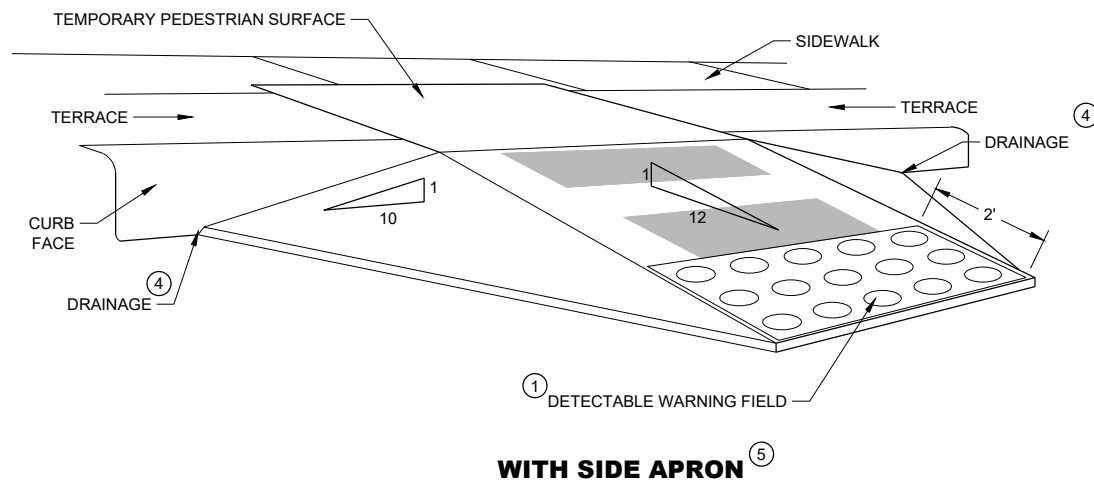


**SIDE VIEW**

**TEMPORARY CURB RAMP PARALLEL TO CURB**

<p><b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b></p>
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p>





**TEMPORARY CURB RAMP PERPENDICULAR TO CURB**

**GENERAL NOTES**

CURB RAMPS SHALL BE 48" MINIMUM WIDTH WITH A FIRM, STABLE AND SLIP RESISTANT SURFACE.

ALTERNATE SIDEWALK WORK BETWEEN LEFT AND RIGHT SIDE OF ROADWAY TO MAINTAIN PEDESTRIAN ACCESS.

CURB RAMPS AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

CLEAR SPACE OF 48" X 48" SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.

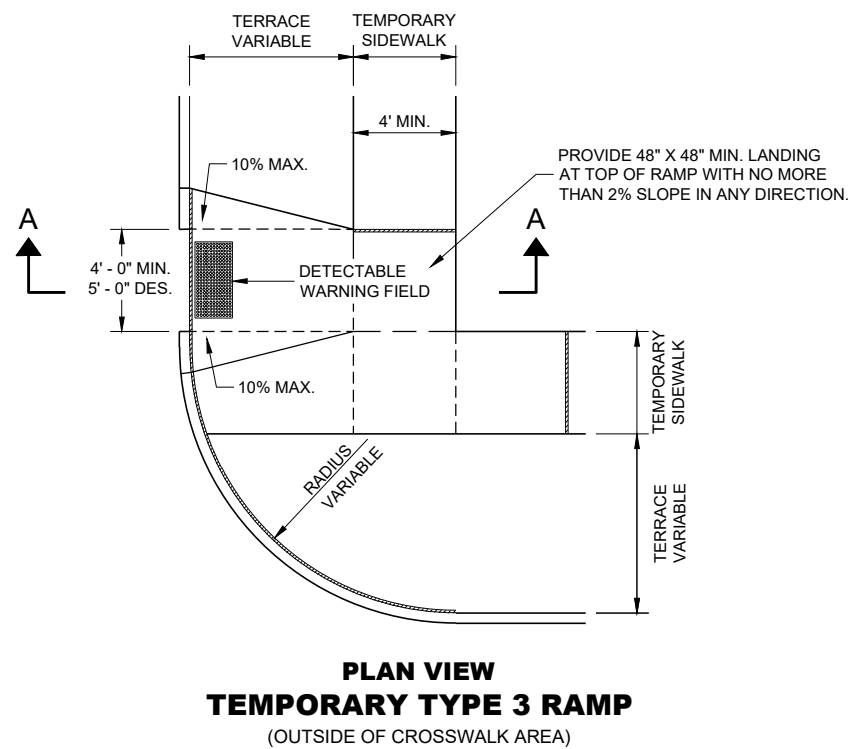
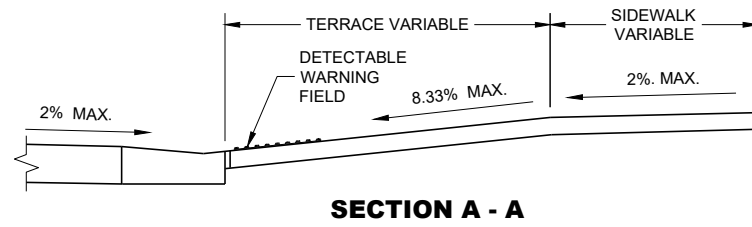
LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.

CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".

- ① INSTALL CONTRASTING TEMPORARY DETECTABLE WARNING FIELD AT PEDESTRIAN STREET CROSSINGS, AS SHOWN IN THE PLANS
- ② PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- ③ DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- ④ DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ⑤ CAN ONLY BE USED FOR RAMPS WITH 6" OR LESS OF VERTICAL CHANGE.

**GENERAL NOTES**

- BARRICADE DEVICE SELECTED FROM APPROVED PRODUCT LIST
- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② SHEETING REQUIRED ON MORE THAN 50% OF BARRICADE WIDTH.
- ③ PLACE SHEETING ON BOTH SIDES OF THE BARRICADE.
- ★ USE THIS DETAIL FOR SHEETING PLACEMENT REFERENCE.



6

6

SDD 15D30-09d

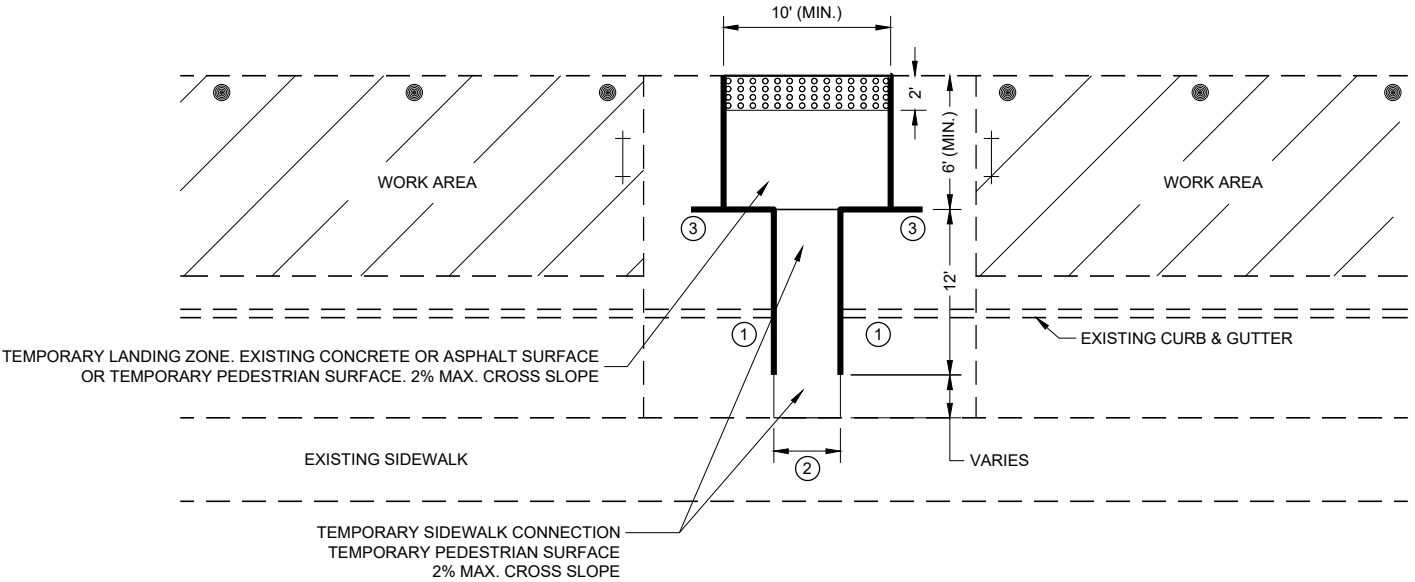
SDD 15D30-09d

<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
<small>FHWA</small>	

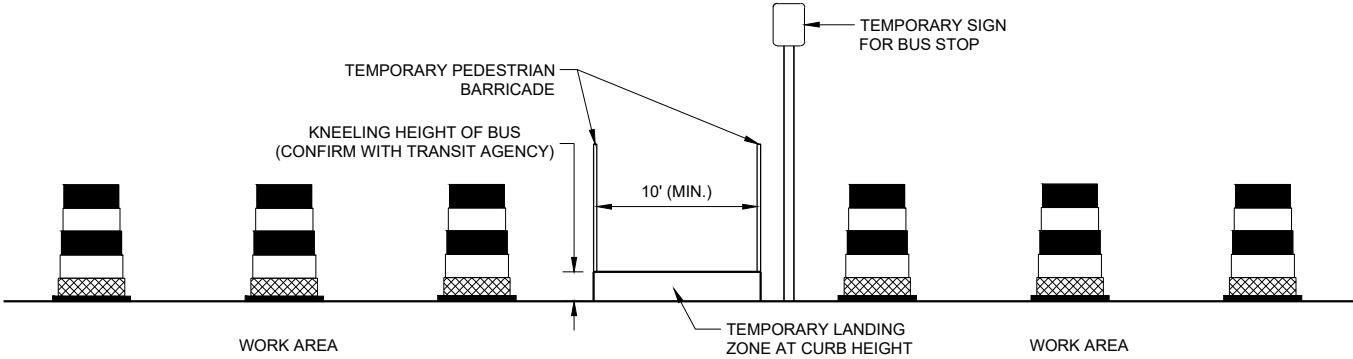
**GENERAL NOTES**

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- NOTIFY THE BUS COMPANY 7 DAYS IN ADVANCE OF THE BUS STOP RELOCATION.
- PROTECTIVE EDGING WITH A 2" MIN. HEIGHT SHALL BE INSTALLED WHEN A CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6" OR GREATER OR HAS A SIDE APRON SLOPE STEEPER THAN 1:3 (33%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN CURB RAMP OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3" OR MORE.
- DETECTABLE EDGING WITH 6" MIN. HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 1/2" WIDTH.
- CHANGES BETWEEN SURFACE HEIGHTS SHALL NOT EXCEED 1/2". LATERAL EDGES MAY BE VERTICAL UP TO 1/4" HIGH AND SHALL BE BEVELED AT 1:2 BETWEEN 1/4" AND 1/2".
- CURB RAMP AND LANDINGS SHALL HAVE A 1:50 (2%) MAX. CROSS-SLOPE.

- ① DO NOT RESTRICT WATER FLOW IN THE GUTTER SYSTEM.
- ② 5' WIDE MIN. WITH TEMPORARY PEDESTRIAN BARRICADE, 10' WIDE MIN. WITHOUT TEMPORARY PEDESTRIAN BARRICADE.
- ③ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE INTO THIS SPACE.



**PLAN VIEW**



**PROFILE VIEW  
TEMPORARY BUS STOP PAD**

**LEGEND**







- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE
- TEMPORARY PEDESTRIAN BARRICADE
- TEMPORARY DETECTABLE WARNING FIELD
- WORK AREA

**TRAFFIC CONTROL,  
PEDESTRIAN ACCOMMODATION**

---

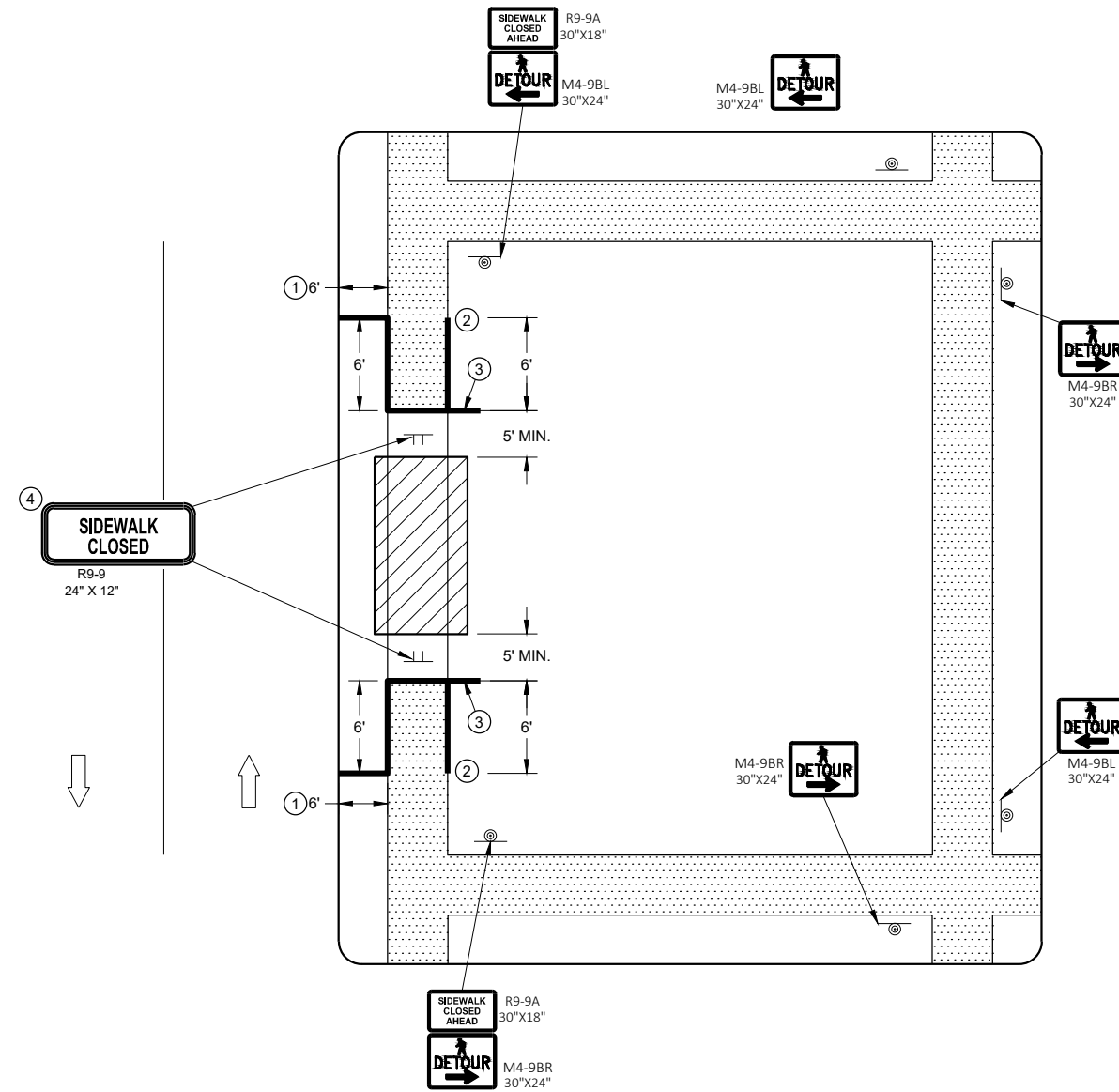
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**LEGEND**

-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  UNDER PEDESTRIAN TRAFFIC
-  WORK AREA
-  TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC

**GENERAL NOTES**








- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICTS WITH DRIVEWAYS AND OTHER EXISTING FEATURES.
- ① IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
  - ② PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
  - ③ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
  - ④ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



**SIDEWALK DETOUR, SIDEWALK ONLY ON ONE SIDE**

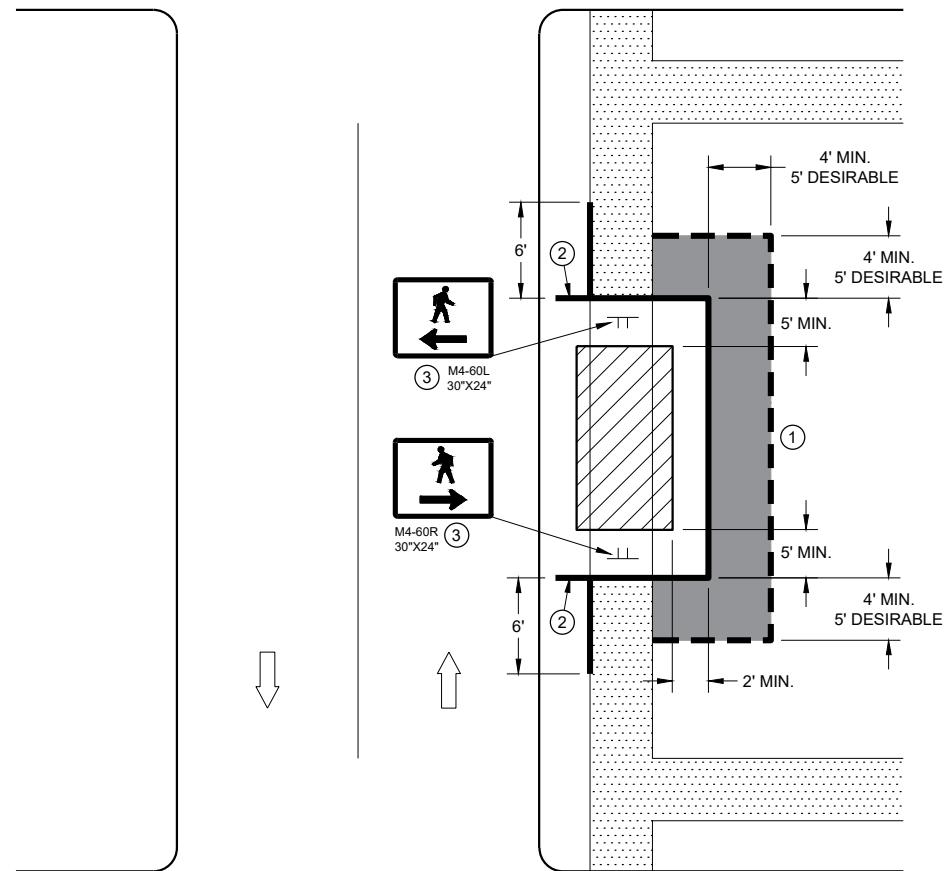
<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

**LEGEND**

-  SIGN ON TEMPORARY SUPPORT
-  WORK AREA
-  UNDER PEDESTRIAN TRAFFIC
-  TEMPORARY PEDESTRIAN SURFACE
-  TEMPORARY PEDESTRIAN BARRICADE
-  OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC










**GENERAL NOTES**

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- ① USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
  - ② IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
  - ③ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



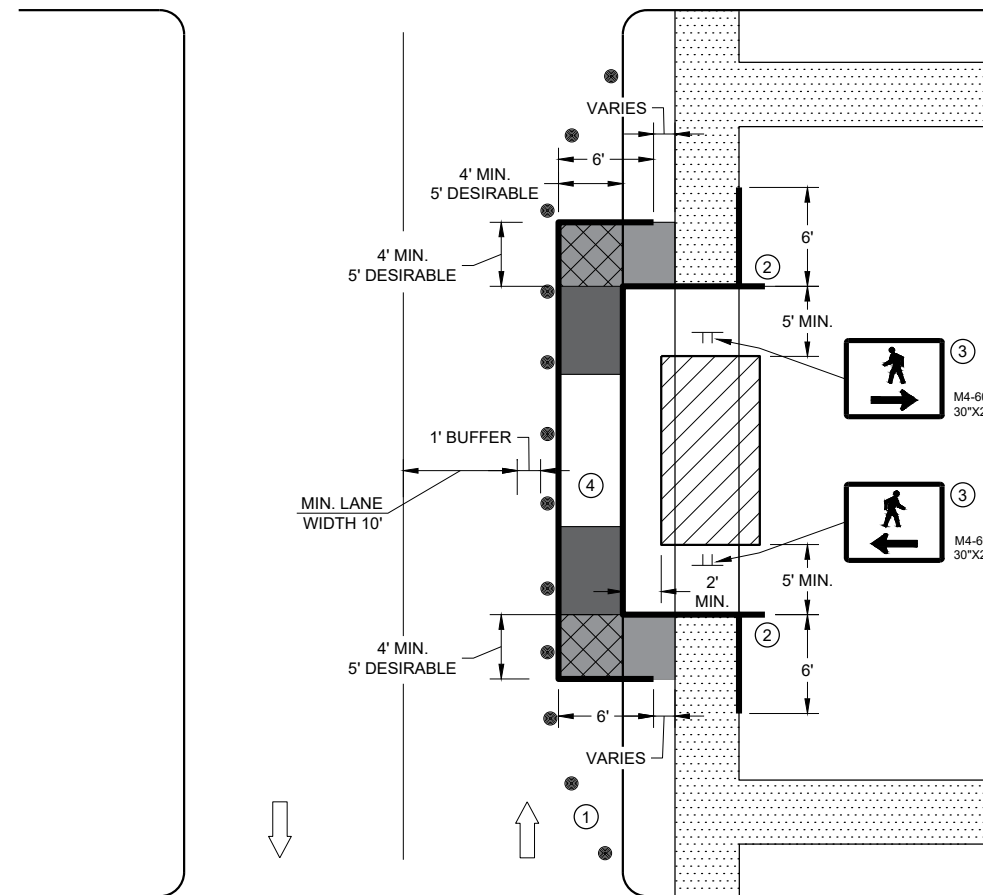
**SIDEWALK DIVERSION  
SINGLE SIDE**

**LEGEND**

-  SIGN ON TEMPORARY SUPPORT
-  TRAFFIC CONTROL DRUM
-  WORK AREA
-  UNDER PEDESTRIAN TRAFFIC
-  TEMPORARY CURB RAMP
-  TEMPORARY PEDESTRIAN SURFACE "A"
-  TEMPORARY PEDESTRIAN SURFACE "B"
-  TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC

**GENERAL NOTES**

- TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.
- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND BUFFER SPACE REQUIRED.
  - ② PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL PAST THE SIDEWALK ON THE SIDE AWAY FROM THE ROAD.
  - ③ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.
  - ④ USE EXISTING PAVEMENT SURFACE. IF EXISTING PAVEMENT SURFACE HAS BEEN REMOVED, USE A TEMPORARY PEDESTRIAN SURFACE.



**SIDEWALK DIVERSION, SINGLE SIDE**

<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

6

6

SDD 15D30 - 09h

SDD 15D30 - 09h

### GENERAL NOTES

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.











SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

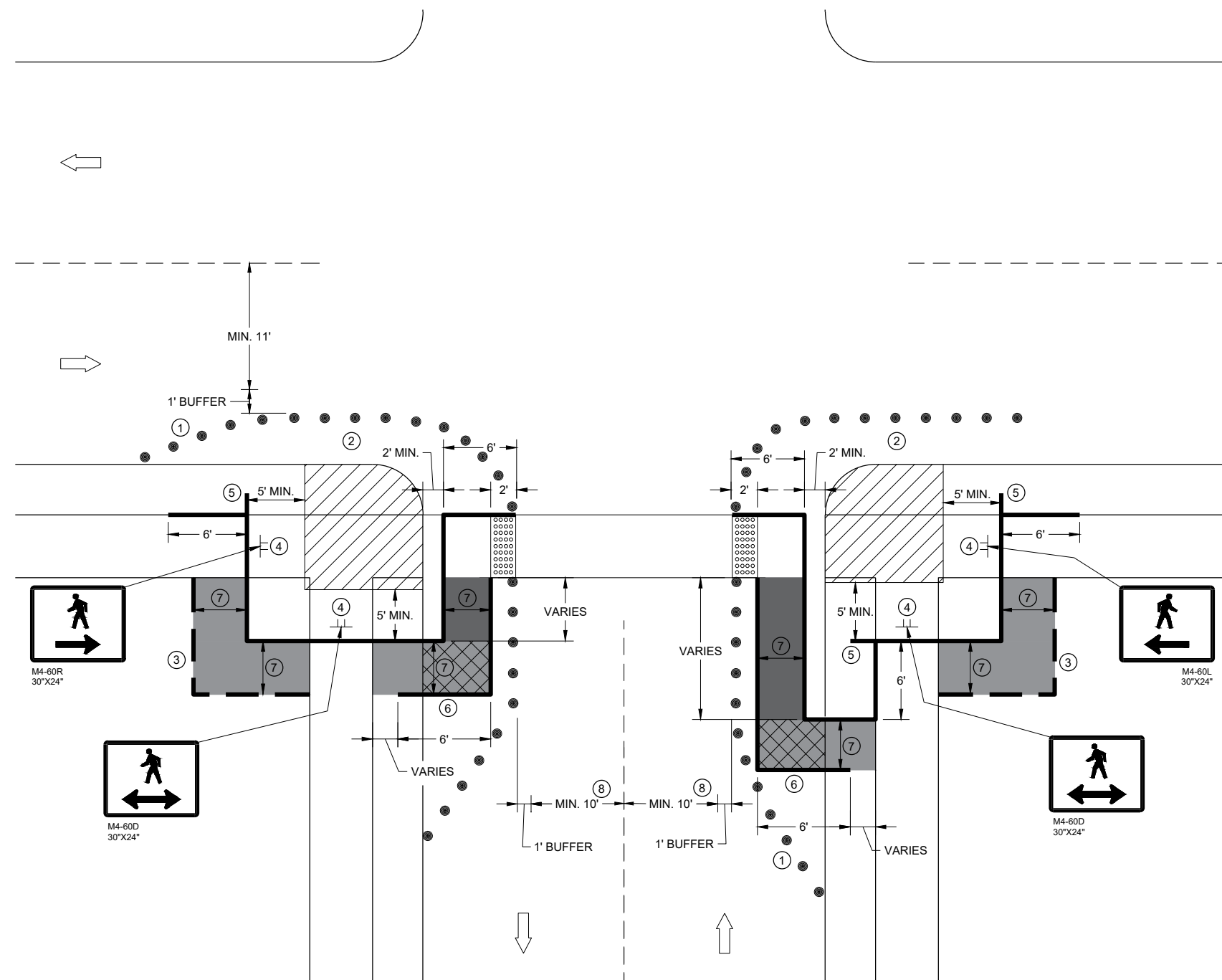
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
- ⑤ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
- ⑥ IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
- ⑦ 4 FEET MINIMUM, 5 FEET DESIRABLE
- ⑧ IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

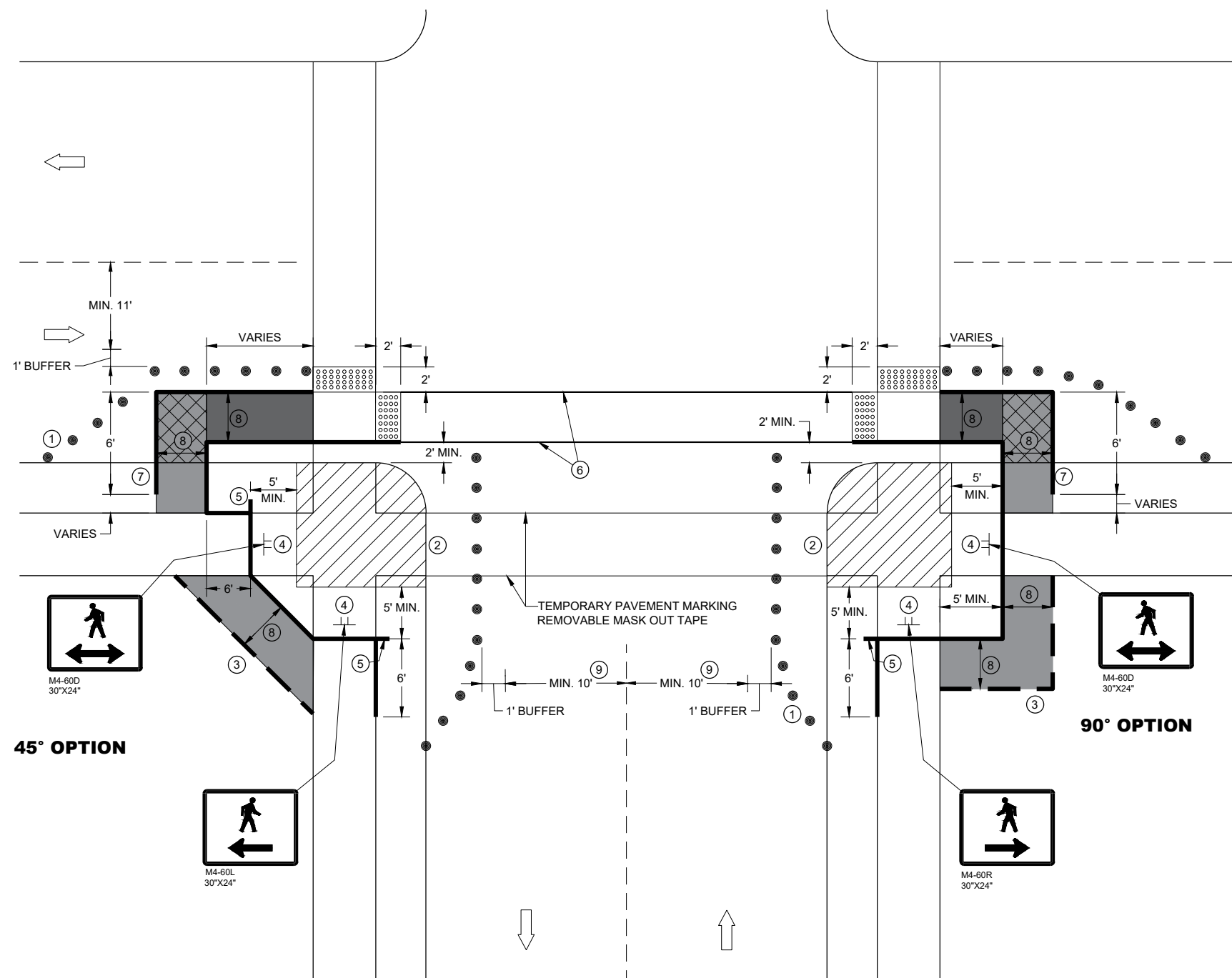
### LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  TRAFFIC CONTROL DRUM
-  WORK AREA
-  TEMPORARY CURB RAMP
-  TEMPORARY PEDESTRIAN SURFACE "A"
-  TEMPORARY PEDESTRIAN SURFACE "B"
-  TEMPORARY DETECTABLE WARNING FIELD
-  TEMPORARY PEDESTRIAN BARRICADE
-  OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC



**CURB RAMP PEDESTRIAN TRAFFIC CONTROL  
SIDEWALK ON SINGLE SIDE**

<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION



**CURB RAMP PEDESTRIAN TRAFFIC CONTROL**

**GENERAL NOTES**

IF PEDESTRIAN PUSH BUTTONS ARE PRESENT ON THE EXISTING FACILITY, ENSURE THEY ARE MAINTAINED/ACCESSIBLE FOR PEDESTRIAN USE THROUGHOUT THE TEMPORARY PEDESTRIAN ACCOMMODATIONS.

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG

WHEN TEMPORARY PEDESTRIAN BARRICADE RUNS PARALLEL ALONG THE SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.

- ① SHOULDER OR LANE CLOSURE ADVANCE WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② PROVIDE ADEQUATE SPACE FOR CONTRACTOR OPERATIONS
- ③ USE TEMPORARY PEDESTRIAN BARRICADE TO SEPARATE PEDESTRIANS FROM DROP OFFS OR FOR ADDITIONAL PEDESTRIAN CHANNELIZATION.
- ④ MOUNTING HEIGHT OF 5 FEET FROM SIDEWALK SURFACE TO BOTTOM OF SIGN.
- ⑤ PLACE EXCESS PORTION OF TEMPORARY PEDESTRIAN BARRICADE PANEL IN THE SIDEWALK TERRACE.
- ⑥ WHITE 6" TEMPORARY PAVEMENT MARKING
- ⑦ IF TEMPORARY PEDESTRIAN BARRICADE DOES NOT REACH THE FACE OF THE CURB, USE AN ADDITIONAL PANEL AND EXTEND INTO THE TERRACE.
- ⑧ 4 FEET MINIMUM, 5 FEET DESIRABLE
- ⑨ IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, CURB RAMPS MAY NEED TO BE CONSTRUCTED AT SEPARATE TIMES.

**LEGEND**







- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- WORK AREA
- TEMPORARY CURB RAMP
- TEMPORARY PEDESTRIAN SURFACE "A"
- TEMPORARY PEDESTRIAN SURFACE "B"
- TEMPORARY DETECTABLE WARNING FIELD
- TEMPORARY PEDESTRIAN BARRICADE
- OPTIONAL TEMPORARY PEDESTRIAN BARRICADE
- DIRECTION OF TRAFFIC

**TRAFFIC CONTROL,  
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

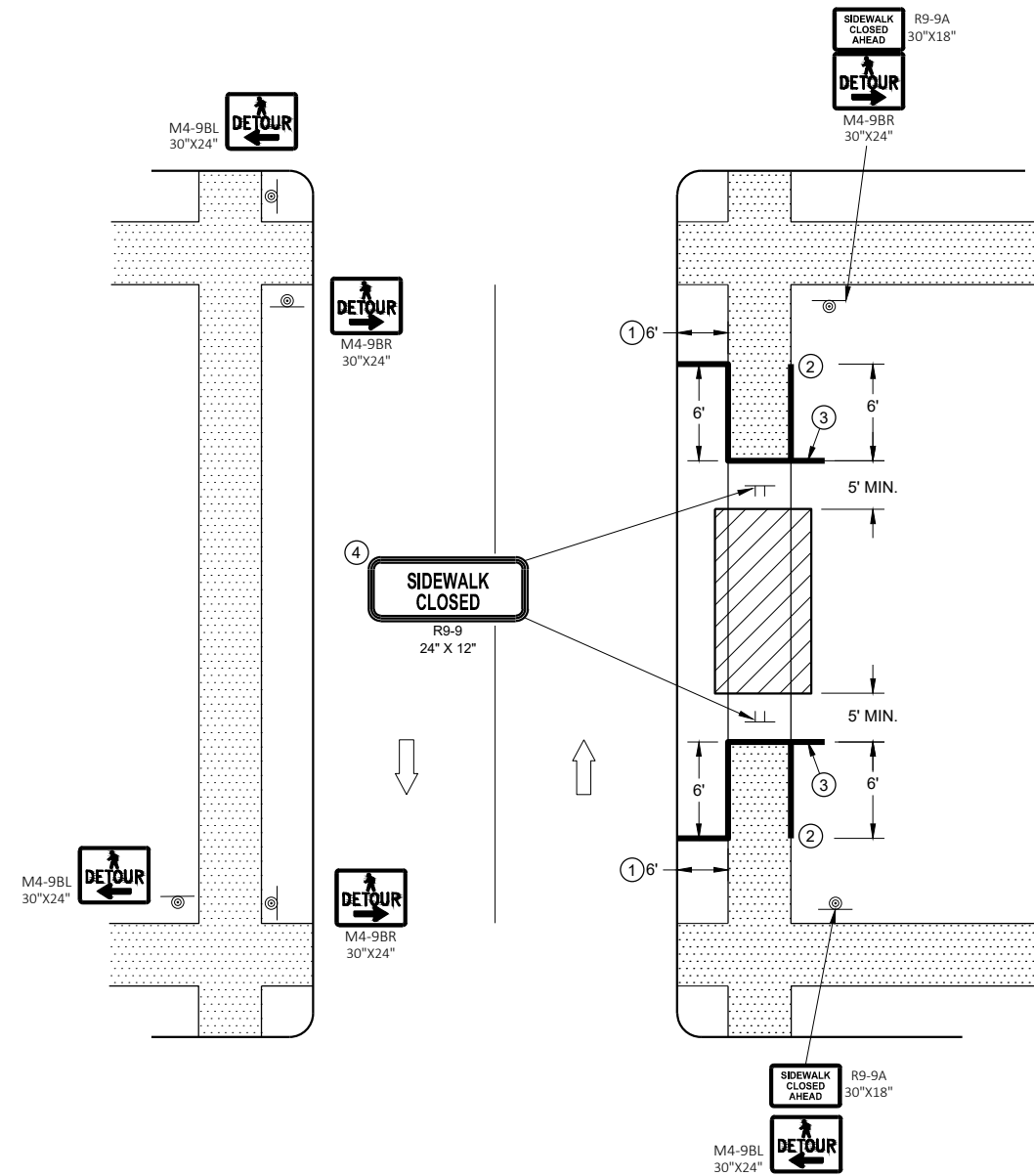


**LEGEND**

-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TEMPORARY SUPPORT
-  UNDER PEDESTRIAN TRAFFIC
-  WORK AREA
-  TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC

**GENERAL NOTES**

- SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.
- WHERE TEMPORARY BARRICADE RUNS PARALLEL ALONG SIDEWALK, PLACE THE FACE OF THE BARRICADE AT THE EDGE OF THE SIDEWALK.
- SIGNS THAT REMAIN IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- PLACE TEMPORARY PEDESTRIAN BARRICADE TO FIT FIELD CONDITIONS, AVOIDING CONFLICT WITH DRIVEWAYS AND OTHER EXISTING FEATURES.
- ① IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
  - ② PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
  - ③ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
  - ④ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF SIGN.



**SIDEWALK DETOUR, SIDEWALK ON BOTH SIDES**

<b>TRAFFIC CONTROL, PEDESTRIAN ACCOMMODATION</b>
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

6

6

SDD 15D30 - 09k

SDD 15D30 - 09k

## GENERAL NOTES




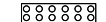




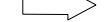
TYPICAL TEMPORARY PEDESTRIAN BARRICADE PANEL IS 6 FEET LONG.

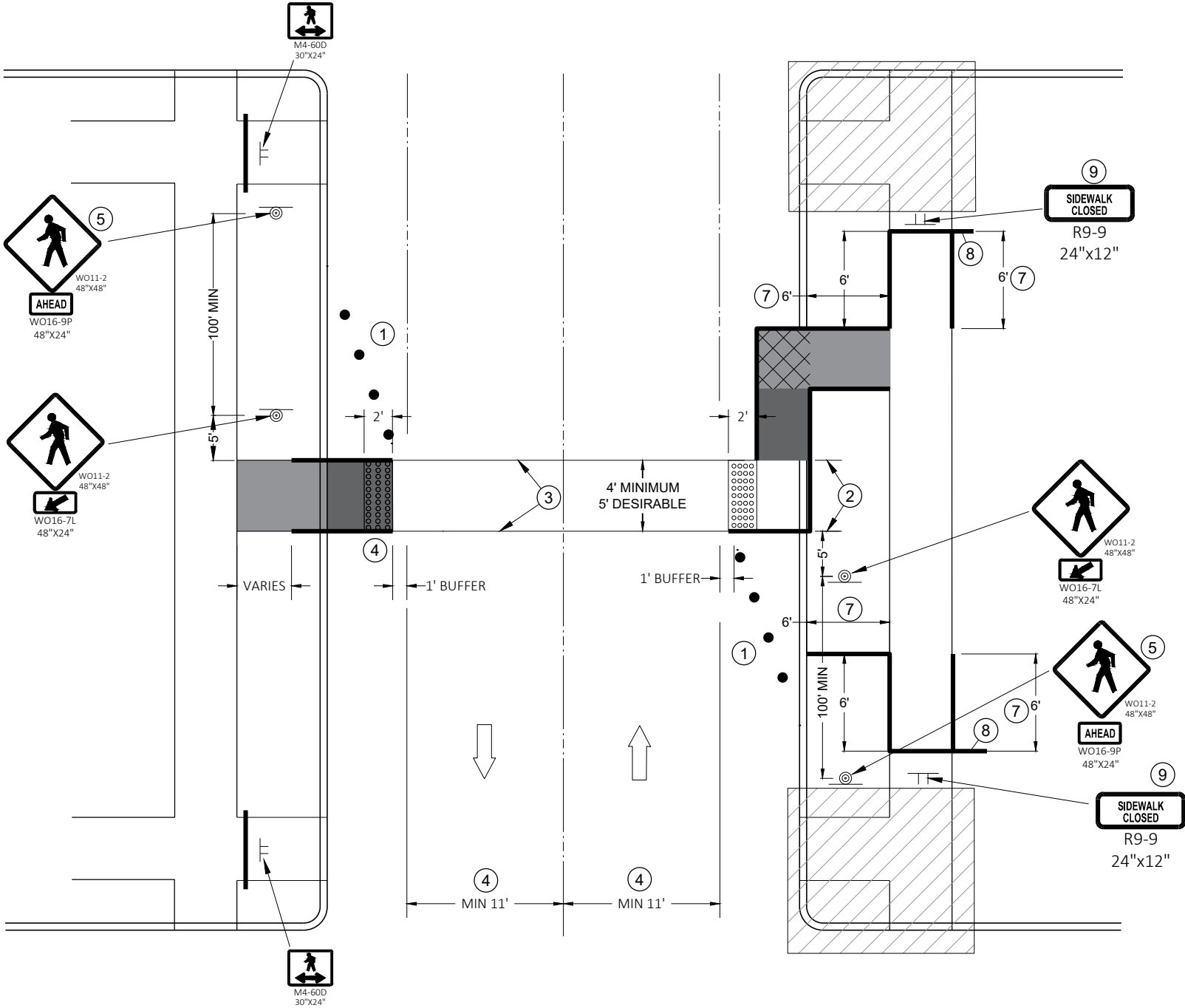
SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISCONSIN STANDARD SIGN PLATES.

SEE OTHER PEDESTRIAN ACCOMMODATION DETAILS FOR SIGNING AND DEVICES FOR DIFFERENT PEDESTRIAN FACILITIES CLOSURES.

- ① SHOULDER OR LANE CLOSURE ADVANCED WARNING AND PROPER BUFFER SPACE REQUIRED.
- ② 4 FEET MINIMUM, 5 FEET DESIRABLE.
- ③ WHITE 6" TEMPORARY PAVEMENT MARKING.
- ④ IF MINIMUM LANE WIDTHS CAN'T BE ATTAINED, PERPENDICULAR CURB RAMPS MAY NEED TO BE UTILIZED.
- ⑤ IF MINIMUM 100' SPACING FROM THE MID-BLOCK CROSSING CANNOT BE ATTAINED BEFORE THE INTERSECTION, REMOVE THIS SIGN ASSEMBLY.
- ⑥ IF TERRACE IS LESS THAN 6 FEET WIDE, OMIT TEMPORARY PEDESTRIAN BARRICADE FROM THE SIDEWALK TO THE CURB.
- ⑦ PLACE BARRICADE CLOSURE SO THAT THE TEMPORARY PEDESTRIAN BARRICADE END IS AT THE LAST OPEN SIDEWALK ACCESS TO RESIDENCES OR BUSINESSES BEFORE THE SIDEWALK CLOSURE.
- ⑧ IF TEMPORARY PEDESTRIAN BARRICADE PANEL IS WIDER THAN THE SIDEWALK WIDTH, THE PORTION OF THE EXCESS PANEL SHOULD EXTEND INTO THE TERRACE.
- ⑨ MOUNTING HEIGHT OF 5 FEET FROM THE SURFACE TO THE BOTTOM OF THE SIGN.

## LEGEND

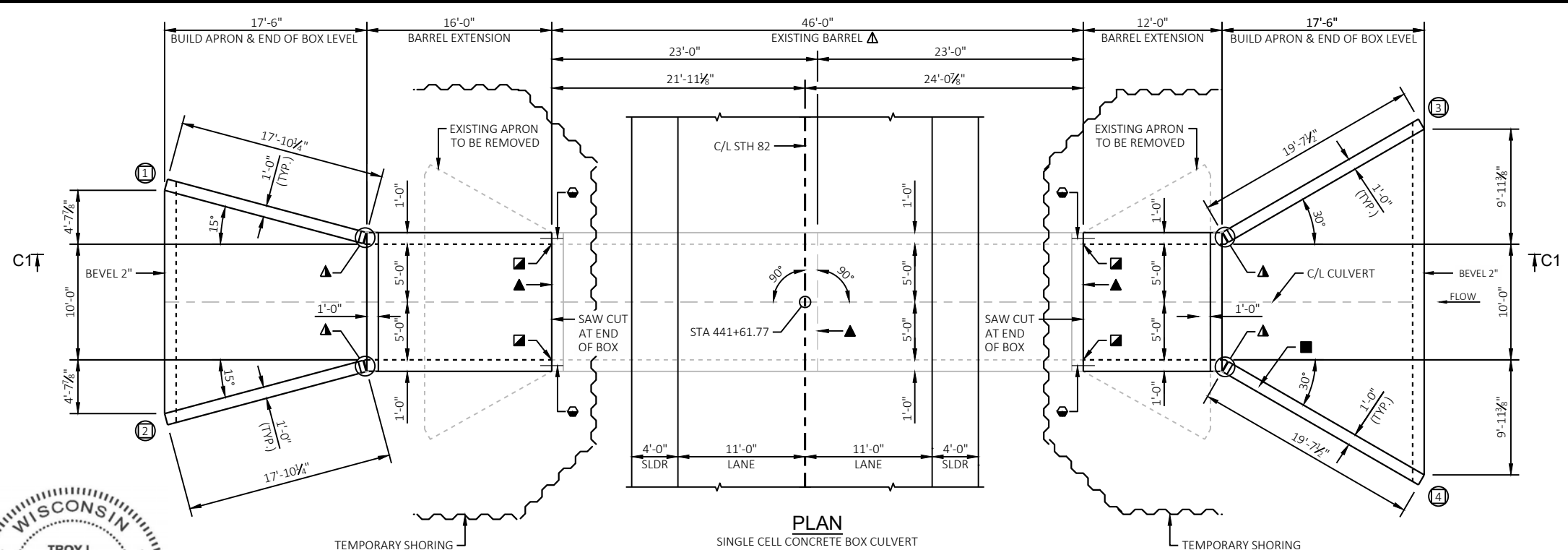
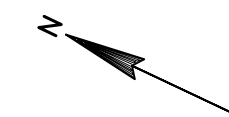
-  TRAFFIC CONTROL DRUM
-  SIGN ON TEMPORARY SUPPORT
-  TEMPORARY CURB RAMP
-  TEMPORARY DETECTABLE WARNING FIELD
-  TEMPORARY PEDESTRIAN SURFACE "A"
-  TEMPORARY PEDESTRIAN SURFACE "B"
-  WORK AREA
-  TEMPORARY PEDESTRIAN BARRICADE
-  DIRECTION OF TRAFFIC



**TEMPORARY PEDESTRIAN CROSSING**

**TRAFFIC CONTROL,  
PEDESTRIAN ACCOMMODATION**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



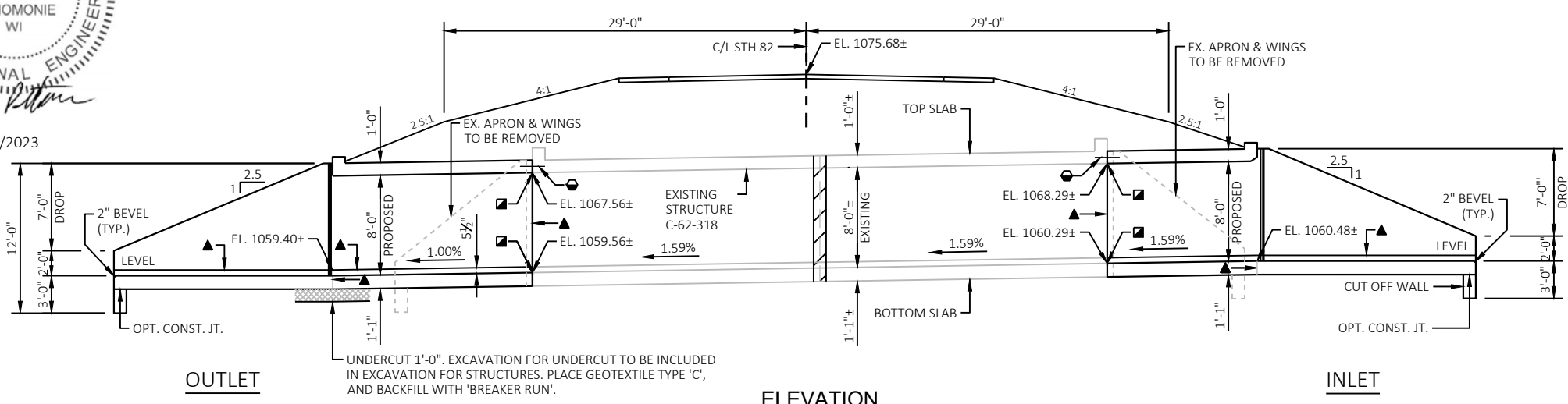
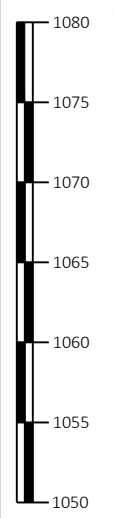
**PLAN**  
SINGLE CELL CONCRETE BOX CULVERT  
(LOOKING UP STATION)

**LEGEND**

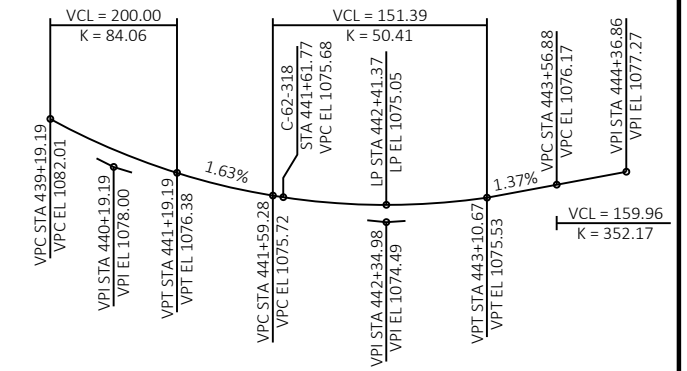
- ⊙ INDICATES WING NUMBER
  - NAME PLATE LOCATION (SEE SHEET 3)
  - ▲ CORNER DETAILS (SEE SHEET 3&5)
  - ▲ CONSTRUCTION JOINT (TYP.)
  - ▲ EXISTING BARREL TO REMAIN IN PLACE
  - ▲ BUILD APRONS & END OF BOX EXTENSIONS LEVEL
  - INSIDE WALLS TO MATCH EXISTING (TYP.)
  - ADHESIVE ANCHORS NO.5 BAR EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP & BOTTOM SLAB)
- NOTE: STRUCTURE BACKFILL REQUIRED BEHIND ALL WING WALLS.



9/6/2023



**ELEVATION**  
SECTION C1



**LIST OF DRAWINGS**

1. GENERAL PLAN & QUANTITIES
2. INLET BOX EXTENSION DETAILS
3. INLET APRON DETAILS
4. OUTLET BOX EXTENSION DETAILS
5. OUTLET APRON DETAILS

**WisDOT CONTACT**  
AARON M. BONK  
(608) 261-0261

**CONSULTANT CONTACT**  
TROY L. PETERSON  
(715) 235-9081

**GENERAL NOTES**

DRAWINGS SHALL NOT BE SCALED.

ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.

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

ALL REINFORCING BARS ARE ENGLISH. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.

THE EXISTING STRUCTURE C-62-318 IS A 46' LONG SINGLE CELL CONCRETE BOX CULVERT, TO BE EXTENDED.

THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-62-318" SHALL BE THE EXISTING GROUNDLINE.

THE CONCRETE IN THE CUTOFF WALL MAY BE PLACED UNDER WATER IF THE EXCAVATION CANNOT BE DE-WATERED.

▲ 18" MINIMUM WIDTH RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP & SLAB AT VERTICAL CONSTRUCTION JOINTS.

ALL VOLUME WHICH CANNOT BE PLACED BEFORE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING THE APRON WING WALLS.

THE ALTERNATE CUTOFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUT OFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUT OFF WALLS.

THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES MAINTENANCE SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".

UNDERCUT 1'-0" SHOWN IN ELEVATION VIEW. EXCAVATIONS FOR UNDERCUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH "BREAKER RUN".

THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS & MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE B" REQUIRED ON THE BOX CULVERT SIDES AND BEHIND APRON WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.

THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR.

**DESIGN DATA (EXTENSION)**

**LIVE LOAD:**

- DESIGN LOADING ————— HL-93
- INVENTORY RATING FACTOR ————— RF = 1.34
- OPERATING RATING FACTOR ————— RF = 1.73
- WIS-SPV ————— 200 KIPS

**EARTH LOAD:**

- DESIGNED FOR 7.0 FT. OF FILL
- HEIGHT RANGE OF 6 TO 7 FEET.

**MATERIAL PROPERTIES:**

- CONCRETE MASONRY ————— f<sub>c</sub>=3,500 P.S.I.
- HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60 ————— f<sub>y</sub>=60,000 P.S.I.

**TRAFFIC VOLUME**

- STH 82:
- A.A.D.T. (2024) ————— 800
- A.A.D.T. (2044) ————— 940
- DESIGN SPEED ————— 55 M.P.H.

**TOTAL ESTIMATED QUANTITIES**

ITEM NO.	BID ITEMS:	TOTAL	UNIT
203.0220.05	REMOVING STRUCTURE (C-62-318)	1	EACH
206.2001.01	EXCAVATION FOR STRUCTURES CULVERTS (C-62-318)	1	EACH
210.2500	BACKFILL STRUCTURE TYPE B	890	TON
311.0110	BREAKER RUN	104	TON
502.4205	ADHESIVE ANCHORS NO. 5 BAR	80	EACH
504.0100	CONCRETE MASONRY CULVERTS	90	CY
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	5800	LB
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	2290	LB
511.1200.01	TEMPORARY SHORING (C-62-318)	450	SF
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	29	SY
645.0105	GEOTEXTILE TYPE C	155	SY
SPV.0060.02	SPECIAL 02, CLEANING BOX CULVERTS	1	EACH
SPV.0090.02	INJECTED CHEMICAL GROUT SEALING FOR CONCRETE CRACK REPAIR	26	LF
	<b>NON-BID ITEMS:</b>		
	FILLER	¾"	SIZE

8

8

NO.	DATE	REVISION	BY

ORIGINAL PLANS PREPARED BY

**Cedar** corporation  
www.cedarcorp.com 800-472-7372

ACCEPTED *[Signature]* SDR **09/06/23** DATE

CHIEF STRUCTURES DESIGN ENGINEER

**STRUCTURE C-62-318**

STH 82 OVER CATTLE PASS

COUNTY: VERNON TOWN/CITY/VILLAGE: STERLING

DESIGN SPEC. REHABILITATION N/A

DESIGNED BY: TLP	DESIGN CK'D: TLP	DRAWN BY: NIT	PLANS CK'D: TLP
------------------	------------------	---------------	-----------------

**GENERAL PLAN & QUANTITIES**

SHEET 1 OF 5

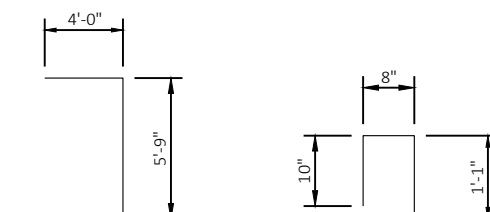
SCALE = 1:1

**BILL OF BARS**

1940 #UNCOATED

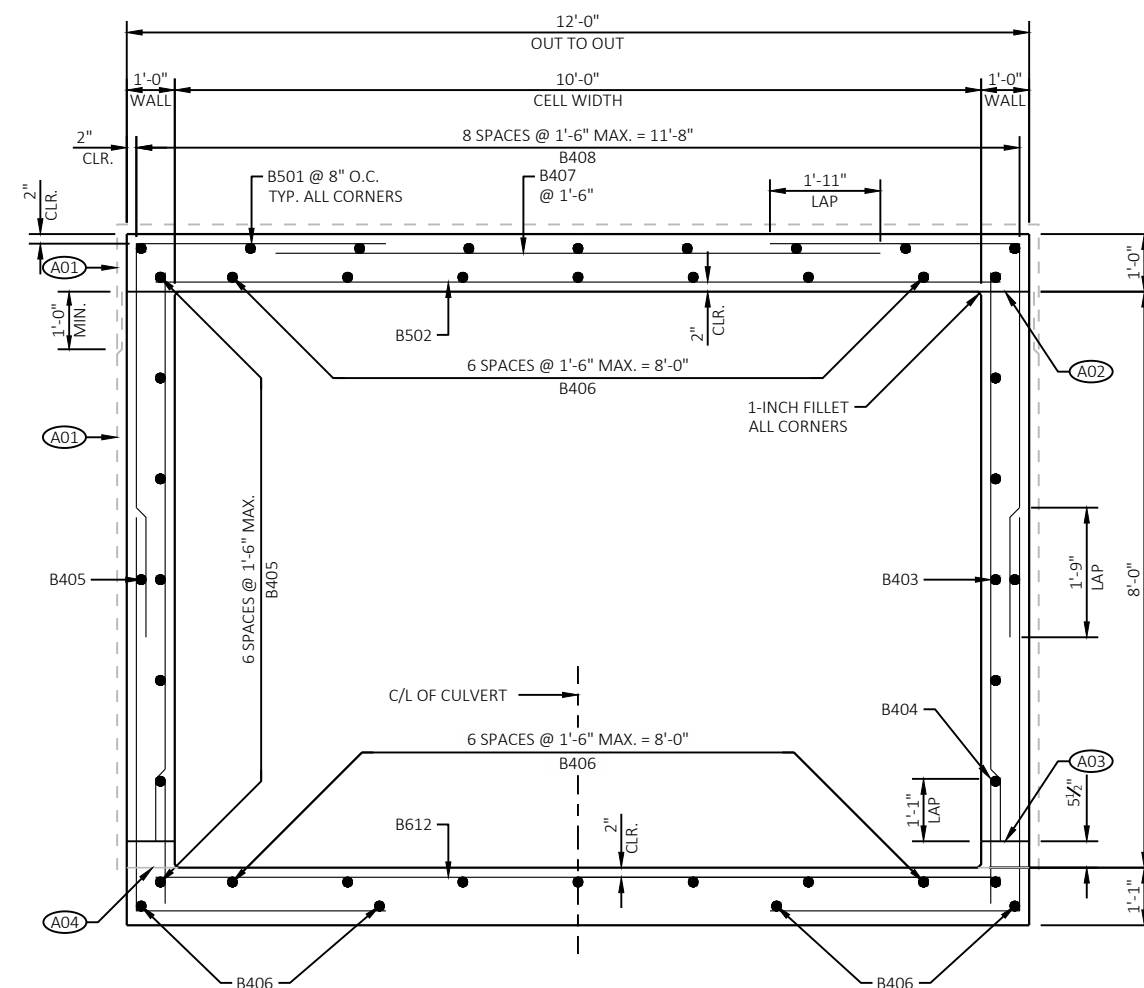
BAR MARK	COMT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
B501		76	9-8	X		BOX CORNERS
B502		19	11-0			BOX TOP SLAB TRANSVERSE
B403		18	8-0			BOX WALLS VERTICAL
B404		18	2-0			BOX WALLS VERTICAL DOWELS
B405		16	11-8			BOX WALLS LONGITUDINAL
B406		18	11-8			BOX TOP & BOTTOM SLAB LONG.
B407		9	7-6			BOX TOP SLAB TRANSVERSE
B408		9	11-8			BOX TOP SLAB LONGITUDINAL
B509		40	2-6			BOX CONSTRUCTION JOINT DOWEL
B410		2	11-8			BOX HEADERS
B311		16	2-10	X		BOX HEADERS
B612		19	11-0			BOX BOTTOM SLAB TRANSVERSE

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

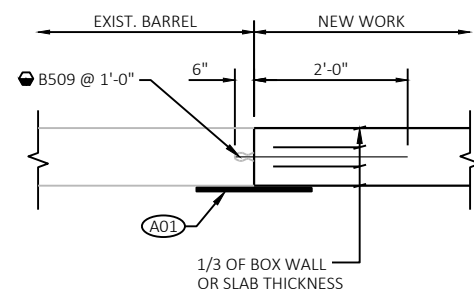


**B501**

**B311**

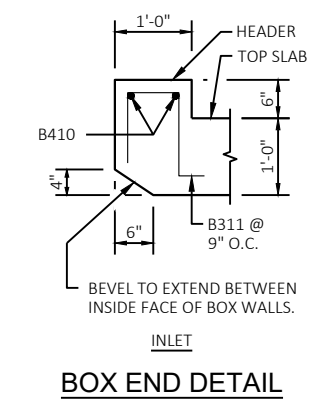


**SECTION THRU BOX**  
(FACING DOWNSTREAM AND NORTH)

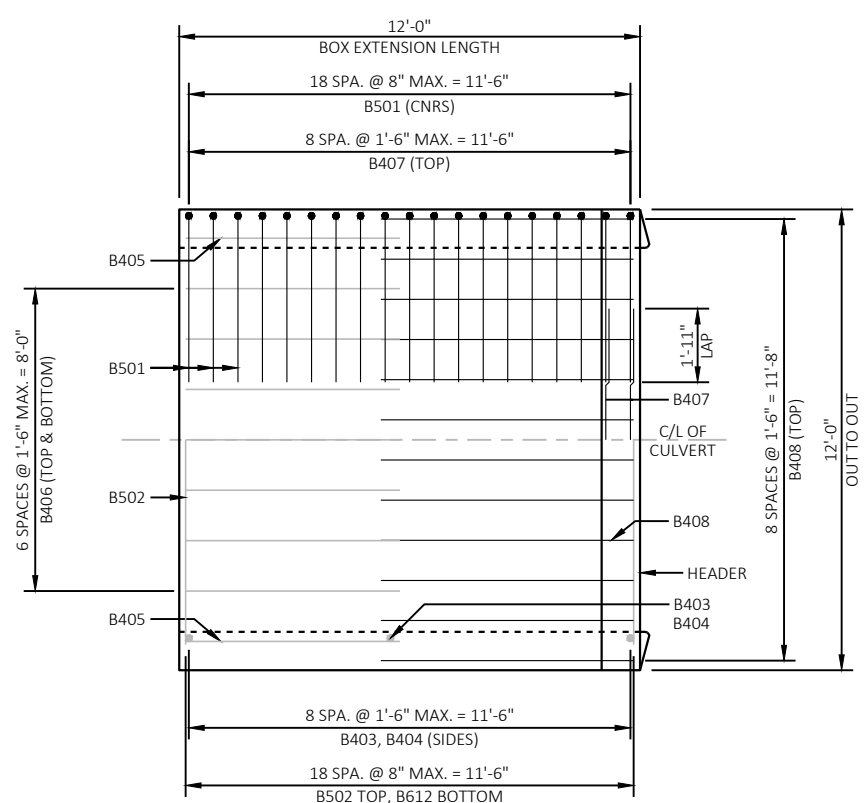


**VERTICAL CONSTRUCTION JOINT**  
TYP. WALLS AND TOP SLAB

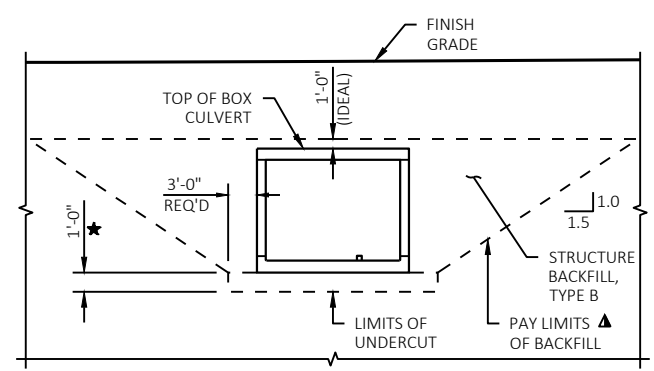
ADHESIVE ANCHORS NO. 5 BAR, EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP & BOTTOM SLAB).



**BOX END DETAIL**



**PLAN VIEW OF PANEL**



**TYPICAL SECTION THRU BOX CULVERT**

▲ BACKFILL PAY LIMITS, BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES, LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.  
★ UNDER CUT 1'-0", EXCAVATION FOR UNDER CUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".

**LEGEND**

- 18" MIN. WIDTH (R.M.W.) RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS. EXTEND 6" MIN. BELOW THE TOP OF THE BOTTOM SLAB. AT CONSTRUCTION JOINTS, EXTEND WATERPROOFING 1'-0" MIN. BELOW BOTTOM OF THE TOP SLAB.
- A01 OPTIONAL CONSTRUCTION JOINT. OMIT 1" FILLET IF OPTIONAL CONSTRUCTION JOINT IS USED.
- A02 CONSTRUCTION JOINT
- A04 ALTERNATE CONSTRUCTION JOINT. OMIT 1" FILLET IF ALTERNATE CONSTRUCTION JOINT IS USED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**STRUCTURE C-62-318**

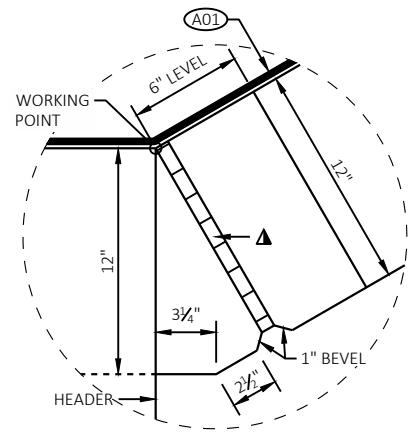
INLET BOX  
EXTENSION DETAILS

DRAWN BY: NJT  
PLANS CK'D: TLP

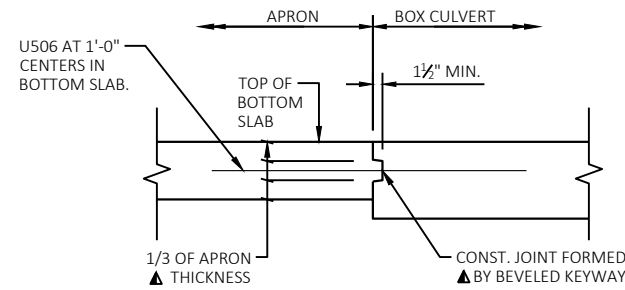
SHEET 2 OF 5

8

8

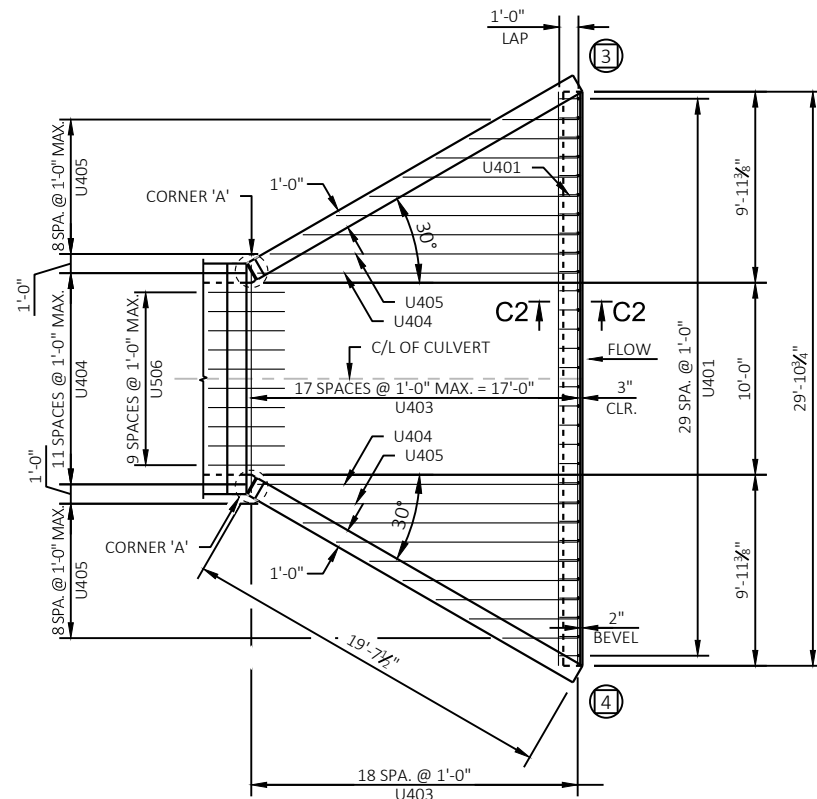


CORNER 'A'

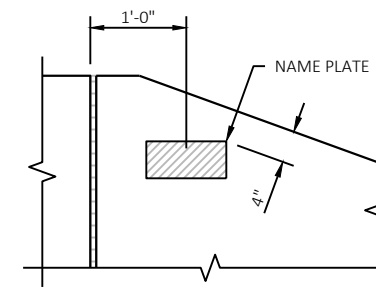


APRON CONNECTION DETAIL

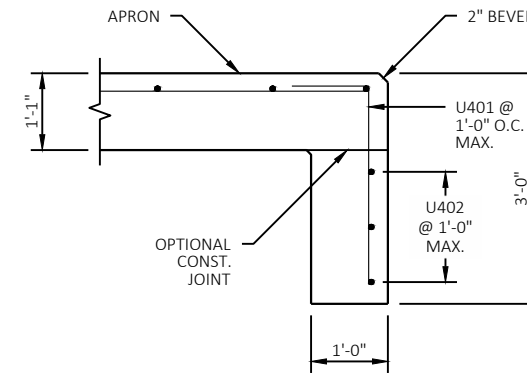
▲ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING.



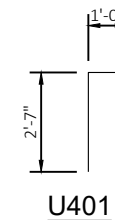
INLET APRON REINFORCEMENT



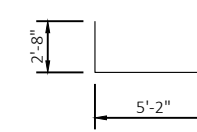
NAME PLATE LOCATION WING 4



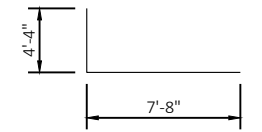
INLET CUT-OFF WALL SECTION C2



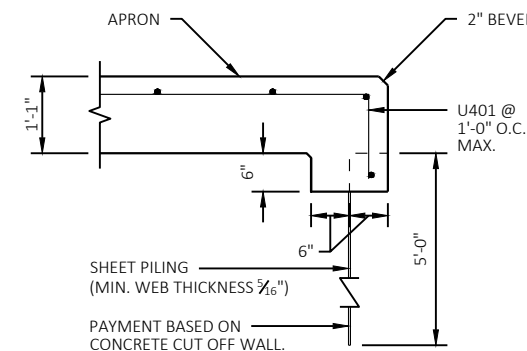
U401



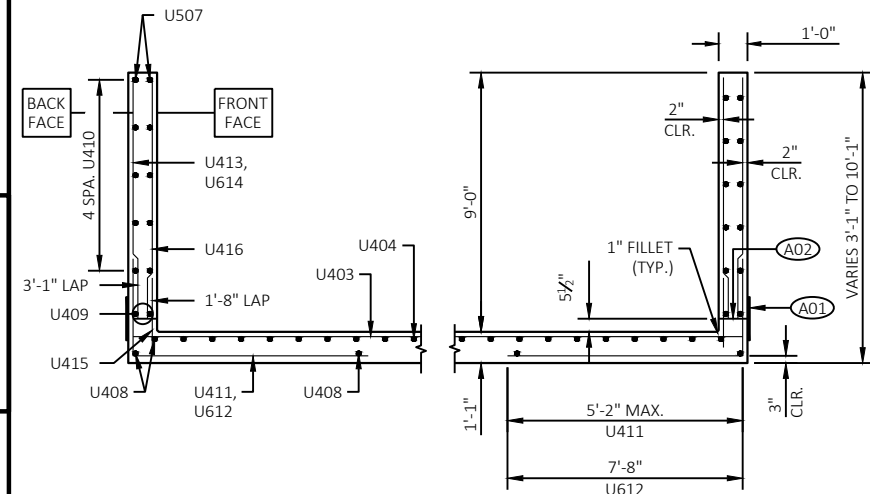
U411



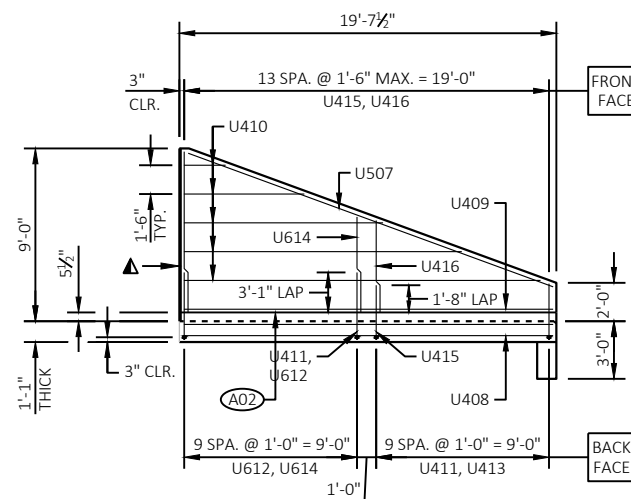
U612



ALTERNATE CUT-OFF WALL SECTION C2



SECTION THRU WINGS 3 & 4



WINGS 3 & 4

3/8" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

BILL OF BARS

BAR MARK	COAT	1200# COATED		670# UNCOATED		LOCATION
		NO. REQ'D	LENGTH	BENT	BAR SERIES	
U401		31	3-6	X		CUTOFF WALL VERTICAL
U402		3	29-6			CUTOFF WALL HORIZONTAL
U403		18	20-8		☑	APRON TRANSVERSE
U404		12	17-0			APRON LONGITUDINAL
U405		18	9-2		☑	APRON LONGITUDINAL
U506		10	4-0			APRON CONNECTION
U507	X	4	20-5			WINGS 3&4 HORIZ. TOP BOTH FACES
U408	X	6	19-1			WINGS 3&4 HORIZ. APRON SLAB
U409	X	4	19-1			WINGS 3&4 HORIZ. BOT. BOTH FACES
U410	X	20	10-7		☑	WINGS 3&4 HORIZONTAL
U411	X	20	7-9	X		WINGS 3&4 CORNER
U612	X	20	11-10	X		WINGS 3&4 CORNER
U413	X	20	3-1		☑	WINGS 3&4 VERTICAL BACK FACE
U614	X	20	6-8		☑	WINGS 3&4 VERTICAL BACK FACE
U415	X	28	2-8			WINGS 3&4 VERTICAL F.F. DOWELS
U416	X	28	4-10		☑	WINGS 3&4 VERTICAL FRONT FACE

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

☑ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BUNDLE AND TAG EACH SERIES SEPARATELY

BAR MARK	NO. REQUIRED	LENGTH
U403	1 SERIES OF 18	11-10 TO 29-6
U405	2 SERIES OF 9	2-3 TO 16-1
U410	4 SERIES OF 5	4-0 TO 19-2
U413	2 SERIES OF 10	1-4 TO 4-10
U614	2 SERIES OF 10	5-0 TO 8-4
U416	2 SERIES OF 14	1-4 TO 8-4

LEGEND

- ⊙ INDICATES WING NUMBER
- ⊙ A01 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZONTAL CONSTRUCTION JOINT IN WING.
- ⊙ A02 HORIZONTAL CONSTRUCTION JOINT

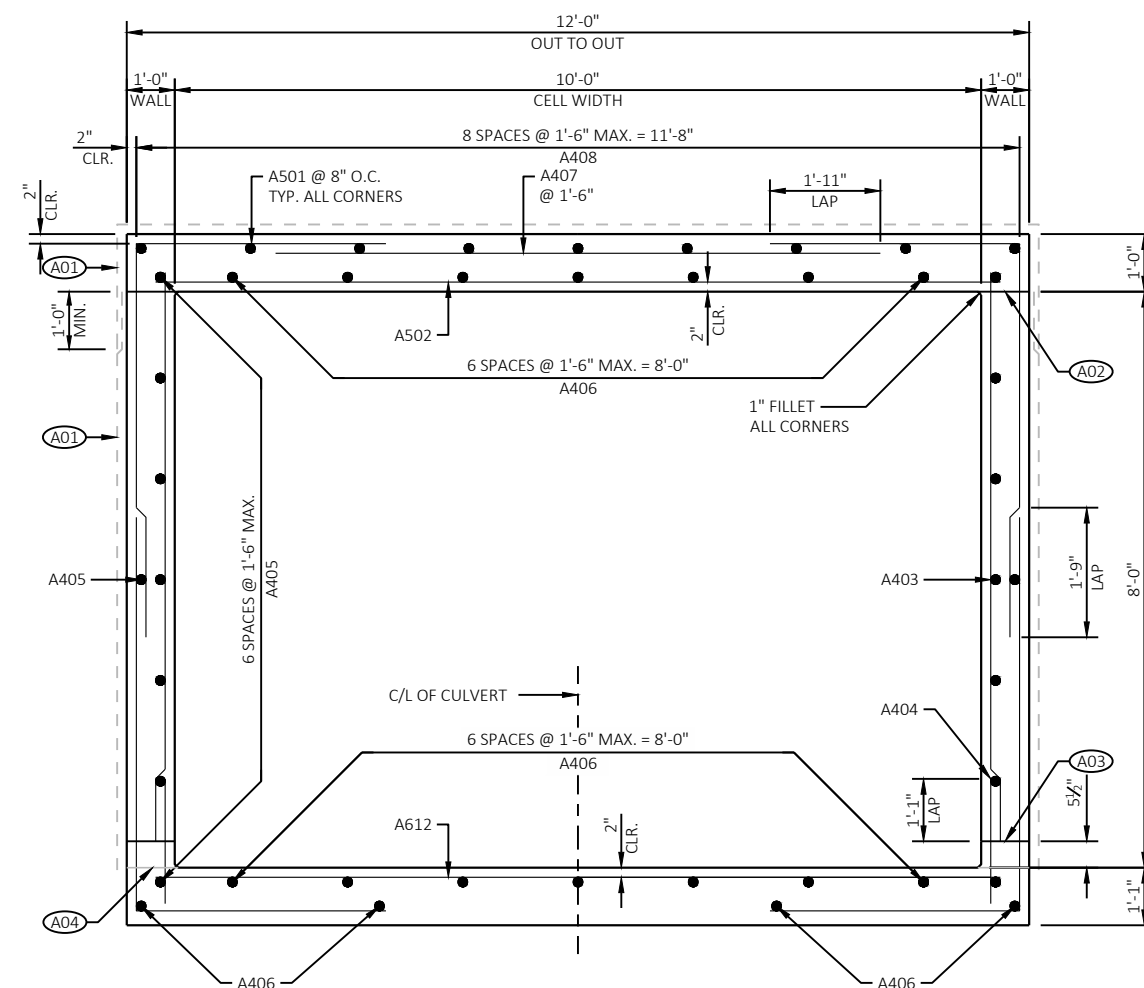
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE C-62-318			
DRAWN BY		NTJ	PLANS CK'D. TLP
INLET APRON DETAILS			SHEET 3 OF 5

**BILL OF BARS**

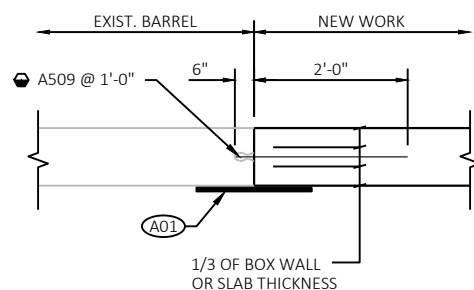
2690#UNCOATED

BAR MARK	COMT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
A501		100	9-8	X		BOX CORNERS
A502		25	11-0			BOX TOP SLAB TRANSVERSE
A403		24	8-0			BOX WALLS VERTICAL
A404		24	2-0			BOX WALLS VERTICAL DOWELS
A405		16	15-8			BOX WALLS LONGITUDINAL
A406		18	15-8			BOX TOP & BOTTOM SLAB LONG.
A407		12	7-6			BOX TOP SLAB TRANSVERSE
A408		9	15-8			BOX TOP SLAB LONGITUDINAL
A509		40	2-6			BOX CONSTRUCTION JOINT DOWEL
A410		2	11-8			BOX HEADERS
A311		16	3-0	X		BOX HEADERS
A612		25	15-8			BOX BOTTOM SLAB TRANSVERSE

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

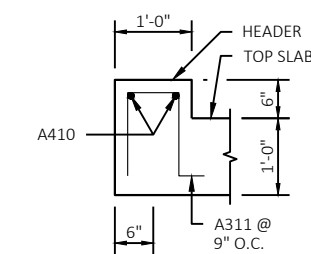


**SECTION THRU BOX**  
(FACING DOWNSTREAM AND SOUTH)

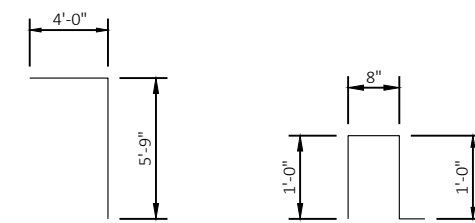


**VERTICAL CONSTRUCTION JOINT**  
TYP. WALLS AND TOP SLAB

ADHESIVE ANCHORS NO. 5 BAR, EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP & BOTTOM SLAB).

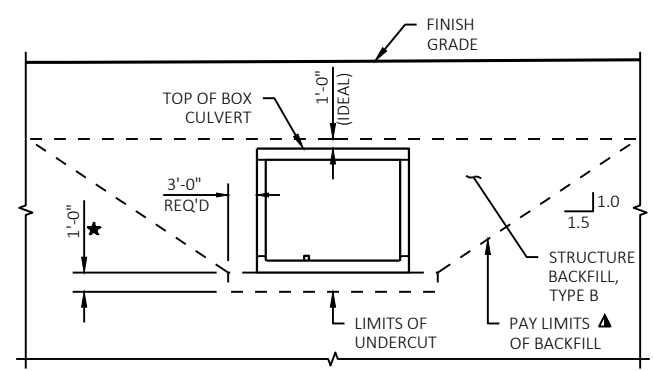


**BOX END DETAIL**



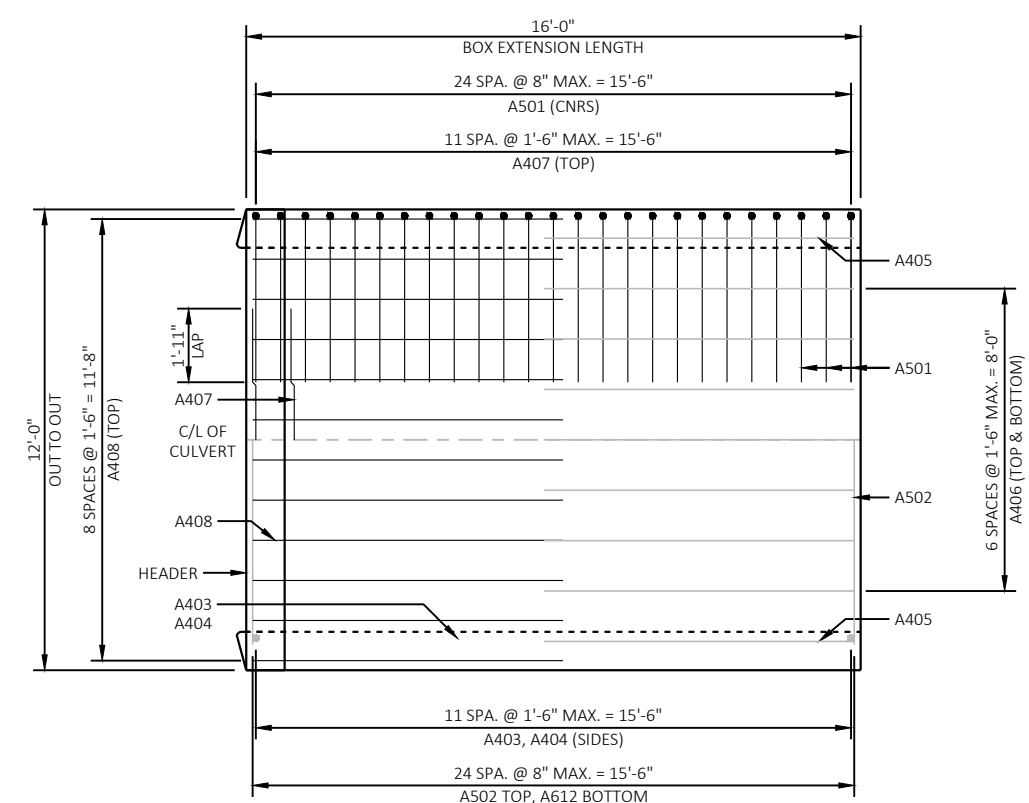
**A501**

**A311**



**TYPICAL SECTION THRU BOX CULVERT**

▲ BACKFILL PAY LIMITS, BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES, LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.  
★ UNDER CUT 2'-0", EXCAVATION FOR UNDER CUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".



**PLAN VIEW OF PANEL**

**LEGEND**

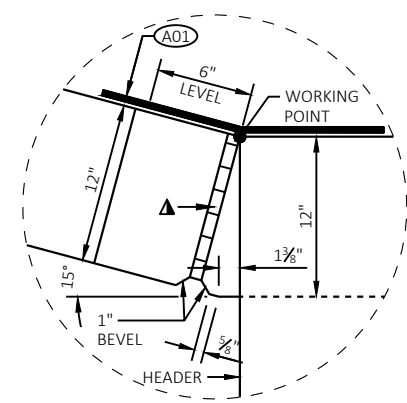
- 18" MIN. WIDTH (R.M.W.) RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS. EXTEND 6" MIN. BELOW THE TOP OF THE BOTTOM SLAB. AT CONSTRUCTION JOINTS, EXTEND WATERPROOFING 1'-0" MIN. BELOW BOTTOM OF THE TOP SLAB.
- A01 OPTIONAL CONSTRUCTION JOINT. OMIT 1" FILLET IF OPTIONAL CONSTRUCTION JOINT IS USED.
- A02 CONSTRUCTION JOINT
- A03 ALTERNATE CONSTRUCTION JOINT. OMIT 1" FILLET IF ALTERNATE CONSTRUCTION JOINT IS USED.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE C-62-318</b>			
DRAWN BY		NJT	PLANS CK'D. TLP
<b>OUTLET BOX EXTENSION DETAILS</b>			SHEET 4 OF 5

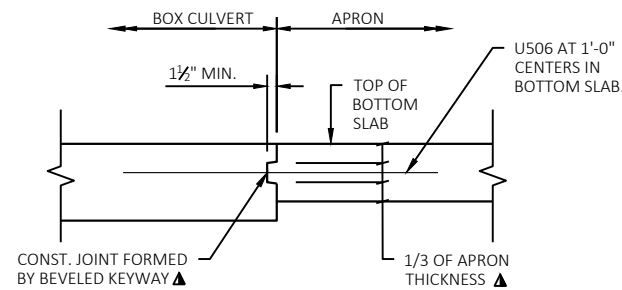
**BILL OF BARS**

BAR MARK	COAT	1090# COATED		500# UNCOATED		LOCATION
		NO. REQ'D	LENGTH	BENT	BAR SERIES	
D401		20	3-6	X		CUTOFF WALL VERTICAL
D402		3	19-0			CUTOFF WALL HORIZONTAL
D403		18	15-4		☒	APRON TRANSVERSE
D404		12	17-0			APRON LONGITUDINAL
D405		8	9-4		☒	APRON LONGITUDINAL
D506		10	4-0			APRON CONNECTION
D507	X	4	18-10			WINGS 1&2 HORIZ. TOP BOTH FACES
D408	X	6	17-6			WINGS 1&2 HORIZ. APRON SLAB
D409	X	4	17-6			WINGS 1&2 HORIZ. BOT. BOTH FACES
D410	X	20	10-4		☒	WINGS 1&2 HORIZONTAL
D411	X	18	7-9	X		WINGS 1&2 HORIZ. CORNER
D612	X	18	11-10	X		WINGS 1&2 CORNER
D413	X	18	2-11		☒	WINGS 1&2 VERTICAL BACK FACE
D614	X	18	6-7		☒	WINGS 1&2 VERTICAL BACK FACE
D415	X	26	2-8			WINGS 1&2 VERTICAL F.F. DOWELS
D416	X	26	4-10		☒	WINGS 1&2 VERTICAL FRONT FACE

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.  
 ☒ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

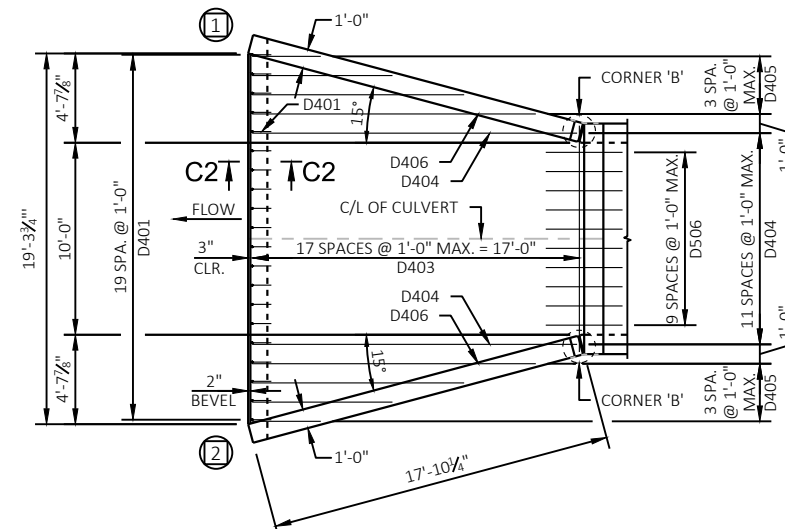


**CORNER 'B'**

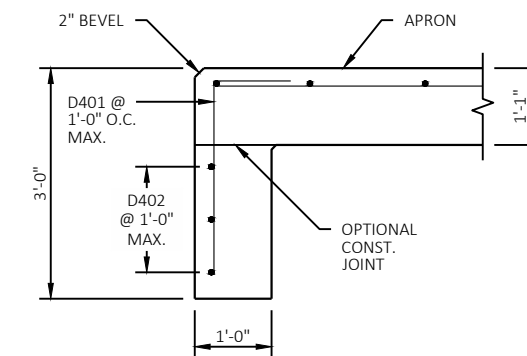
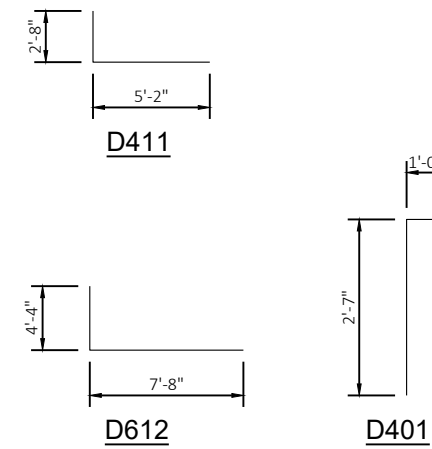


**APRON CONNECTION DETAIL**

▲ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING.

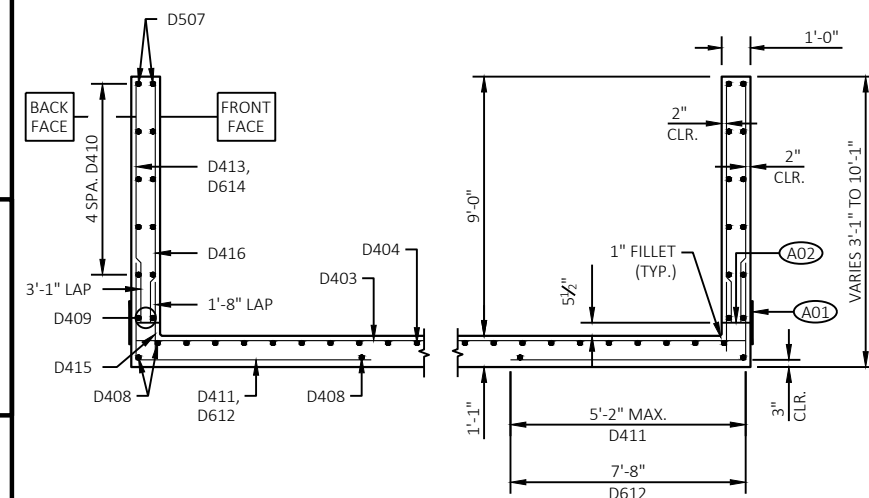


**OUTLET APRON REINFORCEMENT**

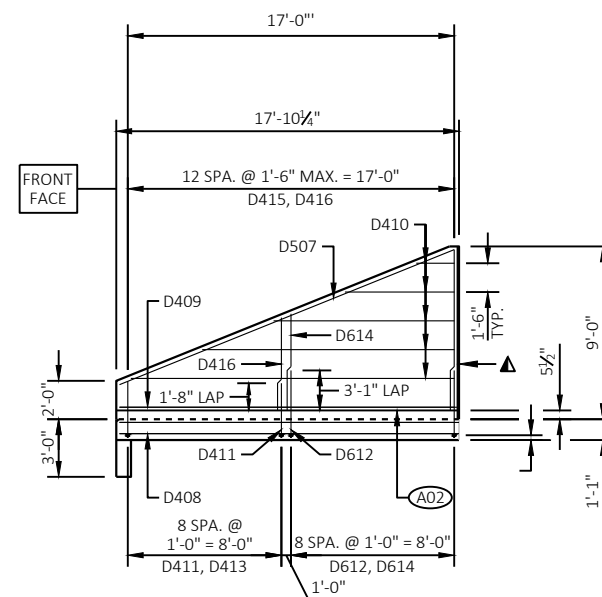


**CUT-OFF WALL**  
SECTION C2

**ALTERNATE CUTOFF WALL**  
SECTION C2



**SECTION THRU WINGS 1 & 2**



**WINGS 1 & 2**

▲ 3/4\"/>

**BAR SERIES TABLE**

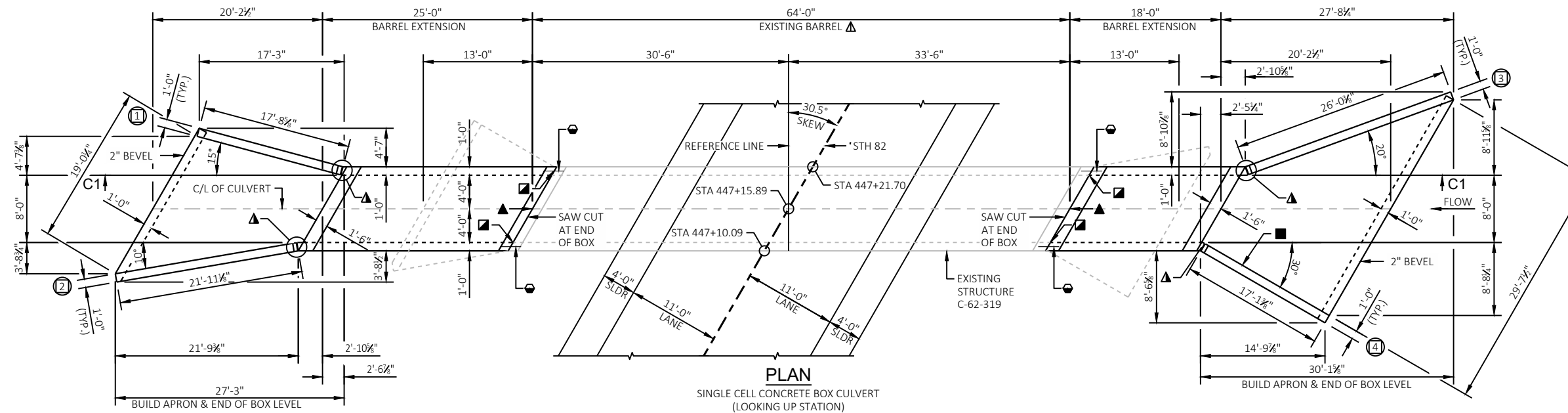
BUNDLE AND TAG EACH SERIES SEPARATELY

BAR MARK	NO. REQUIRED	LENGTH
D403	1 SERIES OF 18	11-8 TO 19-0
D405	2 SERIES OF 4	3-8 TO 15-0
D410	4 SERIES OF 5	3-2 TO 17-6
D413	2 SERIES OF 9	1-4 TO 4-6
D614	2 SERIES OF 9	4-10 TO 8-4
D416	2 SERIES OF 13	1-4 TO 8-4

**LEGEND**

- Ⓢ INDICATES WING NUMBER
- ⓐ01 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZONTAL CONSTRUCTION JOINT IN WING.
- ⓐ02 HORIZONTAL CONSTRUCTION JOINT

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
<b>STRUCTURE C-62-318</b>			
DRAWN BY		NJT	PLANS CK'D. TLP
<b>OUTLET APRON DETAILS</b>			SHEET 5 OF 5



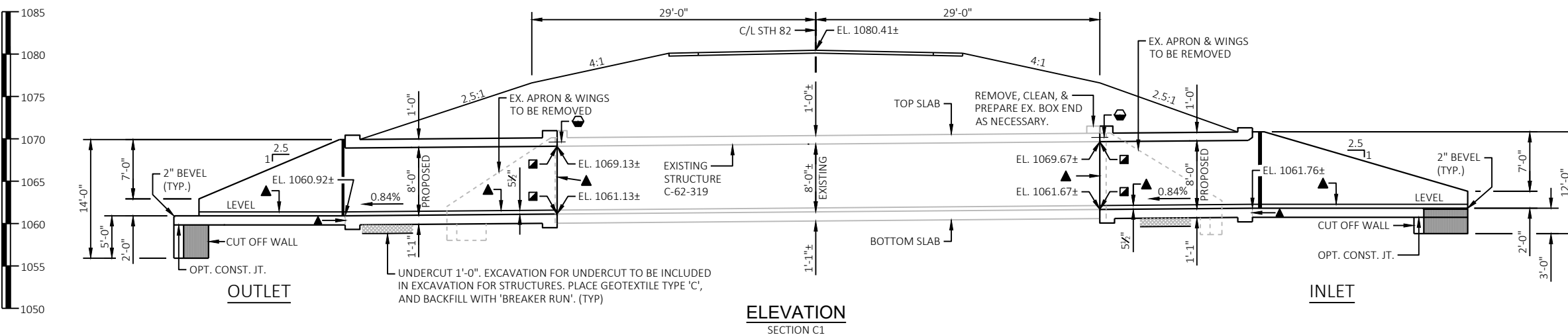
**LEGEND**

- ⊙ INDICATES WING NUMBER
  - NAME PLATE LOCATION (SEE SHEET 3)
  - ▲ CORNER DETAILS (SEE SHEET 3 & 5)
  - ▲ CONSTRUCTION JOINT (TYP.)
  - ▲ EXISTING BARREL TO REMAIN IN PLACE
  - ▲ BUILD APRONS & END OF BOX EXTENSIONS LEVEL
  - INSIDE WALLS TO MATCH EXISTING (TYP.)
  - ADHESIVE ANCHORS NO.5 BAR EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP & BOTTOM SLAB)
- NOTE: STRUCTURE BACKFILL REQUIRED BEHIND ALL WING WALLS.



**LIST OF DRAWINGS**

1. GENERAL PLAN & QUANTITIES
2. INLET BOX EXTENSION DETAILS
3. INLET APRON DETAILS
4. OUTLET BOX EXTENSION DETAILS
5. OUTLET APRON DETAILS



**GENERAL NOTES**

DRAWINGS SHALL NOT BE SCALED.  
 ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.  
 BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS SHOWN OR NOTED OTHERWISE.  
 ALL REINFORCING BARS ARE ENGLISH. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.  
 JOINT FILLER SHALL CONFORM TO THE REQUIREMENTS OF A.A.S.H.T.O. DESIGNATION M 153, TYPE I, II OR III OR A.A.S.H.T.O. DESIGNATION M 213.  
 THE EXISTING STRUCTURE C-62-319 IS A 46' LONG SINGLE CELL CONCRETE BOX CULVERT, TO BE EXTENDED.  
 THE UPPER LIMITS OF "EXCAVATION FOR STRUCTURES CULVERTS C-62-319" SHALL BE THE EXISTING GROUNDLINE.  
 THE CONCRETE IN THE CUTOFF WALL MAY BE PLACED UNDER WATER IF THE EXCAVATION CANNOT BE DE-WATERED.  
 18" MINIMUM WIDTH RUBBERIZED MEMBRANE WATERPROOFING UP WALLS AND ACROSS TOP & SLAB AT VERTICAL CONSTRUCTION JOINTS.  
 ALL VOLUME WHICH CANNOT BE PLACED BEFORE CULVERT CONSTRUCTION AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL WITHIN THE LENGTH OF THE CULVERT INCLUDING THE APRON WING WALLS.  
 THE ALTERNATE CUTOFF WALL MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONCRETE CUTOFF WALLS. PAYMENT SHALL BE BASED ON CONCRETE CUTOFF WALLS.  
 THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES MAINTENANCE SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS IN CHAPTER 36 STANDARDS OF THE CURRENT WISCONSIN DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE "TOTAL ESTIMATED QUANTITIES".  
 UNDERCUT 1'-0" SHOWN IN ELEVATION VIEW. EXCAVATIONS FOR UNDERCUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. BACKFILL WITH "BREAKER RUN".  
 THE BACKFILL QUANTITIES ARE BASED ON THE PAY LIMITS SHOWN ON THE PLANS & MAY NOT REFLECT ACTUAL PLACED QUANTITIES. "BACKFILL STRUCTURE TYPE B" REQUIRED ON THE BOX CULVERT SIDES AND BEHIND APRON WINGS FOR 3 FEET. BACKFILL PLACED BEYOND PAY LIMITS OR EXCEEDING PLAN QUANTITIES SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES.  
 LOCATE NAME PLATE ON NEAREST RIGHT WING TRAVELING UP STATION, FACE NAME PLATE UP STATION.  
 THE CONTRACTOR SHALL SUPPLY A NEW NAME PLATE IN ACCORDANCE WITH SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS AND THE STANDARD DETAIL DRAWINGS. NAME PLATE TO SHOW ORIGINAL CONSTRUCTION YEAR.

**DESIGN DATA (EXTENSION)**

<b>LIVE LOAD:</b>	
DESIGN LOADING	HL-93
INVENTORY RATING FACTOR	RF = 1.75
OPERATING RATING FACTOR	RF = 2.27
WIS-SPV	250 KIPS
<b>EARTH LOAD:</b>	
DESIGNED FOR 10 FT. OF FILL	
FILL RANGE FROM 9 TO 10 FT.	
<b>MATERIAL PROPERTIES:</b>	
CONCRETE MASONRY	f <sub>c</sub> =3,500 P.S.I.
HIGH STRENGTH BAR STEEL REINFORCEMENT, GRADE 60	f <sub>y</sub> =60,000 P.S.I.
<b>TRAFFIC VOLUME</b>	
STH 82:	
A.A.D.T. (2024)	800
A.A.D.T. (2044)	940
DESIGN SPEED	55 M.P.H.

**TOTAL ESTIMATED QUANTITIES**

ITEM NO.	BID ITEMS:	TOTAL	UNIT
203.0220.06	REMOVING STRUCTURE (C-62-319)	1	EACH
206.2001.02	EXCAVATION FOR STRUCTURES CULVERTS (C-62-319)	1	EACH
210.2500	BACKFILL STRUCTURE TYPE B	1290	TON
311.0110	BREAKER RUN	115	TON
502.4205	ADHESIVE ANCHORS NO. 5 BAR	72	EACH
504.0100	CONCRETE MASONRY CULVERTS	109	CY
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	7380	LB
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	2530	LB
511.1200.02	TEMPORARY SHORING C-62-319	450	SF
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	30	SY
645.0105	GEOTEXTILE TYPE C	173	SY
SPV.0060.02	SPECIAL 02, CLEANING BOX CULVERTS	1	EACH
<b>NON-BID ITEMS:</b>			
	FILLER	¾"	SIZE

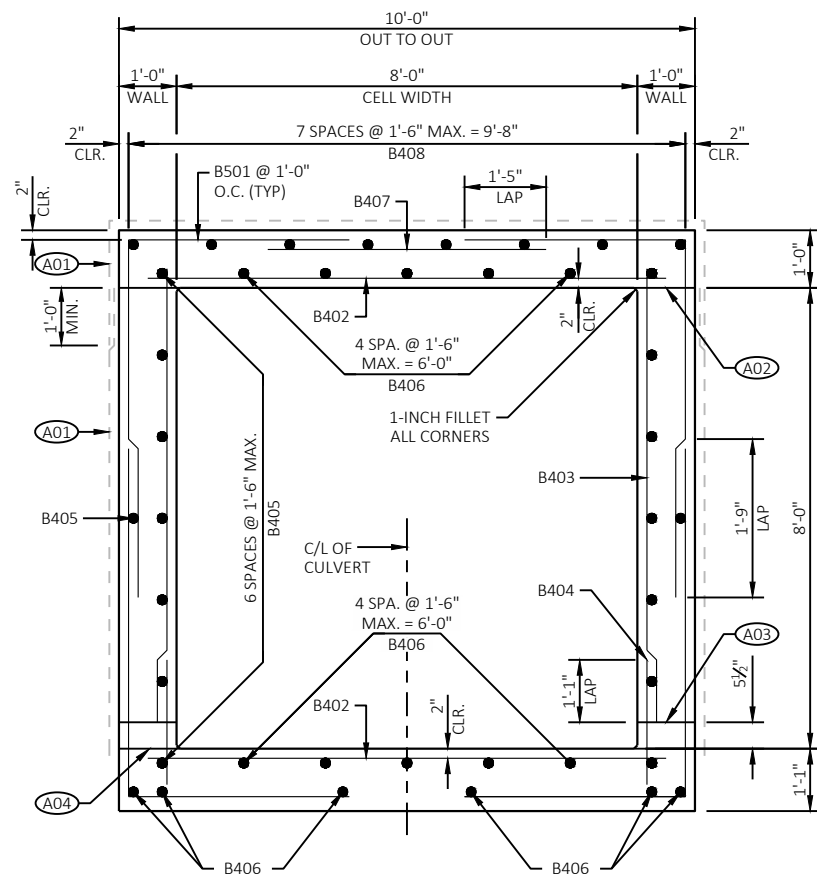
8

8

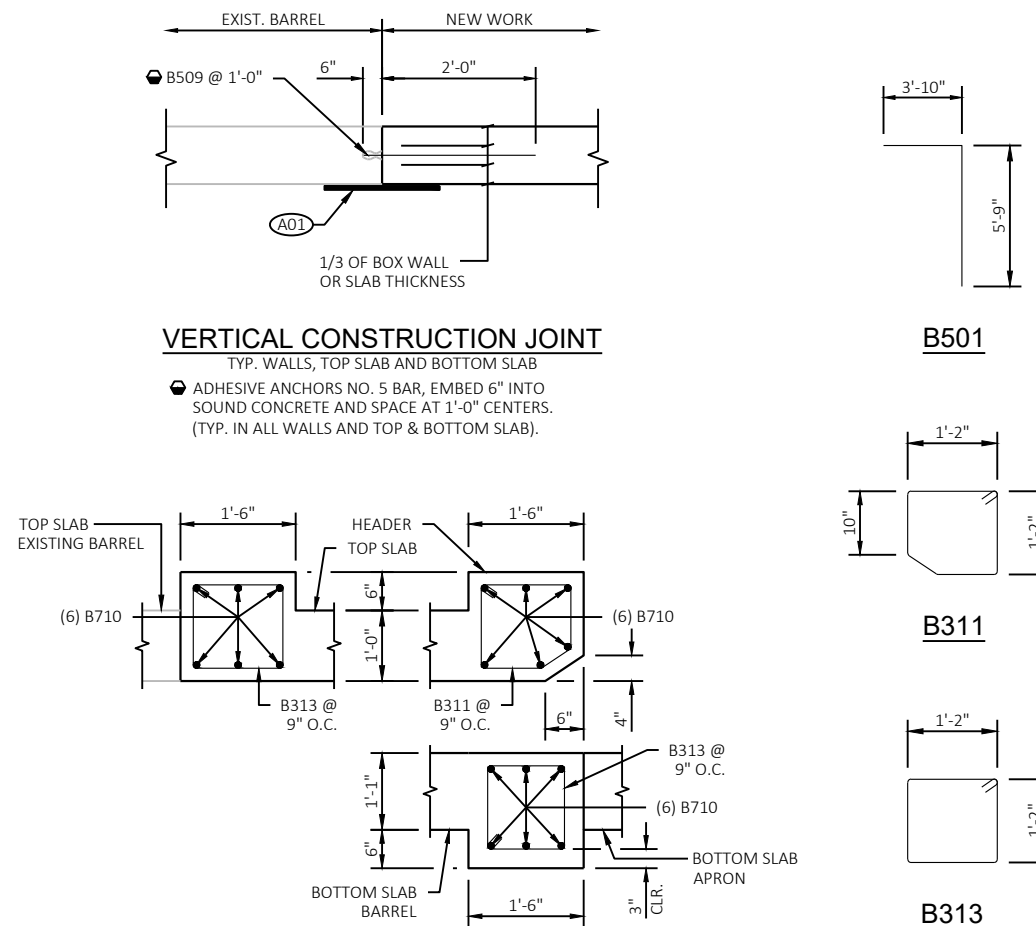
WisDOT CONTACT: AARON M. BONK (608) 261-0261  
 CONSULTANT CONTACT: TROY L. PETERSON (715) 235-9081

NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY			
<b>Cedar</b> corporation			
www.cedarcorp.com 800-472-7372			
ACCEPTED	SIGNED		DATE
<i>[Signature]</i>		09/06/23	
CHIEF STRUCTURES DESIGN ENGINEER			
<b>STRUCTURE C-62-319</b>			
STH 82 OVER DRAINAGE WAY			
COUNTY	VERNON	TOWN/VILLAGE	STERLING
DESIGN SPEC.	REHABILITATION N/A		
DESIGNED BY	DESIGN CK'D.	DRAWN BY	PLANS CK'D.
CCW	CK'D. TJP	NIT	TJP
<b>GENERAL PLAN &amp; QUANTITIES</b>			SHEET 1 OF 5





SECTION THRU BOX



**VERTICAL CONSTRUCTION JOINT**

TYP. WALLS, TOP SLAB AND BOTTOM SLAB  
 ADHESIVE ANCHORS NO. 5 BAR, EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP & BOTTOM SLAB).

**BOX END DETAILS**

**BILL OF BARS**

2730#UNCOATED

BAR MARK	COMT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
B501		84	9-6	X		BOX CORNERS
B402		50	9-0			BOX TOP & BOTTOM SLAB TRANS.
B403		38	8-0			BOX WALLS VERTICAL
B404		38	2-0			BOX WALLS VERTICAL DOWELS
B405		16	17-8			BOX WALLS LONGITUDINAL
B406		16	17-8			BOX TOP & BOTTOM SLAB LONG.
B407		9	4-10			BOX TOP SLAB TRANSVERSE
B408		8	17-8			BOX TOP SLAB LONGITUDINAL
B509		36	2-6			BOX CONSTRUCTION JOINT DOWEL
B710		24	11-1			BOX HEADERS
B311		16	4-9	X		BOX HEADERS
B412		24	5-4		X	BOX TOP & BOTTOM SLAB TRANS.
B313		48	5-1	X		BOX HEADER INLET TOP SLAB

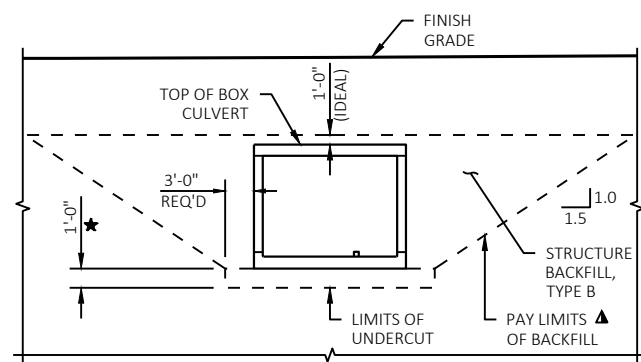
NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

**BAR SERIES TABLE**

BUNDLE AND TAG EACH SERIES SEPARATELY

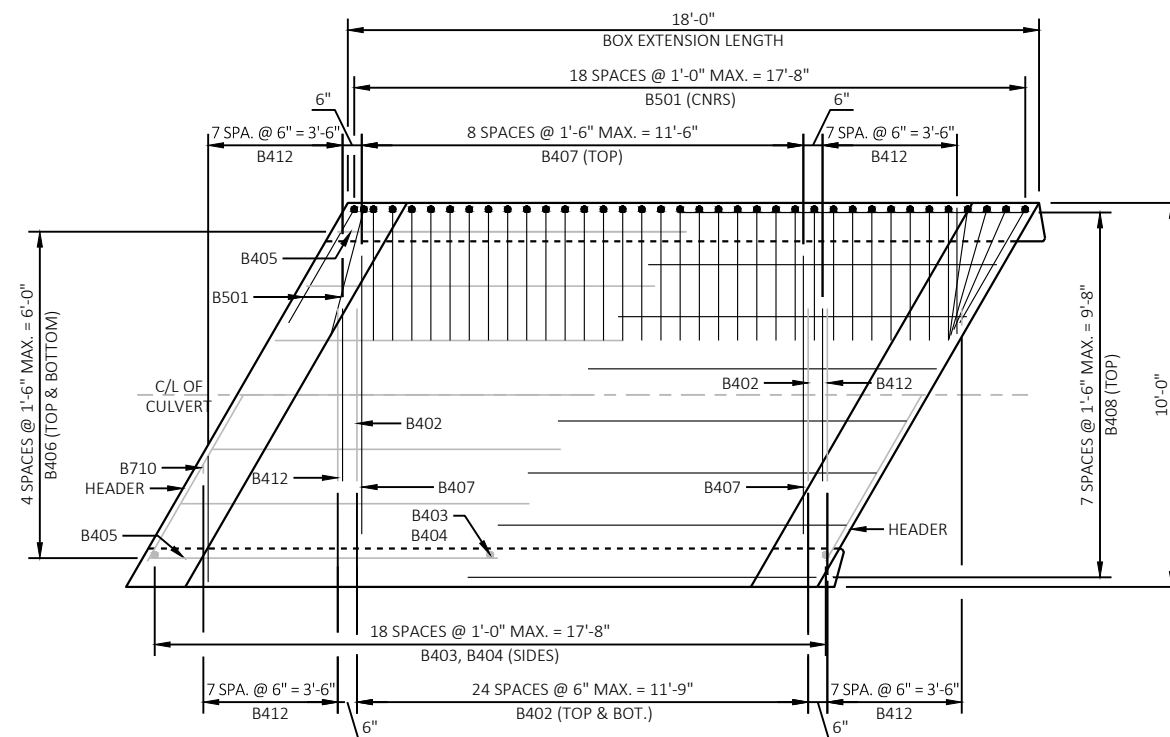
BAR MARK	NO. REQUIRED	LENGTH
B412	4 SERIES OF 8	2'-4" TO 8'-4"



TYPICAL SECTION THRU BOX CULVERT

▲ BACKFILL PAY LIMITS, BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES, LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

★ UNDER CUT 1'-0", EXCAVATION FOR UNDER CUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".



PLAN VIEW OF PANEL

**LEGEND**

- 18" MIN. WIDTH (R.M.W.) RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS. EXTEND 6" MIN. BELOW THE TOP OF THE BOTTOM SLAB. AT CONSTRUCTION JOINTS, EXTEND WATERPROOFING 1'-0" MIN. BELOW BOTTOM OF THE TOP SLAB.
- A01
- A02 OPTIONAL CONSTRUCTION JOINT. OMIT 1" FILLET IF OPTIONAL CONSTRUCTION JOINT IS USED.
- A03 CONSTRUCTION JOINT
- A04 ALTERNATE CONSTRUCTION JOINT. OMIT 1" FILLET IF ALTERNATE CONSTRUCTION JOINT IS USED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-62-319

DRAWN BY: NJT PLANS CK'D: TLP

INLET BOX  
EXTENSION DETAILS

SHEET 2 OF 5

**BILL OF BARS**

BAR MARK	COAT	1310# COATED		610# UNCOATED		LOCATION
		NO. REQ'D	LENGTH	BEND	BAR SERIES	
U401		16	3-6	X		CUTOFF WALL VERTICAL
U402		3	30-3			CUTOFF WALL HORIZONTAL
U403		18	20-7		X	APRON TRANSVERSE
U404		9	19-10			APRON LONGITUDINAL
U405		8	10-2		X	APRON LONGITUDINAL
U506		8	4-0			APRON CONNECTION
U507	X	2	18-0			WINGS 4 HORIZ. TOP BOTH FACES
U408	X	3	16-8			WINGS 4 HORIZ. APRON SLAB
U409	X	2	16-8			WINGS 4 HORIZ. BOT. BOTH FACES
U410	X	10	10-3		X	WINGS 4 HORIZONTAL
U411	X	22	6-3	X		WINGS 3&4 CORNER
U612	X	23	11-10	X		WINGS 3&4 CORNER
U413	X	9	3-0		X	WINGS 4 VERTICAL BACK FACE
U614	X	9	6-8		X	WINGS 4 VERTICAL BACK FACE
U415	X	30	2-8			WINGS 3&4 VERTICAL F.F. DOWELS
U416	X	12	4-10		X	WINGS 4 VERTICAL FRONT FACE
U517	X	2	26-7			WINGS 3 HORIZ. TOP BOTH FACES
U418	X	3	25-6			WINGS 3 HORIZ. APRON SLAB
U419	X	2	25-7			WINGS 3 HORIZ. BOT. BOTH FACES
U420	X	10	15-3		X	WINGS 3 HORIZONTAL
U421	X	13	3-0		X	WINGS 3 VERTICAL BACK FACE
U622	X	13	6-7		X	WINGS 3 VERTICAL BACK FACE
U423	X	18	4-10		X	WINGS 3 VERTICAL FRONT FACE
U424		8	10-10		X	APRON LONGITUDINAL

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

X LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

**BAR SERIES TABLE**

BUNDLE AND TAG EACH SERIES SEPARATELY

BAR MARK	NO. REQUIRED	LENGTH
U403	1 SERIES OF 18	11-0 TO 30-2
U405	1 SERIES OF 8	1-11 TO 18-5
U410	2 SERIES OF 5	3-8 TO 16-10
U413	1 SERIES OF 9	1-4 TO 4-8
U614	1 SERIES OF 9	5-0 TO 8-4
U416	1 SERIES OF 13	1-4 TO 8-4
U420	2 SERIES OF 5	5-0 TO 25-6
U421	1 SERIES OF 13	1-4 TO 4-8
U622	1 SERIES OF 14	4-10 TO 8-4
U423	1 SERIES OF 18	1-4 TO 8-4
U424	1 SERIES OF 8	3-3 TO 18-5

**LEGEND**

- INDICATES WING NUMBER
- 18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZONTAL CONSTRUCTION JOINT IN WING.
- HORIZONTAL CONSTRUCTION JOINT

NO.	DATE	REVISION	BY

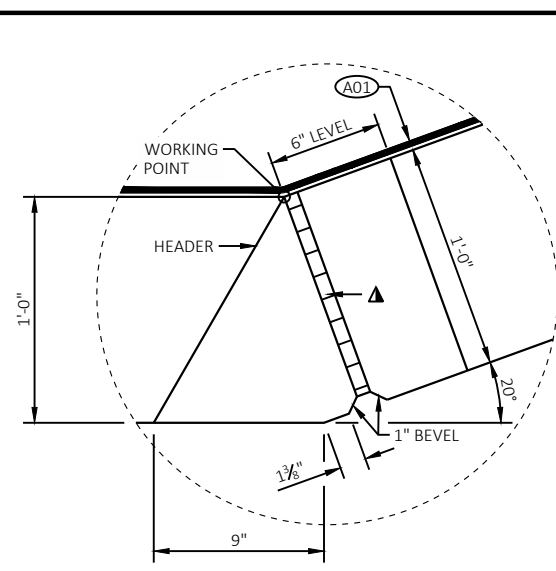
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**STRUCTURE C-62-319**

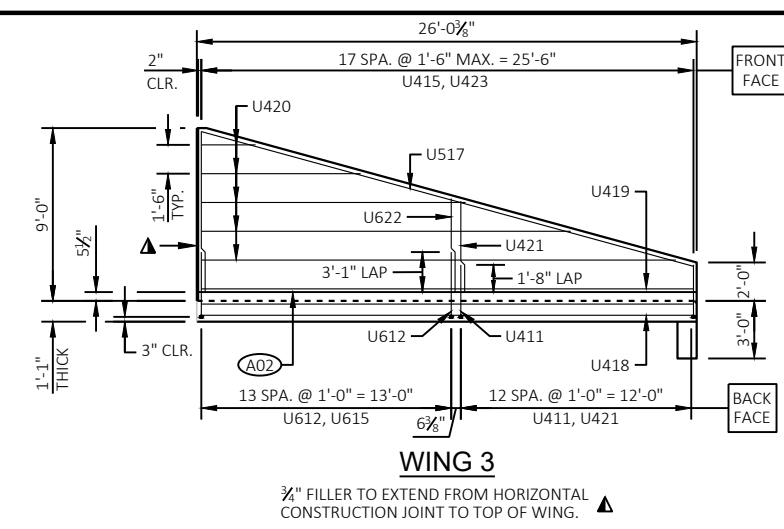
DRAWN BY: NJT PLANS CK'D: TLP

**INLET APRON  
DETAILS**

SHEET 3 OF 5

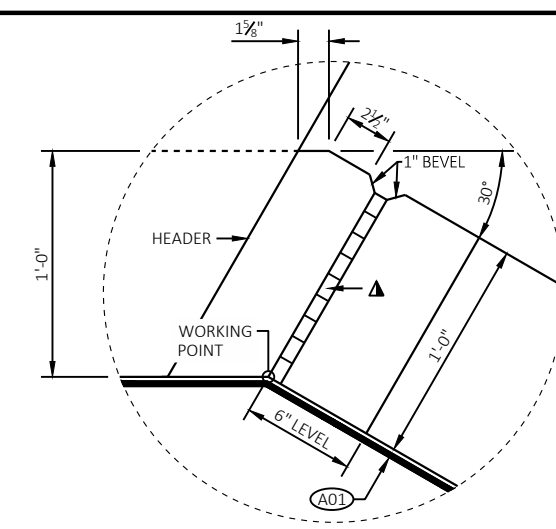


**CORNER 'A'**

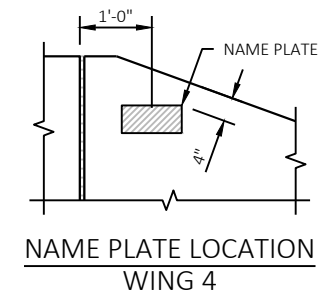


**WING 3**

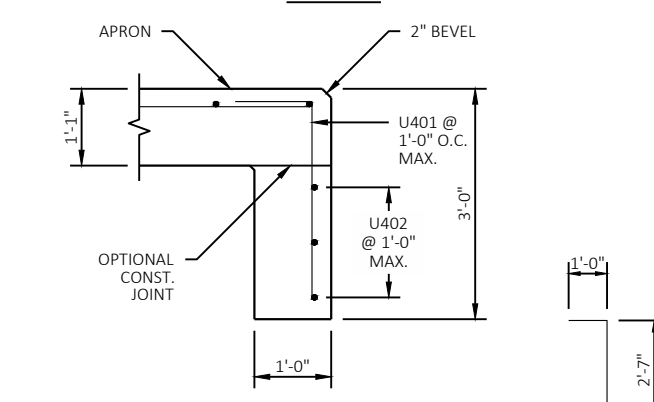
3/4" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.



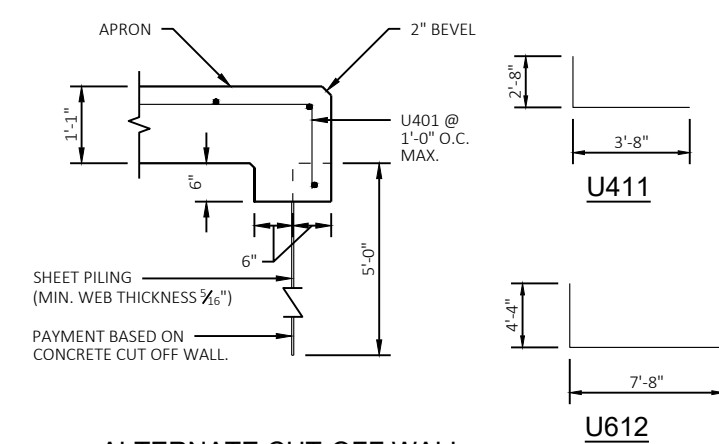
**CORNER 'B'**



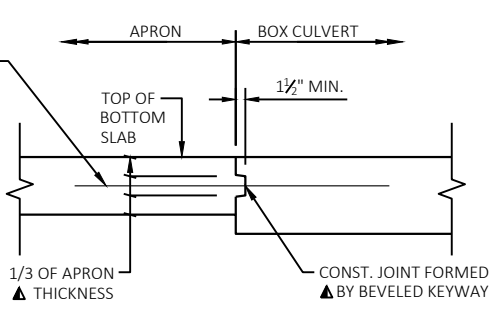
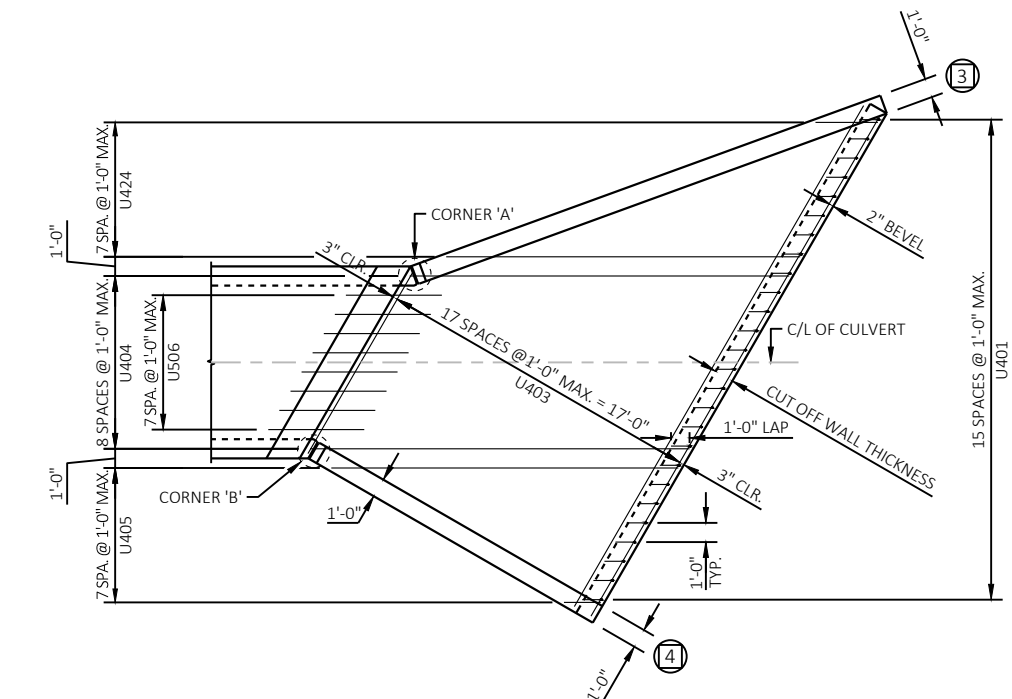
**NAME PLATE LOCATION  
WING 4**



**INLET CUT-OFF WALL  
SECTION C2**

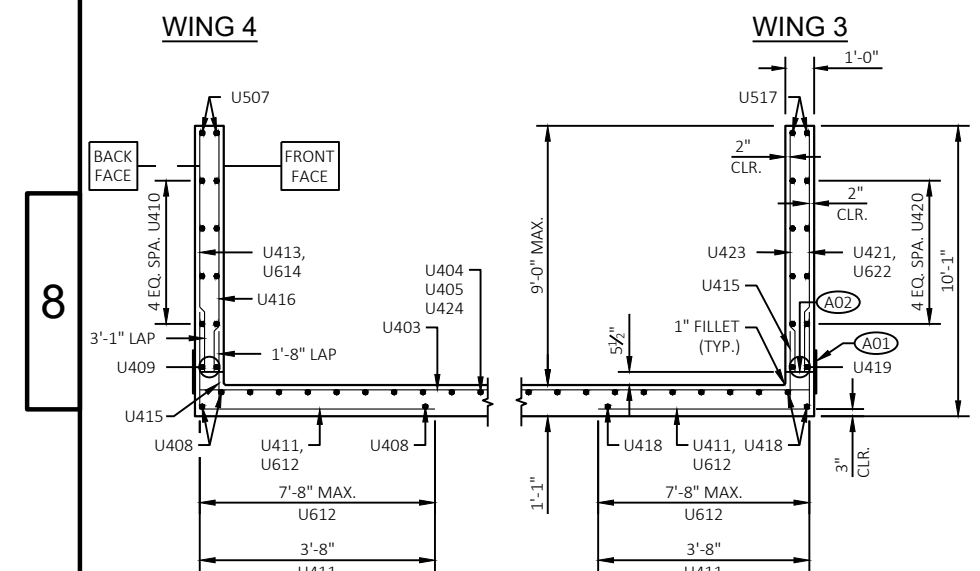


**ALTERNATE CUT-OFF WALL  
SECTION C2**

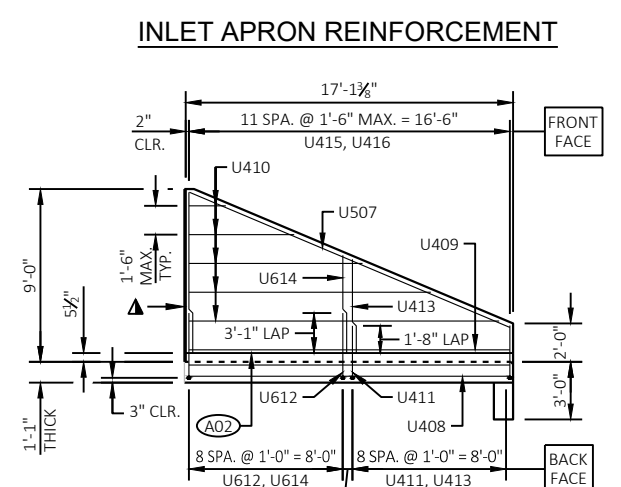


**APRON CONNECTION DETAIL**

IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING.

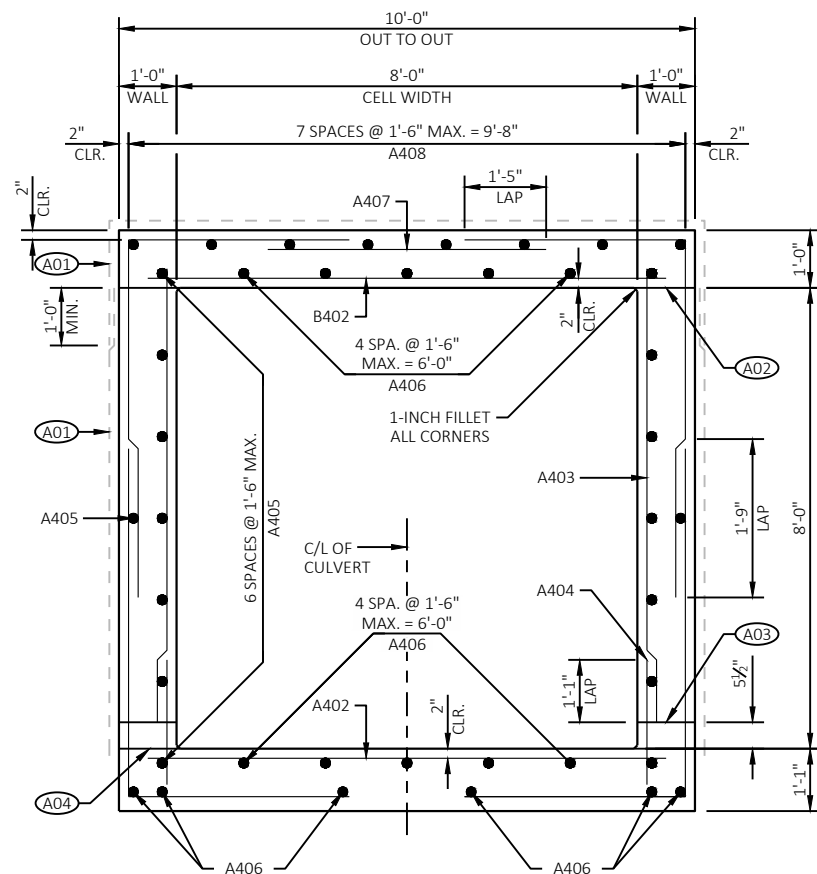


**SECTION THRU WINGS 3 & 4**

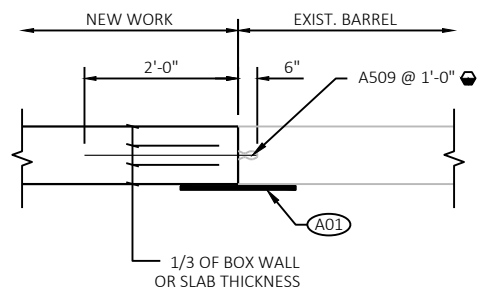


**WING 4**

3/4" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.



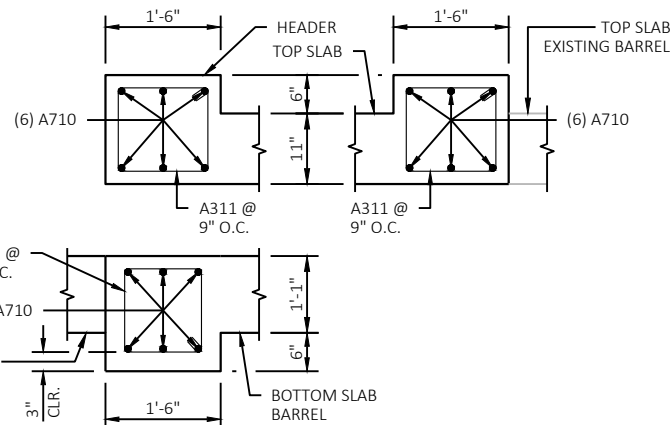
SECTION THRU BOX



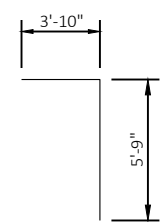
**VERTICAL CONSTRUCTION JOINT**

TYP. WALLS, TOP SLAB, AND BOTTOM SLAB

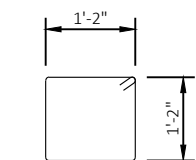
ADHESIVE ANCHORS NO. 5 BAR, EMBED 6" INTO SOUND CONCRETE AND SPACE AT 1'-0" CENTERS. (TYP. IN ALL WALLS AND TOP & BOTTOM SLAB).



BOX END DETAILS



A501



A311

**BILL OF BARS**

BAR MARK	COMT	NO. REQ'D	LENGTH	BENT	BAR SERIES	LOCATION
3500#UNCOATED						
A501		112	9-6	X		BOX CORNERS
A402		78	9-0			BOX TOP & BOTTOM SLAB TRANS.
A403		52	8-0			BOX WALLS VERTICAL
A404		52	2-0			BOX WALLS VERTICAL DOWELS
A405		16	24-8			BOX WALLS LONGITUDINAL
A406		16	24-8			BOX TOP & BOTTOM SLAB LONG.
A407		13	4-10			BOX TOP SLAB TRANSVERSE
A408		8	24-8			BOX TOP SLAB LONGITUDINAL
A509		36	2-6			BOX CONSTRUCTION JOINT DOWEL
A710		24	11-1			BOX HEADERS
A311		64	5-1	X		BOX HEADERS
A412		32	5-4		X	BOX TOP & BOTTOM SLAB TRANS.

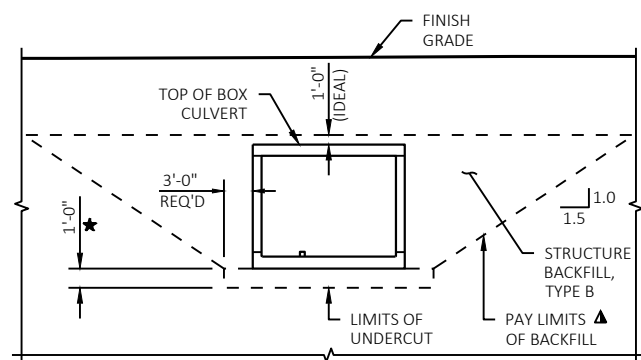
NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

**BAR SERIES TABLE**

BUNDLE AND TAG EACH SERIES SEPARATELY

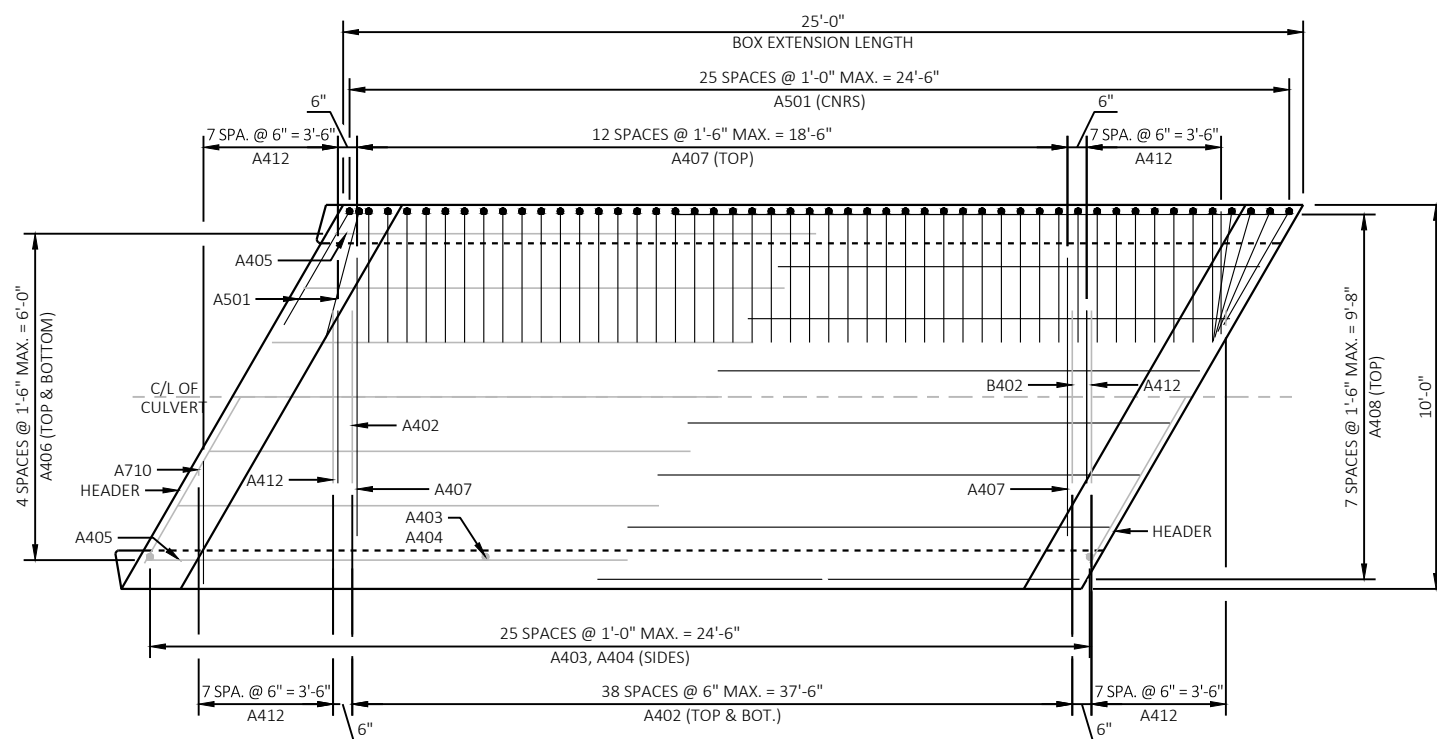
BAR MARK	NO. REQUIRED	LENGTH
A412	4 SERIES OF 8	2'-4" TO 8'-4"



TYPICAL SECTION THRU BOX CULVERT

▲ BACKFILL PAY LIMITS, BACKFILL BEYOND BACKFILL PAY LIMITS SHALL BE INCIDENTAL TO EXCAVATION FOR STRUCTURES, LIMITS OF EXCAVATION SHALL BE DETERMINED BY THE CONTRACTOR.

★ UNDER CUT 1'-0", EXCAVATION FOR UNDER CUT TO BE INCLUDED IN EXCAVATION FOR STRUCTURES. PLACE "GEOTEXTILE TYPE C" AND BACKFILL WITH "BREAKER RUN".



PLAN VIEW OF PANEL

**LEGEND**

- 18" MIN. WIDTH (R.M.W.) RUBBERIZED MEMBRANE WATERPROOFING UP WALLS & ACROSS TOP SLAB AT VERTICAL CONSTRUCTION JOINTS. EXTEND 6" MIN. BELOW THE TOP OF THE BOTTOM SLAB. AT CONSTRUCTION JOINTS, EXTEND WATERPROOFING 1'-0" MIN. BELOW BOTTOM OF THE TOP SLAB.
- A01 OPTIONAL CONSTRUCTION JOINT. OMIT 1" FILLET IF OPTIONAL CONSTRUCTION JOINT IS USED.
- A02 CONSTRUCTION JOINT
- A04 ALTERNATE CONSTRUCTION JOINT. OMIT 1" FILLET IF ALTERNATE CONSTRUCTION JOINT IS USED.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

STRUCTURE C-62-319

DRAWN BY	NJT	PLANS CK'D.	TLP
----------	-----	-------------	-----

OUTLET BOX  
EXTENSION DETAILS

SHEET 4 OF 5

**BILL OF BARS**

BAR MARK	COAT	NO. REQ'D	LENGTH	BEND	BAR SERIES	LOCATION
D401		17	5-6	X		CUTOFF WALL VERTICAL
D402		6	18-8			CUTOFF WALL HORIZONTAL
D403		18	15-7		☑	APRON TRANSVERSE
D404		10	19-8			APRON LONGITUDINAL
D405		3	12-0		☑	APRON LONGITUDINAL
D506		8	4-0			APRON CONNECTION
D507	X	2	22-4			WINGS 2 HORIZ. TOP BOTH FACES
D408	X	3	21-5			WINGS 2 HORIZ. APRON SLAB
D409	X	2	21-6			WINGS 2 HORIZ. BOT. BOTH FACES
D410	X	10	12-10		☑	WINGS 2 HORIZONTAL
D411	X	20	6-3	X		WINGS 1&2 CORNER
D612	X	21	11-10	X		WINGS 1&2 CORNER
D413	X	11	3-0		☑	WINGS 2 VERTICAL BACK FACE
D614	X	12	6-7		☑	WINGS 2 VERTICAL BACK FACE
D415	X	29	2-8			WINGS 1&2 VERTICAL F.F. DOWELS
D416	X	16	4-10		☑	WINGS 2 VERTICAL FRONT FACE
D517	X	2	18-8			WINGS 1 HORIZ. TOP BOTH FACES
D418	X	3	17-2			WINGS 1 HORIZ. APRON SLAB
D419	X	2	17-4			WINGS 1 HORIZ. BOT. BOTH FACES
D420	X	10	10-6		☑	WINGS 1 HORIZONTAL
D421	X	9	3-0		☑	WINGS 1 VERTICAL BACK FACE
D622	X	9	6-7		☑	WINGS 1 VERTICAL BACK FACE
D423	X	13	4-10		☑	WINGS 1 VERTICAL FRONT FACE
D424		4	9-6		☑	APRON LONGITUDINAL

NOTE: BAR DIMENSIONS ARE OUT TO OUT OF BAR. THE FIRST DIGIT OF A THREE-DIGIT BAR MARK OR THE FIRST TWO DIGITS OF A FOUR-DIGIT BAR MARK SIGNIFIES THE BAR SIZE.

☑ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

**BAR SERIES TABLE**

BUNDLE AND TAG EACH SERIES SEPARATELY

BAR MARK	NO. REQUIRED	LENGTH
D403	1 SERIES OF 18	11-0 TO 20-2
D405	1 SERIES OF 3	6-9 TO 17-4
D410	2 SERIES OF 5	4-10 TO 20-10
D413	1 SERIES OF 11	1-4 TO 4-8
D614	1 SERIES OF 12	4-10 TO 8-4
D416	1 SERIES OF 16	1-4 TO 8-4
D420	2 SERIES OF 5	3-10 TO 17-2
D421	1 SERIES OF 9	1-4 TO 4-8
D622	1 SERIES OF 9	4-10 TO 8-4
D423	1 SERIES OF 13	1-4 TO 8-4
D424	1 SERIES OF 4	3-0 TO 16-0

**LEGEND**

①	INDICATES WING NUMBER
Ⓐ01	18" MIN. WIDTH RUBBERIZED MEMBRANE WATERPROOFING ALONG HORIZONTAL CONSTRUCTION JOINT IN WING.
Ⓐ02	HORIZONTAL CONSTRUCTION JOINT

NO.	DATE	REVISION	BY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

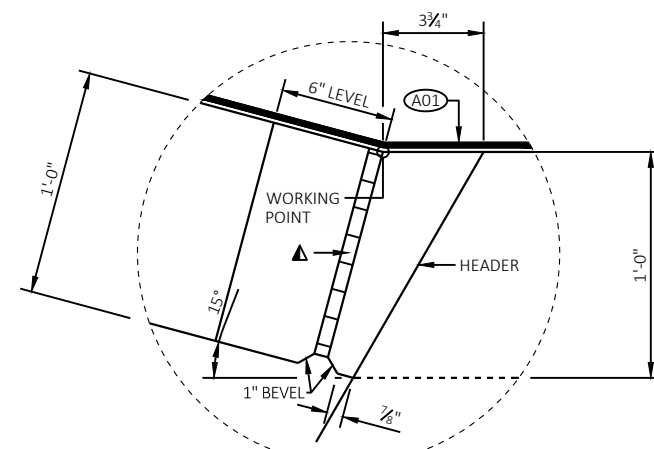
**STRUCTURE C-62-319**

DRAWN BY NJT PLANS CK'D. TLP

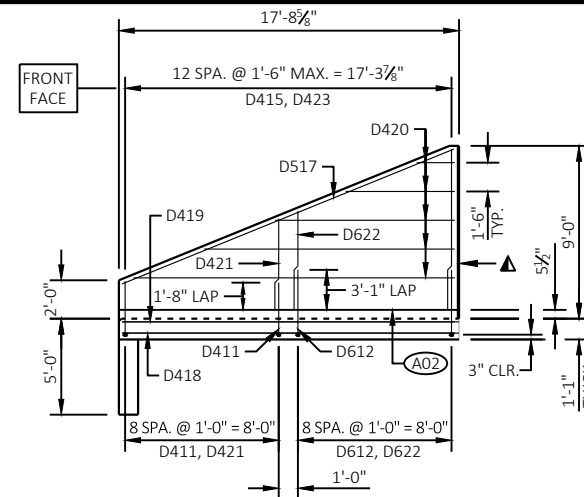
**OUTLET APRON  
DETAILS**

SHEET 5 OF 5

SCALE = 1:1

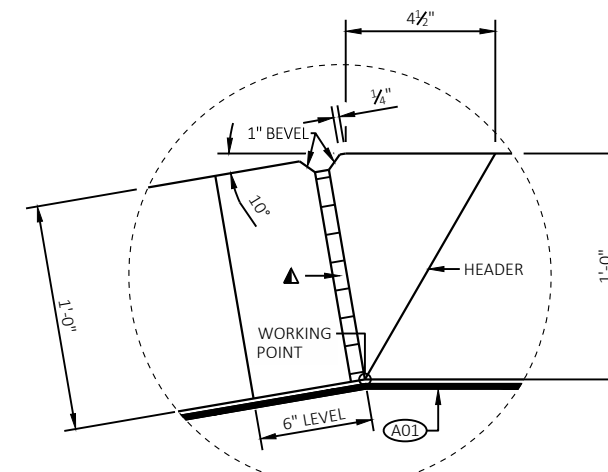


**CORNER 'A'**

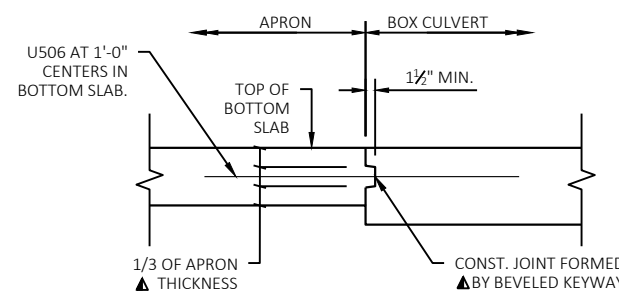


**WING 1**

▲ 3/4" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.

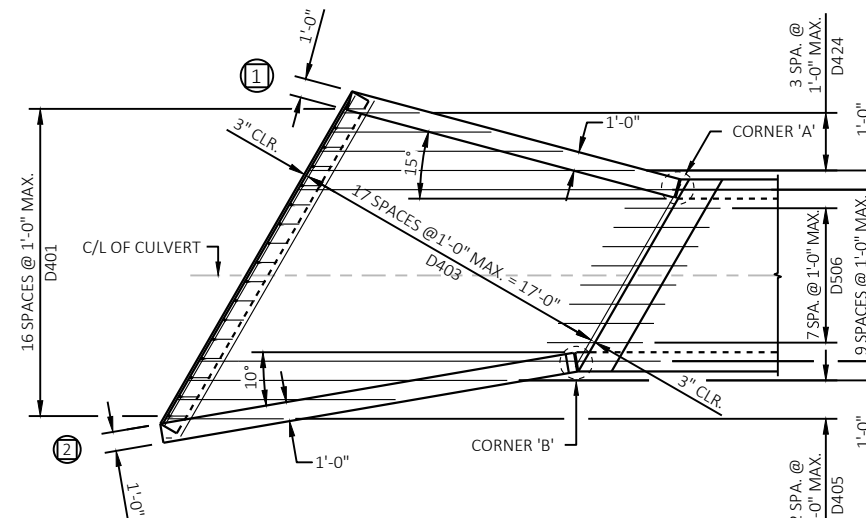


**CORNER 'B'**



**APRON CONNECTION DETAIL**

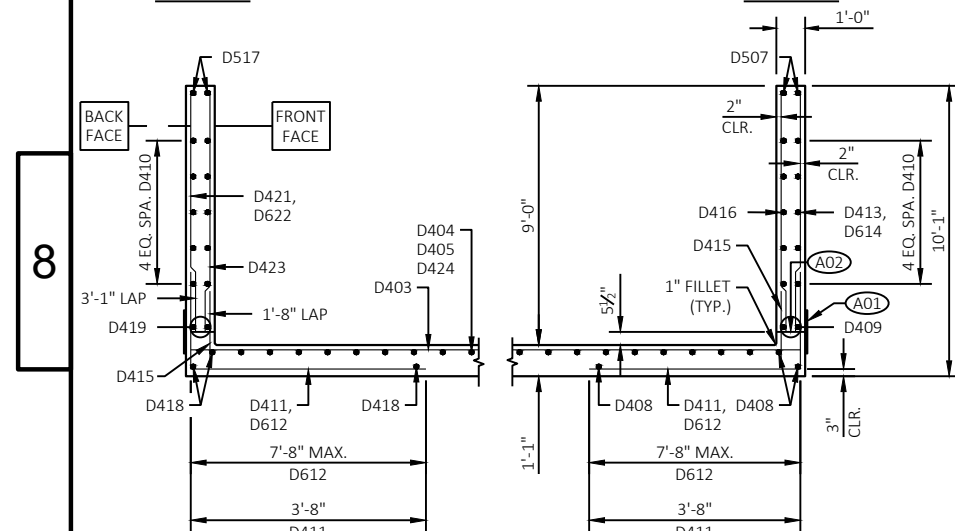
▲ IN LIEU OF CONSTRUCTION JOINTS IN THE BOTTOM SLAB, THE CONTRACTOR MAY USE 2" DEEP SAW CUTS WITHIN 12 HOURS AFTER POURING.



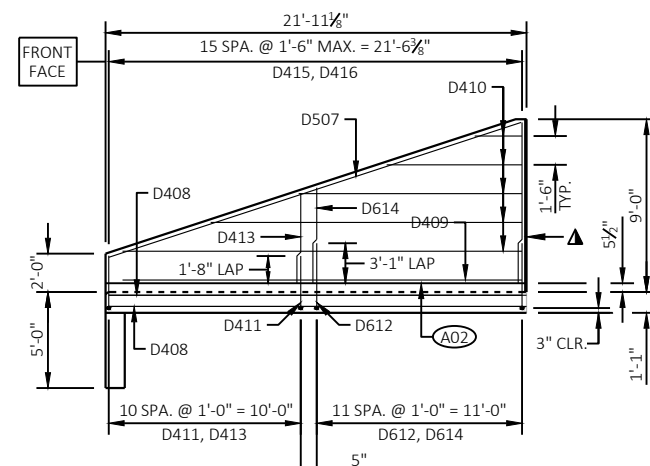
**OUTLET APRON REINFORCEMENT**

**WING 1**

**WING 2**

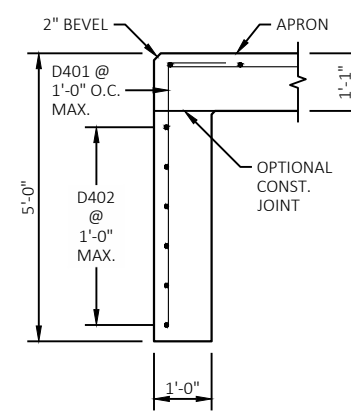


**SECTION THRU WINGS 1 & 2**

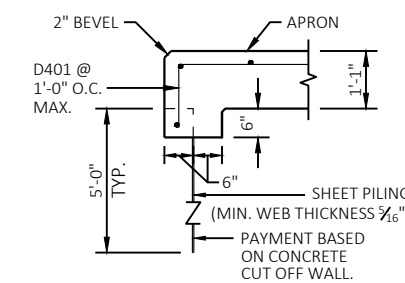


**WING 2**

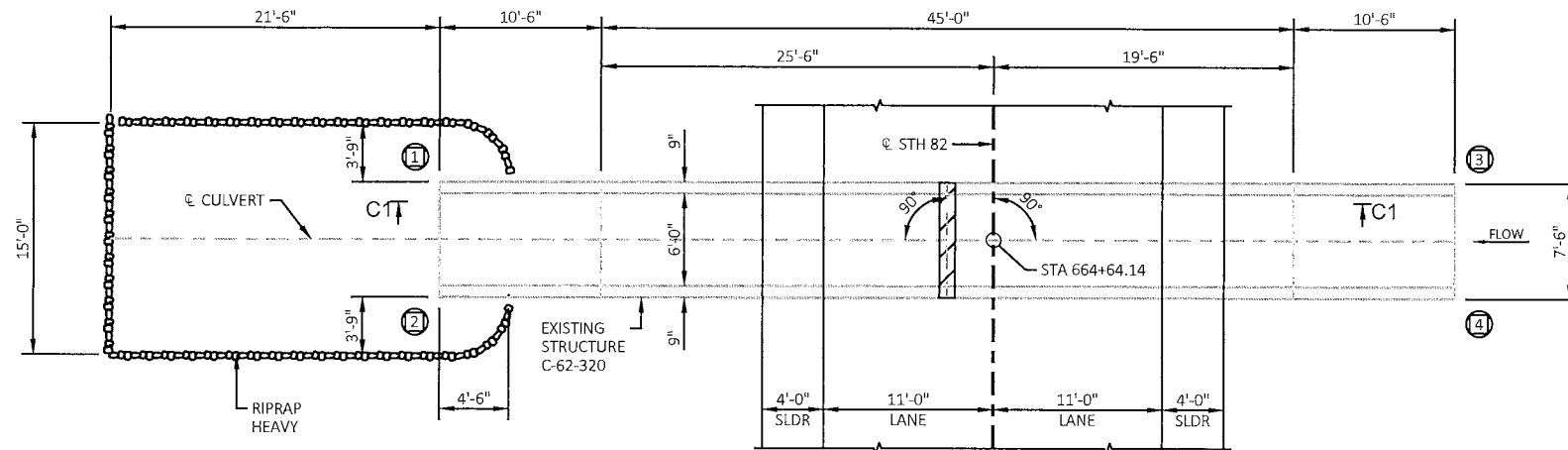
▲ 3/4" FILLER TO EXTEND FROM HORIZONTAL CONSTRUCTION JOINT TO TOP OF WING.



**CUT-OFF WALL  
SECTION C2**



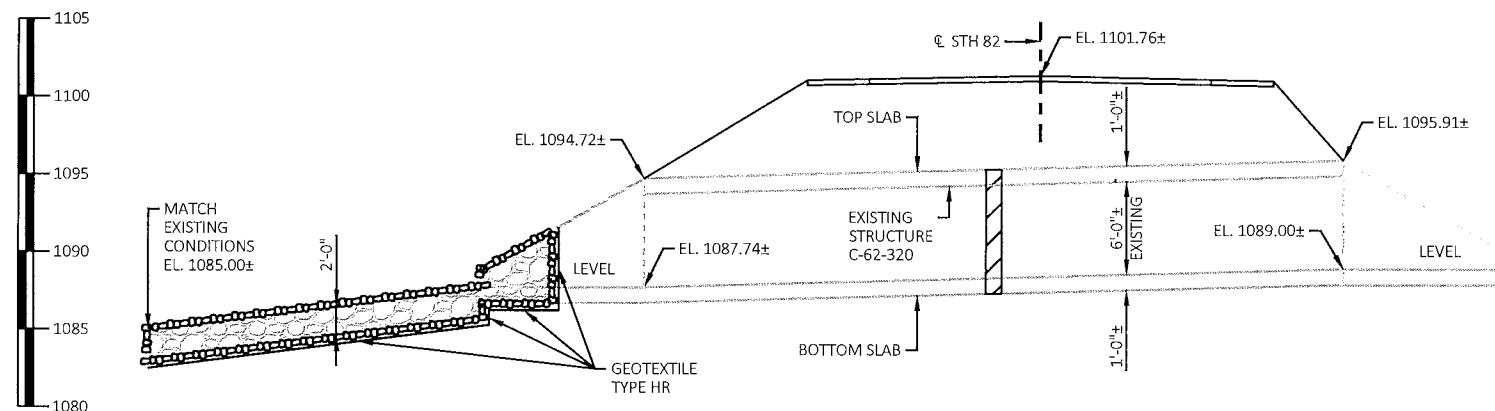
**ALTERNATE CUT-OFF WALL  
SECTION C2**



**PLAN**  
SINGLE CELL CONCRETE BOX CULVERT  
(LOOKING UP STATION)

**LEGEND**

- INDICATES WING NUMBER
- EXISTING AREA WITH LARGE CRACK AND SPALLING AT CRACK EDGES. AREA INCLUDES THE FLOOR, WALLS, AND TOP OF BOX. AREA TO BE REPAIRED TO BE DETERMINED BY FIELD ENGINEER. AREA TO BE PAID UNDER "INJECTED CHEMICAL GROUT SEALING FOR CONCRETE CRACK REPAIR, ITEM SPV.0090.01".



**ELEVATION**  
SECTION C1

**LIST OF DRAWINGS**

1. GENERAL PLAN & QUANTITIES

WisDOT CONTACT  
AARON M. BONK  
(608) 261-0261

CONSULTANT CONTACT  
TROY L. PETERSON  
(715) 235-9081

**DESIGN DATA**

LIVE LOAD:  
INVENTORY RATING FACTOR \_\_\_\_\_ RF = 1.0  
OPERATING RATING FACTOR \_\_\_\_\_ RF = 1.67  
WIS-SPV \_\_\_\_\_ 190 KIPS

**TRAFFIC VOLUME**

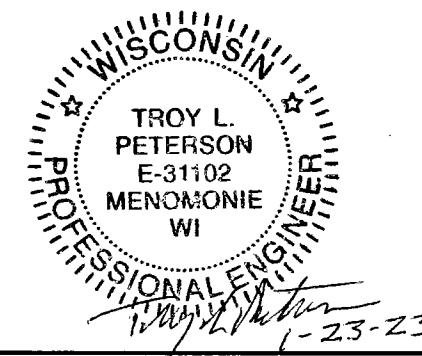
STH 82:  
A.A.D.T. (2024) \_\_\_\_\_ 800  
A.A.D.T. (2044) \_\_\_\_\_ 940  
DESIGN SPEED \_\_\_\_\_ 55 M.P.H.

**TOTAL ESTIMATED QUANTITIES**

ITEM NO.	BID ITEMS:	UNIT	TOTAL
606.0300	RIPRAP HEAVY _____	CY	25
645.0120	GEOTEXTILE TYPE HR _____	SY	55
SPV.0090.02	SPECIAL 02, INJECTED CHEMICAL GROUT SEALING FOR CONCRETE CRACK REPAIR _____	LF	25
SPV.0060.02	SPECIAL 02, CLEANING BOX CULVERTS _____	EACH	1

**GENERAL NOTES**

DRAWINGS SHALL NOT BE SCALED.  
ALL STATIONS AND ALL ELEVATIONS ARE IN FEET.  
THE EXISTING STRUCTURE C-62-320 IS A 45' LONG SINGLE CELL CONCRETE BOX CULVERT, TO BE REHABILITATED.



NO.	DATE	REVISION	BY
ORIGINAL PLANS PREPARED BY <b>Cedar</b> corporation www.cedarcorp.com 800-472-7377			
ACCEPTED		SDR 08/09/23	DATE
CHIEF STRUCTURES DESIGN ENGINEER			
<b>STRUCTURE C-62-320</b>			
STH 82 OVER DRAINAGE WAY			
COUNTY	VERNON	TOWN/VILLAGE	STERLING
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	TLP	DESIGN CK'D.	TLP
DRAWN BY	NIT	PLANS CK'D.	TLP
<b>GENERAL PLAN &amp; QUANTITIES</b>			SHEET 1 OF 1

DIVISION – ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
38+00	3800.00	0.00	6.41	4.62	0	0	0	0	0
38+50	3850.00	50.00	27.74	1.37	32	6	32	8	25
38+78.762	3878.76	28.76	41.07	0.04	37	1	69	9	60
39+00	3900.00	21.24	28.89	0.00	28	0	97	9	88
39+41.742	3941.74	41.74	26.35	9.78	43	8	140	19	121
39+45	3945.00	3.26	25.80	22.55	3	2	143	21	122
39+50	3950.00	5.00	12.77	21.57	4	4	147	26	121
39+55	3955.00	5.00	11.57	38.29	2	6	149	34	115
39+60	3960.00	5.00	11.71	46.42	2	8	151	44	107
39+65	3965.00	5.00	10.08	37.54	2	8	153	54	99
39+70	3970.00	5.00	9.15	5.84	2	4	155	59	96
39+75	3975.00	5.00	11.37	1.69	2	1	157	60	97
39+80	3980.00	5.00	12.85	0.56	2	0	159	60	99
39+85	3985.00	5.00	12.60	0.29	2	0	161	60	101
39+90	3990.00	5.00	14.64	0.57	3	0	164	60	104
39+95	3995.00	5.00	17.35	0.33	3	0	167	60	107
40+00	4000.00	5.00	23.56	3.07	4	0	171	60	111
40+05	4005.00	5.00	35.88	5.67	6	1	177	61	116
40+10	4010.00	5.00	40.92	18.93	7	2	184	64	120
40+15	4015.00	5.00	45.67	42.09	8	6	192	71	121
40+20	4020.00	5.00	56.87	46.87	9	8	201	81	120
40+20.328	4020.33	0.33	65.57	47.51	1	1	202	83	120
40+50	4050.00	29.67	61.13	0.24	70	26	272	115	157
41+00	4100.00	50.00	39.43	0.40	93	1	365	116	249
41+16.607	4116.61	16.61	34.72	0.14	23	0	388	116	272
41+50	4150.00	33.39	5.58	0.31	25	0	413	116	297
41+69.941	4169.94	19.94	3.53	1.18	3	1	416	118	299
42+00	4200.00	30.06	6.51	0.00	6	1	422	119	303
					<b>422</b>	<b>95</b>			

DIVISION – ALIGNMENT - DEVLIN STREET

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
10+11.006	1011.01	0.00	0.00	0.00	0	0	0	0	0
10+15	1015.00	3.99	15.28	0.00	1	0	1	0	1
10+20	1020.00	5.00	21.88	5.41	3	1	4	1	3
10+25	1025.00	5.00	20.88	44.46	4	5	8	8	1
10+30	1030.00	5.00	19.66	52.97	4	9	12	19	-7
10+35	1035.00	5.00	22.85	64.03	4	11	16	33	-17
10+40	1040.00	5.00	26.46	69.86	5	12	21	48	-27
10+45	1045.00	5.00	31.95	72.75	5	13	26	64	-38
10+47.088	1047.09	2.09	29.00	68.49	2	5	28	70	-42
10+50	1050.00	2.91	29.91	59.59	3	7	31	79	-48
10+55	1055.00	5.00	28.96	39.58	5	9	36	90	-54
10+60	1060.00	5.00	27.29	23.80	5	6	41	98	-57
10+65	1065.00	5.00	24.16	17.38	5	4	46	103	-57
10+70	1070.00	5.00	22.99	7.62	4	2	50	105	-55
10+75	1075.00	5.00	22.65	5.69	4	1	54	106	-52
10+80	1080.00	5.00	21.17	6.58	4	1	58	108	-50
10+85	1085.00	5.00	23.49	0.41	4	1	62	109	-47
10+90	1090.00	5.00	23.97	0.02	4	0	66	109	-43
10+95	1095.00	5.00	24.78	0.00	5	0	71	109	-38
11+00	1100.00	5.00	27.76	0.00	5	0	76	109	-33
11+05	1105.00	5.00	30.90	0.00	5	0	81	109	-28
11+07.599	1107.60	2.60	31.40	0.00	3	0	84	109	-25
					<b>84</b>	<b>87</b>			

DIVISION – ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE		
								1.00	1.25
122+00	12200.00	0.00	54.75	1.64	0	0	0	0	0
122+50	12250.00	50.00	63.21	0.19	109	2	109	3	107
123+00	12300.00	50.00	112.66	1.62	163	2	272	5	267
123+50	12350.00	50.00	93.71	0.52	191	2	463	8	456
124+00	12400.00	50.00	39.31	2.19	123	3	586	11	575
124+50	12450.00	50.00	81.54	1.37	112	3	698	15	683
125+00	12500.00	50.00	71.40	1.71	142	3	840	19	821
125+50	12550.00	50.00	87.51	0.28	147	2	987	21	966
					<b>987</b>	<b>17</b>			

DIVISION – ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
248+00	24800.00	0.00	8.24	7.63	0	0	0	0	0
248+50	24850.00	50.00	13.47	14.80	20	21	20	26	-6
249+00	24900.00	50.00	13.87	9.63	25	23	45	55	-10
249+50	24950.00	50.00	13.33	3.37	25	12	70	70	0
250+00	25000.00	50.00	11.23	7.10	23	10	93	83	11
250+50	25050.00	50.00	12.28	7.72	22	14	115	100	15
251+00	25100.00	50.00	14.11	15.43	24	21	139	126	13
251+50	25150.00	50.00	17.17	45.40	29	56	168	196	-28
252+00	25200.00	50.00	16.44	9.17	31	51	199	260	-61
252+50	25250.00	50.00	15.20	8.81	29	17	228	281	-53
253+00	25300.00	50.00	13.02	12.76	26	20	254	306	-52
253+50	25350.00	50.00	9.11	20.41	20	31	274	345	-71
254+00	25400.00	50.00	12.80	4.41	20	23	294	374	-80
254+50	25450.00	50.00	4.93	8.51	16	12	310	389	-79
					<b>310</b>	<b>311</b>			

9

9

DIVISION -- ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
		NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 8	
274+00	27400.00	0.00	5.29	11.37	0	0	0	0	0
274+50	27450.00	50.00	28.31	52.16	31	59	31	74	-43
275+00	27500.00	50.00	27.82	89.43	52	131	83	238	-155
275+50	27550.00	50.00	30.91	159.20	54	230	137	525	-388
276+00	27600.00	50.00	25.24	345.83	52	468	189	1,110	-921
276+27.419	27627.42	27.42	23.99	422.89	25	390	214	1,598	-1,384
276+50	27650.00	22.58	21.42	239.88	19	277	233	1,944	-1,711
277+00	27700.00	50.00	23.37	196.21	41	404	274	2,449	-2,175
277+50	27750.00	50.00	22.58	60.60	43	238	317	2,746	-2,429
278+00	27800.00	50.00	21.67	12.56	41	68	358	2,831	-2,473
					<b>358</b>	<b>2,265</b>			

DIVISION -- ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
		NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 8	
298+00	29800.00	0.00	1.54	0.79	0	0	0	0	0
298+50	29850.00	50.00	27.63	12.22	27	12	27	15	12
299+00	29900.00	50.00	15.13	13.83	40	24	67	45	22
299+50	29950.00	50.00	13.21	79.71	26	87	93	154	-61
299+73.017	29973.02	23.02	13.05	251.97	11	141	104	330	-226
300+00	30000.00	26.98	17.29	503.49	15	377	119	801	-682
300+50	30050.00	50.00	18.16	311.32	33	754	152	1,744	-1,592
301+00	30100.00	50.00	21.91	49.44	37	334	189	2,161	-1,972
301+50	30150.00	50.00	4.12	0.41	24	46	213	2,219	-2,006
					<b>213</b>	<b>1,775</b>			

DIVISION -- ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
		NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 8	
401+00	40100.00	0.00	10.27	1.20	0	0	0	0	0
401+50	40150.00	50.00	39.84	5.15	46	6	46	8	39
402+00	40200.00	50.00	27.10	19.65	62	23	108	36	72
402+50	40250.00	50.00	21.37	42.13	45	57	153	108	46
403+00	40300.00	50.00	19.83	35.84	38	72	191	198	-7
403+50	40350.00	50.00	8.10	87.41	26	114	217	340	-123
403+76.748	40376.75	26.75	6.22	194.45	7	140	224	515	-291
404+00	40400.00	23.25	13.29	96.82	8	125	232	671	-439
404+50	40450.00	50.00	15.83	101.08	27	183	259	900	-641
405+00	40500.00	50.00	13.88	71.72	28	160	287	1,100	-813
405+50	40550.00	50.00	17.81	22.81	29	88	316	1,210	-894
406+00	40600.00	50.00	46.26	2.11	59	23	375	1,239	-864
					<b>375</b>	<b>991</b>			

DIVISION -- ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
		NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 8	
439+50	43950.00	0.00	5.84	0.05	0	0	0	0	0
440+00	44000.00	50.00	20.42	113.91	24	106	24	133	-109
440+50	44050.00	50.00	19.17	139.30	37	234	61	425	-364
441+00	44100.00	50.00	15.06	192.61	32	307	93	809	-716
441+50	44150.00	50.00	11.62	322.66	25	477	118	1,405	-1,287
441+75	44175.00	25.00	12.98	323.89	11	299	129	1,779	-1,650
442+00	44200.00	25.00	13.29	180.98	12	234	141	2,071	-1,930
442+50	44250.00	50.00	22.51	52.09	33	216	174	2,341	-2,167
443+00	44300.00	50.00	9.68	0.00	30	48	204	2,401	-2,197
446+00	44600.00	300.00	19.09	0.00	160	0	364	2,401	-2,037
446+50	44650.00	50.00	84.93	0.00	96	0	460	2,401	-1,941
446+88.681	44688.68	38.68	8.95	134.42	67	96	527	2,521	-1,994
447+00	44700.00	11.32	24.50	193.98	7	69	534	2,608	-2,074
447+50	44750.00	50.00	19.29	285.25	41	444	575	3,163	-2,588
447+50.089	44750.09	0.09	19.29	284.95	0	1	575	3,164	-2,589
448+00	44800.00	49.91	10.24	0.00	27	263	602	3,493	-2,891
					<b>602</b>	<b>2,794</b>			

9

9

DIVISION – ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
			NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 8
476+50	47650.00	0.00	13.39	0.00	0	0	0	0	0
477+00	47700.00	50.00	23.47	73.33	34	68	34	85	-51
477+50	47750.00	50.00	24.66	153.60	45	210	79	348	-269
477+86.715	47786.71	36.71	18.38	311.79	29	316	108	743	-635
478+00	47800.00	13.29	10.80	310.14	7	153	115	934	-819
478+31.021	47831.02	31.02	14.59	302.14	15	352	130	1,374	-1,244
478+39.704	47839.70	8.68	17.53	279.40	5	94	135	1,491	-1,356
478+50	47850.00	10.30	19.68	238.63	7	99	142	1,615	-1,473
479+00	47900.00	50.00	23.02	161.03	40	370	182	2,078	-1,896
479+50	47950.00	50.00	22.18	155.15	42	293	224	2,444	-2,220
480+00	48000.00	50.00	23.25	119.64	42	254	266	2,761	-2,495
480+50	48050.00	50.00	26.57	56.16	46	163	312	2,965	-2,653
481+00	48100.00	50.00	27.91	11.53	50	63	362	3,044	-2,682
481+50	48150.00	50.00	11.60	0.00	37	11	399	3,058	-2,659
485+50	48550.00	400.00	12.88	17.69	181	131	580	3,221	-2,641
486+00	48600.00	50.00	16.21	77.41	27	88	607	3,331	-2,724
486+50	48650.00	50.00	13.28	146.73	27	208	634	3,591	-2,957
486+88.024	48688.02	38.02	13.08	350.63	19	350	653	4,029	-3,376
487+00	48700.00	11.98	15.85	216.81	6	126	659	4,186	-3,527
487+50	48750.00	50.00	19.33	74.53	33	270	692	4,524	-3,832
488+00	48800.00	50.00	8.70	0.00	26	69	718	4,610	-3,892
					<b>718</b>	<b>3,688</b>			

DIVISION – ALIGNMENT - STH 82

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
			NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 8
625+00	62500.00	0.00	7.86	0.00	0	0	0	0	0
625+25	62525.00	25.00	6.03	0.00	6	0	6	0	6
625+50	62550.00	25.00	7.03	0.00	6	0	12	0	12
625+59.944	62559.94	9.94	39.70	0.00	9	0	21	0	21
625+60	62560.00	0.06	39.69	0.00	0	0	21	0	21
625+65	62565.00	5.00	53.53	0.00	9	0	30	0	30
625+70	62570.00	5.00	54.78	0.03	10	0	40	0	40
625+75	62575.00	5.00	57.64	0.11	10	0	50	0	50
625+80	62580.00	5.00	63.52	0.10	11	0	61	0	61
625+85	62585.00	5.00	72.41	0.13	13	0	74	0	74
625+90	62590.00	5.00	75.65	0.00	14	0	88	0	88
625+95	62595.00	5.00	61.85	0.00	13	0	101	0	101
626+00	62600.00	5.00	47.83	0.00	10	0	111	0	111
626+05	62605.00	5.00	34.09	0.00	8	0	119	0	119
626+10	62610.00	5.00	25.37	0.00	6	0	125	0	125
626+15	62615.00	5.00	32.34	0.00	5	0	130	0	130
626+20	62620.00	5.00	40.80	0.00	7	0	137	0	137
626+25	62625.00	5.00	50.05	0.00	8	0	145	0	145
626+30	62630.00	5.00	59.33	0.00	10	0	155	0	155
626+35	62635.00	5.00	67.50	0.00	12	0	167	0	167
626+40	62640.00	5.00	74.89	0.00	13	0	180	0	180
626+45	62645.00	5.00	83.60	0.00	15	0	195	0	195
626+50	62650.00	5.00	80.72	0.00	15	0	210	0	210
626+55	62655.00	5.00	75.16	0.00	14	0	224	0	224
626+60	62660.00	5.00	70.31	0.01	13	0	237	0	237
626+65	62665.00	5.00	67.28	0.00	13	0	250	0	250
626+70	62670.00	5.00	64.23	0.00	12	0	262	0	262
626+75	62675.00	5.00	62.13	0.00	12	0	274	0	274
626+79.182	62679.18	4.18	61.28	0.00	10	0	284	0	284
626+80	62680.00	0.82	45.33	0.00	2	0	286	0	286
626+80.518	62680.52	0.52	39.31	0.00	1	0	287	0	287
627+00	62700.00	19.48	36.94	0.00	28	0	315	0	315
627+25	62725.00	25.00	32.50	0.00	32	0	347	0	347
627+50	62750.00	25.00	30.20	0.09	29	0	376	0	376
627+75	62775.00	25.00	28.20	0.50	27	0	403	0	403
627+85.573	62785.57	10.57	23.74	1.06	10	0	413	0	413
628+00	62800.00	14.43	18.64	2.12	11	1	424	1	423
628+25	62825.00	25.00	12.71	4.53	15	3	439	5	434
628+50	62850.00	25.00	8.03	6.02	10	5	449	11	438
628+75	62875.00	25.00	0.25	1.20	4	3	453	15	438
628+94.838	62894.84	19.84	0.00	3.07	0	2	453	18	436
629+00	62900.00	5.16	0.00	3.94	0	1	453	19	434
					<b>453</b>	<b>15</b>			

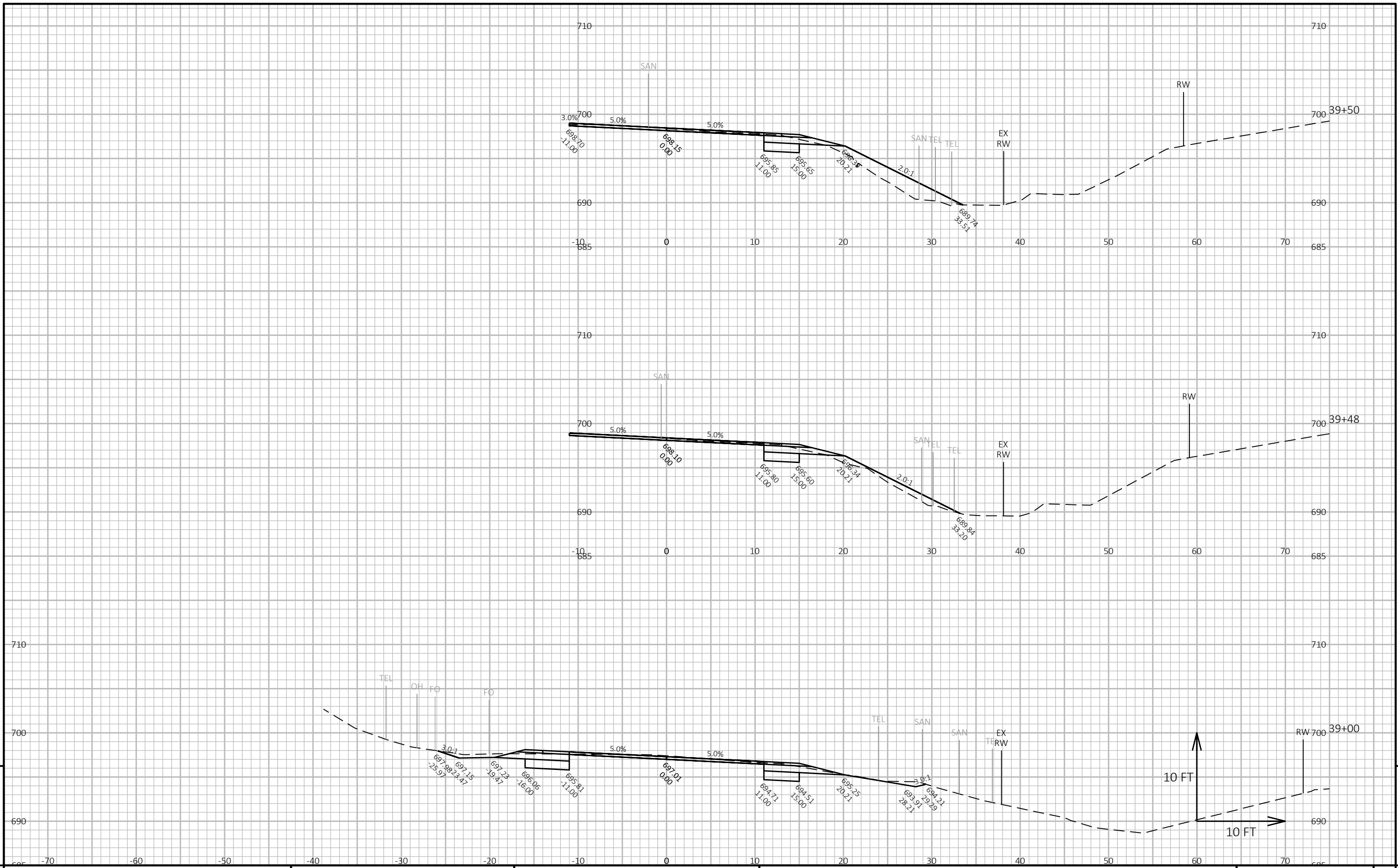
DIVISION – ALIGNMENT - SWENSON AVE

STATION	REAL STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
			CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDINATE
			NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 1	NOTE 3	NOTE 8
09+89.68	989.68	0.00	3.48	0.00	0	0	0	0	0
09+90	990.00	0.32	4.75	0.00	0	0	0	0	0
09+95	995.00	5.00	24.45	0.00	3	0	3	0	3
10+00	1000.00	5.00	43.02	0.00	6	0	9	0	9
10+05	1005.00	5.00	61.71	0.00	10	0	19	0	19
10+10	1010.00	5.00	82.90	0.00	13	0	32	0	32
10+15	1015.00	5.00	104.30	0.00	17	0	49	0	49
10+20	1020.00	5.00	109.98	0.09	20	0	69	0	69
10+25	1025.00	5.00	106.27	0.08	20	0	89	0	89
10+30	1030.00	5.00	111.28	0.00	20	0	109	0	109
10+35	1035.00	5.00	105.37	0.00	20	0	129	0	129
10+40	1040.00	5.00	99.07	0.00	19	0	148	0	148
10+45	1045.00	5.00	105.44	0.00	19	0	167	0	167
10+50	1050.00	5.00	111.22	0.06	20	0	187	0	187
10+55	1055.00	5.00	117.02	0.19	21	0	208	0	208
10+56.886	1056.89	1.89	119.08	0.26	8	0	216	0	216
10+75	1075.00	18.11	163.95	1.94	95	1	311	1	310
11+00	1100.00	25.00	168.54	0.00	154	1	465	2	463
11+25	1125.00	25.00	118.39	0.00	133	0	598	2	596
11+50	1150.00	25.00	122.67	0.00	112	0	710	2	708
11+70.165	1170.17	20.17	49.41	0.00	64	0	774	2	772
					<b>774</b>	<b>2</b>			

9

9



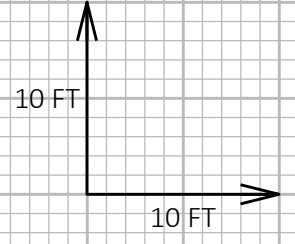
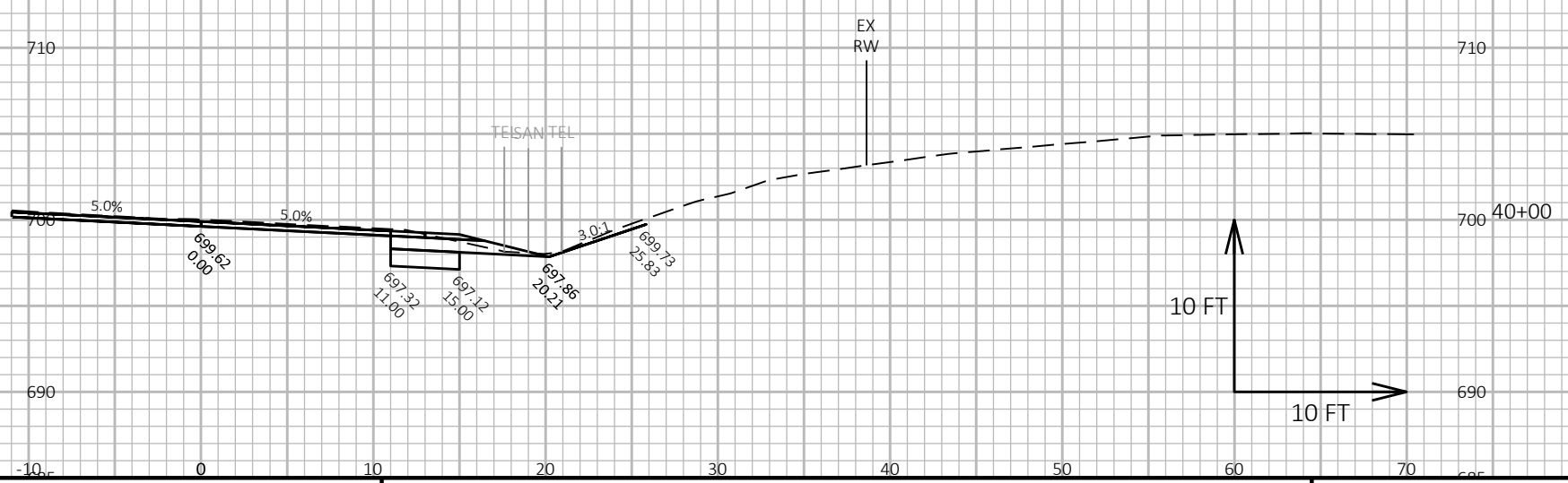
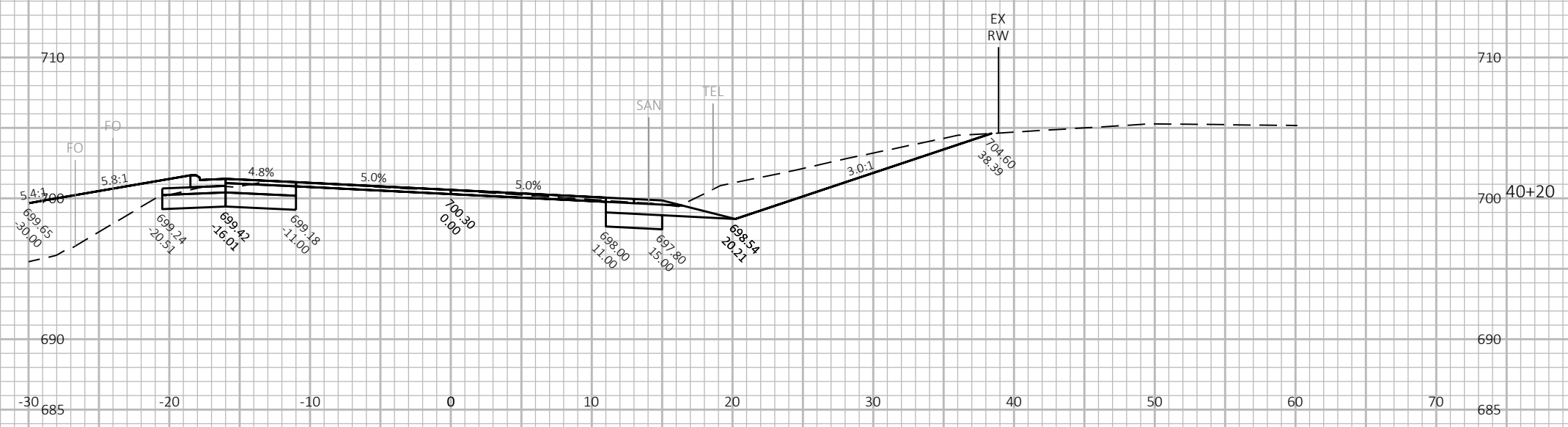
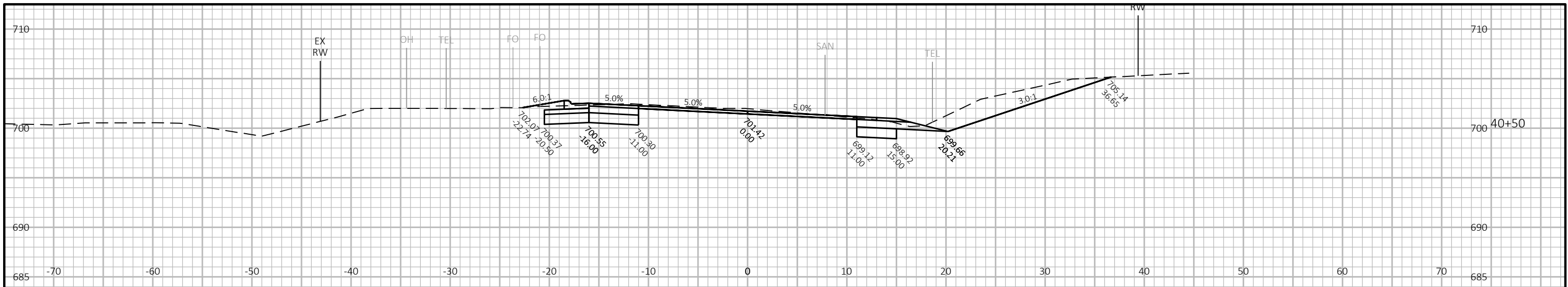


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	CROSS SECTIONS: STH 82	SHEET
------------------------	-------------	----------------	------------------------	-------

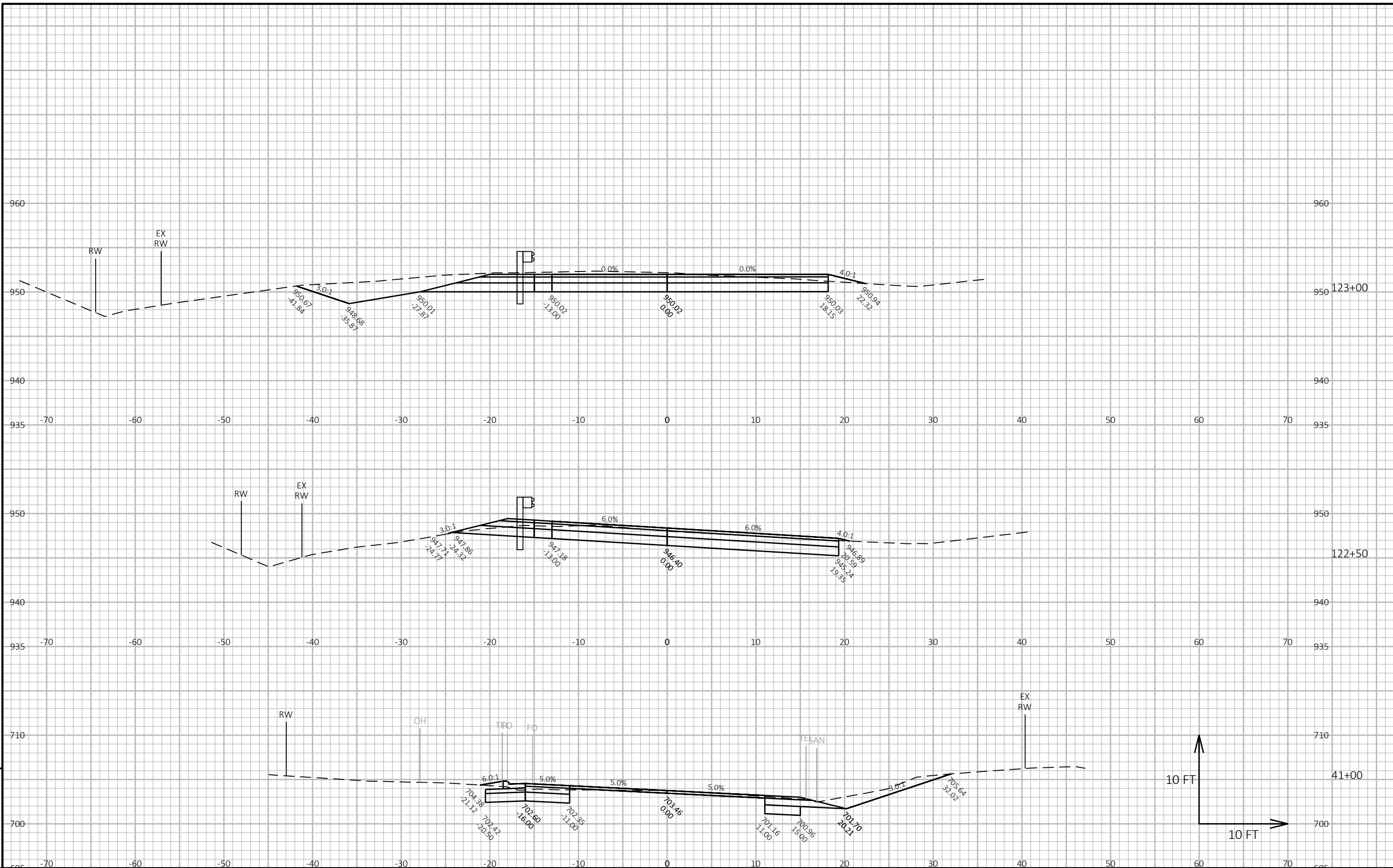
9

9

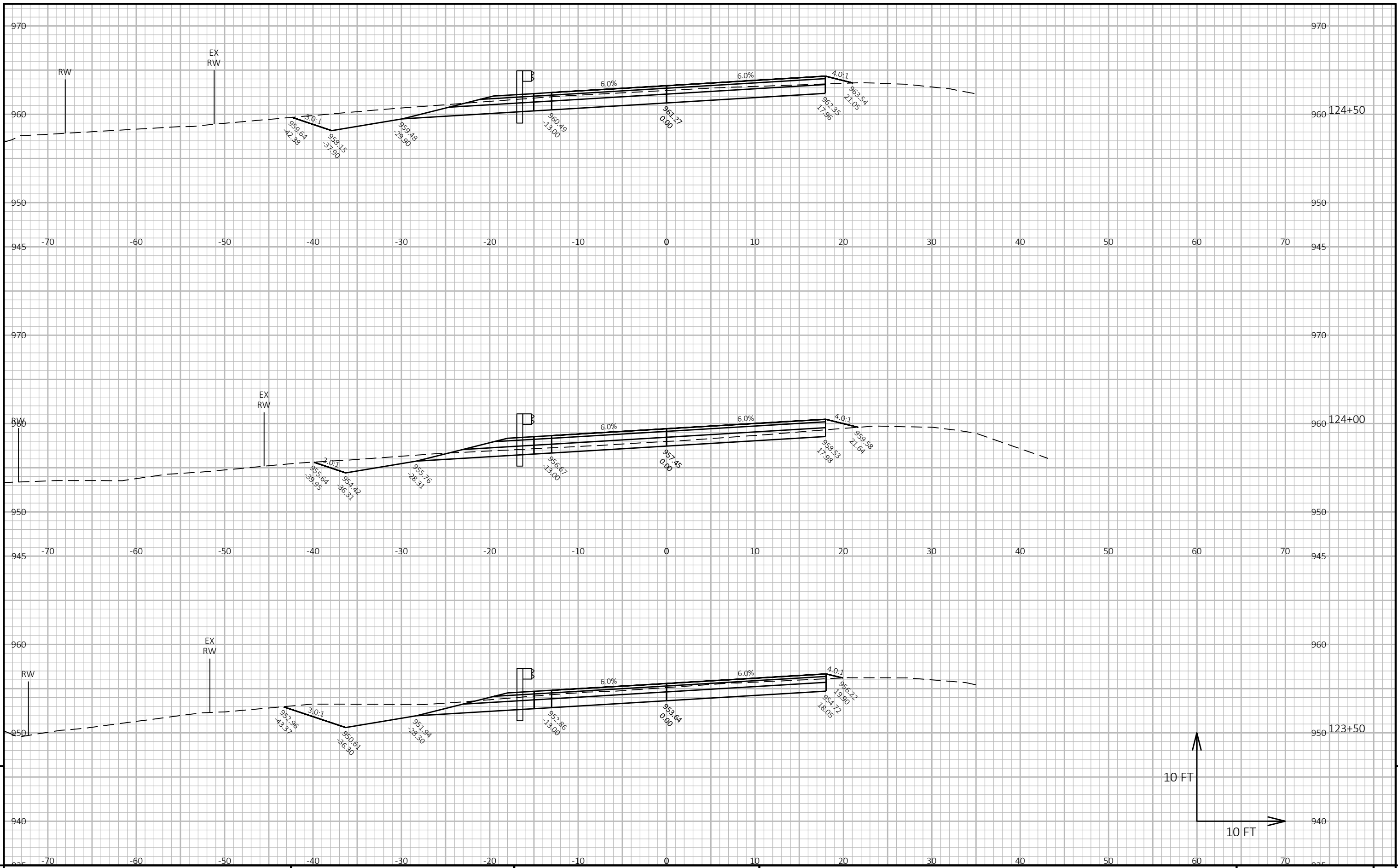
E



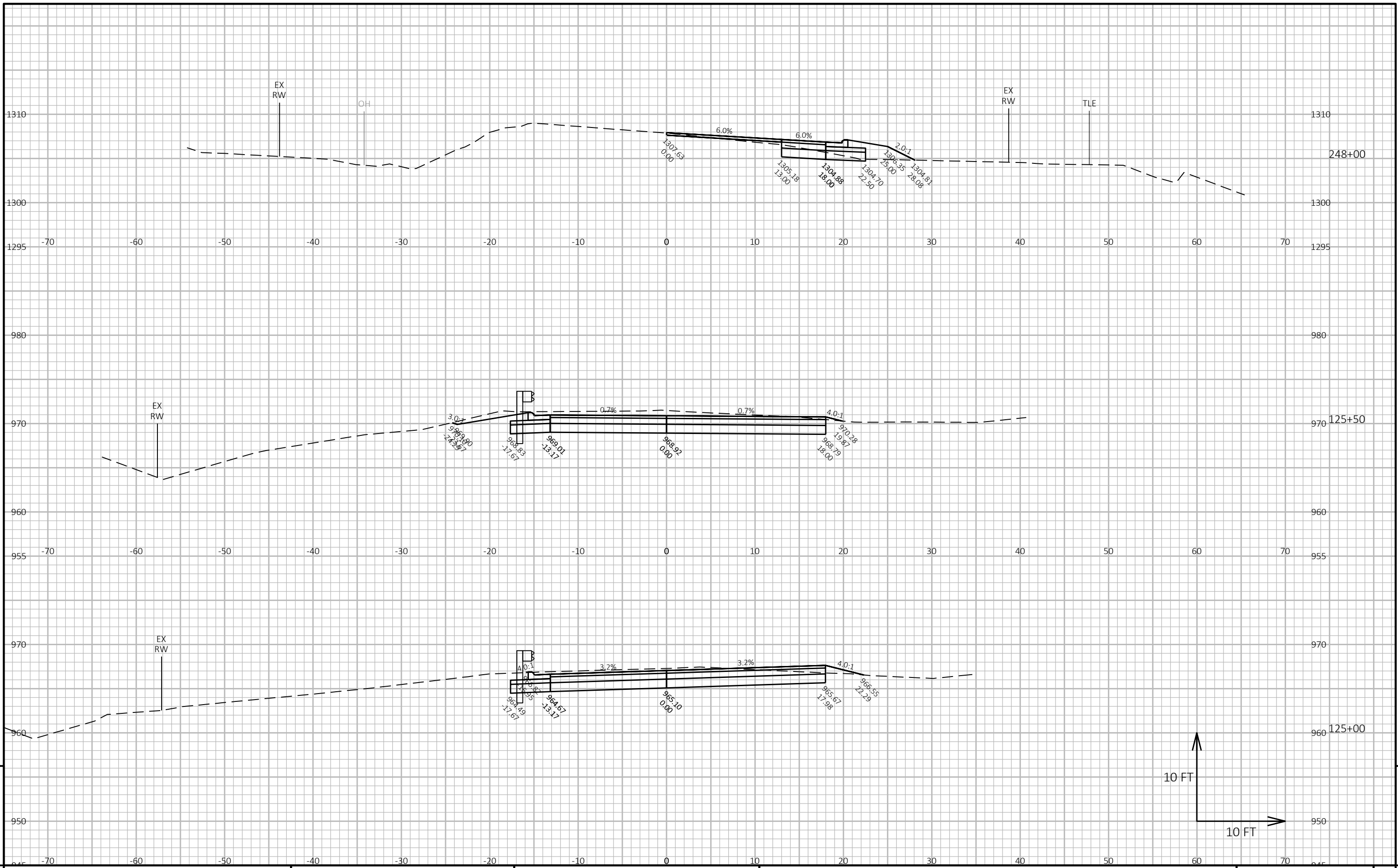
PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET      E



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	CROSS SECTIONS: STH 82	SHEET 9
------------------------	-------------	----------------	------------------------	---------



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	CROSS SECTIONS: STH 82	SHEET	E
------------------------	-------------	----------------	------------------------	-------	---



9

9

PROJECT NO: 5150-02-70

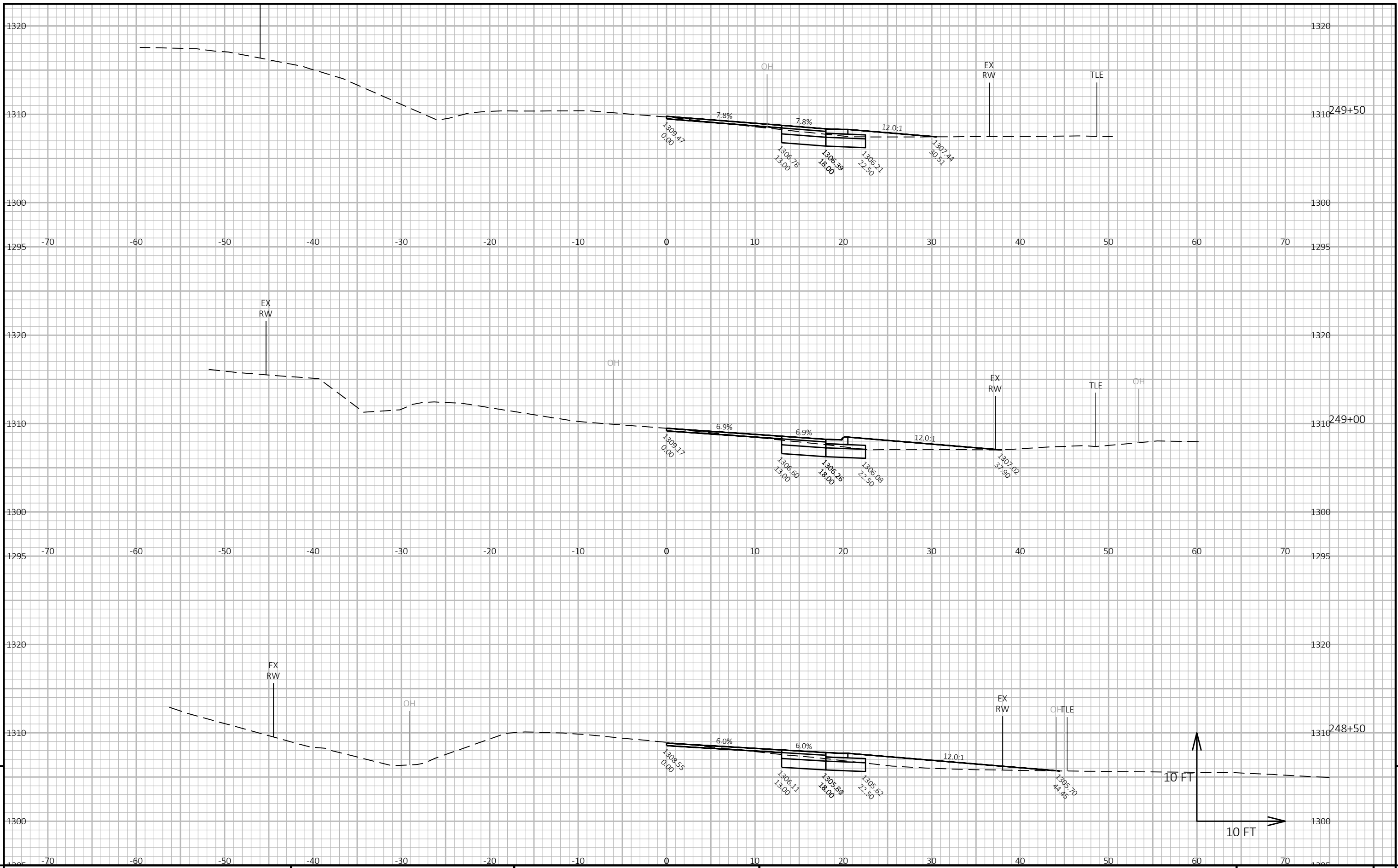
HWY: STH 82

COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E



PROJECT NO: 5150-02-70

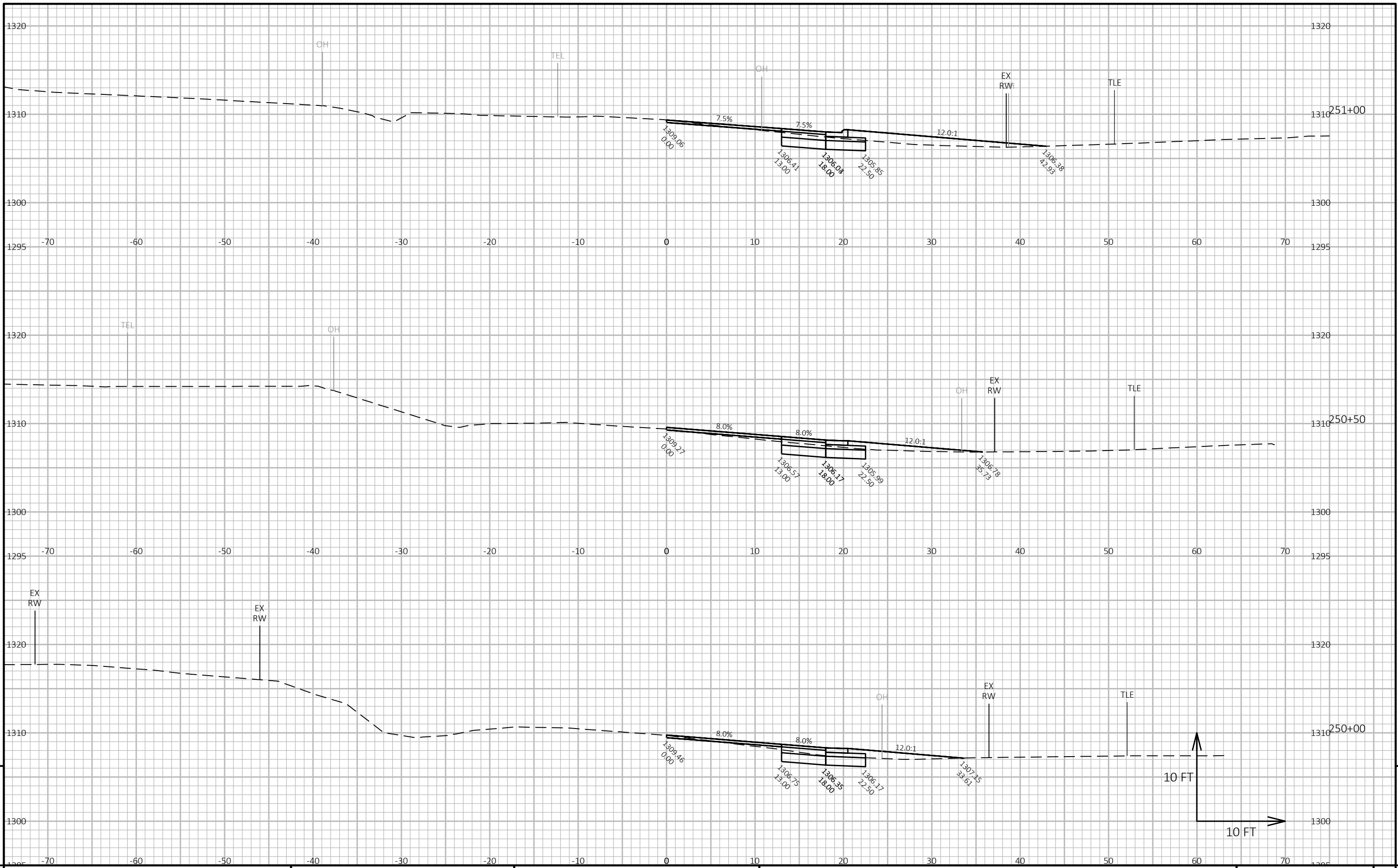
HWY: STH 82

COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E

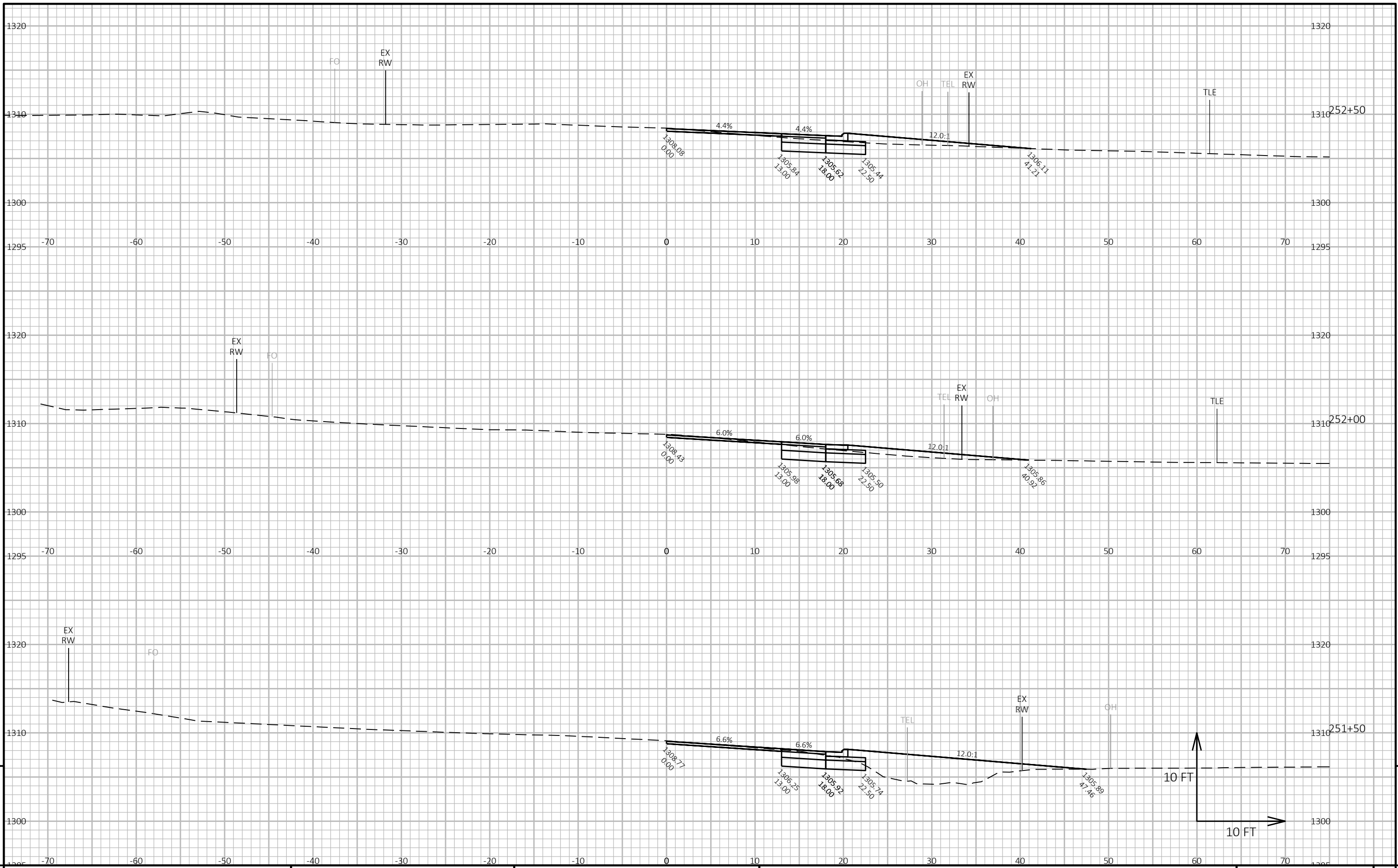


9

9

PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET      E

FILE NAME : W:\PROJECTS\2018\18-1712-1 (WAUZEKA DRIVE) STH 82\DRAWINGS\2022 WISDOT DRAWINGS\51500270-MODEL & CROSS SECTIONS.DWG      PLOT DATE : 4/3/2023 9:15 AM      PLOT BY : TYLER BUCHANAN      PLOT NAME :      PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.      WISDOT/CADD SHEET 49



9

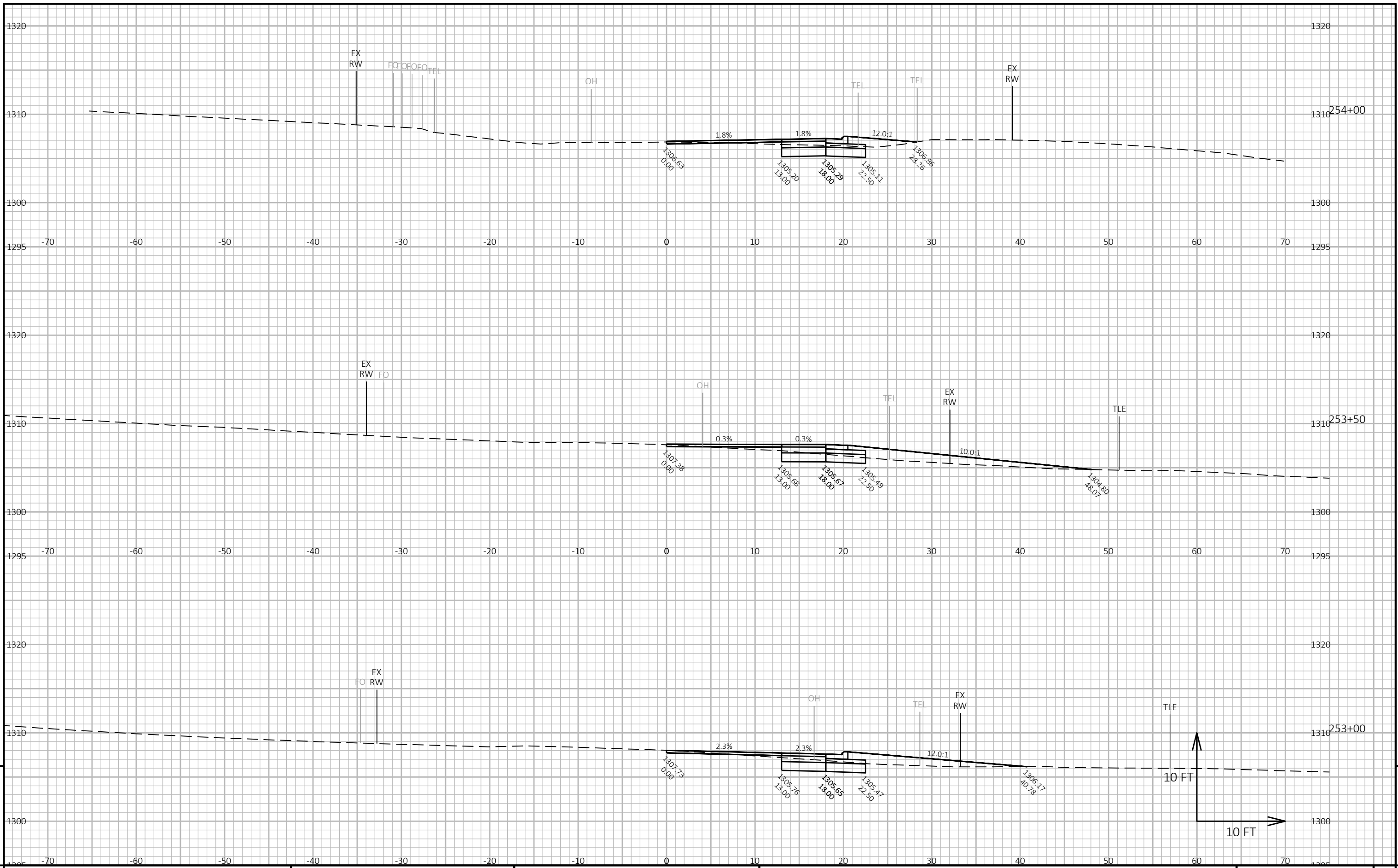
9

PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET      E

FILE NAME: W:\PROJECTS\2018\18-1712-1 (WAUZEKA DRIVE) STH 82\DRAWINGS\2022 WISDOT DRAWINGS\51500270-MODEL & CROSS SECTIONS.DWG      PLOT DATE: 4/3/2023 9:15 AM      PLOT BY: TYLER BUCHANAN      PLOT NAME:      PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.      WISDOT/CADD SHEET 49

LAYOUT NAME - STH 82 XS 8

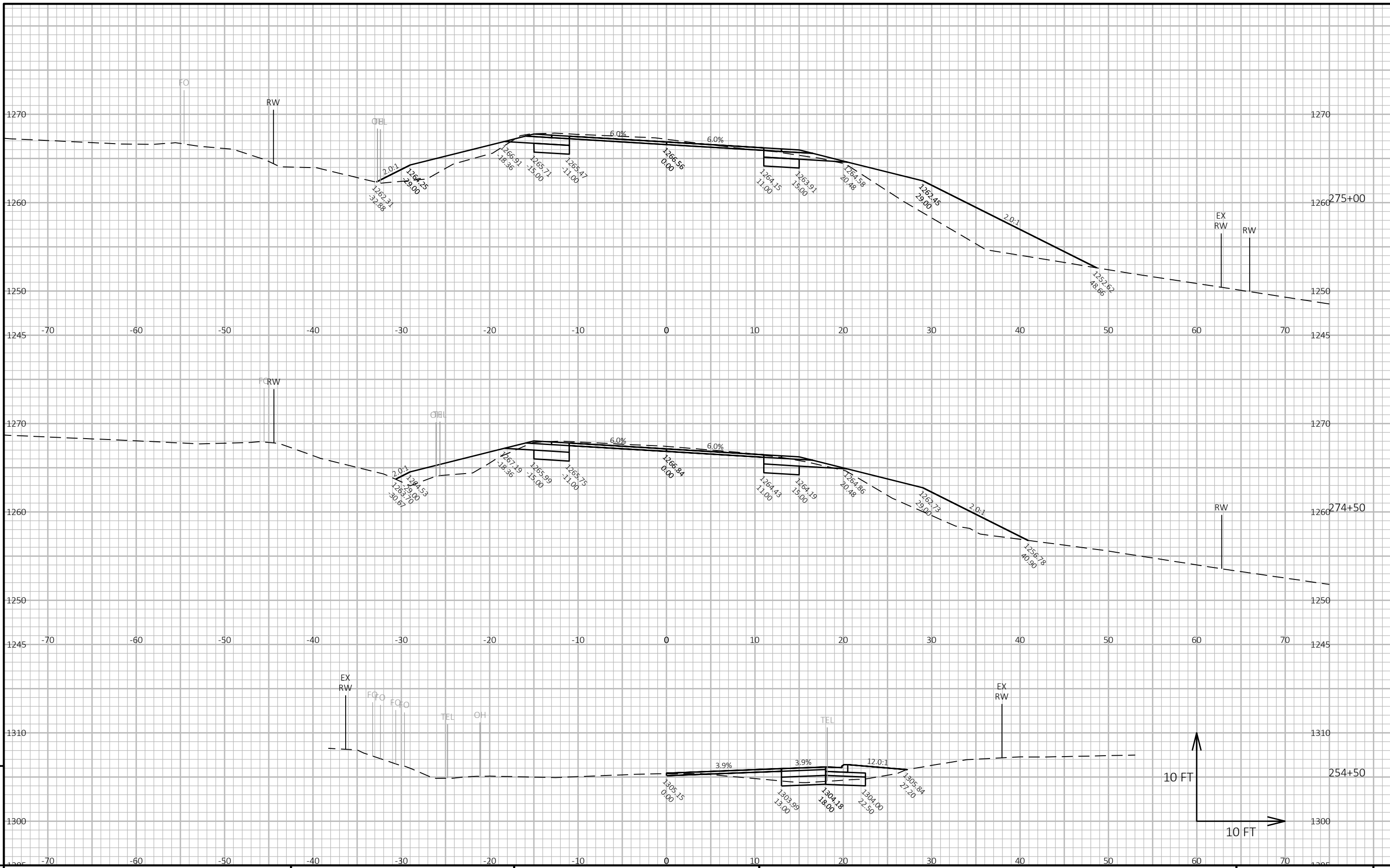




9

9

PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	CROSS SECTIONS: STH 82	SHEET	E
------------------------	-------------	----------------	------------------------	-------	---



PROJECT NO: 5150-02-70

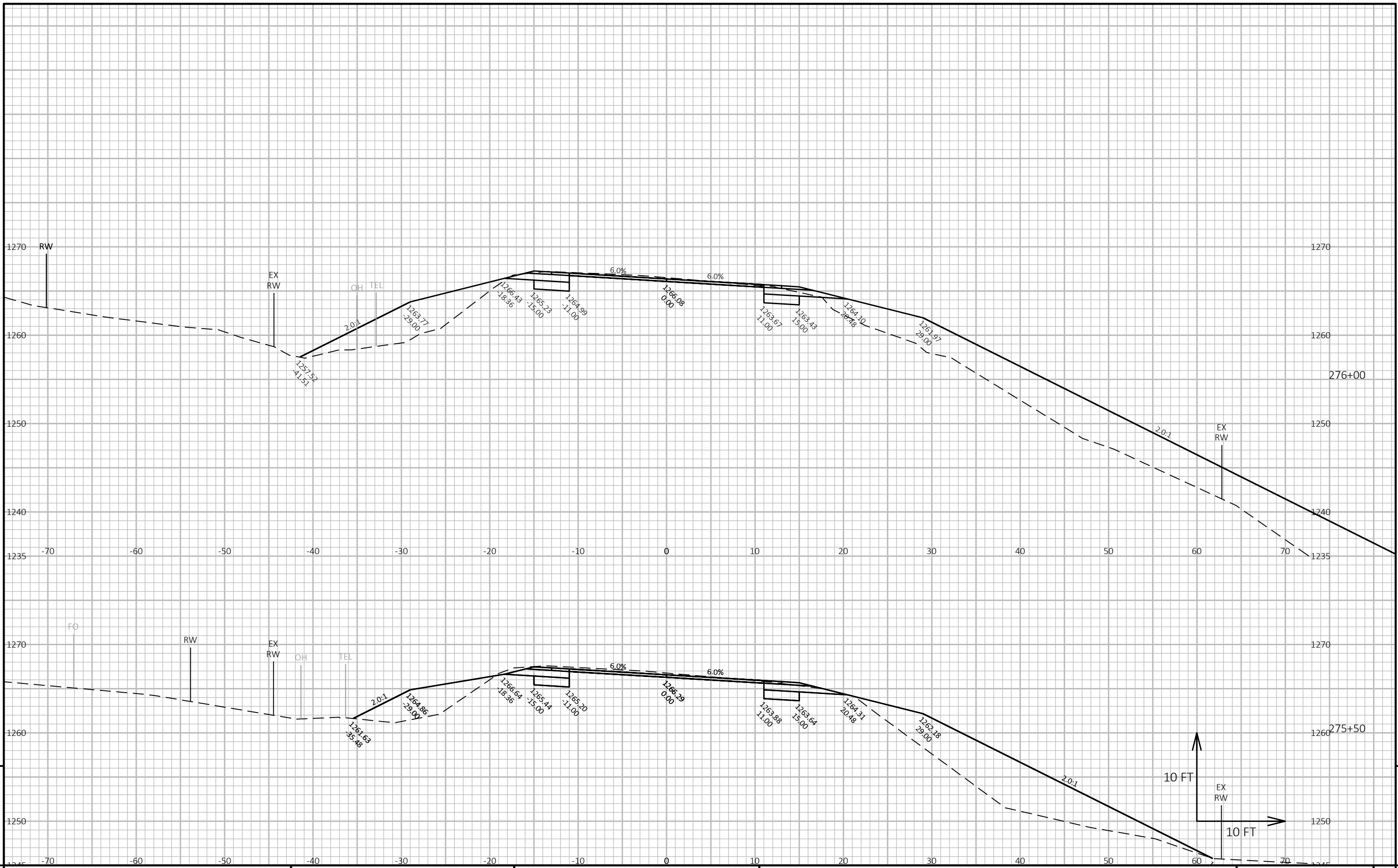
HWY: STH 82

COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E



PROJECT NO: 5150-02-70

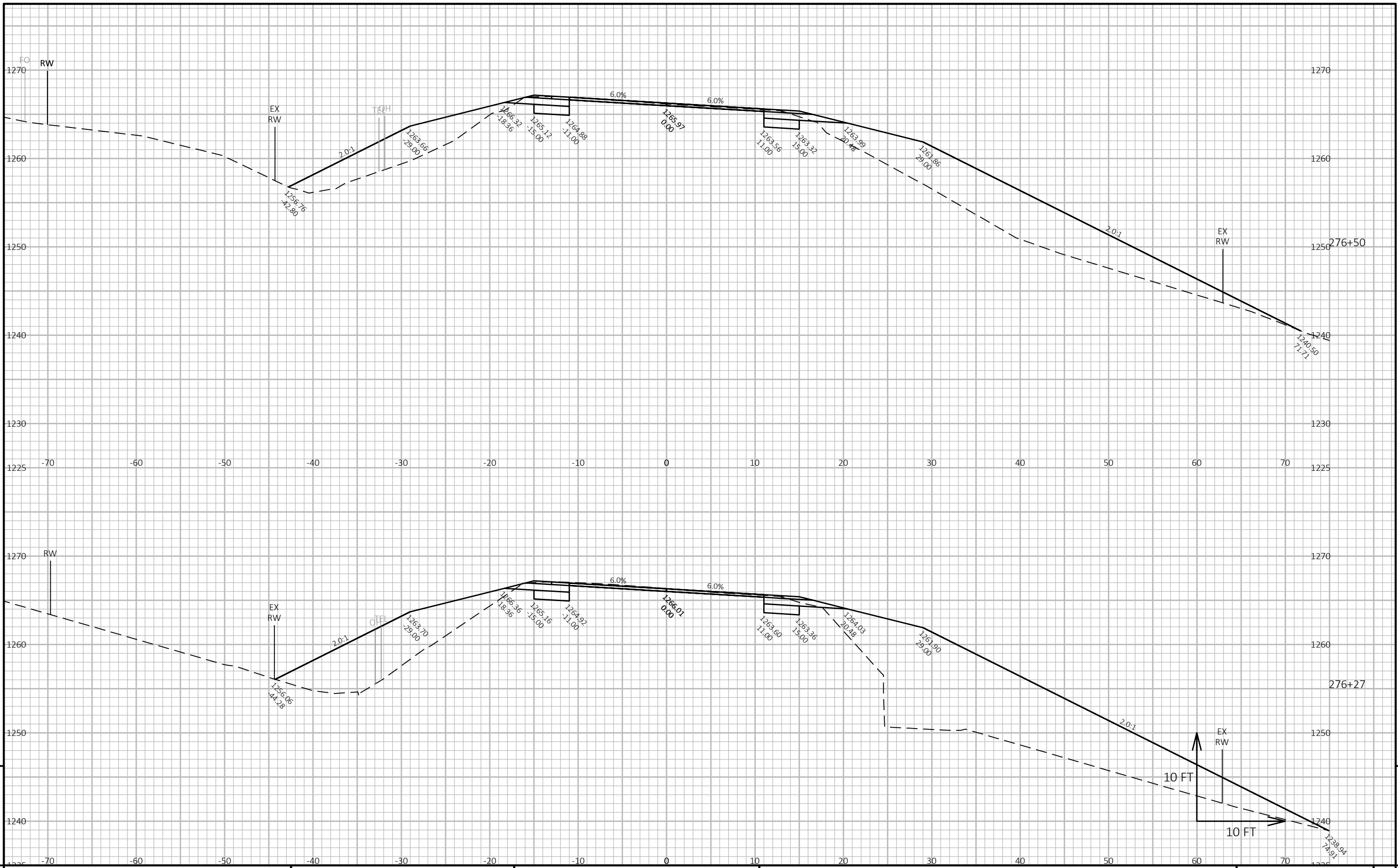
HWY: STH 82

COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E



PROJECT NO: 5150-02-70

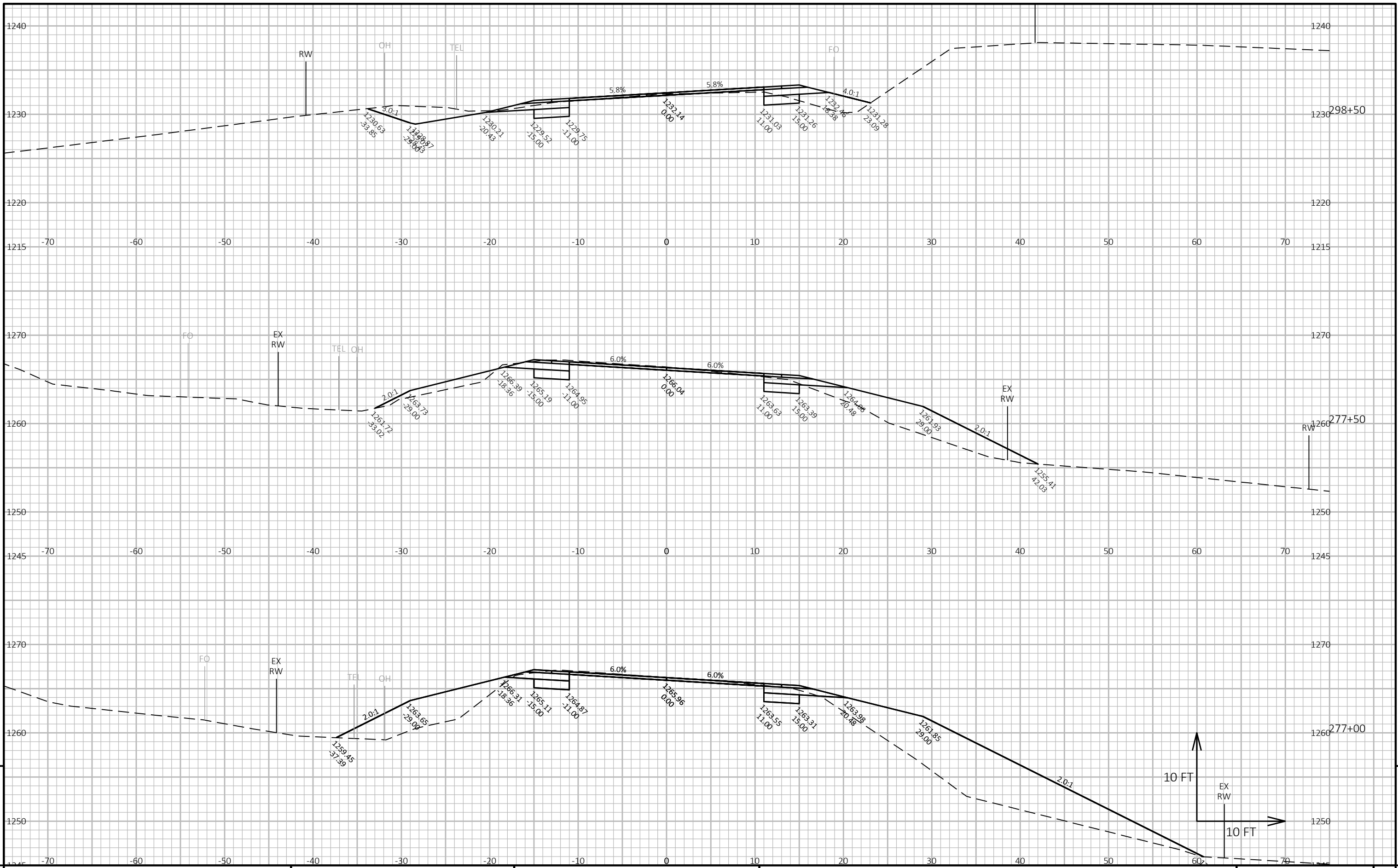
HWY: STH 82

COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E

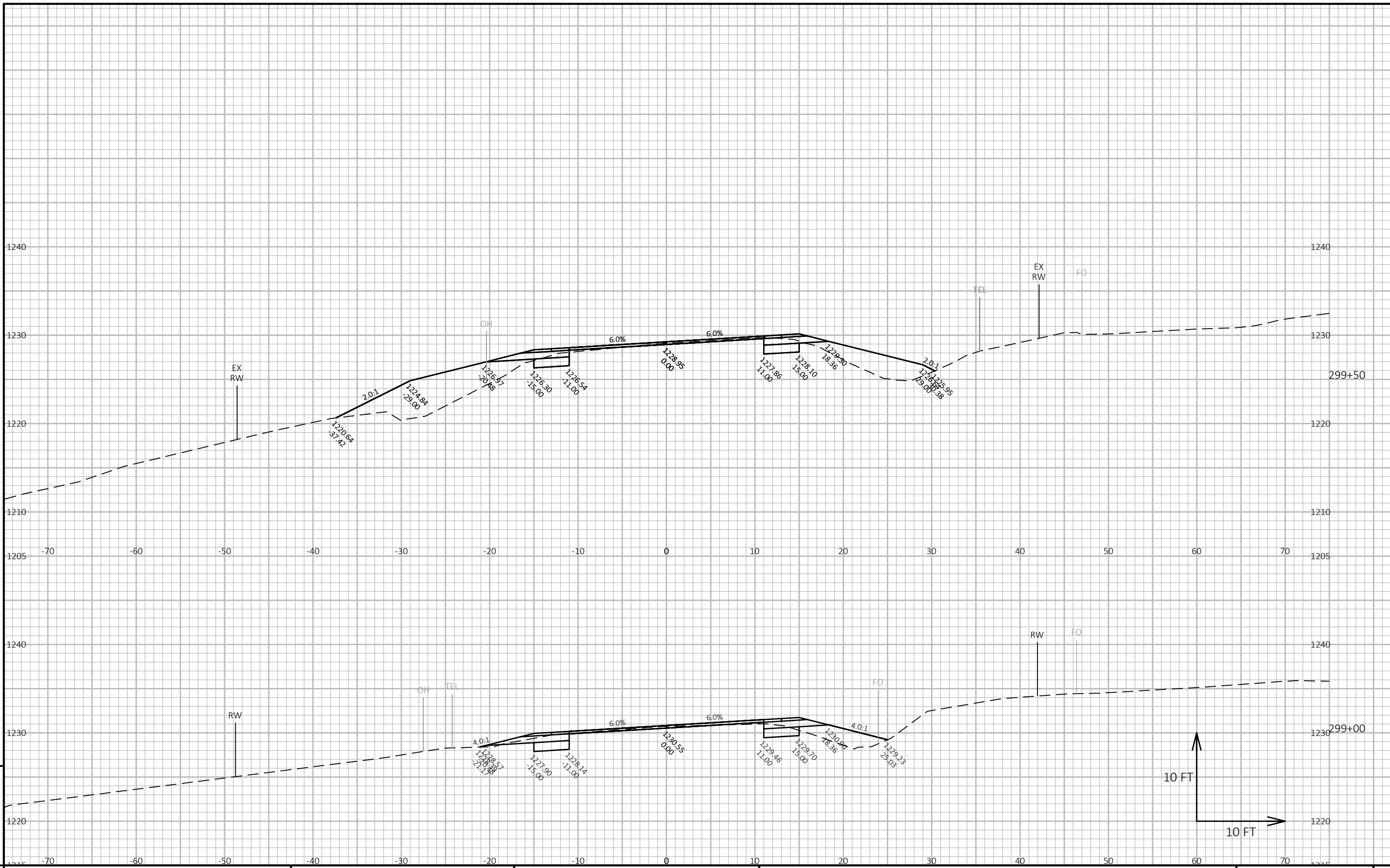


9

9

PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET      E

FILE NAME : W:\PROJECTS\2018\18-1712-1 (WAUZEKA DRIVE) STH 82\DRAWINGS\2022 WISDOT DRAWINGS\51500270-MODEL & CROSS SECTIONS.DWG      PLOT DATE : 4/3/2023 9:16 AM      PLOT BY : TYLER BUCHANAN      PLOT NAME :      PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.      WISDOT/CADD SHEET 49



PROJECT NO: 5150-02-70

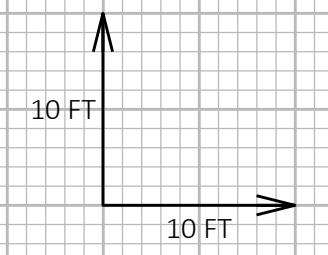
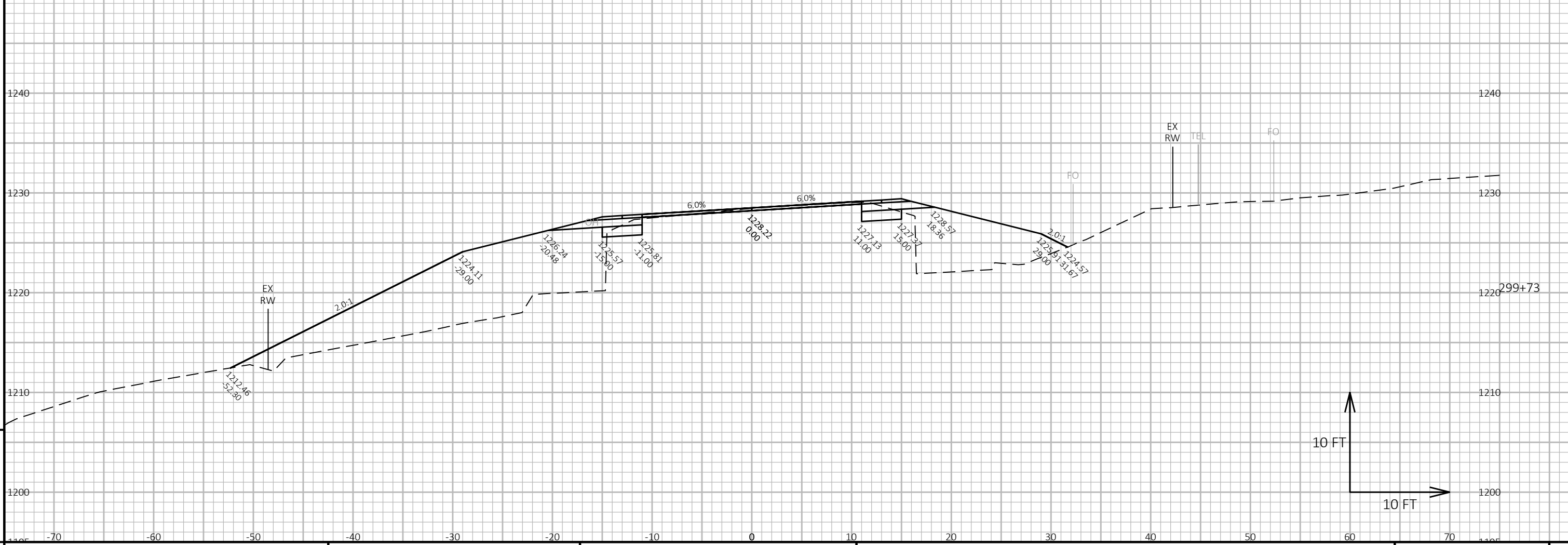
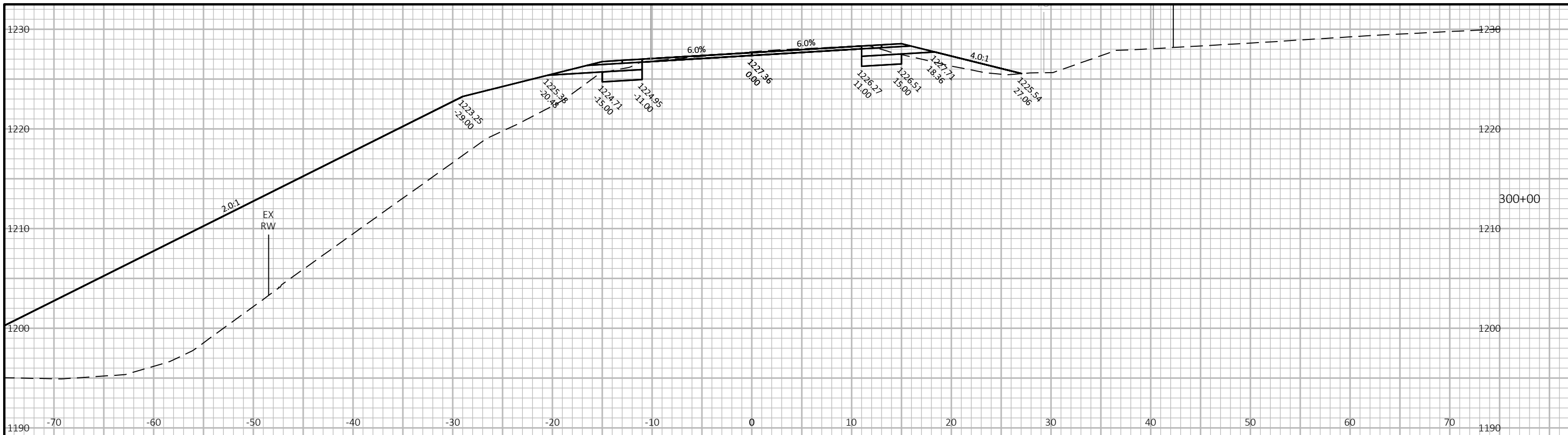
HWY: STH 82

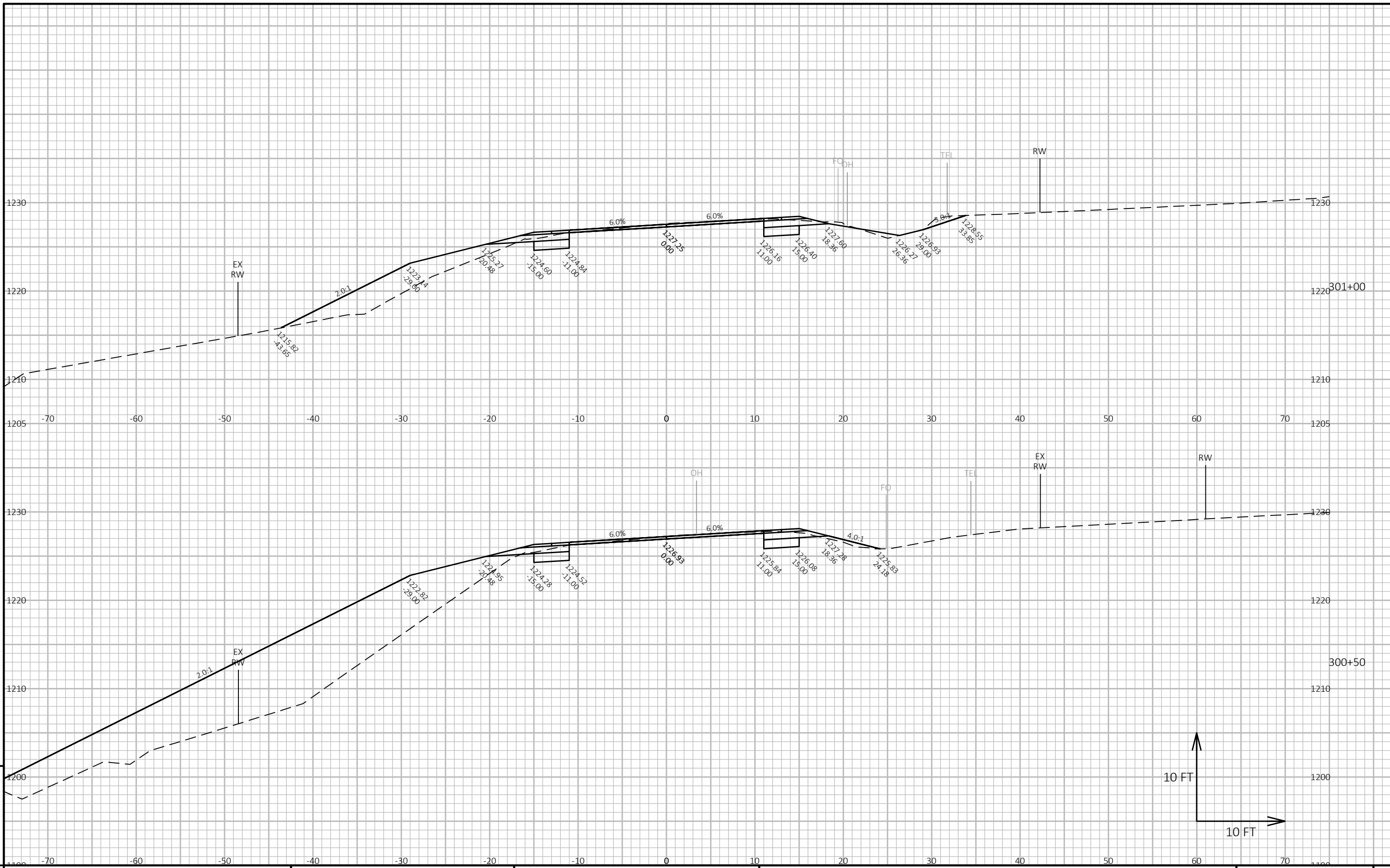
COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E





PROJECT NO: 5150-02-70

HWY: STH 82

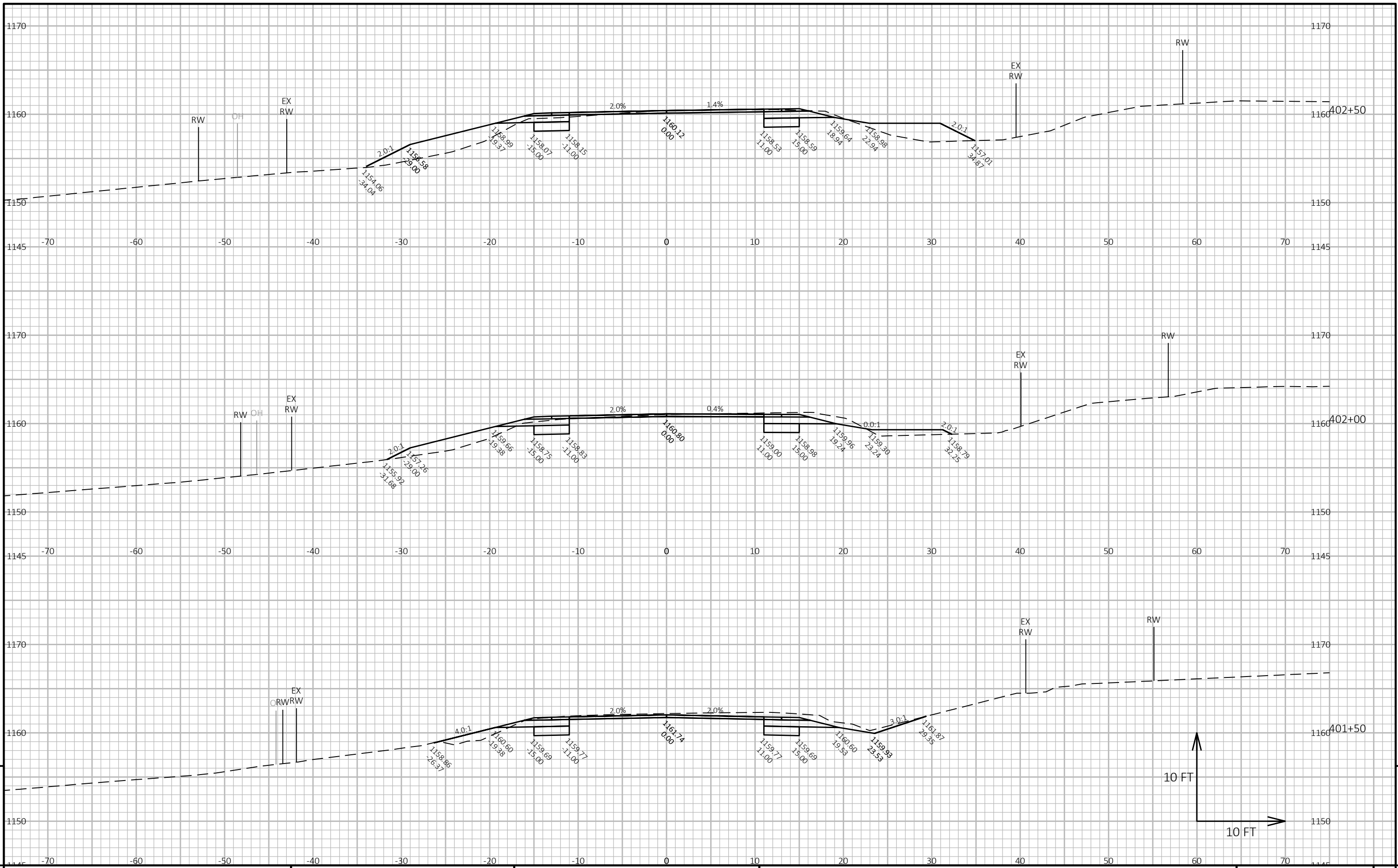
COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E





PROJECT NO: 5150-02-70

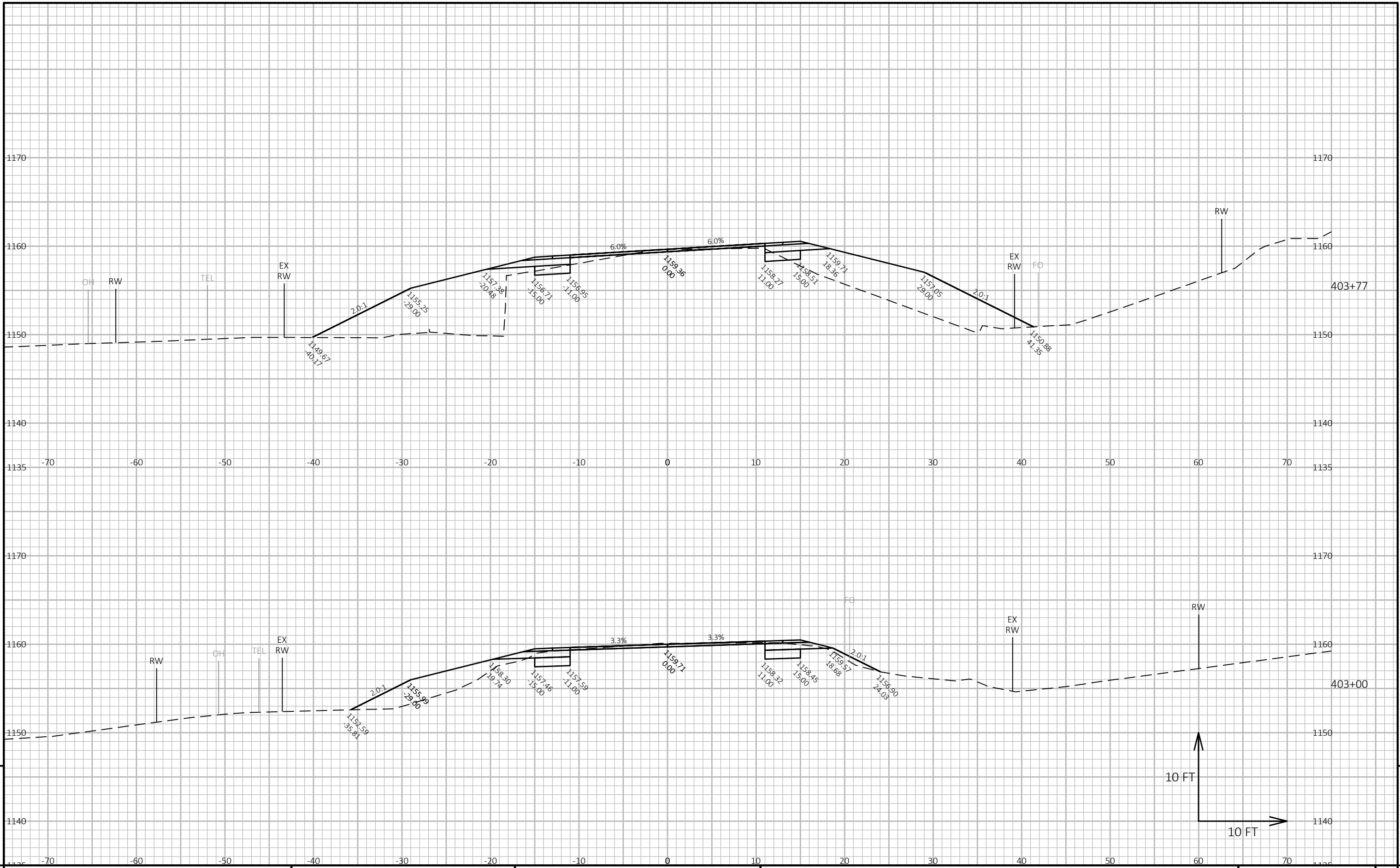
HWY: STH 82

COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E



PROJECT NO: 5150-02-70

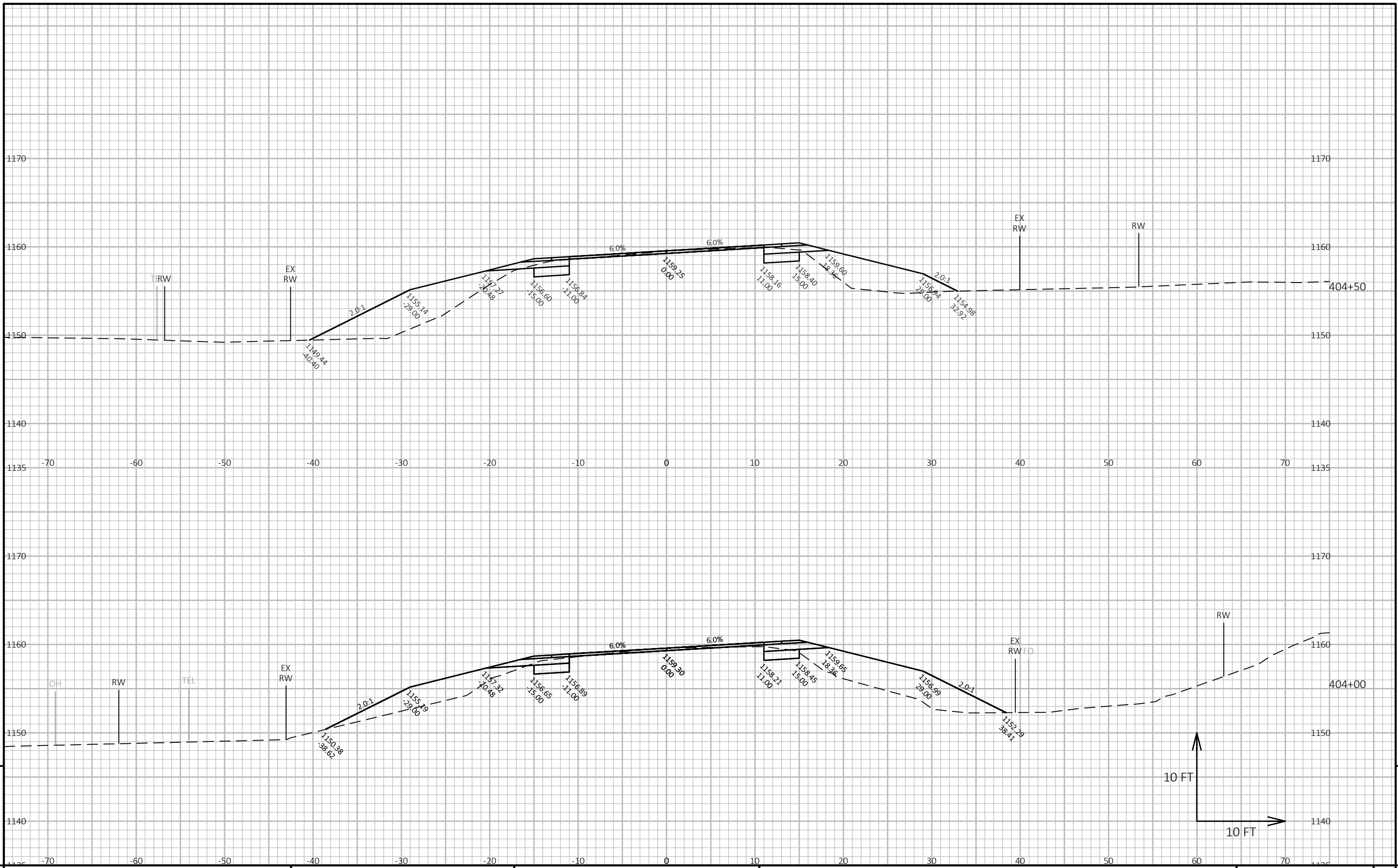
HWY: STH 82

COUNTY: VERNON

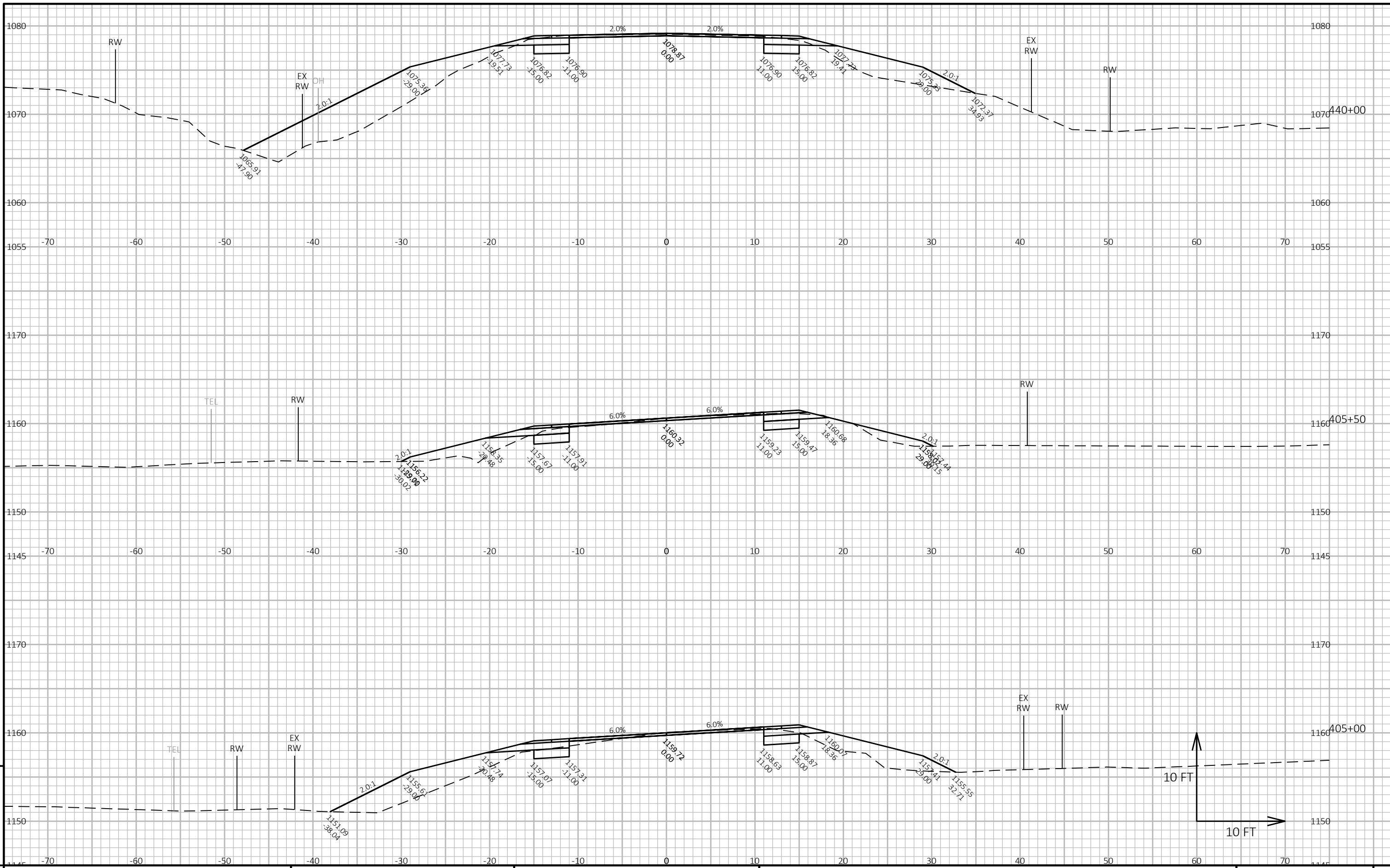
CROSS SECTIONS: STH 82

SHEET

E



PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET      E



PROJECT NO: 5150-02-70

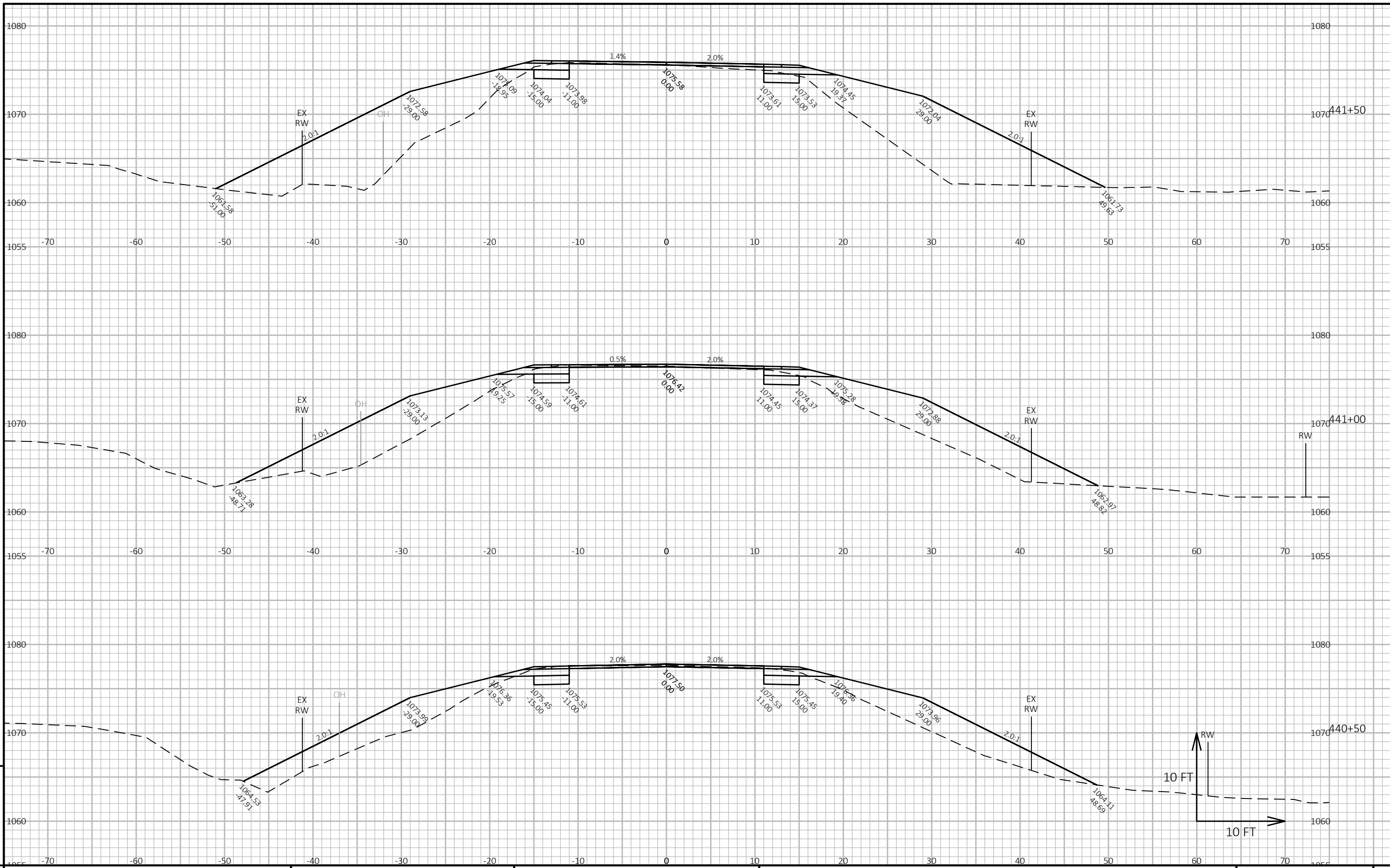
HWY: STH 82

COUNTY: VERNON

CROSS SECTIONS: STH 82

SHEET

E



9

9

PROJECT NO: 5150-02-70

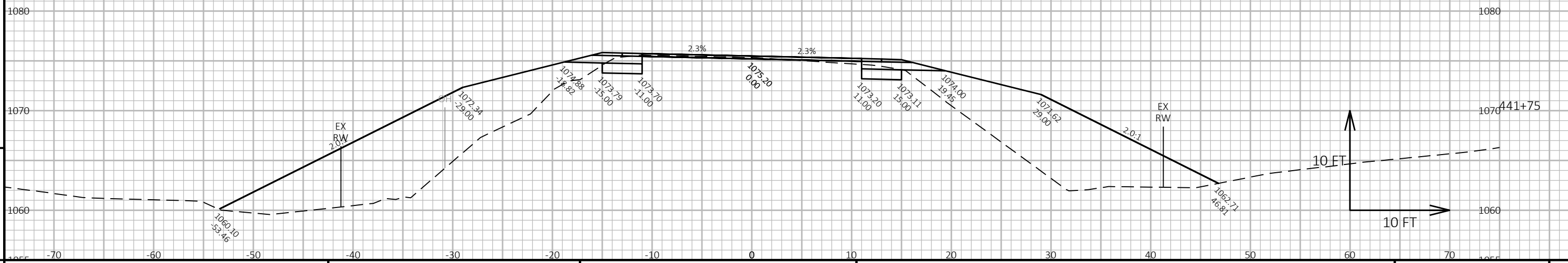
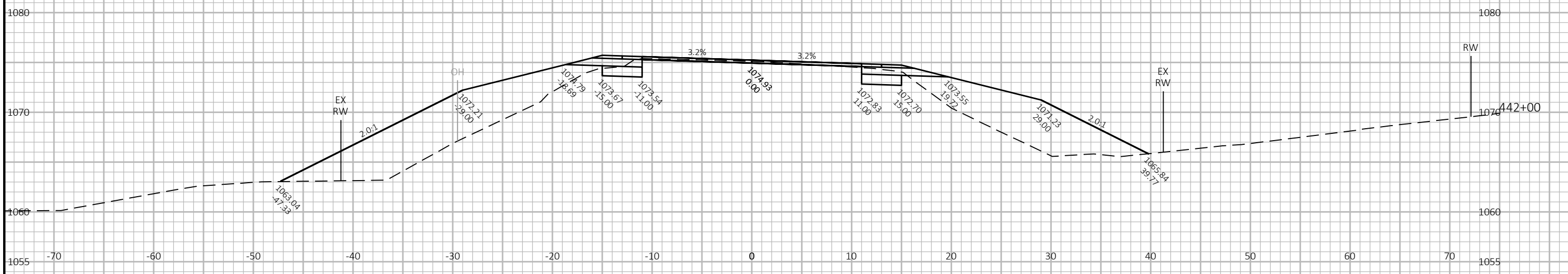
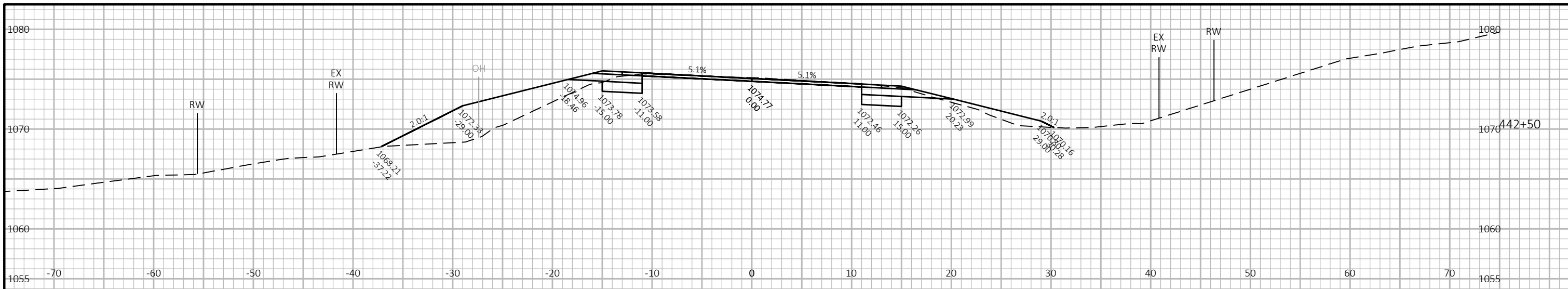
HWY: STH 82

COUNTY: VERNON

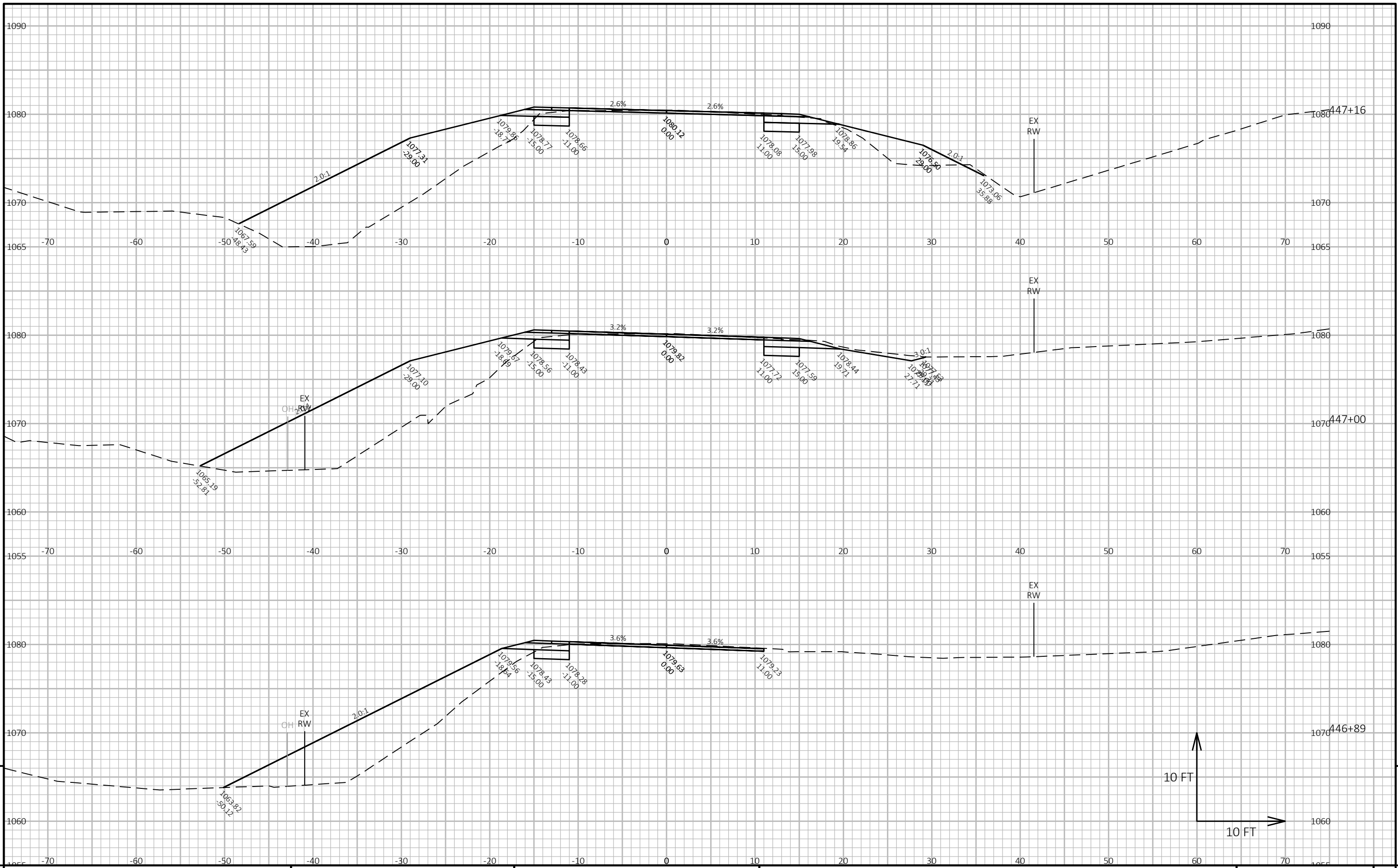
CROSS SECTIONS: STH 82

SHEET

E



PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET 9



PROJECT NO: 5150-02-70

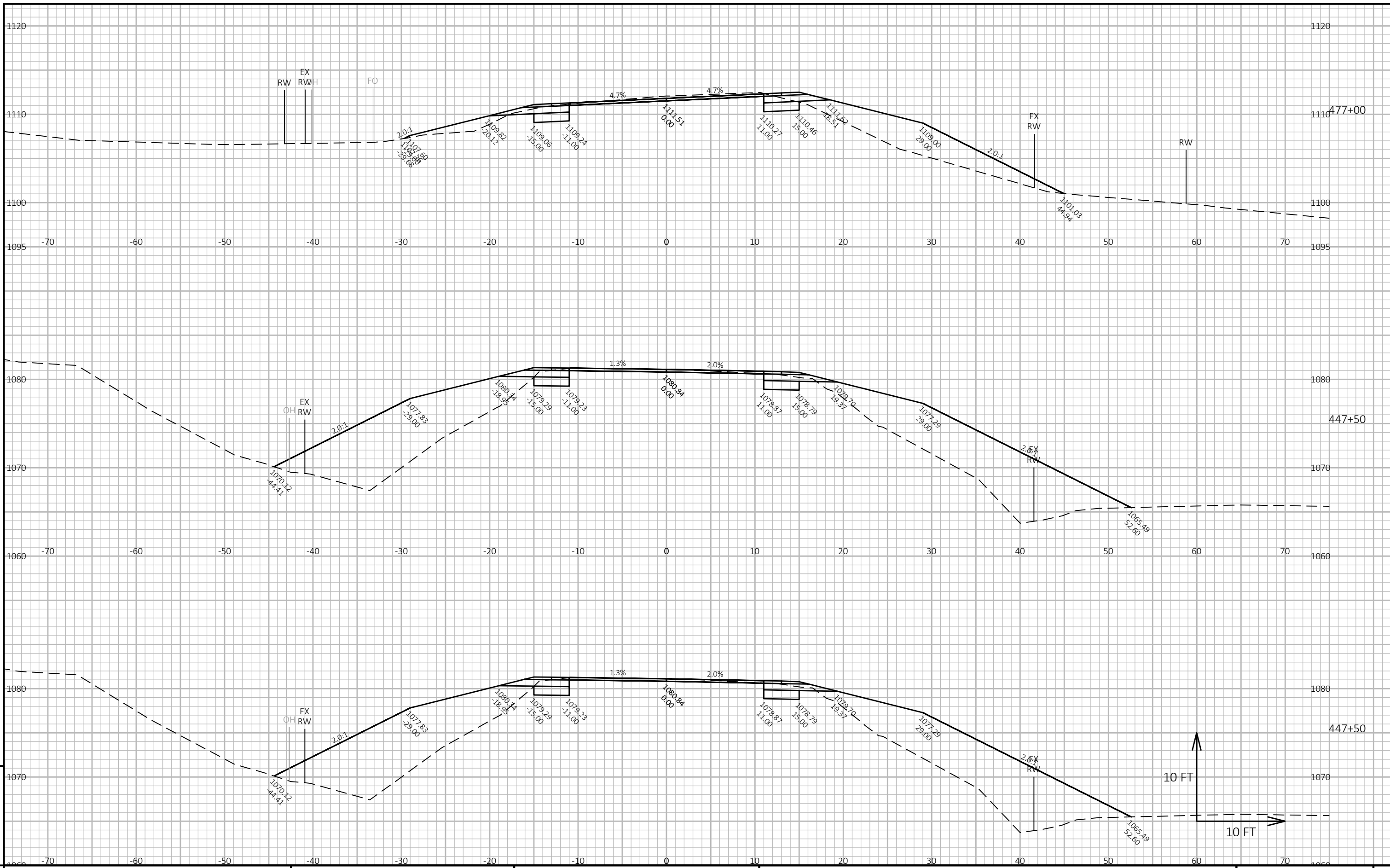
HWY: STH 82

COUNTY: VERNON

CROSS SECTIONS: STH 82

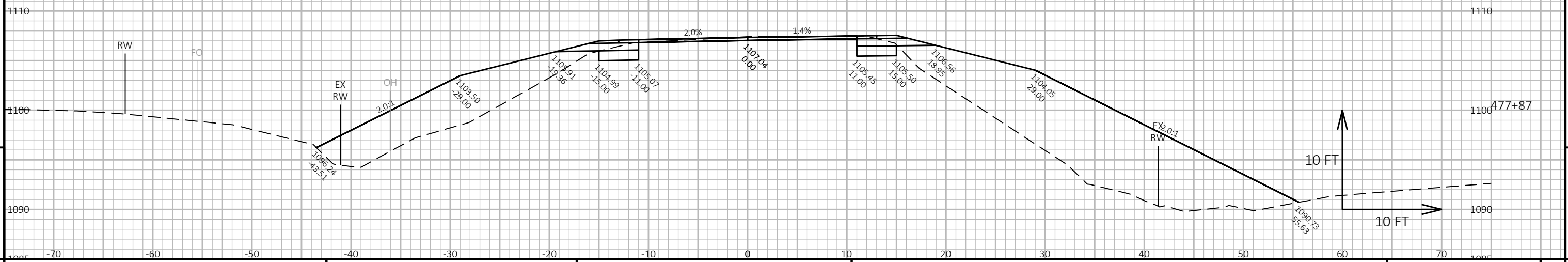
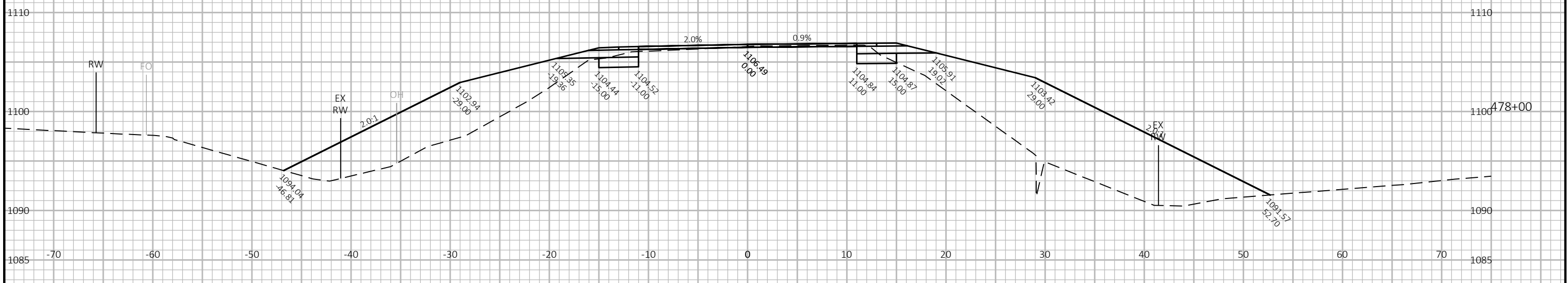
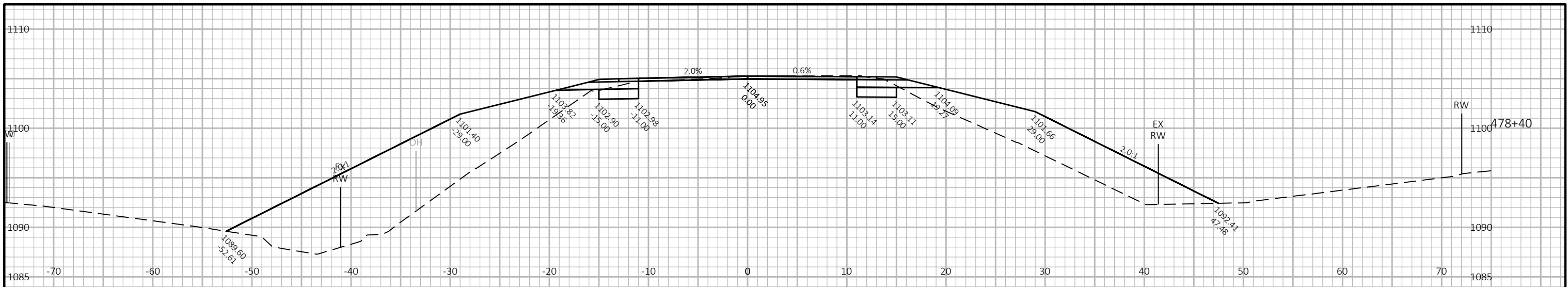
SHEET

E

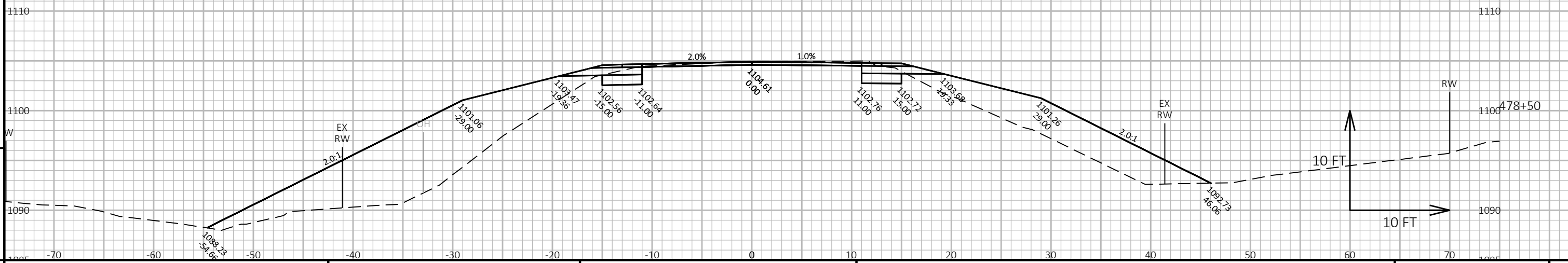
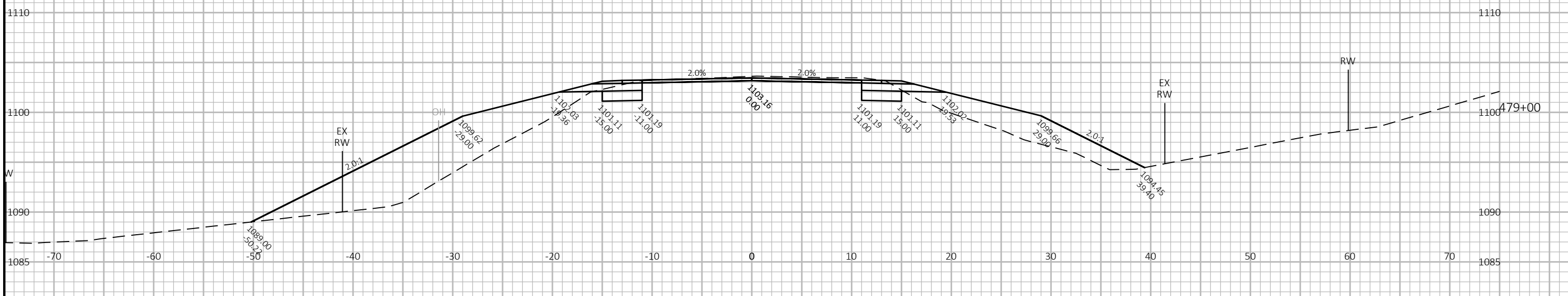
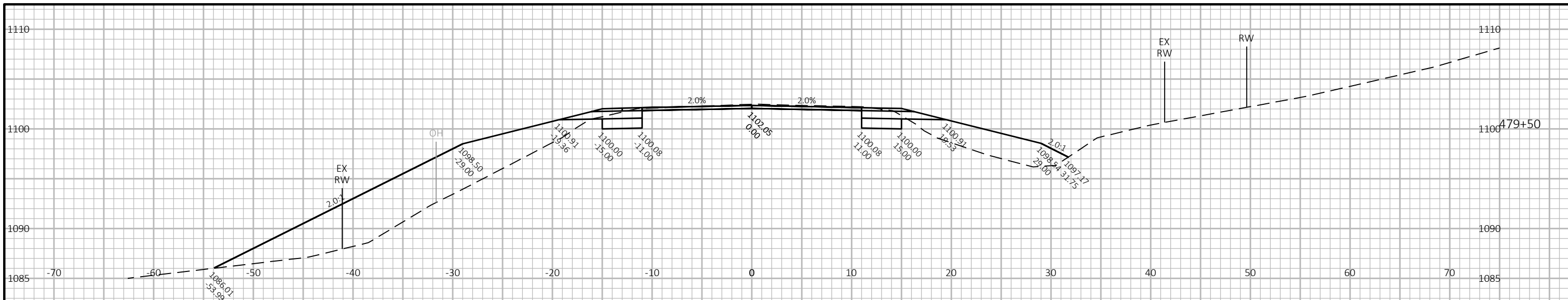


PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	CROSS SECTIONS: STH 82	SHEET	E
------------------------	-------------	----------------	------------------------	-------	---



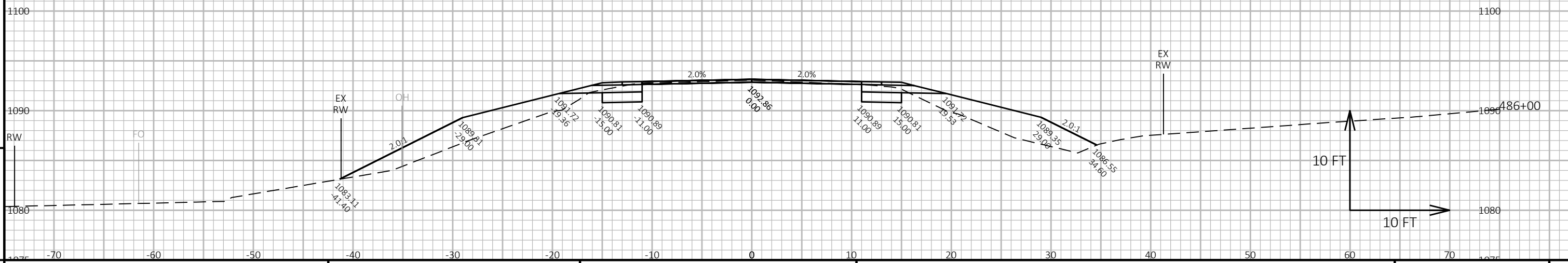
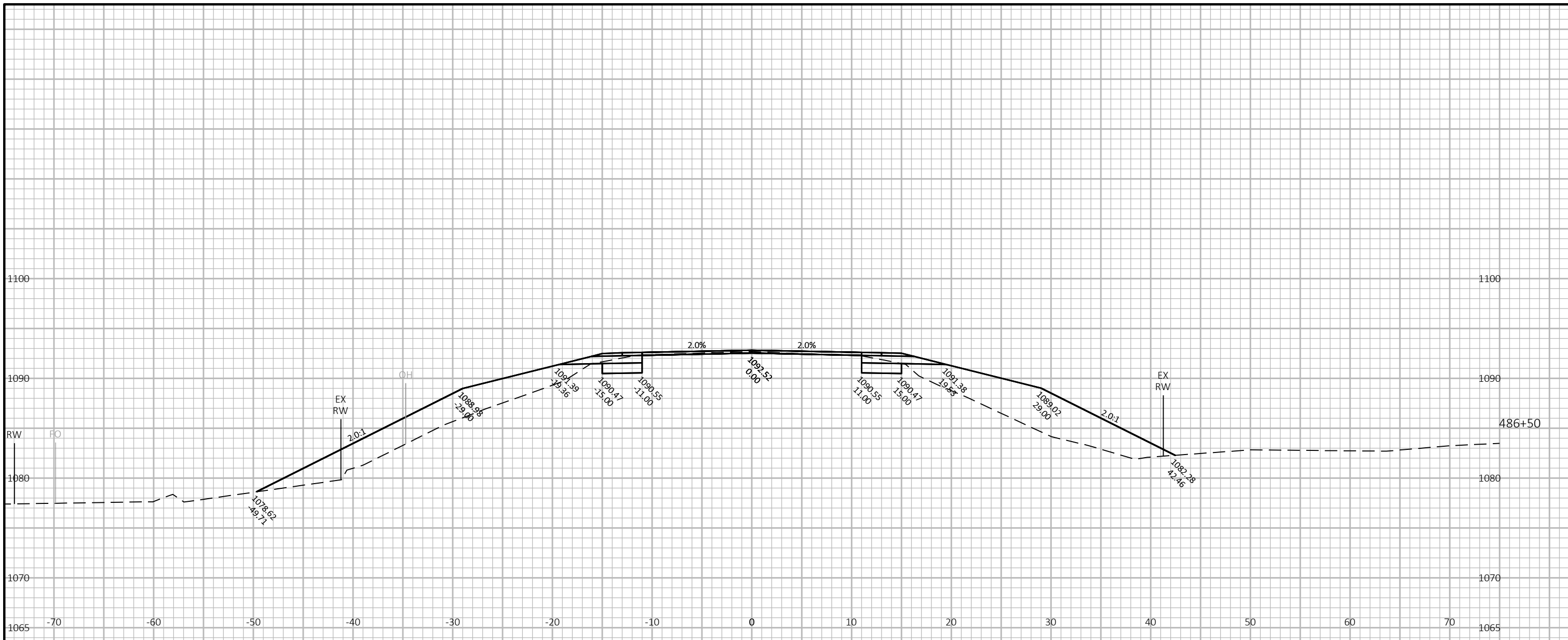


PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET 9

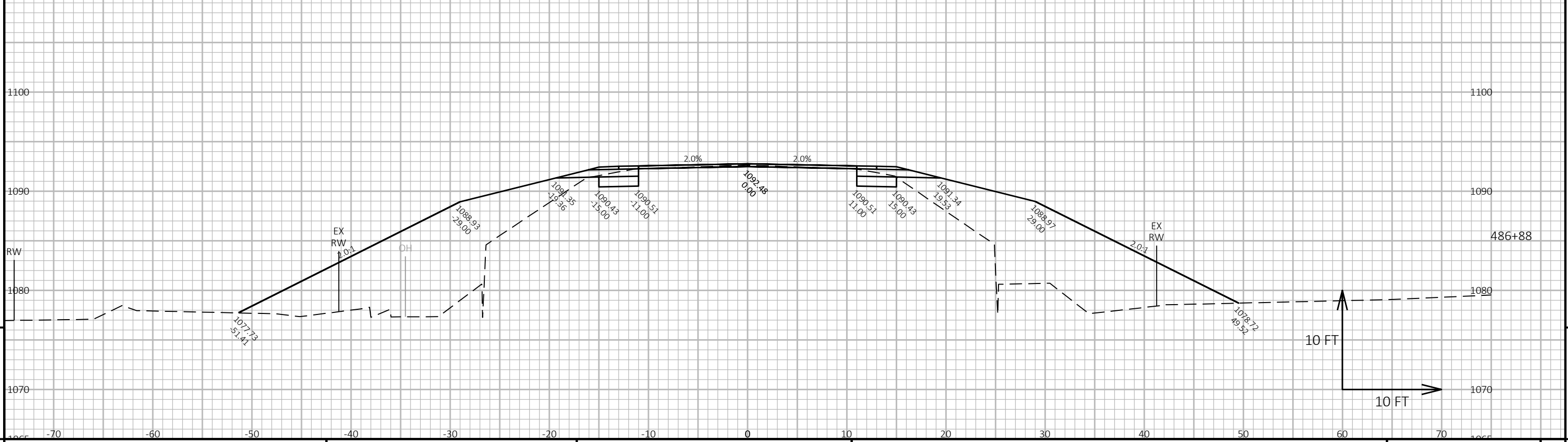
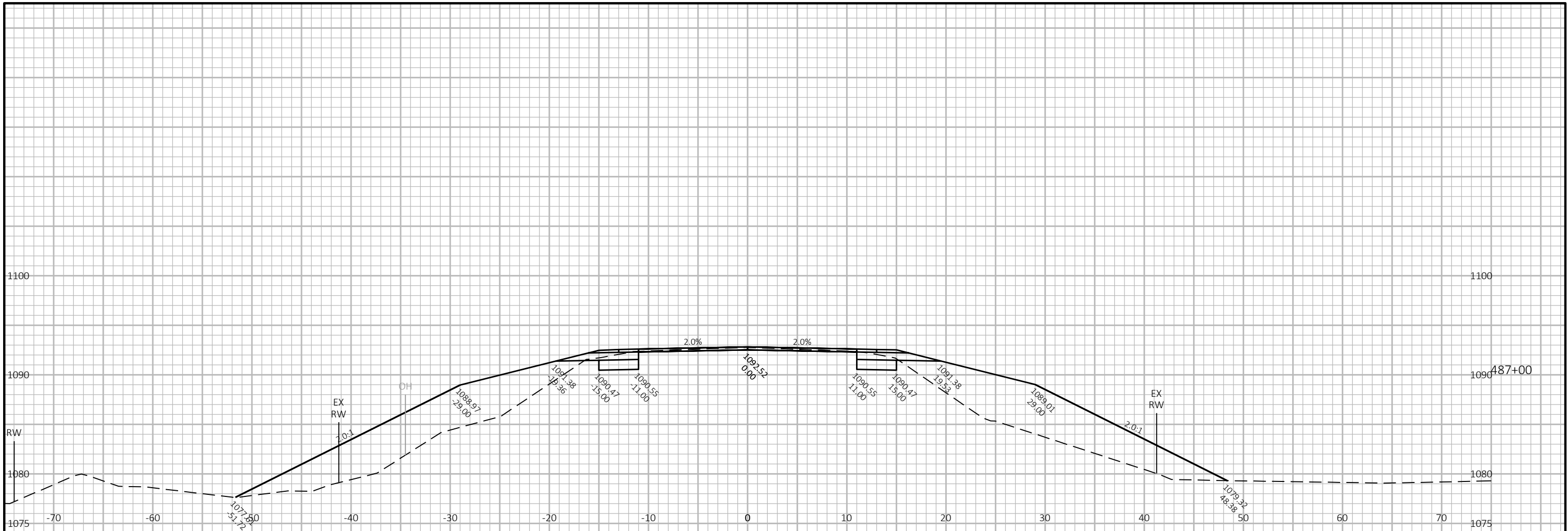


PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET 9

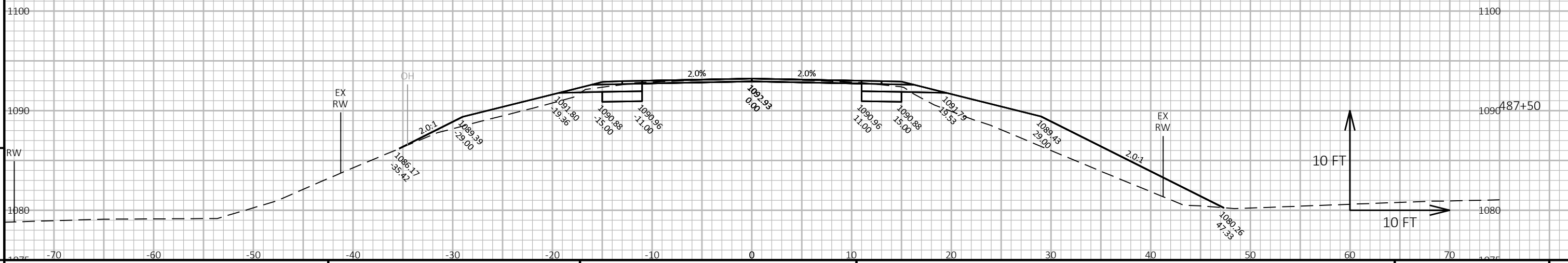
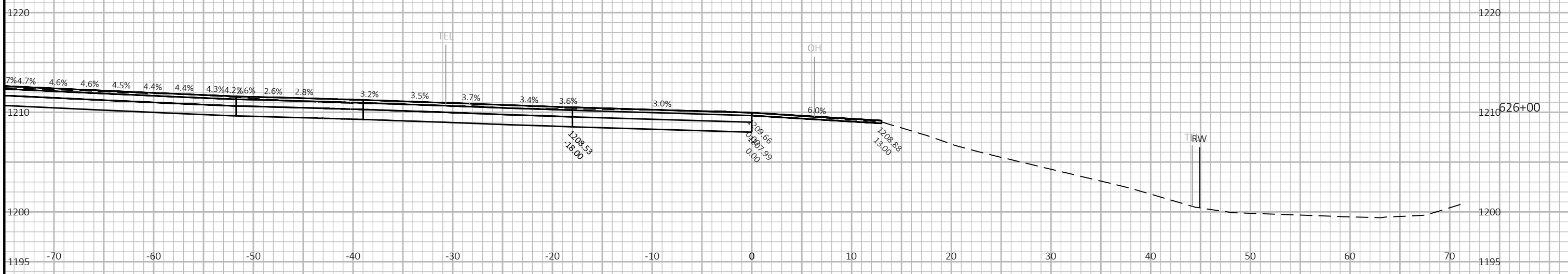
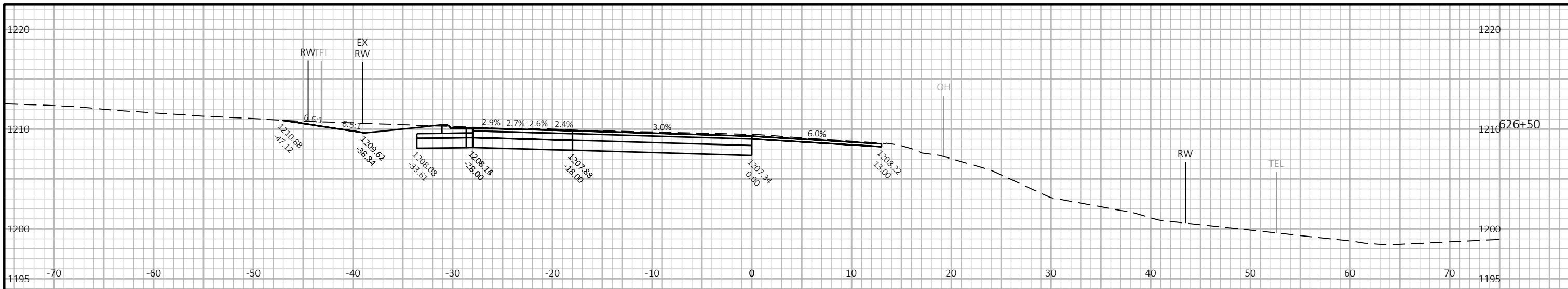




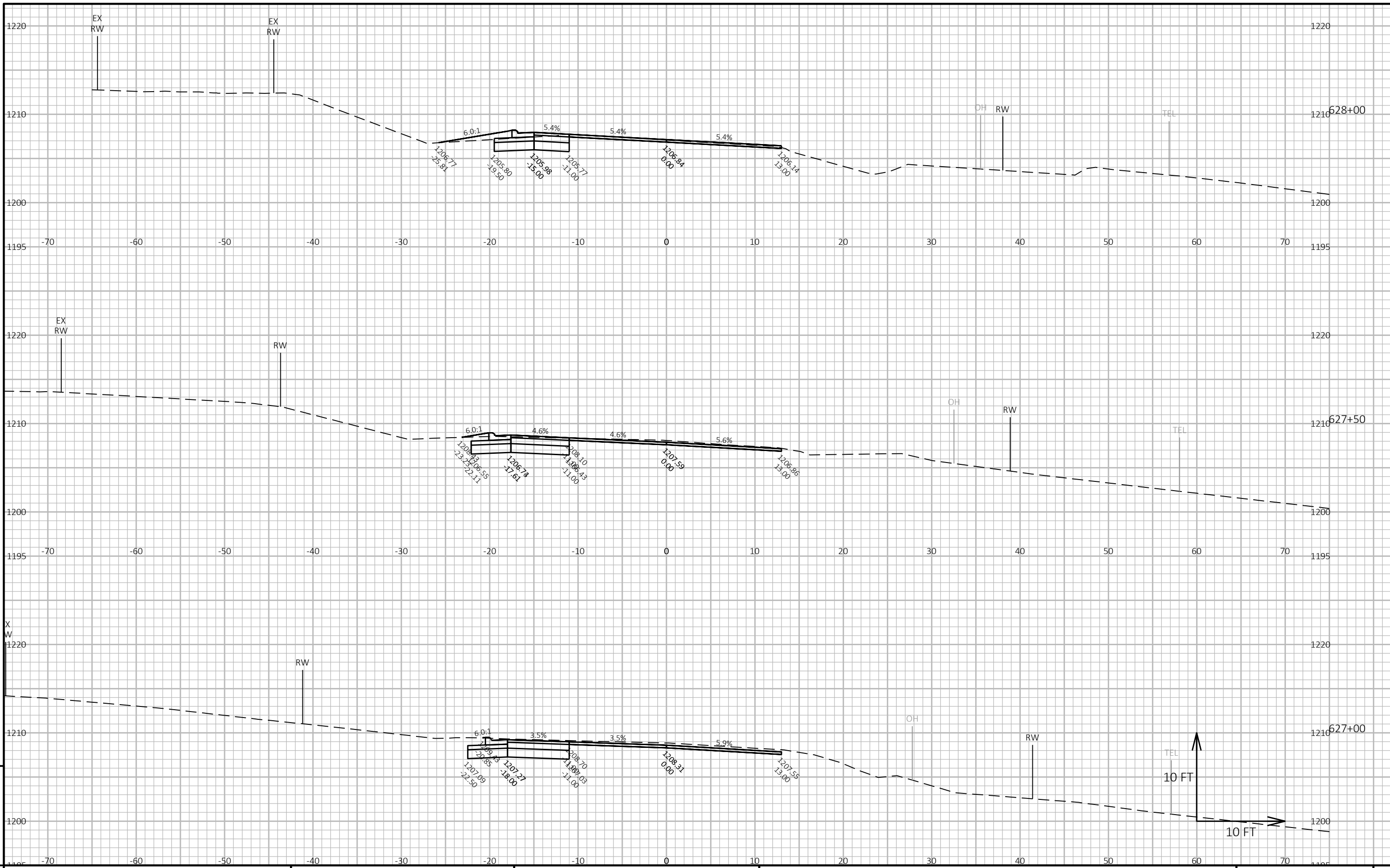
PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET      E



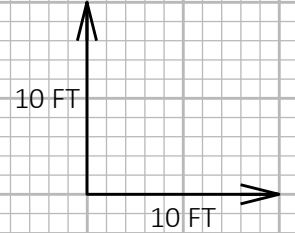
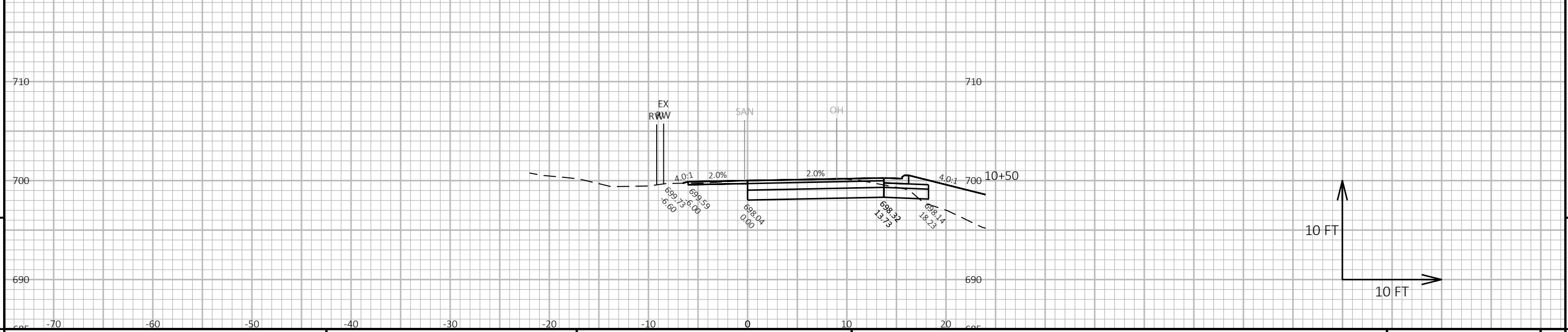
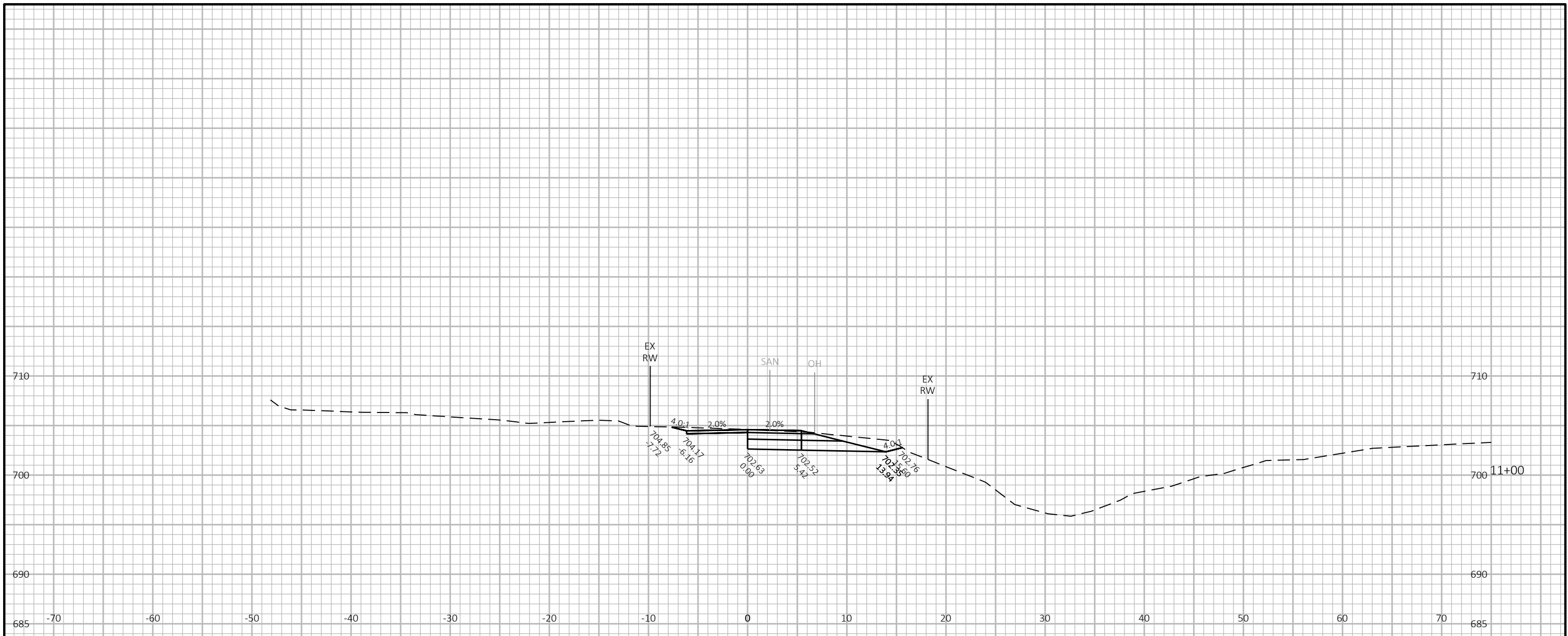
PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET 9



PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET 9



PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82      SHEET      E



9

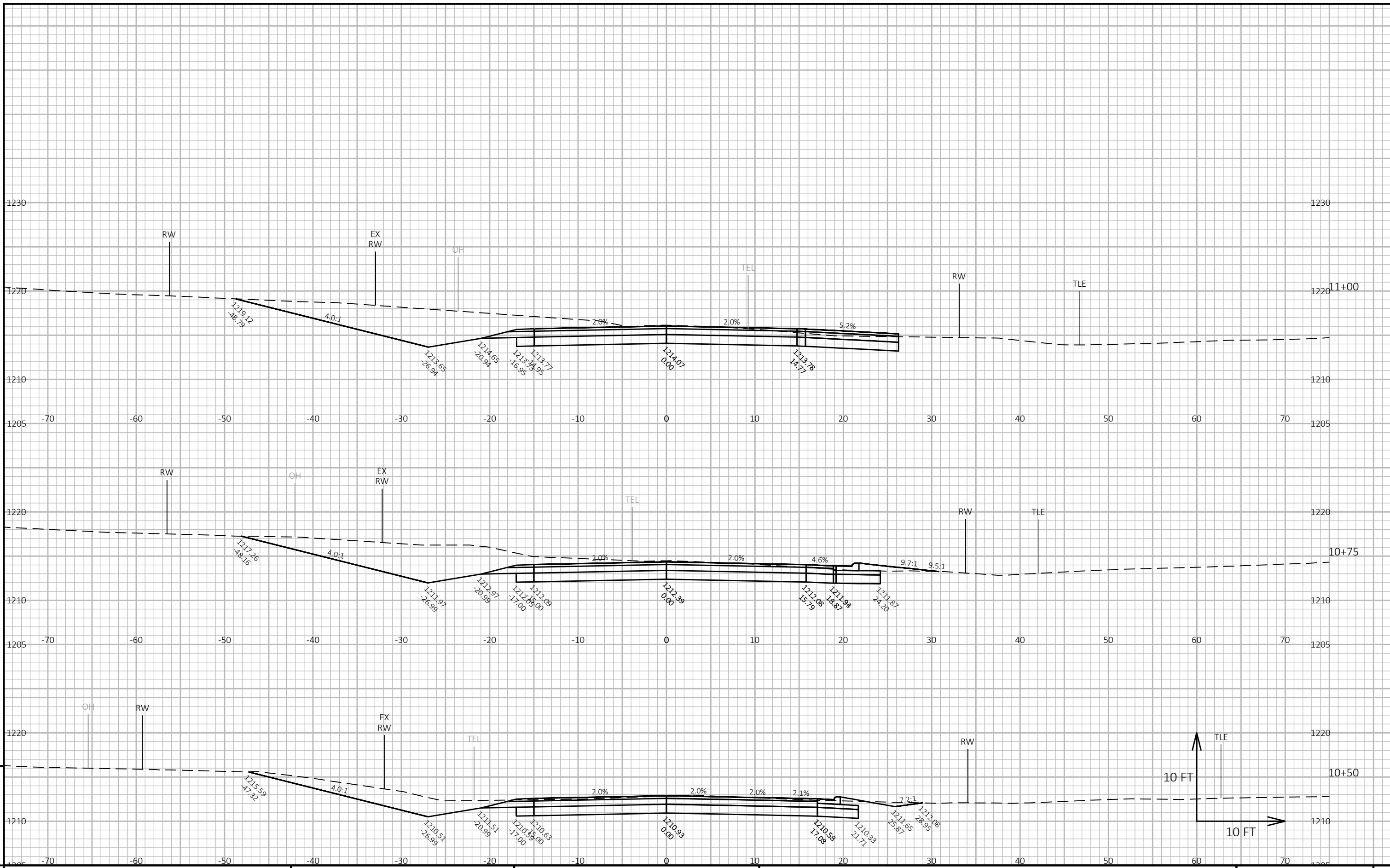
9

PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: DEVLIN STREET      SHEET      E

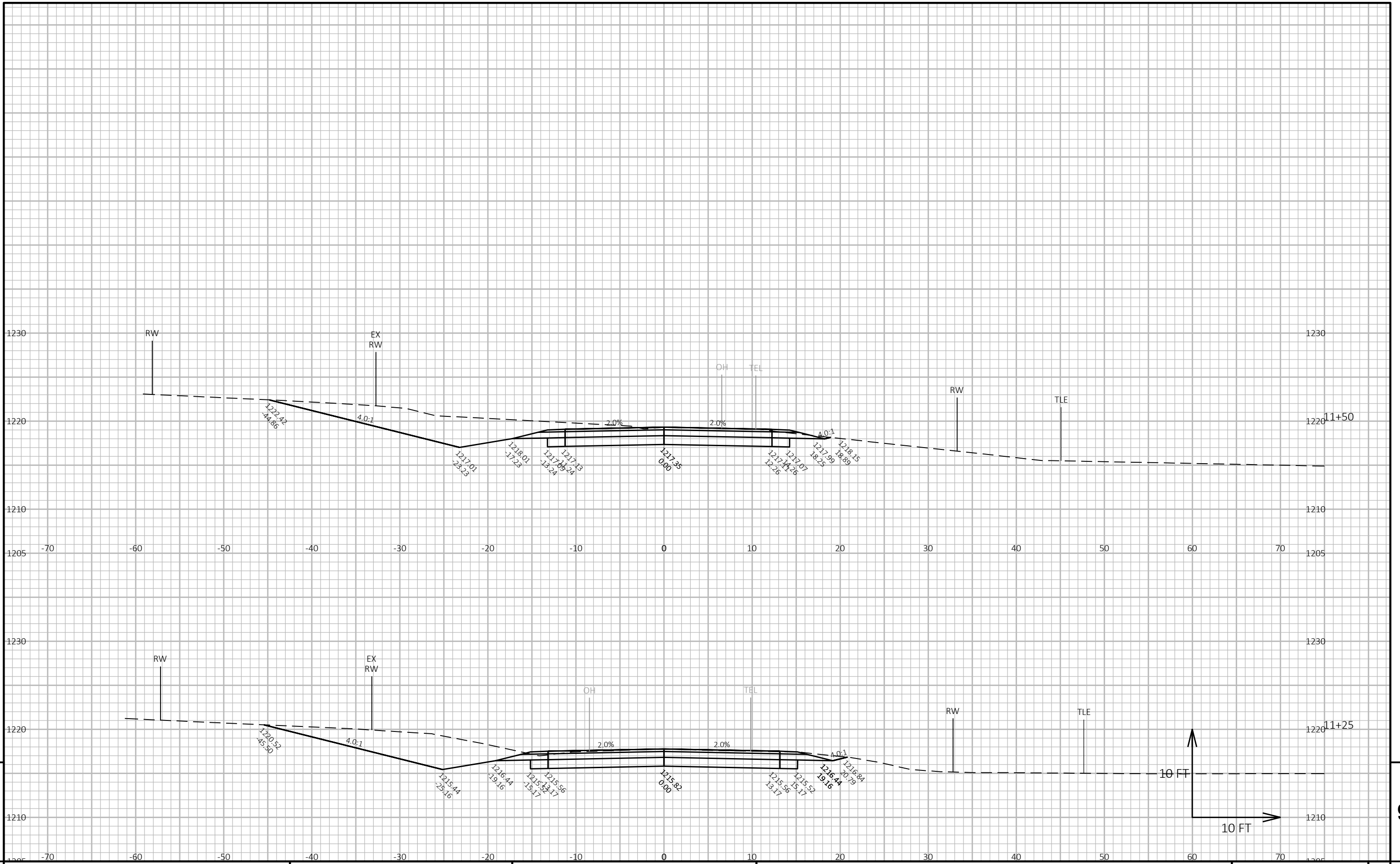
FILE NAME : W:\PROJECTS\2018\18-1712-1 (WAUZEKA DRIVE) STH 82\DRAWINGS\2022 WISDOT DRAWINGS\51500270-MODEL & CROSS SECTIONS.DWG      PLOT DATE : 4/3/2023 9:17 AM      PLOT BY : TYLER BUCHANAN      PLOT NAME :      PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.      WISDOT/CADD SHEET 49

LAYOUT NAME - Devlin XS 1

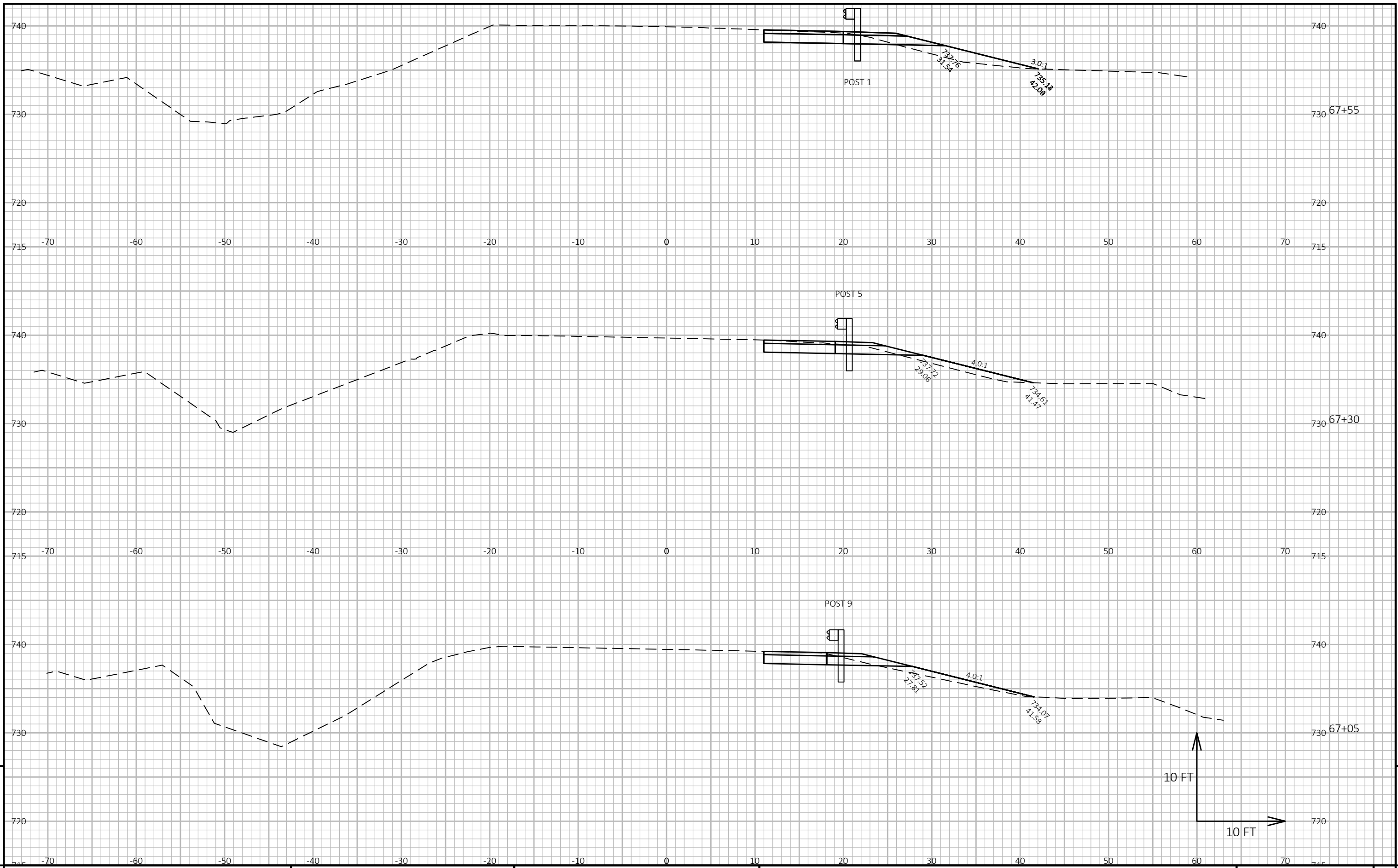




PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: SWENSON AVENUE      SHEET      E



PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: SWENSON AVENUE      SHEET      E



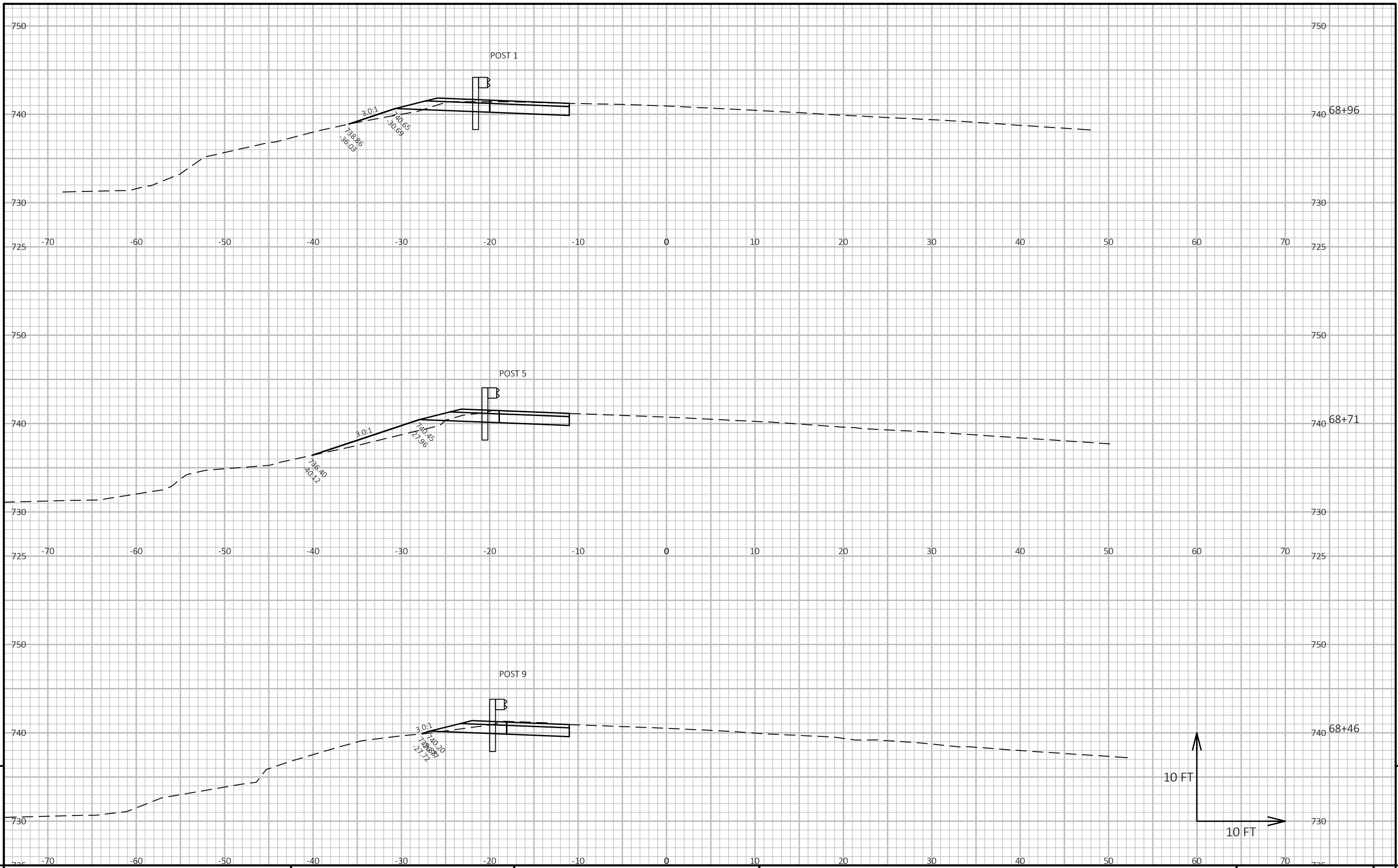
9

9

PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82 EAT'S      SHEET      E

FILE NAME: W:\PROJECTS\2018\18-1712-1 (WAUZEKA DRIVE) STH 82\DRAWINGS\2022 WISDOT DRAWINGS\51500270-MODEL & CROSS SECTIONS.DWG      PLOT DATE: 4/3/2023 9:17 AM      PLOT BY: TYLER BUCHANAN      PLOT NAME:      PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.      WISDOT/CADD SHEET 49

LAYOUT NAME - EATs XS 3



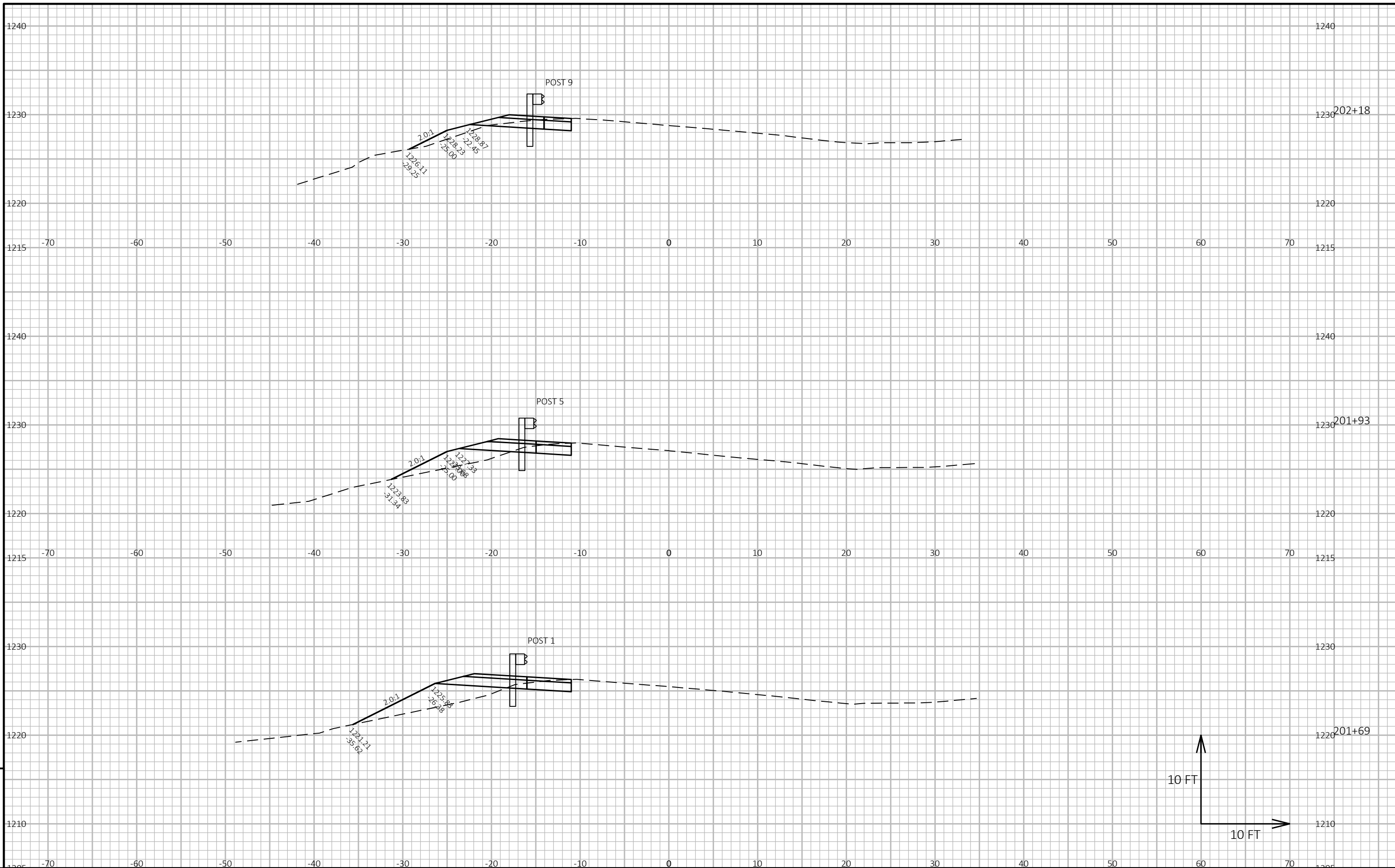
9

9

PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82 EAT'S      SHEET      E

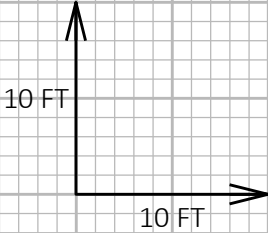
FILE NAME : W:\PROJECTS\2018\18-1712-1 (WAUZEKA DRIVE) STH 82\DRAWINGS\2022 WISDOT DRAWINGS\51500270-MODEL & CROSS SECTIONS.DWG      PLOT DATE : 4/3/2023 9:17 AM      PLOT BY : TYLER BUCHANAN      PLOT NAME :      PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.      WISDOT/CADD SHEET 49

LAYOUT NAME - EATs XS 4

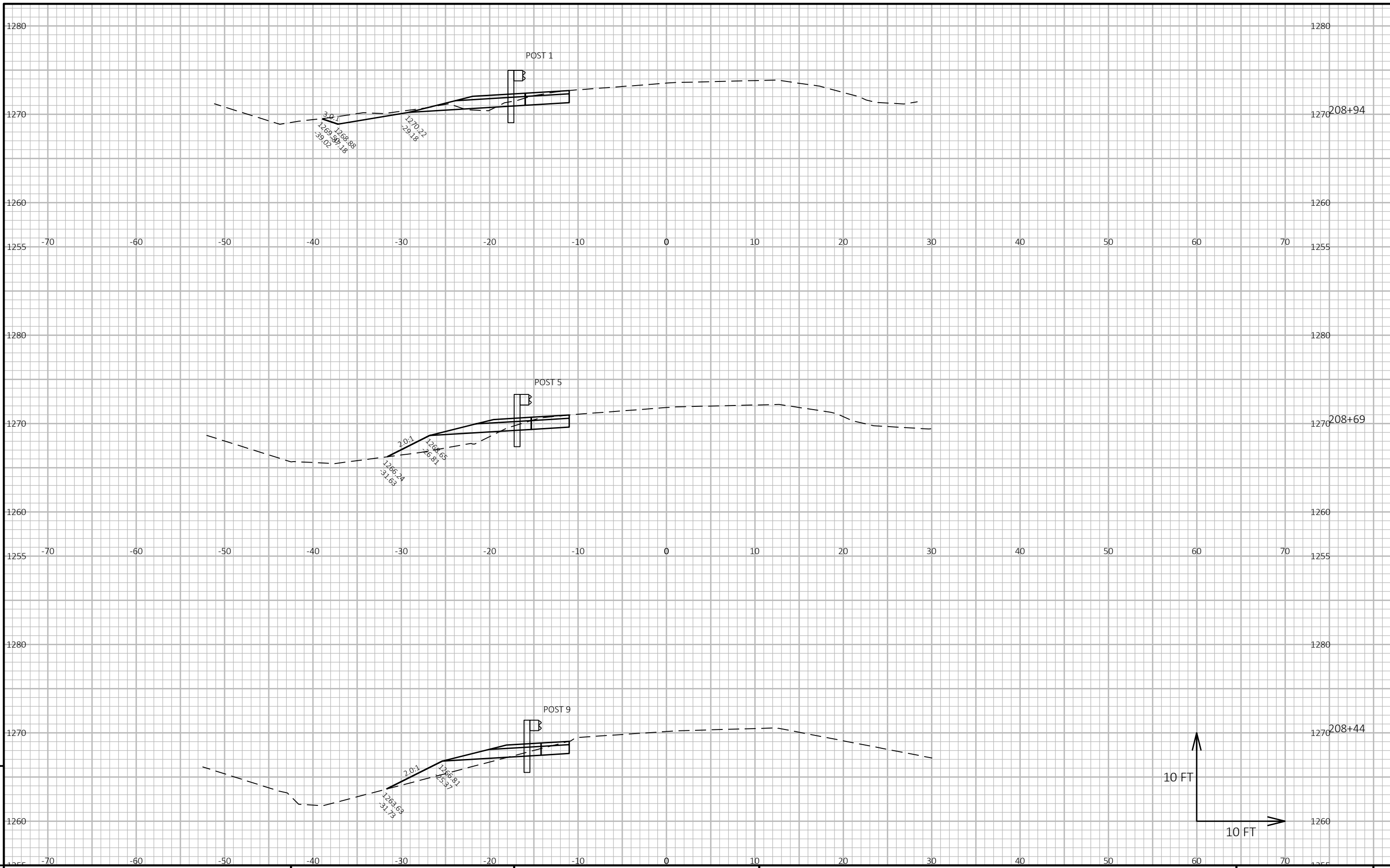


9

9



PROJECT NO: 5150-02-70	HWY: STH 82	COUNTY: VERNON	CROSS SECTIONS: STH 82 EAT'S	SHEET	E
------------------------	-------------	----------------	------------------------------	-------	---



9

9

PROJECT NO: 5150-02-70      HWY: STH 82      COUNTY: VERNON      CROSS SECTIONS: STH 82 EAT'S      SHEET      E

FILE NAME : W:\PROJECTS\2018\18-1712-1 (WAUZEKA DRIVE) STH 82\DRAWINGS\2022 WISDOT DRAWINGS\51500270-MODEL & CROSS SECTIONS.DWG      PLOT DATE : 4/3/2023 9:17 AM      PLOT BY : TYLER BUCHANAN      PLOT NAME :      PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.      WISDOT/CADD SHEET 49

LAYOUT NAME - EATs XS 10

Notes



## ***Wisconsin Department of Transportation***

Dedicated people creating transportation solutions through innovation and exceptional service.

<http://www.dot.wisconsin.gov>