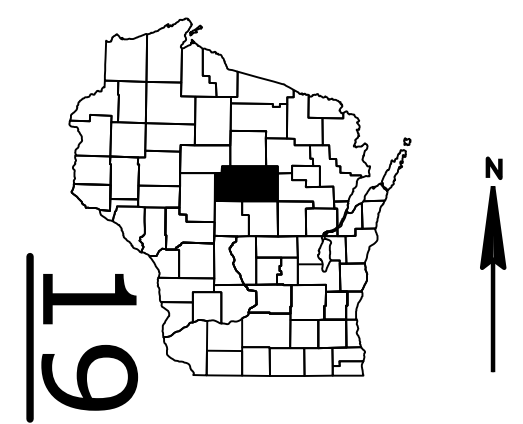


WISCONSIN
PROJECT ID: 6360-06-70
COUNTY: MARATHON

JUNE 2021

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 = 148



DESIGN DESIGNATION			
A.A.D.T.	2020	=	3100
A.A.D.T.	2040	=	3400
D.H.V.		=	500
D.D.		=	60/40
T.		=	17.4%
DESIGN SPEED		=	55 mph
ESALS		=	N/A

CONVENTIONAL SYMBOLS

PLAN	PROFILE
CORPORATE LIMITS	GRADE LINE
PROPERTY LINE	ORIGINAL GROUND
LOT LINE	MARSH OR ROCK PROFILE (To be noted as such)
LIMITED HIGHWAY EASEMENT	SPECIAL DITCH
EXISTING RIGHT OF WAY	GRADE ELEVATION
PROPOSED OR NEW R/W LINE	CULVERT (Profile View)
SLOPE INTERCEPT	UTILITIES
REFERENCE LINE	ELECTRIC
EXISTING CULVERT	FIBER OPTIC
PROPOSED CULVERT (Box or Pipe)	GAS
COMBUSTIBLE FLUIDS	SANITARY SEWER
	STORM SEWER
	TELEPHONE
	WATER
MARSH AREA	UTILITY PEDESTAL
	POWER POLE
	TELEPHONE POLE
WOODED OR SHRUB AREA	

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HALDER-MARATHON CITY

STH 153 TO CTH B

STH 107

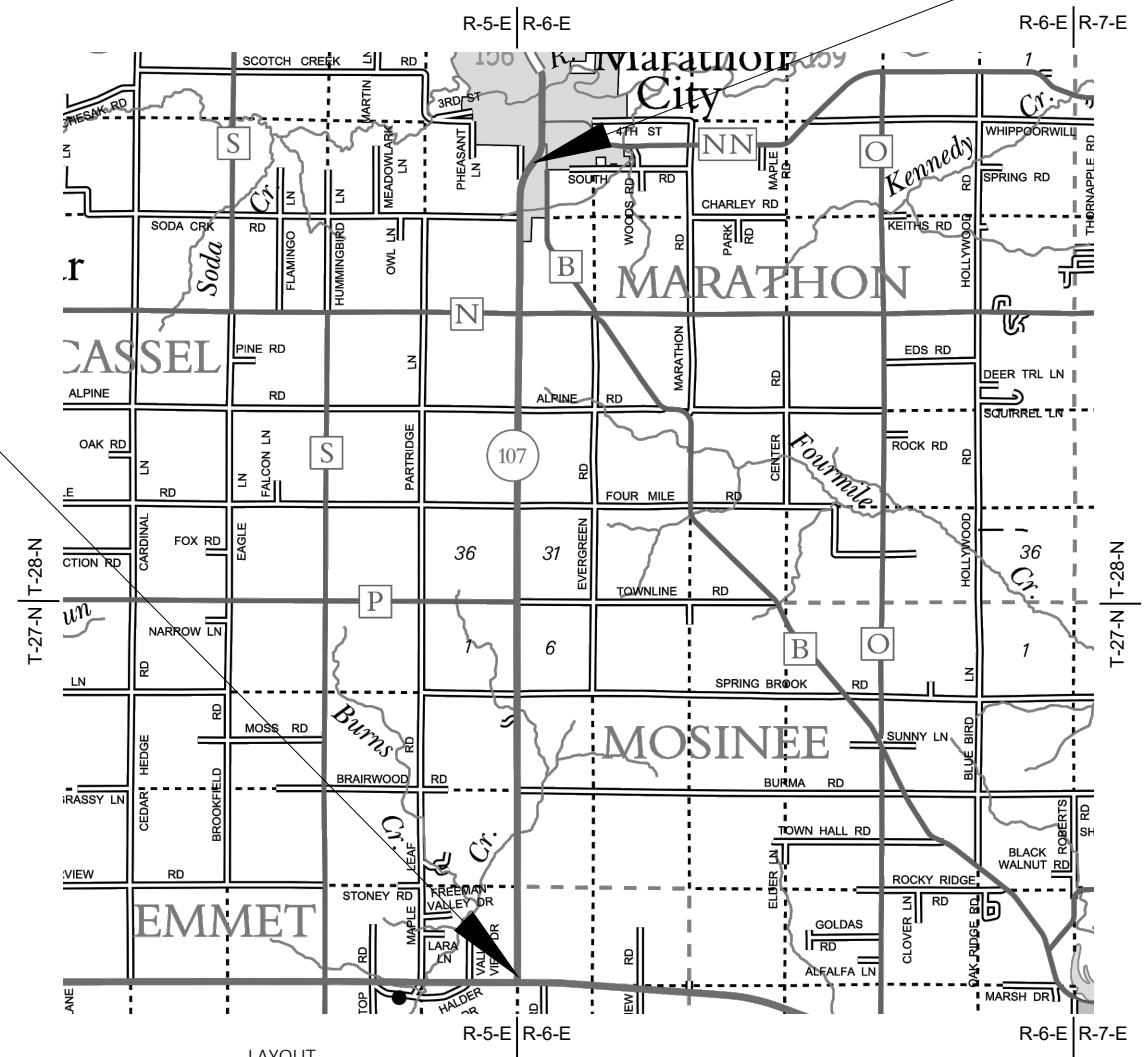
MARATHON COUNTY

STATE PROJECT NUMBER
6360-06-70

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
6360-06-70	WISC 2021368	1

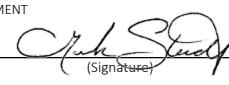
END PROJECT
STA 451+89

BEGIN PROJECT
6360-06-70
STA 1+64
NORTHING = 144275.07
EASTING = 225476.37



LAYOUT
SCALE 0 2 MI
TOTAL NET LENGTH OF CENTERLINE = 8.5 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), MARATHON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
PREPARED BY	Surveyor _____ EMCS
Designer	_____ ANDREW CASPER
Project Manager	_____ MARK STEIDL
Regional Examiner	_____ CHERYL SIMON
Regional Supervisor	_____ NICHOLE LYSNE
APPROVED FOR THE DEPARTMENT	
DATE: 3/15/21	 (Signature)

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

CASEY JONES
WDNR EA LIAISON
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
PHONE: (715) 213-6571 WORK
E-MAIL: casey.jones@wisconsin.gov

Runoff Coefficient Table

	Hydrologic Soil Group											
	A			B			C			D		
	Slope Range (Percent)											
Land Use	0 - 2	2 - 6	6 & Over	0 - 2	2 - 6	6 & Over	0 - 2	2 - 6	6 & Over	0 - 2	2 - 6	6 & Over
Row Crops	0.08	0.16	0.22	0.12	0.20	0.27	0.15	0.24	0.33	0.19	0.28	0.38
	0.22	0.30	0.38	0.26	0.34	0.44	0.30	0.37	0.50	0.34	0.41	0.56
Median Strip-Turf	0.19	0.20	0.24	0.19	0.22	0.26	0.20	0.23	0.30	0.20	0.25	0.30
	0.24	0.26	0.30	0.25	0.28	0.33	0.26	0.30	0.37	0.27	0.32	0.40
Side Slope Turf			0.25			0.27			0.28			0.30
			0.32			0.34			0.36			0.38
Pavement												
Asphalt	0.70 - 0.95											
Concrete	0.80 - 0.95											
Brick	0.70 - 0.80											
Drives, Sidewalks	0.75 - 0.85											
Roofs	0.75 - 0.95											
Gravel Roads, Shoulders	0.40 - 0.60											

Total Project Area = 41 Acres
Total Area Expected To Be Disturbed By Construction Activities = 1.25 Acres

GENERAL NOTES

- CURVE DATA IS BASED ON THE ARC DEFINITION.
- CONTRACTOR WILL BE RESPONSIBLE FOR RESHAPING AND SEEDING ANY PREVIOUSLY GRASSED AREAS WHICH ARE DISTURBED BY HIS OPERATION OUTSIDE OF THE NORMAL CONSTRUCTION LIMITS.
- 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.
- PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.
- WORK WITH UTMOST CARE AND PROTECT ALL SURVEY MARKERS. REMOVAL OF ANY SURVEY MARKER IS TO BE WITH THE APPROVAL OF THE ENGINEER.
- ADJUST CONSTRUCTION OPERATIONS TO MINIMIZE TREE DISTURBANCE WITHIN TLE AND PLE AREAS.

UTILITIES

ATC MANAGEMENT, INC. - ELECTRIC

DOUG VOSBERG
5303 FEN OAK DRIVE
MADISON, WI 53718
PHONE: (608) 877-7650 WORK
E-MAIL: dvosberg@atcllc.com

CENTURYLINK COMMUNICATIONS, LLC - COMMUNICATION

SHAD GARCIA
3235 INTERTECH DR. SUITE 600
BROOKFIELD, WI 53045
PHONE: (414) 908-1009
PHONE: (262) 606-0896
E-MAIL: Shad.Garcia@centurylink.com

CHARTER COMMUNICATIONS - COMMUNICATION

SCOTT OLSON
853 MCINSTOSH STREET
WAUSAU, WI 54403
PHONE: (715) 301-4079 WORK
PHONE: (715) 216-6204 MOBILE
E-MAIL: Scott.Olson@charter.com

WISCONSIN PUBLIC SERVICE CORPORATION - GAS/PETROLEUM

SHANE SARKKINEN
1700 SHERMAN ST.
WAUSAU, WI 54402
PHONE: (715) 848-7387 WORK
PHONE: (715) 966-1040 MOBILE
E-MAIL: shane.sarkkinen@wisconsinpublicservice.com

MAGELLAN PIPELINE - GAS/PETROLEUM

CLAIR MADSEN
2728 PATTON ROAD
ROSEVILLE, MN 55113
PHONE: (612) 750-1806 MOBILE
E-MAIL: clair.madsen@magellanlp.com

WISCONSIN PUBLIC SERVICE CORPORATION - ELECTRICTY

CLAYTON VIRCKS
P.O. BOX 1166
WAUSAU, WI 54402
PHONE: (715) 848-7317 WORK
PHONE: (715) 573-7806 MOBILE
E-MAIL: clayton.vircks@wisconsinpublicservice.com

VILLAGE OF MARATHON CITY - WATER & SEWER

JERRY CONLEY
104 CHESTNUT STREET
MARATHON CITY, WI 54448
PHONE: (715) 340-2080 WORK
PHONE: (715) 340-2080 MOBILE
E-MAIL: water@marathoncity.org

FRONTIER COMMUNICATIONS OF WI LLC - COMMUNICATION

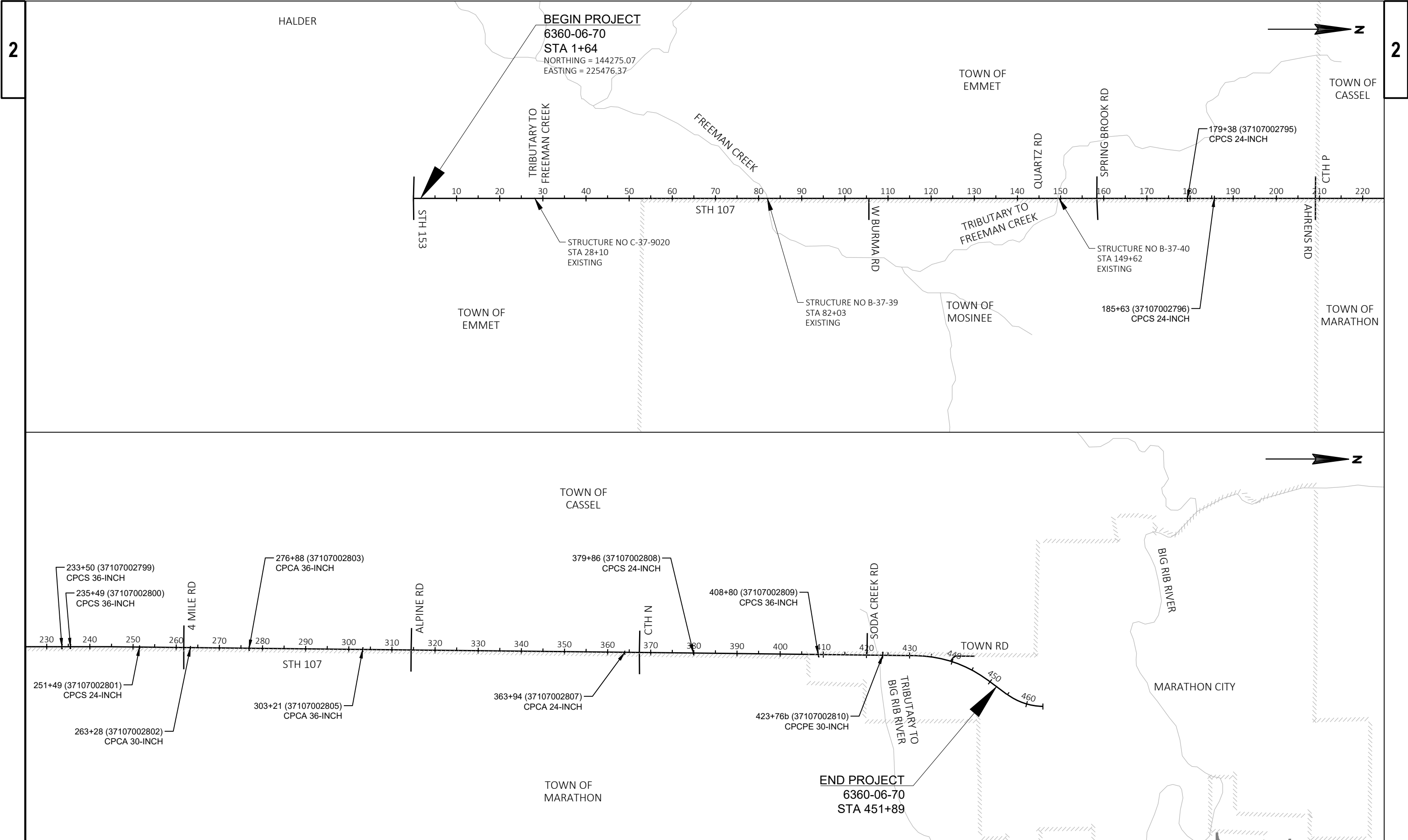
RUSS RYAN
118 DIVISION STREET
PLYMOUTH, WI 53073
PHONE: (920) 583-3275
PHONE: (920) 737-9662
E-MAIL: russell.w.ryan@ftr.com

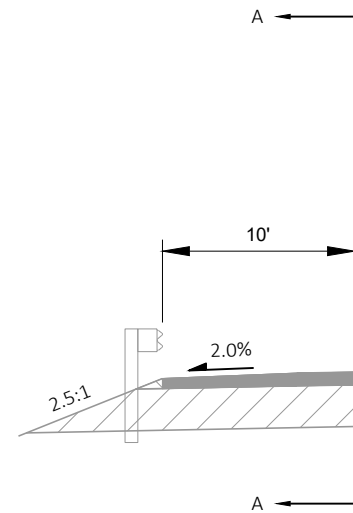
TDS TELECOM - COMMUNICATION

JEFF SHAW
202 E OGDEN STREET
MEDFORD, WI 54451
PHONE: (715) 748-6970
E-MAIL: jeff.shaw@tdstelecom.com



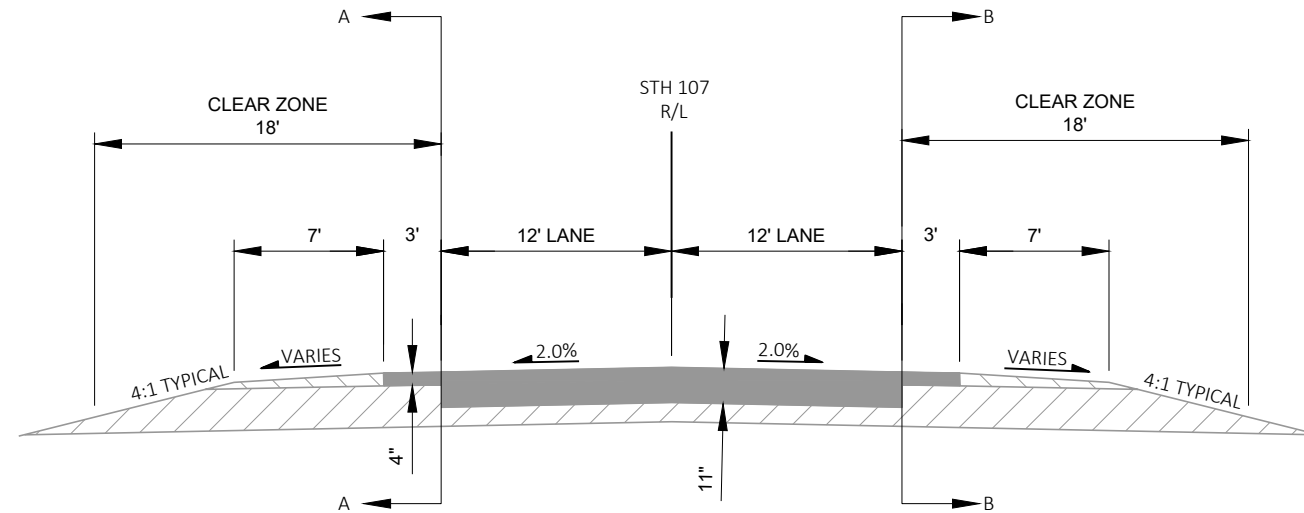
Dial 811 or (800)242-8511
www.DiggersHotline.com





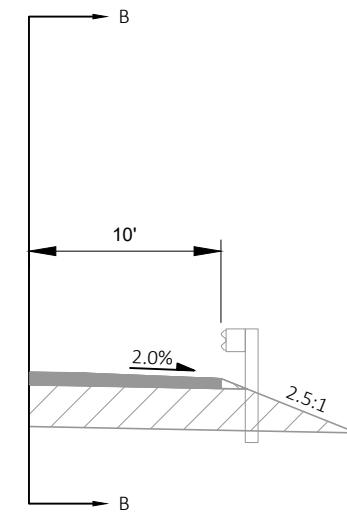
SECTION A-A

STA 890+91 - STA 82+96
STA 117+93 - STA 124+41
STA 146+92 - STA 151+97
STA 177+85 - STA 191+40
STA 421+02 - STA 428+31



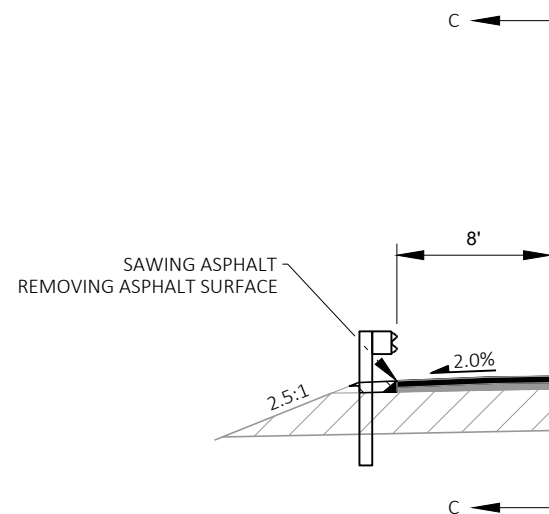
EXISTING TYPICAL SECTION

STA 1+64 TO STA 451+89



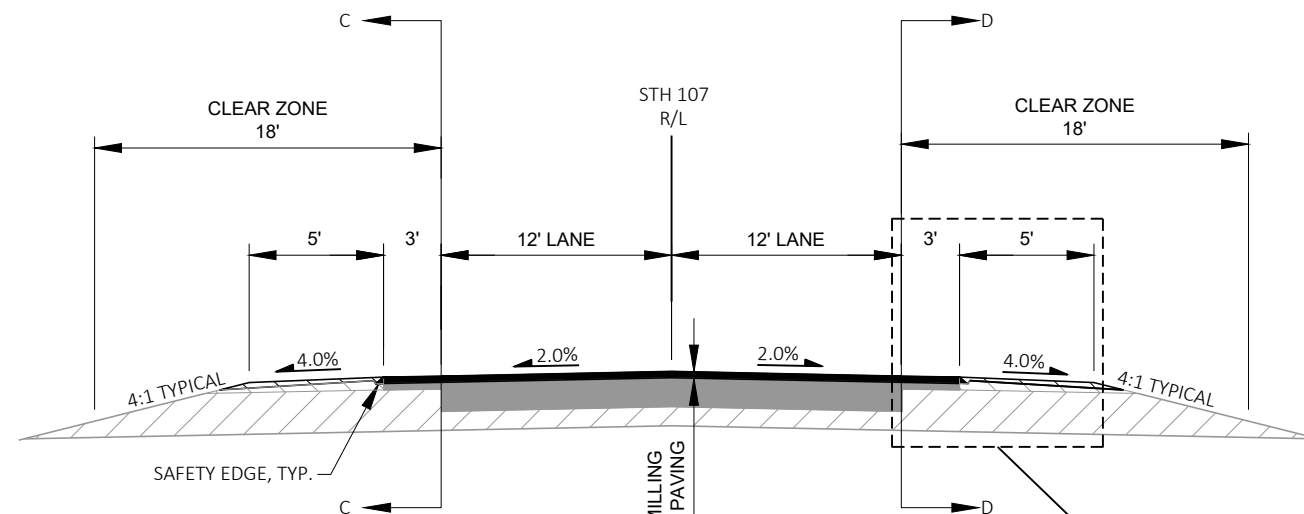
SECTION B-B

STA 80+91 - STA 82+96
STA 117+96 - STA 124+51
STA 147+40 - STA 152+45
STA 420+98 - STA 428+28



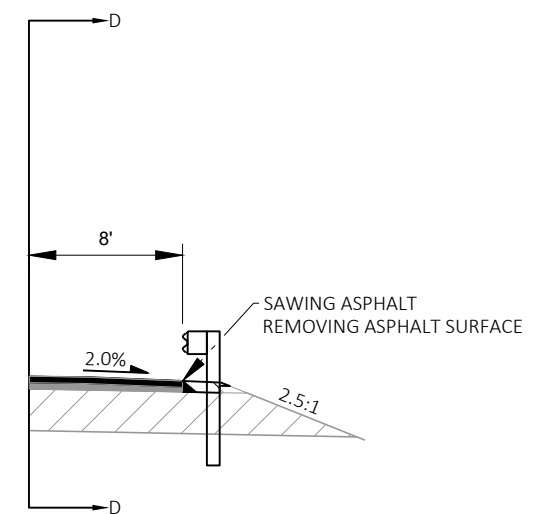
SECTION C-C

STA 80+14 - STA 83+88
STA 117+93 - STA 124+41
STA 146+92 - STA 151+97
STA 177+85 - STA 191+40



FINISHED TYPICAL SECTION

STA 1+64 TO STA 423+20
STA 424+32 TO STA 451+89



SECTION D-D

STA 80+14 - STA 83+88
STA 117+96 - STA 124+51
STA 147+40 - STA 152+45

LEGEND



EXISTING HMA
PAVEMENT



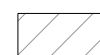
HMA PAVEMENT
4 MT 58-28S



EXISTING DISINTEGRATED
GRANITE



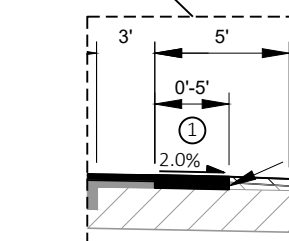
PROPOSED BASE AGGREGATE
DENSE 3/4-INCH



EXISTING BASE AGGREGATE
DENSE 1 1/4-INCH



PROPOSED BASE AGGREGATE
DENSE 1 1/4-INCH



ASPHALT WIDENING AREAS

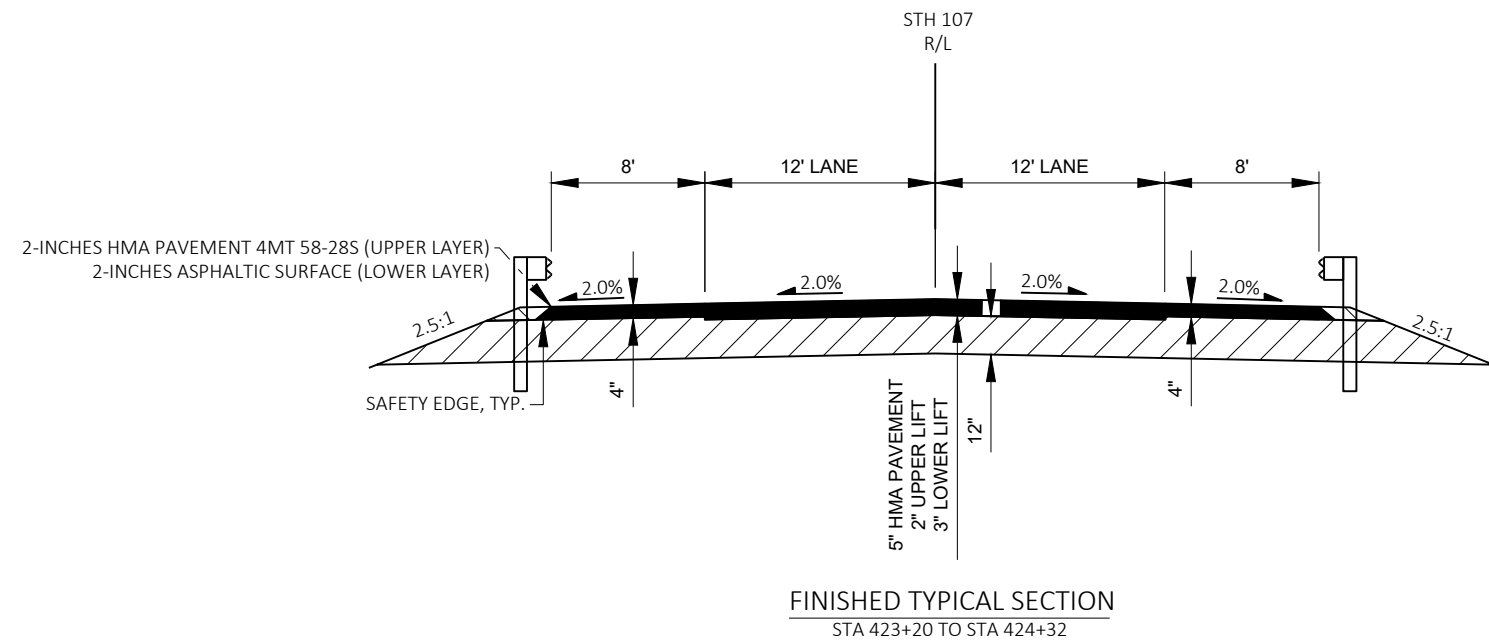
STA 64+75 TO STA 67+33 (RIGHT)
STA 71+66 TO STA 74+27 (RIGHT)
STA 78+78 TO STA 80+86 (LEFT/RIGHT)
STA 82+97 TO STA 85+22 (LEFT)
STA 83+14 TO STA 85+22 (RIGHT)
STA 116+63 TO STA 117+98 (LEFT)

STA 116+77 TO STA 117+97 (RIGHT)
STA 124+46 TO STA 125+82 (RIGHT)
STA 125+36 TO STA 125+76 (LEFT)
STA 145+74 TO STA 146+96 (LEFT)
STA 145+99 TO STA 147+41 (RIGHT)
STA 151+96 TO STA 153+29 (LEFT)

2-INCHES HMA PAVEMENT 4MT 58-28S (UPPER LAYER)
2-INCHES ASPHALTIC SURFACE (LOWER LAYER)

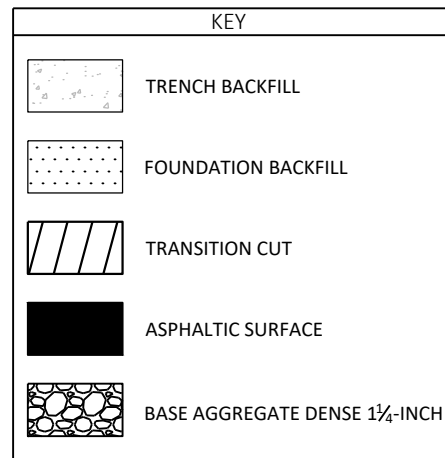
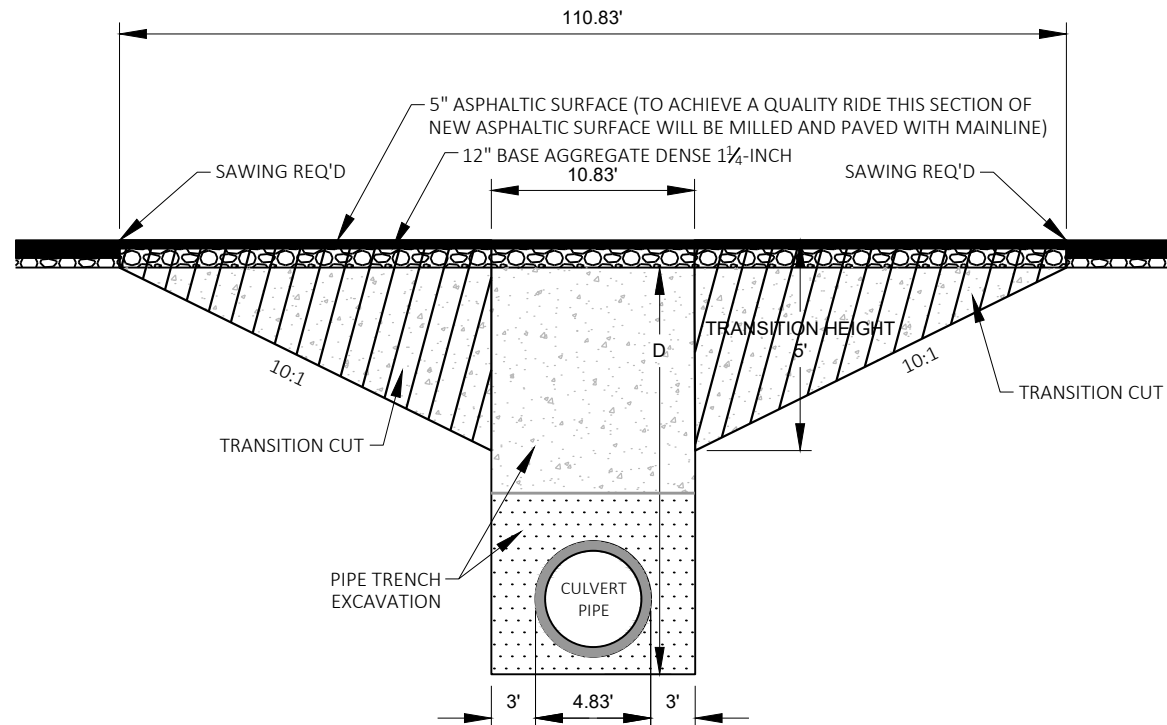
① PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

STA 152+40 TO STA 153+75 (RIGHT)
STA 176+50 TO STA 177+86 (LEFT)
STA 191+39 TO STA 192+18 (LEFT)
STA 428+29 TO STA 429+54 (LEFT)
STA 428+29 TO STA 429+64 (RIGHT)



LEGEND

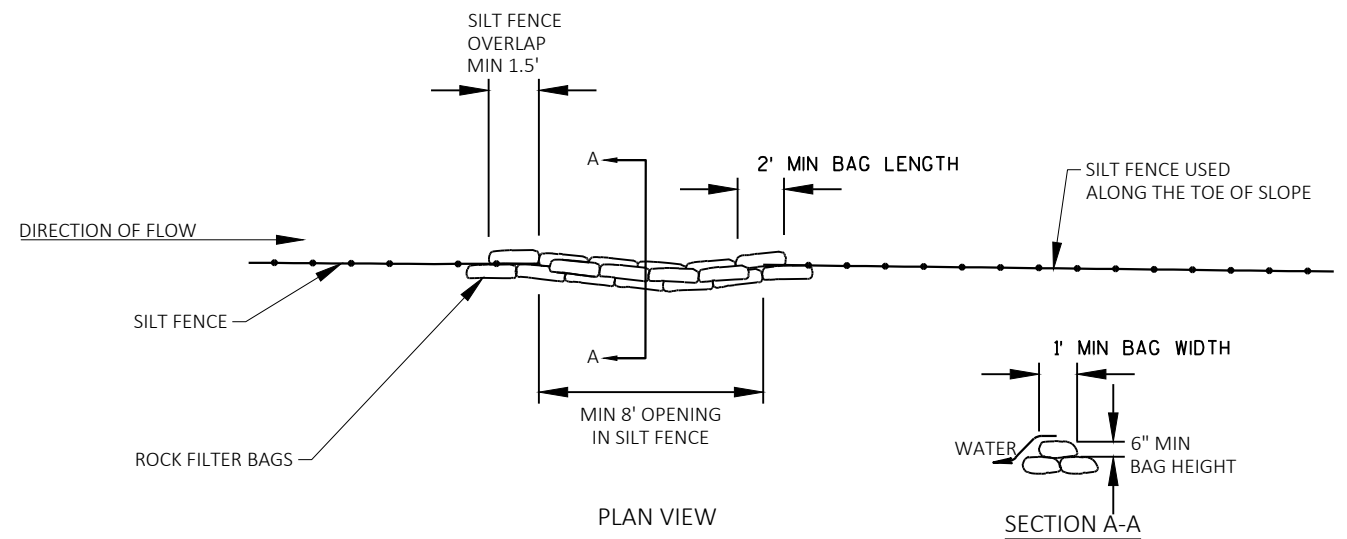
	EXISTING HMA PAVEMENT		HMA PAVEMENT 4MT 58-28S
	EXISTING DISINTEGRATED GRANITE		PROPOSED BASE AGGREGATE DENSE 3/4-INCH
	EXISTING BASE AGGREGATE DENSE 1 1/4-INCH		PROPOSED BASE AGGREGATE DENSE 1 1/4-INCH

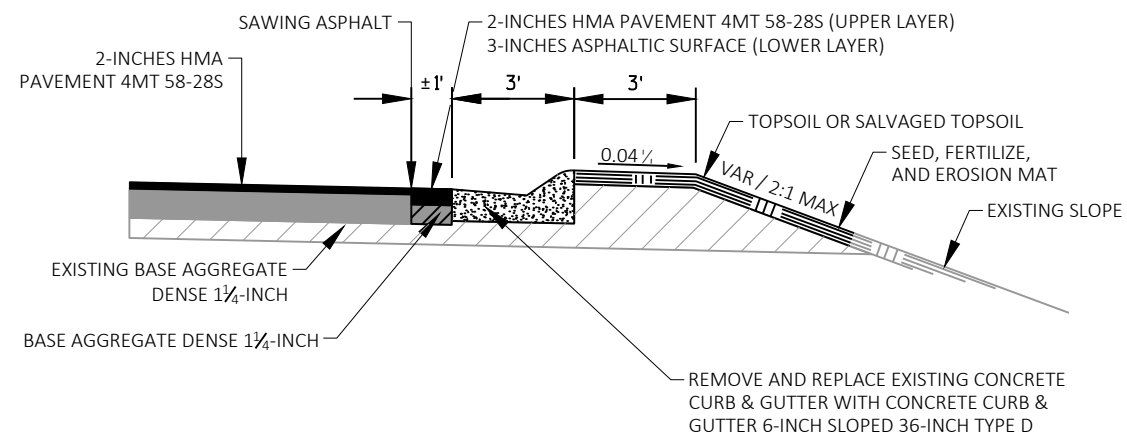
**NOTES**

TRANSITION CUT IS PAID AS EXCAVATION COMMON.
TRANSITION CUT WIDTH IS FROM SUBGRADE SHOULDER POINT TO SUBGRADE SHOULDER POINT.
BACKFILL THE TRANSITION CUT AREAS WITH FOUNDATION AND TRENCH BACKFILL AS SPECIFIED IN STANDARD SPEC 520.
PERFORM CULVERT PIPE INSTALLATION BEFORE MILLING AND PAVING MAINLINE.
PLACE ASPHALTIC SURFACE AFTER CULVERT PIPE INSTALLATION AND BEFORE MILLING AND PAVING MAINLINE.

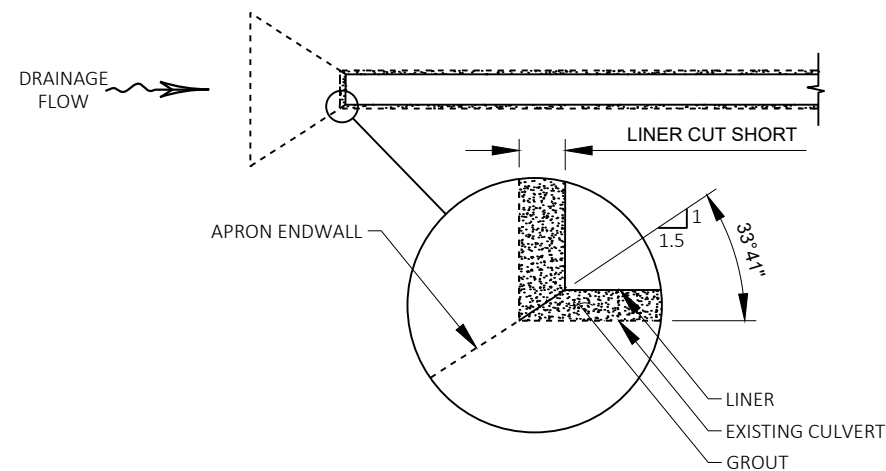
CULVERT PIPE TRANSITION

ROUTE	STA (CL)	DEPTH D (FT)	PIPE DIA (IN)	REMARKS
STH 107	423+76	20FT	48-INCH	37107002810

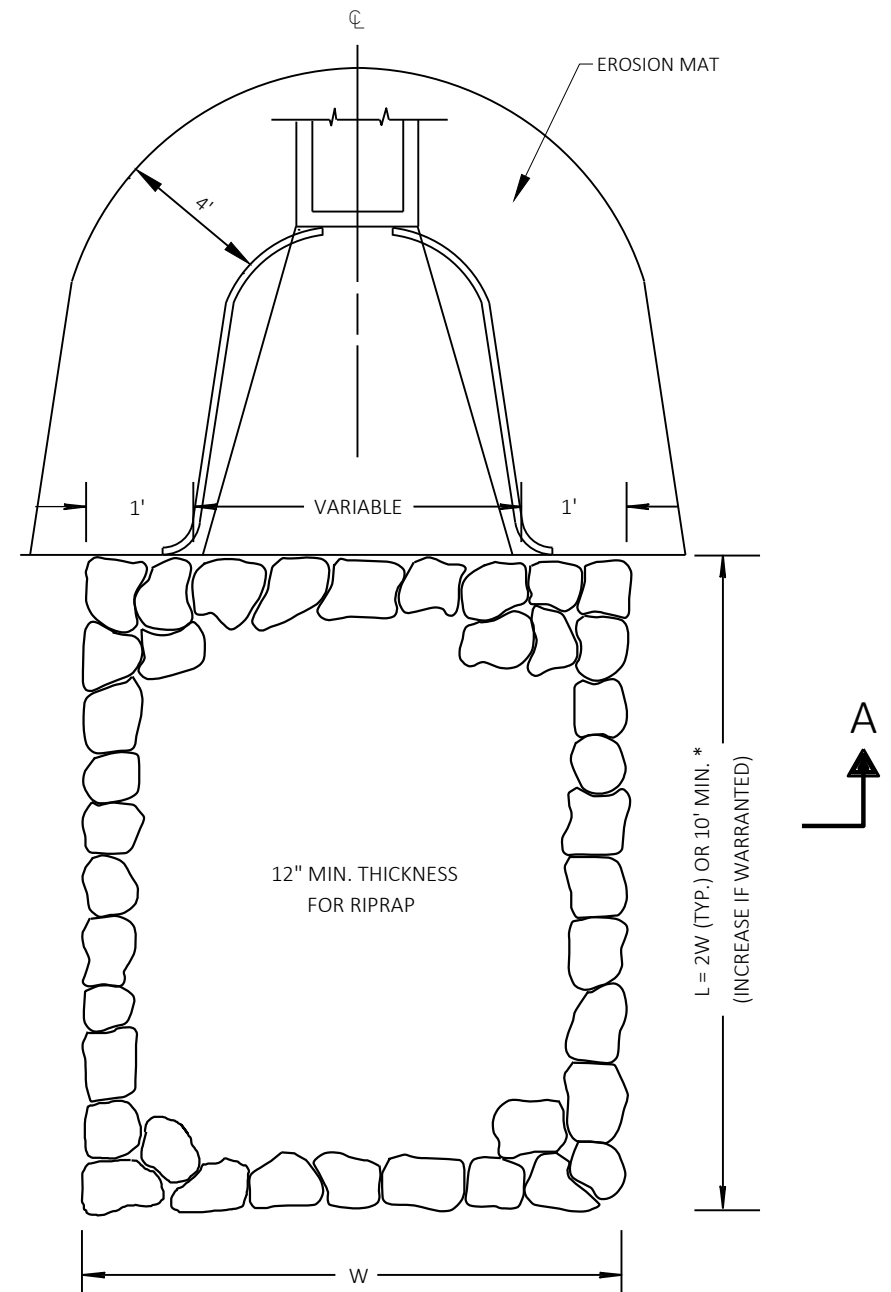
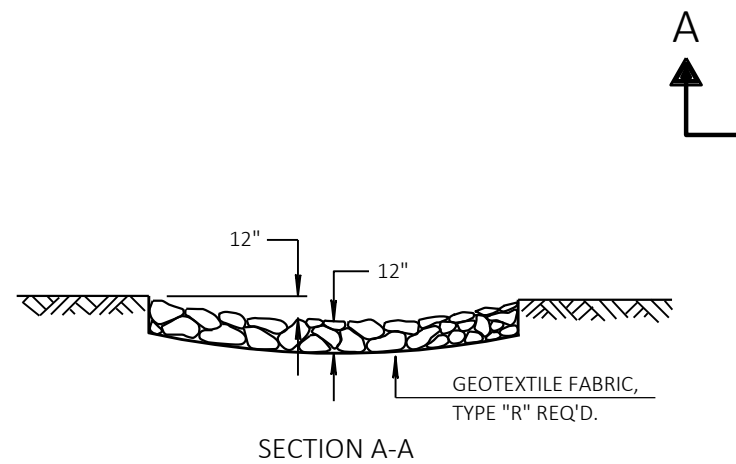
CULVERT PIPE REPLACEMENT**ROCK BAGS USED FOR SILT FENCE RELIEF**



DETAIL OF CURB & GUTTER INSTALLATION AT INTERSECTIONS

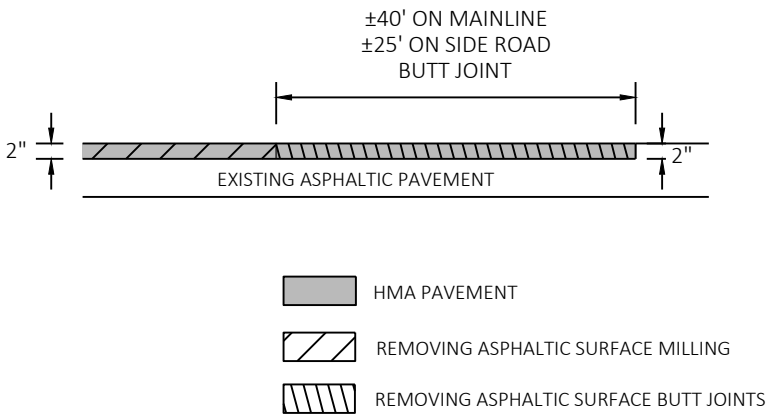


INLET BEVEL DETAIL
(REQUIRED FOR ALL CULVERT LINER INLETS)



FINISHING AT PIPE ENDS
RIPRAP AT OUTLETS
EROSION MAT AT APRON REPLACEMENTS

* 179+38 AND 185+63 USE A 6' MIN.
AT 423+76 USE 10'



BUTT JOINT

MAINLINE AND SIDE ROADS

NW_Curb						
ID	STATION	OFFSET	ELEVATION	NORTHING	EASTING	REMARKS
1	367+55.67	68.71' LT	1421.56	180866.81	225489.76	FF BC
2	367+59.07	53.92' LT	1421.54	180870.08	225504.59	FF
3	367+71.53	32.83' LT	1421.55	180882.33	225525.79	FF EC/BC
4	367+93.86	22.77' LT	1421.71	180904.57	225536.06	FF EC/BC
5	367+98.54	63.00' LT	0.00	180909.63	225495.88	FF
A	367+57.78	59.53' LT	1421.49	180868.84	225498.97	FF LOW POINT
B	367+64.46	41.13' LT	1421.54	180875.34	225517.43	FF LOW POINT

NE_CURB						
ID	STATION	OFFSET	ELEVATION	NORTHING	EASTING	REMARKS
41	367+59.76	64.42' RT	1421.25	180869.64	225622.92	FF
42	367+61.54	56.26' RT	1421.37	180871.50	225614.78	FF BC
43	367+69.27	39.95' RT	1421.52	180879.39	225598.55	FF
44	367+83.37	28.69' RT	1421.65	180893.59	225587.42	FF
45	368+00.98	24.74' RT	1421.66	180911.24	225583.64	FF EC
46	368+00.72	64.84' RT	0.00	180910.59	225623.74	RADIUS

W ISLAND						
ID	STATION	OFFSET	ELEVATION	NORTHING	EASTING	REMARKS
10	367+15.19	44.80' LT	1422.09	180826.11	225513.29	BOC EC/BC
11	367+17.36	44.51' LT	1422.14	180828.27	225513.60	BOC EC
12	367+17.32	29.12' LT	1422.17	180828.09	225528.99	BOC BC
13	367+13.81	25.07' LT	1422.10	180824.54	225533.01	BOC EC
14	367+11.55	24.73' LT	1422.09	180822.27	225533.32	BOC BC
15	367+09.07	28.10' LT	1422.03	180819.82	225529.94	BOC EC/BC
16	367+16.36	45.31' LT	0.00	180827.28	225512.79	RADIUS
17	367+10.57	26.61' LT	0.00	180821.32	225531.44	RADIUS
18	367+15.31	27.31' LT	0.00	180826.06	225530.78	RADIUS
19	366+18.43	70.50' LT	0.00	180729.59	225486.68	RADIUS

E ISLAND						
ID	STATION	OFFSET	ELEVATION	NORTHING	EASTING	REMARKS
31	367+53.85	28.92' RT	1422.21	180864.07	225587.38	BOC EC/BC
32	367+51.05	25.94' RT	1422.19	180861.29	225584.37	BOC EC/BC
33	367+49.88	26.34' RT	1422.19	180860.12	225584.76	BOC EC
34	367+46.47	31.17' RT	1422.18	180856.67	225589.55	BOC BC
35	367+46.62	45.14' RT	1422.15	180856.68	225603.52	BOC EC
36	367+48.77	45.36' RT	1422.13	180858.83	225603.76	BOC EC/BC
37	367+47.62	45.91' RT	0.00	180857.68	225604.31	RADIUS
38	367+52.20	27.66' RT	0.00	180862.43	225586.10	RADIUS
39	367+48.45	28.95' RT	0.00	180858.67	225587.35	RADIUS
40	368+46.72	66.57' RT	0.00	180956.58	225625.90	RADIUS

SW_CURB						
ID	STATION	OFFSET	ELEVATION	NORTHING	EASTING	REMARKS
20	367+05.15	62.82' LT	1421.42	180816.23	225495.18	FF BC
21	366+95.86	44.46' LT	1421.09	180806.77	225513.44	FF
22	366+80.90	30.35' LT	1421.13	180791.68	225527.42	FF
23	366+62.05	22.13' LT	1421.29	180772.75	225535.46	FF EC
24	366+47.94	80.24' LT	0.00	180759.20	225477.22	RADIUS
C	366+95.06	43.42' LT	1421.07	180805.97	225514.48	FF LOW POINT

SE_CURB						
ID	STATION	OFFSET	ELEVATION	NORTHING	EASTING	REMARKS
25	366+58.32	25.92' RT	1421.14	180768.58	225583.47	FF BC
26	366+77.96	29.32' RT	1421.07	180788.18	225587.05	FF
27	366+95.42	38.94' RT	1420.97	180805.55	225596.84	FF
28	367+08.78	53.73' RT	1420.96	180818.76	225611.76	FF
29	367+16.57	72.08' RT	1421.14	180826.38	225630.18	FF EC
30	366+58.03	86.12' RT	0.00	180767.72	225643.67	RADIUS
D	367+00.35	43.31' RT	1420.88	180810.44	225601.26	FF LOW POINT

ACRONYM LEGEND

FF = FRONT FACE
BC = BEGIN CURVE
EC = END OF CURVE
BOC = BACK OF CURB

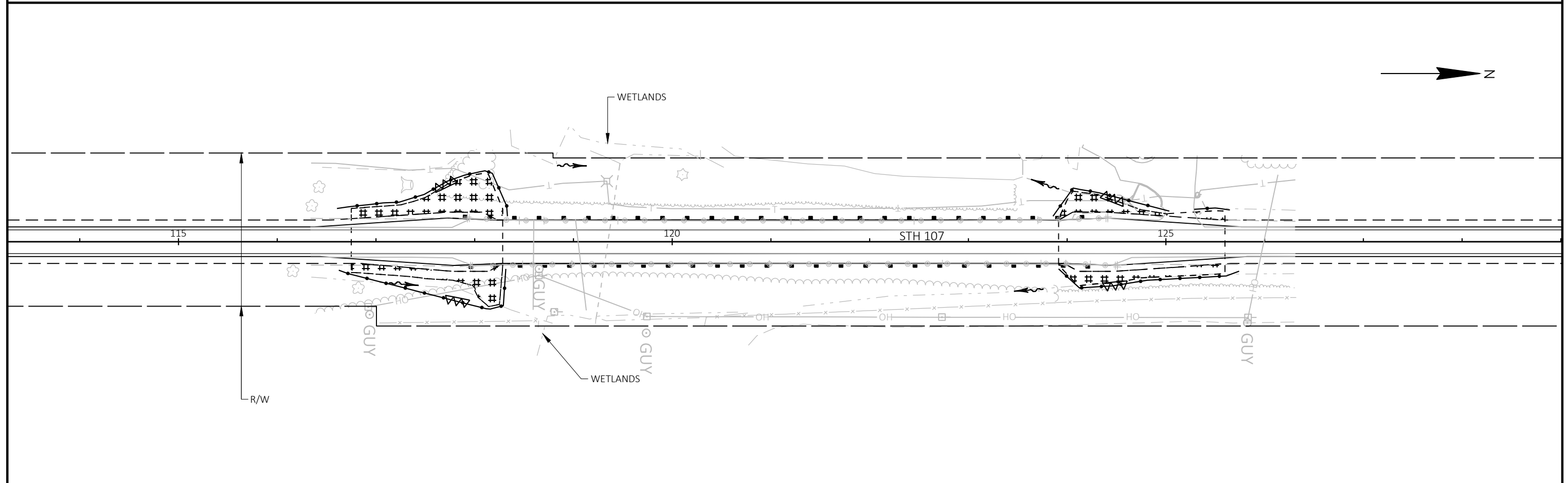
PROJECT NO: 6360-06-70

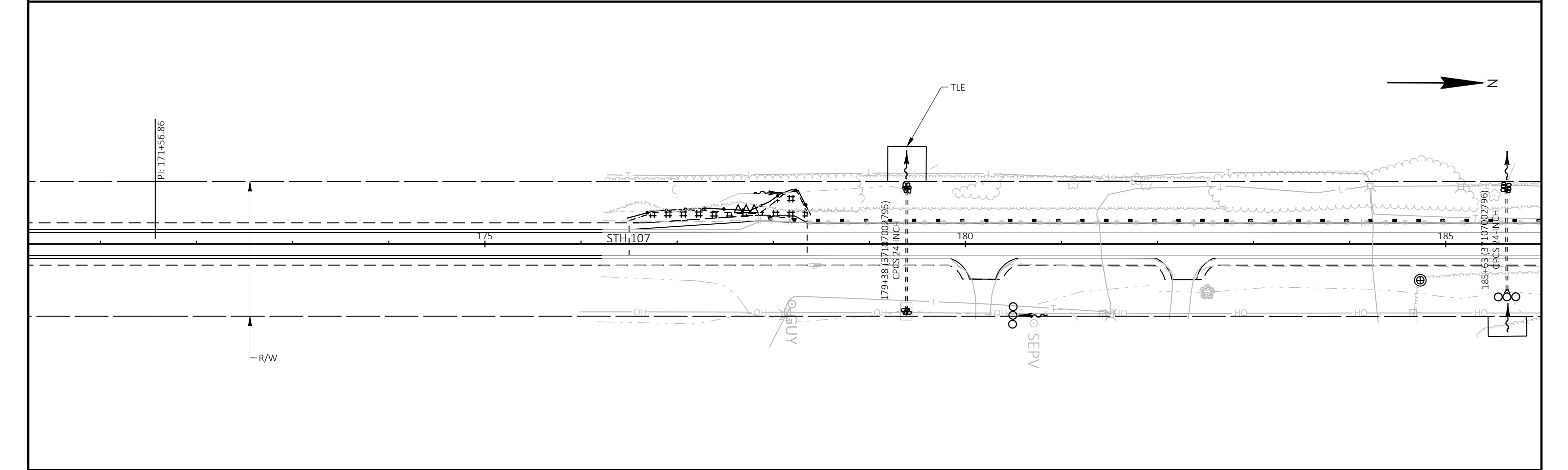
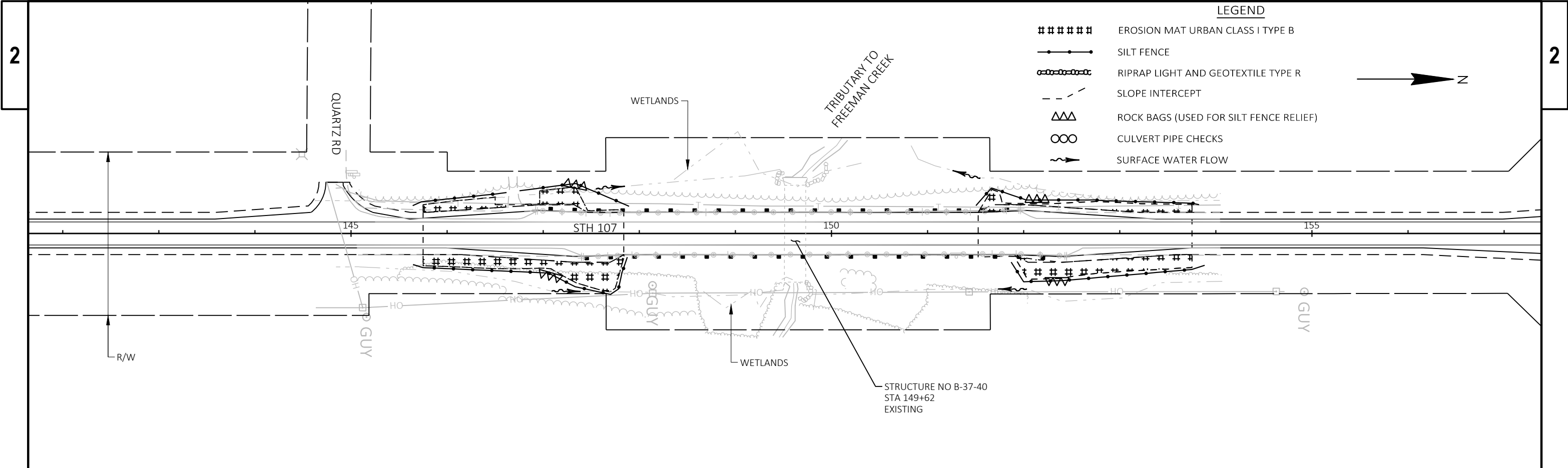
HWY: STH 107

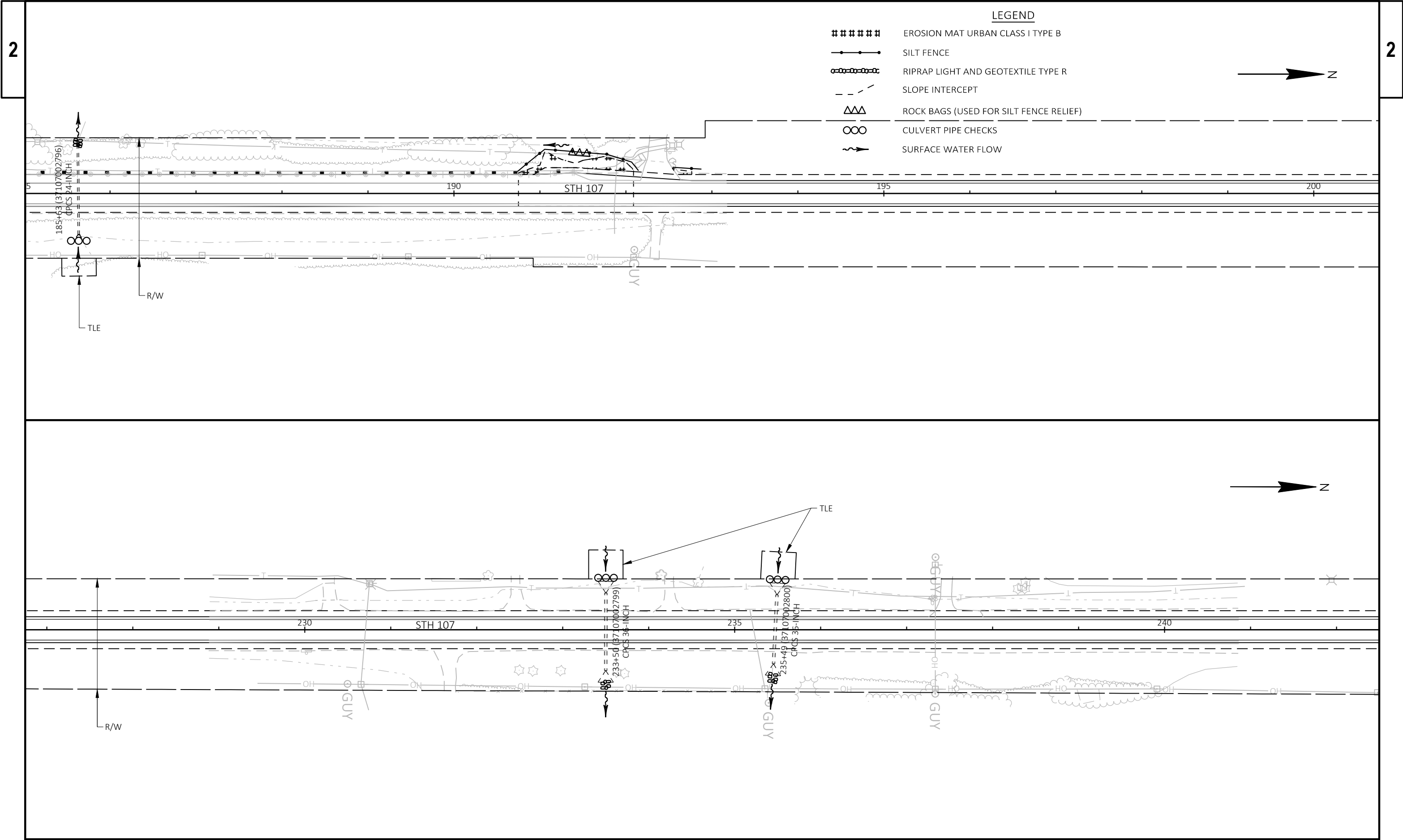
COUNTY: MARATHON

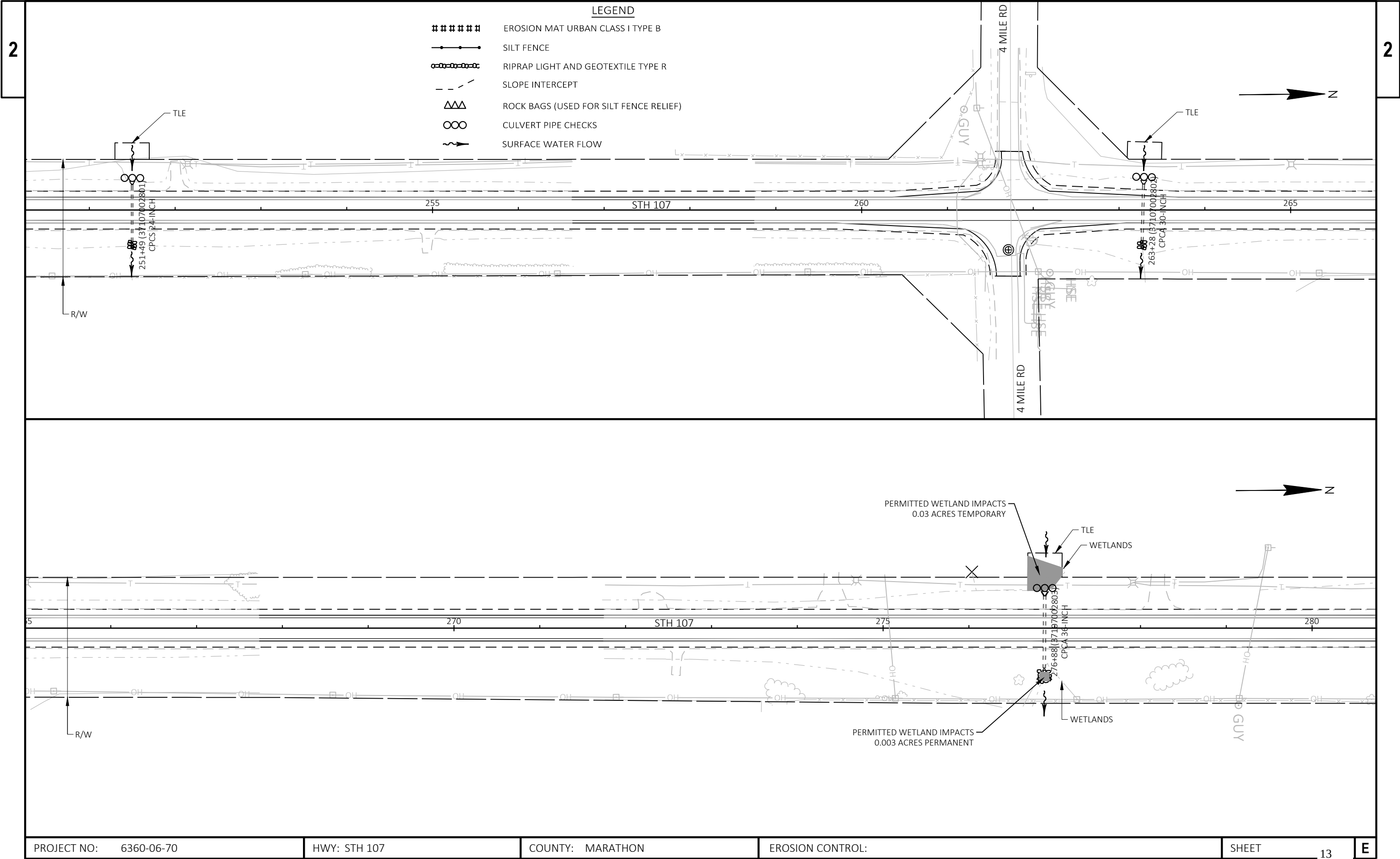
CTH N - INTERSECTION DETAILS

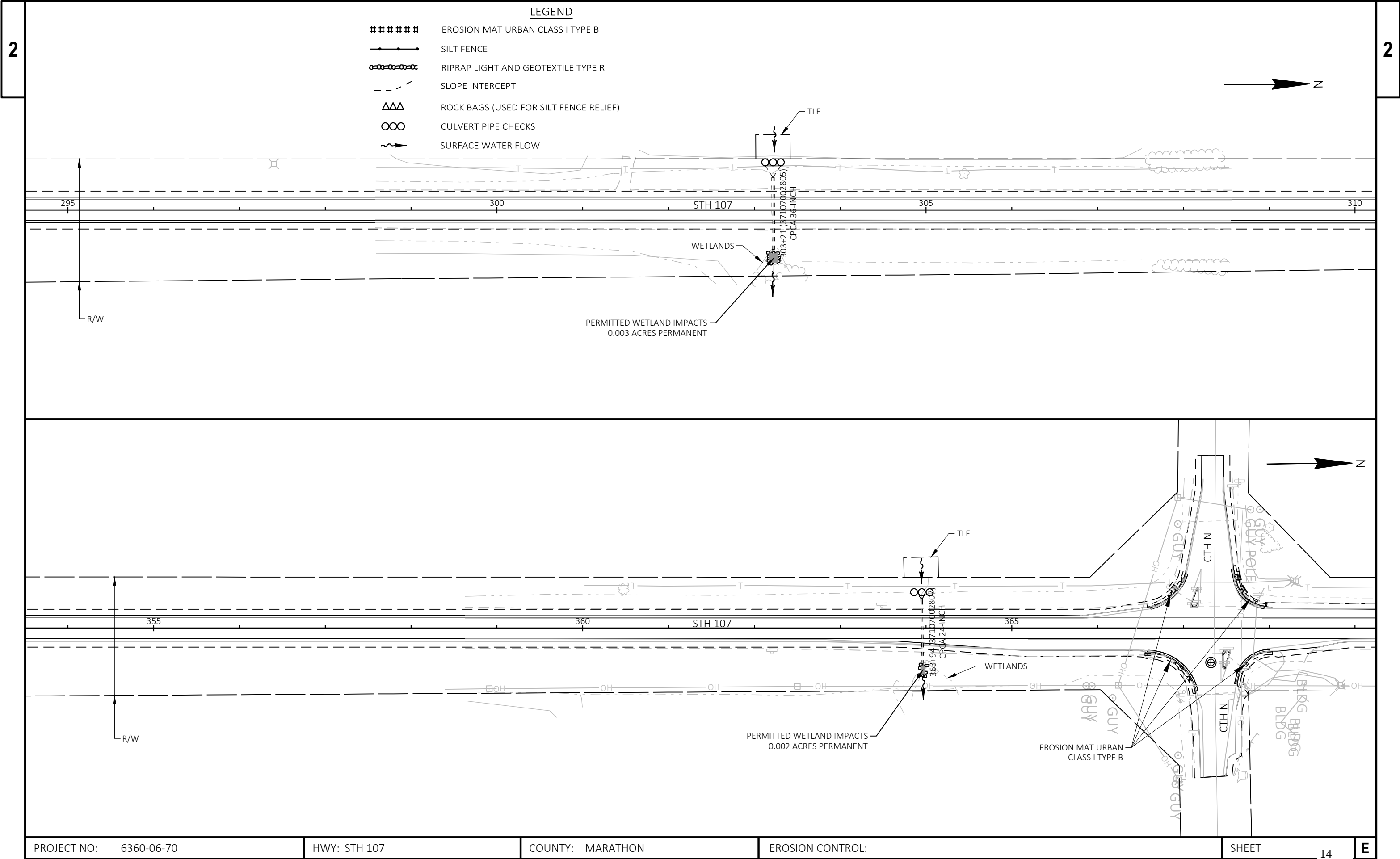
SHEET

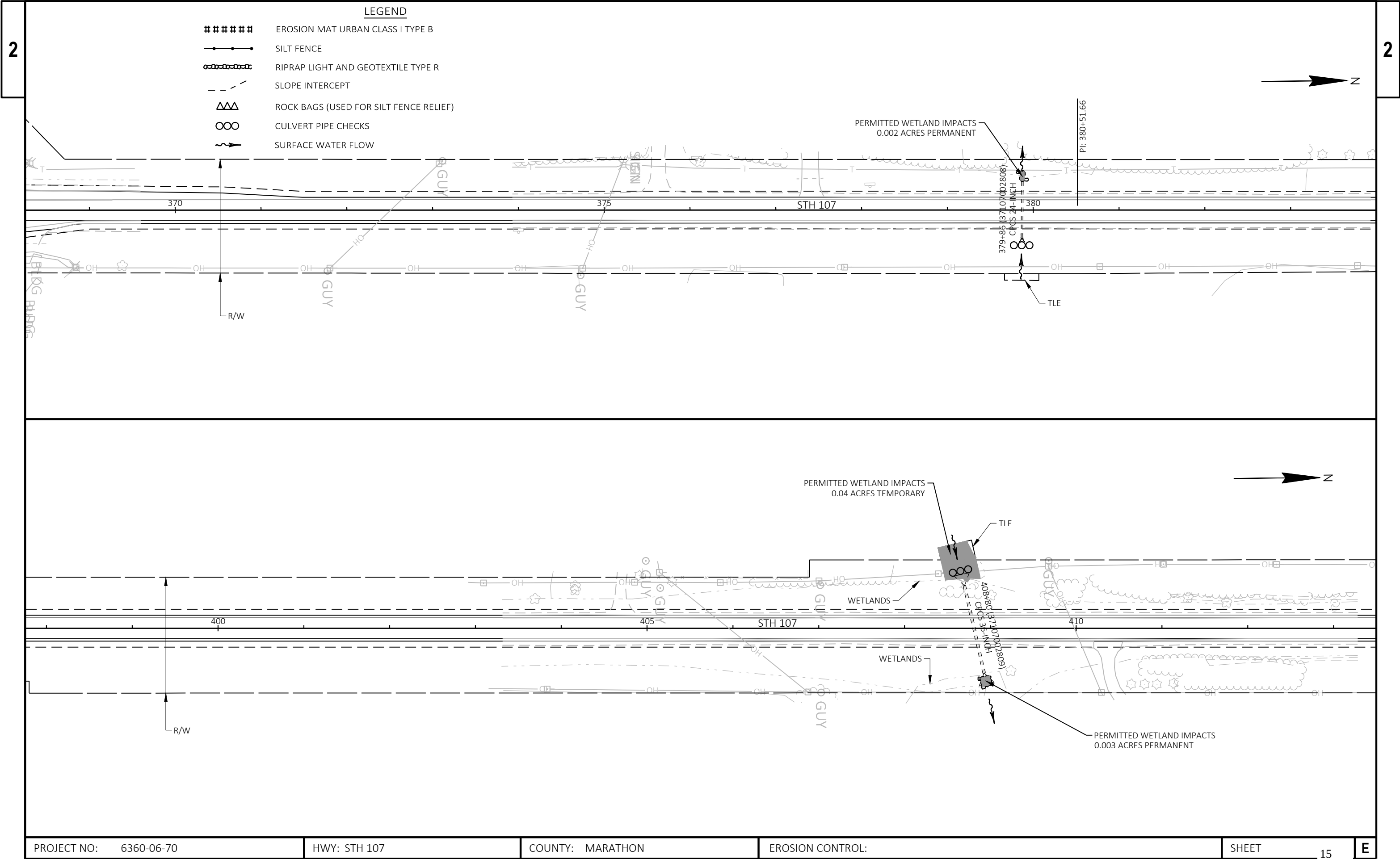


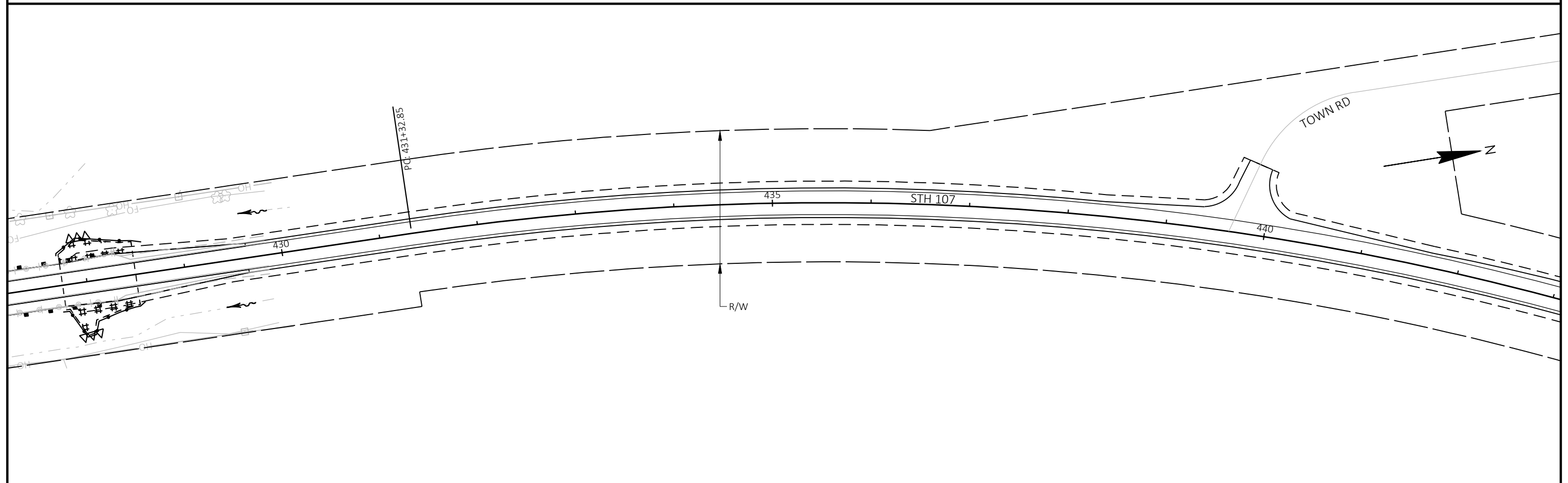






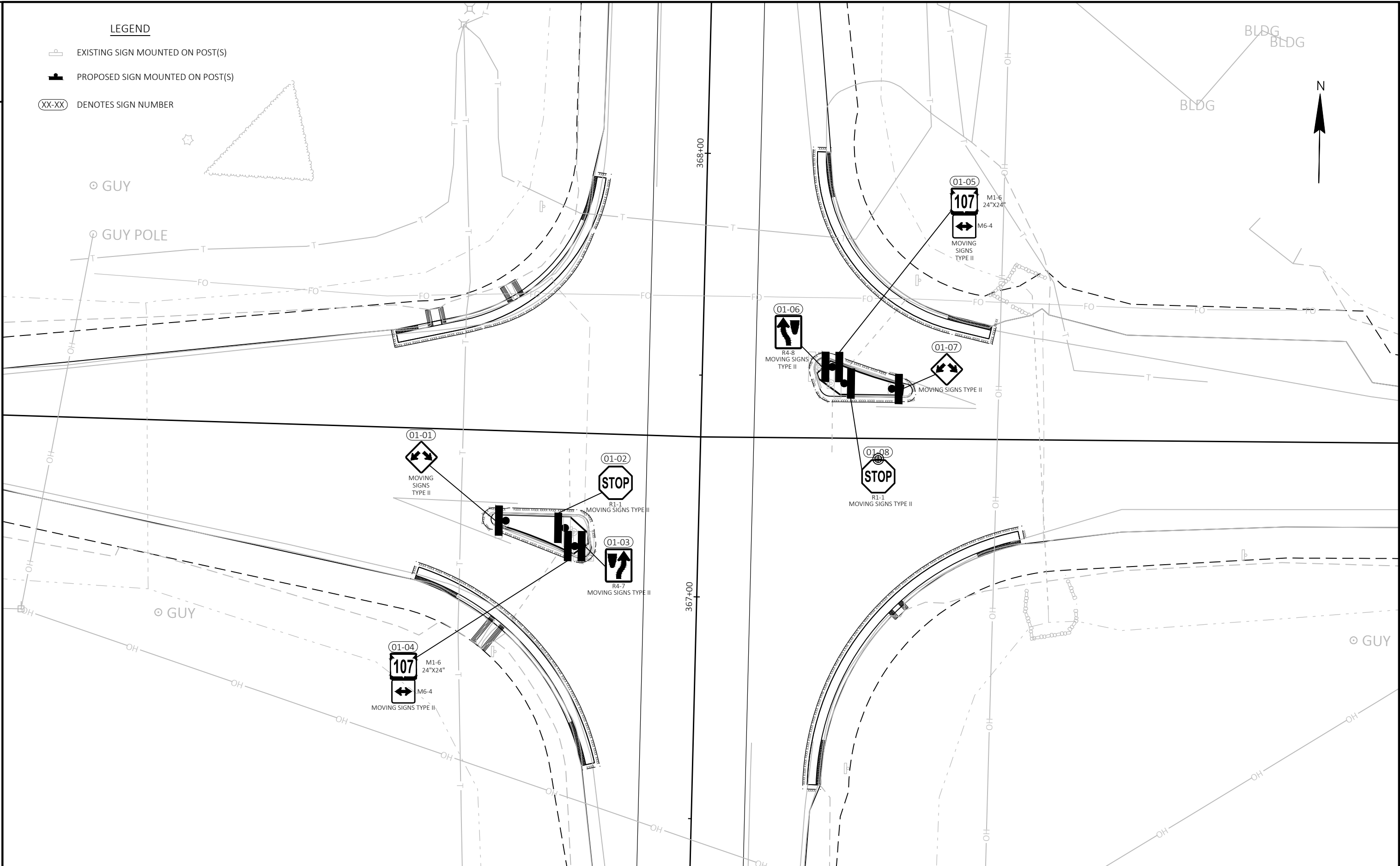


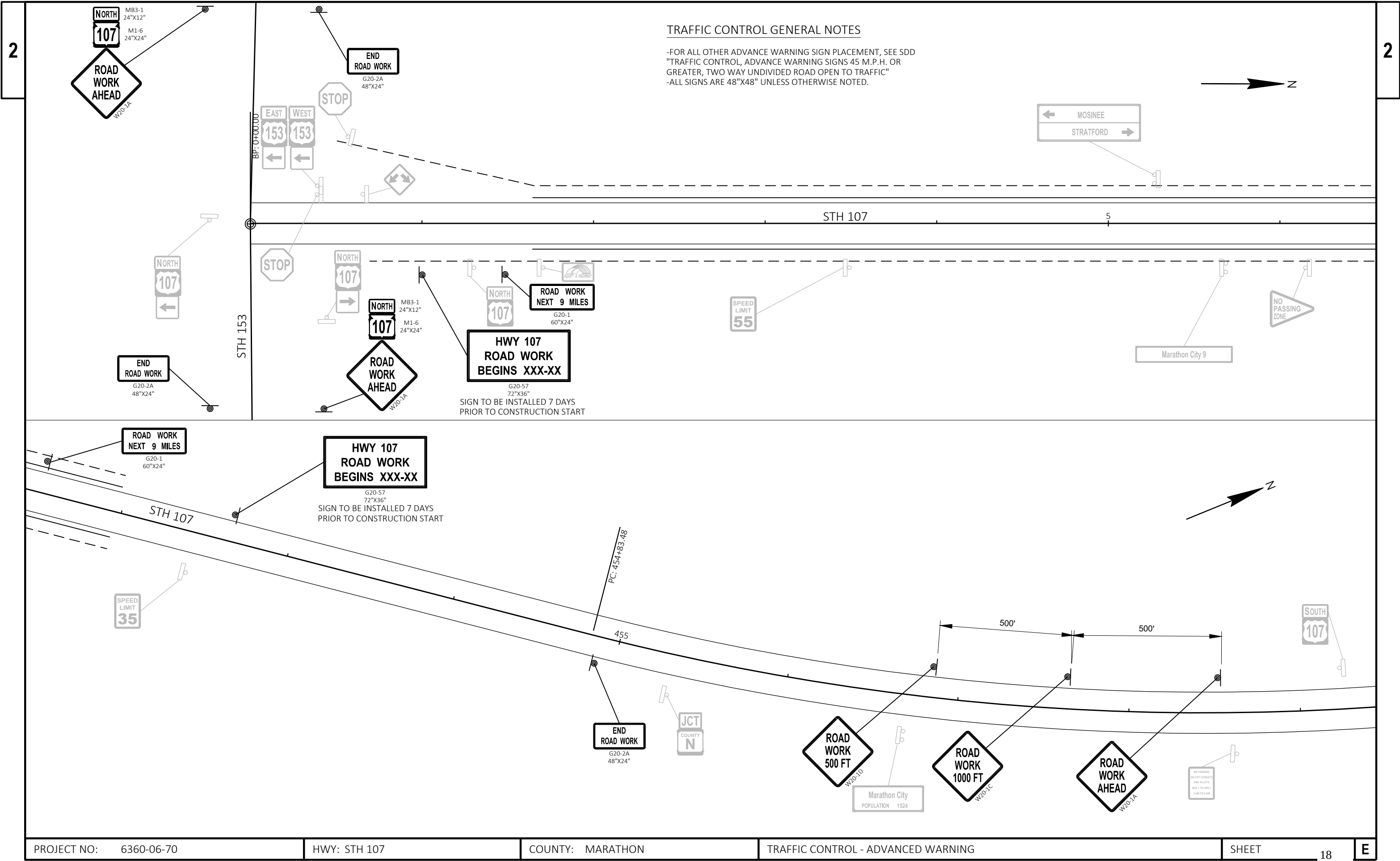


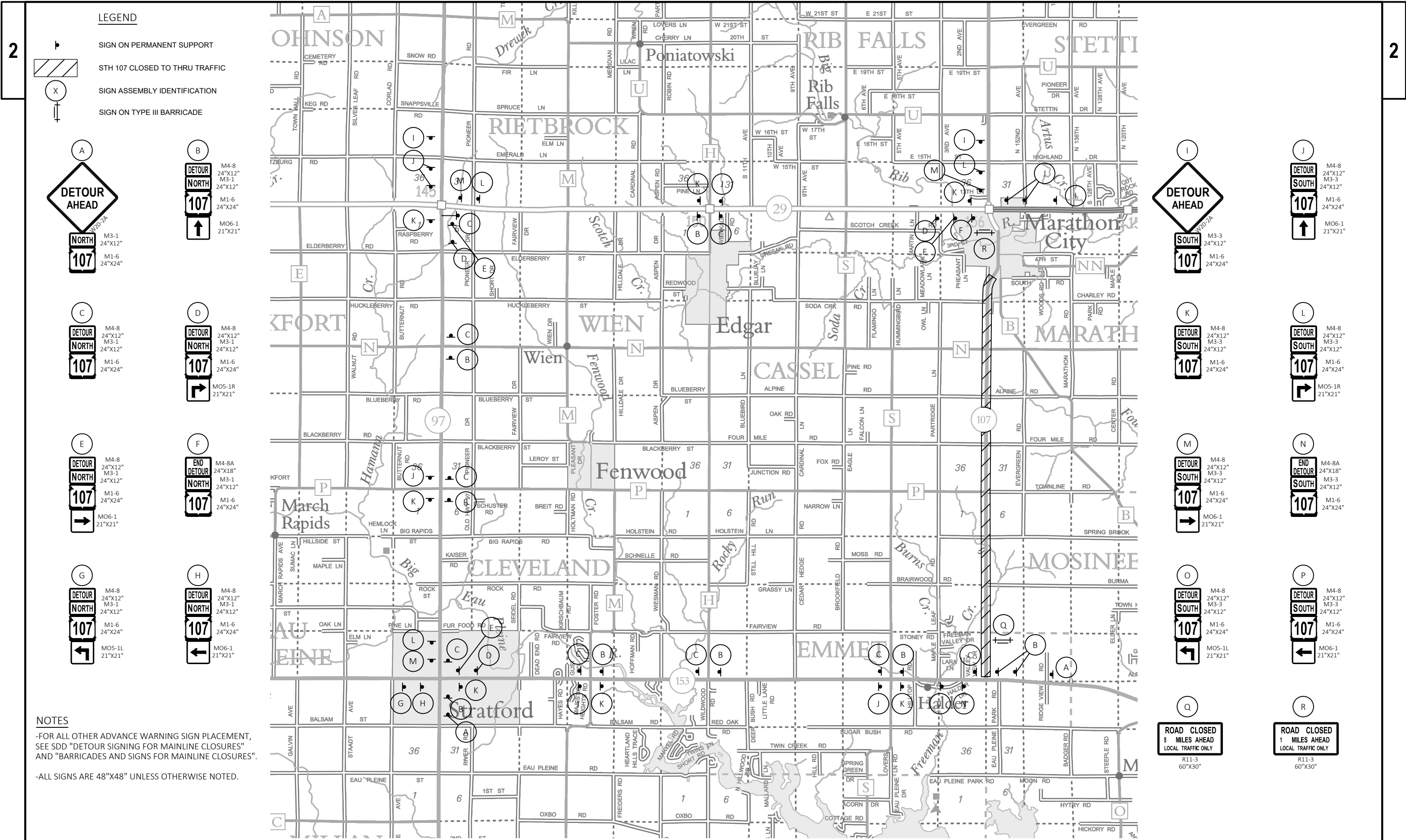


LEGEND

- EXISTING SIGN MOUNTED ON POST(S)
- PROPOSED SIGN MOUNTED ON POST(S)
- XX-XX DENOTES SIGN NUMBER







NOTES

-FOR ALL OTHER ADVANCE WARNING SIGN PLACEMENT, SEE SDD "DETOUR SIGNING FOR MAINLINE CLOSURES" AND "BARRICADES AND SIGNS FOR MAINLINE CLOSURES".

-ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

Estimate Of Quantities

6360-06-70					
Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0004	204.0110	Removing Asphaltic Surface	SY	521.000	521.000
0006	204.0115	Removing Asphaltic Surface Butt Joints	SY	812.000	812.000
0008	204.0120	Removing Asphaltic Surface Milling	SY	162,646.000	162,646.000
0010	204.0130	Removing Curb	LF	108.000	108.000
0012	204.0150	Removing Curb & Gutter	LF	258.000	258.000
0014	204.0165	Removing Guardrail	LF	5,537.000	5,537.000
0016	205.0100	Excavation Common	CY	685.000	685.000
0018	208.0100	Borrow	CY	2,291.000	2,291.000
0020	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 6360-06-70	LS	1.000	1.000
0022	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	26.000	26.000
0024	213.0100	Finishing Roadway (project) 01. 6360-06-70	EACH	1.000	1.000
0026	305.0110	Base Aggregate Dense 3/4-Inch	TON	10,240.000	10,240.000
0028	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	474.000	474.000
0030	455.0605	Tack Coat	GAL	11,484.000	11,484.000
0032	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0034	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	1.000	1.000
0036	460.2000	Incentive Density HMA Pavement	DOL	1,412.000	1,412.000
0038	460.2005	Incentive Density PWL HMA Pavement	DOL	13,588.000	13,588.000
0040	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	18,010.000	18,010.000
0042	460.2010	Incentive Air Voids HMA Pavement	DOL	15,000.000	15,000.000
0044	460.6224	HMA Pavement 4 MT 58-28 S	TON	18,274.000	18,274.000
0046	465.0105	Asphaltic Surface	TON	313.000	313.000
0048	465.0305	Asphaltic Surface Safety Islands	TON	2.000	2.000
0050	465.0315	Asphaltic Flumes	SY	6.000	6.000
0052	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	45,025.000	45,025.000
0054	520.9700.S	Culvert Pipe Liners (size) 01. 24-Inch	LF	446.000	446.000
0056	520.9700.S	Culvert Pipe Liners (size) 02. 30-Inch	LF	68.000	68.000
0058	520.9700.S	Culvert Pipe Liners (size) 03. 36-Inch	LF	442.000	442.000
0060	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	11.000	11.000
0062	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	4.000	4.000
0064	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	1.000	1.000
0066	521.1036	Apron Endwalls for Culvert Pipe Steel 36-Inch	EACH	1.000	1.000
0068	522.0448	Culvert Pipe Reinforced Concrete Class IV 48-Inch	LF	130.000	130.000
0070	522.1048	Apron Endwalls for Culvert Pipe Reinforced Concrete 48-Inch	EACH	2.000	2.000
0072	601.0120	Concrete Curb Type J	LF	108.000	108.000
0074	601.0557	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type D	LF	258.000	258.000
0076	606.0100	Riprap Light	CY	48.000	48.000

Estimate Of Quantities

6360-06-70

Line	Item	Item Description	Unit	Total	Qty
0078	611.0420	Reconstructing Manholes	EACH	1.000	1.000
0080	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0082	614.2330	MGS Guardrail 3 K	LF	4,960.000	4,960.000
0084	614.2610	MGS Guardrail Terminal EAT	EACH	18.000	18.000
0086	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6360-06-70	EACH	1.000	1.000
0088	619.1000	Mobilization	EACH	1.000	1.000
0090	624.0100	Water	MGAL	161.000	161.000
0092	625.0100	Topsoil	SY	5,777.000	5,777.000
0094	628.1504	Silt Fence	LF	4,052.000	4,052.000
0096	628.1520	Silt Fence Maintenance	LF	4,052.000	4,052.000
0098	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0100	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0102	628.2008	Erosion Mat Urban Class I Type B	SY	5,777.000	5,777.000
0104	628.7555	Culvert Pipe Checks	EACH	36.000	36.000
0106	628.7570	Rock Bags	EACH	345.000	345.000
0108	629.0210	Fertilizer Type B	CWT	3.600	3.600
0110	630.0130	Seeding Mixture No. 30	LB	104.000	104.000
0112	630.0160	Seeding Mixture No. 60	LB	2.000	2.000
0114	630.0500	Seed Water	MGAL	16.000	16.000
0116	633.5200	Markers Culvert End	EACH	12.000	12.000
0118	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	6.000	6.000
0120	638.2102	Moving Signs Type II	EACH	6.000	6.000
0122	642.5001	Field Office Type B	EACH	1.000	1.000
0124	643.0300	Traffic Control Drums	DAY	7,072.000	7,072.000
0126	643.0420	Traffic Control Barricades Type III	DAY	2,339.000	2,339.000
0128	643.0705	Traffic Control Warning Lights Type A	DAY	2,598.000	2,598.000
0130	643.0715	Traffic Control Warning Lights Type C	DAY	1,365.000	1,365.000
0132	643.0800	Traffic Control Arrow Boards	DAY	416.000	416.000
0134	643.0900	Traffic Control Signs	DAY	8,079.000	8,079.000
0136	643.1000	Traffic Control Signs Fixed Message	SF	164.000	164.000
0138	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0140	643.1070	Traffic Control Cones 42-Inch	DAY	432.000	432.000
0142	643.5000	Traffic Control	EACH	1.000	1.000
0144	645.0130	Geotextile Type R	SY	187.000	187.000
0146	646.1020	Marking Line Epoxy 4-Inch	LF	15,762.000	15,762.000
0148	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	90,066.000	90,066.000
0150	646.6020	Marking Stop Line Epoxy 12-Inch	LF	270.000	270.000
0152	648.0100	Locating No-Passing Zones	MI	9.000	9.000
0154	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	15,762.000	15,762.000

Estimate Of Quantities

6360-06-70					
Line	Item	Item Description	Unit	Total	Qty
0156	650.4000	Construction Staking Storm Sewer	EACH	2.000	2.000
0158	650.4500	Construction Staking Subgrade	LF	112.000	112.000
0160	650.5000	Construction Staking Base	LF	112.000	112.000
0162	650.8000	Construction Staking Resurfacing Reference	LF	44,913.000	44,913.000
0164	650.9910	Construction Staking Supplemental Control (project) 01. 6360-06-70	LS	1.000	1.000
0166	650.9920	Construction Staking Slope Stakes	LF	1,778.000	1,778.000
0168	690.0150	Sawing Asphalt	LF	5,770.000	5,770.000
0170	740.0440	Incentive IRI Ride	DOL	34,000.000	34,000.000
0172	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,000.000	1,000.000
0174	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	1,260.000	1,260.000

REMOVING SMALL PIPE CULVERTS

203.0100			
STATION	LOCATION	EACH	REMARKS
423+76	LT/RT	1	CPCS 42-IN LINED WITH CPCPE 30-IN
TOTAL		1	

REMOVING ASPHALTIC SURFACE

		204.0115	204.0120	REMARKS
STATION - STATION		BUTT JOINTS	MILLING	
		SY	SY	
1+64 - 451+97	LT/RT	---	162,646	MAINLINE
1+59	LT/RT	134	---	BOP
158+36	RT	103	---	SPRING BROOK RD
209+11	LT	85	---	CTH P
261+75	LT	68	---	4 MILE RD
367+34	LT	72	---	CTH N
367+34	RT	84	---	CTH N
420+11	LT	65	---	SODA CREEK RD
439+89	LT	68	---	TOWN RD
451+94	LT/RT	133	---	EOP
TOTAL		812	162,646	

REMOVING ASPHALTIC SURFACE

		204.0110	REMARKS
STATION - STATION	LOCATION	SY	
80+91 - 82+96	RT	23	IN FRONT OF BEAMGUARD
80+91 - 82+96	LT	23	IN FRONT OF BEAMGUARD
117+96 - 124+51	RT	73	IN FRONT OF BEAMGUARD
117+93 - 124+41	LT	73	IN FRONT OF BEAMGUARD
147+40 - 152+45	RT	56	IN FRONT OF BEAMGUARD
146+92 - 151+97	LT	56	IN FRONT OF BEAMGUARD
177+85 - 191+40	LT	151	IN FRONT OF BEAMGUARD
367+46 - 367+55	RT	12	ISLAND AT CTH N
367+08 - 367+18	LT	14	ISLAND AT CTH N
366+58 - 367+14	RT	8	CURB AT CTH N
367+46 - 367+55	RT	6	ISLAND CURB AT CTH N
367+62 - 368+01	RT	7	CURB AT CTH N
366+61 - 367+02	LT	7	CURB AT CTH N
367+08 - 367+18	LT	6	ISLAND CURB AT CTH N
367+58 - 367+94	LT	7	CURB AT CTH N
TOTAL		521	

REMOVING CURB

		204.0130	REMARKS
STATION - STATION	LOCATION	LF	
367+46 - 367+55	RT	51	ISLAND
367+08 - 367+18	LT	57	ISLAND
TOTAL		108	

REMOVING CURB & GUTTER

STATION - STATION	LOCATION	204.0150 LF	REMARKS
366+58 - 367+14	RT	76	RADIUS
367+62 - 368+01	RT	59	RADIUS
366+61 - 367+02	LT	60	RADIUS
367+58 - 367+94	LT	63	RADIUS
TOTAL		258	

REMOVING GUARDRAIL

STATION - STATION	LOCATION	204.0165 LF	REMARKS
80+91 - 82+96	RT	205	FREEMAN CREEK
80+91 - 82+96	LT	205	FREEMAN CREEK
117+96 - 124+51	RT	655	CULVERTS
117+93 - 124+41	LT	648	CULVERTS
147+40 - 152+45	RT	505	B-37-40
146+92 - 151+97	LT	505	B-37-40
177+85 - 191+40	LT	1355	CULVERTS
420+98 - 428+28	RT	730	CULVERT
421+02 - 428+31	LT	729	CULVERT
TOTAL		5,537	

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1)		SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13)	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW	COMMENT
			CUT (2)	EBS EXCAVATION (3)				FACTOR 1.25				
DIVISION 1	78+75/428+75											
BG			10	0	0	10	1,841	2,301	-2,291	0	2,291	
DIVISION 1 SUBTOTAL			10	0	0	10	1,841	2,301	-2,291	0	2,291	
DIVISION 2												
CULVERT	423+19/424+33		675	0	0	675	0	0	675	675	0	
DIVISION 2 SUBTOTAL			675	0	0	675	0	0	675	675	0	
GRAND TOTAL			685	0	0	685	1,841	2,301	-1,616	675	2,291	
TOTAL COMMON EXC			685									

NOTES:
(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100
(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.
(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL
(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL
(13) EXPANDED FILL FACTOR = X.6X
DEPENDING ON SELECTIONS:
OR
OR
OR
(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.
(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

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

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

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

EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR

PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS

		211.0400		
STATION - STATION	LOCATION	STA	REMARKS	
64+75 - 67+35	RT	3	ASPHALT WIDENING	
71+66 - 74+27	RT	3	ASPHALT WIDENING	
78+82 - 80+86	LT	2	ASPHALT WIDENING	
78+78 - 80+86	RT	2	ASPHALT WIDENING	
82+97 - 85+22	LT	2	ASPHALT WIDENING	
83+14 - 85+23	RT	2	ASPHALT WIDENING	
116+38 - 117+96	LT	2	ASPHALT WIDENING	
116+43 - 117+96	RT	2	ASPHALT WIDENING	
125+36 - 125+76	LT	0	ASPHALT WIDENING	
124+46 - 125+82	RT	1	ASPHALT WIDENING	
145+74 - 146+96	LT	1	ASPHALT WIDENING	
145+99 - 147+41	RT	1	ASPHALT WIDENING	
151+96 - 153+29	LT	1	ASPHALT WIDENING	
152+40 - 153+75	RT	1	ASPHALT WIDENING	
176+52 - 177+86	LT	1	ASPHALT WIDENING	
191+39 - 192+18	RT	1	ASPHALT WIDENING	
		TOTAL	26	

FINISHING ROADWAY (PROJECT) 01.
6360-06-70

		213.0100	
STATION - STATION	LOCATION	EACH	REMARKS
1+64 - 451+97	LT/RT	1	
		TOTAL	1

BASE AGGREGATE DENSE

		305.0110	305.0120	624.0100	
		3/4-INCH	1 1/4-INCH	WATER	
STATION - STATION	LOCATION	TON	TON	MGAL	REMARKS
1+64 - 423+20	LT/RT	9,290	---	139	SHLDRS
423+20 - 424+32	LT/RT	24	455	7	MAINLINE & SHLDRS
427+10 - 451+89	LT/RT	546	---	8	SHLDRS
105+55 - 439+64	LT/RT	130	---	2	SIDE ROADS
366+58 - 367+14	RT	---	2	0	CURB AT CTH N
367+46 - 367+55	RT	---	1	0	ISLAND CURB AT CTH N
367+62 - 368+01	RT	---	1	0	CURB AT CTH N
366+61 - 367+02	LT	---	1	0	CURB AT CTH N
367+08 - 367+18	LT	---	1	0	ISLAND CURB AT CTH N
367+58 - 367+94	LT	---	2	0	CURB AT CTH N
UNDISTRIBUTED	LT/RT	250	10	4	UNFORESEEN
		TOTALS	10,240	474	161

3

TACK COAT

STATION - STATION	LOCATION	455.0605 GALLONS	REMARKS
1+64 - 451+89	LT/RT	11,484	MAINLINE & BUTT JOINTS
TOTAL		11,484	

HMA PAVEMENT

STATION - STATION	LOCATION	460.0105.S PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	460.0110.S PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH	460.6224 4 MT 58-28 S TON	REMARKS
1+64 - 451+89	LT/RT	1	1	---	PROJECT 6360-06-70
1+64 - 451+89	LT/RT	---	---	18,274	MAINLINE/INTERSECTIONS
TOTALS		1	1	18,274	

PWL MIXTURE USE TABLE

THE FOLLOWING ACCEPTANCE CRITERIA ARE APPLICABLE FOR THIS PROJECT:

LOCATION	STATION	MIXTURE USE	UDERLYING SURFACE	BID ITEM	TONS	THICKNESS	QUALITY MANAGEMENT PROGRAM TO BE USED FOR:	
							MIXTURE ACCEPTANCE	DENSITY ACCEPTANCE
12 FOOT DRIVING LANE	1+64 - 451+89	UPPER LAYER	MILLED EXISTING HMA SURFACE	HMA PAVEMENT 4 MT 58-28S	13,207	2-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	INCENTIVE DENSITY PWL HMA PAVEMENT 460.2005
SHOULDERS	1+64 - 451+89	UPPER LAYER	MILLED EXISTING HMA SURFACE	HMA PAVEMENT 4 MT 58-28S	3,302	2-INCH	PWL INCENTIVE AIR VOIDS HMA PAVEMENT 460.2010	ACCEPTANCE TESTING BY THE DEPARTMENT; NOT ELIGIBLE FOR INCENTIVE OR DISINCENTIVE
INTERSECTIONS	1+64 - 451+89	UPPER LAYER	MILLED EXISTING HMA SURFACE	HMA PAVEMENT 4 MT 58-28S	1,765	2-INCH	QMP AS PER SS 460.	INCENTIVE DENSITY HMA PAVEMENT 460.2000
12 FOOT DRIVING LANE	423+20 - 424+32	LOWER LAYER	BASE AGGREGATE	ASPHALTIC SURFACE	129	3-INCH	QMP AS PER SS 465.	ACCEPTANCE BY ORDINARY COMPACTION.
SHOULDERS / PATCHING	423+20 - 424+32	LOWER LAYER	BASE AGGREGATE	ASPHALTIC SURFACE	184	2-INCH OR 3- INCH	QMP AS PER SS 465.	ACCEPTANCE BY ORDINARY COMPACTION.

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ASPHALTIC FLUMES

STATION - STATION	LOCATION	465.0315		REMARKS
		SY		
366+93	LT	3		CTH N INTERSECTION
366+98	RT	1		CTH N INTERSECTION
367+61	LT	1		CTH N INTERSECTION
367+67	LT	1		CTH N INTERSECTION
TOTALS		6		

ASPHALTIC SURFACE

STATION - STATION	LOCATION	211.0400 PREPARE FOUNDATION FOR ASPHALTIC SHOULDERS		465.0305 SAFETY ISLAND		REMARKS
		STA	465.0105 TON	TON		
64+75 - 67+35	RT	3	13	---		ASPHALT WIDENING
71+66 - 74+27	RT	3	13	---		ASPHALT WIDENING
78+82 - 80+86	LT	3	13	---		ASPHALT WIDENING
78+78 - 80+86	RT	3	14	---		ASPHALT WIDENING
82+97 - 85+22	LT	3	15	---		ASPHALT WIDENING
83+14 - 85+23	RT	3	11	---		ASPHALT WIDENING
116+38 - 117+96	LT	2	9	---		ASPHALT WIDENING
116+43 - 117+96	RT	2	7	---		ASPHALT WIDENING
125+36 - 125+76	LT	1	1	---		ASPHALT WIDENING
124+46 - 125+82	RT	2	6	---		ASPHALT WIDENING
145+74 - 146+96	LT	2	6	---		ASPHALT WIDENING
145+99 - 147+41	RT	2	7	---		ASPHALT WIDENING
151+96 - 153+29	LT	2	6	---		ASPHALT WIDENING
152+40 - 153+75	RT	2	6	---		ASPHALT WIDENING
176+52 - 177+86	LT	2	6	---		ASPHALT WIDENING
191+39 - 192+18	RT	1	5	---		ASPHALT WIDENING
366+58 - 367+14	RT	---	1	---		CURB AT CTH N
367+46 - 367+55	RT	---	1	1.1		ISLAND CURB AT CTH N (ISLAND 2IN THICK)
367+62 - 368+01	RT	---	1	---		CURB AT CTH N
366+61 - 367+02	LT	---	1	---		CURB AT CTH N
367+08 - 367+18	LT	---	1	1.2		ISLAND CURB AT CTH N (ISLAND 2IN THICK)
367+58 - 367+94	LT	---	1	---		CURB AT CTH N
420+70 - 421+48	LT	1	1	---		ASPHALT WIDENING
419+67 - 421+07	RT	2	7	---		ASPHALT WIDENING
428+29 - 429+54	LT	2	5	---		ASPHALT WIDENING
428+28 - 429+64	RT	2	5	---		ASPHALT WIDENING
423+20 - 424+32	MAINLINE	---	151	---		CULVERT REPLACEMENT
TOTALS		43	313	2		

ASPHALTIC CENTER LINE RUMBLE STRIP 2-LANE RURAL

STATION - STATION	LOCATION	465.0475		REMARKS
		LF		
1+64 451+89	CENTERLINE	45,025		
TOTAL		45,025		

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CROSS DRAINS & SIDE ROAD CULVERT PIPES

STATION	LOCATION	CULVERT PIPE LINERS			CLEANING CULVERT PIPES FOR LINER VERIFICATION	APRON ENDWALLS			CPRC CLASS IV	APRON ENDWALLS		REMARKS
		ENTER SIZE				FOR CULVERT PIPE STEEL				FOR CULVERT PIPE RC		
		520.9700.S	520.9700.S	520.9700.S		521.1024	521.1030	521.1036		522.0448	522.1048	
		24-INCH	30-INCH	36-INCH		520.9750.S	24-INCH	30-INCH		36-INCH	48-INCH	
		LF	LF	LF	EACH	EACH	EACH	EACH	LF	EACH		
179+38	LT/RT	126	---	---	1	---	---	---	---	---		
185+63	LT/RT	104	---	---	1	1	---	---	---	---		
233+50	LT/RT	---	---	90	1	---	---	---	---	---		
235+49	LT/RT	---	---	80	1	---	---	---	---	---		
251+49	LT/RT	69	---	---	1	1	---	---	---	---		
263+28	LT/RT	---	68	---	1	---	1	---	---	---		
276+88	LT/RT	---	---	84	1	---	---	1	---	---		
303+21	LT/RT	---	---	84	1	---	---	---	---	---		
363+94	LT/RT	79	---	---	1	1	---	---	---	---		
379+86	LT/RT	68	---	---	1	1	---	---	---	---		
408+80	LT/RT	---	---	104	1	---	---	---	---	---		
423+76	LT/RT	---	---	---	---	---	---	---	130	2		
TOTALS		446	68	442	11	4	1	1	130	2		

3

CONCRETE CURB & GUTTER

STATION	LOCATION	601.0120	601.0557	REMARKS
		CONCRETE	6-INCH SLOPED	
		CURB	36-INCH	
		TYPE J	TYPE D	
		LF	LF	
366+58 - 367- RT		---	76	RADIUS
367+46 - 367- RT		51	---	ISLAND
367+62 - 368- RT		---	59	RADIUS
366+61 - 367- LT		---	60	RADIUS
367+08 - 367- LT		57	---	ISLAND
367+58 - 367- LT		---	63	RADIUS
TOTALS		108	258	

RIPRAP AND GEOTEXTILE FABRIC

STATION	LOCATION	RIPRAP	GEOTEXTILE FABRIC	REMARKS
		606.0100	645.0130	
		LIGHT	TYPE R	
		CY	SY	
179+38	LT	4	16	PIPE OUTLET
185+63	LT	4	16	PIPE OUTLET
233+50	RT	4	16	PIPE OUTLET
235+49	RT	4	16	PIPE OUTLET
251+49	RT	4	16	PIPE OUTLET
263+28	RT	4	16	PIPE OUTLET
276+88	RT	4	16	PIPE OUTLET
303+21	RT	4	16	PIPE OUTLET
363+94	RT	4	16	PIPE OUTLET
379+86	LT	4	16	PIPE OUTLET
408+80	RT	4	16	PIPE OUTLET
423+76	RT	4	16	PIPE OUTLET
TOTALS		48	187	

MANHOLES				
STATION	LOCATION	611.0420 RECONSTRUCTING EACH	611.0530 COVERS TYPE J EACH	REMARKS
179+38	RT	1	1	
TOTAL		1	1	

MGS GUARDRAIL			
STATION - STATION	LOCATION	614.2330 3K LF	614.2610 TERMINAL EAT EACH
80+14 - 83+88	RT	268	2
80+14 - 83+88	LT	268	2
117+78 - 124+51	RT	563	2
117+73 - 124+41	LT	563	2
147+40 - 152+45	RT	400	2
146+92 - 151+97	LT	400	2
177+85 - 191+40	LT	1250	2
420+98 - 428+28	RT	625	2
421+02 - 428+31	LT	625	2
TOTALS		4960	18

ROCK BAGS			
STATION	LOCATION	628.7570 EACH	REMARKS
80+14	RT	16	SILFT FENCE RELIEF
80+14	LT	16	SILFT FENCE RELIEF
83+90	RT	16	SILFT FENCE RELIEF
83+87	LT	16	SILFT FENCE RELIEF
117+75	RT	16	SILFT FENCE RELIEF
117+85	LT	16	SILFT FENCE RELIEF
124+41	RT	16	SILFT FENCE RELIEF
124+35	LT	16	SILFT FENCE RELIEF
147+10	RT	16	SILFT FENCE RELIEF
147+34	LT	16	SILFT FENCE RELIEF
152+25	RT	16	SILFT FENCE RELIEF
152+10	LT	16	SILFT FENCE RELIEF
177+75	LT	16	SILFT FENCE RELIEF
191+40	LT	16	SILFT FENCE RELIEF
421+15	RT	16	SILFT FENCE RELIEF
421+15	LT	16	SILFT FENCE RELIEF
423+76	RT	16	SILFT FENCE RELIEF
423+76	LT	16	SILFT FENCE RELIEF
428+00	RT	16	SILFT FENCE RELIEF
428+00	LT	16	SILFT FENCE RELIEF
UNDISTRIBUTED	LT/RT	25	
TOTAL		345	

TOPSOIL, EROSION MAT, FERTILIZER, AND SEEDING

STATION - STATION	LOCATION	625.0100	628.2008	629.0210	630.0130	630.0160	630.0500	REMARKS
		TOPSOIL	URBAN	FERTILIZER	SEEDING	SEEDING	SEED	
		SY	CLASS 1	TYPE B	MIXTURE	MIXTURE	WATER	
		SY	TYPE B	TYPE B	NO. 30	NO. 60	MGAL	
			SY	CWT	LB	LB		
78+75 - 80+60	RT	272	272	0.2	5	---	0.8	BEAMGUARD EATS
78+75 - 80+64	LT	320	320	0.2	6	---	0.9	BEAMGUARD EATS
83+38 - 85+22	RT	304	304	0.2	5	---	0.9	BEAMGUARD EATS
83+38 - 85+22	LT	307	307	0.2	6	---	0.9	BEAMGUARD EATS
116+75 - 118+28	RT	234	234	0.1	4	---	0.7	BEAMGUARD EATS
116+75 - 118+28	LT	358	358	0.2	6	---	1.0	BEAMGUARD EATS
123+91 - 125+60	RT	191	191	0.1	3	---	0.5	BEAMGUARD EATS
123+91 - 125+60	LT	163	163	0.1	3	---	0.5	BEAMGUARD EATS
145+75 - 147+84	RT	351	351	0.2	6	---	1.0	BEAMGUARD EATS
145+75 - 147+84	LT	183	183	0.1	3	---	0.5	BEAMGUARD EATS
151+90 - 153+75	RT	309	309	0.2	6	---	0.9	BEAMGUARD EATS
151+53 - 153+75	LT	177	177	0.1	3	---	0.5	BEAMGUARD EATS
176+50 - 178+35	LT	205	205	0.1	4	---	0.6	BEAMGUARD EATS
190+75 - 192+77	LT	161	161	0.1	3	---	0.5	BEAMGUARD EATS
366+80	LT	25	25	0.0	0	---	0.1	CURB REPLACEMENT
366+80	RT	27	27	0.0	0	---	0.1	CURB REPLACEMENT
367+75	LT	26	26	0.0	0	---	0.1	CURB REPLACEMENT
367+75	RT	21	21	0.0	0	---	0.1	CURB REPLACEMENT
420+64 - 421+48	RT	157	157	0.1	3	---	0.4	CULVERT PIPE
420+64 - 421+48	LT	247	247	0.2	4	---	0.7	CULVERT PIPE
423+20 - 424+32	RT	475	475	0.3	9	---	1.3	CULVERT PIPE
423+20 - 424+32	LT	524	524	0.3	9	---	1.5	CULVERT PIPE
427+75 - 428+50	RT	121	121	0.1	2	---	0.3	CULVERT PIPE
427+75 - 428+50	LT	118	118	0.1	2	---	0.3	CULVERT PIPE
423+20 - 423+99	LT	---	---	---	---	1	0.0	WETLANDS
423+37 - 423+85	RT	---	---	---	---	1	0.0	WETLANDS
UNDISTRIBUTED	LT/RT	500	500	0.3	9	1	1.4	
TOTALS		5,777	5,777	3.6	104	2	16	

SILT FENCE

STATION	LOCATION	628.1504	628.1520	REMARKS
		LF	MAINTENANCE LF	
78+67 - 80+67	RT	212	212	BEAMGUARD EATS
78+66 - 80+64	LT	212	212	BEAMGUARD EATS
83+35 - 85+32	RT	209	209	BEAMGUARD EATS
83+36 - 85+36	LT	212	212	BEAMGUARD EATS
116+62 - 118+32	RT	210	210	BEAMGUARD EATS
116+61 - 118+33	LT	211	211	BEAMGUARD EATS
123+91 - 125+74	RT	192	192	BEAMGUARD EATS
123+86 - 125+65	LT	172	172	BEAMGUARD EATS
145+65 - 147+88	RT	256	256	BEAMGUARD EATS
145+64 - 147+89	LT	219	219	BEAMGUARD EATS
151+87 - 153+88	RT	214	214	BEAMGUARD EATS
151+50 - 153+83	LT	243	243	BEAMGUARD EATS
176+48 - 178+39	LT	214	214	BEAMGUARD EATS
19+74 - 192+88	LT	190	190	BEAMGUARD EATS
420+58 - 421+51	RT	109	109	BEAMGUARD EATS
420+59 - 421+53	LT	112	112	BEAMGUARD EATS
423+12 - 424+41	RT	166	166	CULVERT REPLACEMENT
423+08 - 424+39	LT	141	141	CULVERT REPLACEMENT
427+72 - 428+56	RT	113	113	BEAMGUARD EATS
427+73 - 428+60	LT	95	95	BEAMGUARD EATS
UNDISTRIBUTED	LT/RT	350	350	
TOTALS		4,052	4,052	

MOBILIZATIONS EROSION CONTROL

STATION - STATION	628.1905	628.1910	REMARKS
	MOBILIZATIONS EROSION CONTROL EACH	MOBILIZATIONS EMERGENCY EROSION CONTROL EACH	
423+08 - 424+41	1	---	CULVERT REPLACEMENT
78+66 - 428+60	2	---	BEAMGUARD EATS
PROJECT 6360-06-70	2	2	RESTORATION / STORM RESPONSE
TOTALS	5	2	

CULVERT PIPE CHECKS

STATION	LOCATION	628.7555	REMARKS
		EACH	
180+45	RT	3	PIPE INLET
185+63	RT	3	PIPE INLET
233+50	LT	3	PIPE INLET
235+49	LT	3	PIPE INLET
251+49	LT	3	PIPE INLET
263+28	LT	3	PIPE INLET
276+88	LT	3	PIPE INLET
303+21	LT	3	PIPE INLET
363+94	LT	3	PIPE INLET
379+86	RT	3	PIPE INLET
408+80	LT	3	PIPE INLET
423+76	LT	3	PIPE INLET
TOTAL		36	

3

3

MARKERS CULVERT END

633.5200

STATION-STATION	LOCATION	633.5200 EACH	REMARKS
179+38	LT	1	MARKER IS MISSING
185+63	LT	1	MARKER IS MISSING
233+50	LT/RT	2	MARKER IS MISSING
235+49	RT	1	MARKER IS MISSING
251+49	LT	1	MARKER IS MISSING
263+28	LT	1	MARKER IS MISSING
379+86	LT/RT	2	MARKER IS MISSING
408+80	RT	1	MARKER IS MISSING
423+76	LT/RT	2	MARKER IS MISSING
		12	

PERMANENT SIGNING TYPE II AND SIGN SUPPORTS

SIGN NO.	STATION	DESCRIPTION	SIGN/ASSEMBLY	634.0416 POSTS WOOD 4X6-INCH X 16-FT	638.2102 MOVING SIGNS TYPE II	REMARKS
			W X H IN X IN	EACH	EACH	
1-01	367+16	INFORMATIONAL	24 X 24	1	1	
1-02	367+15	REGULATORY	36 X 36	1	1	
1-03	367+11	REGULATORY	24 X 30	1	1	ATTACHED TO 1-04
1-04	367+11	DIRECTIONAL	24 X 48	---	---	ATTACHED TO 1-03
1-05	367+53	DIRECTIONAL	24 X 48	1	1	ATTACHED TO 1-06
1-06	367+53	REGULATORY	24 X 30	---	---	ATTACHED TO 1-05
1-07	367+48	INFORMATIONAL	24 X 24	1	1	
1-08	367+49	REGULATORY	36 X 36	1	1	
				6	6	

TRAFFIC CONTROL

LOCATION	643.0300 DRUMS DAYS	643.0420 BARRICADES TYPE III DAYS	643.0705 WARNING LIGHTS TYPE A DAYS	643.0715 WARNING LIGHTS TYPE C DAYS	643.0800 ARROW BOARDS DAYS	643.0900 SIGNS DAYS	643.1000 FIXED MESSAGE SIGNS SF	643.1050 SIGNS PCMS DAY	643.1070 TRAFFIC CONTROL CONES 42-INCH DAY	649.0120 TEMPORARY PAVEMENT MARKING EPOXY 4-INCH LF	REMARKS
Advanced Warning	---	---	---	---	---	2,520	164	---	---	---	
Beamguard Replacement	5,200	1,040	---	1,248	416	1,872	---	---	---	---	SHLDR CLSR AND LN SHFT
Mill and Overlay	1,872	1,275	2,550	117	---	1,527	---	---	---	15,762	ON SURFACE
CTH N Curb Work	---	---	---	---	---	72	---	---	432	---	SHLDR CLSRs
Detour	---	24	48	---	---	2,088	---	14	---	---	
TOTALS	7,072	2,339	2,598	1,365	416	8,079	164	14	432	15,762	

TRAFFIC CONTROL

LOCATION	643.5000 EACH
PROJECT	1
TOTAL	1

PAVEMENT MARKING EPOXY

STATION - STATION	LOCATION	646.1020	646.1040	646.6020	
		4-INCH YELLOW DASHED LF	GROOVED WET REF 4-INCH WHITE SOLID LF	STOPLINE 12-INCH WHITE LF	
1+64 - 451+89	LT	5,629	2,252	45,033	126
1+64 - 451+89	RT	5,629	2,252	45,033	144
SUB TOTALS		11,258	4,503	90,066	270
PROJECT TOTAL		15,762	90,066	270	

LOCATING NO-PASSING ZONES

STATION - STATION	648.0100 MILES
1+64 - 451+97	9.00
TOTAL	9.00

CONSTRUCTION STAKING

STATION - STATION	650.4000 STORM SEWER EACH	650.4500 SUBGRADE LF	650.5000 BASE LF	650.8000 RESURFACING REFERENCE LF	650.9910 SUPPLEMENTAL CONTROL (1058-24-60) LS	650.9920 CONSTRUCTION STAKING SLOPE STAKES LF	REMARKS
1+64 - 423+20	---	---	---	42,156	---	1,728	
423+20 -424+32	2	112	112	---	---	50	APRON ENDWALLS FOR CULVERT
424+32 - 451+89	---	---	---	2,757	---	---	
PROJECT 6360-00-70	---	---	---	---	1	---	
TOTALS	2	112	112	44,913	1	1,778	

SAWING ASPHALT

STATION	LOCATION	690.0150	REMARKS
		LF	
80+91 - 82+96	RT	205	SHOULDER
80+91 - 82+96	LT	205	SHOULDER
117+96 - 124+51	RT	655	SHOULDER
117+93 - 124+41	LT	648	SHOULDER
147+40 - 152+45	RT	505	SHOULDER
146+92 - 151+97	LT	505	SHOULDER
177+85 - 191+40	LT	1,355	SHOULDER
366+58 - 367+14	RT	76	CURB AT CTH N
367+46 - 367+55	RT	51	ISLAND CURB AT CTH N
367+62 - 368+01	RT	59	CURB AT CTH N
366+61 - 367+02	LT	60	CURB AT CTH N
367+08 - 367+18	LT	57	ISLAND CURB AT CTH N
367+58 - 367+94	LT	63	CURB AT CTH N
420+98 - 423+20	RT	222	SHOULDER
420+98 - 423+20	LT	222	SHOULDER
424+32 - 428+29	RT	397	SHOULDER
424+32 - 428+29	LT	397	SHOULDER
423+20	LT/RT	44	MAINLINE
424+32	LT/RT	44	MAINLINE
TOTAL		5,770	

TRANSPORTATION PROJECT PLAT NO: 6360-06-20-4.01

THAT PART OF THE NE 1/4 OF THE SE 1/4, SECTION 1, TOWNSHIP 27 NORTH, RANGE 5 EAST, TOWN OF EMMET, ALSO PART OF THE SW 1/4 OF THE NW 1/4, SECTION 6, TOWNSHIP 27 NORTH, RANGE 6 EAST, TOWN OF MOSINEE, ALL LOCATED IN MARATHON COUNTY, WISCONSIN

RELOCATION ORDER STH 107, MARATHON COUNTY (STH 153 TO CTH B)

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. THAT THE LANDS AND INTERESTS OR RIGHTS IN LANDS SHOWN ON THIS PLAT ARE TO BE ACQUIRED BY THE STATE OF WISCONSIN PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.					
PARCEL NUMBER	OWNERS	INTEREST	RAW ACRES REQUIRED	TILE	
1	ROBERT L AND LINDA M SCHEIDERER	REQUIRED TILE	NEW EXISTING TOTAL	1469	
2	JAMES G BURISH AND LILLIAN BURISH REVOCABLE TRUST DATED JUNE 2, 1993	TILE	---	---	848

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNERS	REQUIRED	RELEASE OF RIGHTS
201	FRONTIER COMMUNICATIONS OF WI LLC (COMMUNICATION)		
202	MAGELLAN MIDSTREAM PARTNERS LP (GAS)		RELEASE OF RIGHTS

- 201

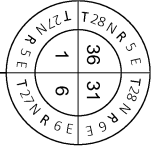
FRONTIER COMMUNICATIONS OF WI LLC (COMMUNICATION)
DOC 935548 - PAR 1
- 202

MAGELLAN MIDSTREAM PARTNERS LP (GAS)
DOC 581975 - PAR 1
DOC 581976 - PAR 2

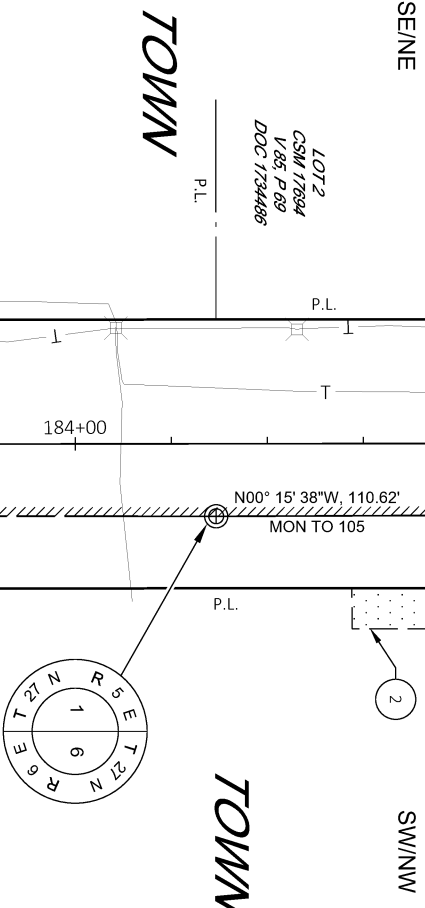
COURSE	BEARING	DISTANCE
100-101	S89° 56' 13"W	36.39'
101-102	S89° 56' 13"W	64.77'
102-103	N00° 03' 47"W	664.77'
103-104	N89° 56' 13"E	64.70'
104-105	N89° 56' 13"E	37.50'
105-106	N89° 56' 13"E	37.81'
106-107	S00° 03' 47"E	664.77'
107-100	S89° 56' 13"W	38.84'

POINT NO.	STATION	OFFSET
100	179+19.13	36.39'
101	179+19.14	0.00'
102	179+19.14	64.77'
103	185+83.92	64.70'
104	185+83.91	0.00'
105	185+83.91	37.50'
106	185+83.90	75.31'
107	179+19.13	75.23'

POINT NO.	STATION	OFFSET
101	179+19.22	101.50'
102	179+59.22	101.50'
103	179+59.14	64.77'
104	185+84.11	96.50'
105	185+44.10	96.50'
106	185+43.90	75.30'



FOUND PK NAIL BROKE
Y = 165016.160
X = 225476.285



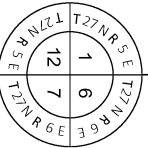
FOUND HARRISON
Y = 162584.377
X = 225487.339

ENNET

NE/SE

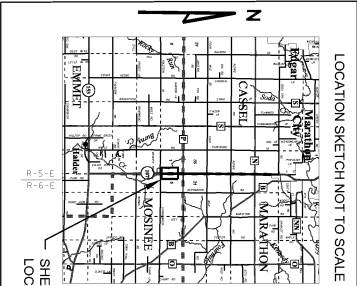
MOSINEE

NW/SW



FOUND PK NAIL BROKE
Y = 159951.488
X = 225483.520

ALL TILES ARE FOR GRADING PURPOSES



RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6360-06-20-4.01
AMENDMENT NO. _____

SCALE, FEET 0 50 100

CONVENTIONAL UTILITY SYMBOLS	
WATER	—w—
GAS	—g—
TELEPHONE	—t—
OVERHEAD TRANSMISSION LINES	—ol—
ELECTRIC	—e—
CABLE TELEVISION	—tv—
SEWER	—sw—
SANITARY SEWER	—ss—
ELECTRIC TOWER	—st—

POWER POLE	
TELEPHONE POLE	—b—
TELEPHONE POLE	—x—

CONVENTIONAL ABBREVIATIONS

AR	OUTLOT	OL
AC	PAGE	P
AD	POINT OF TANGENCY	PT
ALUM	PROPERTY LINE	PL
ET AL	RECORDED AS	(100)
BLK	REF. IMAGE	R/I
BLK	REFERENCE LINE	R/L
C/L	PERMANENT LIMITED EASEMENT	PLE
CSM	POINT OF BEGINNING	PoB
CONC	POINT OF CURVATURE	PC
CO	POINT OF COMPOUND CURVE	PCC
CTH	POINT OF INTERSECTION	CTI
DIST	REMAINING	REM
COR	RESTRICTIVE DEVELOPMENT EASEMENT	ROE
DOC	RIGHT	RT
EASE	RIGHT OF WAY	R/W
EX	SECTION	SEC
GV	SEPTIC VENT	SEPV
GN	SQUARE FEET	SF
HE	STATE TRUNK HIGHWAY	STH
ID	STATION	STA
LC	TELEPHONE PEDESTAL	TP
LT	TEMPORARY LIMITED EASEMENT	TLE
MON	TRANSPORTATION PROJECT PLAT	TTP
NGS	UNITED STATES HIGHWAY	USH
NO	VOLUME	V

CONVENTIONAL SYMBOLS

SECTION LINE	PARCEL NUMBER	UTILITY NUMBER
QUARTER LINE	75	40
SIXTEENTH LINE		
NEW REFERENCE LINE		
NEW R/W LINE		
EXISTING R/W LINE		
PROPERTY LINE		
LOT, TLE AND OTHER MINOR LINES		
SLOPE INTERCEPT		
CORPORATE LIMITS		
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)		
FEE ACQUISITION AREA (PACHING VAMES BY OWNER)		
TEMP. LIMITED EASEMENT AREA		
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)		
TRANSMISSION STRUCTURES		
BUILDING		
BUILDING (TO BE REMOVED)		
PARALLEL OFFSETS		

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MARATHON 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.

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.

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, BUT WITHOUT PREJUDICE TO THE OWNERS RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

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 OWNERS RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

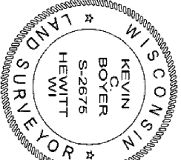
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRAWNWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN HANDS.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 107: RW PLAT 5013(2), CSM 11243, CSM 17694 AND EXISTING CENTERLINE.

ALIGNMENT SHOWN IS THE PROJECT DESIGN ALIGNMENT AND MAY OR MAY NOT BE CENTERED IN THE RIGHT-OF-WAY, 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.

emcs



SIGNATURE: *Kevin C. Boyer* DATE: 09/23/2019
PRINT NAME: KEVIN C. BOYER
REGISTRATION NUMBER: S-2676
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: *Brent L. Stille* DATE: 9-24-19
PRINT NAME: Brent L. Stille

TRANSPORTATION PROJECT PLAT NO: 6360-06-20-4.02

THAT PART OF THE LOT 1 OF CSM 11490 BEING PART OF THE SE 1/4 OF THE NE 1/4, AND PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 36, TOWNSHIP 28 NORTH, RANGE 5 EAST, TOWN OF CASSEL, ALL LOCATED IN MARATHON COUNTY, WISCONSIN

RELOCATION ORDER STH 107, MARATHON COUNTY (STH 133 TO CTH 8)

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 REQUESTS THAT:
1. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT BE LAYED 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 BE 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), MARATHON 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.

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.

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 EGRESSES, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNERS RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

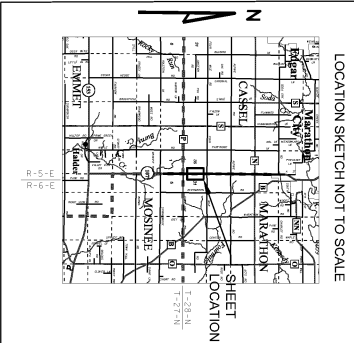
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 107 :
RW PLAT 5013(2), CSM 9581, CSM 11490 AND EXISTING CENTERLINE.

ALIGNMENT SHOWN IS THE PROJECT DESIGN ALIGNMENT AND MAY OR MAY NOT BE CENTERED IN THE RIGHT-OF-WAY.

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.



RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6360-06-20-4.02
AMENDMENT NO. _____

SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.		INTEREST				TILE	
PARCEL NUMBER	OWNERS	REQUIRED	NEW	EXISTING	TOTAL	SQ. FT	
3	DANIEL L AND SHEILA S FREY	TILE	---	---	---	1683	
4	PATRICK L MATUSHAK	TILE	---	---	---	968	

COURSE TABLE	
COURSE	DISTANCE
200-201	N89° 50' 08" W 39.82'
201-202	N89° 50' 08" W 59.14'
202-203	N00° 03' 47" W 239.98'
203-204	S89° 50' 08" E 59.12'
204-205	S89° 50' 08" E 40.97'
205-206	S89° 50' 08" E 31.47'
206-207	S00° 09' 52" W 239.98'
207-200	N89° 50' 08" W 31.64'

STATION & OFFSET TABLE	
POINT NO.	STATION
200	233+29.80
201	233+29.96
202	233+30.21
203	235+70.18
204	235+69.94
205	235+69.77
206	235+69.65
207	233+29.67

TILE STATION & OFFSET TABLE	
POINT NO.	STATION
TLE210	233+30.25
TLE211	233+70.25
TLE212	233+70.21
TLE213	235+30.13
TLE214	235+31.76
TLE215	235+71.82

UTILITY INTERESTS REQUIRED	
UTILITY NUMBER	OWNERS
201	FRONTIER COMMUNICATIONS OF WI LLC (COMMUNICATION)
INTEREST	
	REQUIRED
	RELEASE OF RIGHTS

FRONTIER COMMUNICATIONS OF WI LLC (COMMUNICATION)
DOC 1211772 - PAR 4

CONVENTIONAL UTILITY SYMBOLS	
WATER	—W—
GAS	—G—
TELEPHONE	—T—
OTHER TRANSMISSION LINES	—O—
ELECTRIC	—E—
CABLE TELEVISION	—TV—
FIBER OPTIC	—FO—
SANITARY SEWER	—SS—
STORM SEWER	—S—
ELECTRIC TOWER	⊠

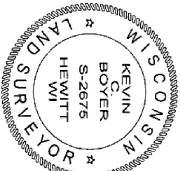
POWER POLE	⊠
TELEPHONE POLE	⊠
TELEPHONE PEDSTAL	⊠

CONVENTIONAL ABBREVIATIONS	
AR	OUTLIT
AC	P
AH	PT
ALUM	PL
ET AL	(100')
BLK	R/L
BACK	REFL / IMAGE
BLOCK	REFERENCE LINE
C/L	PERMANENT LIMITED EASEMENT
CSM	POINT OF BEGINNING
CONC	POINT OF CURVATURE
CO	POINT OF COMPOUND CURVE
CTH	POINT OF INTERSECTION
DIST	REMANING
COR	RESTRICTIVE DEVELOPMENT EASEMENT
DOC	RIGHT
DOE	RT
FASE	R/W
EX	SECTION
GN	SEPV
GV	SF
HE	STATE TRUNK HIGHWAY
ID	STATION
LC	STRA
LT	TP
MON	TELEPHONE LIMITED EASEMENT
NCS	TRANSPORTATION PROJECT PLAT
NO	UNITED STATES HIGHWAY
	VOLUME

CONVENTIONAL SYMBOLS	
SECTION LINE	PARCEL NUMBER (25)
QUARTER LINE	UTILITY NUMBER (40)
SIXTEENTH LINE	
NEW REFERENCE LINE	
NEW R/W LINE	
EXISTING R/W LINE	
PROPERTY LINE	
LOT, TIE AND OTHER MINOR LINES	
SLOPE INTERCEPT	
CORPORATE LIMITS	
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)	
TEMP. LIMITED EASEMENT AREA	
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)	
TRANSMISSION STRUCTURES	
BUILDING	
BUILDING (TO BE REMOVED)	
BRIDGE	
PARALLEL OFFSETS	

emcs

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



SIGNATURE: *Kevin C. Boyer* DATE: 09/23/2019
PRINT NAME: KEVIN C. BOYER
REGISTRATION NUMBER: S-2675
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: *Brent L. Stille* DATE: 9/24/19
PRINT NAME: Brent L. Stille

CASSEL

MARATHON

TOWN

TOWN

SE/NE

LOT 1
CSM 11480
V 48, P 172
DOC 1216375

SW/NW

LOT 1
CSM 9581
DOC 1102006



CALCULATED POSITION FROM TIES
Y = 167650.616
X = 225484.007

NW/SW

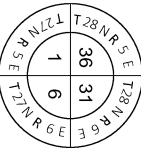
OF

NE/SE

OF

CASSEL

MARATHON



FOUND PK NAIL BROKE
Y = 165015.160
X = 225476.285

ALL TILES ARE FOR GRADING PURPOSES

TRANSPORTATION PROJECT PLAT NO: 6360-06-20-4.04

THAT PART OF THE NE 1/4 OF THE SE 1/4 OF SECTION 25, TOWNSHIP 28 NORTH, RANGE 5 EAST, TOWN OF CASSEL, LOCATED IN MARATHON COUNTY, WISCONSIN

RELOCATION ORDER STH 107, MARATHON COUNTY (STH 153 TO CTH B)

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.

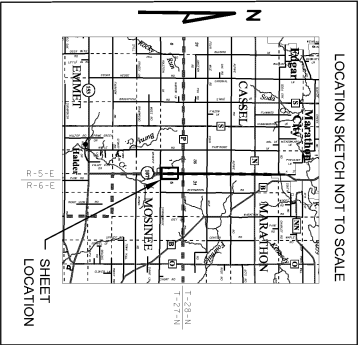
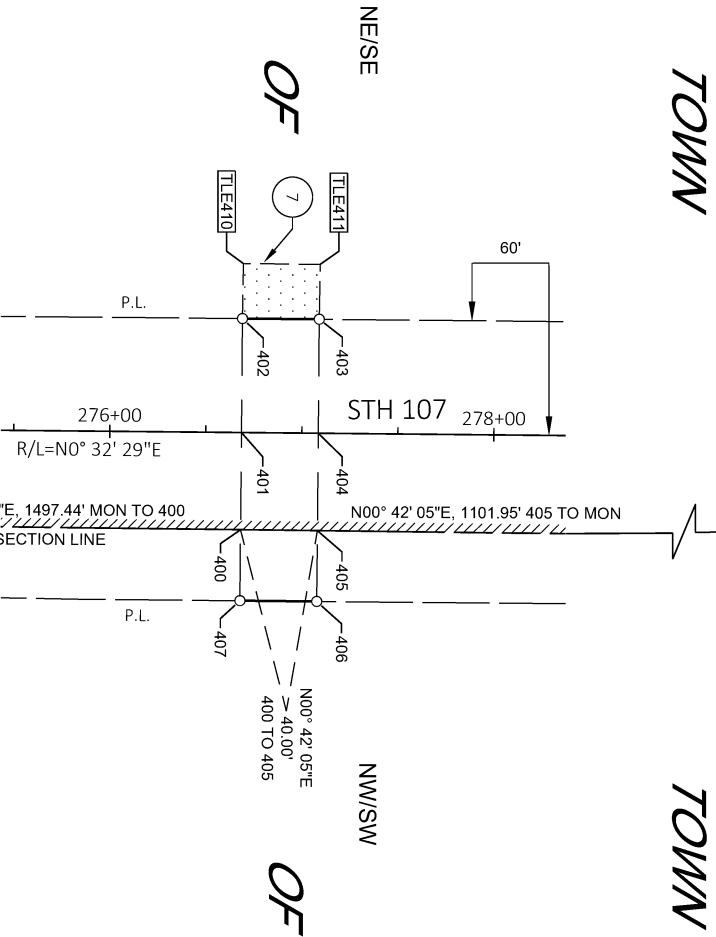
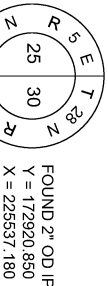
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY REQUESTS THAT:

1. 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 AS SHOWN ON THIS PLAT 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.

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	OWNERS		INTEREST	R/W	ACRES REQUIRED	TILE
NUMBER			REQUIRED	NEW	EXISTING	TOTAL
7	DAVID LEE AND SUZANNE M WERNER		TILE	---	---	1145

COURSE TABLE		
COURSE	BEARING	DISTANCE
400-401	N89° 28' 16"W	50.60'
401-402	N89° 28' 16"W	59.37'
402-403	N00° 32' 06"E	40.00'
403-404	S89° 28' 16"E	59.38'
404-405	S89° 28' 16"E	50.71'
405-406	S89° 28' 16"E	36.87'
406-407	S00° 31' 44"W	40.00'
407-400	N89° 28' 16"W	36.99'

TILE STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET
TILE410	276+68.70	88.00'
TILE411	277+08.71	88.00'



SCALE, FEET 0 50 100



CONVENTIONAL UTILITY SYMBOLS	
WATER	—W—
GAS	—G—
TELEPHONE	—T—
OVERHEAD TRANSMISSION LINES	—O—
CABLE TELEVISION	—C—
FIBER OPTIC	—F—
SANITARY SEWER	—S—
STORM SEWER	—SS—
ELECTRIC TOWER	⊠

CONVENTIONAL ABBREVIATIONS	
AR	OUTLOT
AC	PAGE
AH	POINT OF TANGENCY
ALUM	PROPERTY LINE
ET AL	RECORDED AS
BK	REFERENCE LINE
C/L	PERMANENT LIMITED EASEMENT
CSM	POINT OF BEGINNING
CONC	POINT OF CURVATURE
CO	POINT OF COMPOUND CURVE
CTH	POINT OF INTERSECTION
DIST	REMARKING
COR	RESTRICTIVE DEVELOPMENT EASEMENT
DOC	RIGHT
EASE	RIGHT OF WAY
EX	SECTION
GV	SEPTIC VENT
GN	SQUARE FEET
HE	STATE TRUNK HIGHWAY
ID	STATION
LC	TELEPHONE FEDESTAL
LT	TEMPORARY LIMITED EASEMENT
MON	TRANSPORTATION PROJECT PLAT
NS	UNITED STATES HIGHWAY
NO	VOLUME

CONVENTIONAL SYMBOLS	
SECTION LINE	PARCEL NUMBER 25
QUARTER LINE	UTILITY NUMBER 40
SIXTEENTH LINE	SECTION CORNER
NEW REFERENCE LINE	R/W MONUMENT
NEW R/W LINE	NON MONUMENTED
EXISTING R/W LINE	R/W POINT
PROPERTY LINE	FOUND IRON PIN
LOT, TIE, AND OTHER MINOR LINES	IP
SLOPE INTERCEPT	VALVE (GAS)
CORPORATE LIMITS	WATER, ETC.)
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
FEE ACQUISITION AREA (OWNERS' AREAS BY OWNER)	SIGN
TEMP. LIMITED EASEMENT AREA	OFF-PREMISE SIGN
EASED/ADJ. AREA (HIGHWAY, PERMANENT LIMITATION OR RESTRICTED DEVELOPMENT)	ACCESS CONTROLLED BY ACQUISITION
TRANSFERRING DEVELOPMENT	NO ACCESS (BY STATUTORY AUTHORITY)
BUILDING	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
BUILDING TO BE REMOVED	NO ACCESS (NEW HIGHWAY)
BRIDGE	NATIONAL GEODETIC SURVEY MONUMENT
	SIXTEENTH CORNER MONUMENT
	PARALLEL OFFSETS

CONVENTIONAL SYMBOLS	
SECTION LINE	PARCEL NUMBER 25
QUARTER LINE	UTILITY NUMBER 40
SIXTEENTH LINE	SECTION CORNER
NEW REFERENCE LINE	R/W MONUMENT
NEW R/W LINE	NON MONUMENTED
EXISTING R/W LINE	R/W POINT
PROPERTY LINE	FOUND IRON PIN
LOT, TIE, AND OTHER MINOR LINES	IP
SLOPE INTERCEPT	VALVE (GAS)
CORPORATE LIMITS	WATER, ETC.)
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES
FEE ACQUISITION AREA (OWNERS' AREAS BY OWNER)	SIGN
TEMP. LIMITED EASEMENT AREA	OFF-PREMISE SIGN
EASED/ADJ. AREA (HIGHWAY, PERMANENT LIMITATION OR RESTRICTED DEVELOPMENT)	ACCESS CONTROLLED BY ACQUISITION
TRANSFERRING DEVELOPMENT	NO ACCESS (BY STATUTORY AUTHORITY)
BUILDING	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
BUILDING TO BE REMOVED	NO ACCESS (NEW HIGHWAY)
BRIDGE	NATIONAL GEODETIC SURVEY MONUMENT
	SIXTEENTH CORNER MONUMENT
	PARALLEL OFFSETS

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MARATHON 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.

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.

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, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, 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 LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN HANDBOOK.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 107: RW PLAT 5013(2) AND EXISTING CENTERLINE.

ALIGNMENT SHOWN IS THE PROJECT DESIGN ALIGNMENT AND MAY OR MAY NOT BE CENTERED IN THE RIGHT-OF-WAY.

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.

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, 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.

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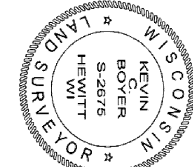
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ALIGNMENT SHOWN IS THE PROJECT DESIGN ALIGNMENT AND MAY OR MAY NOT BE CENTERED IN THE RIGHT-OF-WAY.

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.

emcs

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



SIGNATURE: *Kevin C. Boyer* DATE: 09/23/2019
PRINT NAME: KEVIN C. BOYER
REGISTRATION NUMBER: S-2676
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: *Brent L. Stille* DATE: 9/24/19
PRINT NAME: Brent L. Stille

TRANSPORTATION PROJECT PLAT NO: 6360-06-20-4.05

THAT PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 25, TOWNSHIP 28 NORTH, RANGE 5 EAST, TOWN OF CASSEL, LOCATED IN MARATHON COUNTY, WISCONSIN

RELOCATION ORDER STH 107, MARATHON COUNTY (STH 153 TO CTH B)

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, 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 REQUESTS THAT:

1. THE STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION REQUESTS THAT THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT BE REQUIRED BY THE DEPARTMENT 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.

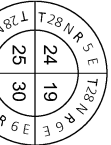
CONVENTIONAL UTILITY SYMBOLS			
WATER	—	W	—
GAS	—	G	—
TELEPHONE	—	T	—
OVERHEAD TRANSMISSION LINES	—	OH	—
ELECTRIC TRANSMISSION LINES	—	E	—
COMMUNICATIONS	—	CO	—
FIBER OPTIC	—	FO	—
SANITARY SEWER	—	SS	—
STORM SEWER	—	SS	—
ELECTRIC TOWER	—	ET	—
POWER POLE	—	PP	—
TELEPHONE POLE	—	TP	—
TELEPHONE PEDestal	—	TPD	—

SCHEDULE OF LANDS & INTERESTS REQUIRED			
OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.			
PARCEL	OWNERS	INTEREST	TILE
8	JOEL M LEMANSKI, A 58% INTEREST AND PATRICK J LEMANSKI, A 42% INTEREST	REQUIRED	NEW
		EXISTING	TOTAL
			1153

COURSE TABLE			
COURSE	BEARING	DISTANCE	POINT NO.
500-501	N89° 52' 27"W	44.90'	500
501-502	N89° 52' 27"W	59.67'	501
502-503	N00° 32' 06"E	40.00'	502
503-504	S89° 52' 27"E	59.67'	503
504-505	S89° 52' 27"E	44.66'	504
505-506	S89° 52' 27"E	31.93'	505
506-507	S00° 07' 33"W	40.00'	506
507-500	N89° 52' 27"W	31.98'	507

STATION & OFFSET TABLE			
POINT NO.	STATION	OFFSET	POINT NO.
500	303+02.46	44.90'	501
501	303+02.14	0.00'	502
502	303+01.70	59.67'	503
503	303+01.14	0.00'	504
504	303+02.46	44.66'	505
505	303+02.69	76.59'	506
506	303+02.69	76.59'	507

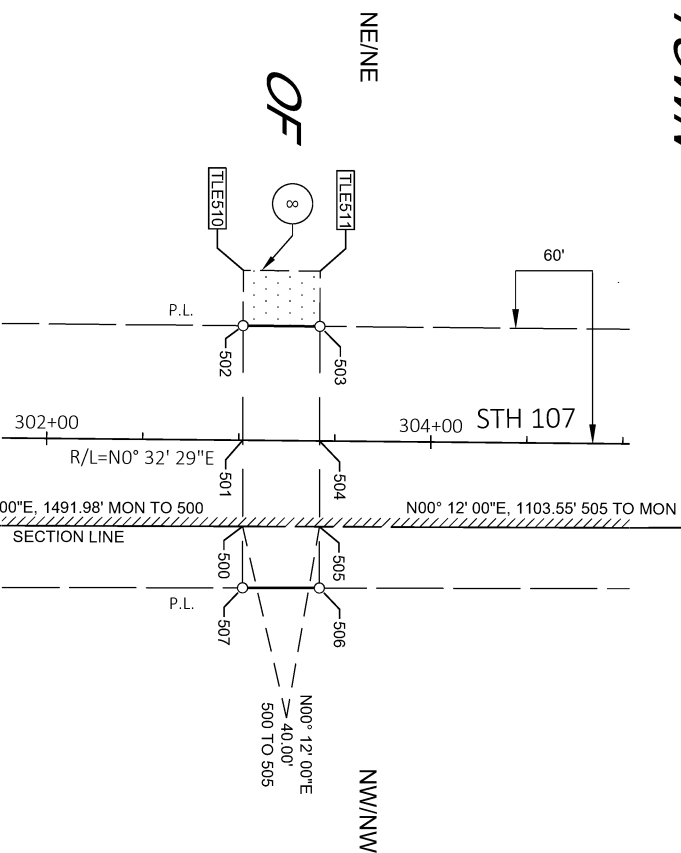
TILE STATION & OFFSET TABLE			
POINT NO.	STATION	OFFSET	POINT NO.
TILE510	303+01.59	88.50'	TILE511
TILE511	303+41.59	88.50'	TILE512



FOUND PK NAIL
Y = 175566.359
X = 225546.380

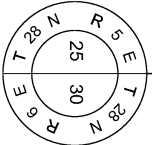
TOWN

TOWN

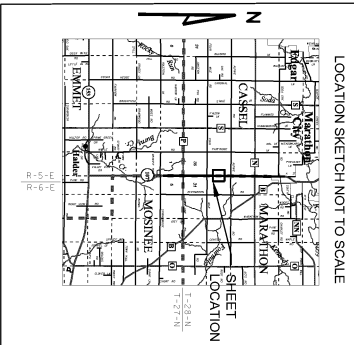
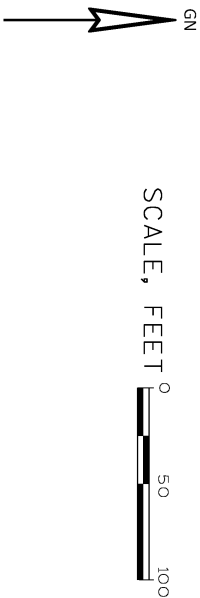


CASSEL

MARATHON



FOUND 2" OD IP
Y = 172920.850
X = 225537.180



RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6360-06-20-4.05
AMENDMENT NO. __

CONVENTIONAL ABBREVIATIONS			
ACCESS RIGHTS	AR	OUTLOT	OL
ACRES	AC	PAGE	P
ALUMINUM	ALUM	POINT OF TANGENCY	PT
ALUMINUM	ALUM	PROPERTY LINE	PL
AND OTHERS	ET AL	RECORDED AS	(100')
BACK	BK	REEL / IMAGE	R/I
BLOCK	BLK	REFERENCE LINE	R/L
CENTERLINE	C/L	PERMANENT LIMITED EASEMENT	PLE
CERTIFIED SURVEY MAP	CSM	POINT OF BEGINNING	PGB
CONCRETE	CONC	POINT OF CURVATURE	PC
COUNTY	CO	POINT OF COMPOUND CURVE	PCC
COUNTY TRUNK HIGHWAY	CTH	POINT OF INTERSECTION	PI
DISTANCE	DIST	REMAINING	REM
CORNER	COR	RESTRICTIVE DEVELOPMENT EASEMENT	REDE
DOCUMENT NUMBER	DOC	RIGHT	RT
EASEMENT	EASE	RIGHT OF WAY	R/W
EXISTING	EX	SECTION	SEC
GAS VALVE	GV	SEPTIC VENT	SPV
GRID NORTH	GN	SQUARE FEET	SF
HIGHWAY EASEMENT	HE	STATE TRUNK HIGHWAY	STH
IDENTIFICATION	ID	STATION	STA
LAND CONTRACT	LC	TELEPHONE PEDESTAL	TP
LEFT	LT	TEMPORARY LIMITED EASEMENT	TLE
MONUMENT	MON	TRANSPORTATION PROJECT PLAT	TPP
NATIONAL GEODETIC SURVEY NUMBER	NGS	UNITED STATES HIGHWAY	USH
		VOLUME	V

CONVENTIONAL SYMBOLS			
SECTION LINE	---	PARCEL NUMBER	25
QUARTER LINE	---	UTILITY NUMBER	40
SIXTEENTH LINE	---		
NEW REFERENCE LINE	---		
NEW R/W LINE	---		
EXISTING R/W LINE	---		
PROPERTY LINE	---		
LOT, TIE, AND OTHER MINOR LINES	---		
SLOPE INTERCEPT	---		
CORPORATE LIMITS	---		
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	---		
FEE ACQUISITION AREA (ATCHING VARIES BY OWNER)	---		
TEMP. LIMITED EASEMENT AREA	---		
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)	---		
TRANSMISSION STRUCTURES	---		
BUILDING	---		
BUILDING (TO BE REMOVED)	---		
BRIDGE	---		
PARALLEL OFFSETS	---		

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MARATHON COUNTY, MAD083 (2011) IN US SURVEY FEET. VALUES SHOWN 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"X24" IRON REBAR) UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

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, BUT WITHOUT PREJUDICE TO THE OWNERS RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, SAND 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 LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 107: RW PLAT 5013(2) AND EXISTING CENTERLINE.

ALIGNMENT SHOWN IS THE PROJECT DESIGN ALIGNMENT AND WAY OR MAY NOT BE CENTERED IN THE RIGHT-OF-WAY.

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.

SIGNATURE: *Kevin C. Boyer* DATE: 09/23/2019

PRINT NAME: KEVIN C. BOYER

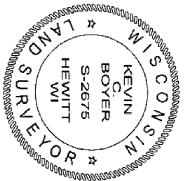
REGISTRATION NUMBER: 5-2675

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

SIGNATURE: *Drew Nelson* DATE: 9/24/19

PRINT NAME: Drew Nelson

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



ALL TILES ARE FOR GRADING PURPOSES

THAT PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 24, TOWNSHIP 28 NORTH, RANGE 5 EAST, TOWN OF CASSEL, LOCATED IN MARATHON COUNTY, WISCONSIN

TO PROPERLY ESTABLISH, LAYOUT, 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:

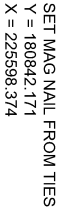
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE ESTABLISHED BY THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE OF WISCONSIN,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

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

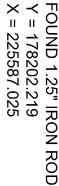
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

COURSE TABLE			STATION & OFFSET TABLE		
COURSE	BEARING	DISTANCE	POINT NO.	STATION	OFFSET
600-601	N89° 47' 40" W	41.97'	600	363+75.12	41.97'
601-602	N89° 47' 40" W	59.42'	601	363+74.88	0.00'
602-603	N00° 33' 30"E	40.01'	602	363+74.53	59.42'
603-604	S89° 47' 40"E	59.41'	603	364+14.54	59.41'
604-605	S88° 47' 40"E	41.76'	604	364+14.88	0.00'
605-606	S89° 47' 40"E	31.01'	605	364+15.13	41.76'
606-607	N89° 47' 20" W	40.01'	606	364+15.31	72.77'
607-600	S00° 47' 40" W	31.04'	607	363+75.31	73.01'

STATION & OFFSET TABLE			TILE STATION & OFFSET TABLE		
POINT NO.	STATION	OFFSET	POINT NO.	STATION	OFFSET
600	365+75.12	41.97			
601	363+44.88	0.00	TL6610	365+4.09	83.50
602	363+74.53	59.42	TL6611	364+14.10	83.50
603	364+14.54	59.41			
604	364+14.88	0.00			
605	364+15.13	41.76			
606	364+15.31	72.77			
607	363+75.31	73.01			



TOWN



MARATHON

4

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and returned to: WisDOT - NC Region - Rhinelander / WI Rap



ACCESS RIGHTS	AGENTS	APPEND	ALUMINUM	AND OTHERS	BACK	BLOCK	CENTLINE	CERTIFIED SURVEY MAP	CONCRETE	COUNTY	COUNTY TRUNK HIGHWAY	DISTANCE	CORNER	DOCUMENT NUMBER	EASEMENT	EXISTING	GAS VALVE	GIRTH NORTH	HIGHWAY EASEMENT	IDENTIFICATION	LAND CONTRACT	LEFT	MONUMENT	NATIONAL GEODETIC SURVEY	NUMBER
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[illegible]

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MARATHON 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.

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

NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

REFERENCE 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.

REFERENCE LINES

A TEMPORARY LIMITED EASEMENT (TITLE) 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 (TITLE) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

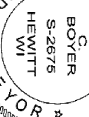
A PERMANENT LIMITED EASEMENT (FEE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR 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, SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN 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 LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 107 :
RW PLAT S013(2) AND EXISTING CENTERLINE.

ALIGNMENT SHOWN IS THE PROJECT DESIGN ALIGNMENT AND MAY OR MAY NOT BE CENTERED IN THE RIGHT-OF-WAY

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.

		emcs^{ie}	
I, KEVIN C. BOYER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 94.095 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:	DATE: 09/23/2019		
PRINT NAME: KEVIN C. BOYER			
REGISTRATION NUMBER: S-2676			
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION			
SIGNATURE: <u>Brent L. Schell</u>	DATE: 9-24-19		
PRINT NAME: Brent L. Schell			

THAT PART OF THE NE 1/4 OF THE NE 1/4 OF SECTION 13, TOWNSHIP 28 NORTH, RANGE 5 EAST, TOWN OF CASSEL, LOCATED IN MARATHON COUNTY, WISCONSIN

TO PROPERLY ESTABLISH, LAYOUT, 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.

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

COURSE TABLE			STATION & OFFSET TABLE			TILE STATION & OFFSET TABLE		
COURSE	BEARING	DISTANCE	POINT NO.	STATION	OFFSET	POINT NO.	STATION	OFFSET
700-701	N89° 26' 30"W	13.06'	700	408+42.45	19.06'	TL710	408+39.16	93.79'
701-702	N89° 26' 30"W	75.56'	701	408+44.45	0.00'	TL711	408+78.14	102.75'
702-703	N00° 33' 30"E	41.04'	702	408+42.43	79.56'			
703-704	S89° 26' 30"E	79.57'	703	408+83.47	79.57'			
704-705	S89° 26' 30"E	18.67'	704	408+83.49	0.00'			
705-706	S89° 26' 30"E	56.75'	705	408+83.49	18.67'			
706-707	S00° 33' 30"W	41.04'	706	408+83.51	75.43'			
707-700	N89° 26' 30"W	56.38'	707	408+42.47	75.44'			

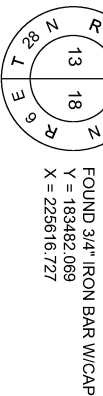
UTILITY		INTEREST
NUMBER	OWNER(S)	REQUIRED
201	FRONTIER COMMUNICATIONS OF WI LLC (COMMUNICATION)	RELEASE OF RIGHTS

FOUND PK NAIL BROKE

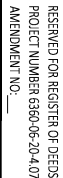
Y = 186115.394
X = 225618.294



P.L.



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09-24-2019 at 01:42 PM
DEAN J. STRATZ, REGISTER OF DEEDS
DOC#: **1788441**
Pages: 1

DOC#: 1/884
Pages: 1

CONVENTIONAL UTILITY SYMBOLS	
WATER	—w—
GAS	—g—
TELEPHONE	—t—
OVERHEAD TRANSMISSION LINES	—h—
ELECTRIC	—e—
CABLE TELEVISION	—tv—
FIBER OPTIC	—fo—
SANITARY SEWER	—san—
STORM SEWER	—ss—
ELECTRIC TOWER	☒

	NON-COMPENSABLE	COMPENSABLE
POWER POLE		
TELEPHONE POLE		
TELEPHONE PEDESTAL		

AR	OUTLOT	OR
AC	PAGE	P
AH	POINT OF TANGENCY	PT
ALUM	PROPERTY LINE	PL
ET AL	RECORDED AS	(100)
BR	REEL / IMAGE	R/I
BLK	REFERENCE LINE	R/L
C/L	PERMANENT LIMITED EASEMENT	P/L
CSM	POINT OF BEGINNING	P/B
CONC	POINT OF CURVATURE	PC
CO	POINT OF COMPOUND CURVE	PCC
CTH	POINT OF INTERSECTION	PI
DIST	REMARKING	REM
COR	RESTRICTIVE DEVELOPMENT EASEMENT	ROE
DOC	RIGHT	RT
EASE	RIGHT OF WAY	R/W
EX	SECTION	SEC
GV	SEPTIC VENT	SEVP
GN	SQUARE FEET	SF
HE	STATE TRUNK HIGHWAY	STH
ID	STATION	STA
LC	TELEPHONE PEDESTAL	TP
LT	TEMPORARY LIMITED EASEMENT	TLE
MON	TRANSPORTATION PROJECT PLAT	TPP
NCS	UNITED STATES HIGHWAY	USH
NO	VOLUME	V

PARCEL NUMBER 25 UTILITY NUMBER 40

SECTION CORNER	NOTATION FOR COMBUSTIBLE FLUIDS	NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES	ACCESS CONTROLLED BY ACQUISITION	NO ACCESS (BY STATUTORY AUTHORITY)	ACCESS RESTRICTED (BY PREVIOUS PROTECT OR CONTROL)	NO ACCESS (NEW HIGHWAY)	NATIONAL GEODETIC SURVEY MONUMENT	SIXTH CORNER MONUMENT	PARALLEL
R/W MONUMENT NON-COMMENTED	R/W POINT FOUND IRON PIN VALVE (GAS, WATER, ETC.) SIGN	OFF-PREMISE SIGN							

POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MARATHON 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.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES, MARATHON 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.

NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TITLE) 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 PURPOSES, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE. ALL TITLES 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 INTEREST AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESENCE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE, TO THE OWNERS RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES PROPERTY LINES SHOWN ON THIS PLAN ARE DRAWN FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPANCIAL 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 LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN WISCONSIN RAPIDS.

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 107:
RW PLAT 5013(2), CSM 13725, AND EXISTING CENTERLINE.

ALIGNMENT SHOWN IS THE PROJECT DESIGN ALIGNMENT AND MAY OR MAY NOT BE CENTERED IN THE RIGHT-OF-WAY.

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.

I, KEVIN C. BOYER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 94.095 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

The seal of the Wisconsin Department of Transportation, Division of Highway Engineering & Construction, is located at the top right. It features a circular design with "WISCONSIN LAND SURVEYOR" around the perimeter and "KEVIN C. BOYER S-2675 HEAVITT" in the center.

SIGNATURE: _____ DATE: 09/23/2019

PRINT NAME: KEVIN C. BOYER

REGISTRATION NUMBER: 5-2675

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

SIGNATURE: Brent L. Schille DATE: 9/24/19

PRINT NAME: Brent L. Schille

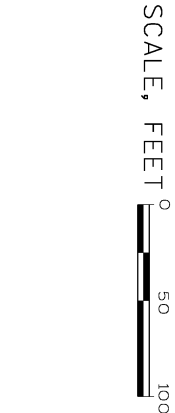
TRANSPORTATION PROJECT PLAT NO: 6360-06-20-4.08

THAT PART OF THE SE 1/4 OF THE SE 1/4 OF SECTION 12, TOWNSHIP 28 NORTH, RANGE 5 EAST, TOWN OF CASSEL, ALSO PART OF THE SW 1/4 OF THE SW 1/4 OF SECTION 7, TOWNSHIP 28 NORTH, RANGE 6 EAST, CITY OF MARATHON, ALL LOCATED IN MARATHON COUNTY, WISCONSIN

RELOCATION ORDER STH 107, MARATHON COUNTY (STH 153 TO CTH B)

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 LAY OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THAT PORTION OF SAID RIGHTS OR RIGHTS IN LANDS SHOWN ON THIS PLAT ARE RELOCATED 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.

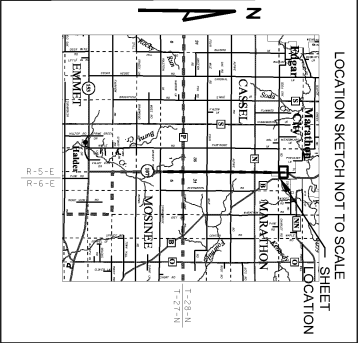
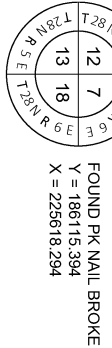
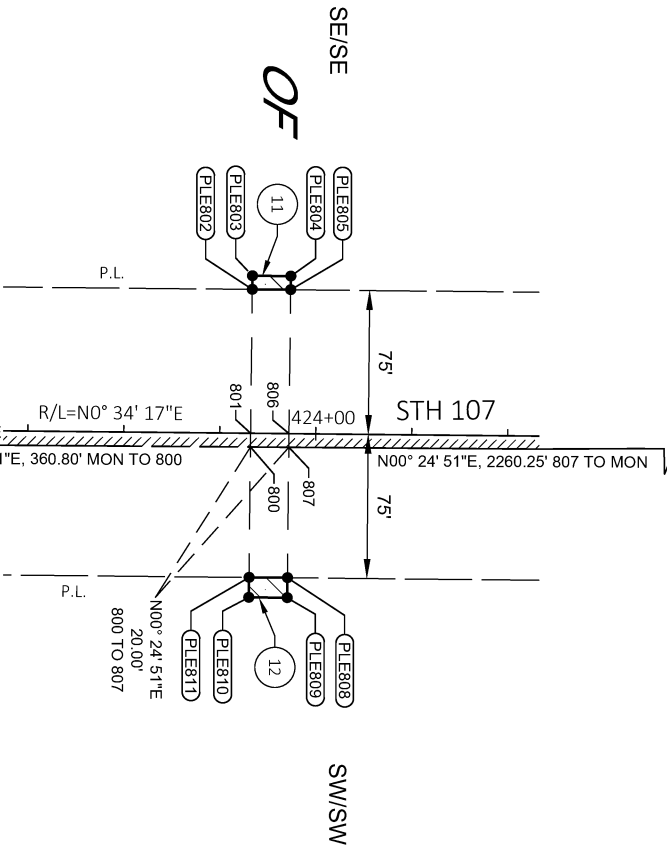
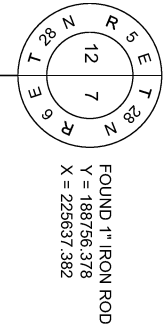


OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.					
PARCEL NUMBER	OWNERS	INTEREST REQUIRED	R/W ACRES REQUIRED	PLE	TLE
11	FRANK T AND CHERRY M SZYMANSKI	PLE	---	---	---
12	LEROY KNAUF, RITA LEMMER, JEAN DIRKS, WILLIAM KNAUF, BETTY AHRENS AND MARY SCHUMACHER	PLE	---	---	208

COURSE TABLE			STATION & OFFSET TABLE		
COURSE	BEARING	DISTANCE	POINT NO.	STATION	OFFSET
800-801	N89° 21' 27"W	7.16	800	423+66.04	7.16
801-PLE802	N89° 21' 27"W	74.91'	801	423+66.05	0.00'
PLE802-PLE803	N89° 19' 12"W	7.09'	PLE802	423+66.14	74.91'
PLE803-PLE804	N00° 34' 17"E	20.00'	PLE803	423+66.15	82.00'
PLE804-PLE805	S89° 19' 09"E	7.08'	PLE804	423+86.15	82.00'
PLE802-PLE805	N00° 33' 30"E	20.00'	PLE805	423+86.14	74.92'
PLE805-806	S89° 21' 27"E	74.92'	806	423+86.05	0.00'
806-807	S89° 21' 27"E	7.11'	807	423+86.04	7.11'
807-PLE808	S89° 21' 21"E	67.97'	PLE808	423+85.95	75.08'
PLE808-PLE809	S00° 34' 12"W	20.00'	PLE809	423+85.94	85.50'
PLE810-PLE811	N89° 21' 21"W	10.41'	PLE810	423+65.94	85.50'
PLE808-PLE811	S00° 33' 30"W	20.00'	PLE811	423+65.95	75.09'
PLE811-800	N89° 21' 27"W	67.92'			

UTILITY INTERESTS REQUIRED		INTEREST REQUIRED	
UTILITY NUMBER	OWNER(S)		
201	FRONTIER COMMUNICATIONS OF WI LLC (COMMUNICATION)		RELEASE OF RIGHTS

FRONTIER COMMUNICATIONS OF WI LLC (COMMUNICATION)
DOC 1241119 - PAR 11



RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 6360-06-20-4.08
AMENDMENT NO. _____

CONVENTIONAL UTILITY SYMBOLS		NON-COMPENSABLE	
WATER	W	NON-COMPENSABLE	NON-COMPENSABLE
GAS	G	NON-COMPENSABLE	NON-COMPENSABLE
TELEPHONE	T	NON-COMPENSABLE	NON-COMPENSABLE
TELEPHONE TRANSMISSION LINES	T	NON-COMPENSABLE	NON-COMPENSABLE
ELECTRIC	E	NON-COMPENSABLE	NON-COMPENSABLE
CABLE TELEVISION	TV	NON-COMPENSABLE	NON-COMPENSABLE
FIBER OPTIC	FO	NON-COMPENSABLE	NON-COMPENSABLE
SANITARY SEWER	SS	NON-COMPENSABLE	NON-COMPENSABLE
STORM SEWER	SS	NON-COMPENSABLE	NON-COMPENSABLE
ELECTRIC TOWER	ET	NON-COMPENSABLE	NON-COMPENSABLE
POWER POLE	P	NON-COMPENSABLE	NON-COMPENSABLE
TELEPHONE POLE	T	NON-COMPENSABLE	NON-COMPENSABLE
TELEPHONE PEDestal	TP	NON-COMPENSABLE	NON-COMPENSABLE

CONVENTIONAL SYMBOLS		CONVENTIONAL ABBREVIATIONS	
SECTION LINE	---	AR	ACCESS RIGHTS
QUARTER LINE	---	AC	ACRES
SIXTEENTH LINE	---	AH	AREAS
NEW REFERENCE LINE	---	ALUM	ALUMINUM
NEW R/W LINE	---	ET AL	AND OTHERS
EXISTING R/W LINE	---	BK	BACK
LOT, TIE, AND OTHER MINOR LINES	---	CL	CENTERLINE
PROPERTY LINE	---	CSM	CERTIFIED SURVEY MAP
SLOPE INTERCEPT	---	CONC	CONCRETE
CORPORATE LIMITS	---	CO	COUNTY
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	---	CH	COUNTY TRUNK HIGHWAY
FEE ACQUISITION AREA (PACHING VARIES BY OWNER)	---	CO	COUNTY TRUNK HIGHWAY
TEMP. LIMITED EASEMENT AREA	---	DIST	DISTANCE
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)	---	COR	CORNER
TRANSMISSION STRUCTURES	---	DOC	DOCUMENT NUMBER
BUILDING	---	EASE	EASEMENT
BUILDING (TO BE REMOVED)	---	EX	EXISTING
BRIDGE	---	GV	GAS VALVE
	---	GN	GRID NORTH
	---	HE	HIGHWAY EASEMENT
	---	ID	IDENTIFICATION
	---	LC	LAND CONTRACT
	---	LT	LEFT
	---	MON	MONUMENT
	---	NGS	NATIONAL GEODETIC SURVEY
	---	NO	NATIONAL
	---	V	VOLUME

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), MARATHON 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.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4\"/>

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, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

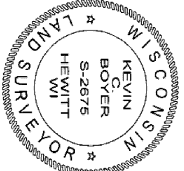
PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

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

EXISTING HIGHWAY RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING POINTS OF REFERENCE FOR STH 107: R/W PLAT 5013(2) AND EXISTING CENTERLINE.

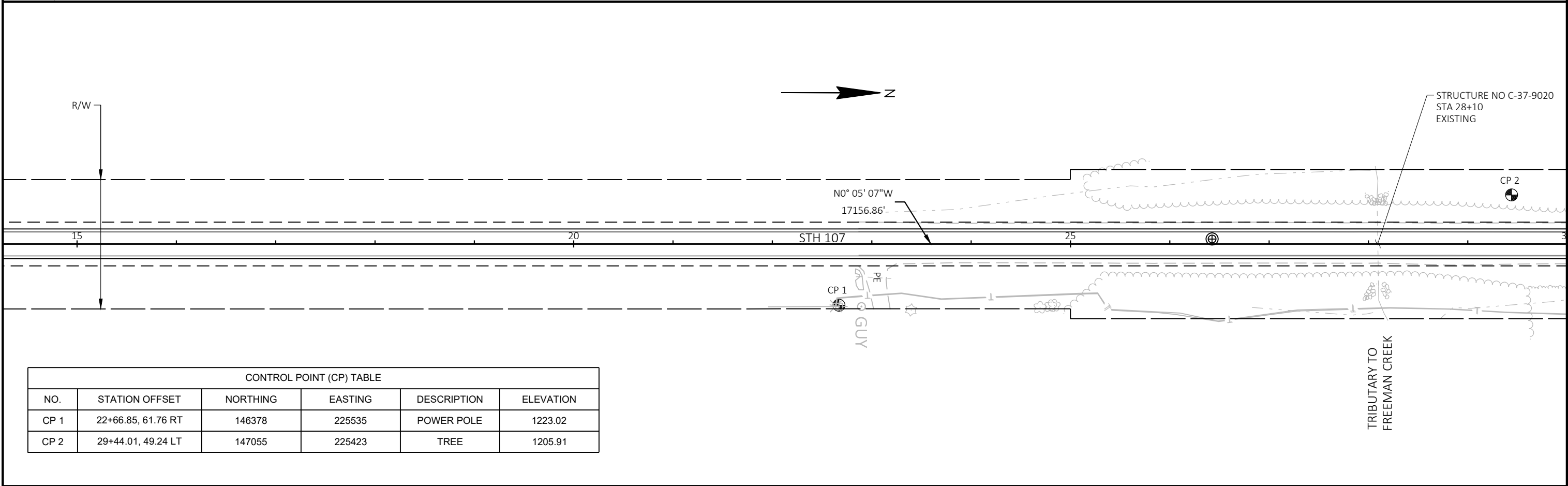
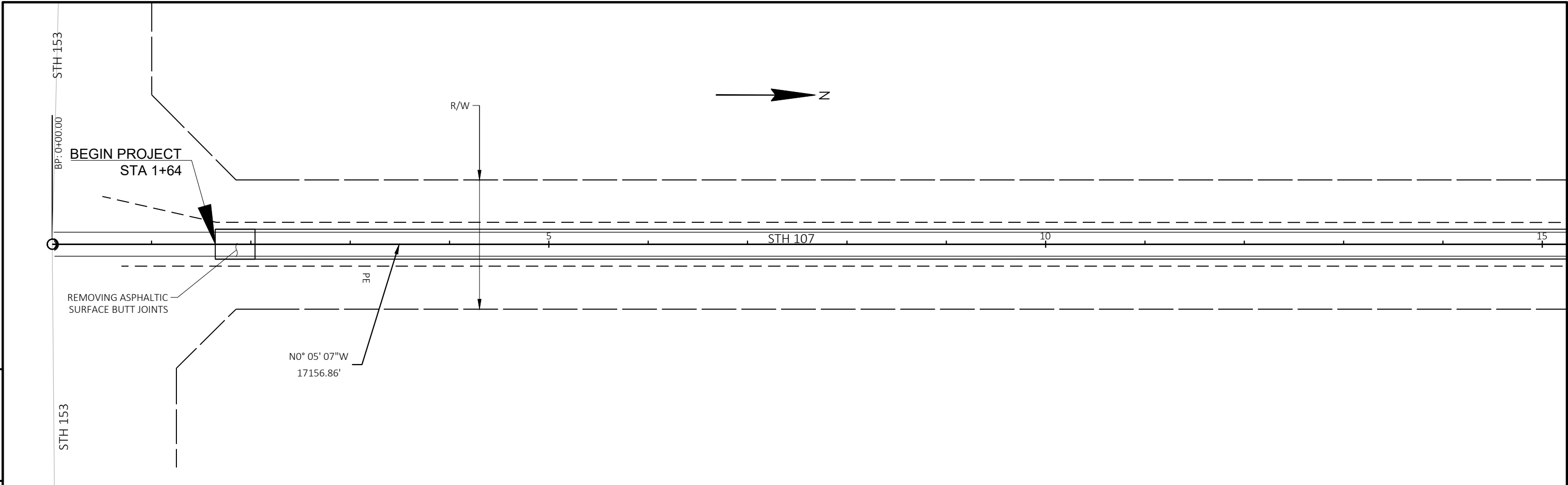
ALIGNMENT SHOWN IS THE PROJECT DESIGN ALIGNMENT AND MAY OR MAY NOT BE CENTERED IN THE RIGHT-OF-WAY. ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

emcs

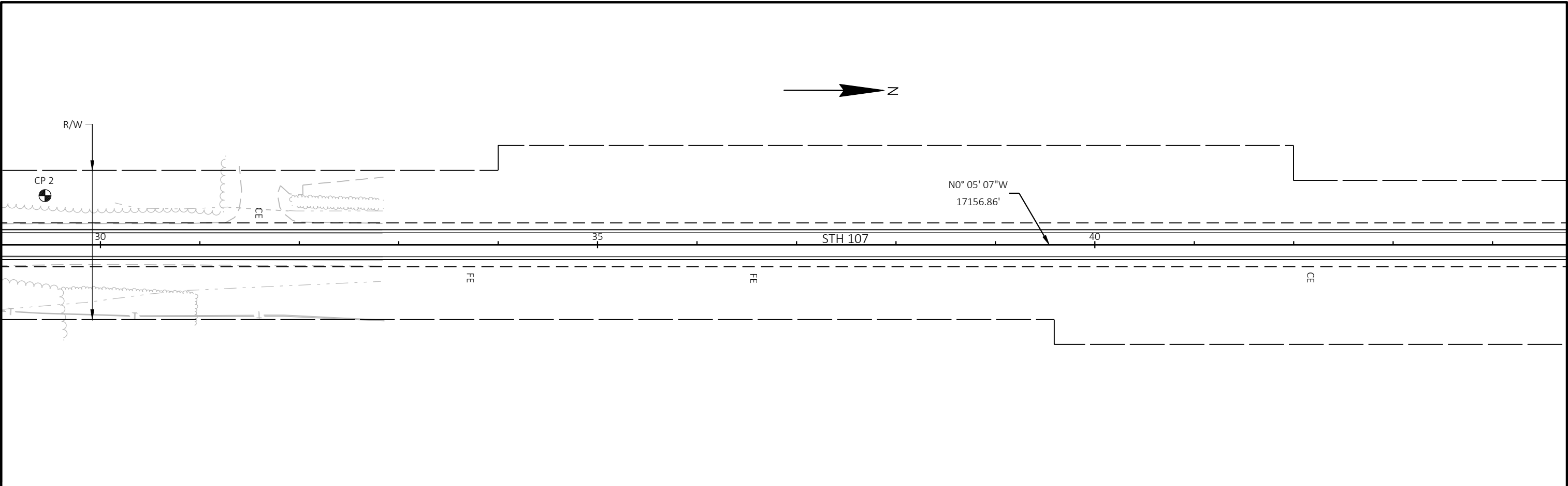


SIGNATURE: Kevin C. Boyer DATE: 09/23/2019
PRINT NAME: KEVIN C. BOYER
REGISTRATION NUMBER: S-2676
THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION
SIGNATURE: Drew Nelson DATE: 9-24-19
PRINT NAME: Drew Nelson

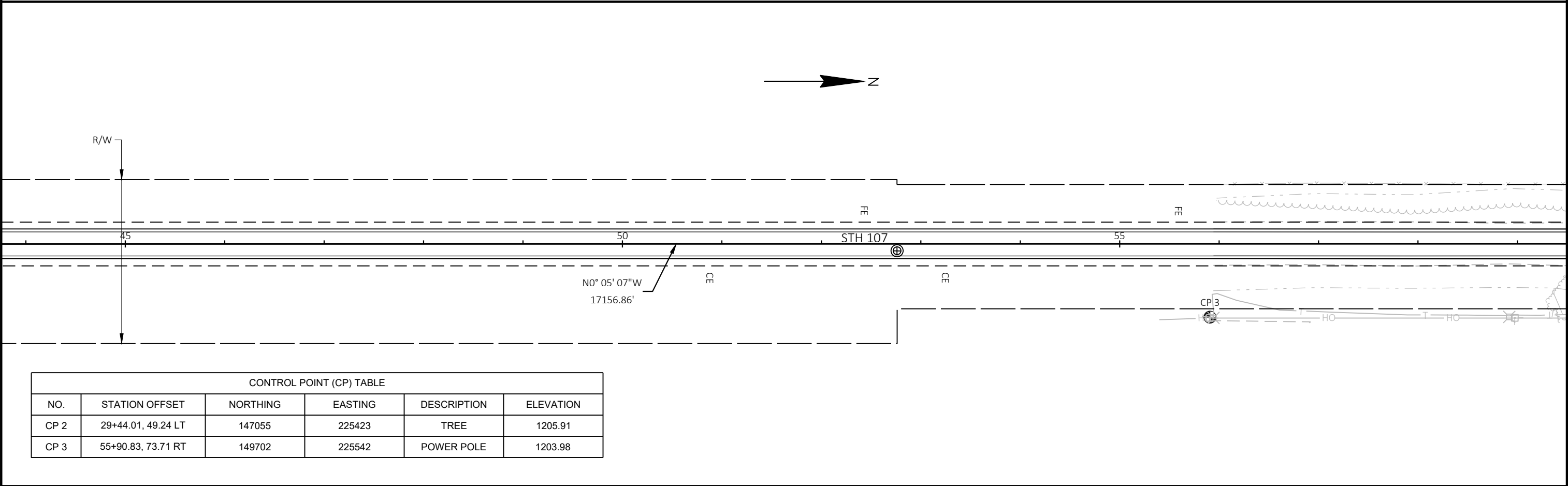
ALL PLES ARE FOR DRAINAGE PURPOSES

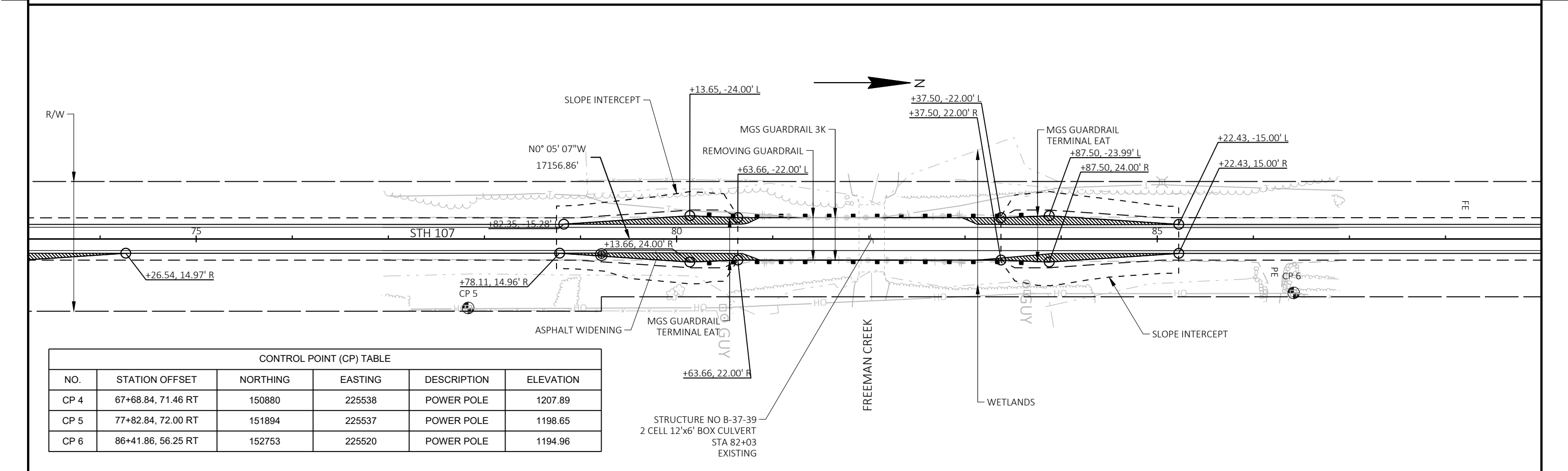
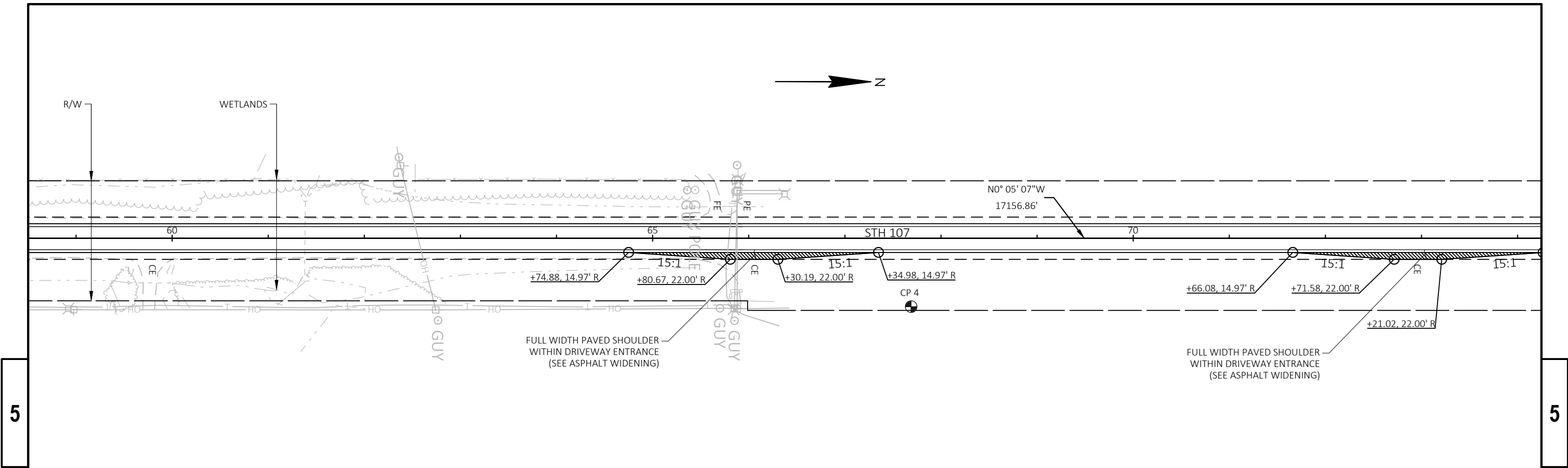


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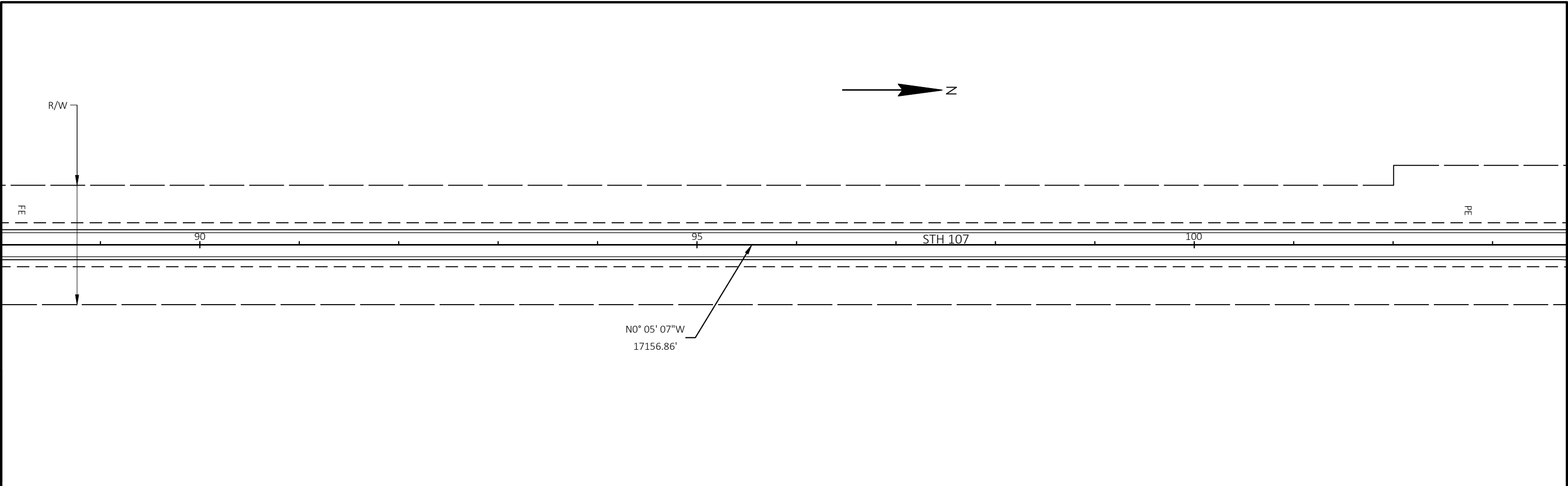
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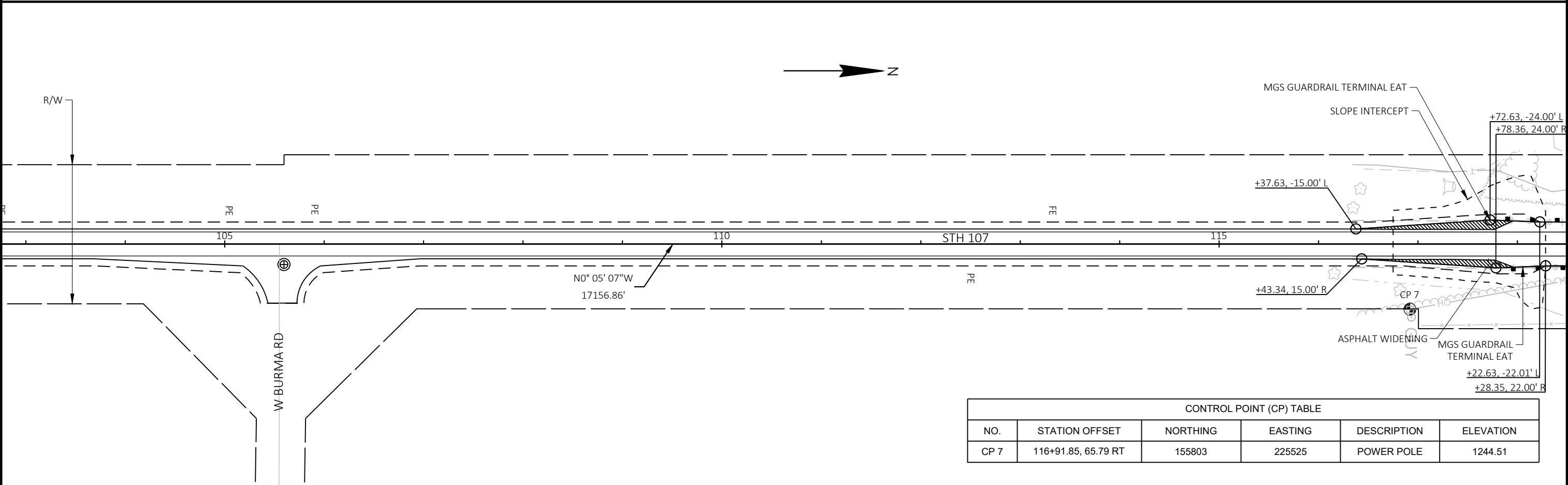


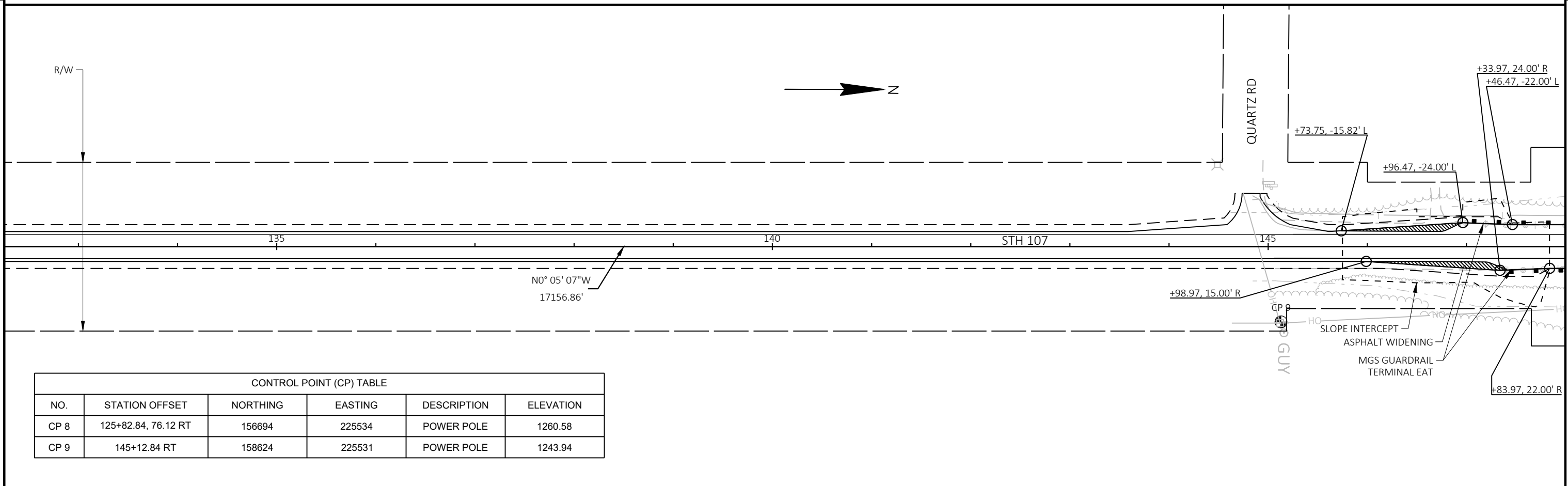
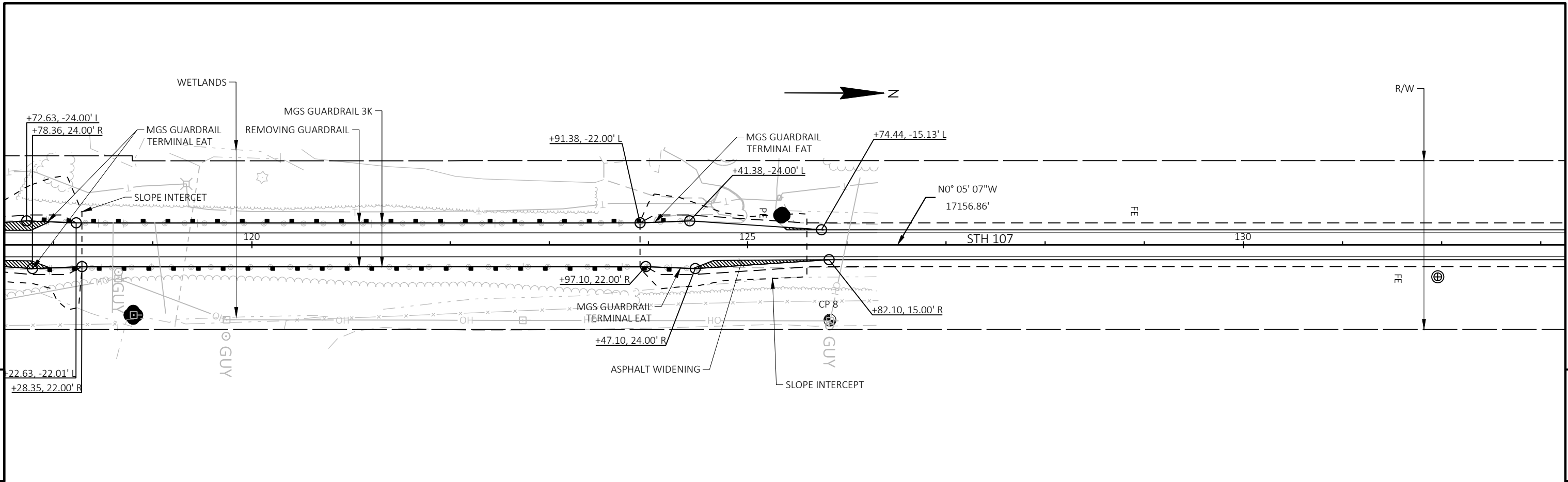
CONTROL POINT (CP) TABLE					
NO.	STATION OFFSET	NORTHING	EASTING	DESCRIPTION	ELEVATION
CP 4	67+68.84, 71.46 RT	150880	225538	POWER POLE	1207.89
CP 5	77+82.84, 72.00 RT	151894	225537	POWER POLE	1198.65
CP 6	86+41.86, 56.25 RT	152753	225520	POWER POLE	1194.96

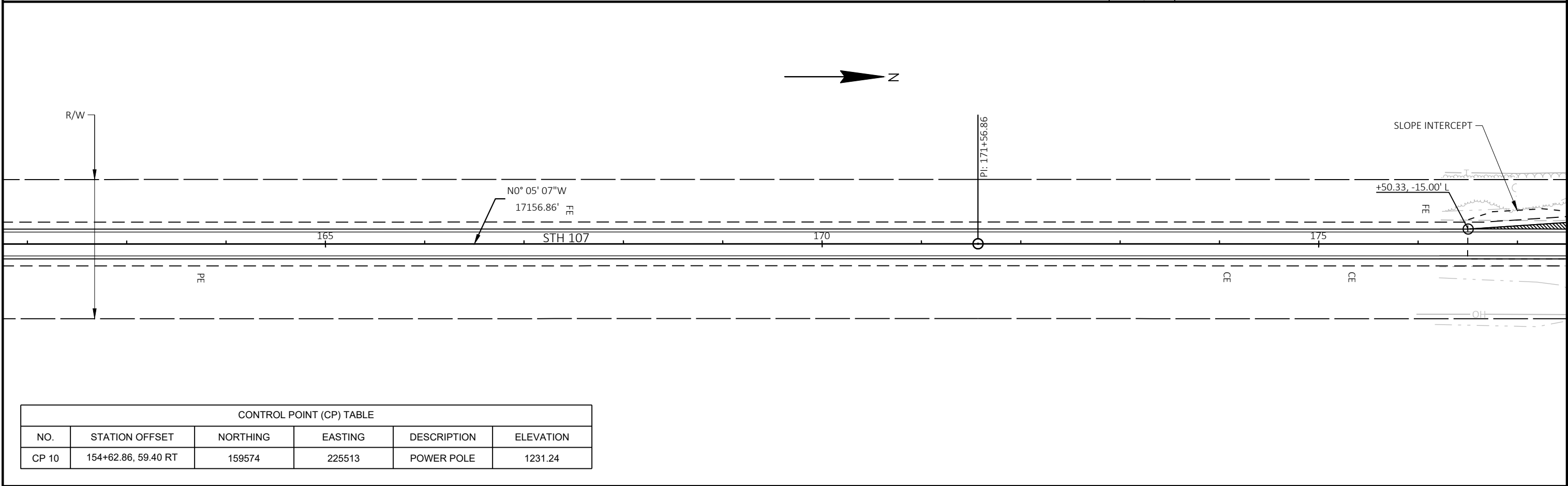
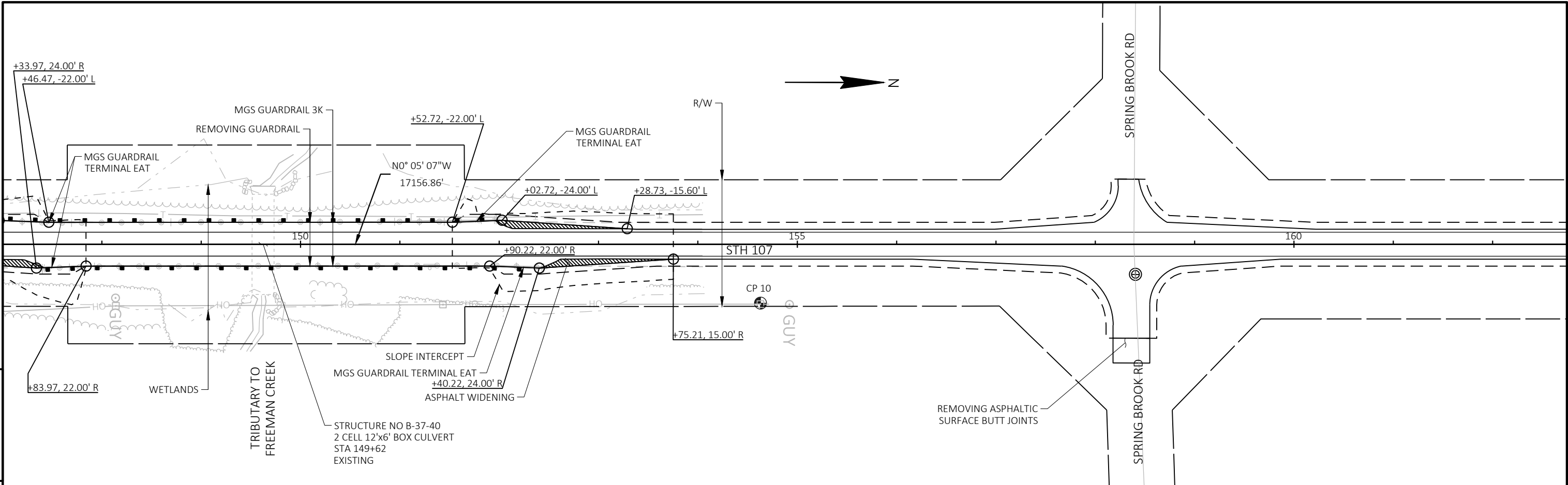
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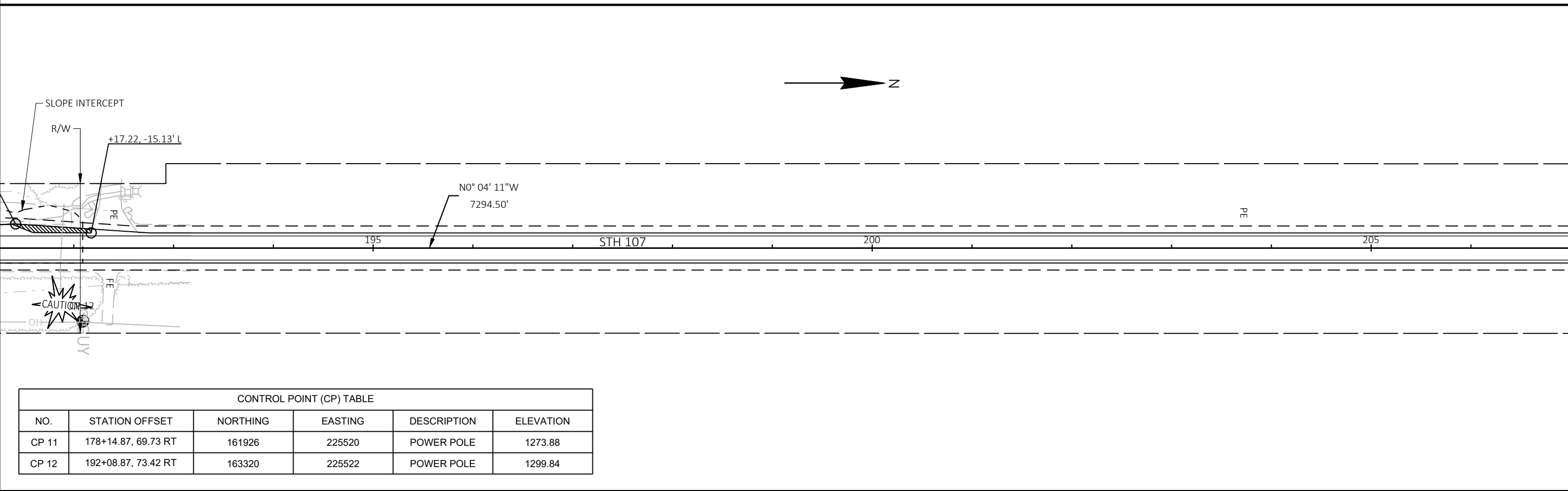
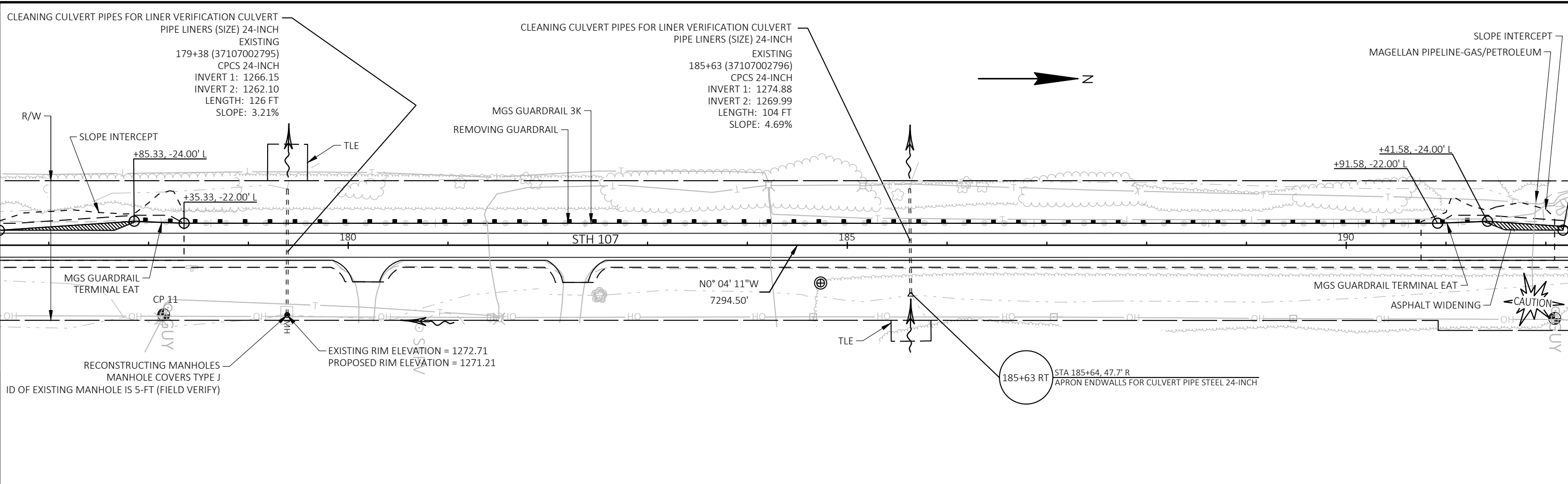
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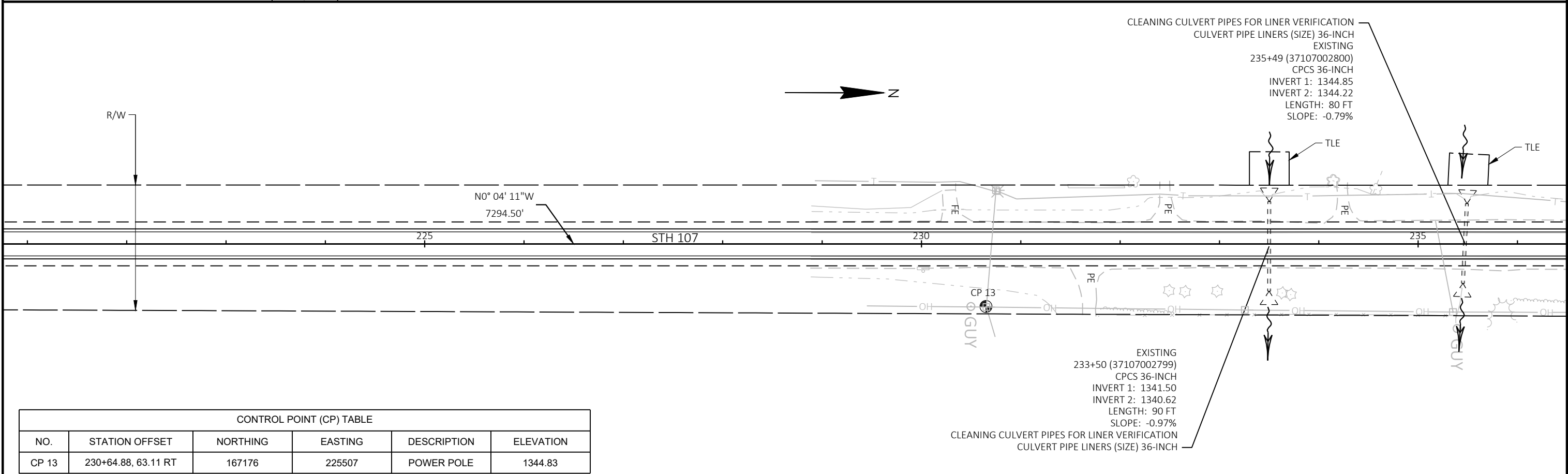
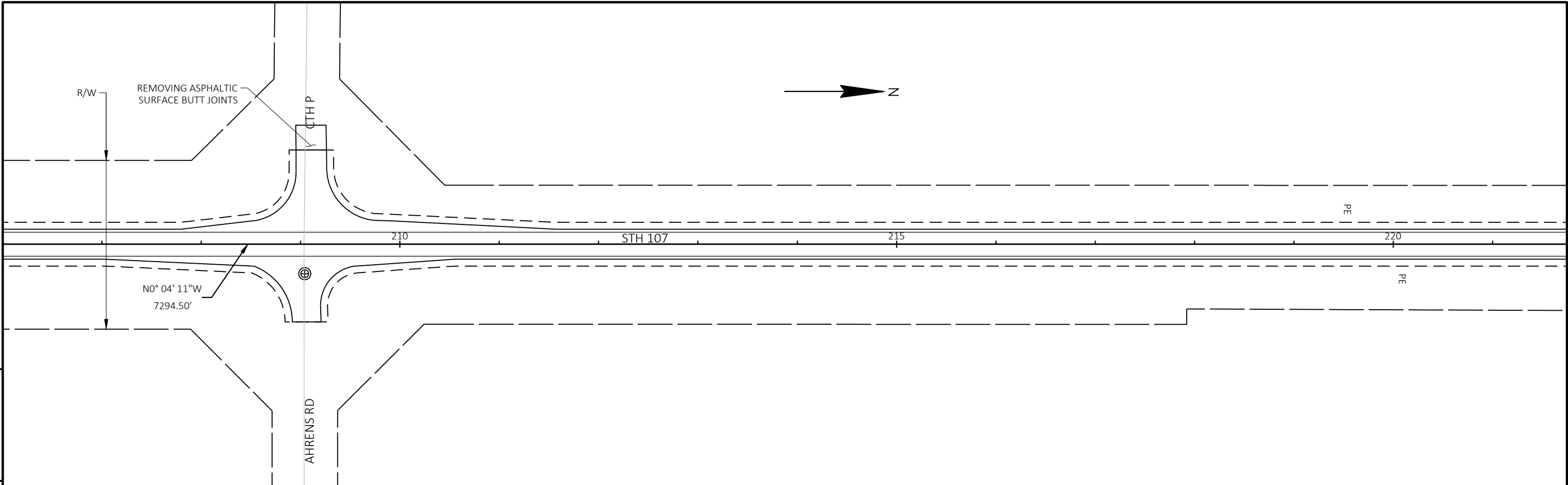


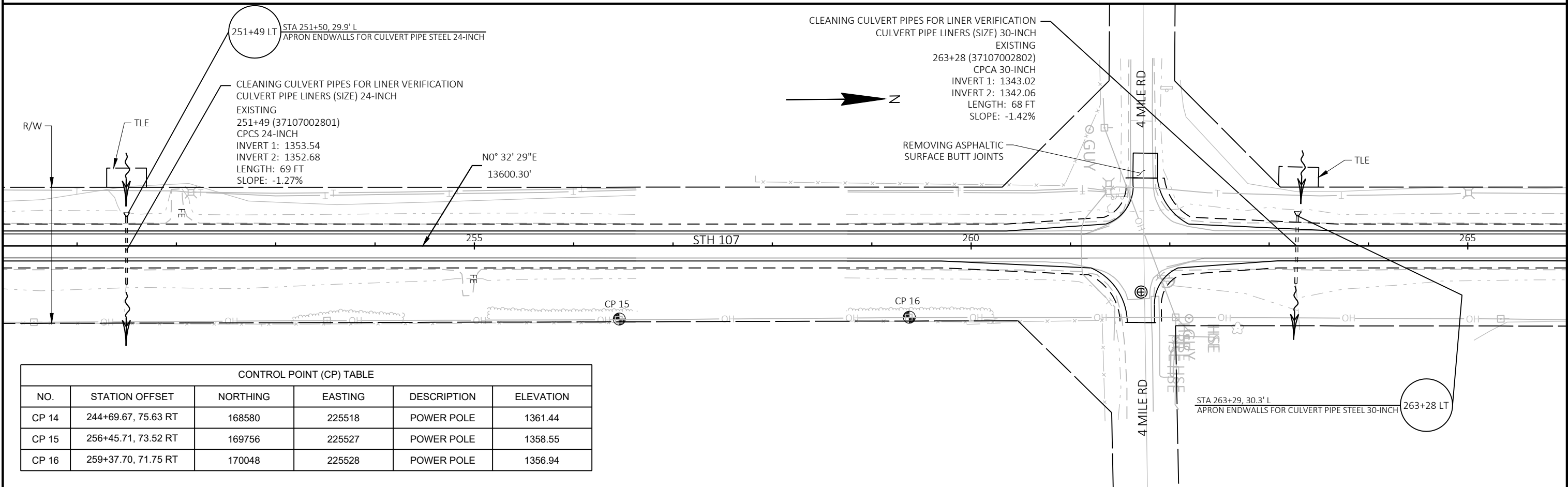
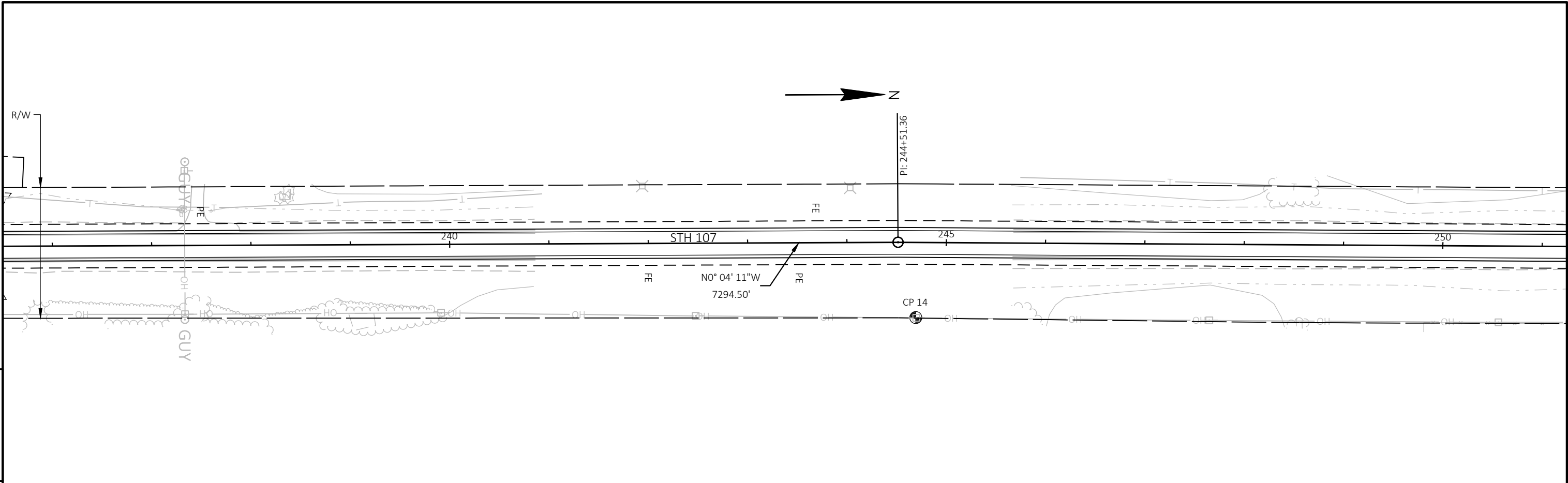




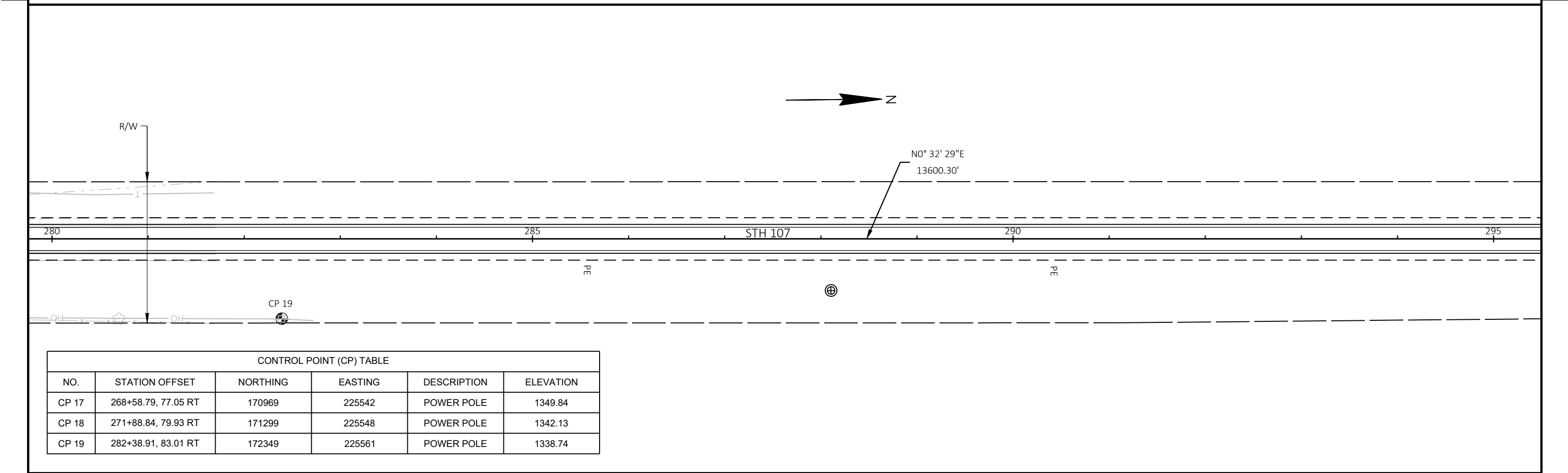
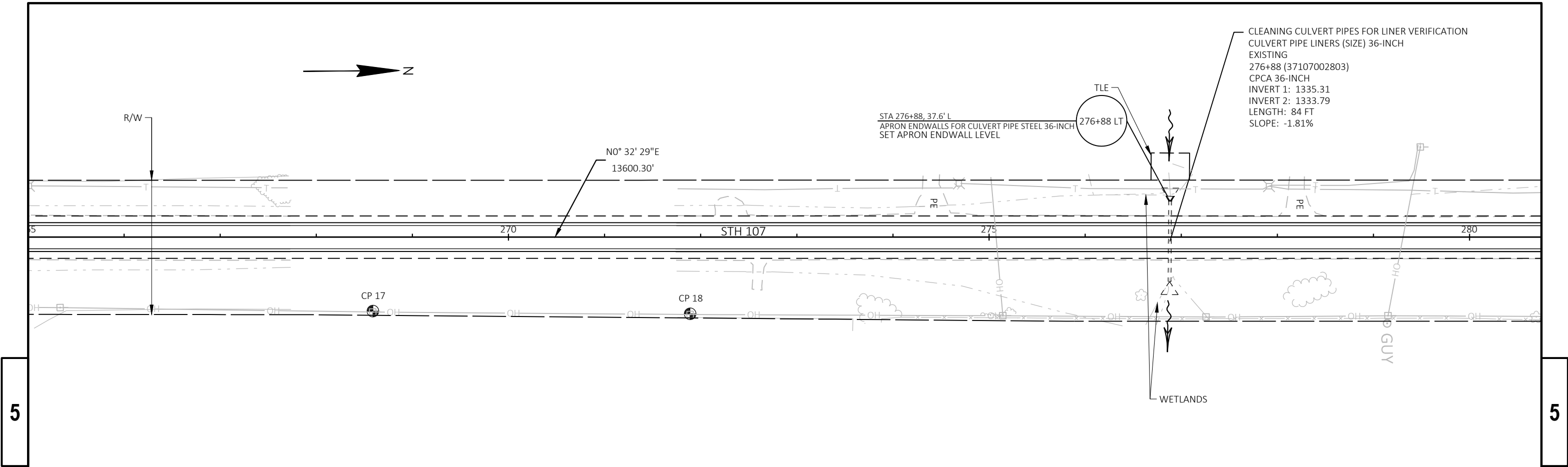
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CP 10	154+62.86, 59.40 RT	159574	225513	POWER POLE	1231.24



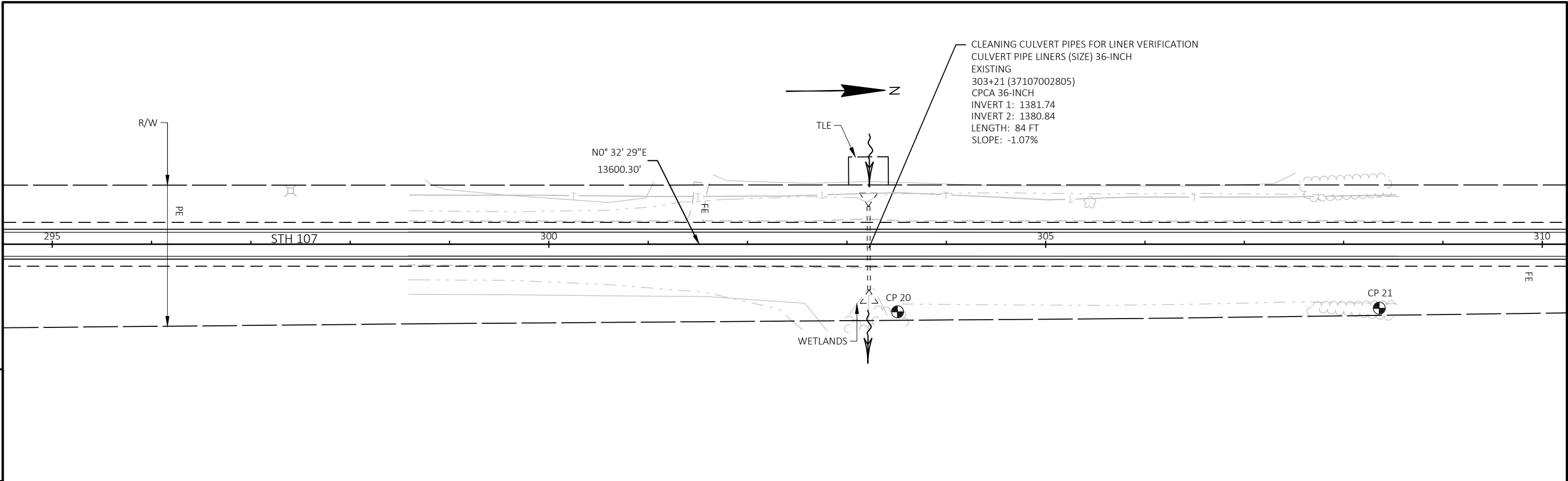




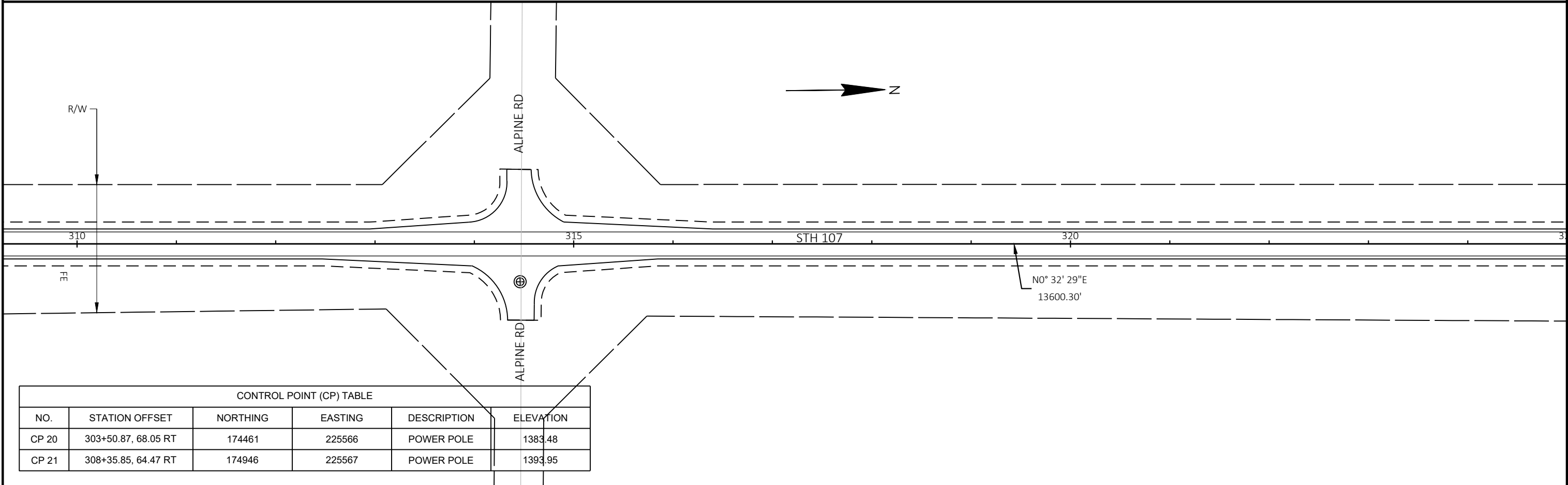
CONTROL POINT (CP) TABLE					
NO.	STATION OFFSET	NORTHING	EASTING	DESCRIPTION	ELEVATION
CP 14	244+69.67, 75.63 RT	168580	225518	POWER POLE	1361.44
CP 15	256+45.71, 73.52 RT	169756	225527	POWER POLE	1358.55
CP 16	259+37.70, 71.75 RT	170048	225528	POWER POLE	1356.94



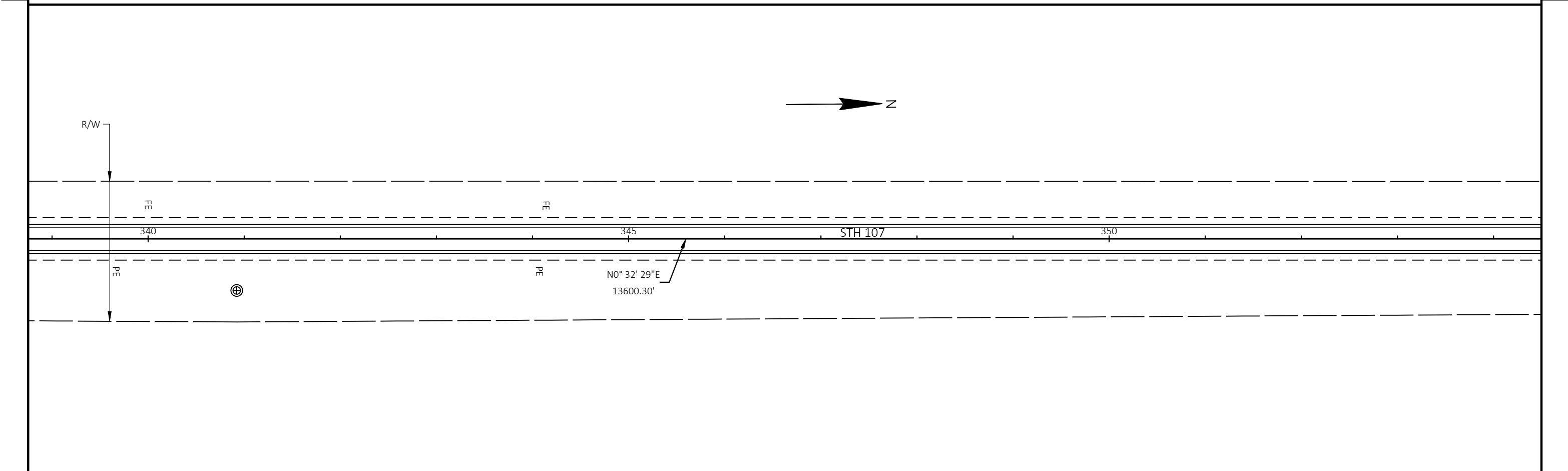
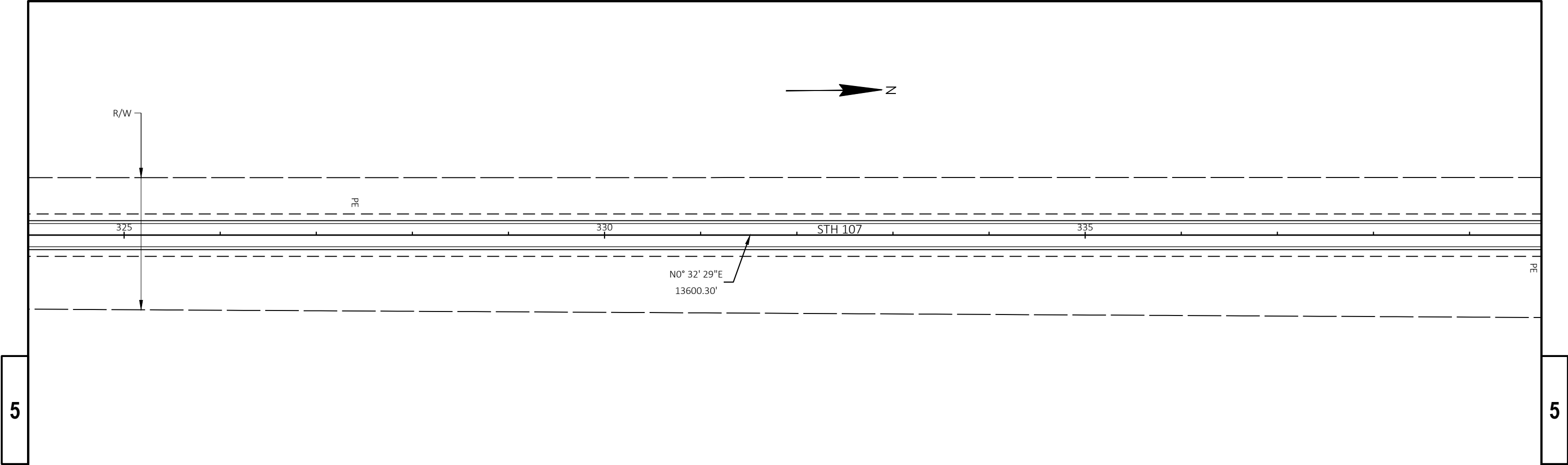
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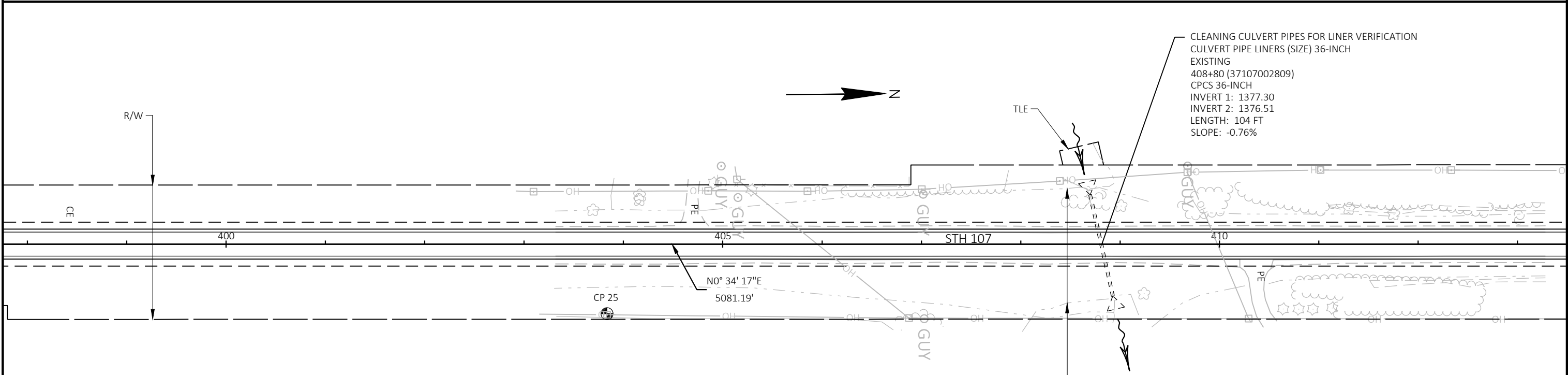
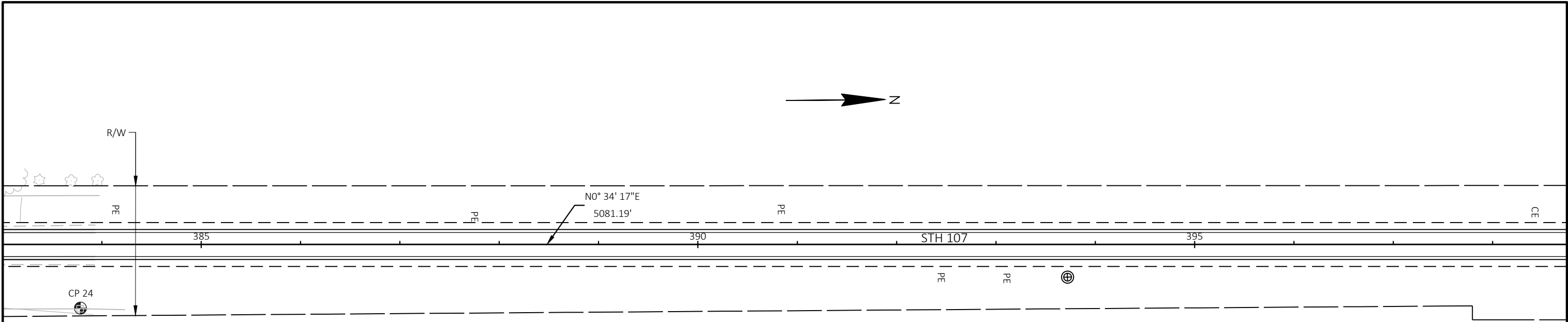


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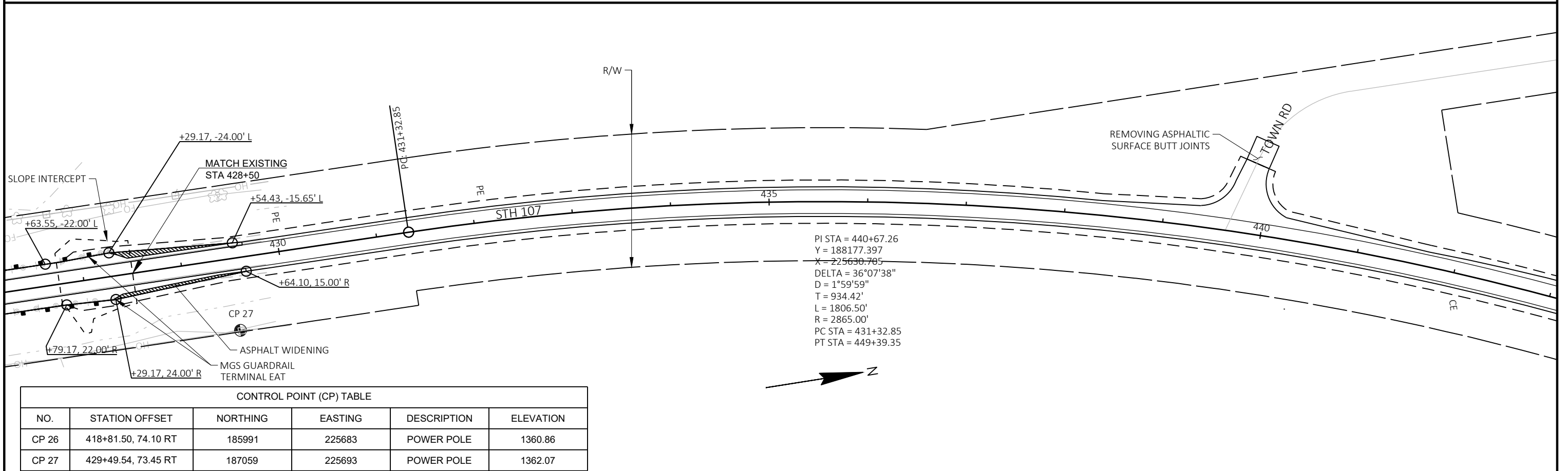
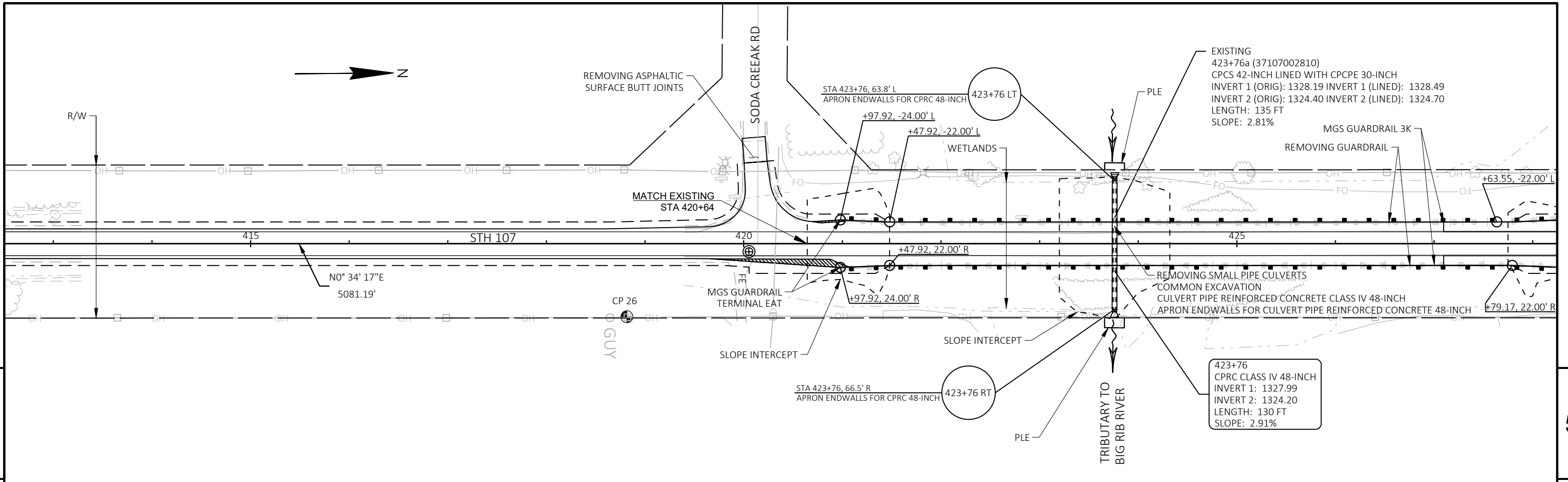


CONTROL POINT (CP) TABLE					
NO.	STATION OFFSET	NORTHING	EASTING	DESCRIPTION	ELEVATION
CP 20	303+50.87, 68.05 RT	174461	225566	POWER POLE	1383.48
CP 21	308+35.85, 64.47 RT	174946	225567	POWER POLE	1393.95

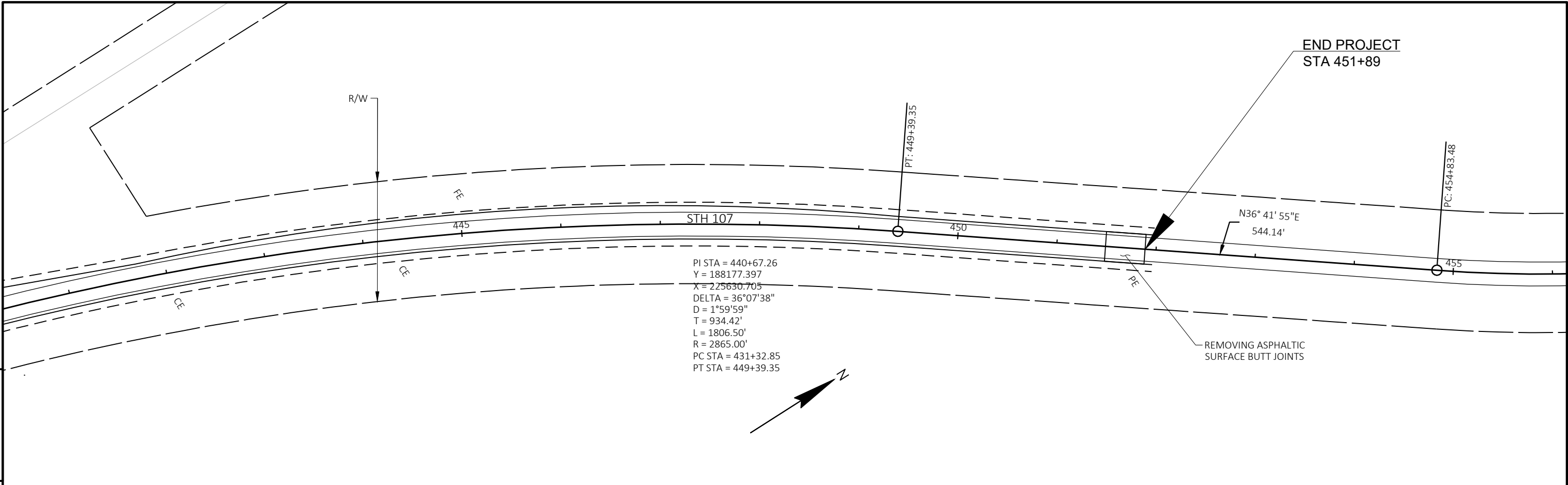




CONTROL POINT (CP) TABLE					
NO.	STATION OFFSET	NORTHING	EASTING	DESCRIPTION	ELEVATION
CP 24	383+78.22, 64.03 RT	182488	225638	POWER POLE	1423.80
CP 25	403+83.38, 70.04 RT	184493	225664	POWER POLE	1399.72

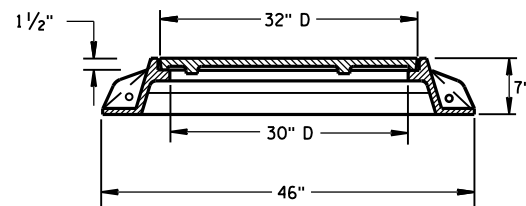
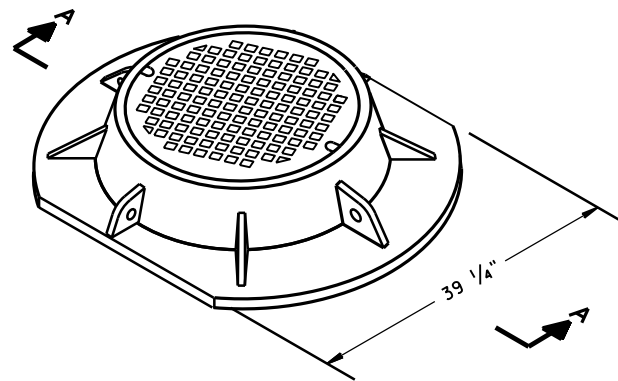


CONTROL POINT (CP) TABLE					
NO.	STATION OFFSET	NORTHING	EASTING	DESCRIPTION	ELEVATION
CP 26	418+81.50, 74.10 RT	185991	225683	POWER POLE	1360.86
CP 27	429+49.54, 73.45 RT	187059	225693	POWER POLE	1362.07

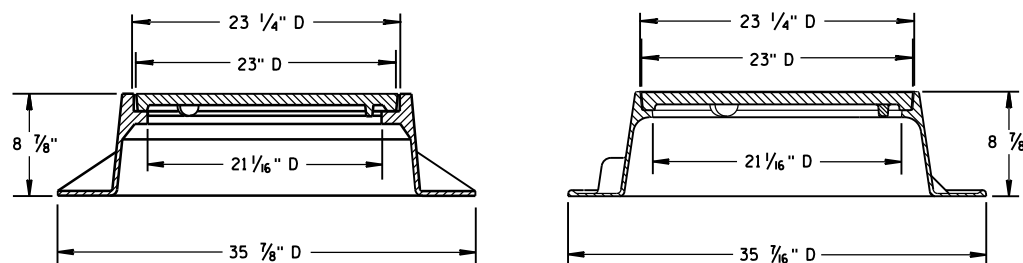
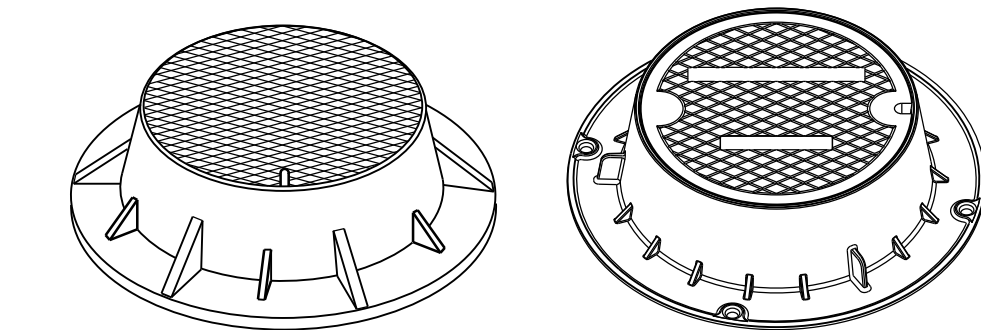


Standard Detail Drawing List

08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08D01-22A	CONCRETE CURB & GUTTER
08D01-22B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E09-06	SILT FENCE
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
09A01-13A	AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND D AND TEE INTERSECTION BYPASS LANE
09A01-13B	AT-GRADE SIDE ROAD INTERSECTION, TYPE "A1" & "A2"
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
14B42-06A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-06D	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)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-08C	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
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-08B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-05B	PAVEMENT MARKINGS, MEDIAN ISLAND NOSE
15C18-05C	PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES
15D45-03	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH LOOSE GRAVEL

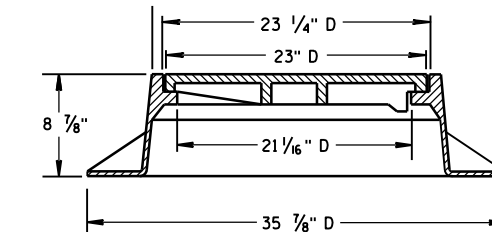
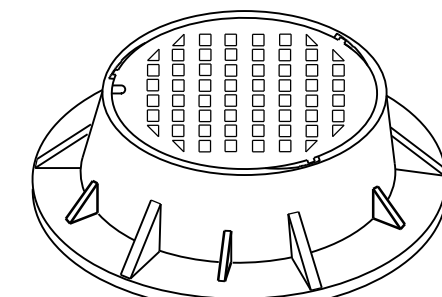
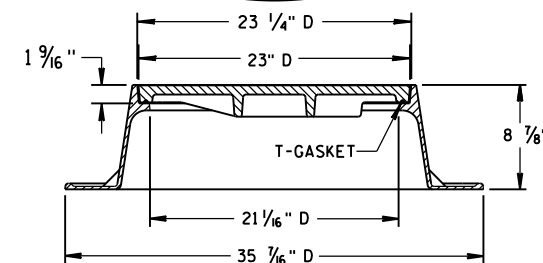
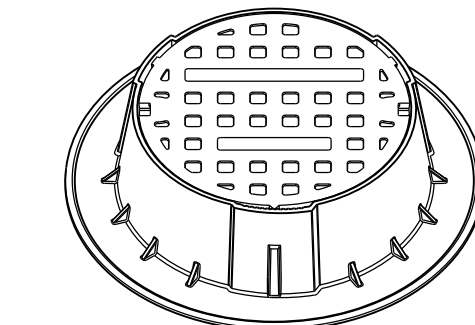


SECTION A-A
TYPE "K"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

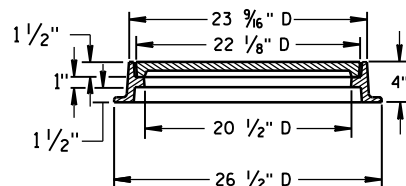
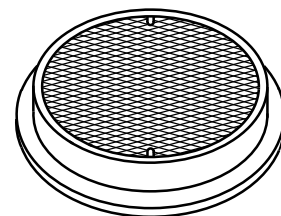


TYPE "J" SPECIAL

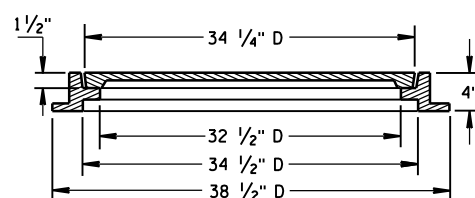
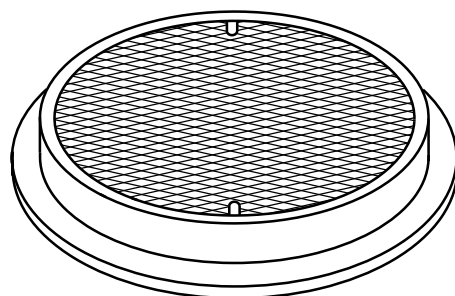
TYPE "B" NON-ROCKING SELF-SEAL LID

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

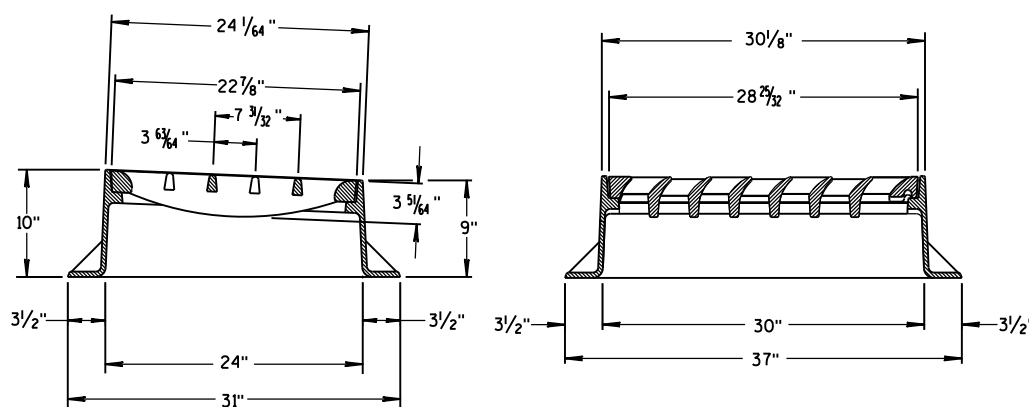
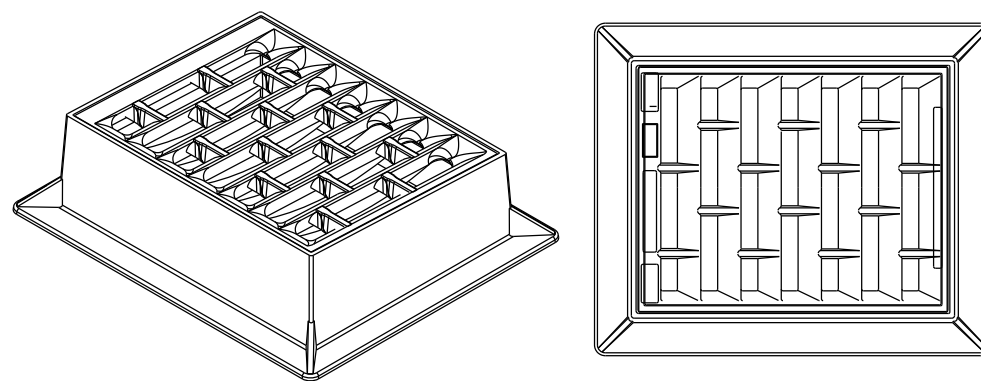
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

GENERAL NOTES

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

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

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

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/27/2013

DATE

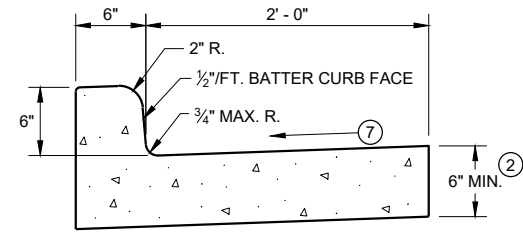
FHWA

/S/ Jerry H. Zogg

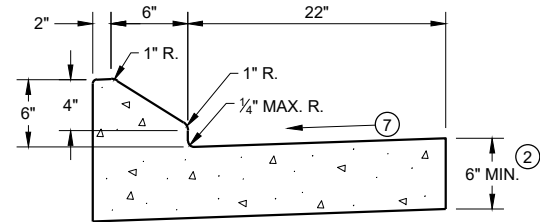
ROADWAY STANDARDS 60

ENGINEER

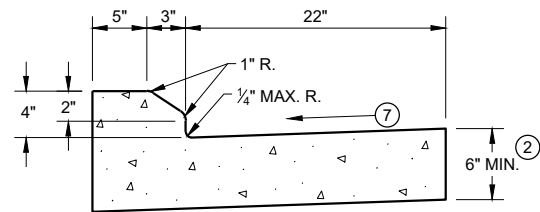
VT



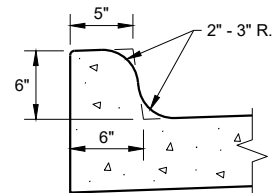
TYPES A^① & D



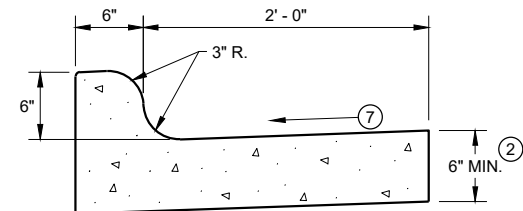
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

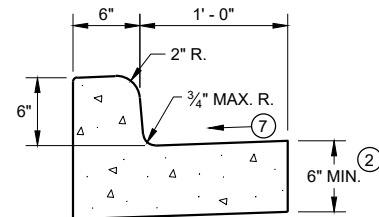


TYPES K^① & L
(OPTIONAL CURB SHAPE)



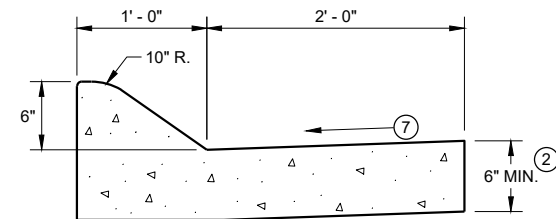
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

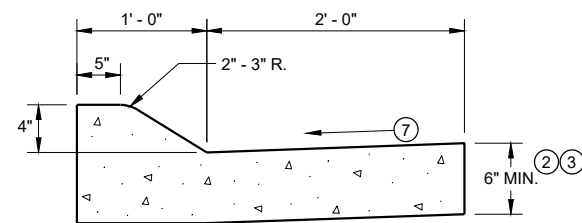


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

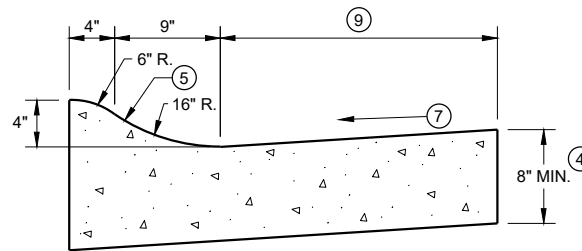


6" SLOPED CURB TYPES A^① & D



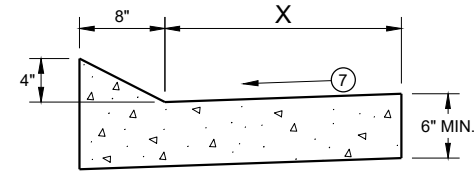
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

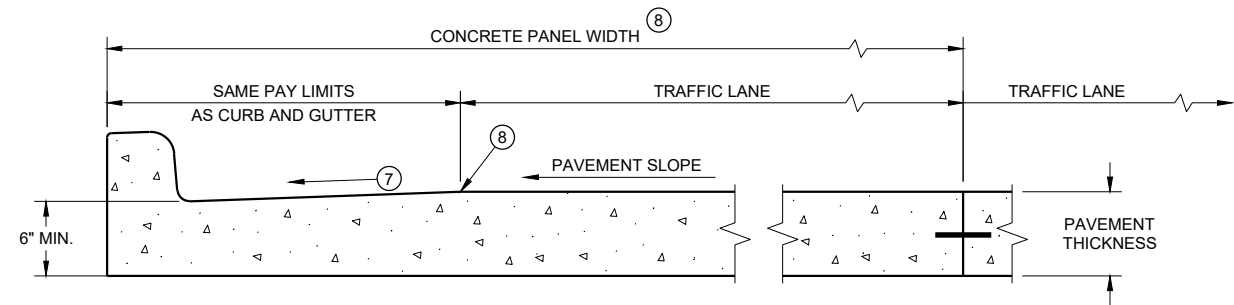


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

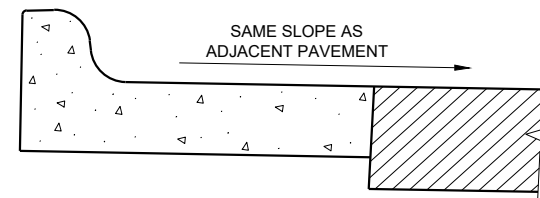
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT *
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER^⑥
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

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

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

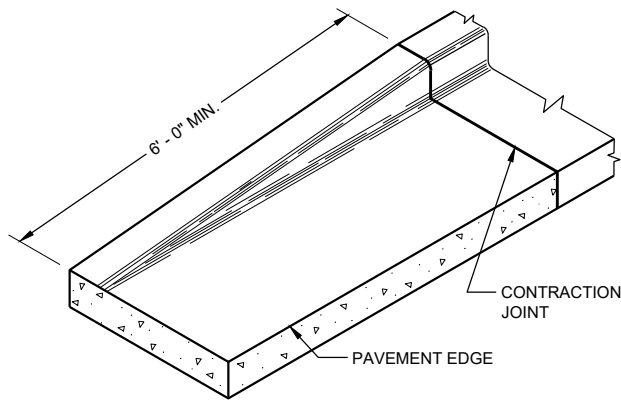
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

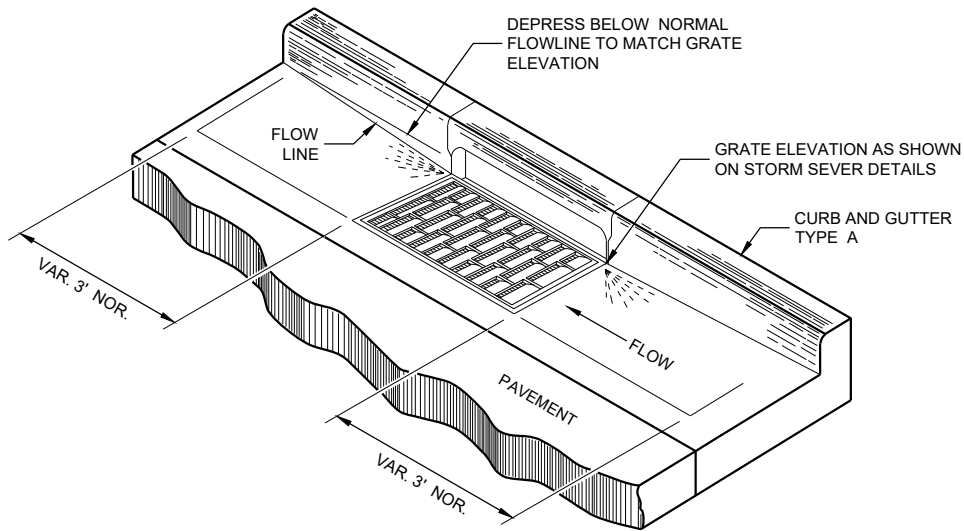
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH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

CONCRETE CURB AND GUTTER

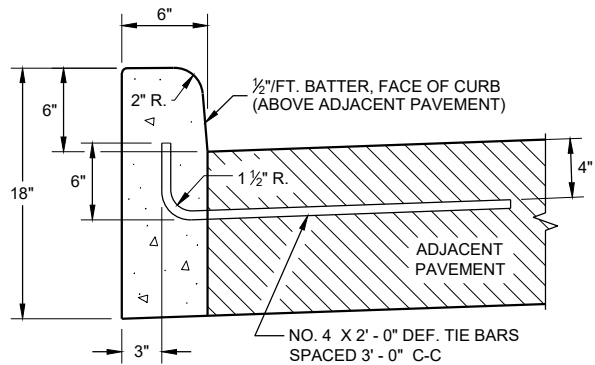
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



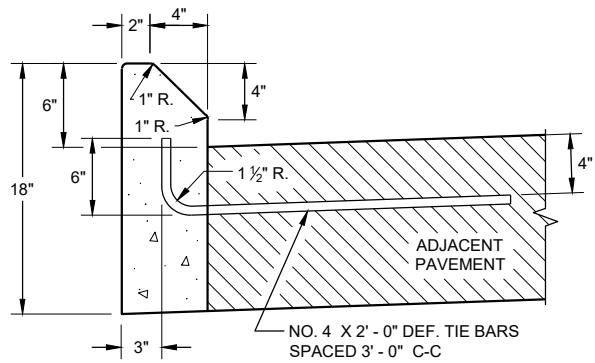
END SECTION CURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

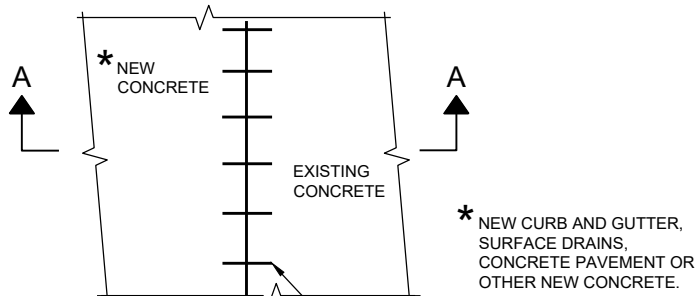


TYPES A^① & D

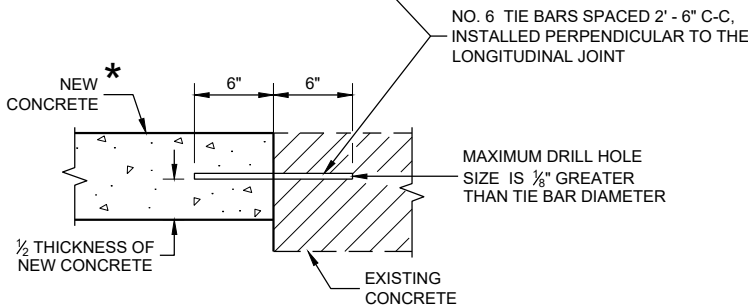


TYPES G^① & J

CONCRETE CURB



PLAN VIEW



SECTION A - A

TIE BARS DRILLED
INTO EXISTING PAVEMENT

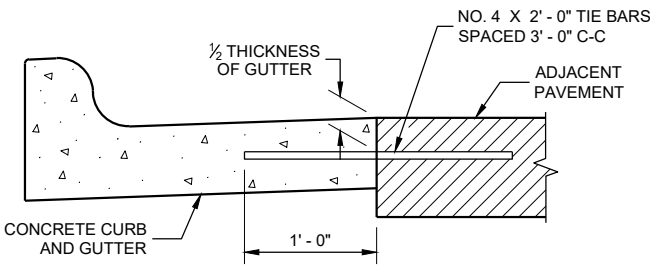
GENERAL NOTES

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

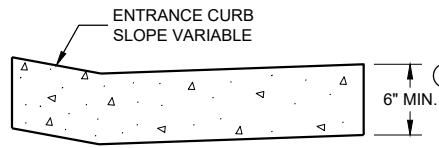
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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.
- ⑨ REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION^①



DRIVEWAY ENTRANCE CURB^⑨
(WHEN DIRECTED BY THE ENGINEER)

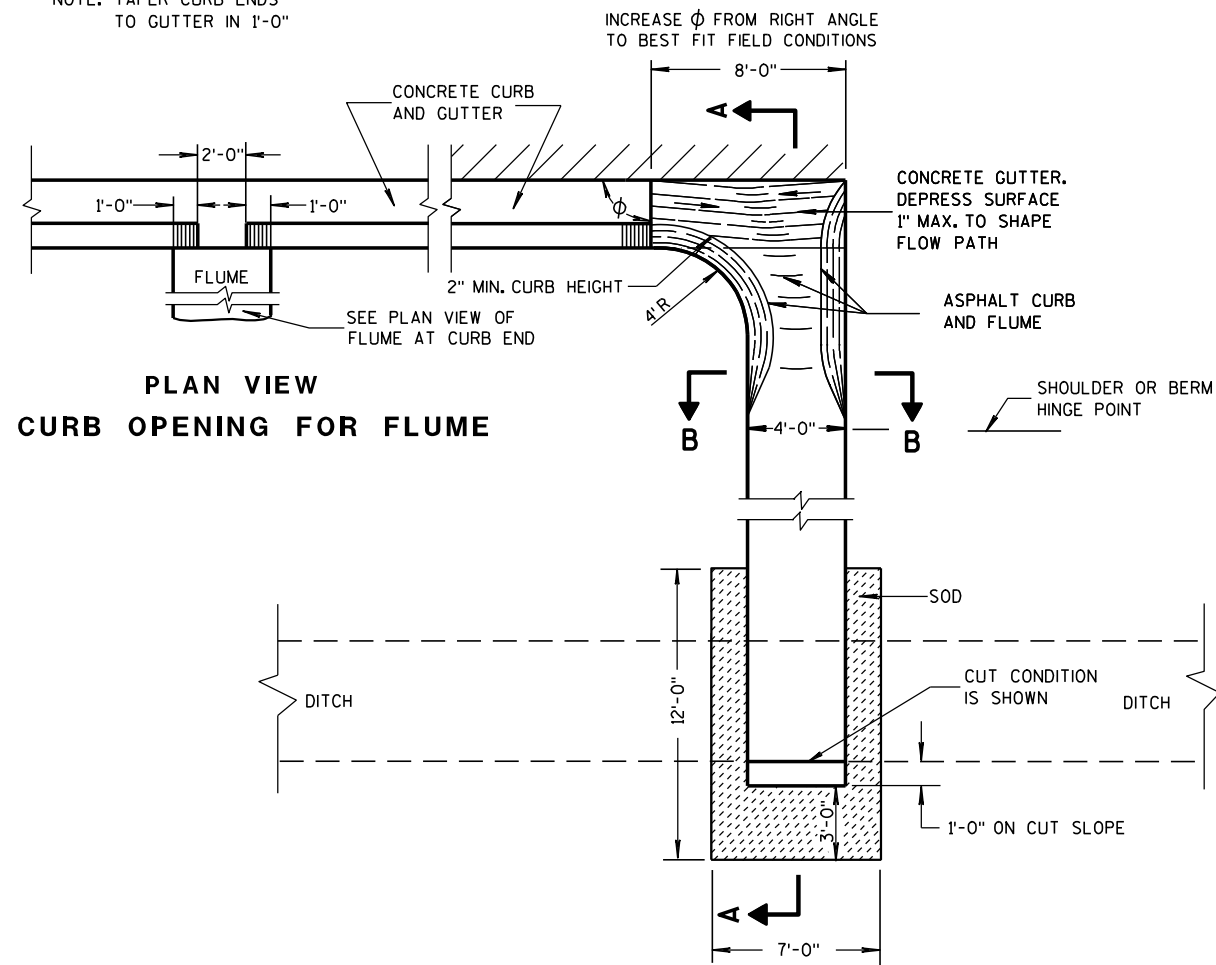
CONCRETE CURB, TIES
AND CURB AND GUTTER
APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

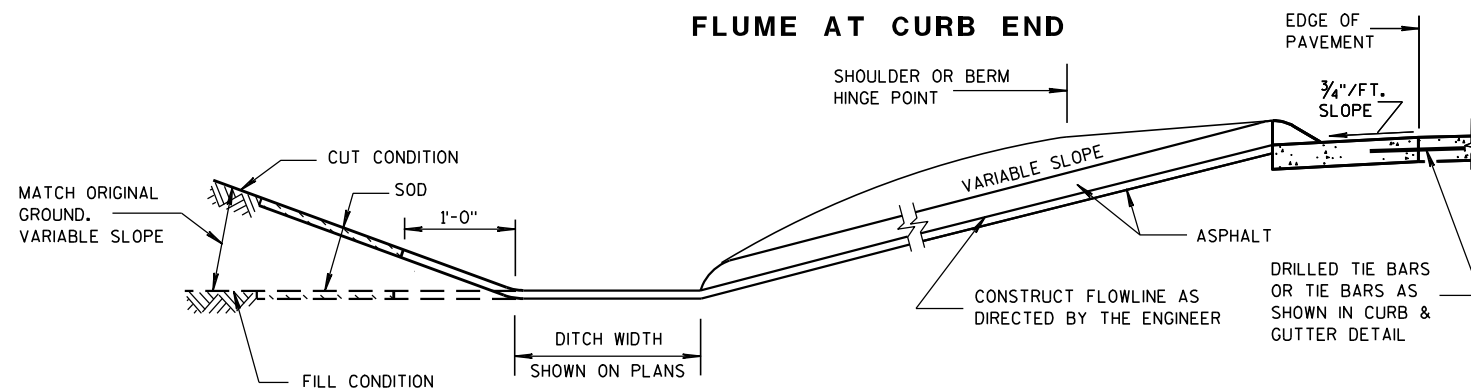
APPROVED
February 2021
DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT ENGINEER 62
FHWA

ASPHALTIC FLUME

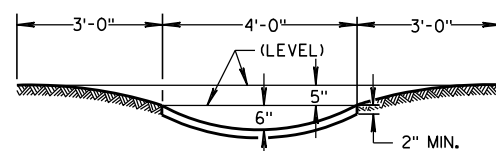
NOTE: TAPER CURB ENDS
TO GUTTER IN 1'-0"



PLAN VIEW FLUME AT CURB END



SECTION A-A



SECTION B-B

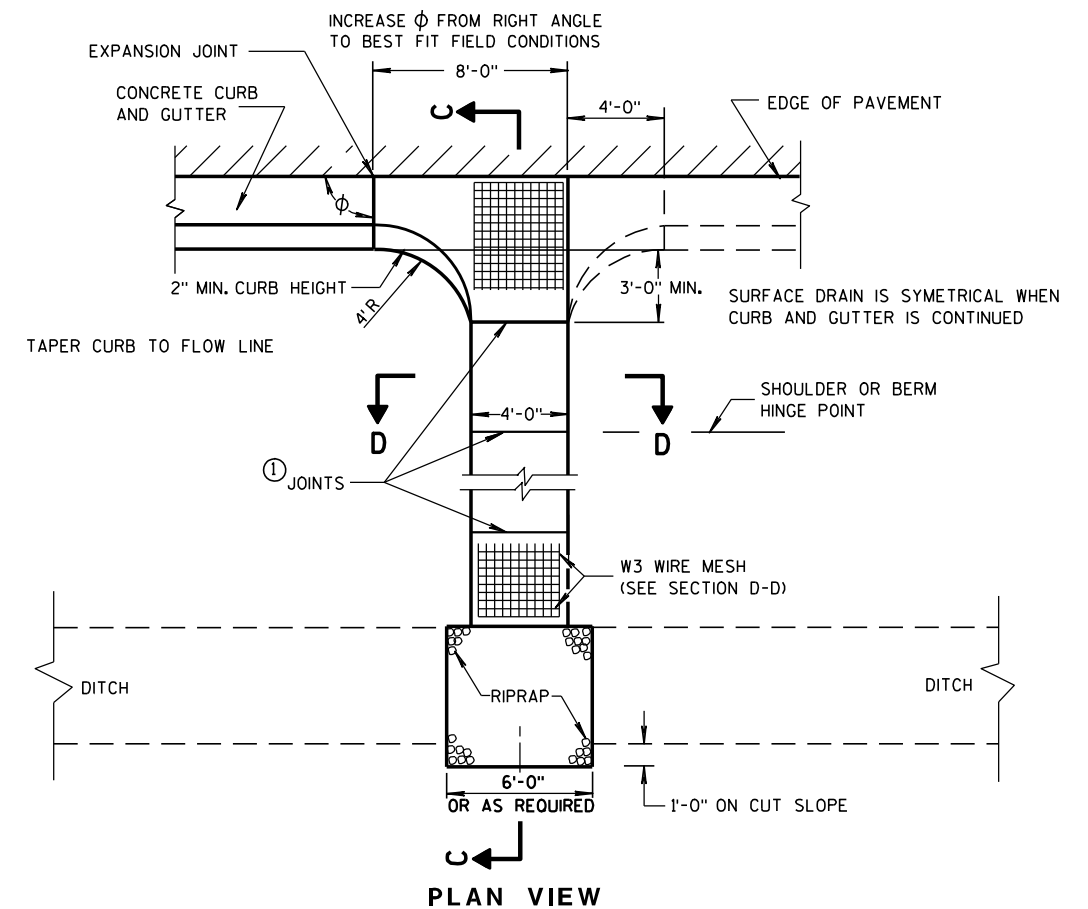
GENERAL NOTES

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

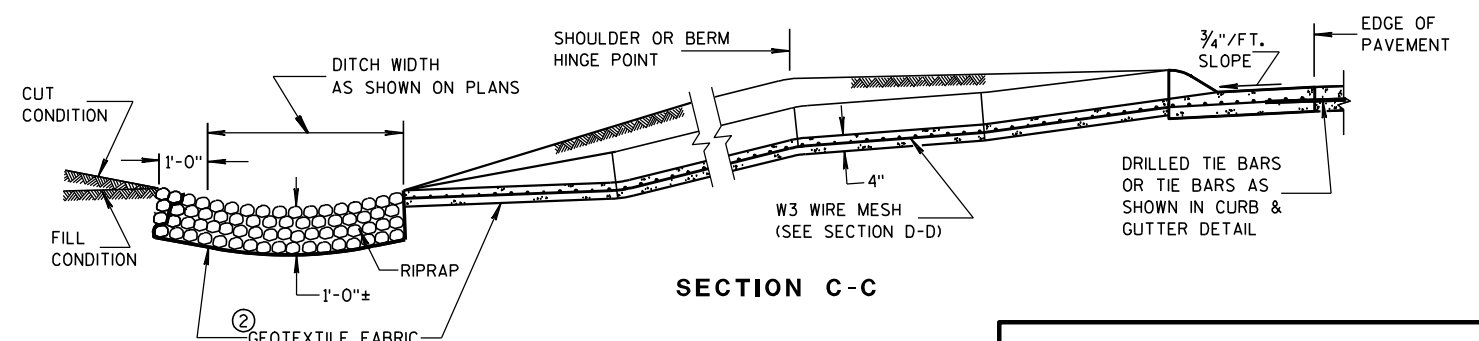
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

- ① JOINTS SHALL BE 1/8" TO 1/4" INCH WIDE BY 1 1/2" INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.
- ② GEOTEXTILE FABRIC 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

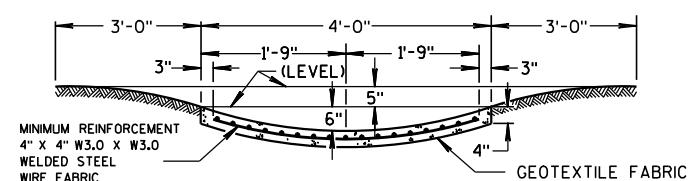
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

9-4-08

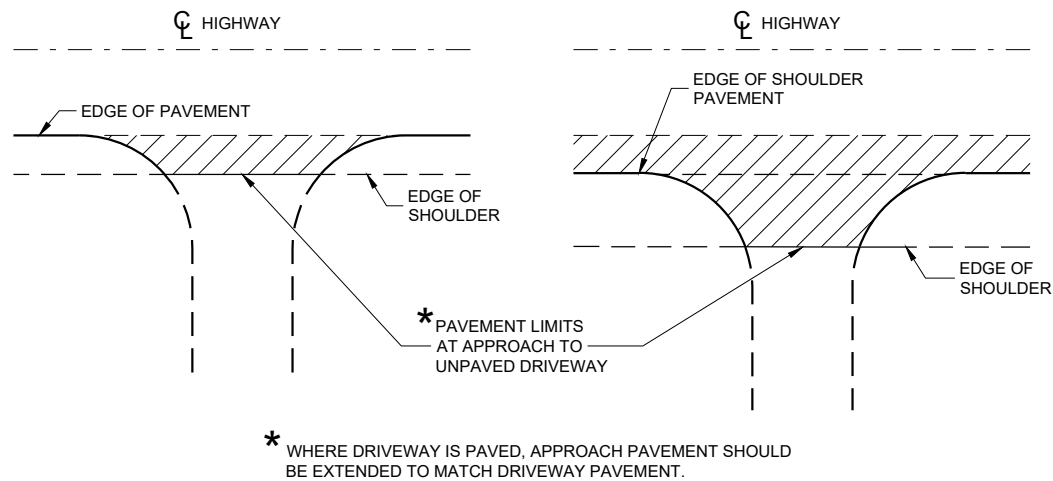
DATE

/s/ Jerry H. Zapp

ROADWAY STANDARDS 63

ENGINEER

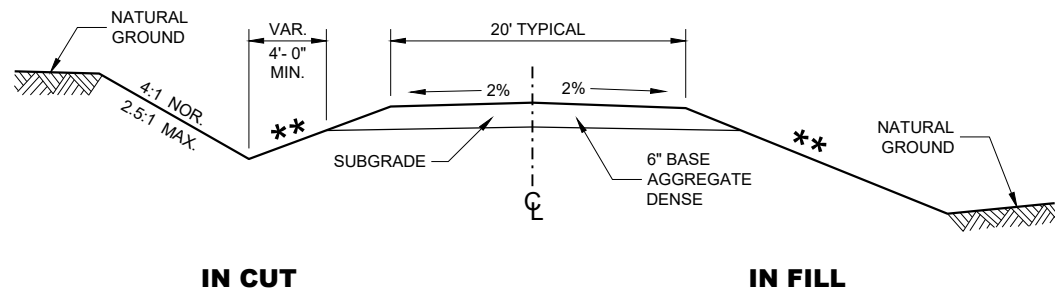
FHWA



PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

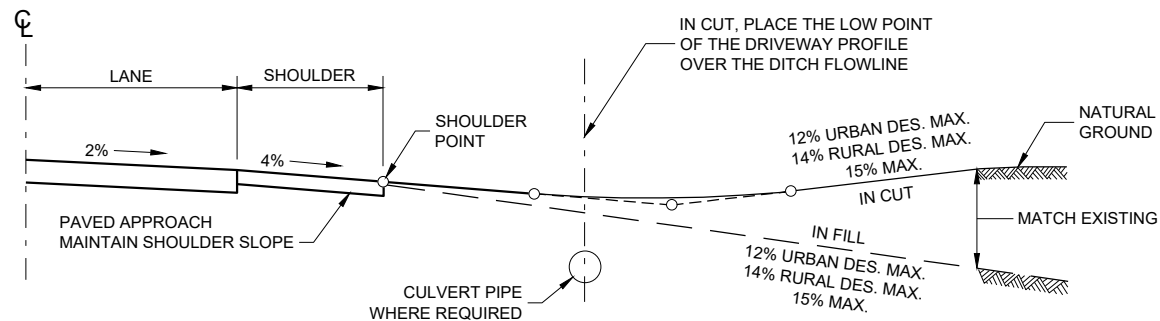
**RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)**



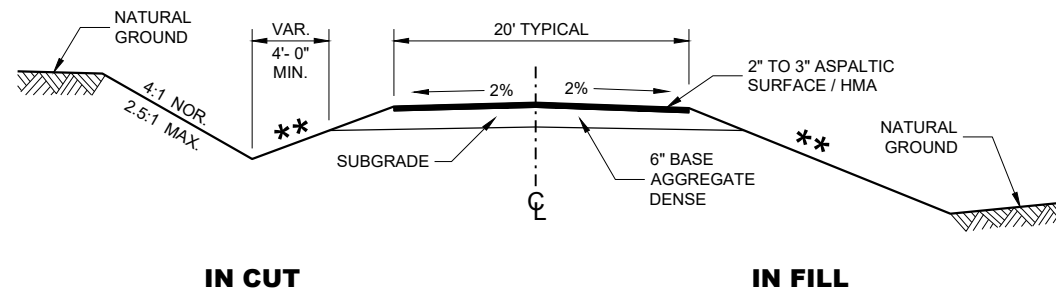
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE**

****** SLOPE CAN VARY WITH
SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



TYPICAL DRIVEWAY PROFILES

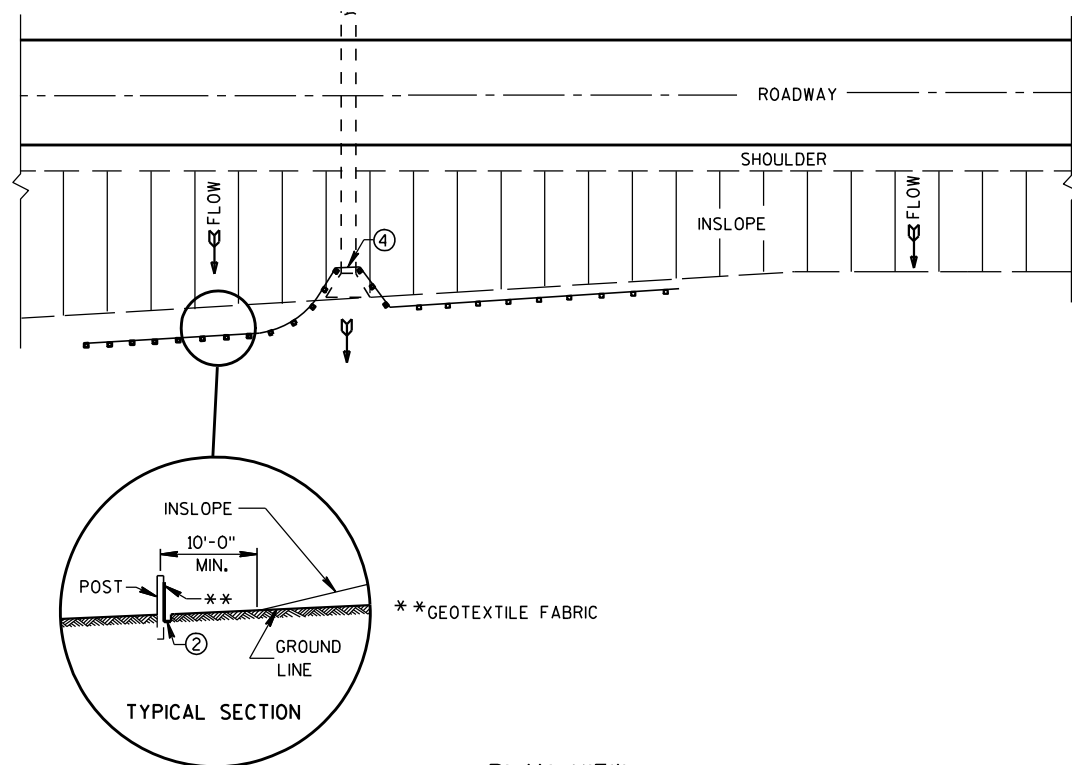


**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE**

**DRIVEWAYS WITHOUT
CURB AND GUTTER**

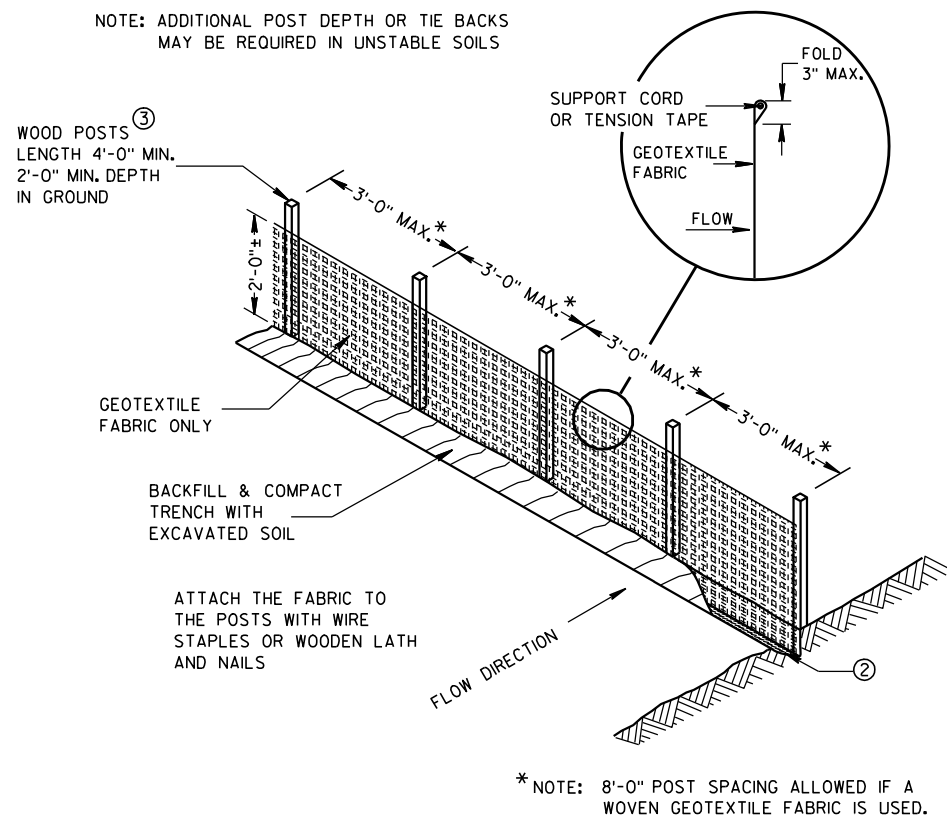
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA 64

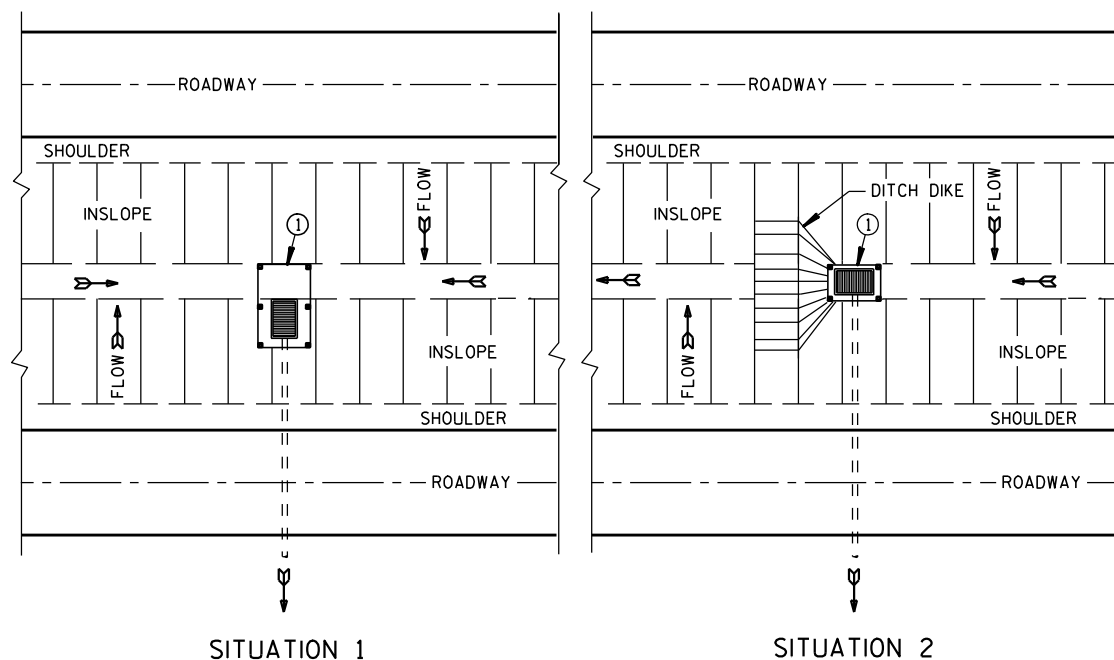


TYPICAL APPLICATION OF SILT FENCE

NOTE: ADDITIONAL POST DEPTH OR TIE BACKS MAY BE REQUIRED IN UNSTABLE SOILS

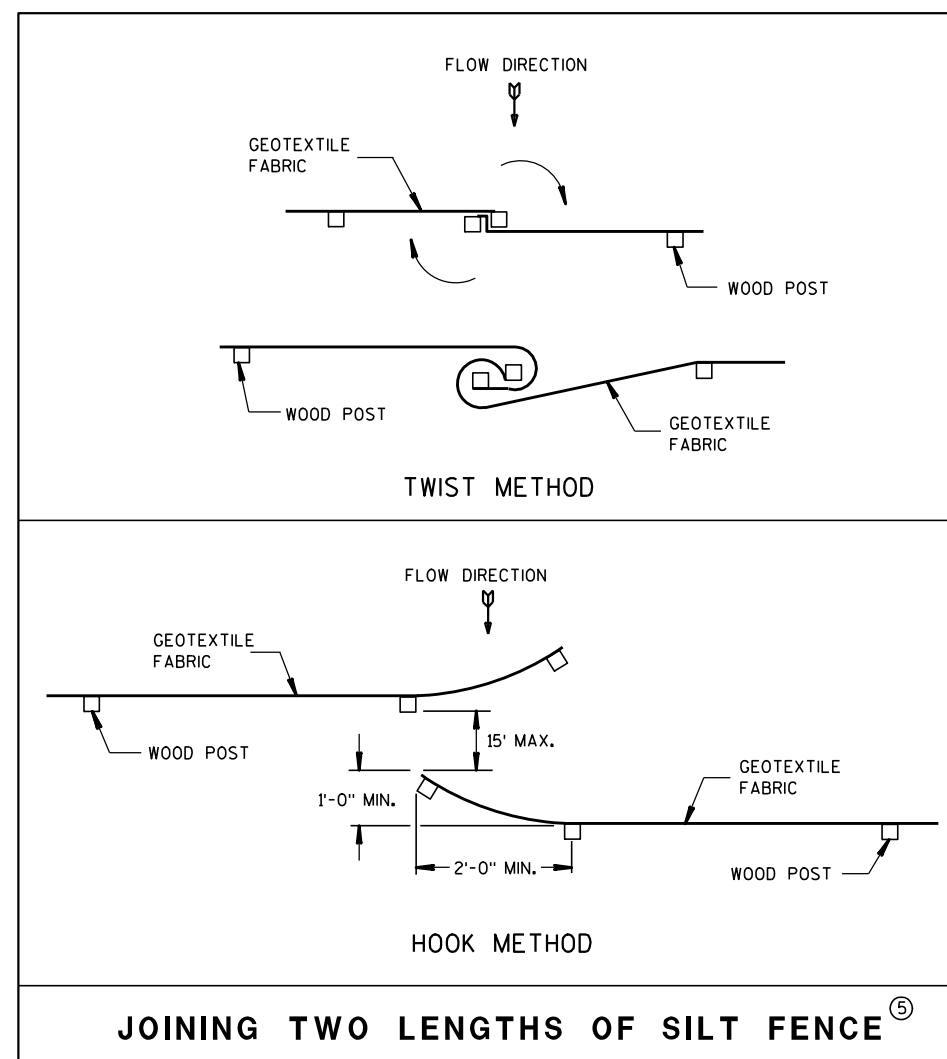


SILT FENCE



PLAN VIEW

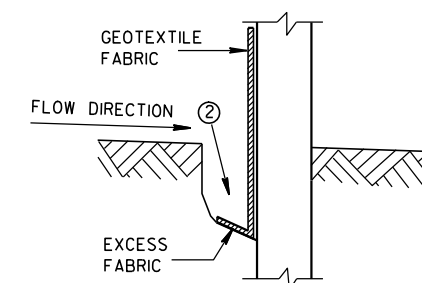
SILT FENCE AT MEDIAN SURFACE DRAINS



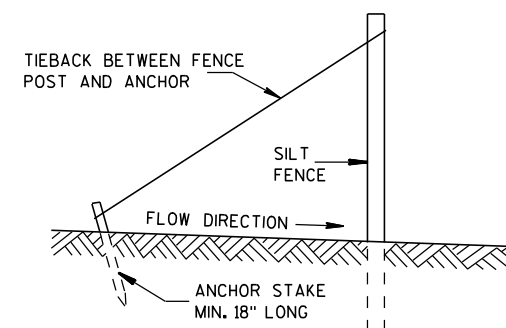
GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 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



SILT FENCE TIE BACK (WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05

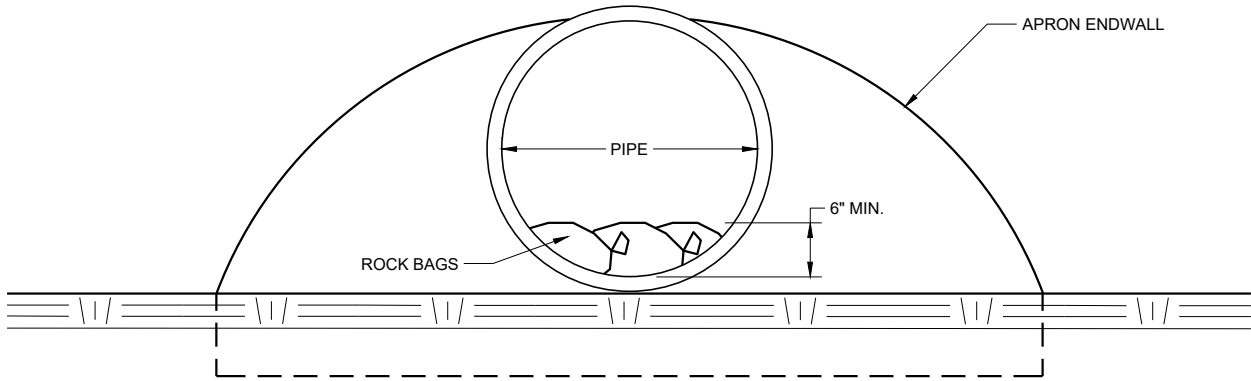
DATE

/S/ Beth Conn

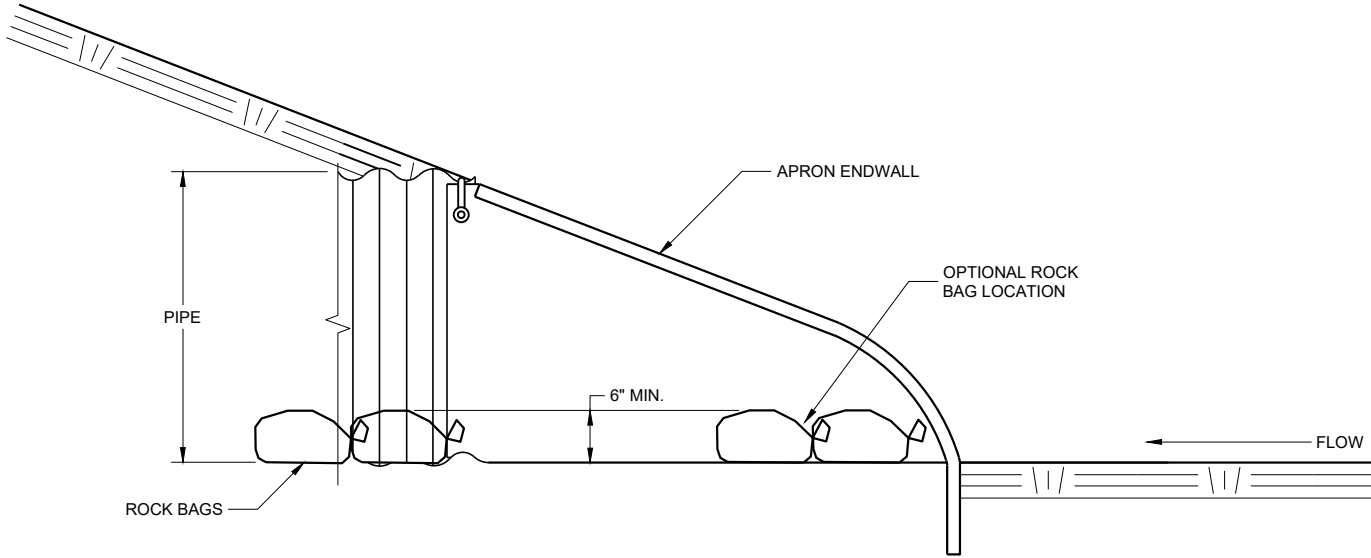
CHIEF ROADWAY DEVELOPER

FHWA

ENGINEER



END VIEW



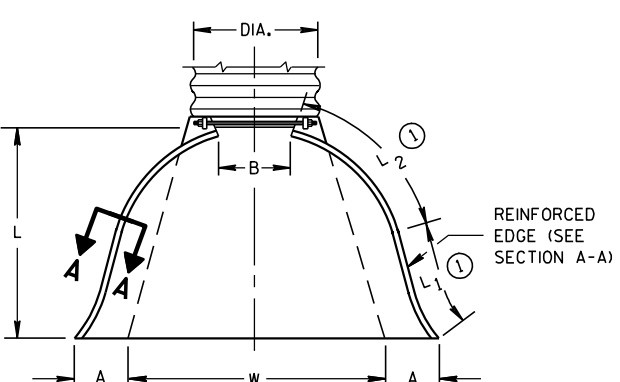
SIDE VIEW

CULVERT PIPE CHECK
(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Daniel Schave EROSION CONTROL ENGI 66
FHWA	

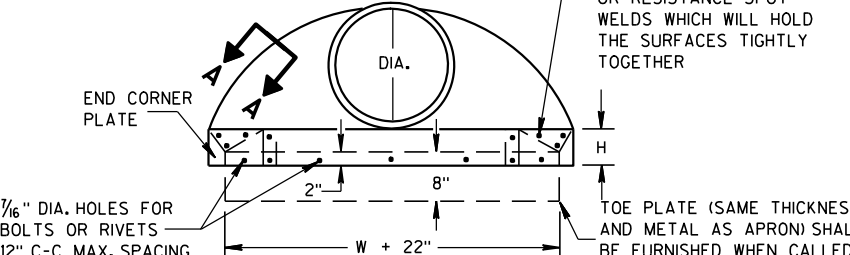
METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L ₁ ①	L ₂ ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.	
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.	
18	.064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

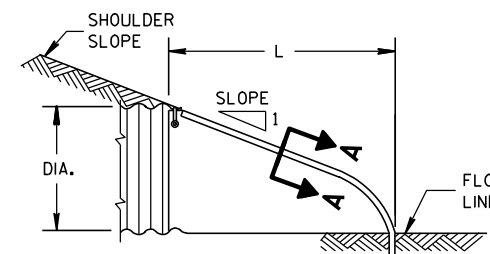


PLAN VIEW

END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



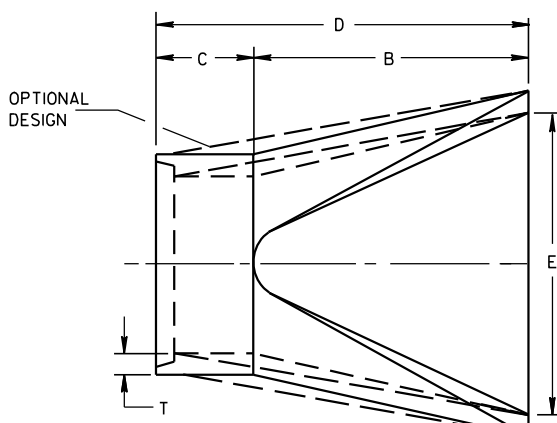
END VIEW



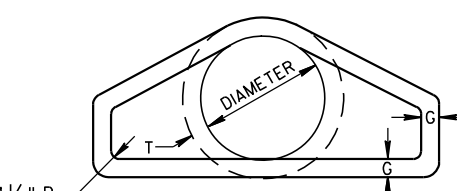
SIDE ELEVATION
METAL ENDWALLS

REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ² / ₂	9	27	46	73	36	2 ² / 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 ⁵ / ₈ to 1
60	6	^{**} 30- ^{**} 35	60	39	99	96	5	2 to 1
66	6 ¹ / ₂	^{**} 24- ^{**} 30	^{**} 72- ^{**} 78	^{**} 21- ^{**} 27	99	102	5 ¹ / ₂	2 to 1
72	7	^{**} 24- ^{**} 36	78	21	99	108	6	2 to 1
78	7 ¹ / ₂	^{**} 24- ^{**} 36	78	21	99	114	6 ¹ / ₂	2 to 1
84	8	36	90 ¹ / ₂	21	111 ¹ / ₂	120	6 ¹ / ₂	1 ¹ / ₂ to 1
90	8 ¹ / ₂	41	87 ¹ / ₂	24	111 ¹ / ₂	132	6 ¹ / ₂	1 ¹ / ₂ to 1

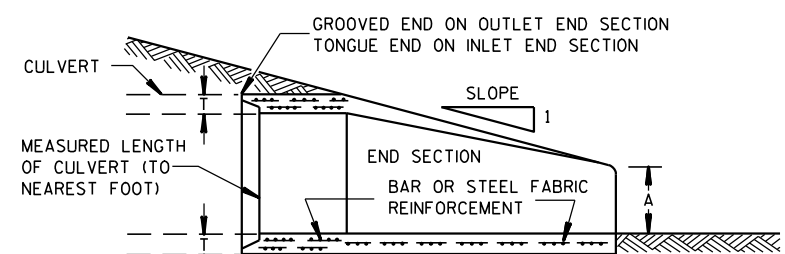
* MINIMUM
** MAXIMUM



PLAN

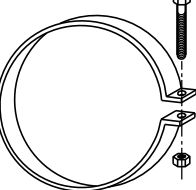


END VIEW

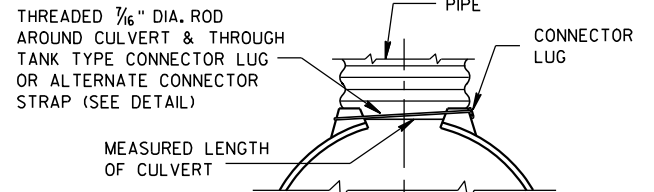


LONGITUDINAL SECTION
CONCRETE ENDWALLS

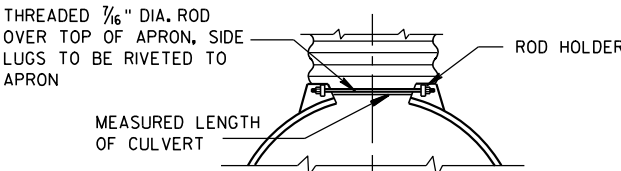
1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



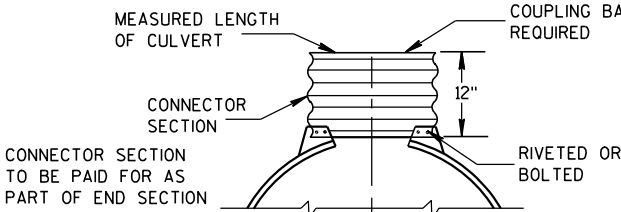
ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



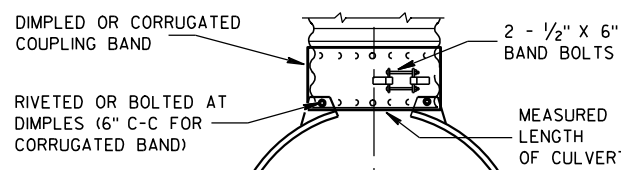
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

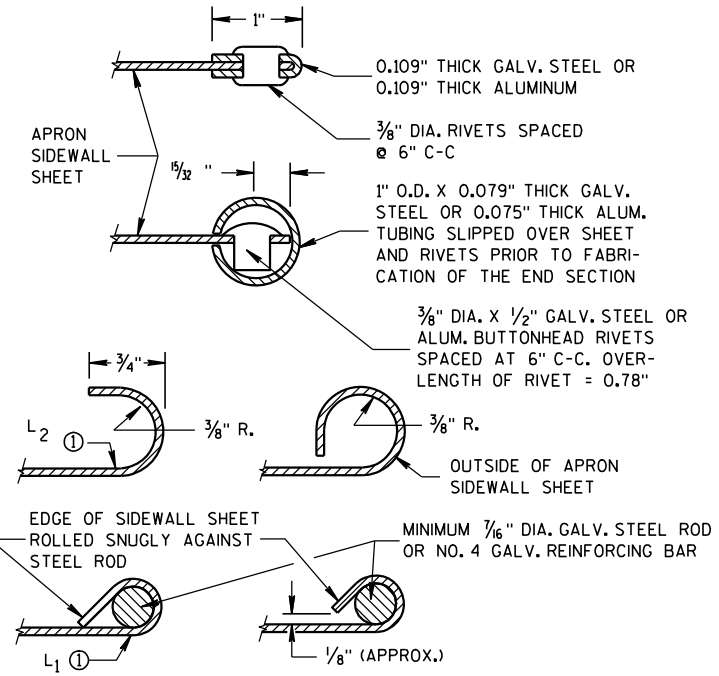
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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 VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

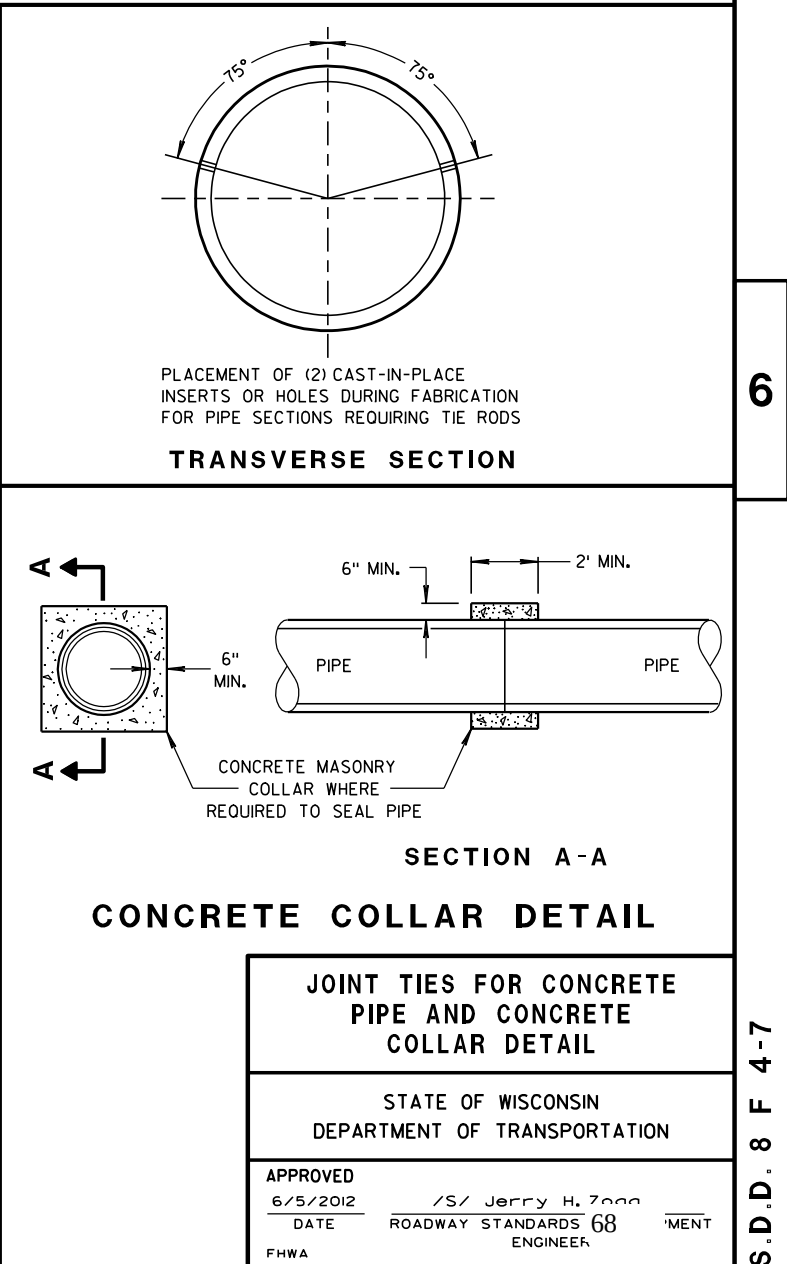
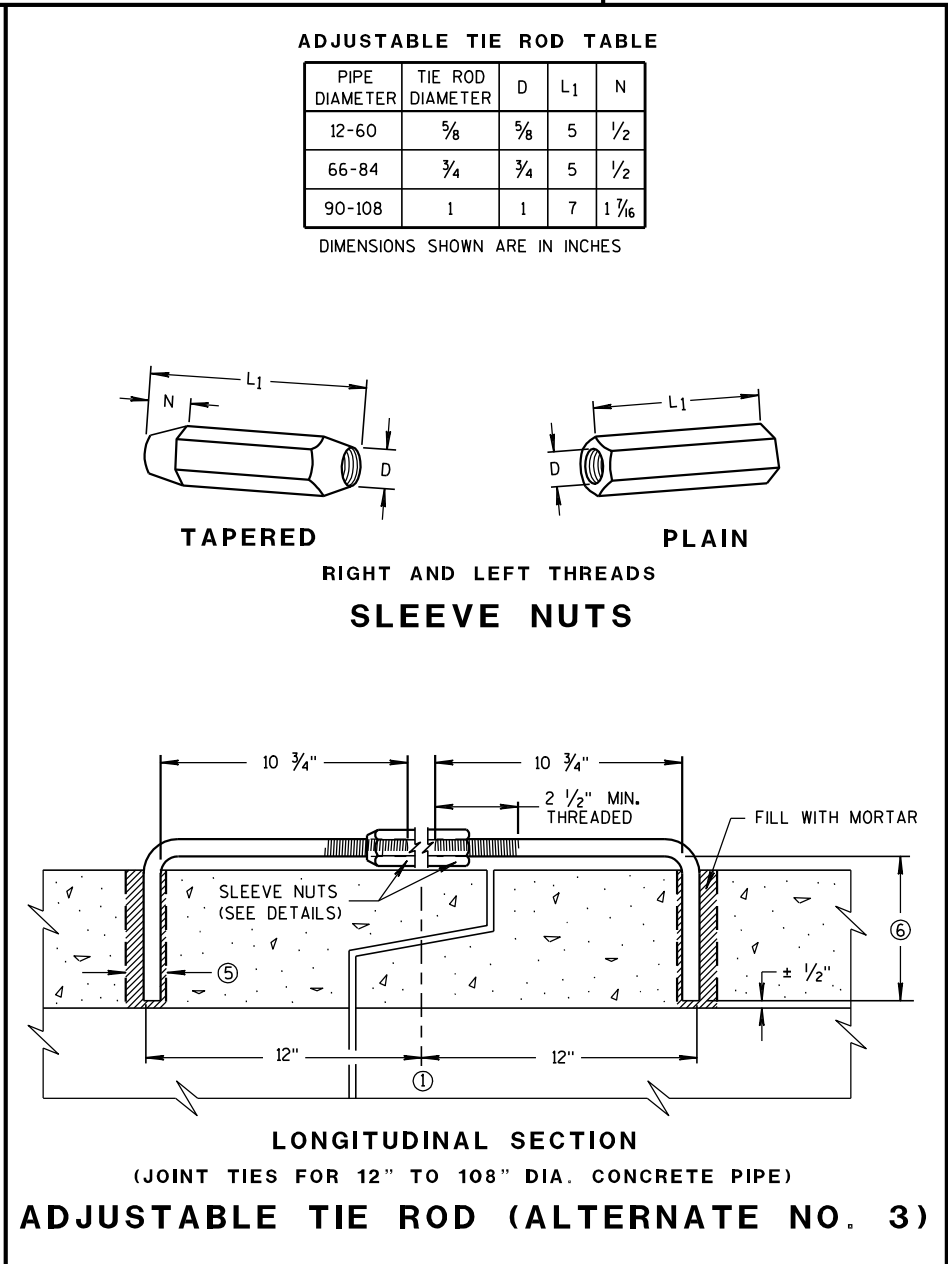
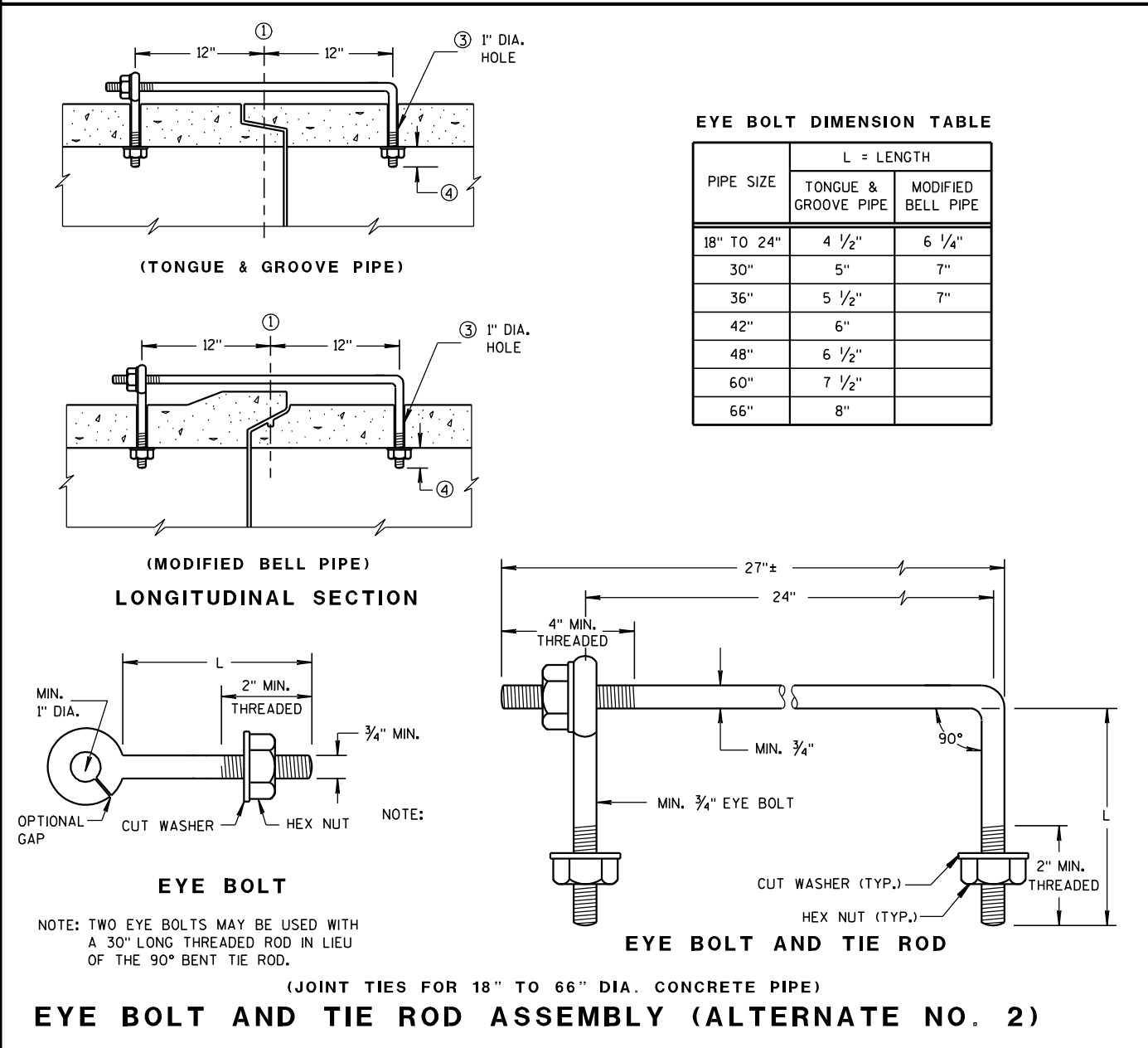
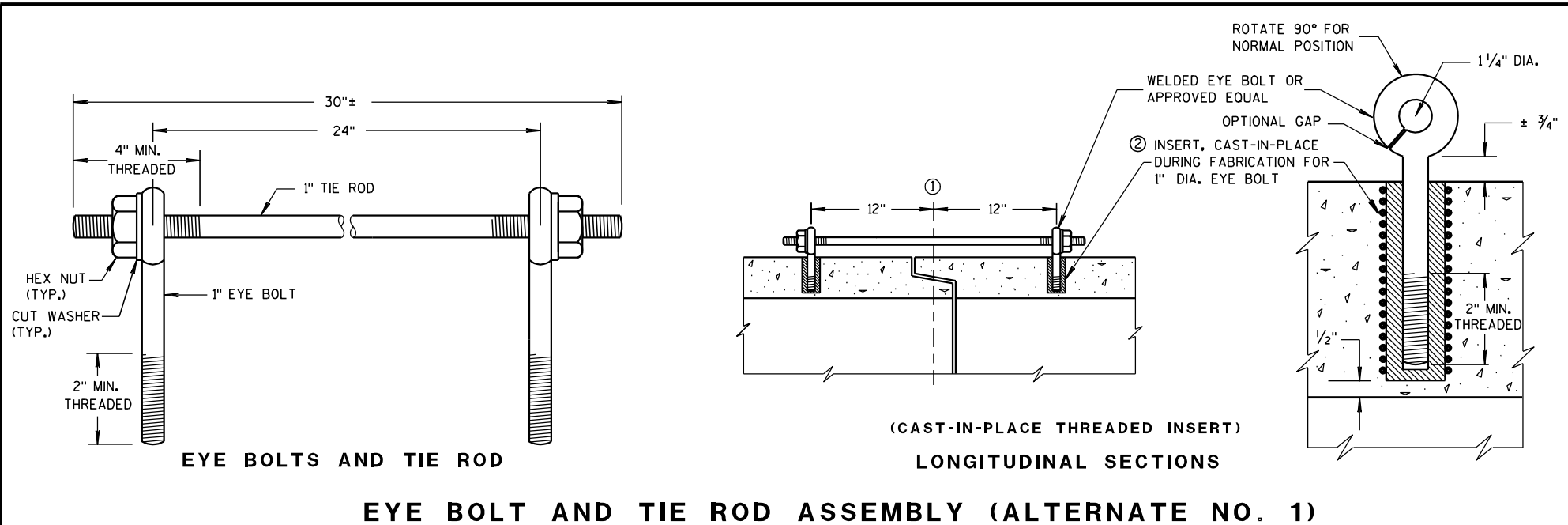
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

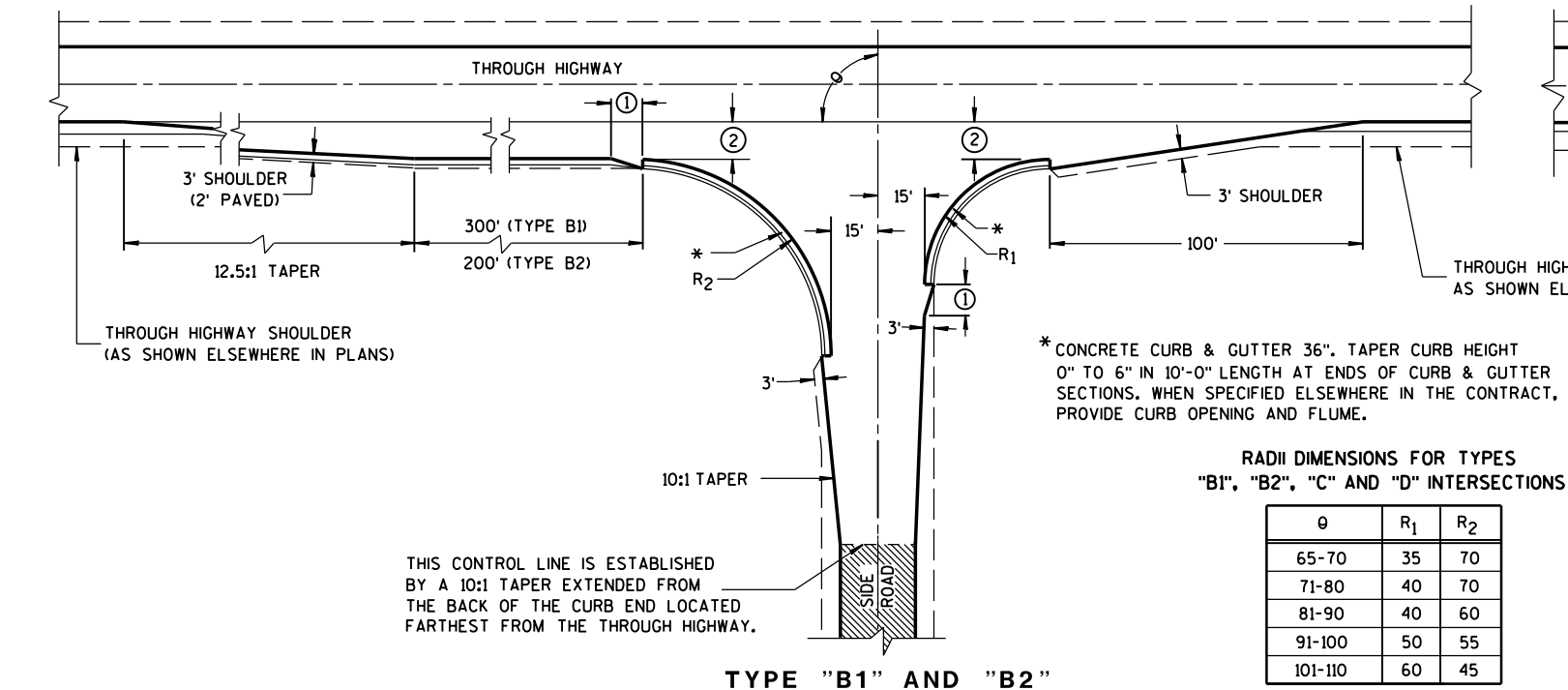
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94
DATE
/S/ Rory L. Rhinehart
CHIEF ROADWAY DEVELOP 67
NEER
FHWA





RADII DIMENSIONS FOR TYPES "B1", "B2", "C" AND "D" INTERSECTIONS

θ	R ₁	R ₂
65-70	35	70
71-80	40	70
81-90	40	60
91-100	50	55
101-110	60	45

GENERAL NOTES

DESIGNS MAY BE USED INTERCHANGEABLY IN COMBINATION OR SEPARATELY FOR ANY ONE COMPLETE INTERSECTION DEPENDING UPON INTERSECTION ANGLE AND SURFACING OF EACH APPROACH ROADWAY.

SIDE ROAD SURFACING NOTE

WHEN THE SIDE ROAD IS NOT PRESENTLY PAVED, PAVEMENT SHALL BE PLACED TO THE LIMITS SHOWN UNLESS OTHERWISE PROVIDED IN THE CONTRACT. WHERE THE CONSTRUCTION LIMITS ARE BEYOND THE PAVING LIMITS, CRUSHED AGGREGATE SURFACING SHALL BE PLACED BETWEEN THE PAVING LIMITS AND CONSTRUCTION LIMITS.

WHEN THE SIDE ROAD IS PRESENTLY PAVED, NEW PAVEMENT SHALL BE PLACED TO THE LIMITS OF DESIGN AS SHOWN AND BEYOND, IF NECESSARY, TO MEET EXISTING PAVEMENT.

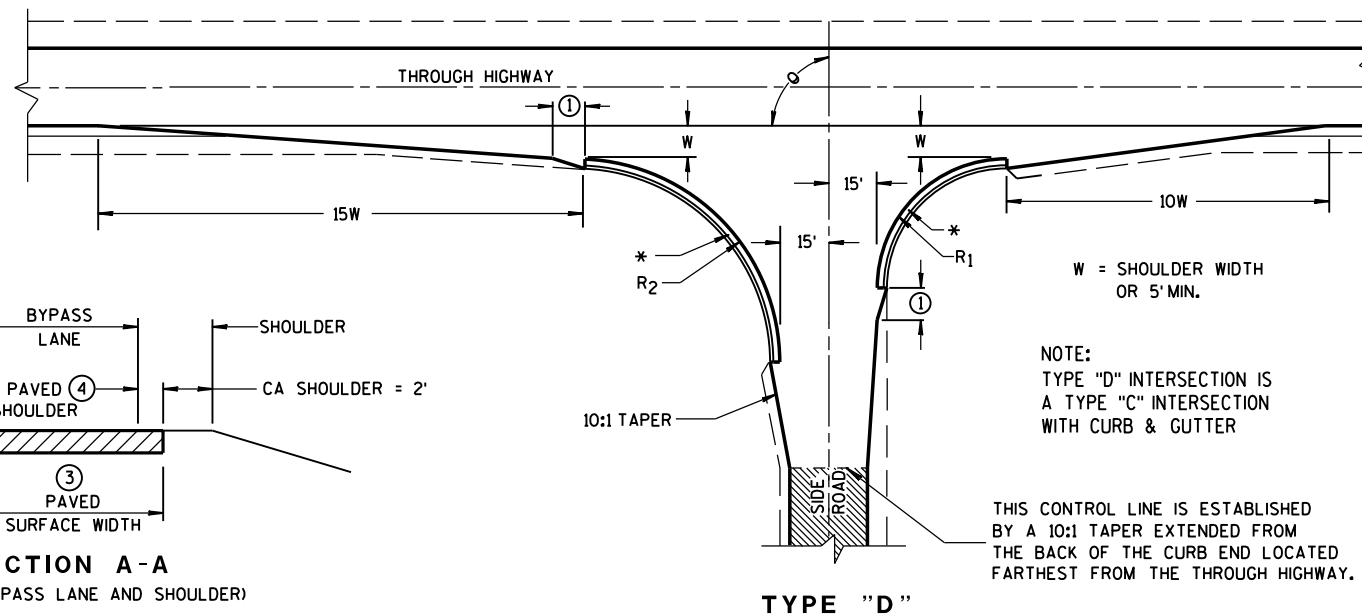
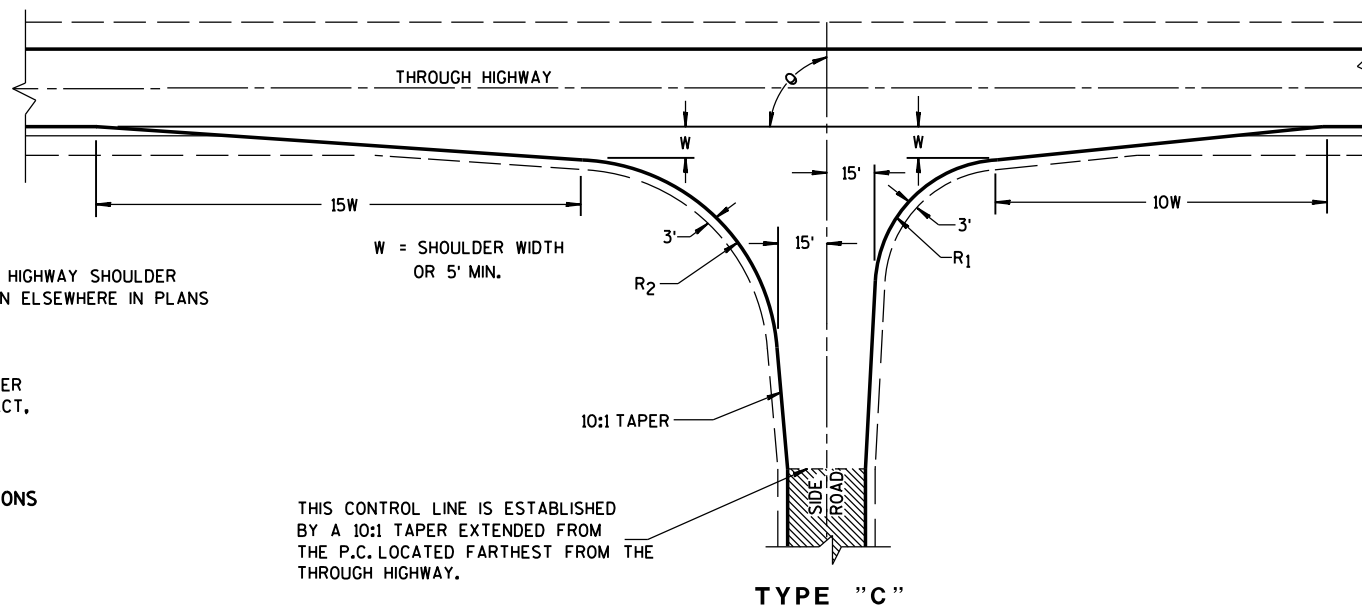
WHEN THE SIDE ROAD IS THE CONSTRUCTION PROJECT, THE INTERSECTION SURFACING SHALL BE THE SAME AS FOR THE PROJECT.

EXISTING PAVED SURFACE

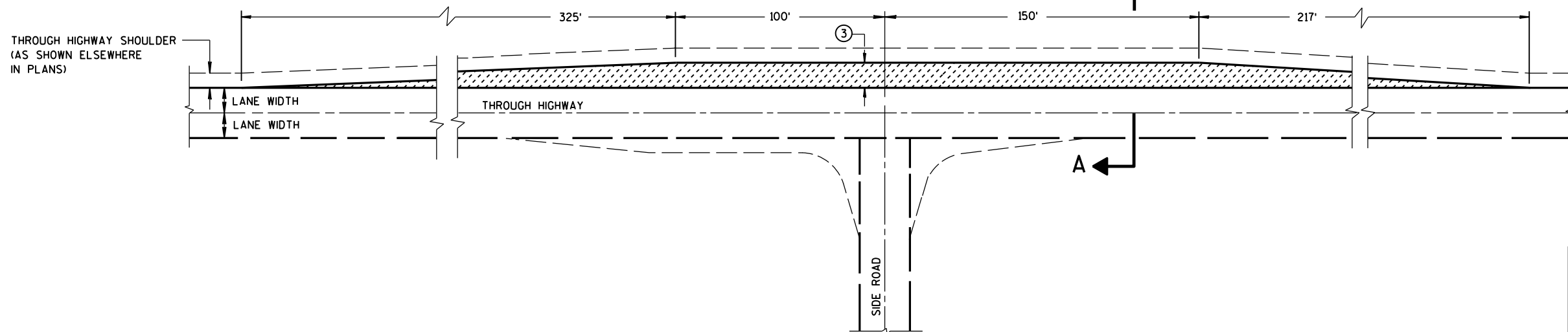
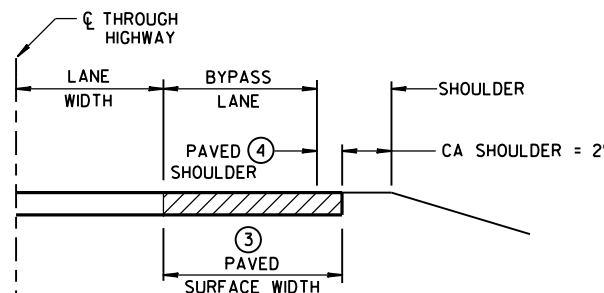
BYPASS LANE

- ① 10-FT TYPICAL.
- ② 12-FT** PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLAN.

**10-FT MAY BE USED ON TYPE B2 ON RESURFACING PROJECTS IF SPECIFIED IN THE CONTRACT.
- ③ BYPASS LANE PAVED SURFACE WIDTH OUTSIDE OF TRAVEL LANE
-ASPHALT = 12-FT PLUS PAVED SHOULDER WIDTH.
-PC CPNCRETE = 13-FT PLUS PAVED SHOULDER WIDTH.
- ④ BYPASS LANE PAVED SHOULDER WIDTH = THE GREATER OF 1-FT OR THE PAVED SHOULDER WIDTH OF THE THROUGH HIGHWAY.



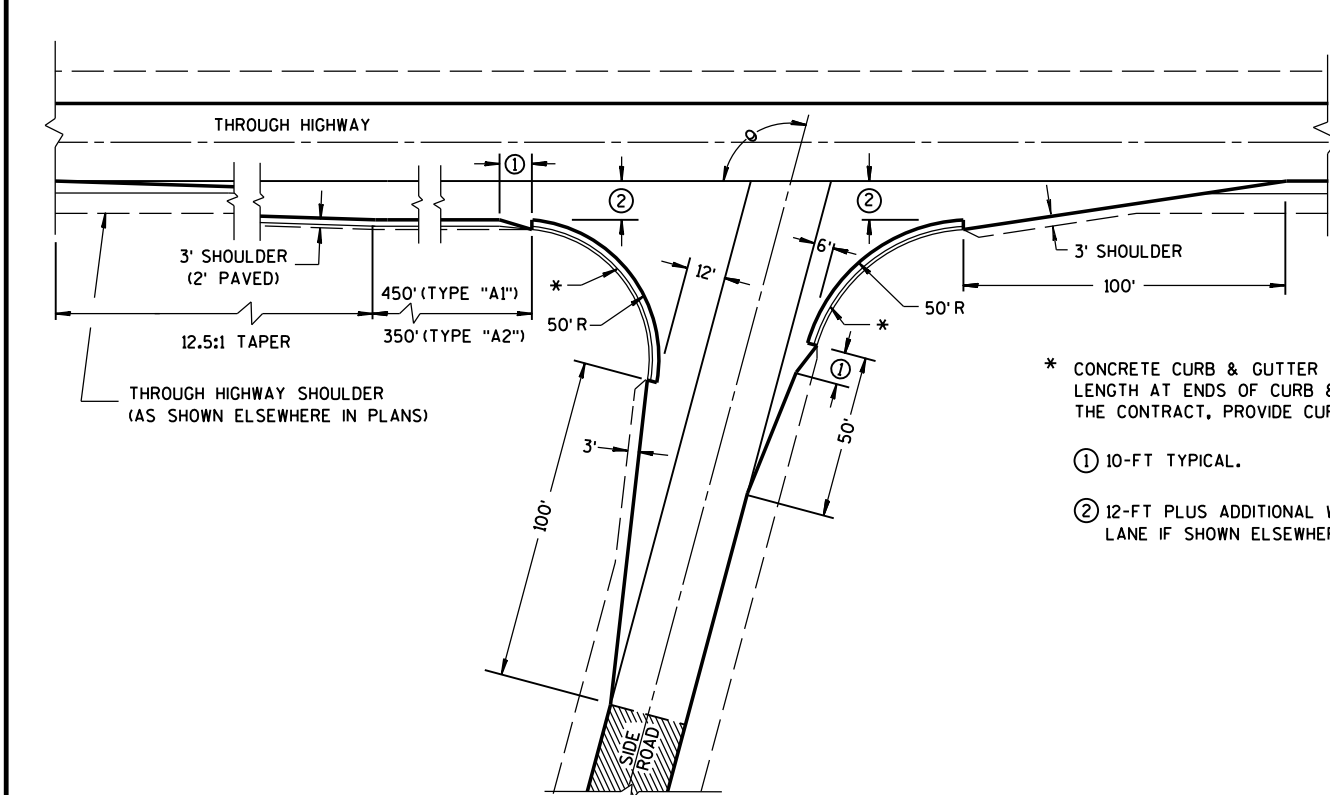
NOTE:
TYPE "D" INTERSECTION IS A TYPE "C" INTERSECTION WITH CURB & GUTTER



TEE INTERSECTION BYPASS LANE DETAIL

AT-GRADE SIDE ROAD INTERSECTION, TYPES "B1", "B2", "C" AND "D" AND TEE INTERSECTION BYPASS LANE

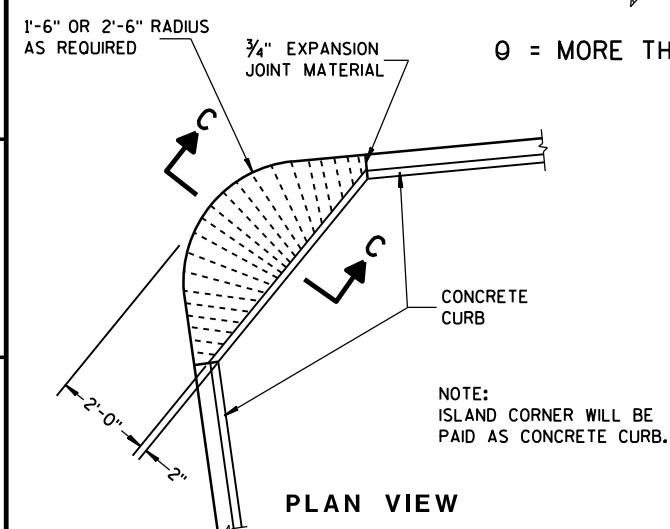
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



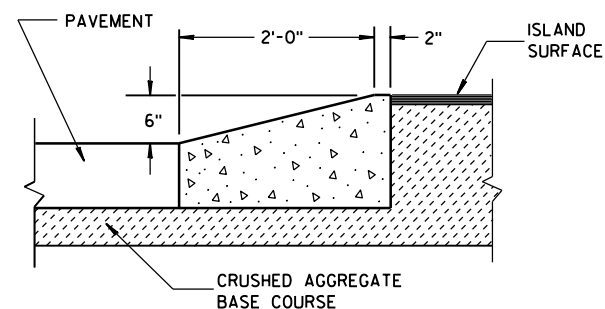
* CONCRETE CURB & GUTTER 36". TAPER CURB HEIGHT 0" TO 6" IN 10'-0" LENGTH AT ENDS OF CURB & GUTTER SECTIONS. WHEN SPECIFIED ELSEWHERE IN THE CONTRACT, PROVIDE CURB OPENING AND FLUME.

① 10-FT TYPICAL.

② 12-FT PLUS ADDITIONAL WIDTH FOR BIKE LANE IF SHOWN ELSEWHERE IN THE PLANS.



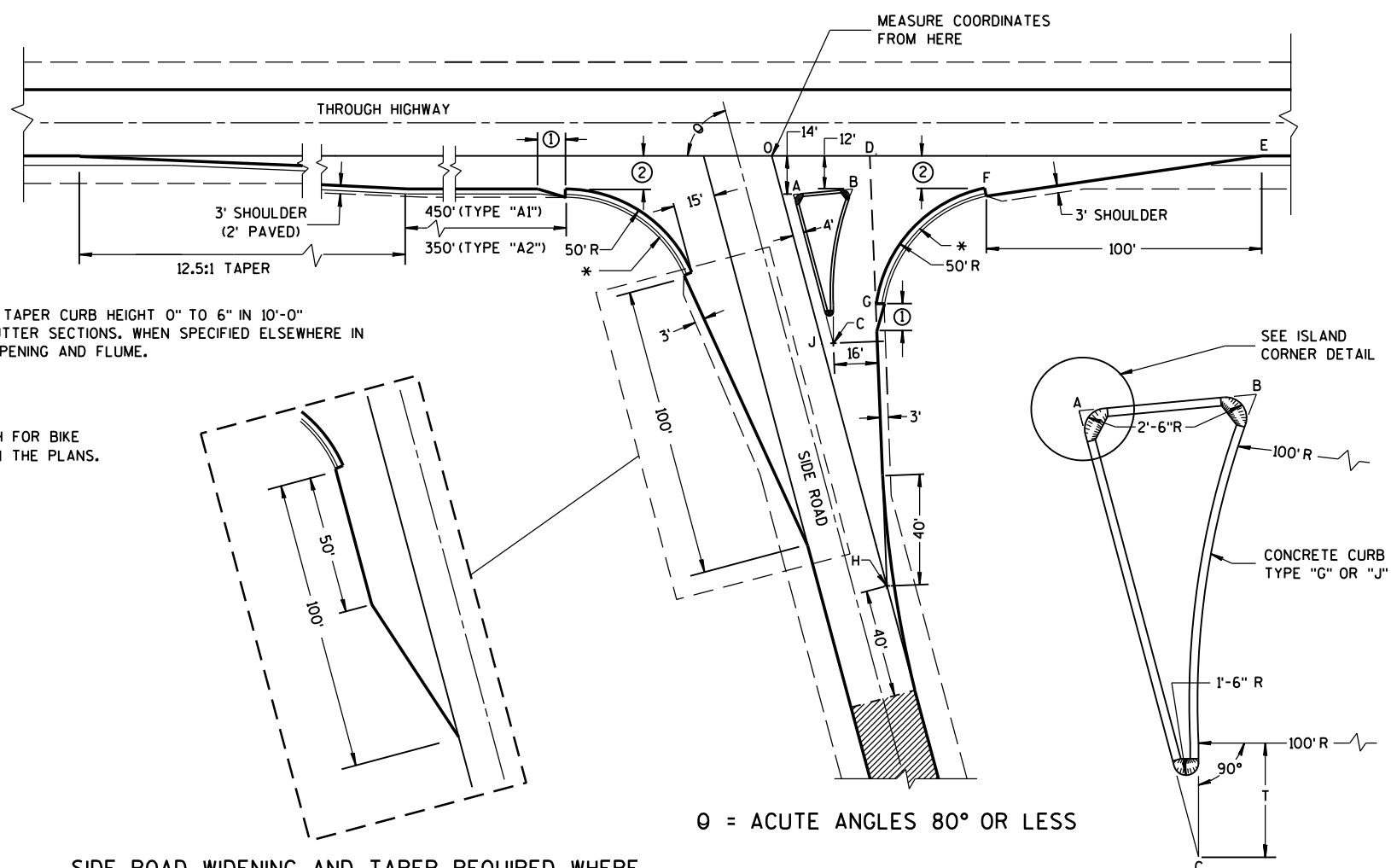
PLAN VIEW



SECTION C-C

ISLAND CORNER DETAIL

(TO BE CONSTRUCTED AT ALL ISLAND CORNERS)



SIDE ROAD WIDENING AND TAPER REQUIRED WHERE THE THROUGH HIGHWAY CARRIES TWO-WAY TRAFFIC
 θ = ACUTE ANGLES 70° OR LESS

TABLE OF DIMENSIONS FOR
 VARIABLE SIDE ROAD INTERSECTION ANGLES

(INTERPOLATE VALUES FOR ANGLES NOT SHOWN)

ANGLE θ DEGREES	COORDINATES IN FEET (MEASURED FROM POINT "O")								LENGTH IN FEET				
	A	B	C	D	E	F	G	H	AB	AC	T	OJ	OH
60	12.7	44.9	46.4	41.9	205.0	104.6	64.0	85.0	32.3	67.4	4.9	85.9	169.9
	-14.0	-12.0	-72.4	0.0	0.0	-12.0	-75.5	-147.1					
65	10.9	39.0	37.8	39.4	196.1	95.7	54.1	70.5	28.2	63.6	8.5	80.9	166.9
	-14.0	-12.0	-71.6	0.0	0.0	-12.0	-71.5	-151.3					
70	9.4	33.9	29.8	37.4	188.3	87.8	45.6	56.1	24.6	59.7	11.5	76.1	164.1
	-14.0	-12.0	-70.1	0.0	0.0	-12.0	-67.5	-154.2					
75	7.9	29.3	22.3	35.7	181.2	80.7	38.2	41.8	21.5	55.8	13.8	71.4	161.4
	-14.0	-12.0	-67.9	0.0	0.0	-12.0	-63.4	-155.9					
80	6.5	25.4	15.6	34.4	174.8	74.4	31.8	27.6	18.9	52.0	15.6	66.9	158.9
	-14.0	-12.0	-65.2	0.0	0.0	-12.0	-59.3	-156.5					

TYPE "A1" & "A2" SIDE ROAD INTERSECTION DETAILS

AT-GRADE SIDE ROAD
 INTERSECTION, TYPE "A1" & "A2"

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

APPROVED

12/18/12

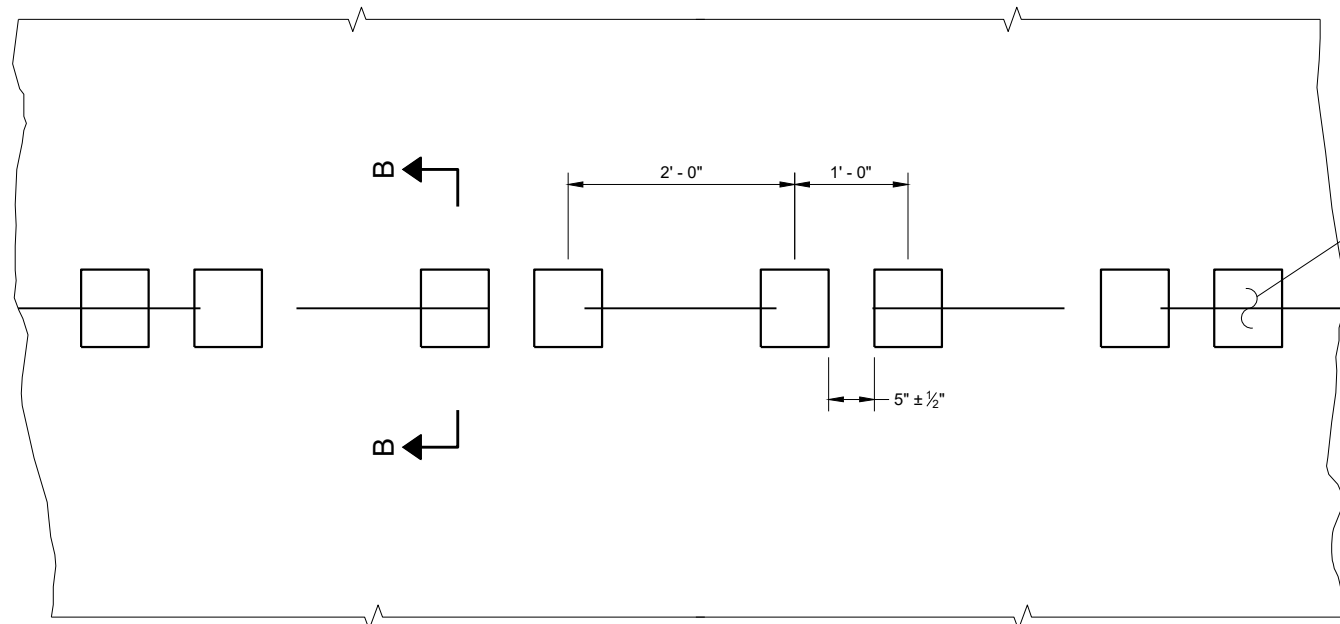
DATE

FHWA

/S/ Jerry H. Zogg

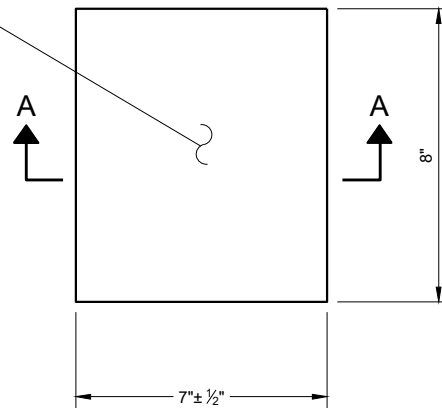
ROADWAY STANDARDS D 70

ENGINEER



PLAN VIEW
SHOULDER WITH GROOVES

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

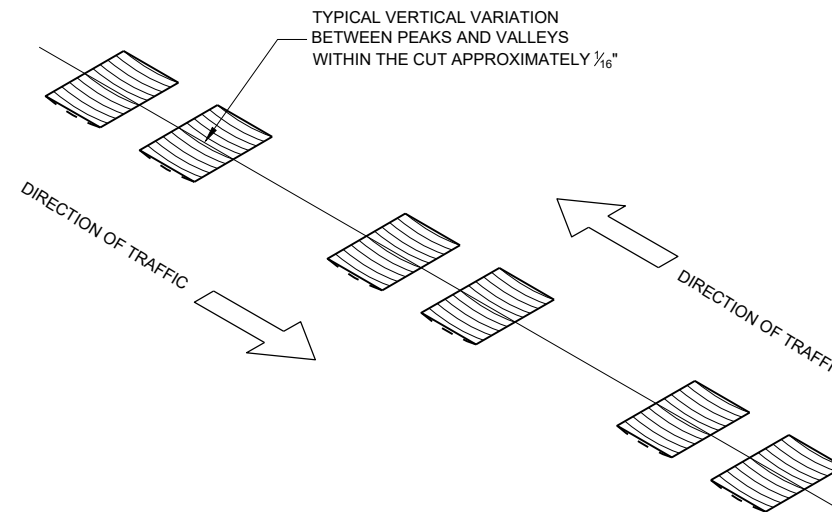
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTERLINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

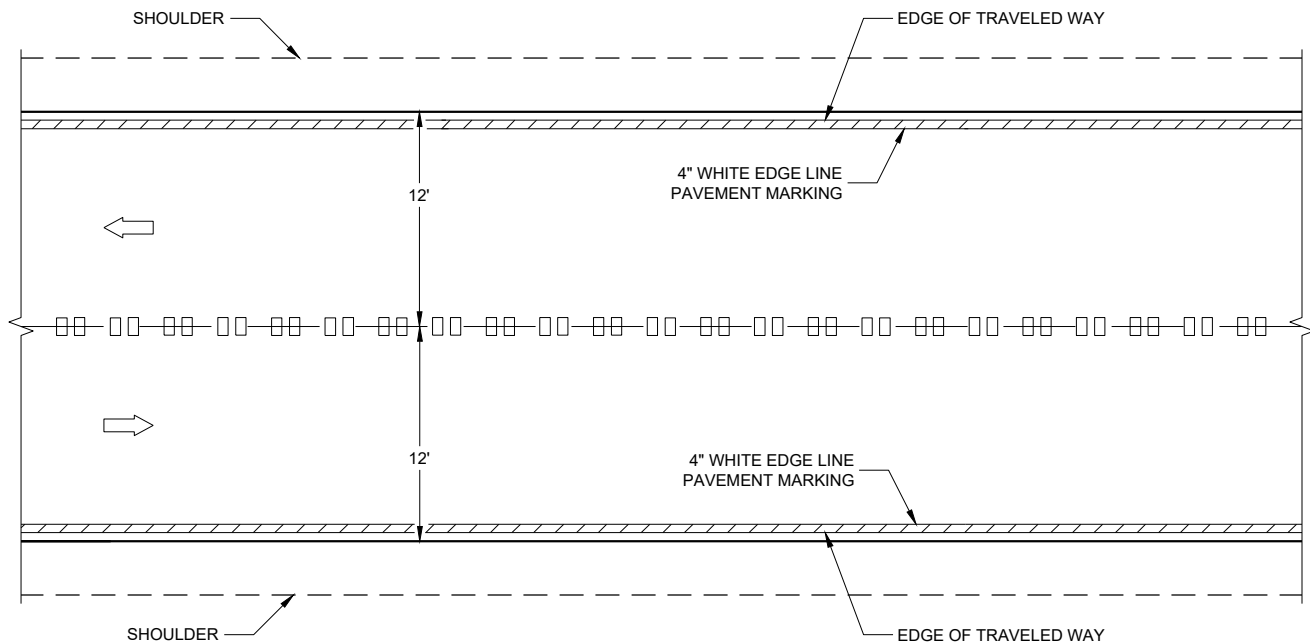
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

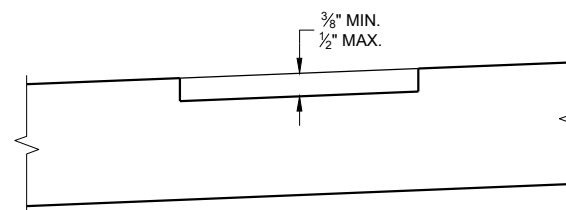
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



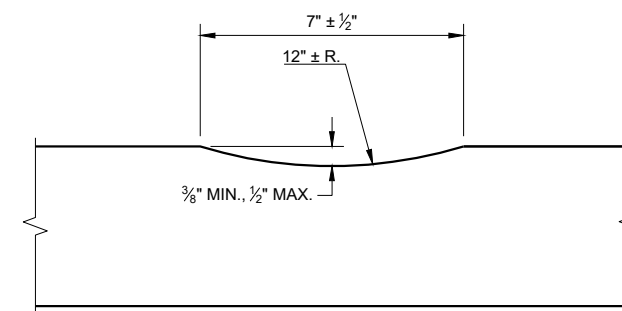
ISOMETRIC



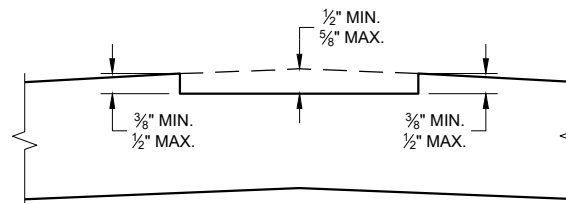
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



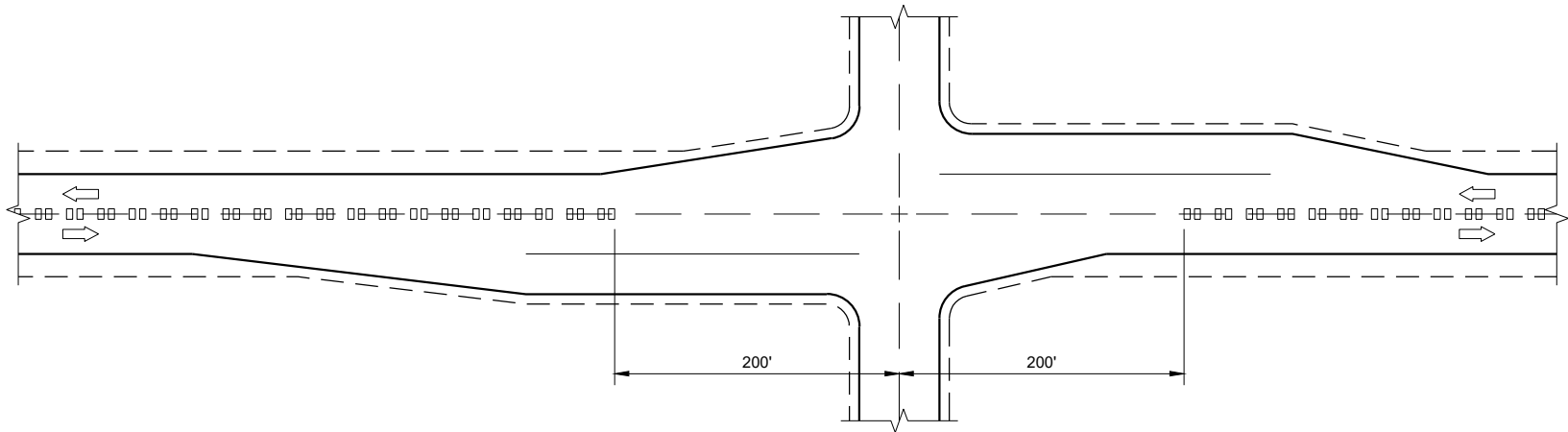
SECTION A - A



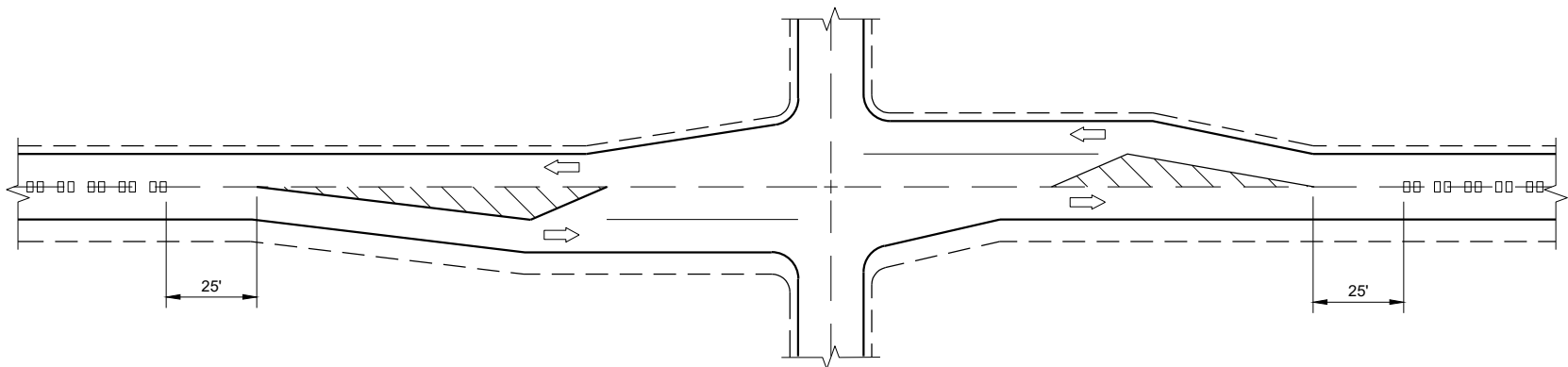
SECTION B - B
CROWNED ROADWAY

**2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING**

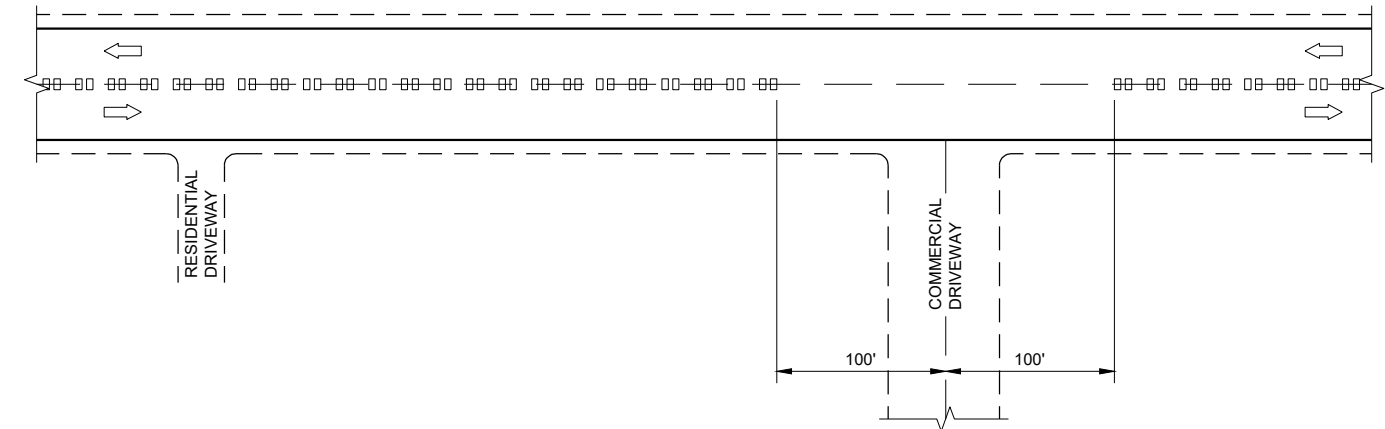
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



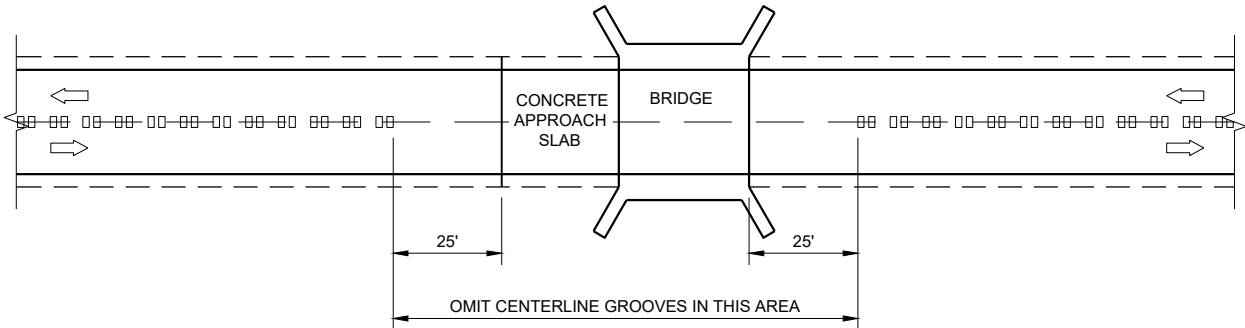
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



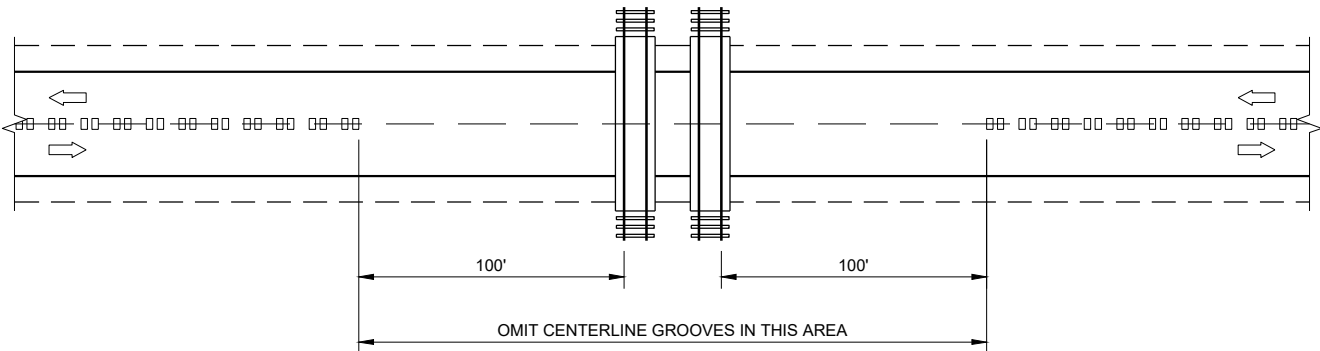
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



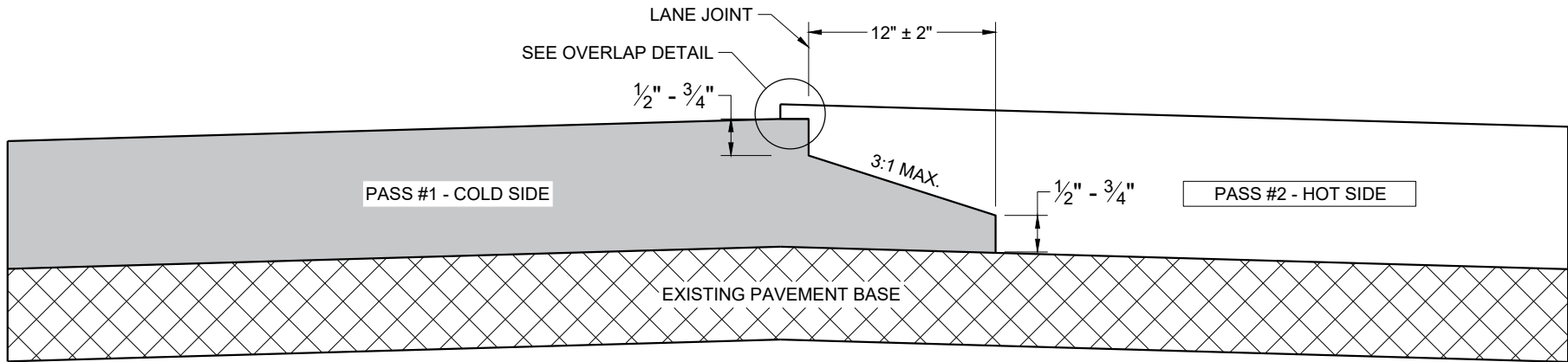
CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL
CENTERLINE RUMBLE STRIP,
MILLING

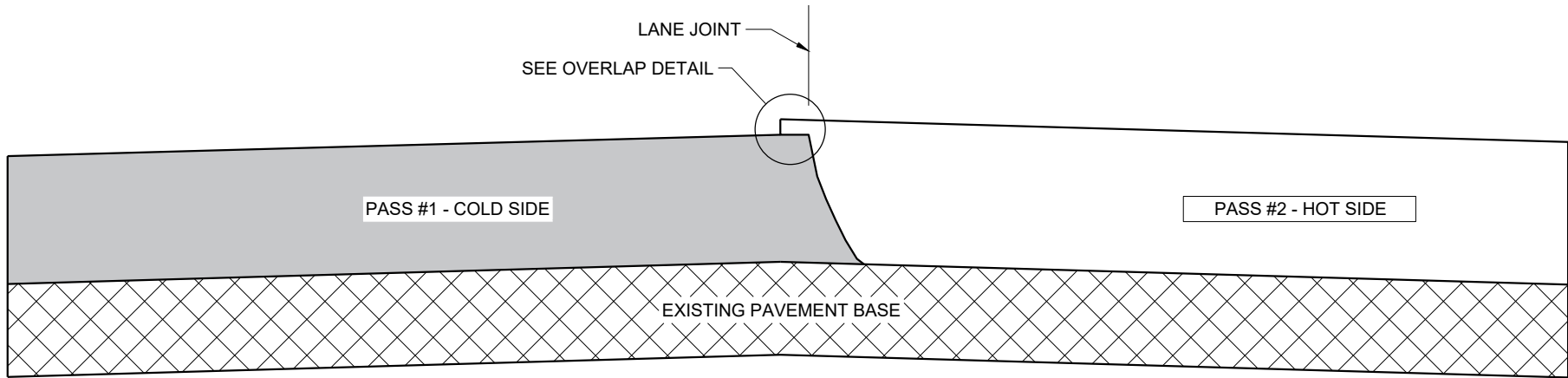
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

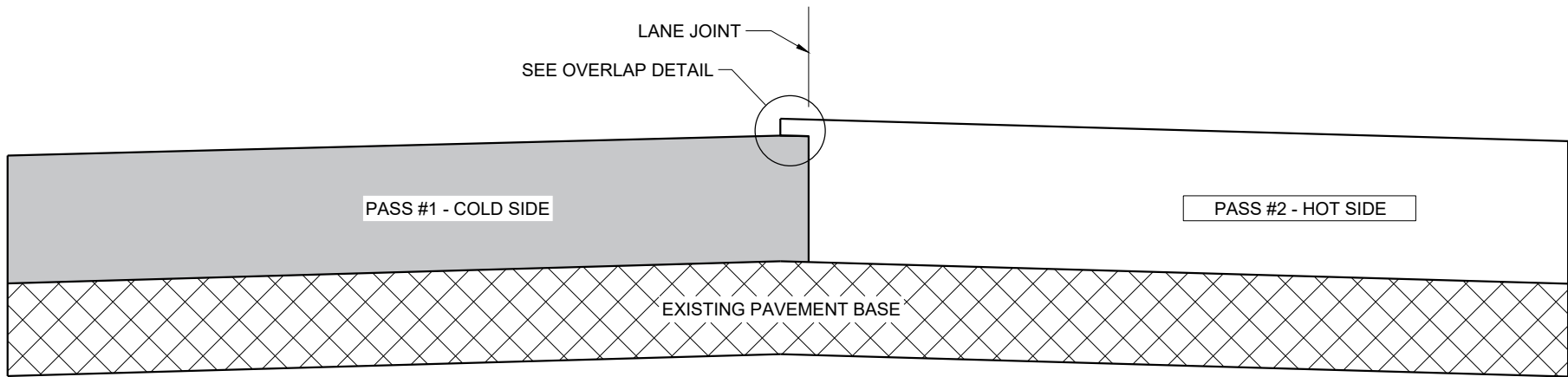
FHWA



TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT



TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)

GENERAL NOTES

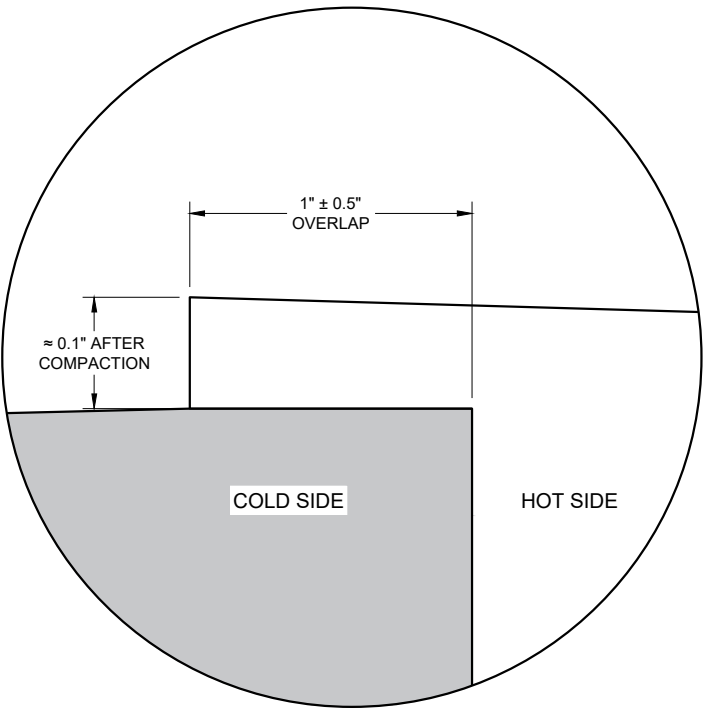
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.



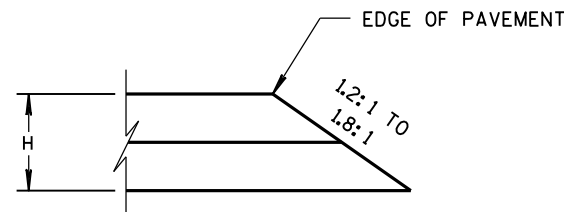
OVERLAP DETAIL (TYPICAL)

HMA LONGITUDINAL JOINTS

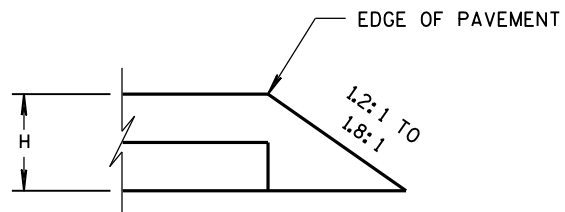
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGIN 73

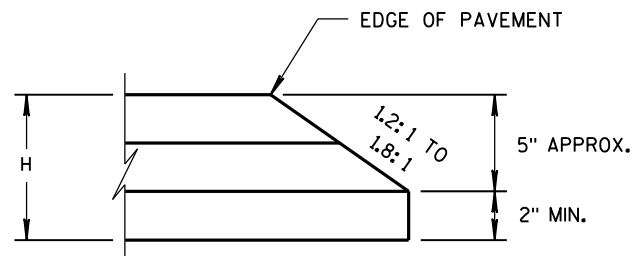
FHWA



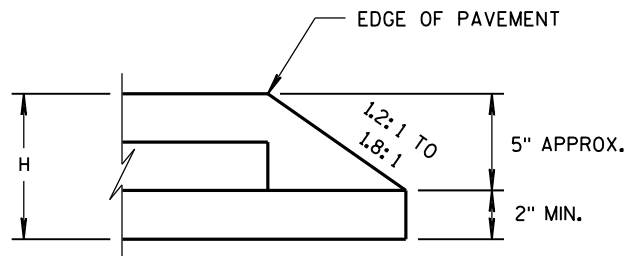
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

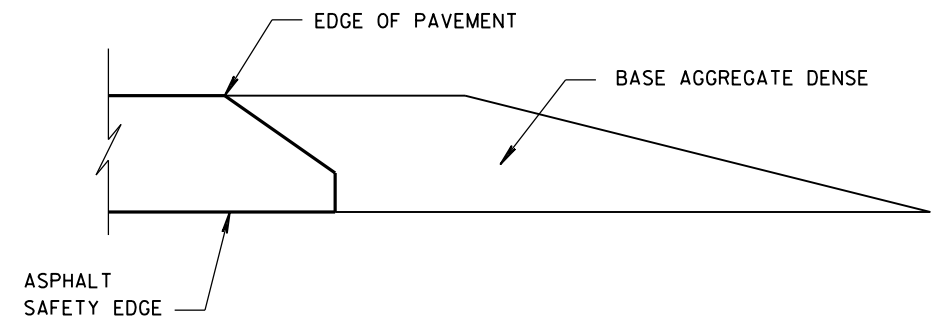


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

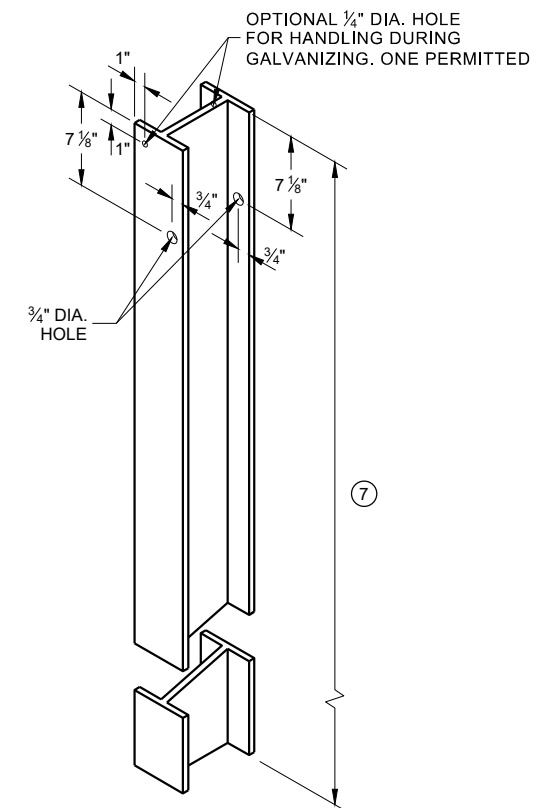
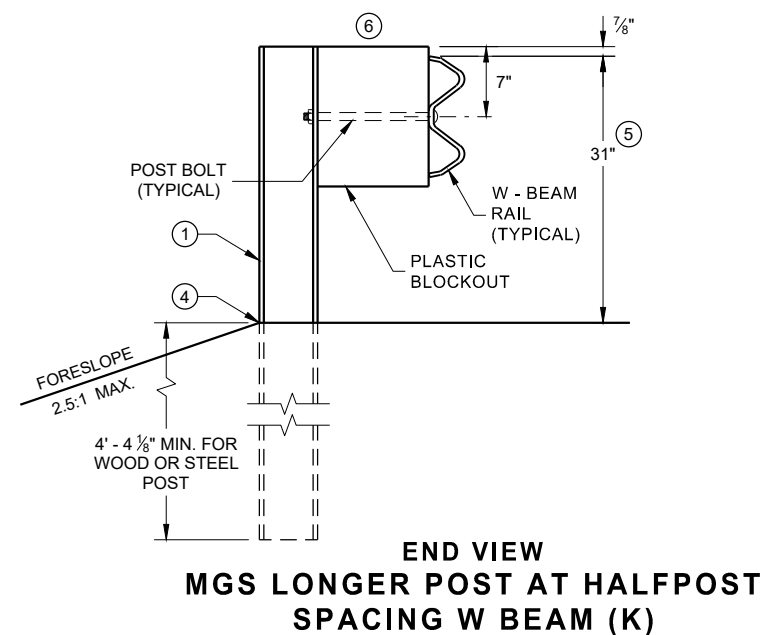
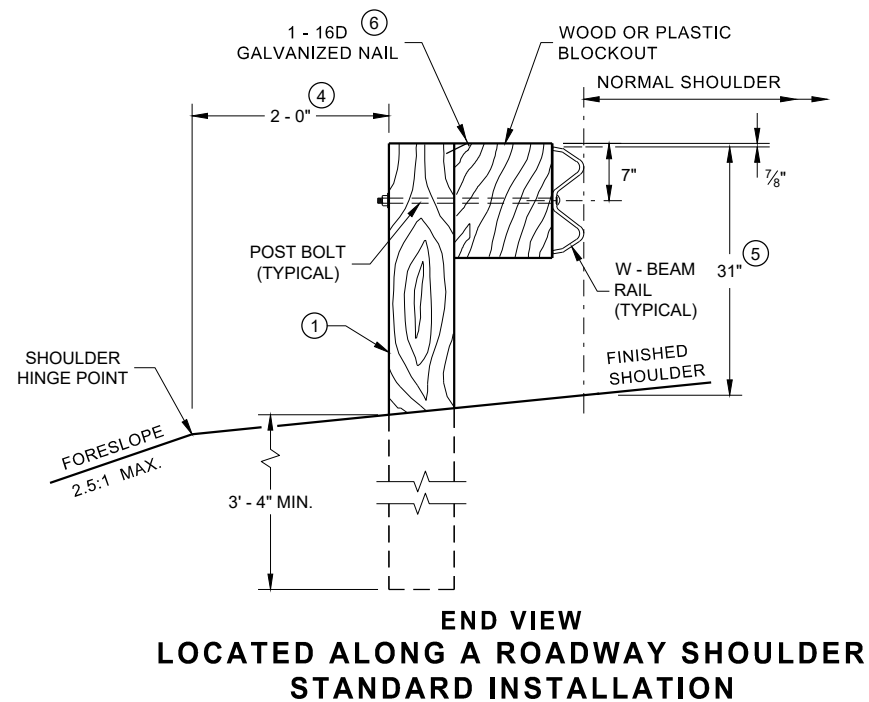
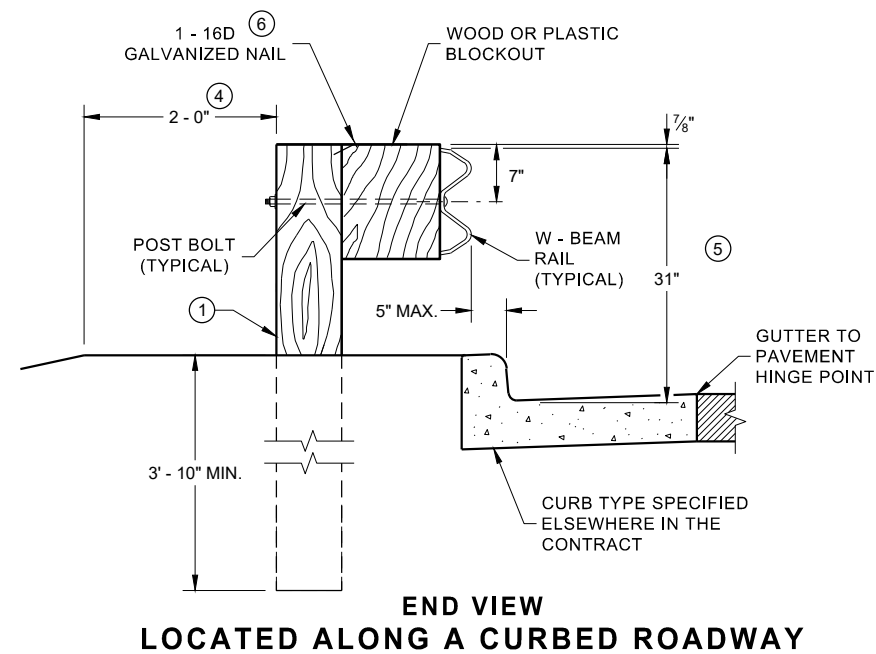
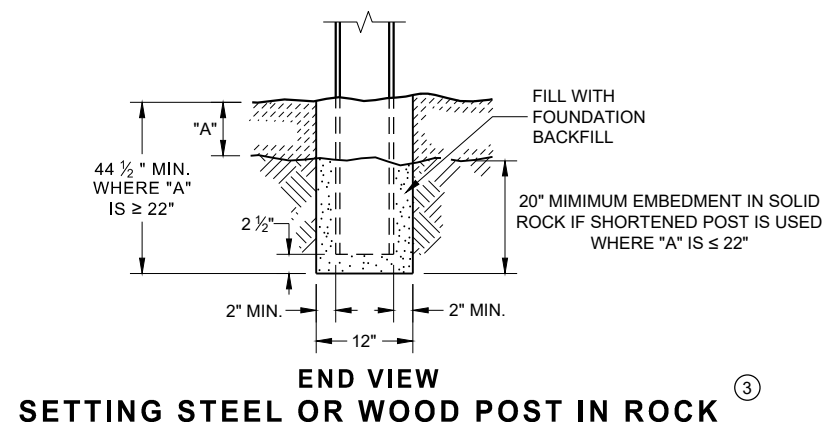
HMA PAVEMENT AND HMA OVERLAYS



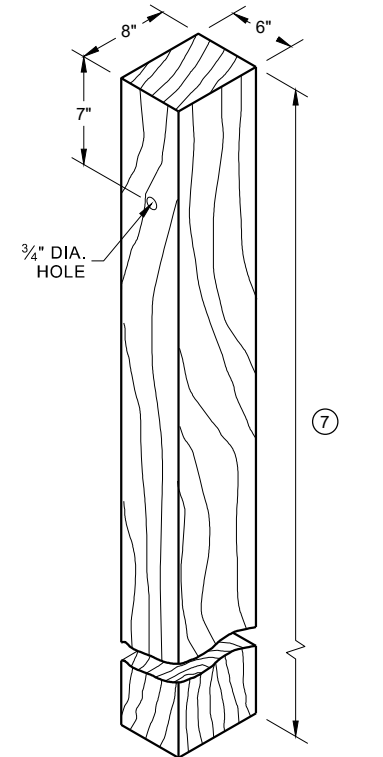
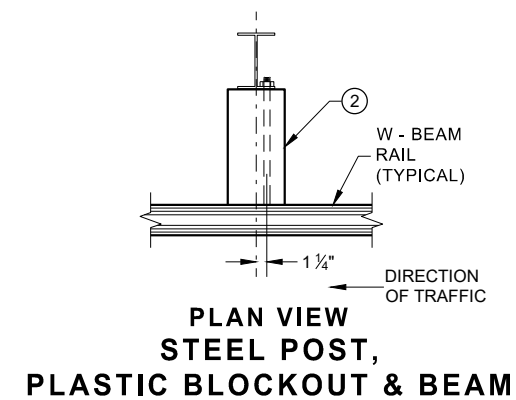
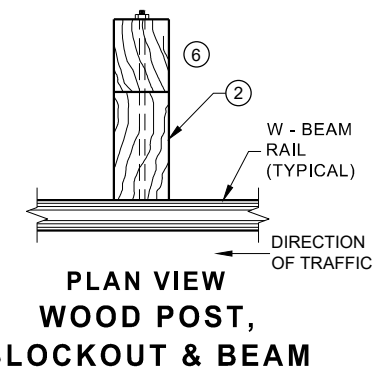
FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE _{SM}		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED DATE 11/30/2012	/S/ Jerry H. Zoog ROADWAY STANDARDS ENGINEER	74 ENT
FHWA		

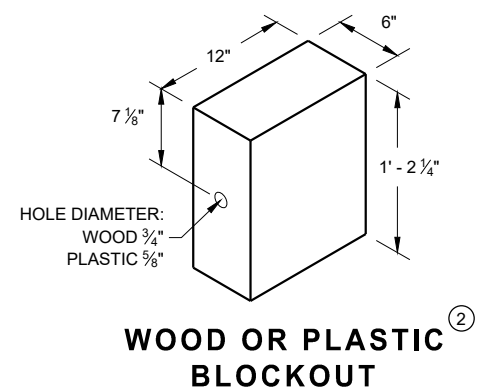
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 30 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2" INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS 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".

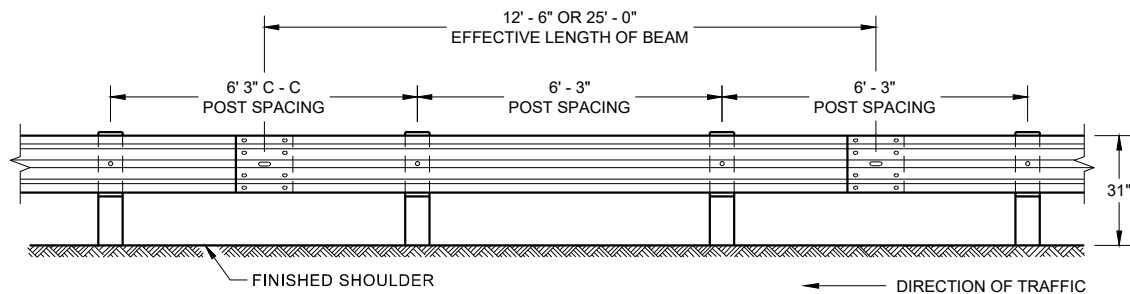


**STEEL POST & HOLE
PUNCHING DETAIL
(W 6 X 9) ①**

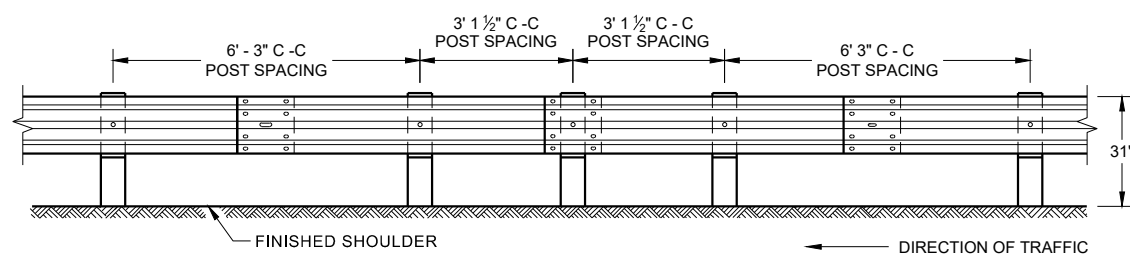


WOOD POST (6" X 8") NOMINAL ^①

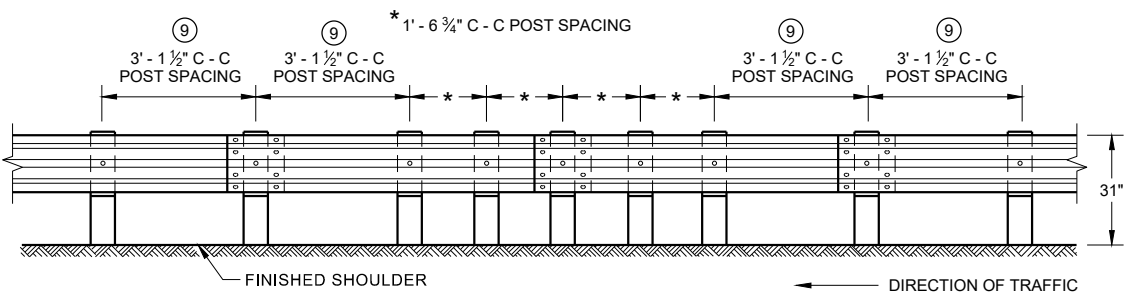




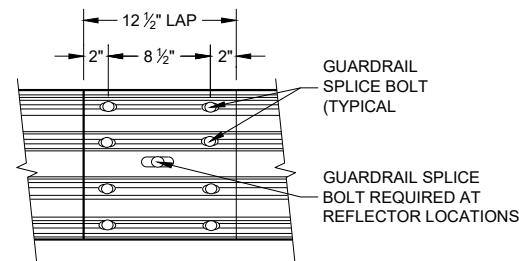
**FRONT VIEW
POST SPACING STANDARD INSTALLATION**



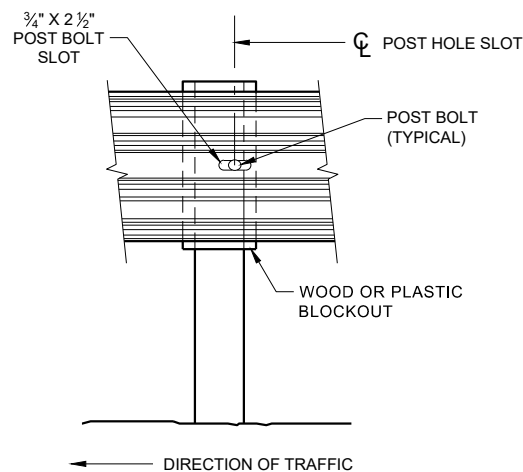
**FRONT VIEW
HALF POST SPACING (HS) AND
HALF POST SPACING WITH LONGER POSTS (K)**



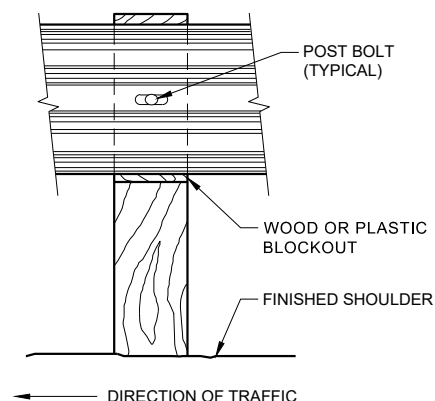
**FRONT VIEW
QUARTER POST SPACING (QS)**



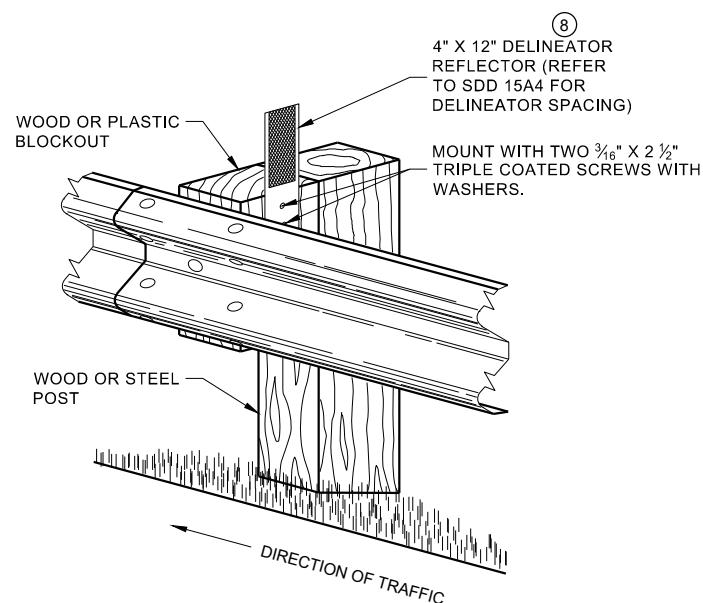
**FRONT VIEW
MID-SPAN BEAM SPLICE**



FRONT VIEW AT STEEL POST



FRONT VIEW AT WOOD POST



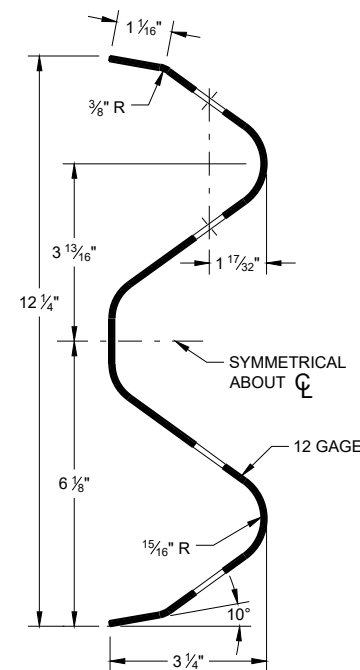
**ONE SIDED REFLECTOR DETAIL
AND TYPICAL INSTALLATION**

GENERAL NOTES

- 8 DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- 9 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.

POST BOLTS ARE A 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.

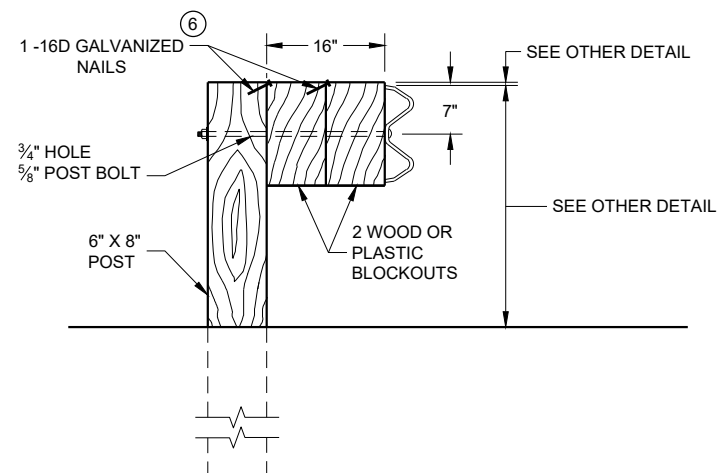
GUARD RAIL SPLICE BOLTS ARE A 3/8" DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES 3/8" DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.



SECTION THRU W-BEAM RAIL

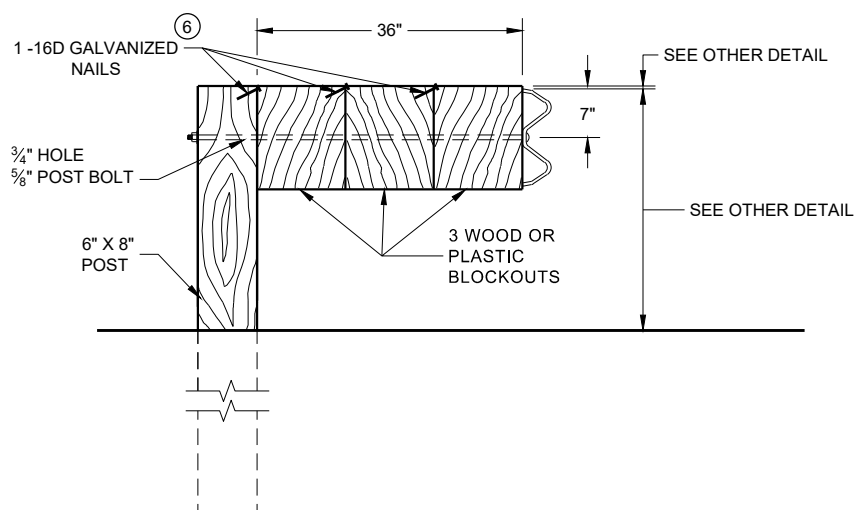
**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 76



DETAIL FOR 16" BLOCKOUT DEPTH

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



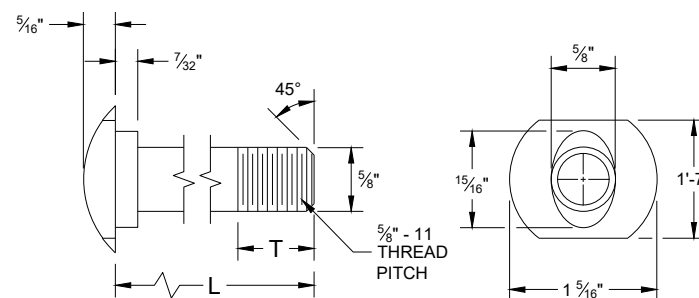
DETAIL FOR 36" BLOCKOUT DEPTH

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

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

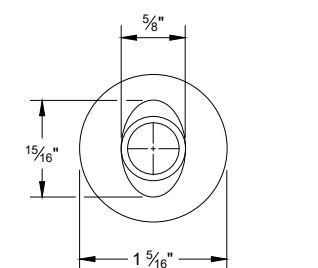
NOTE:

1. ALL FILLETS SHALL HAVE A MINIMUM RADIUS OF $\frac{3}{16}$ ".
2. IF THE BOLT EXTENDS MORE THAN $\frac{1}{4}$ " FROM THE NUT THE BOLT SHOULD BE TRIMMED BACK.

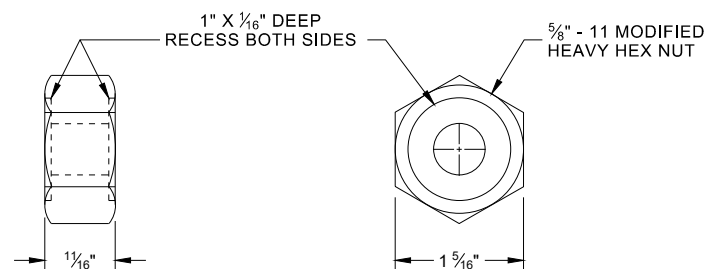


POST BOLT TABLE

L	T (MIN.)
1 ¼"	1 ⅛"
2"	1 ¾"
10"	4"
14"	4 ⅙"
18"	4"
21"	4 ⅙"
25"	4"

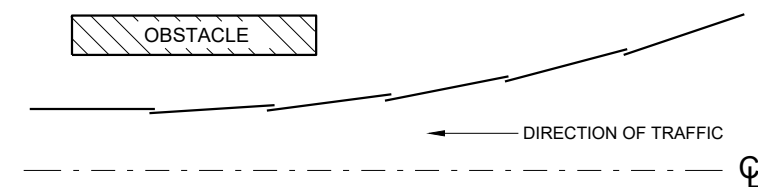


ALTERNATE BOLT HEAD

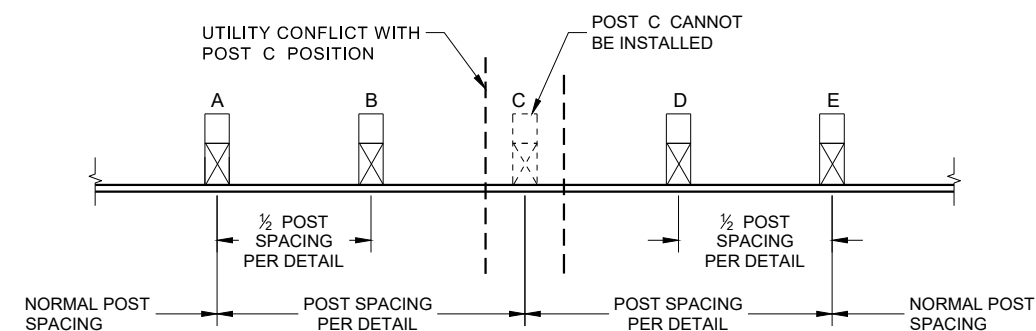


POST BOLT, SPLICE BOLT AND RECESS NUT

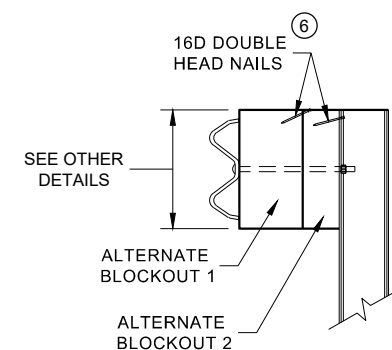
⑥ WHEN USING STEEL POST AD WOOD BLOCKOUTS, INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



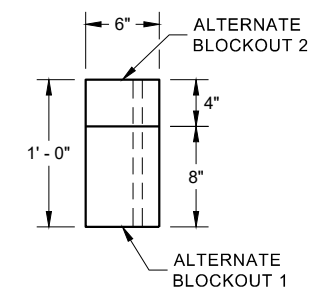
**PLAN VIEW
BEAM LAPPING DETAIL**



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION



SIDE VIEW

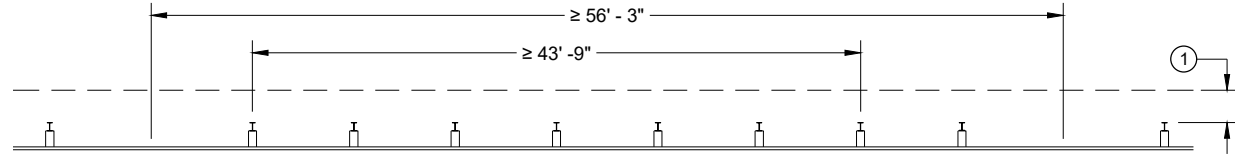


PLAN VIEW

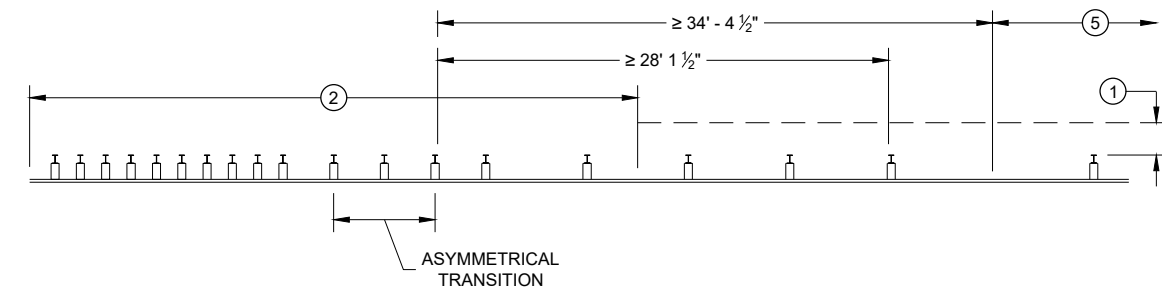
ALTERNATE WOOD BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

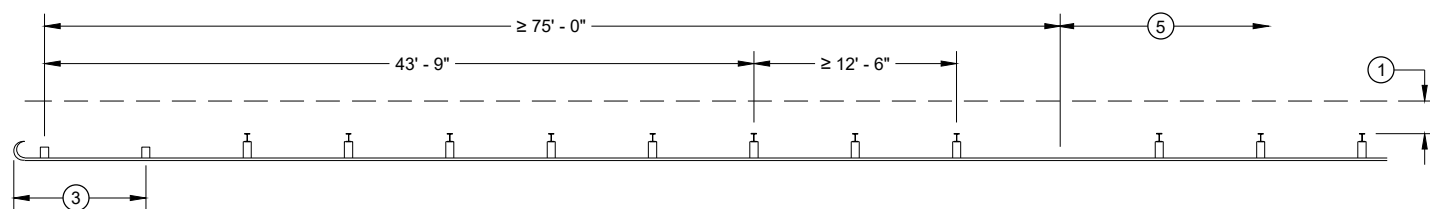
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 77



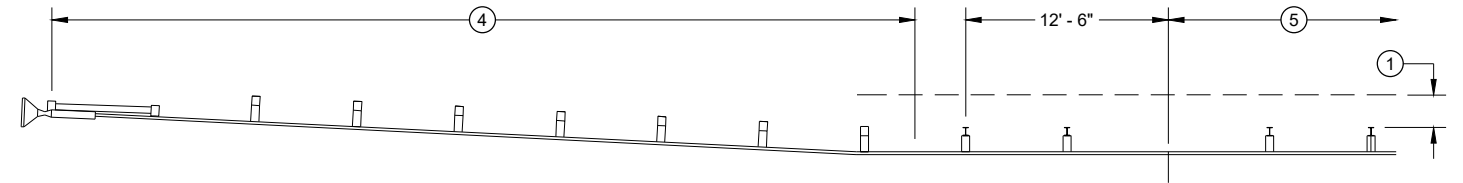
MISSING POST IN NORMAL BEAM GUARD RUN



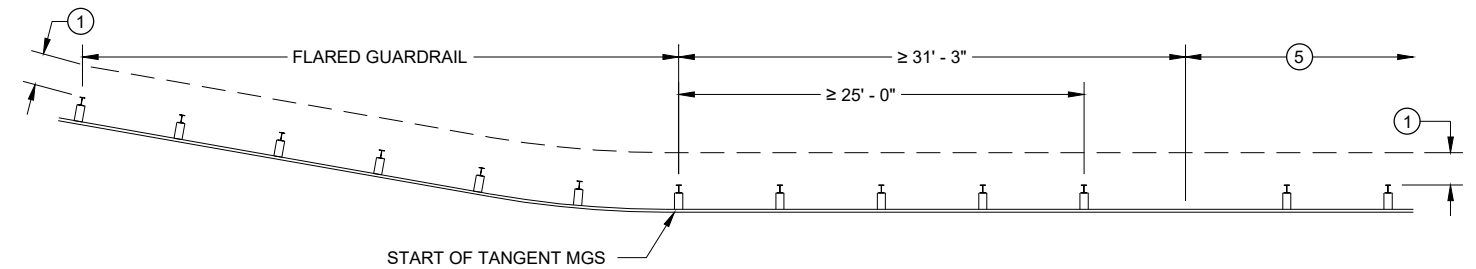
MISSING POST NEAR APPROACH THRIE BEAM TRANSITION



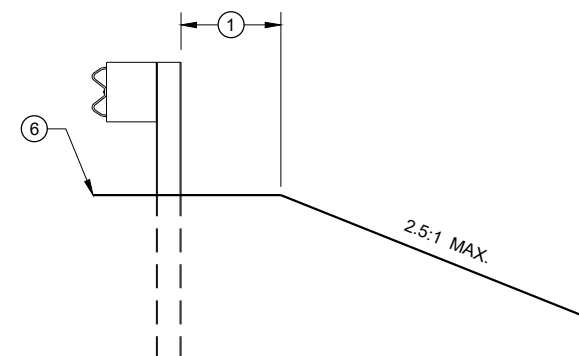
MISSING POST IN NORMAL BEAM GUARD RUN
NEAR TYPE 2 TERMINAL



MISSING POST IN NORMAL BEAM GUARD RUN NEAR EAT



MISSING POST IN NORMAL BEAM GUARD RUN
NEAR FLARED BEAM GUARD



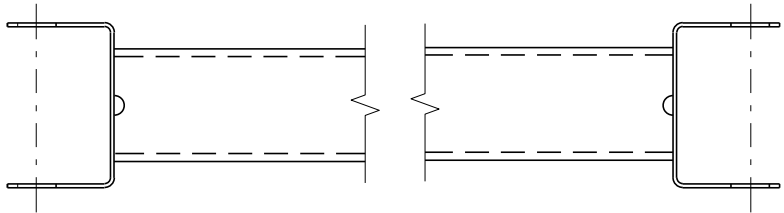
CROSS SECTION VIEW

- ① MINIMUM OF 2 FEET OF GRADING BEHIND POST.
- ② SEE SDD 14B45 FOR MORE DETAILS.
- ③ SEE SDD 14B47 FOR MORE DETAILS.
- ④ SEE SDD 14B44 FOR MORE DETAILS.
- ⑤ SEE MISSING POST IN NORMAL BEAM GUARD RUN FOR DISTANCE TO NEXT MISSING POST AND AREA FOR WELL DRAINED, COMPACTED SOILS.
- ⑥ SEE PLAN FOR SHOULDER DESIGN.

**MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL**

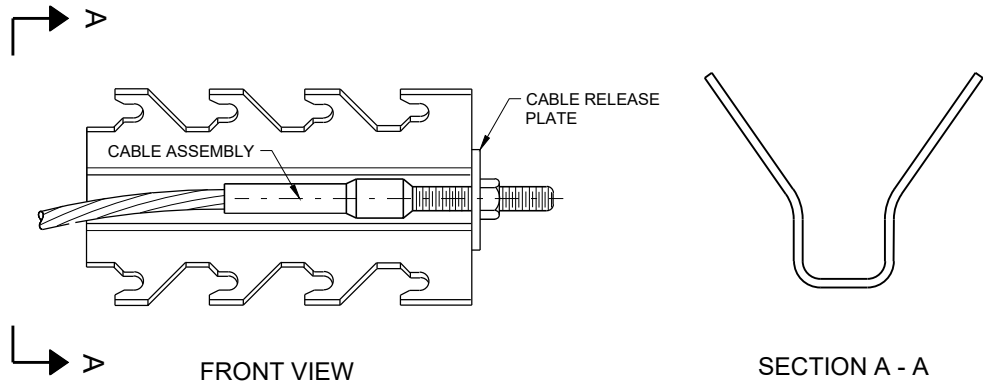
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR 78
FHWA

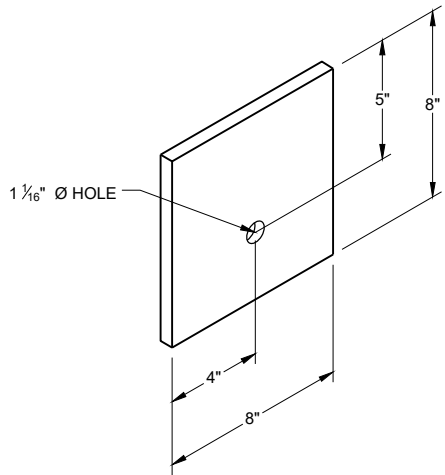


GENERIC GROUND STRUT^⑨ [Ⓔ]

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



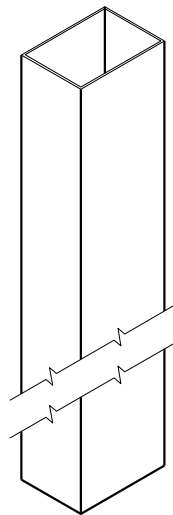
GENERIC ANCHOR CABLE BOX^⑨ [Ⓔ]



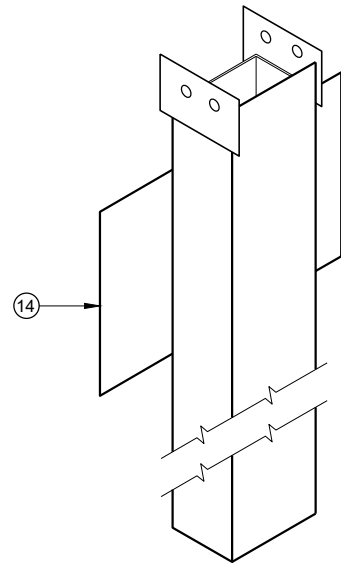
BEARING PLATE^⑥ [Ⓔ]

MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

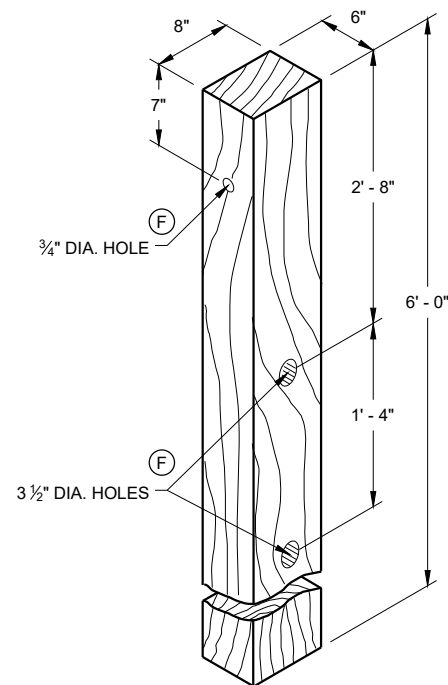
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



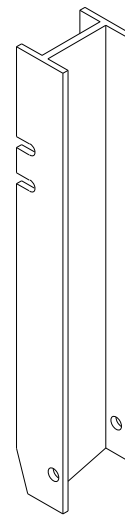
UPPER POST NO. 1 ⁽¹⁾ (E)



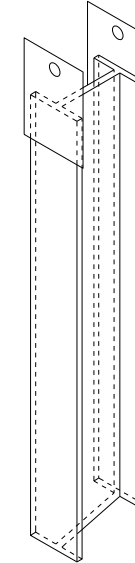
LOWER POST NO. 1 ⁽²⁾ (E)



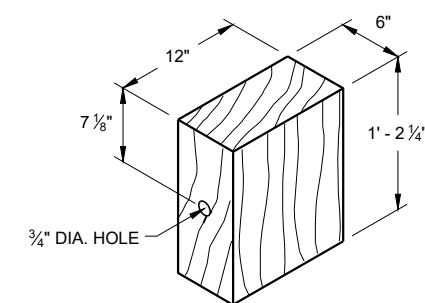
WOOD CRT POST ⁽³⁾ (E)
POSTS NUMBER 3-9



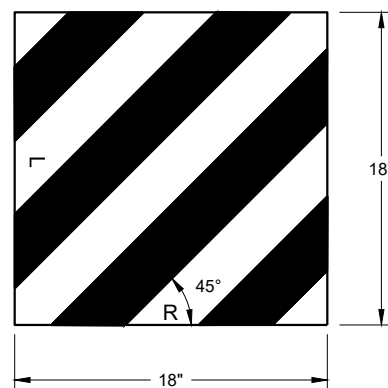
UPPER POST NO. 2 ⁽¹⁵⁾ (E)



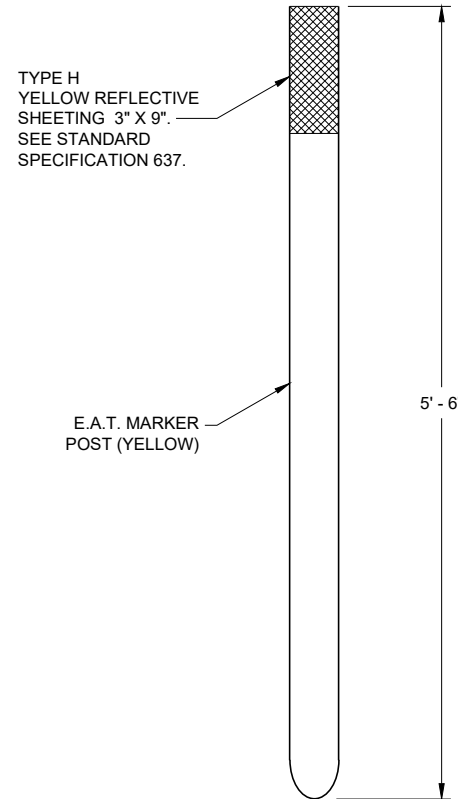
LOWER POST NO. 2 ⁽¹⁶⁾ (E)



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

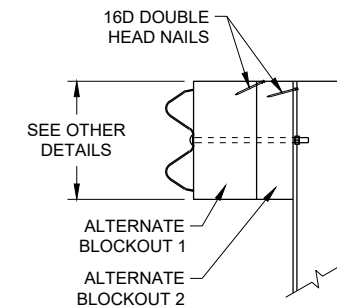


REFLECTIVE SHEETING DETAIL ^(E)



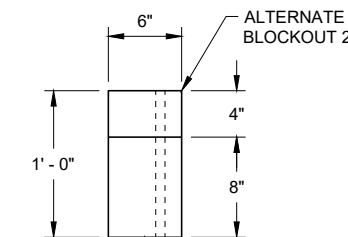
FRONT VIEW SIDE VIEW

E.A.T. MARKER POST ⁽¹³⁾



SIDE VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL



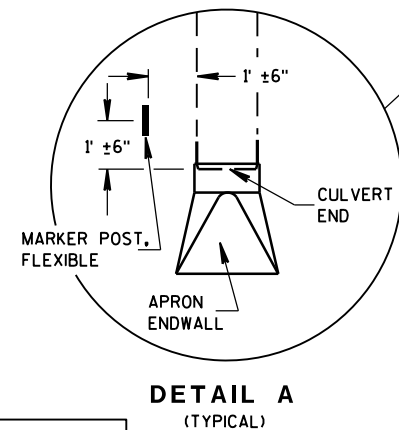
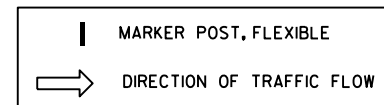
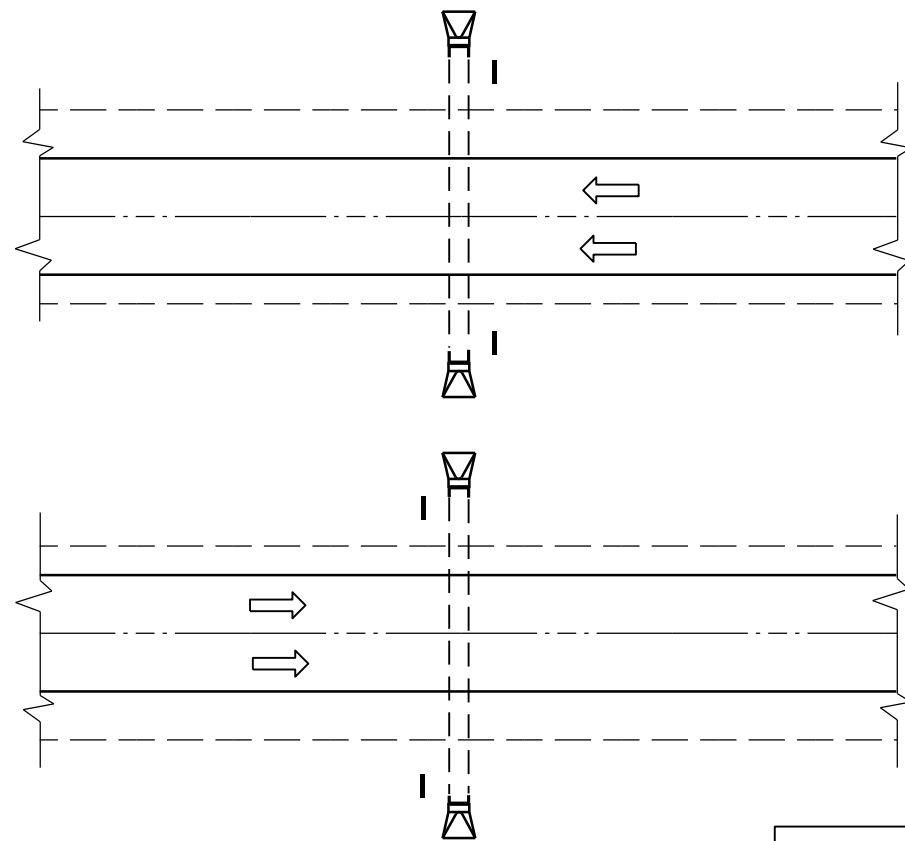
TOP VIEW

**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

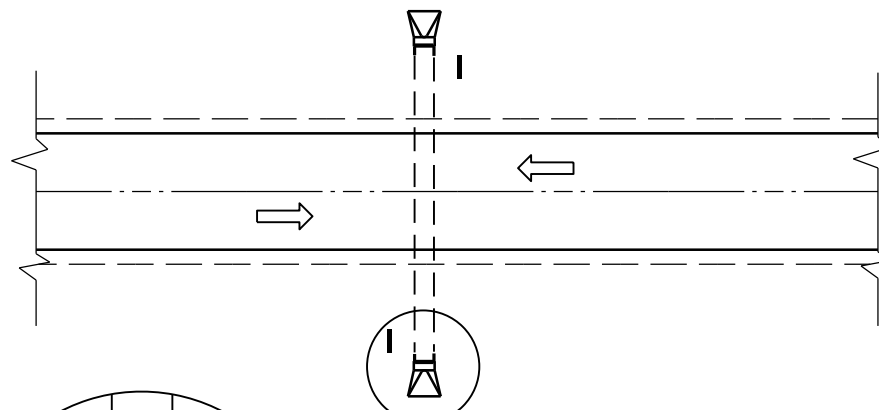
APPROVED
7/2018 DATE /S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT UNIT SUPERVISOR
FHWA 81

PLAN VIEW
DIVIDED HIGHWAY



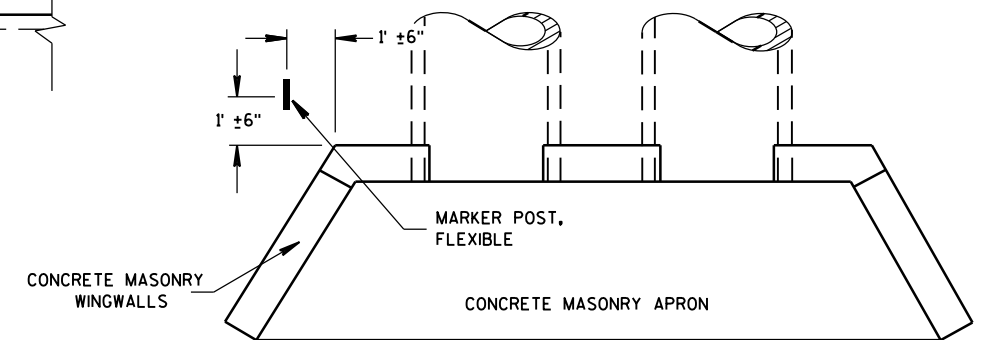
DETAIL A
(TYPICAL)

PLAN VIEW
UNDIVIDED HIGHWAY



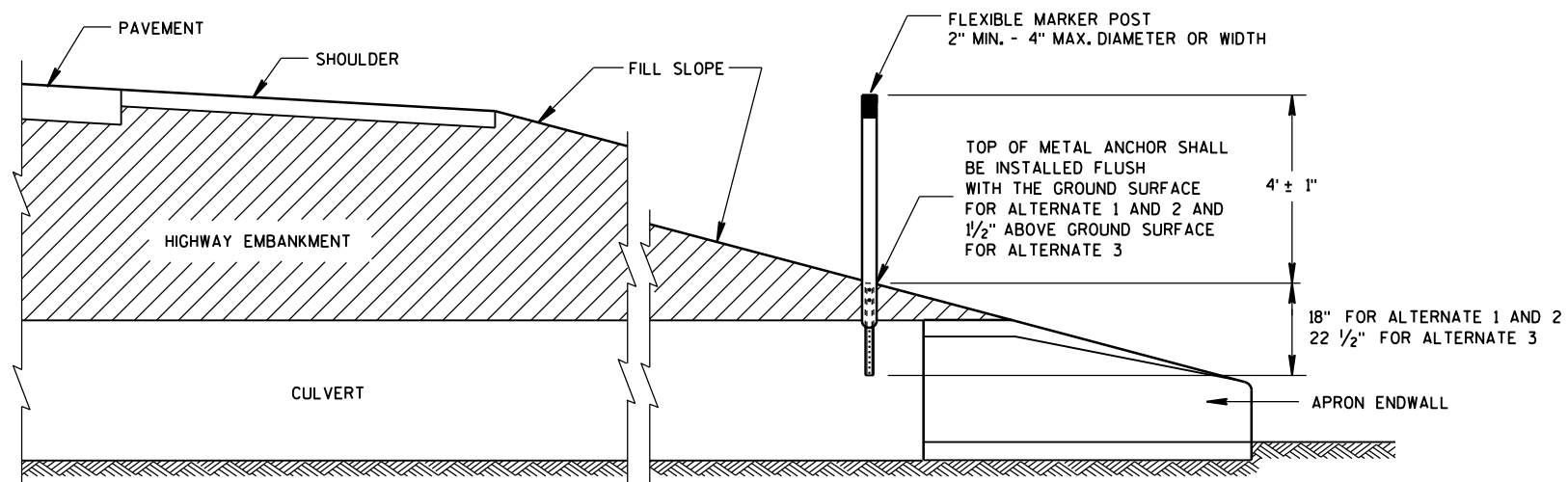
GENERAL NOTES

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

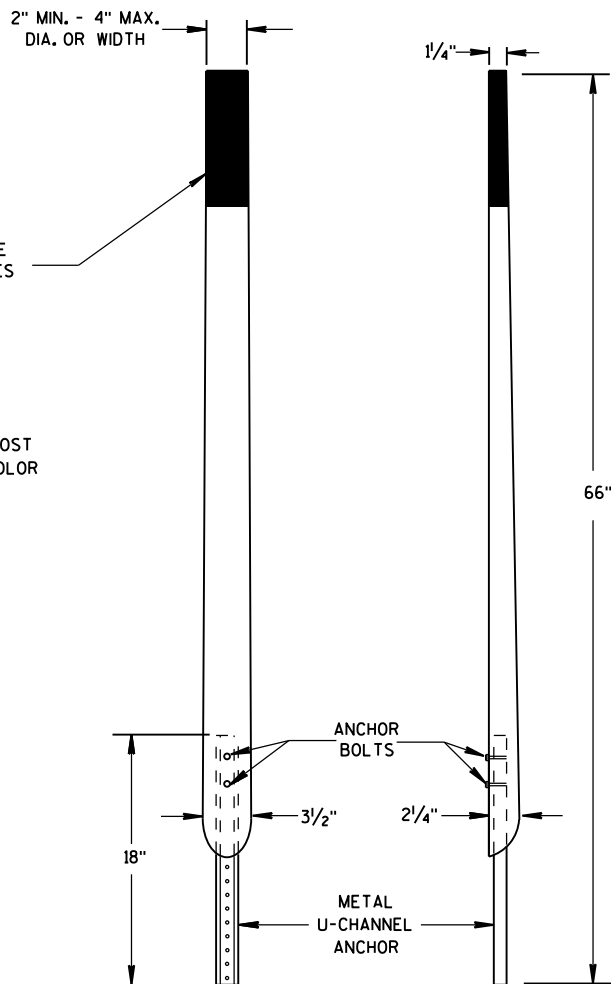
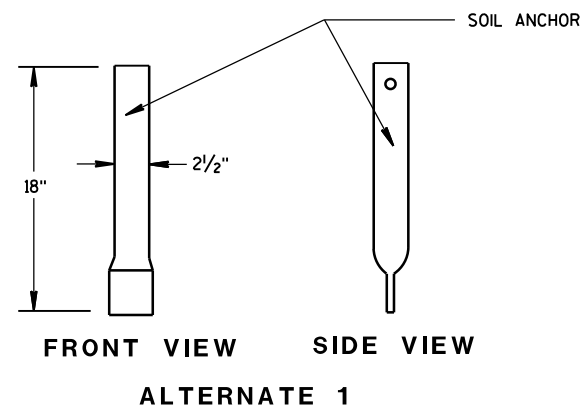
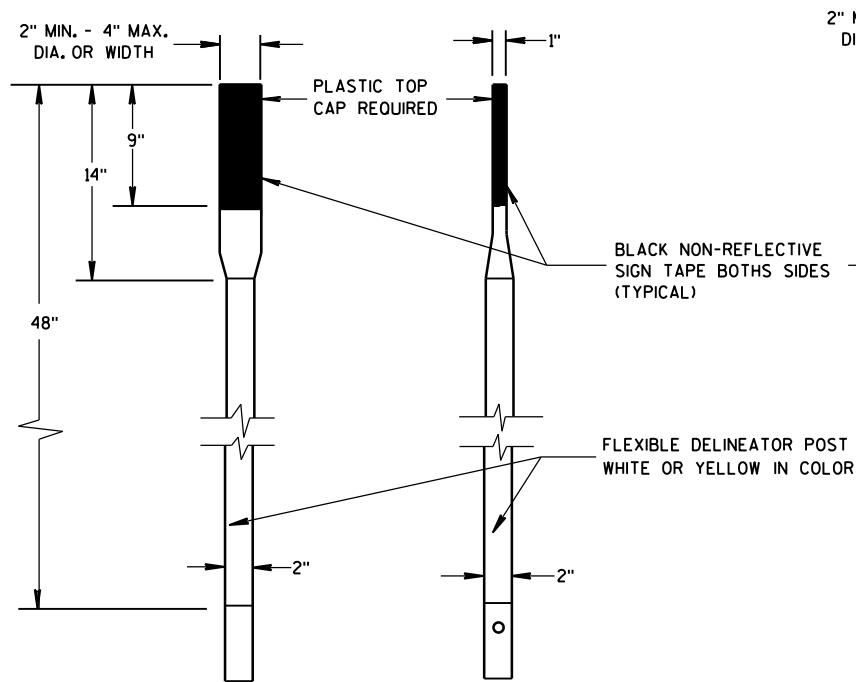
FLEXIBLE MARKER POST LOCATION



CROSS SECTION
FLEXIBLE MARKER POST

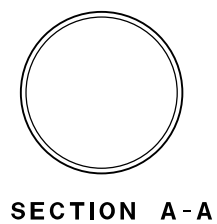
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

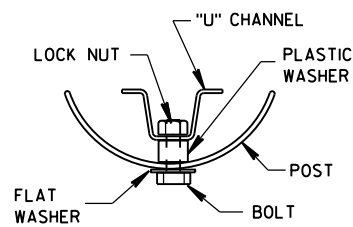
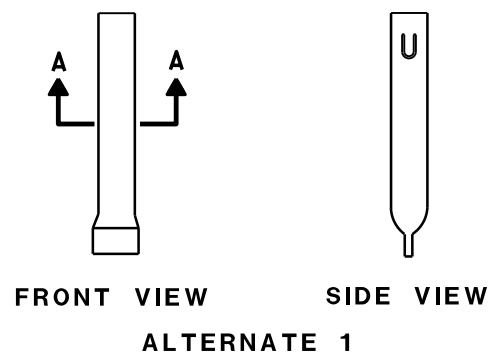


FRONT VIEW SIDE VIEW
ALTERNATE 2

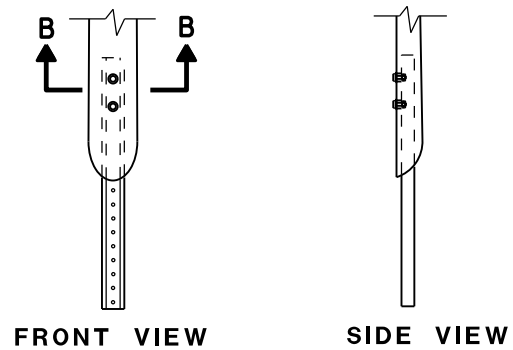
FLEXIBLE MARKER POSTS



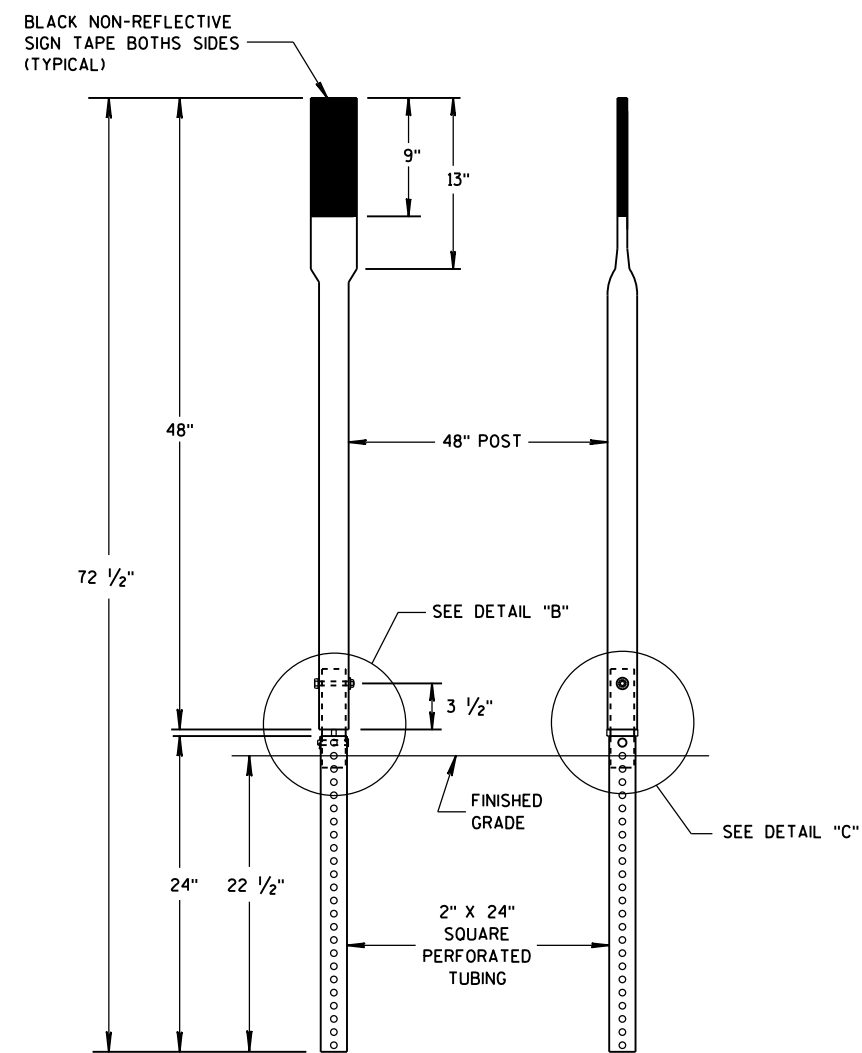
SECTION A-A



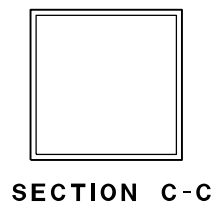
SECTION B-B



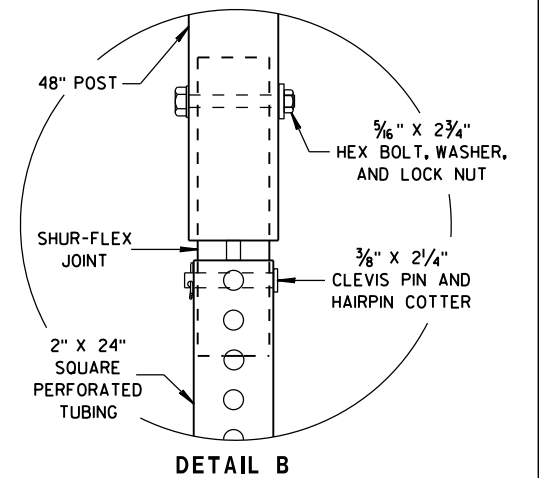
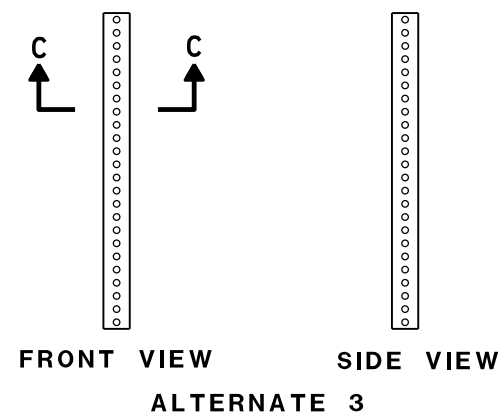
FRONT VIEW SIDE VIEW
ALTERNATE 2
FLEXIBLE MARKER POST ANCHORS



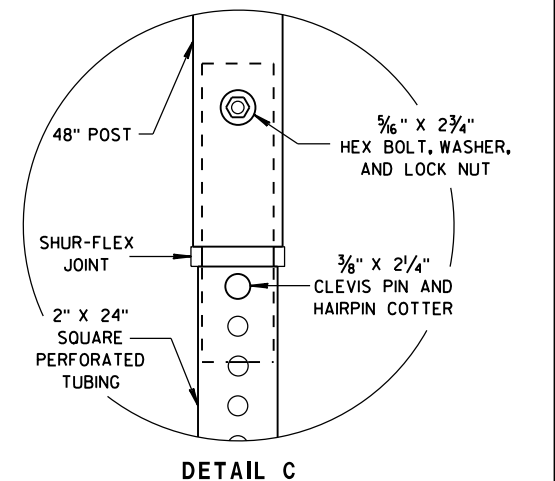
FRONT VIEW SIDE VIEW
ALTERNATE 3



SECTION C-C



DETAIL B



DETAIL C

FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

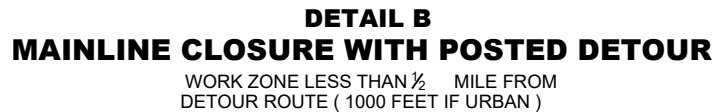
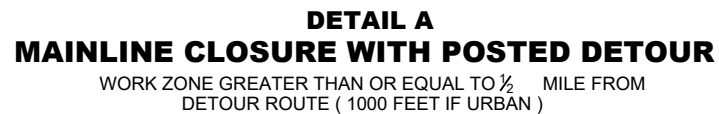
10/1/2012

DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER 83

IGN

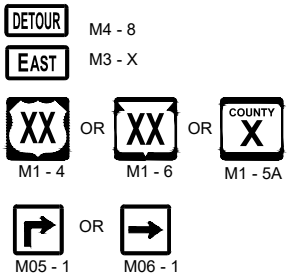


SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES ① THROUGH ⑦



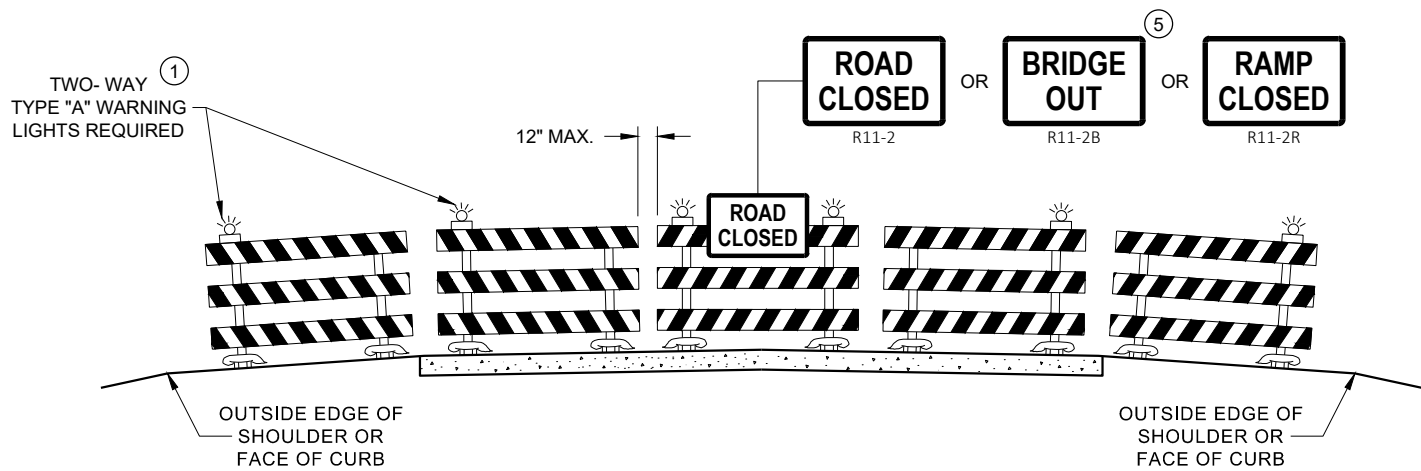
	SIGN ON PERMANENT SUPPORT
	TYPE III BARRICADE
	TYPE III BARRICADE WITH ATTACHED SIGN
	TYPE "A" WARNING LIGHT (FLASHING)
	WORK AREA
	FLAGS, 16" X 16" MIN. (ORANGE)



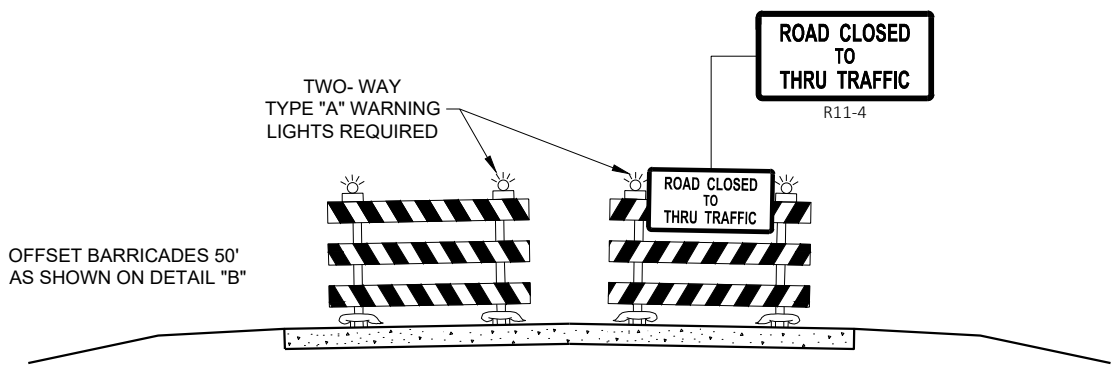
BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 _____ /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 84



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"

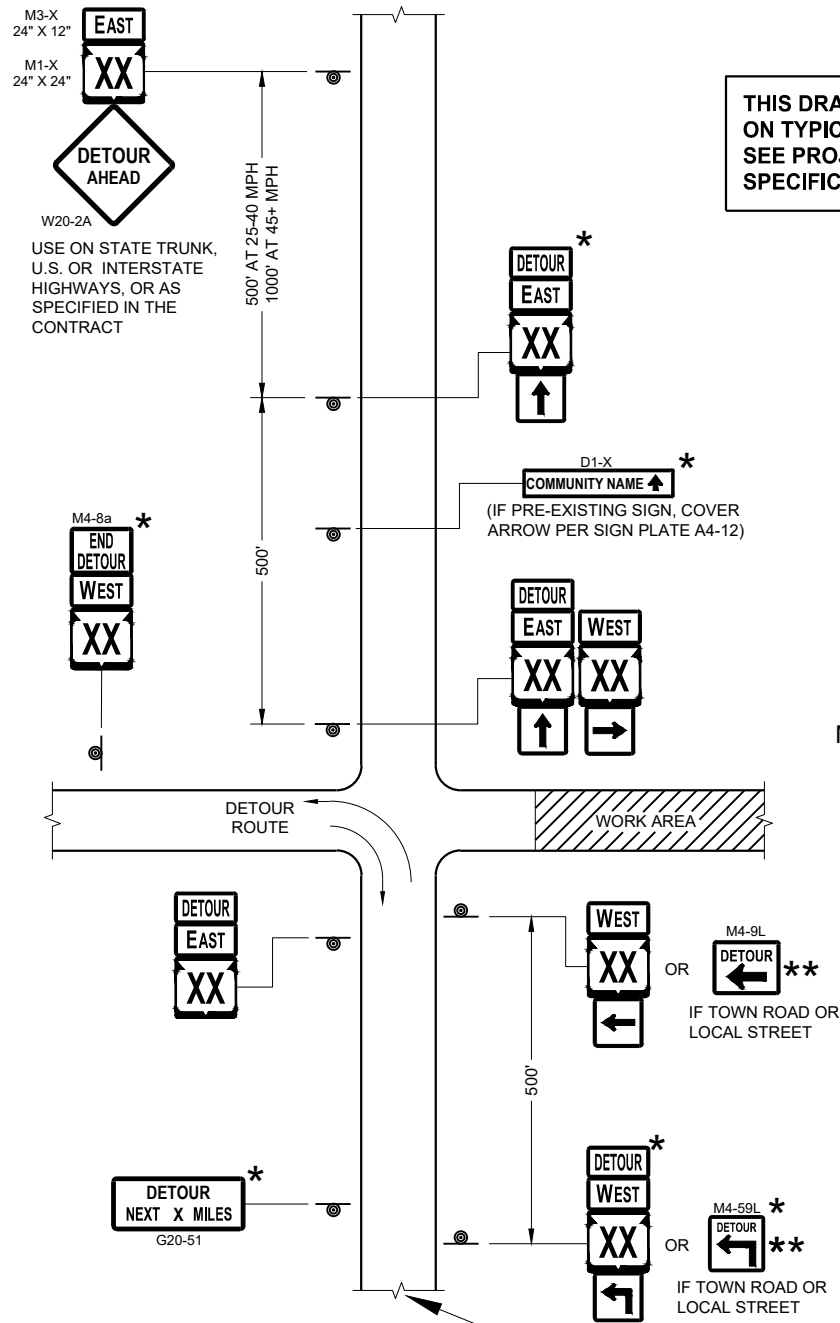
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS 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
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 85

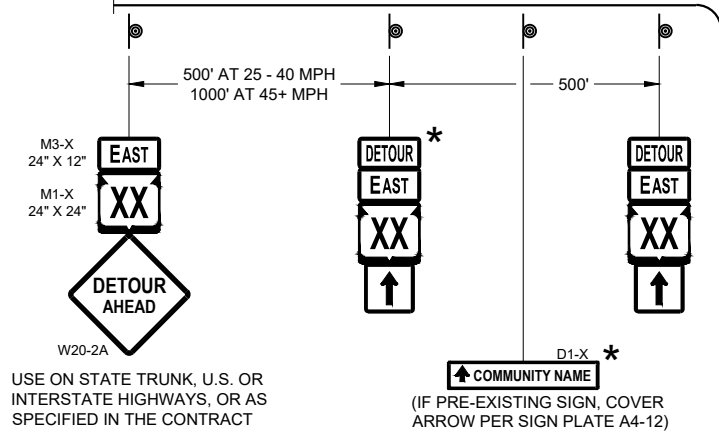
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SEE SPECIFIC PROJECT DETOUR
SIGNING DETAIL SHEETS AND
DETAIL A OR B ON SDD SHEET 15C02 - SHEET "a"

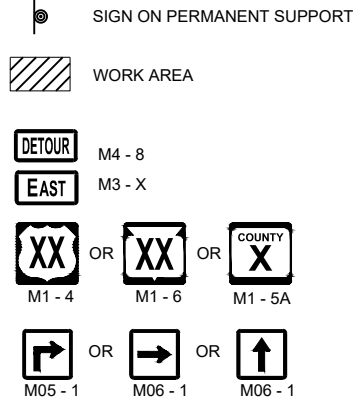
THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT



DETAIL F
DETOUR SIGNING

LEGEND



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.

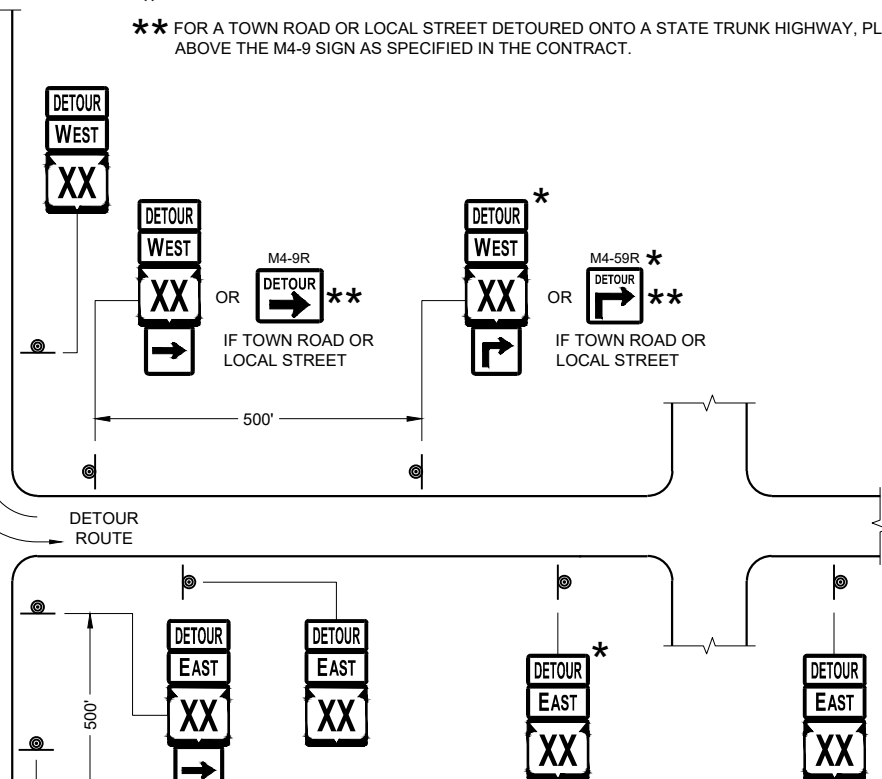
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

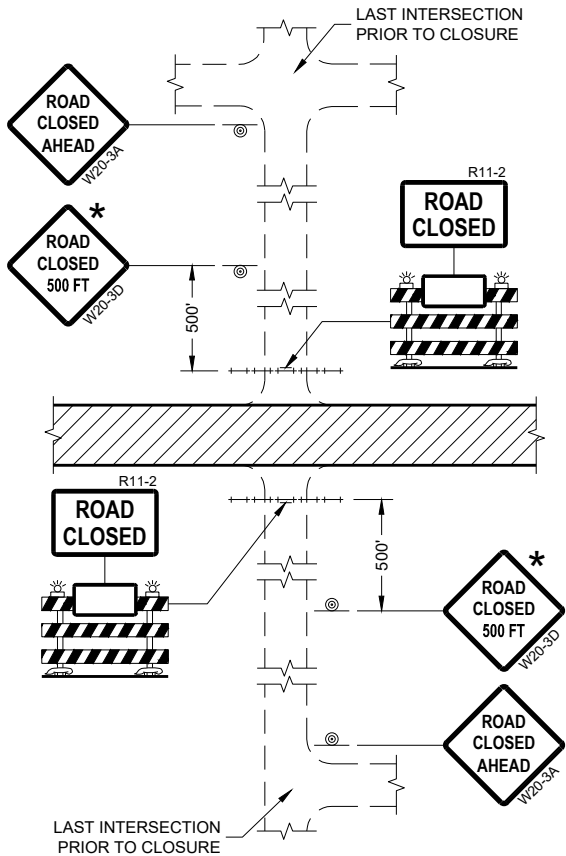


PLACE SIGNS BEYOND INTERSECTIONS
WITH STATE OR COUNTY TRUNK
HIGHWAYS OR AT 4 MILE MAXIMUM
SPACING (4 BLOCKS IF URBAN AREA)

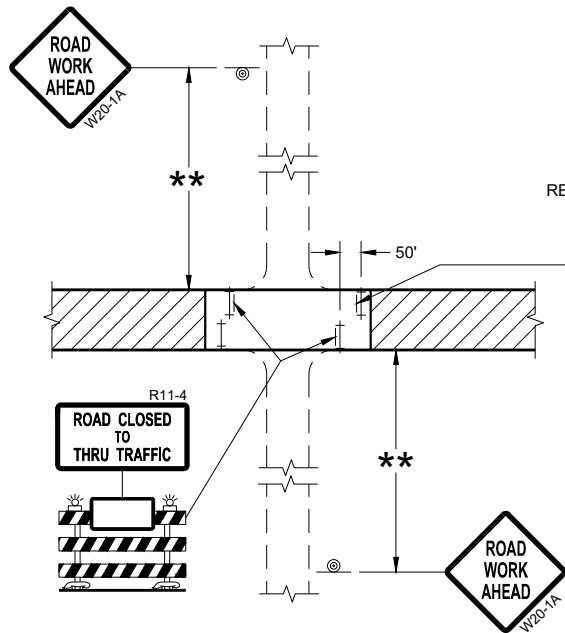
DETOUR SIGNING FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

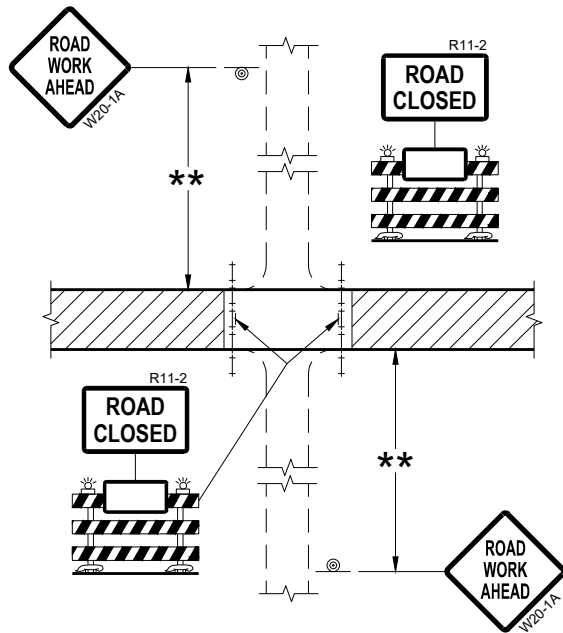
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February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 86
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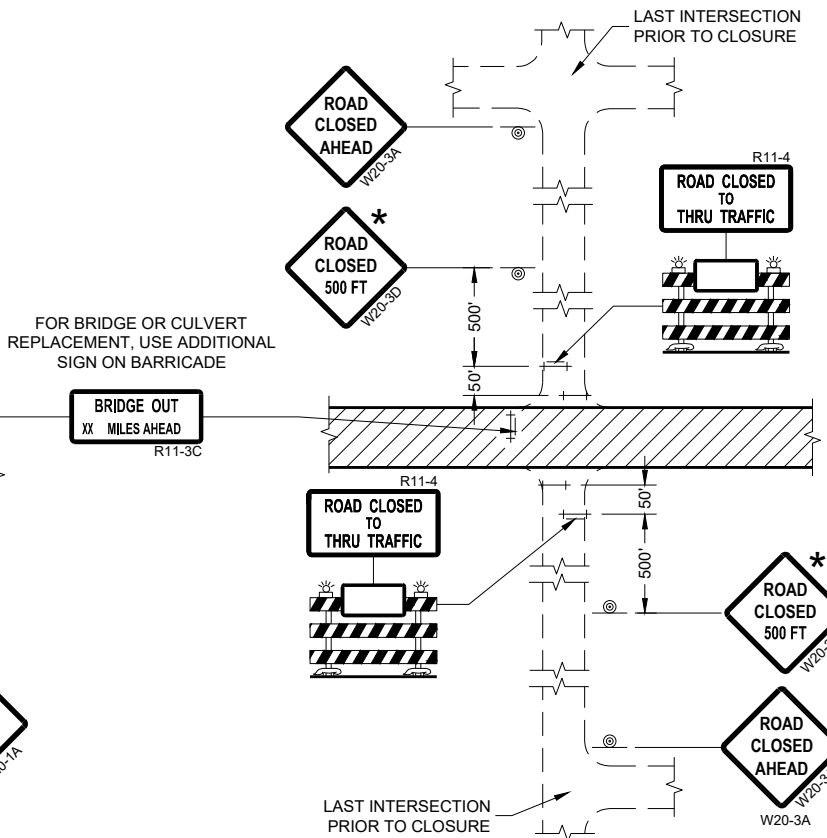
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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 87

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GENERAL NOTES

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

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

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

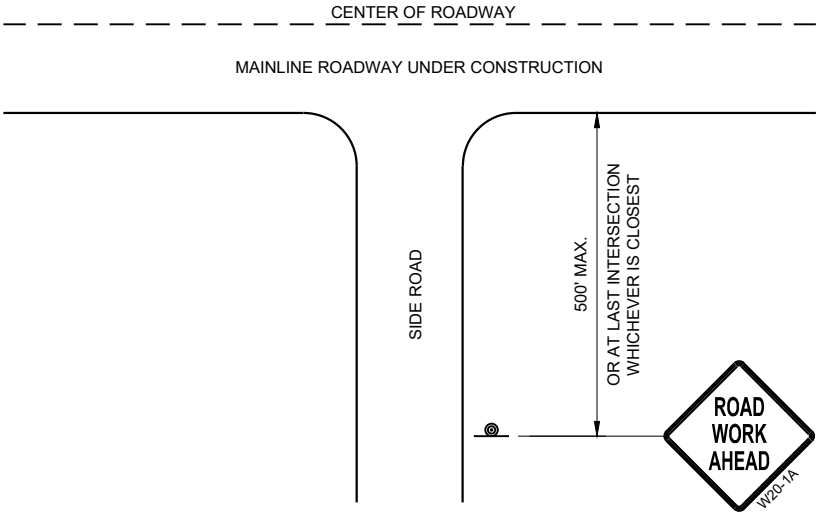
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IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS REESTABLISHED.

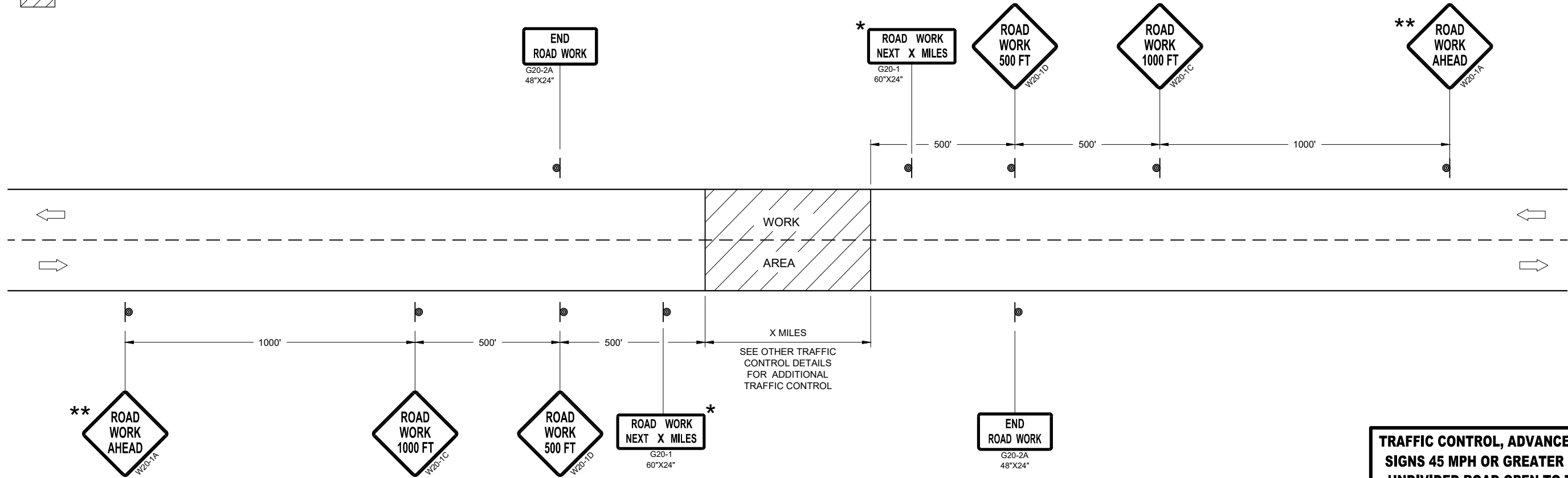
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAFFIC
-  WORK AREA



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

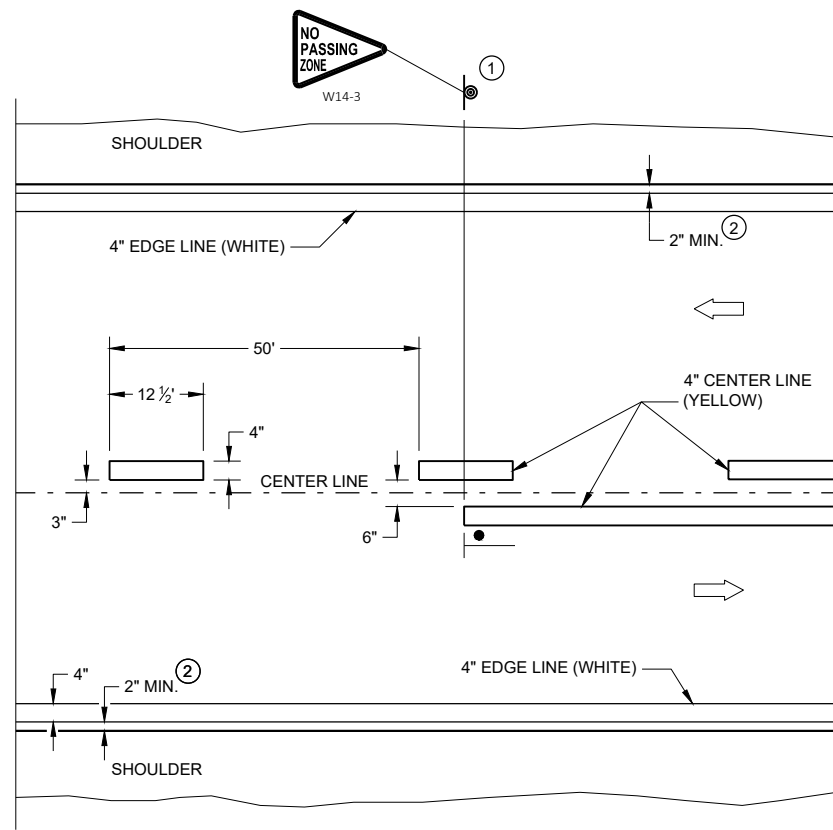


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

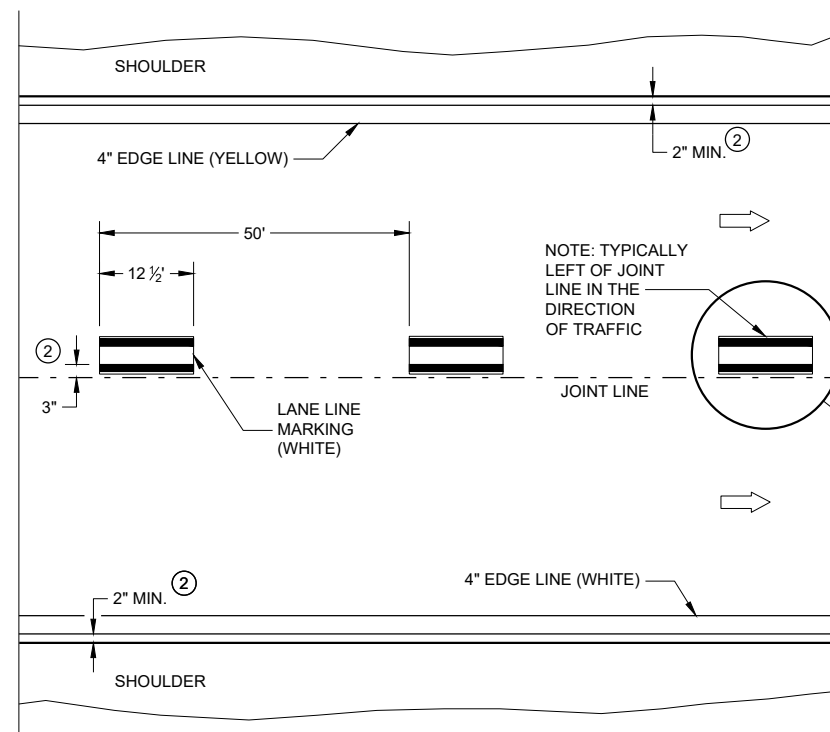
TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 45 MPH OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFICE

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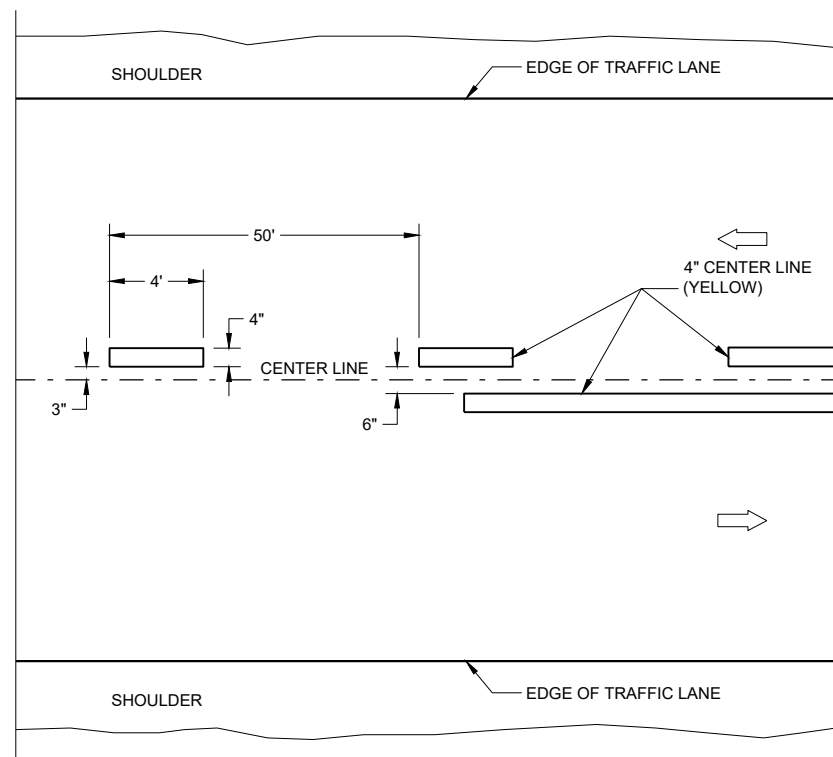


TWO WAY TRAFFIC

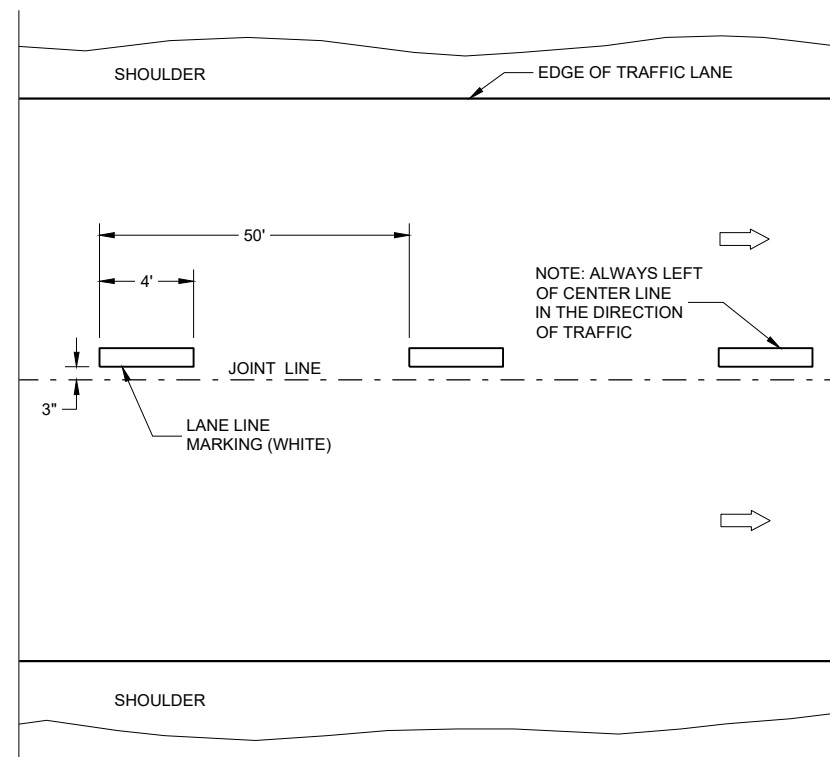


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

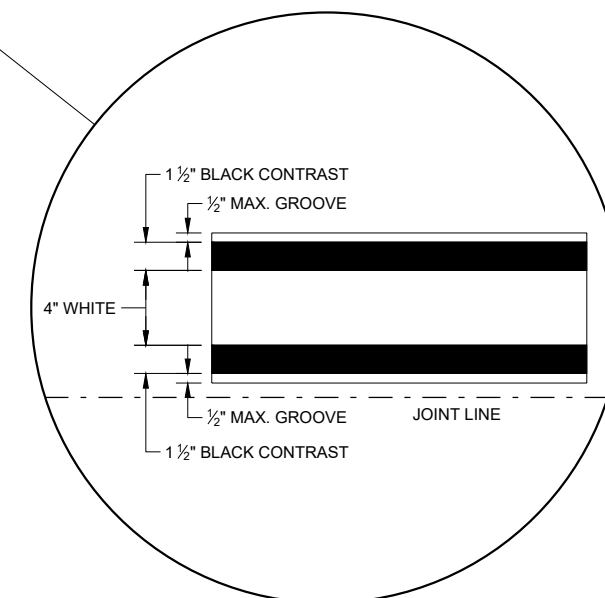
GENERAL NOTES

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 WITH 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



LONGITUDINAL MARKING (MAINLINE)

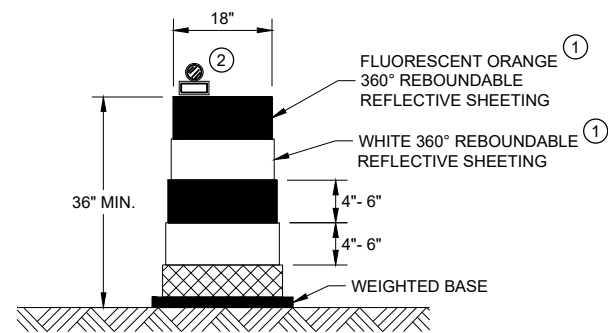
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

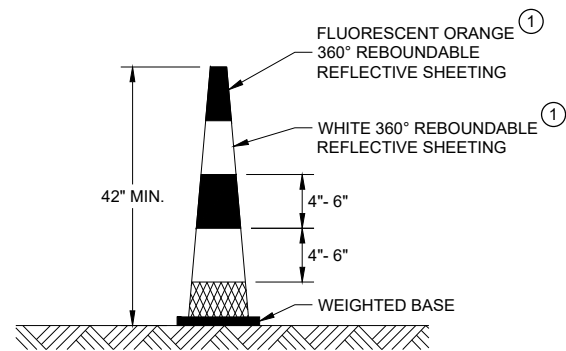
/S/ Matthew Rauch
STATEWIDE SIGNING AND MAPPING ENGINEER

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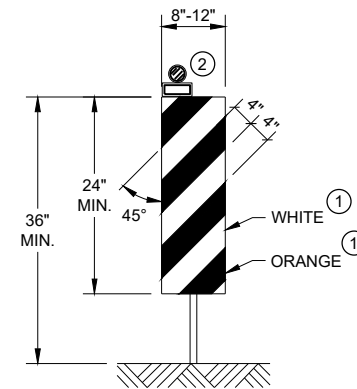


DRUM



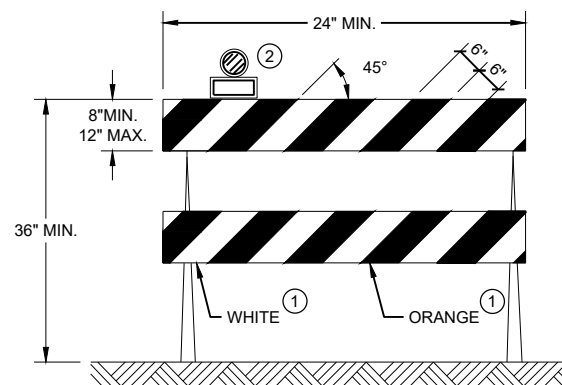
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



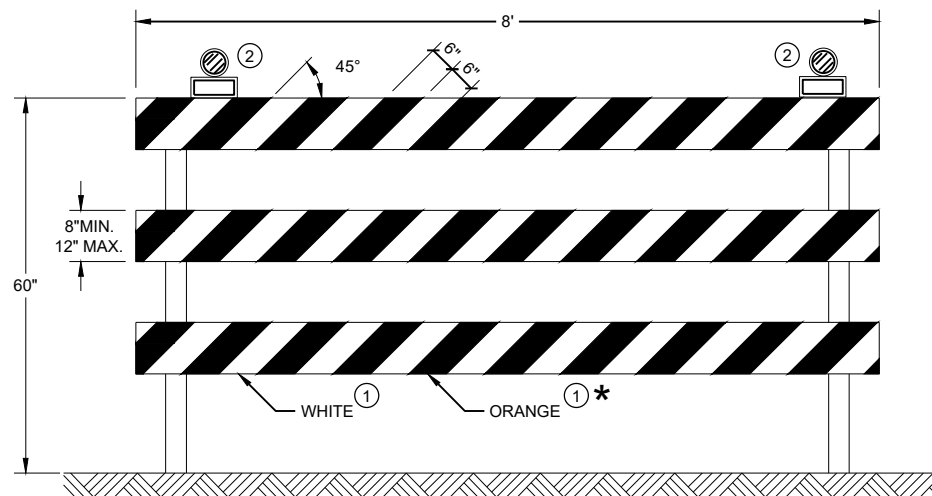
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2020 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 90
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LEGEND

-  SIGN ON PORTABLE OR PERMANENT SUPPORT
-  TEMPORARY PORTABLE RUMBLE STRIP ARRAY
-  DIRECTION OF TRAFFIC
-  WORK AREA
-  FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

GENERAL NOTES

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

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

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

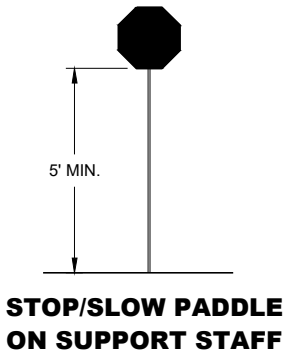
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND LOCATION OF ALL FLAGGERS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

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

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

FLAGGING

- FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.
- 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.
 - 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.
- EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR 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.

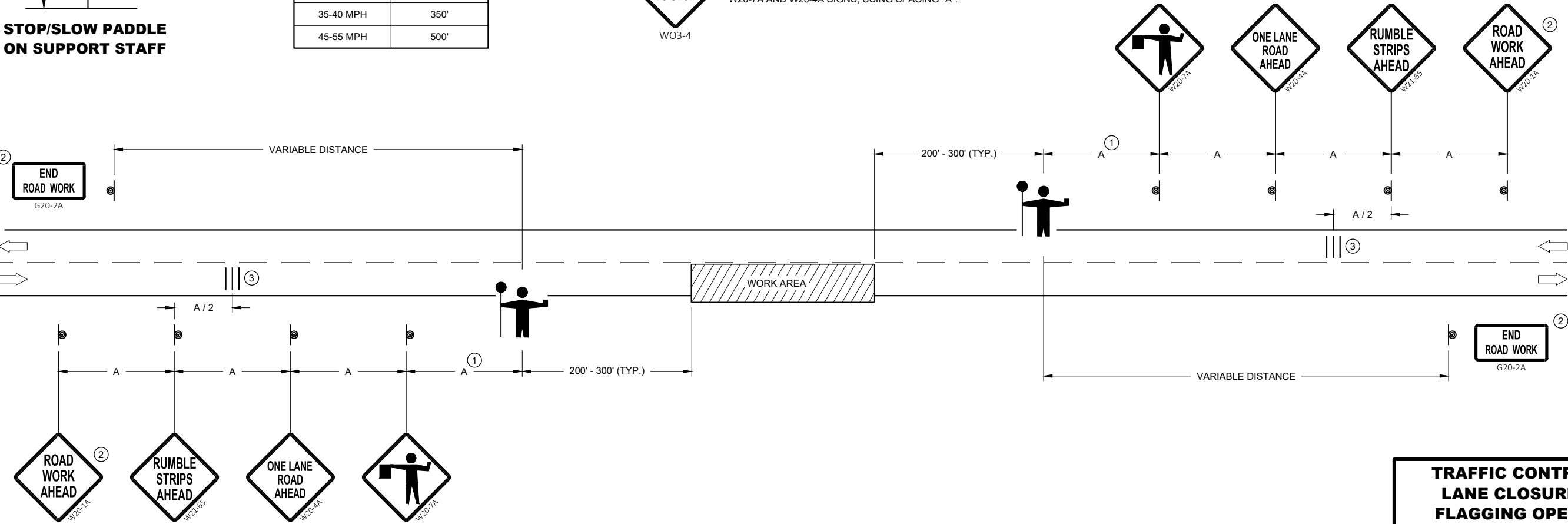


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



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".



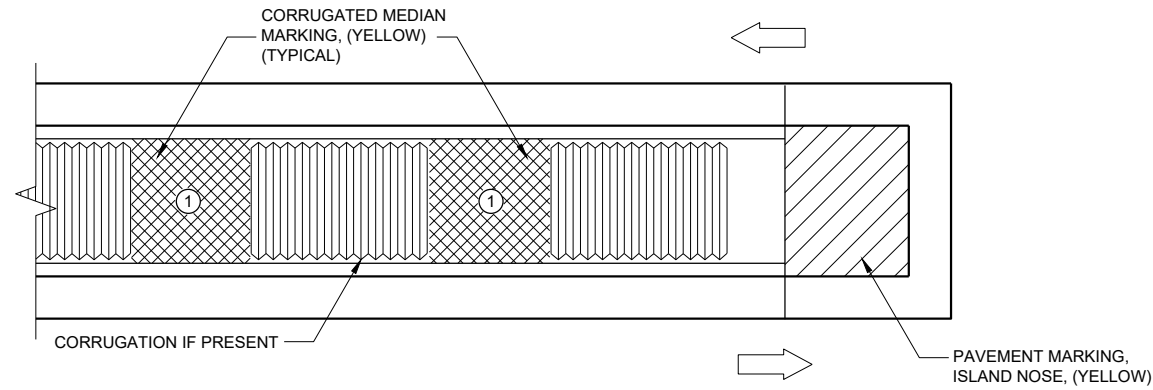
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

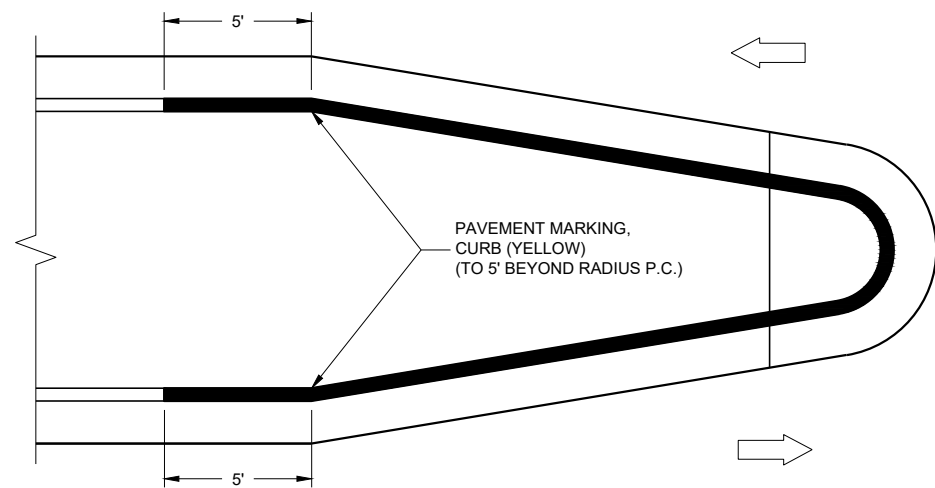
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May 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 91

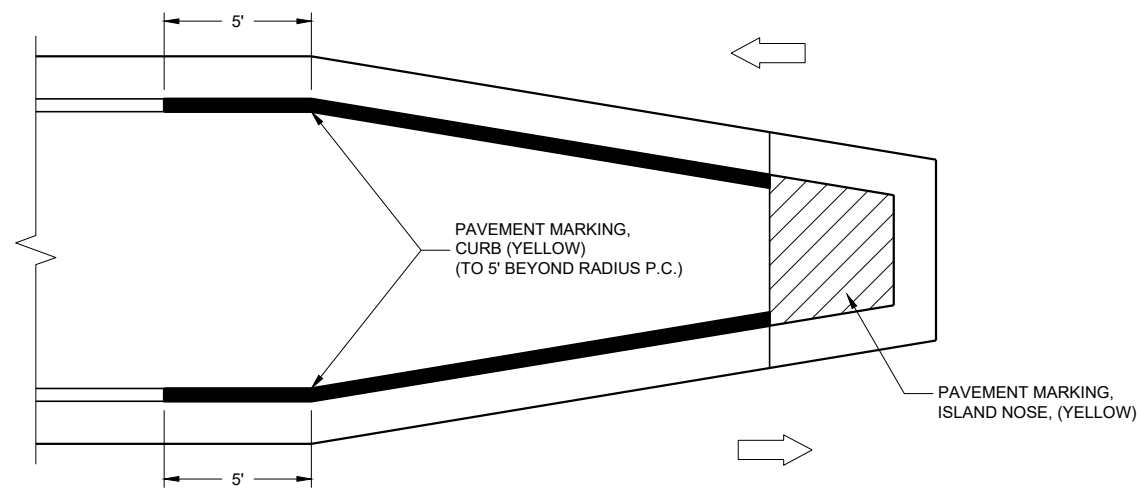
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MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

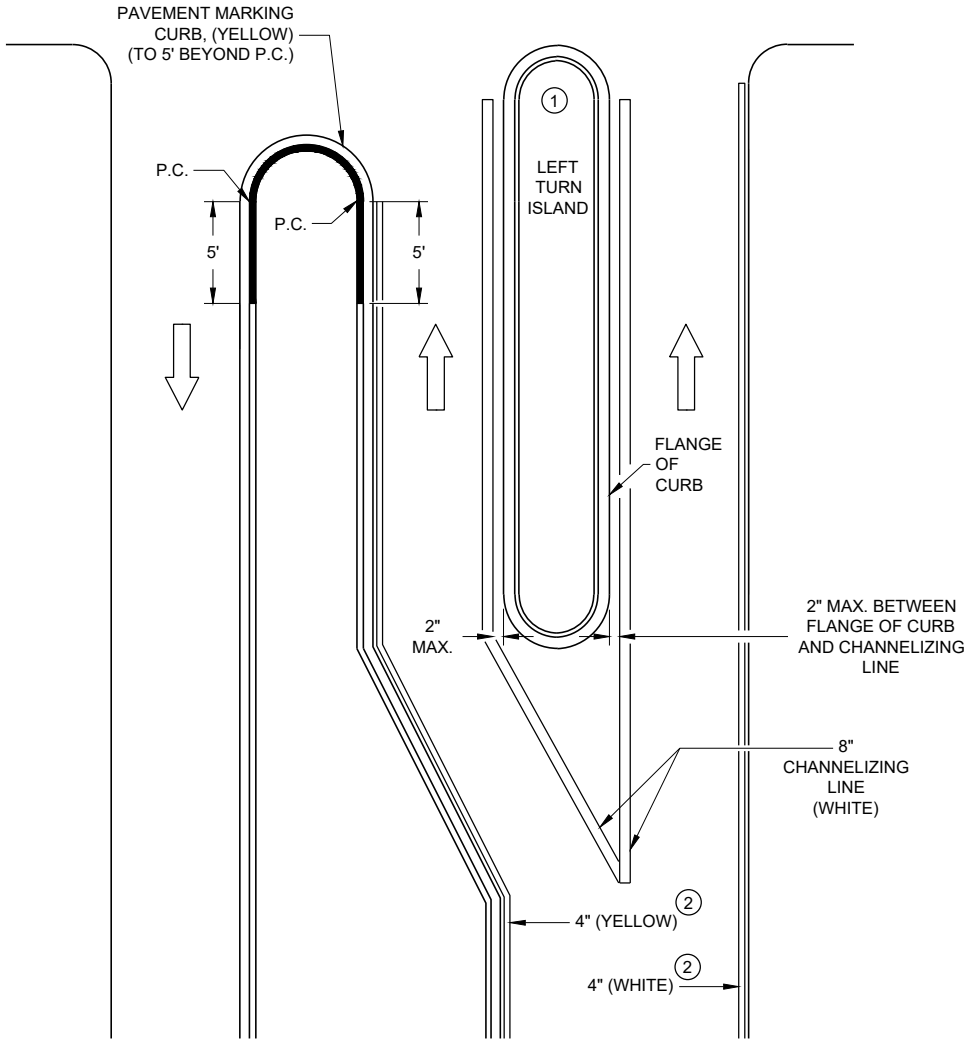
- ISLAND NOSE MARKING
- CURB MARKING
- CORRUGATED MEDIAN MARKING
- DIRECTION OF TRAVEL

**PAVEMENT MARKINGS,
MEDIAN ISLAND NOSE**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



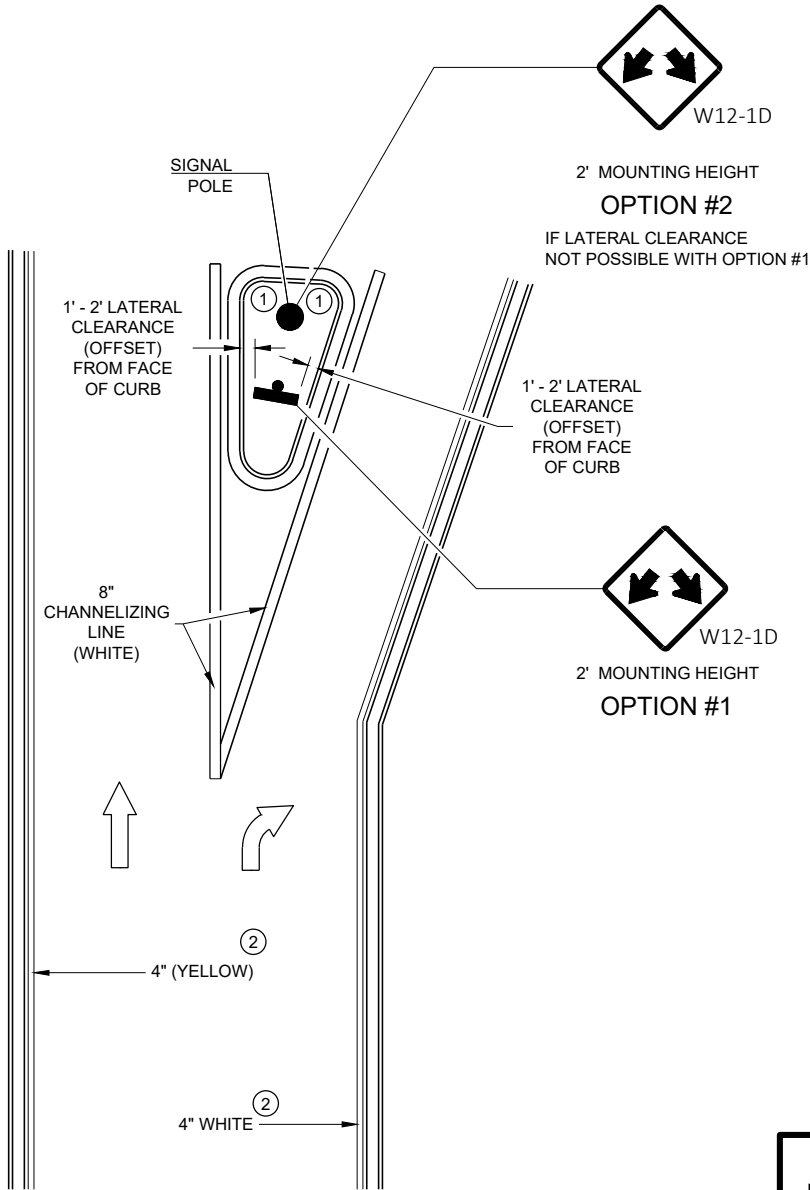
LEFT TURN & MEDIAN ISLAND

GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.
SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

- ① MARK CURB NOSES YELLOW.
- ② MARK ACCORDING TO TABLE.

➡ DIRECTION OF TRAVEL



RIGHT TURN ISLAND

MEDIAN PAVEMENT MARKINGS, DOUBLE ARROW WARNING SIGN PLACEMENT

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LEGEND

- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

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

ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.

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

DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

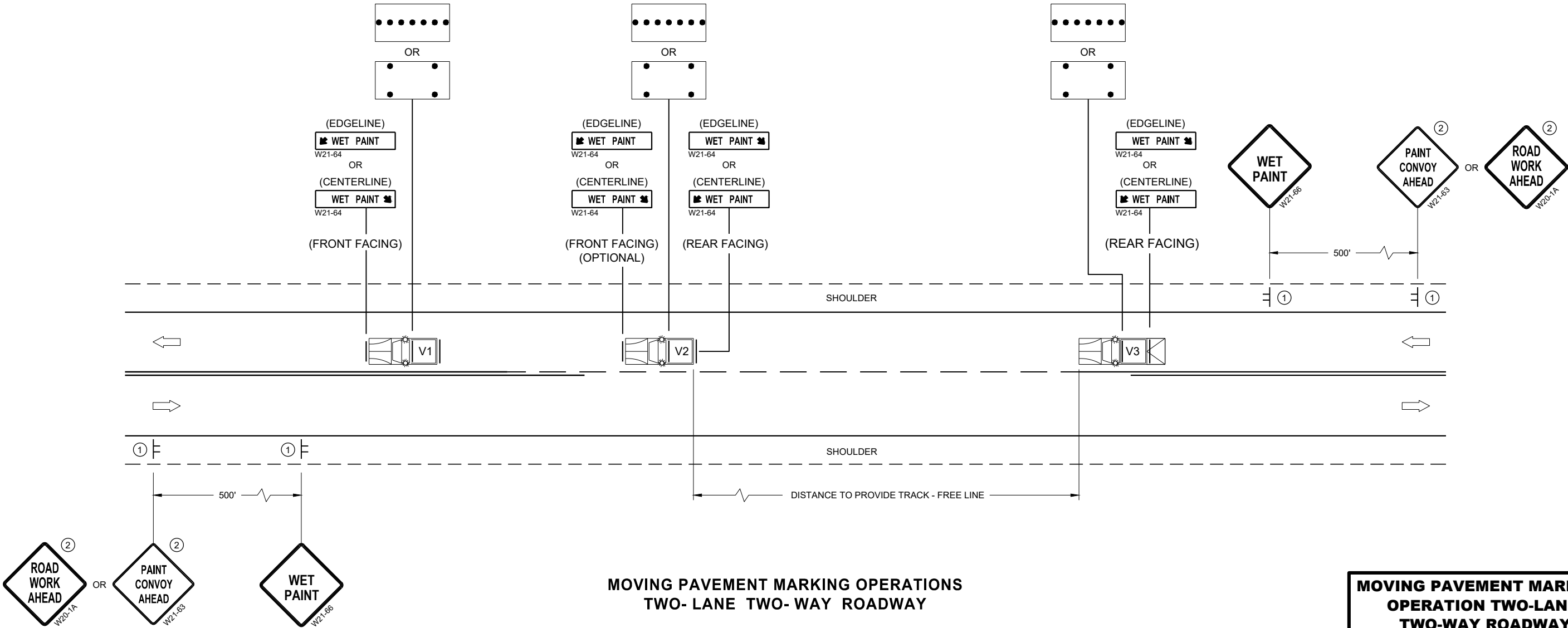
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.

CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

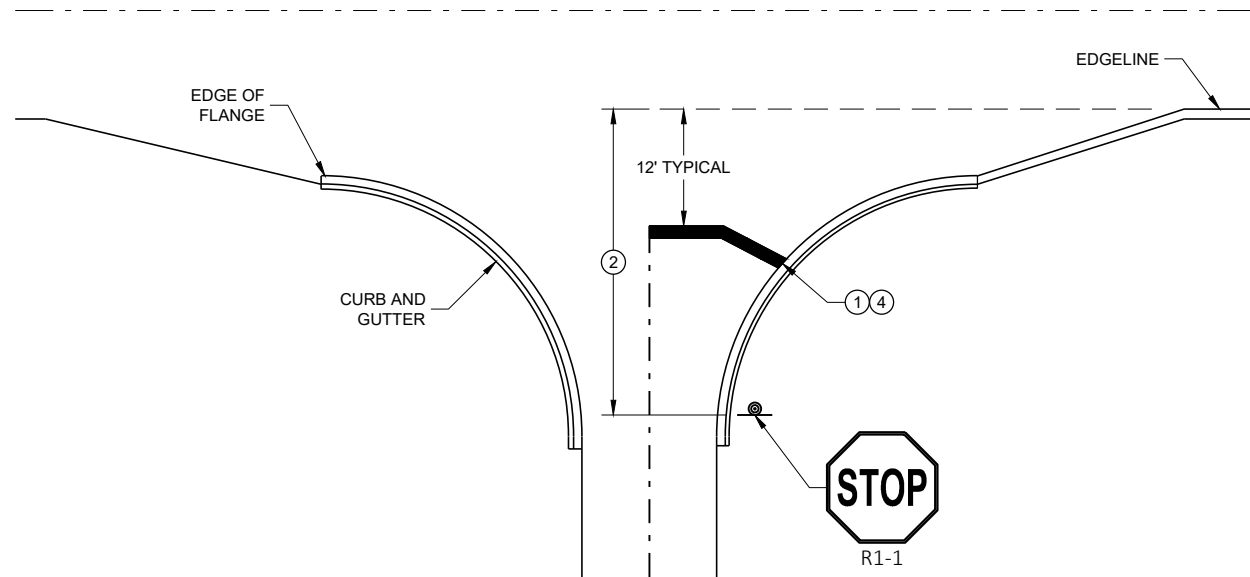
- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



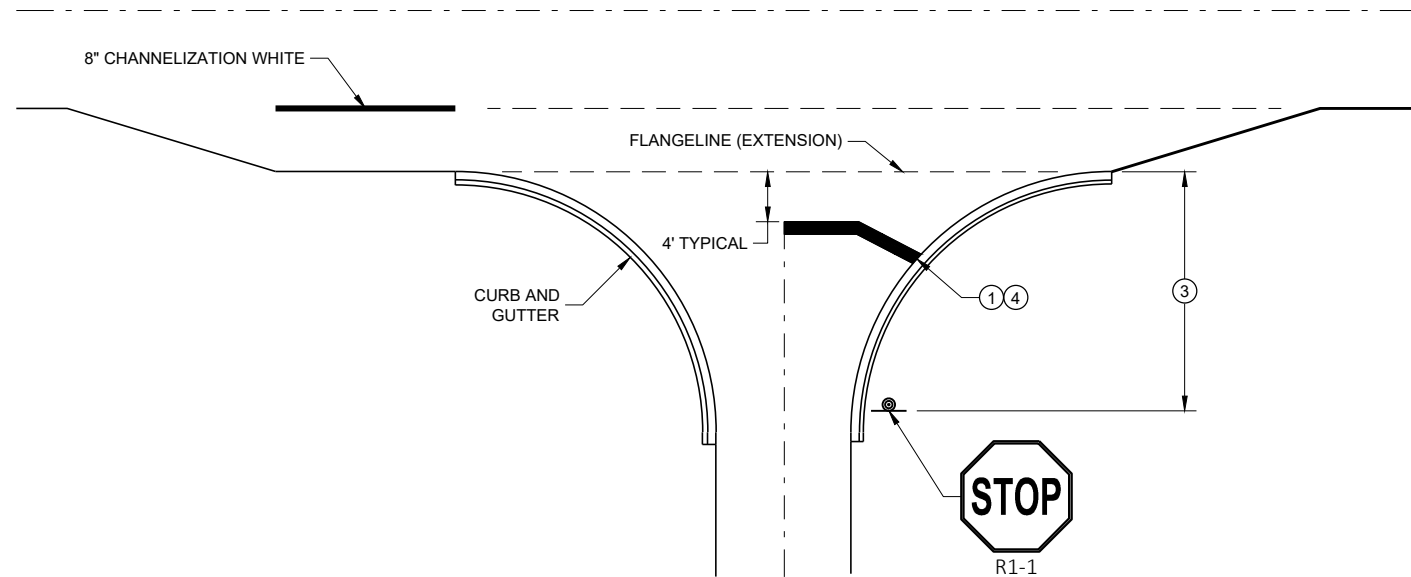
MOVING PAVEMENT MARKING
OPERATION TWO-LANE
TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

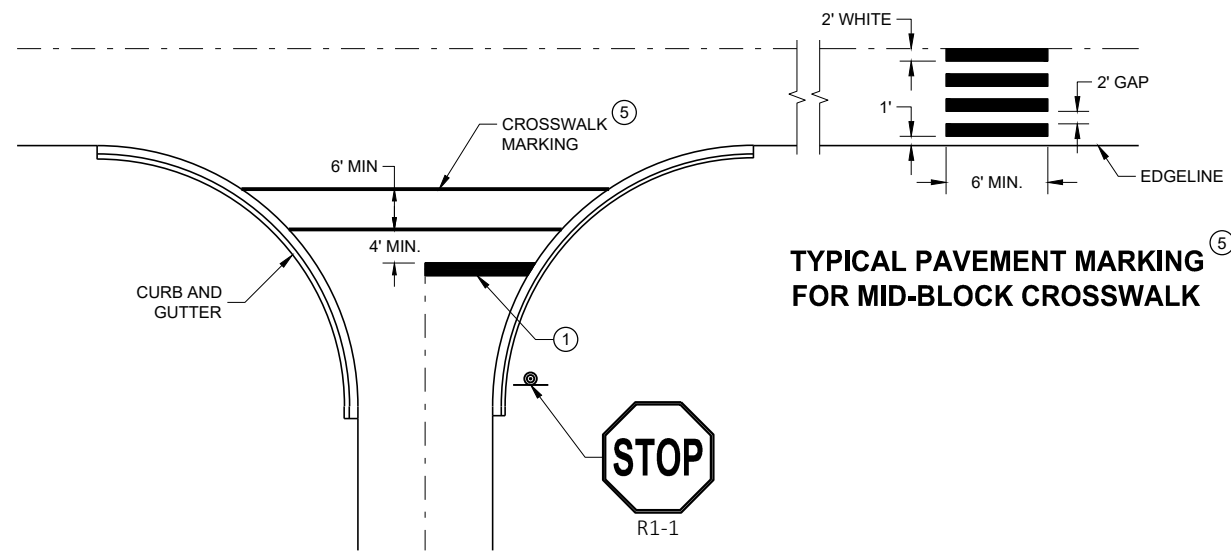
APPROVED
November 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 94
FHWA



TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER

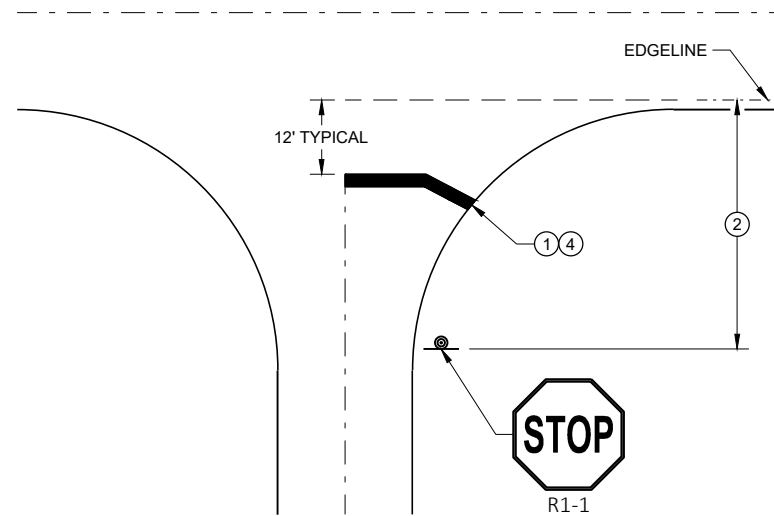


TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR
SIDEROADS WITH CROSSWALK MARKING

TYPICAL PAVEMENT MARKING
FOR MID-BLOCK CROSSWALK



TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER

GENERAL NOTES

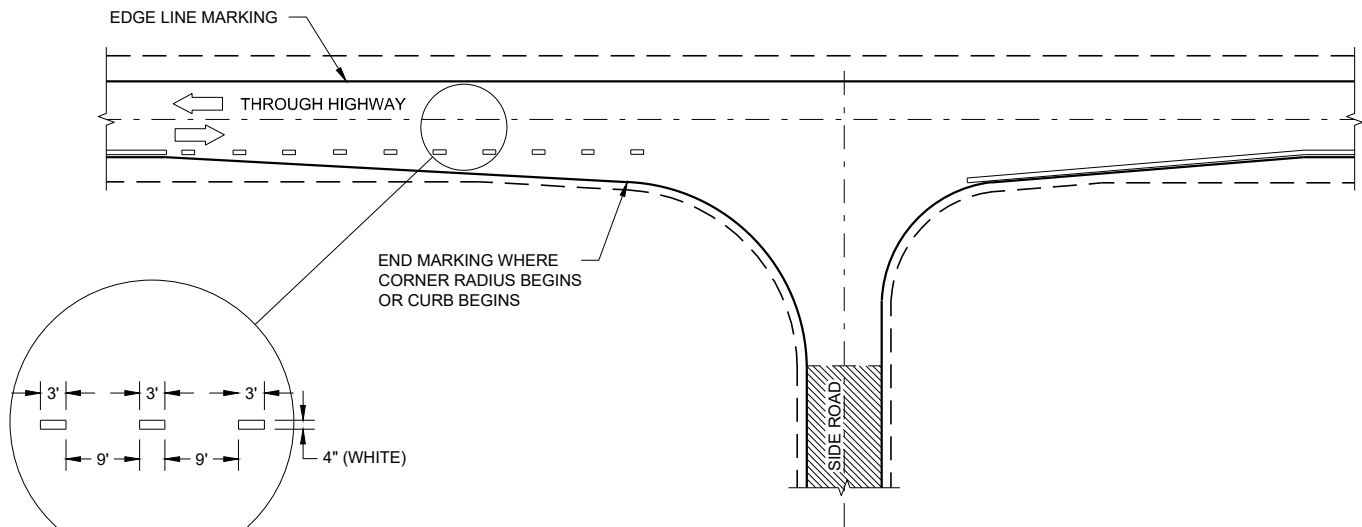
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.

- 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 EDGE LINE.
- 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.

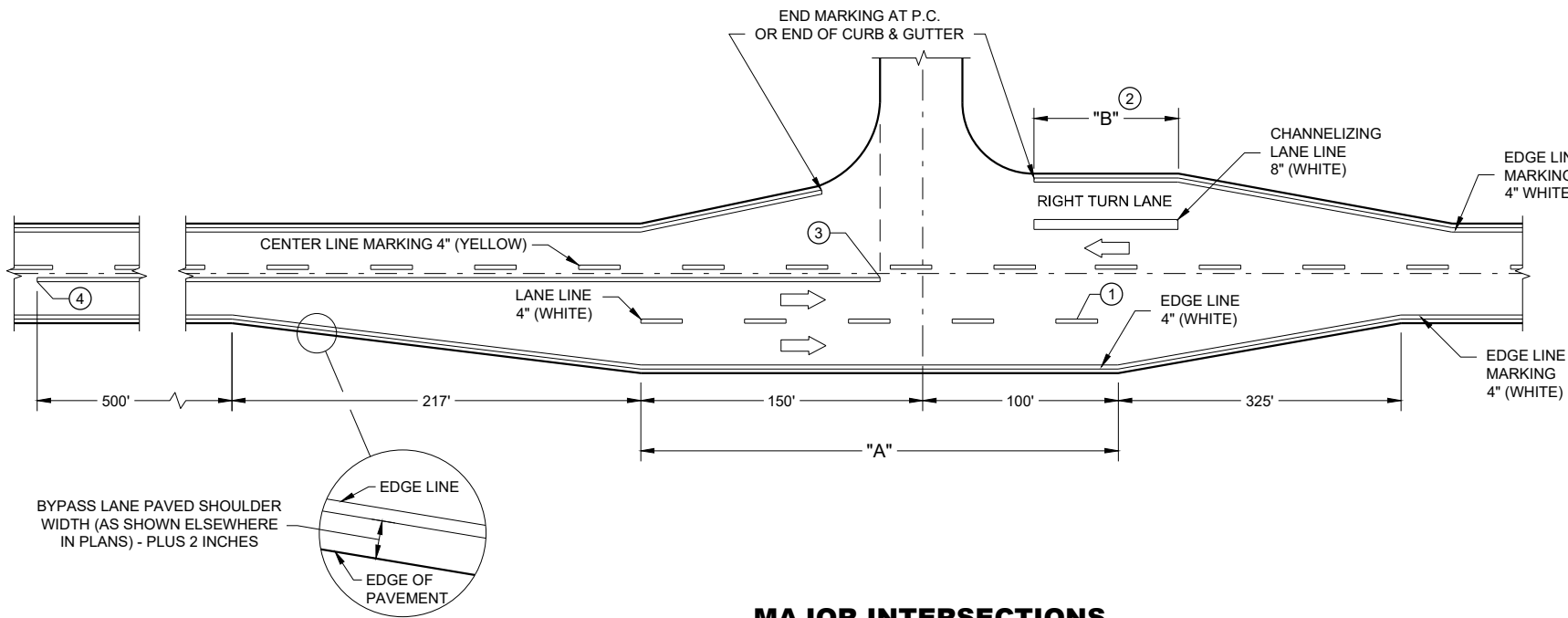
STOP LINE AND CROSSWALK
PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 /S/ Matthew Rauch
DATE STATE SIGNING AND MAP ENGINEER 95
FHWA



MINOR INTERSECTION



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

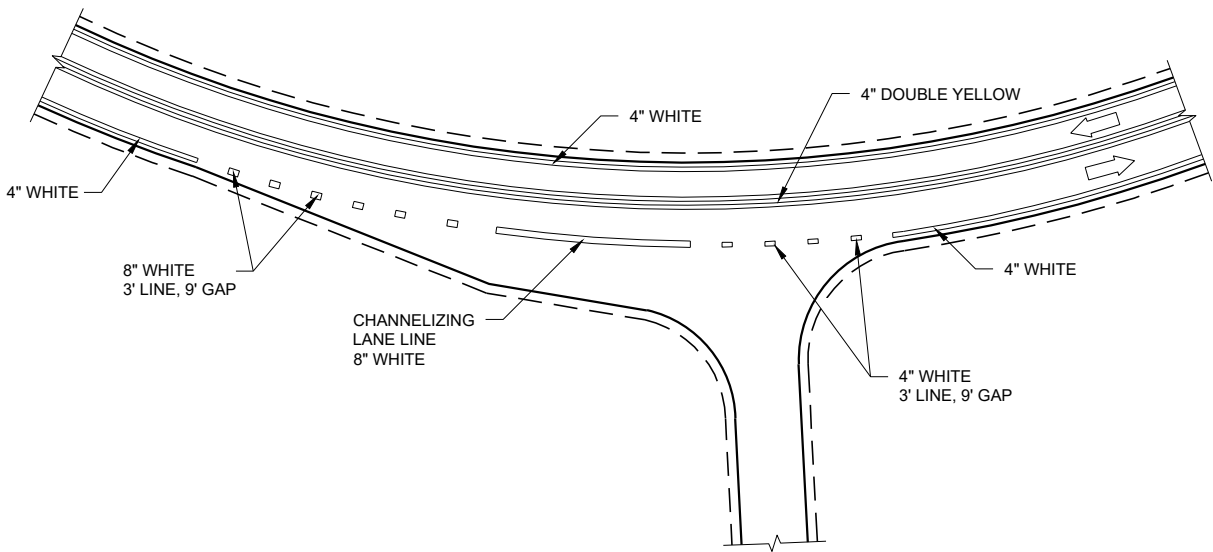
GENERAL NOTES

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.

LEGEND

➡ DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  TRAFFIC CONTROL DRUM
-  DIRECTION OF TRAFFIC
-  WORK ZONE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE REGIONAL TRAFFIC UNIT.

"WO" SIGN IS THE SAME AS "W" SIGN EXCEPT THE BACKGROUND IS ORANGE.

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

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

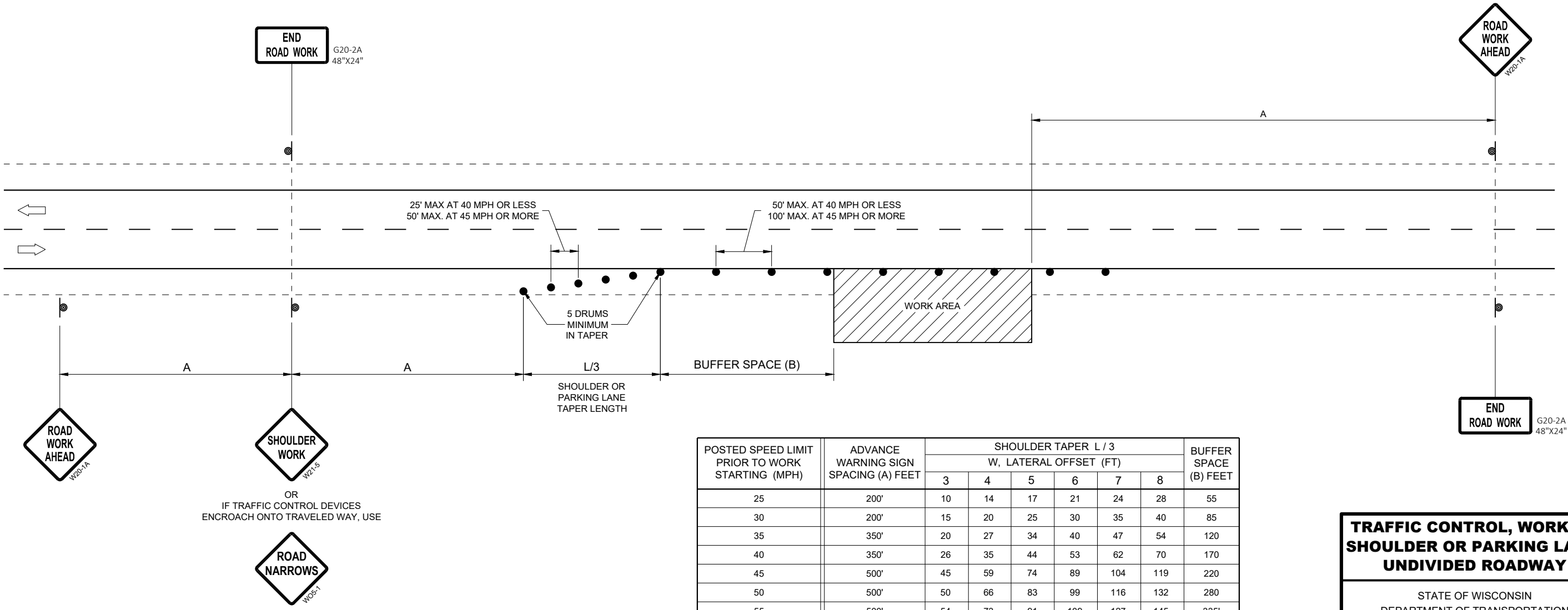
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

W20-1A AND G20-2A SIGNS ARE NOT REQUIRED IF THE WORK AREA IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT. G20-2A SIGNS MAY ALSO BE OMITTED IF DURATION OF WORK IS LESS THAN 7 CONTINUOUS DAYS AND NIGHTS.

6

6



POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	ADVANCE WARNING SIGN SPACING (A) FEET	SHOULDER TAPER L / 3 W, LATERAL OFFSET (FT)						BUFFER SPACE (B) FEET
		3	4	5	6	7	8	
25	200'	10	14	17	21	24	28	55
30	200'	15	20	25	30	35	40	85
35	350'	20	27	34	40	47	54	120
40	350'	26	35	44	53	62	70	170
45	500'	45	59	74	89	104	119	220
50	500'	50	66	83	99	116	132	280
55	500'	54	73	91	109	127	145	335'

TRAFFIC CONTROL, WORK ON
SHOULDER OR PARKING LANE,
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

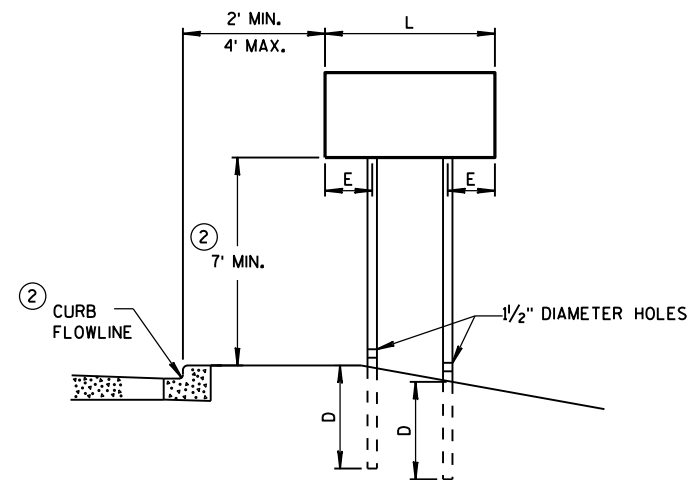
APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE T
SAFETY ENGINEER 97

FHWA

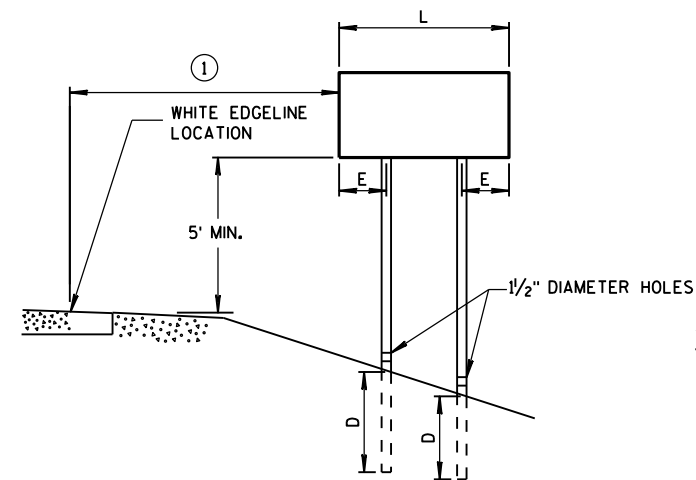
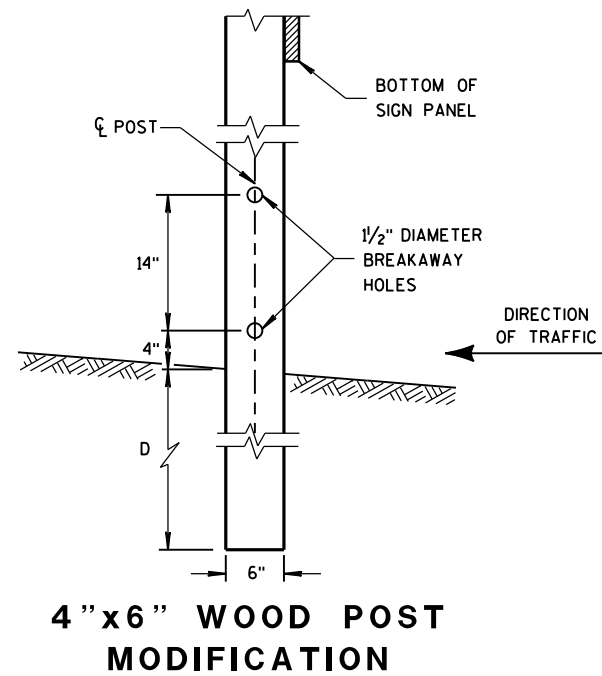


AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3



POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'



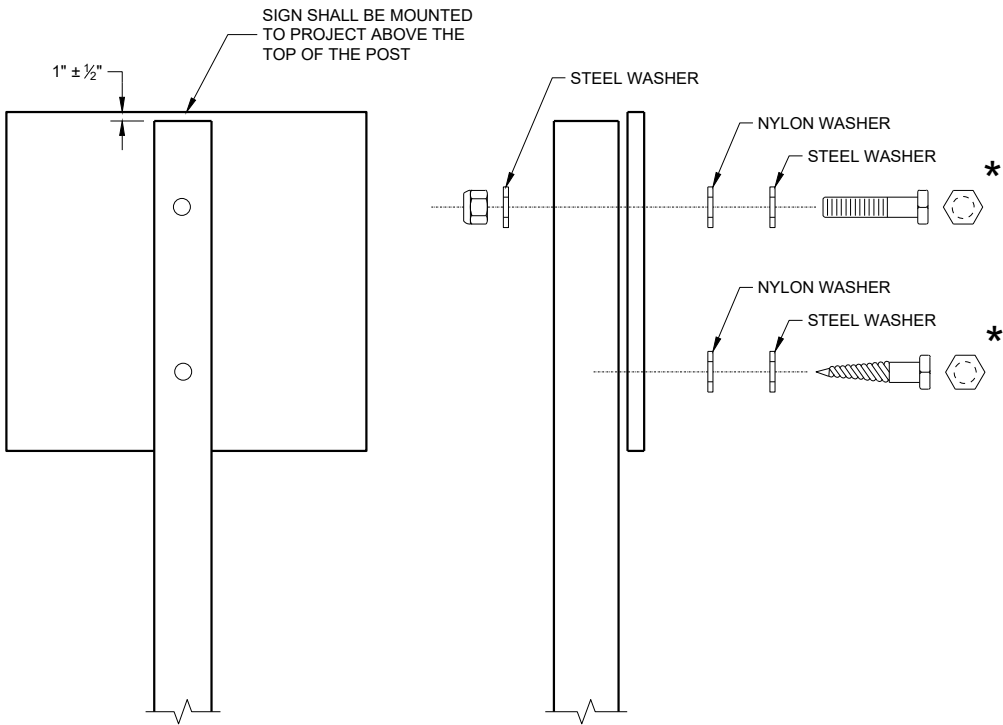
Technical drawing of a rectangular sign on a post. The sign is labeled with a circled '1' and has a length dimension 'L'. Below the sign, the post has a diameter dimension 'D'. The sign is mounted on a base with a height dimension 'E'. The base is labeled 'WHITE EDGELINE LOCATION' and '5' MIN.'. The base is shown in cross-section with '1/2" DIAMETER HOLES' and a depth dimension 'D'. The sign is labeled 'ES'.

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

SEE NOTE (3)

- ① 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.
- ② THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB, IF NO SIDEWALK AND NO PARKING. VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.
- ③ FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.

STATE OF WISCONSIN
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NUTS, BOLTS AND LAGS USED FOR MOUNTING SIGNS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- A. HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3
- B. ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC 3

THREADS ON BOLTS AND NUTS SHALL BE MANUFACTURED WITH SUFFICIENT ALLOWANCE FOR THE CADMIUM PLATE OR GALVANIZED COATING TO PERMIT THE NUTS TO RUN FREELY ON THE BOLTS.

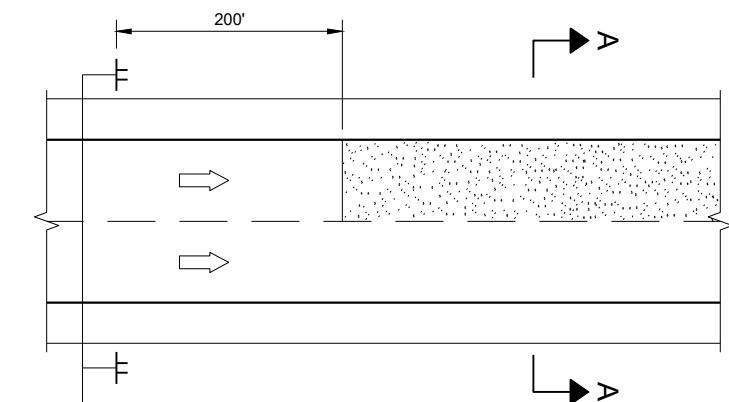
WOOD POST (4" x 6")
LAG SCREWS - ¾" x 3"
MACHINE BOLTS - ⅝" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ¾" x 3 ¼" LENGTH W/NUTS
RIVETS - ⅝" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM
BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH,
GRIP RANGE 0.042 - 0.375 INCH

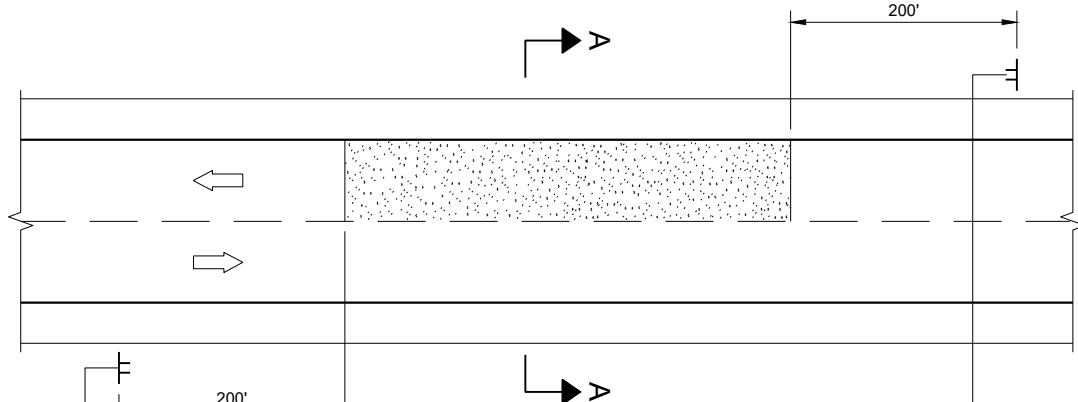
WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x ⅛" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 NYLON

* TWO DIFFERENT FASTENING SYSTEMS ARE SHOWN FOR ILLUSTRATION PURPOSES. ON ANY INDIVIDUAL SIGN, EITHER ONE OR THE OTHER SYSTEM SHALL BE USED. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

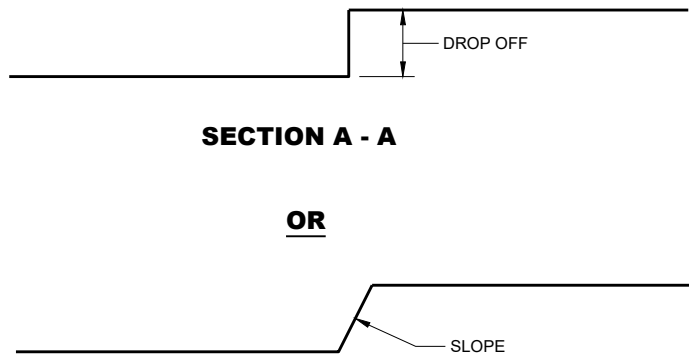
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER 99
FHWA	



MULTI-LANE



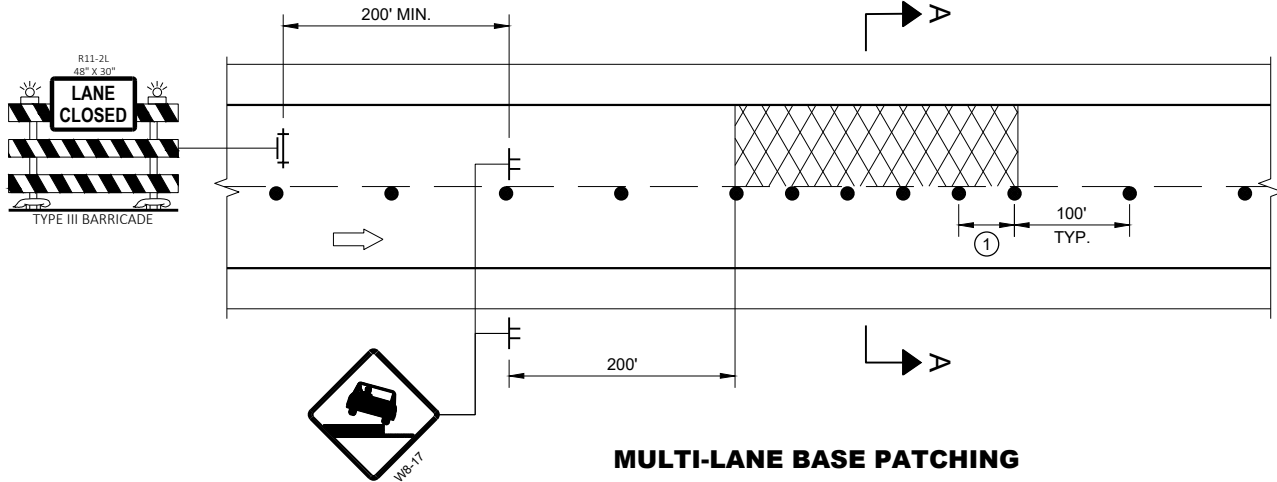
TWO-WAY TWO LANE



SECTION A - A

OR

SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

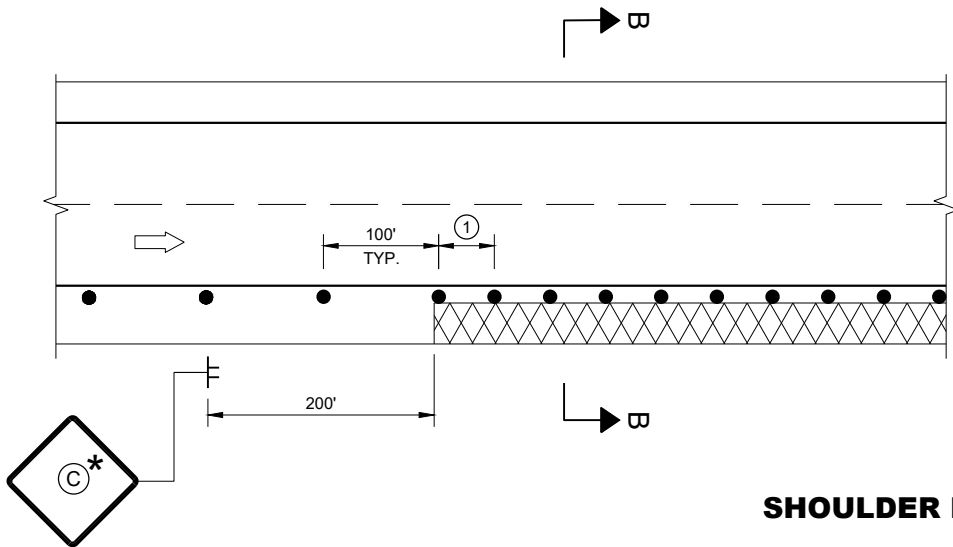
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

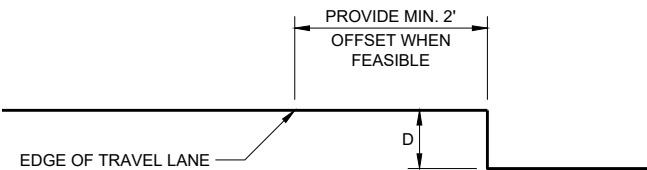
① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

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

TRAFFIC CONTROL,
DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 100

FHWA

GENERAL NOTES

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

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

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

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

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

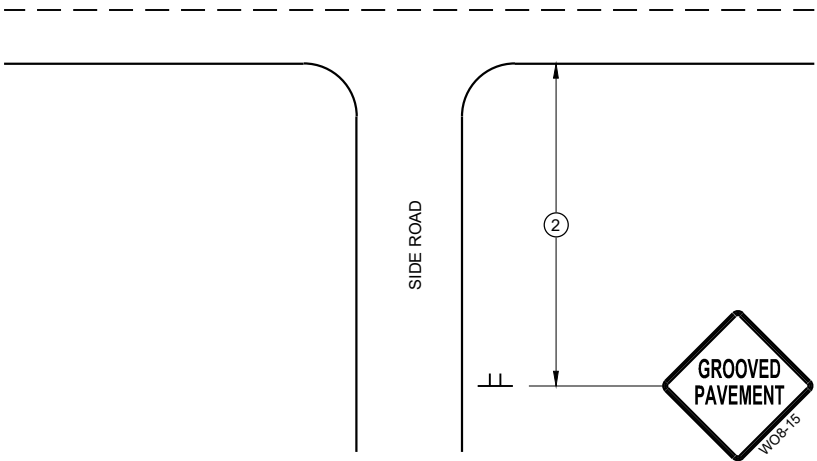
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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

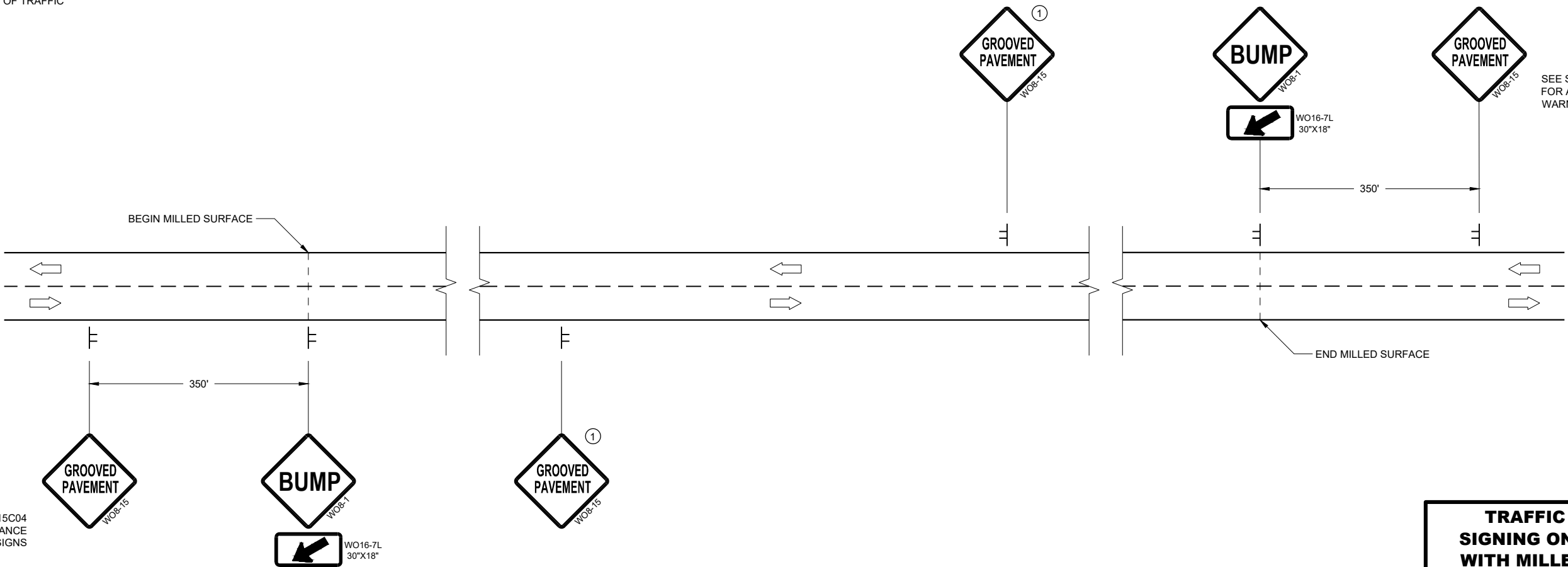
- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL,
SIGNING ON ROADWAYS
WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 101

FHWA

GENERAL NOTES

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

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

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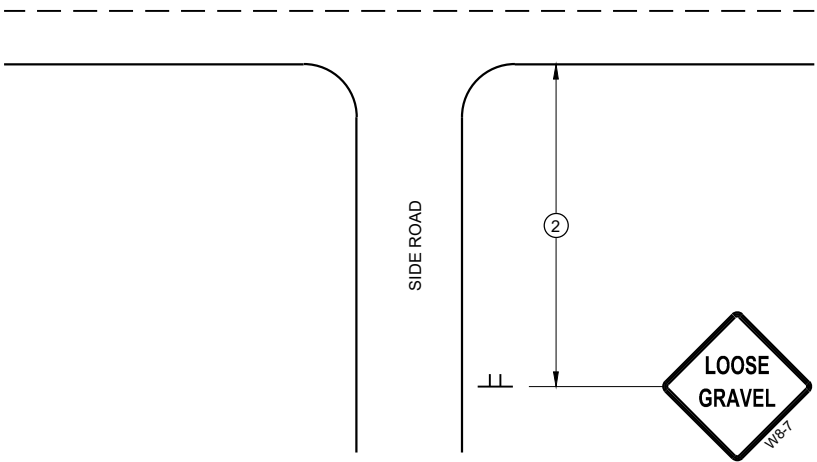
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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

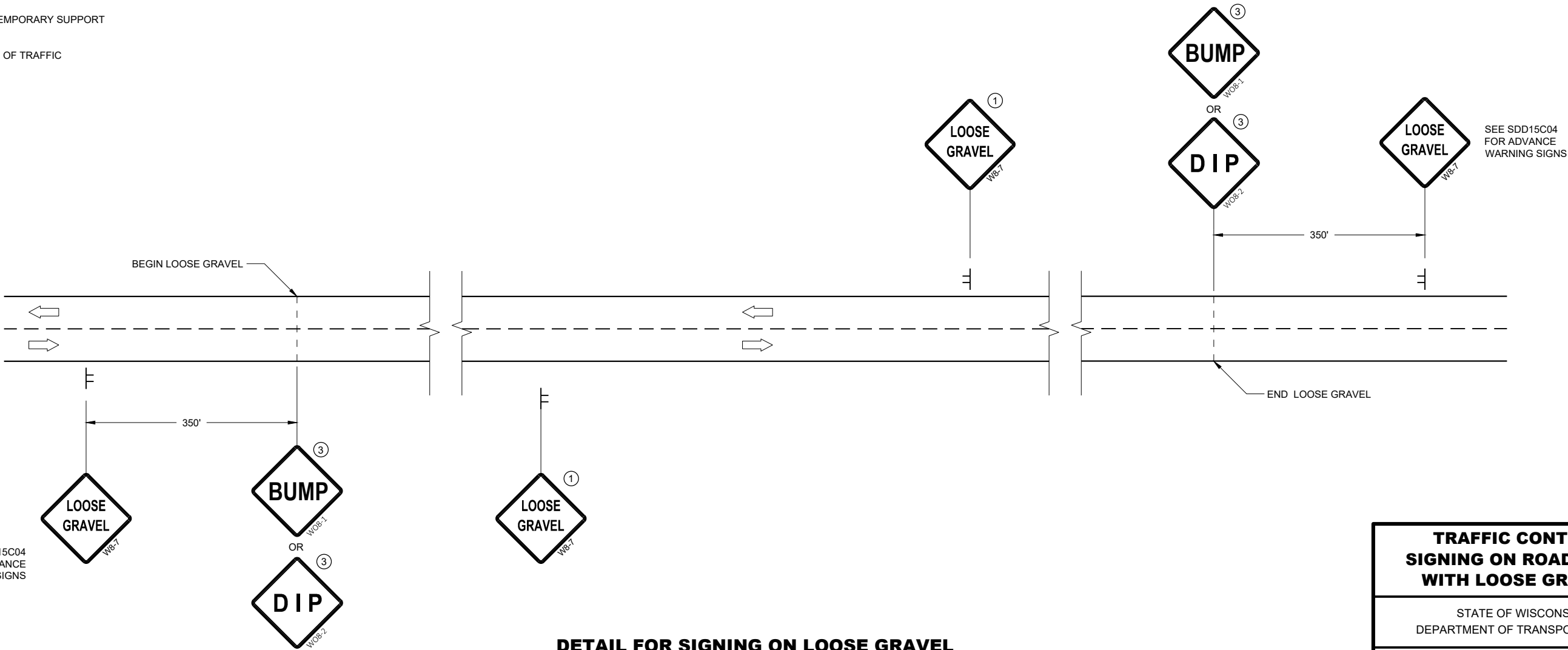
- ① PLACE SIGNS 350' IN ADVANCE OF CHIP SEALED OR LOOSE GRAVEL SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.
- ③ ADD WO8-1 OR WO8-2 SIGN WHEN THE CONDITION IS PRESENT.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



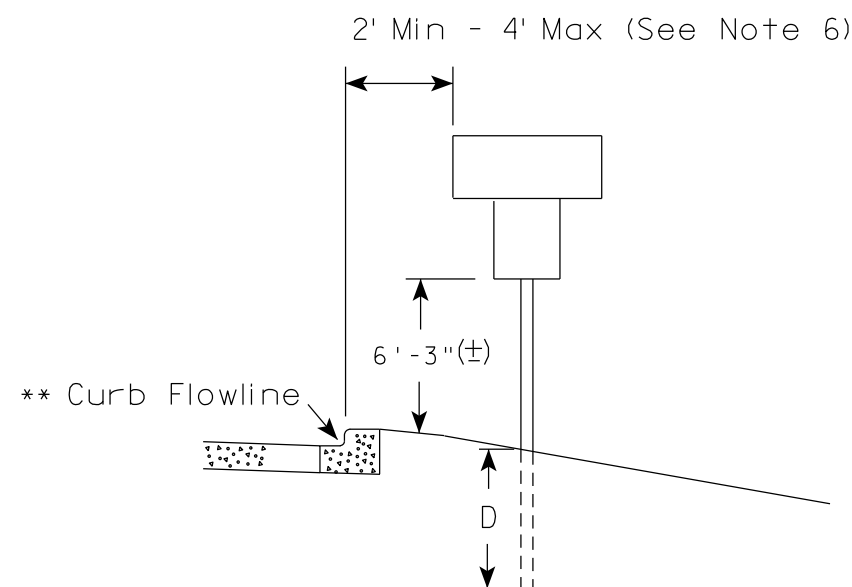
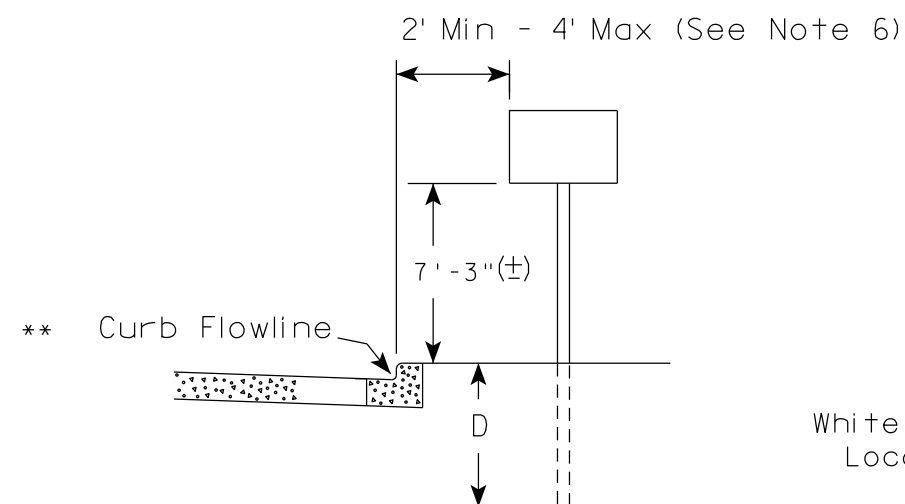
DETAIL FOR SIGNING ON LOOSE GRAVEL
OR CHIP SEALED SURFACES

TRAFFIC CONTROL
SIGNING ON ROADWAYS
WITH LOOSE GRAVEL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

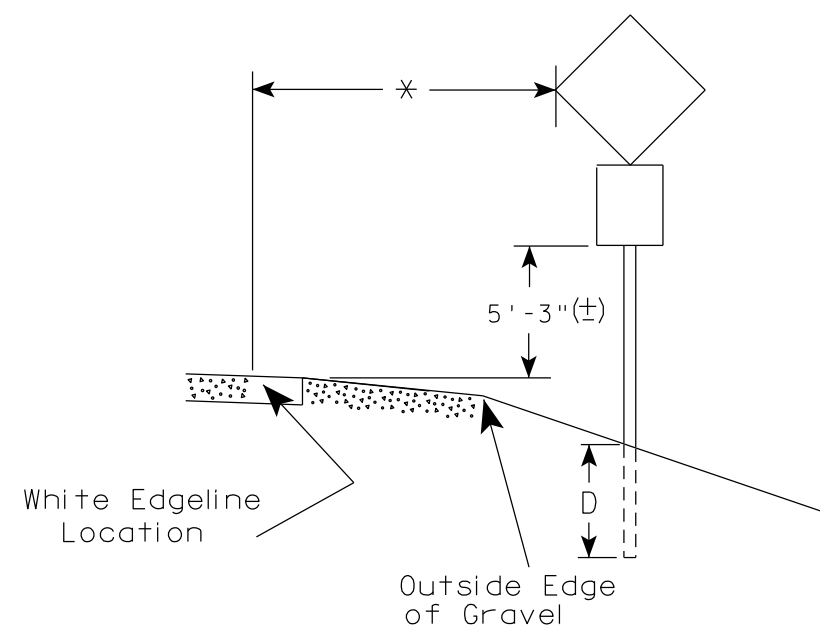
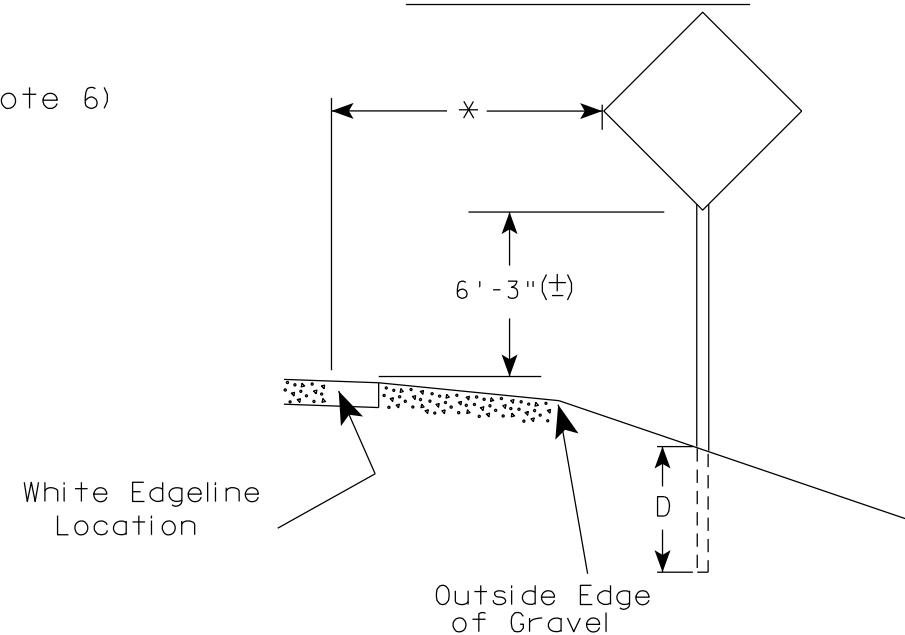
APPROVED
February 2021 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER 102
FHWA

URBAN AREA



** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

RURAL AREA (See Note 2)



* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

- Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
- If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).
- For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
- Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- The (±) tolerance for mounting height is 3 inches.
- Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

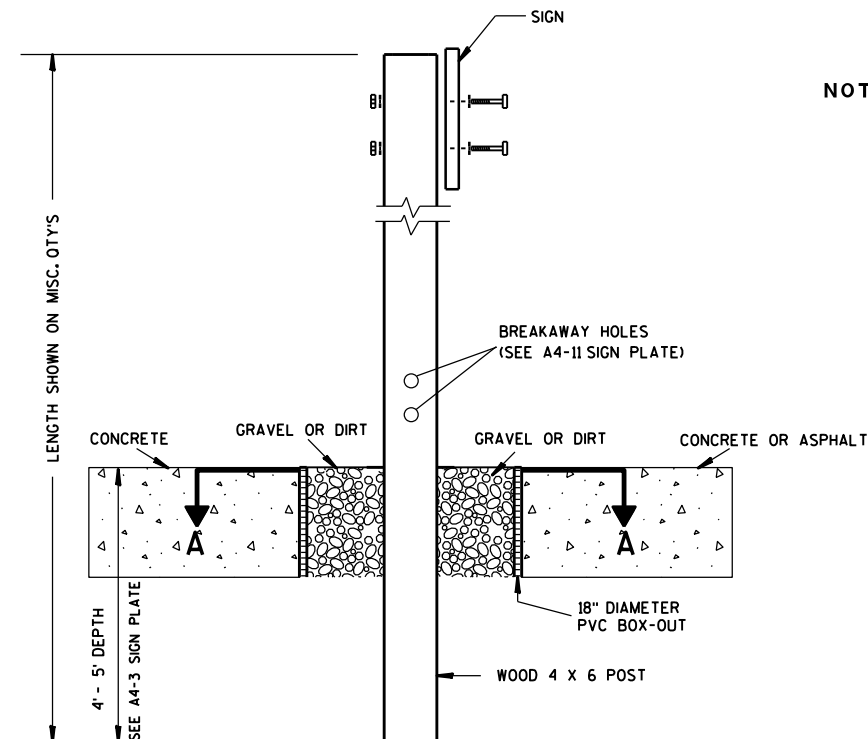
PROJECT NO:

HWY:

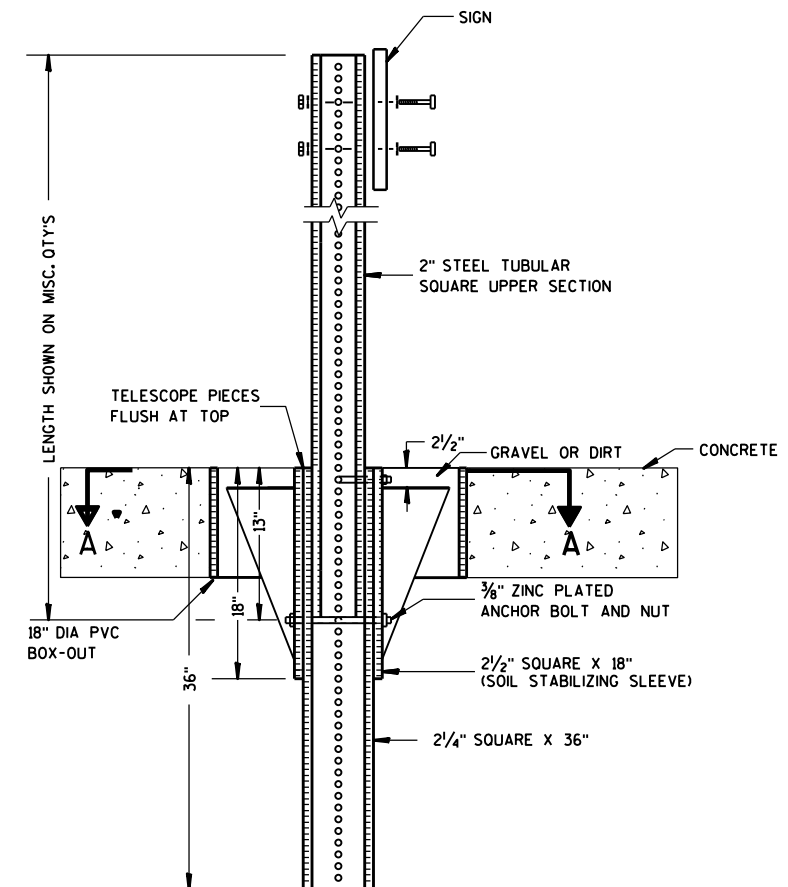
COUNTY:

SHEET NO: 103

E

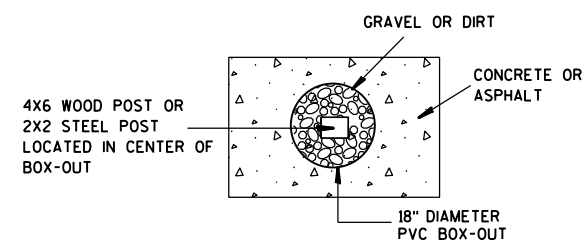


- NOTES: 1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

ELEVATION VIEW
DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW
FOR NEW CONCRETE/ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 104 A4-3B.1

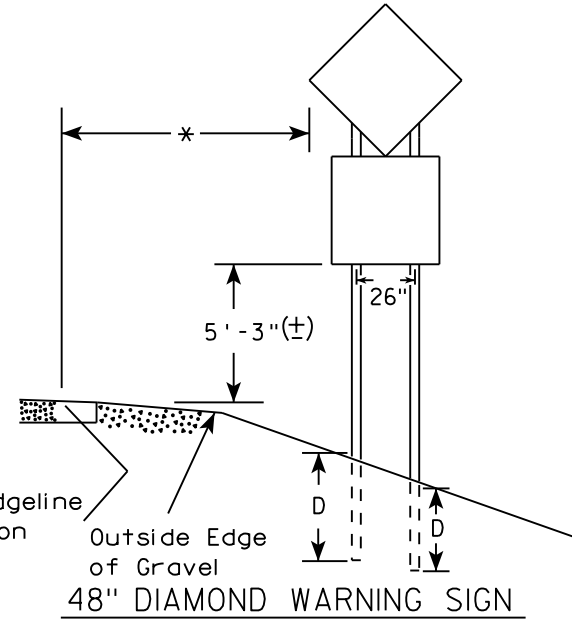
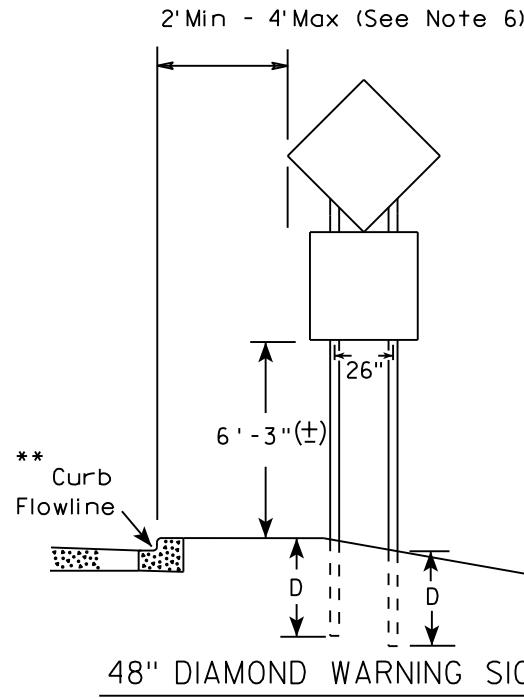
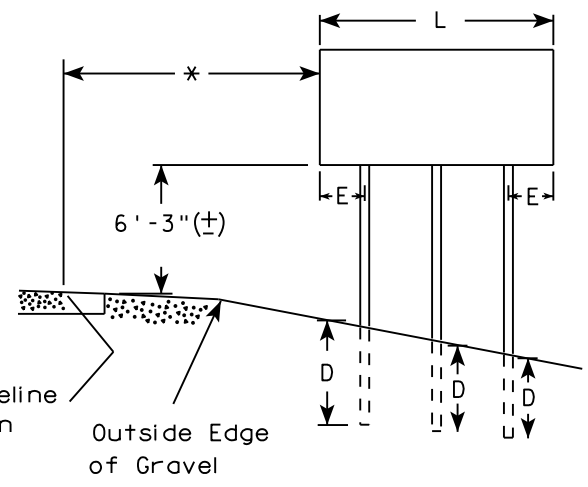
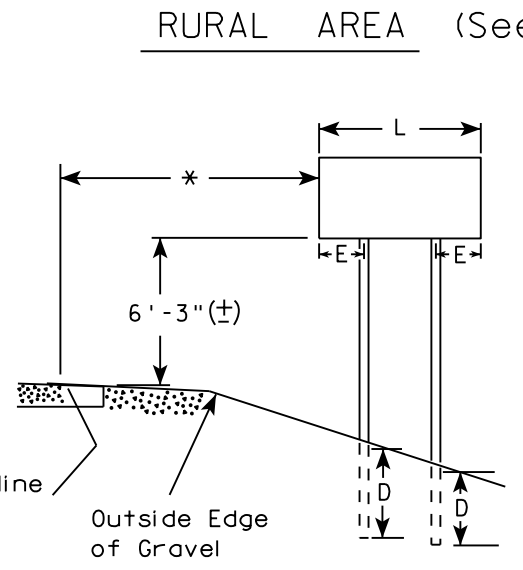
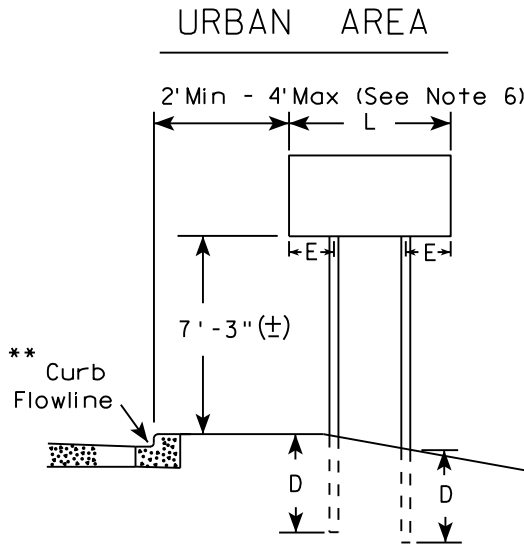
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



- GENERAL NOTES
1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 2. See tables below for required number of posts.
 3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 4. The (±) tolerance for mounting height is 3 inches.
 5. J-Assemblies are considered to be one sign for mounting height.
 6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
 7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4"-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

POST EMBEDMENT DEPTH

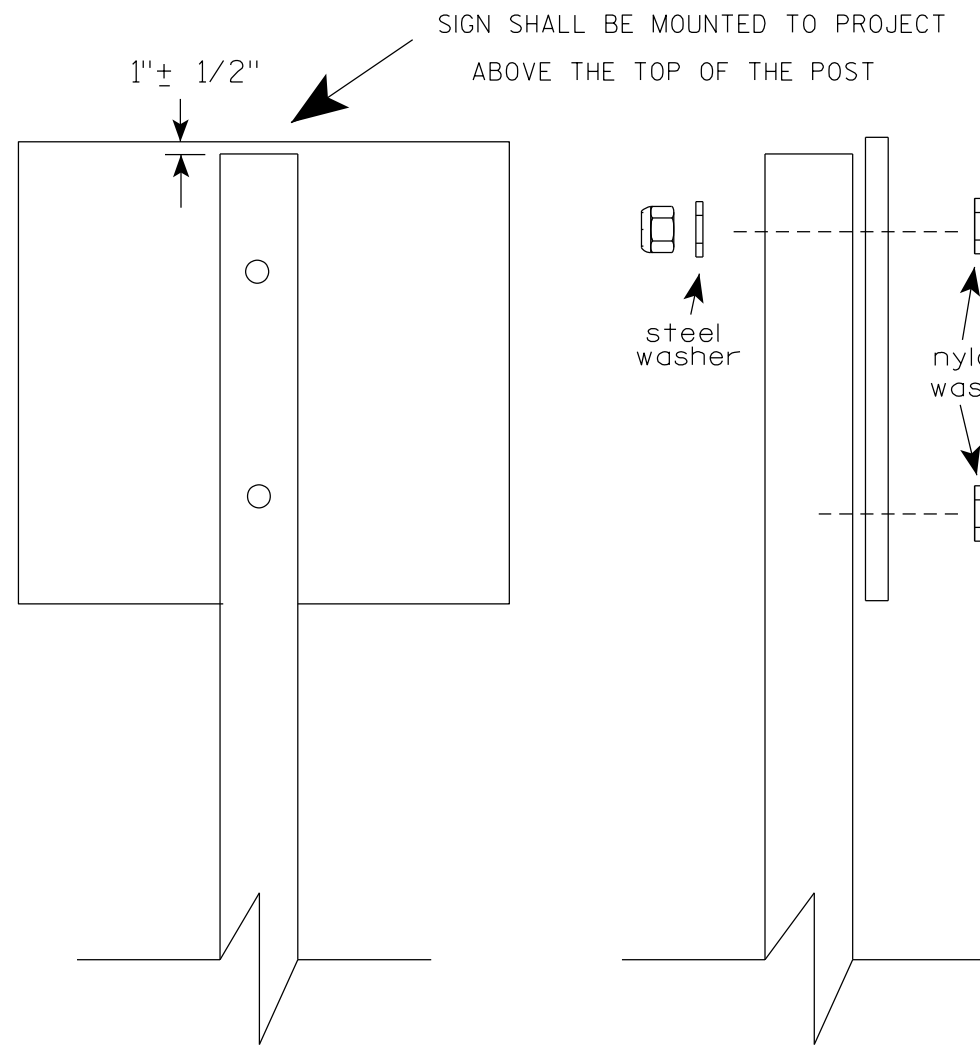
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

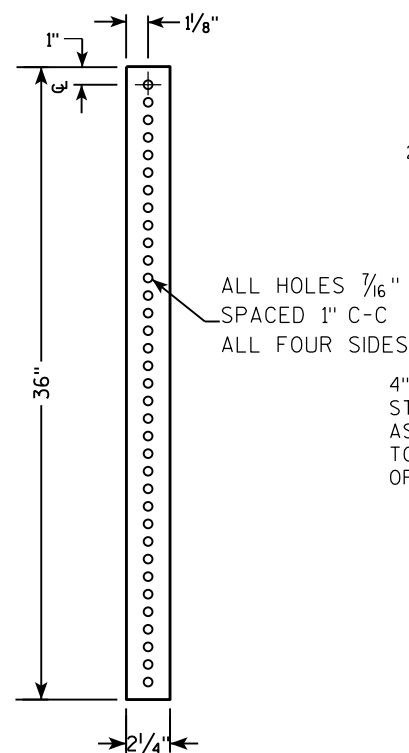
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

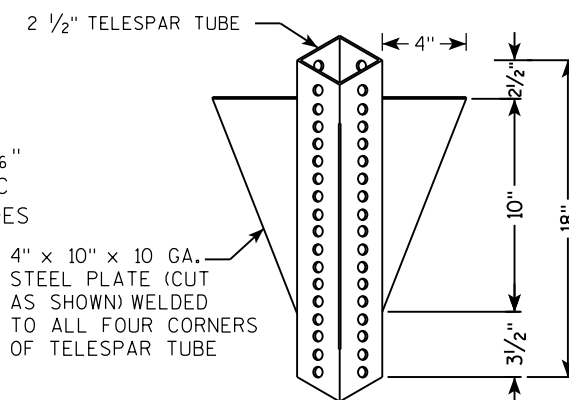
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**

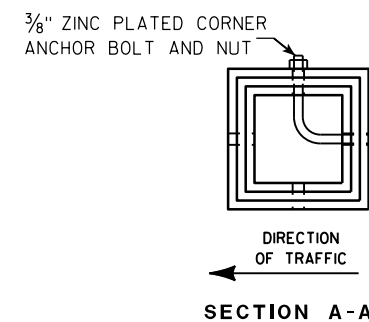


**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**

[illegible]

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

- Dimensions:**
 - Overall height: LENGTH SHOWN ON MISC. Q'TYS
 - Section A-A: 36" (total), 18" (upper), 12" (lower)
 - Section B-B: 1"
- Components:**
 - SIGN
 - SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 - 2" STEEL TUBULAR SQUARE UPPER SECTION
 - ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C
 - ALL FOUR SIDES
 - $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT
 - $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
 - 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
 - 2 1/4" SQUARE X 36"
 - TELESCOPE PIECES FLUSH AT TOP



Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R. Rauch

for State Traffic Engineer

DATE 2/05/15 PLATI 107 14-9.9

SHEET NO:

E

PROJECT NO:

HWY:

COUNTY:

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN

PLOT DATE : 05-FEB-2015 17:09

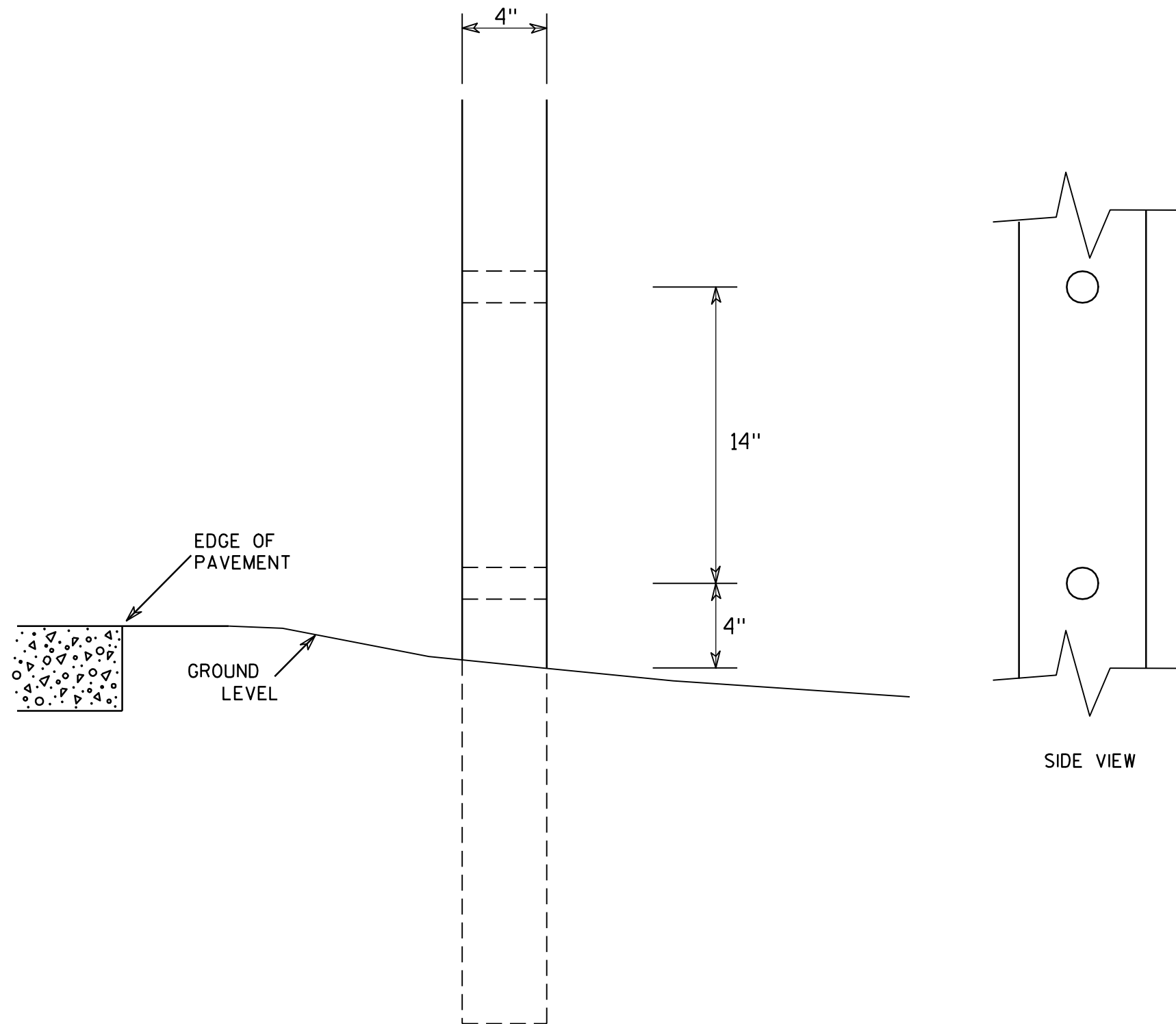
PLOT BY : mscs_ja

PLOT NAME :

PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42

7



GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

7

4 X 6 WOOD POST
MODIFICATIONS

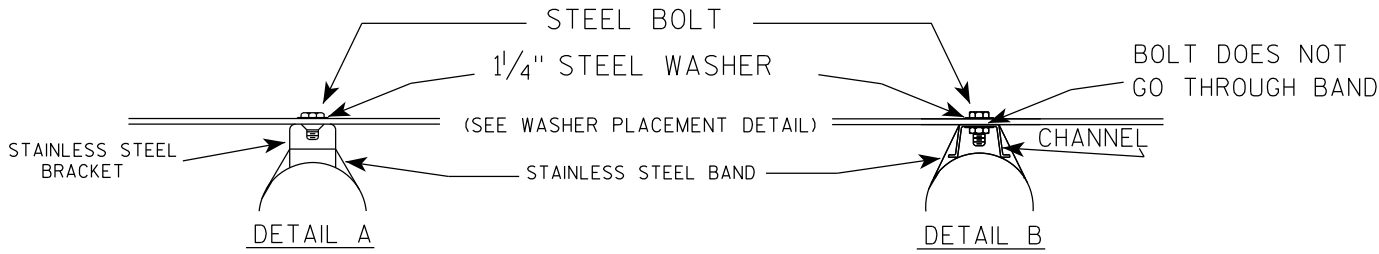
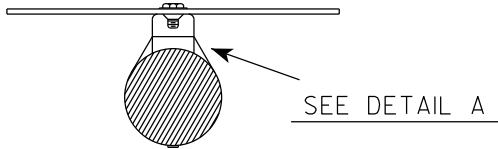
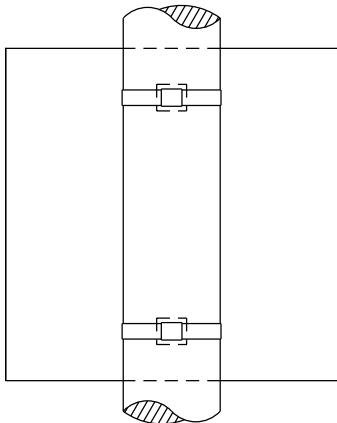
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Chester J. Spang*
for State Traffic Engineer

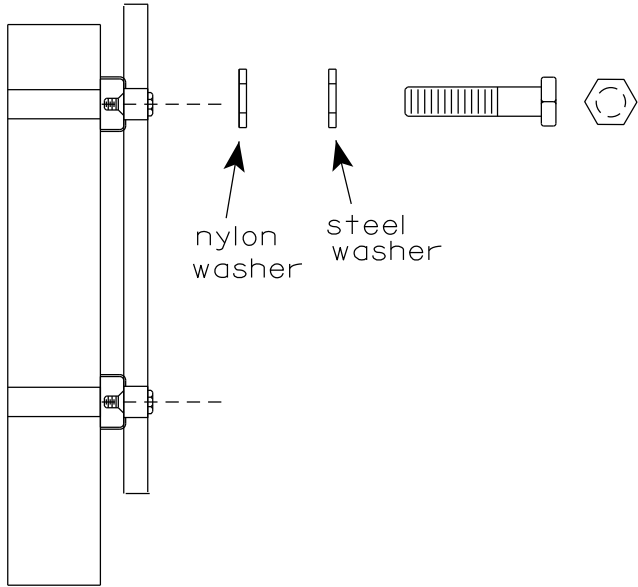
DATE 3/27/97 PLATE NO. A4-11.2

BANDING

SINGLE SIGN



WASHER PLACEMENT

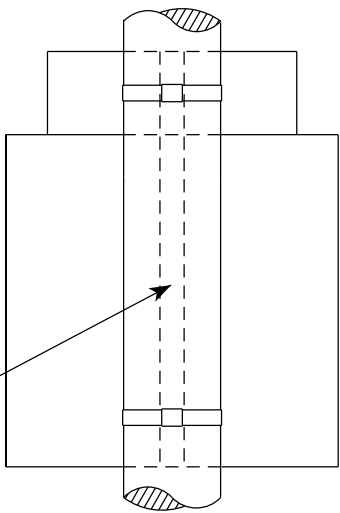


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

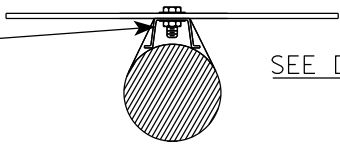
GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be 3/4" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



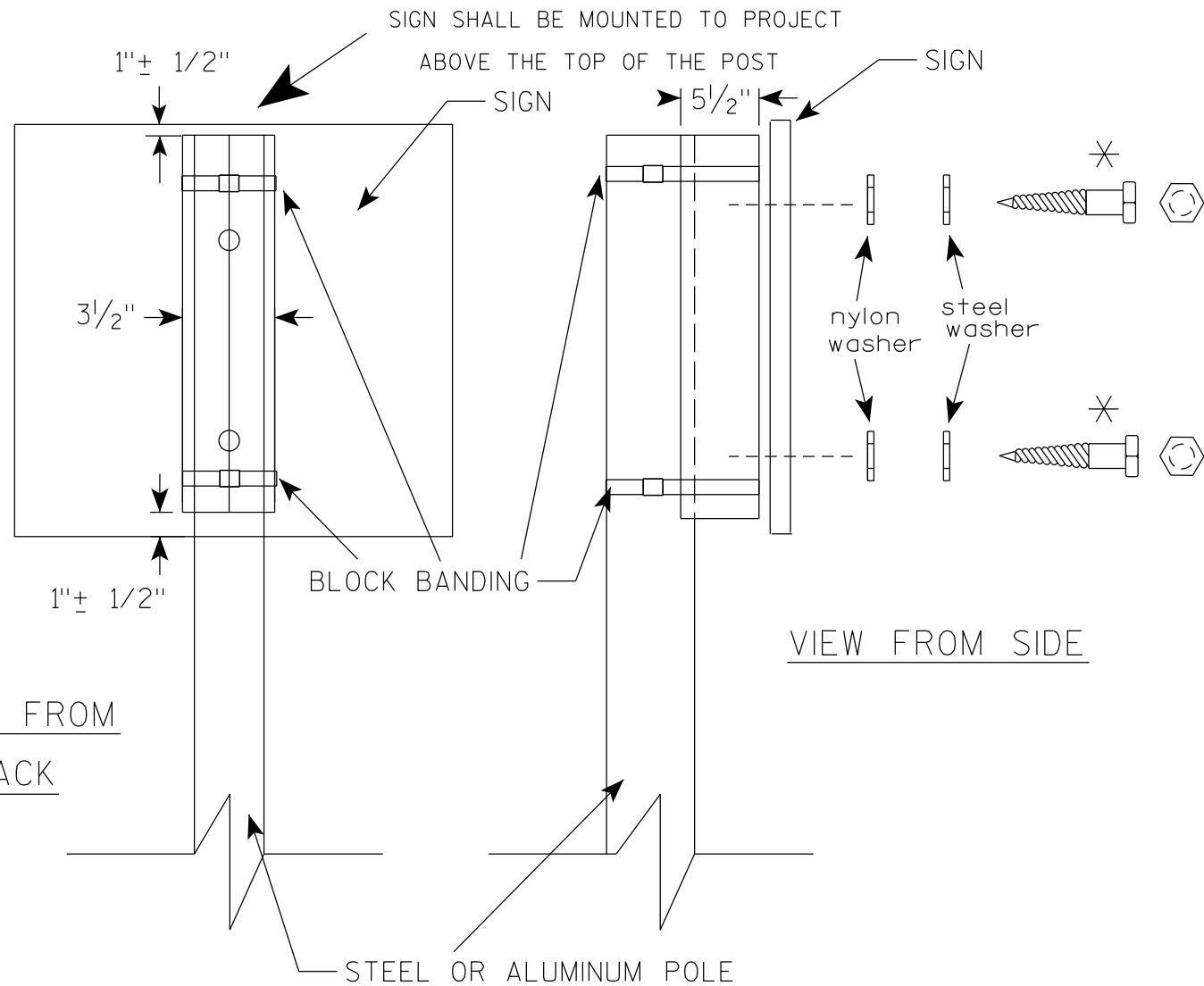
STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

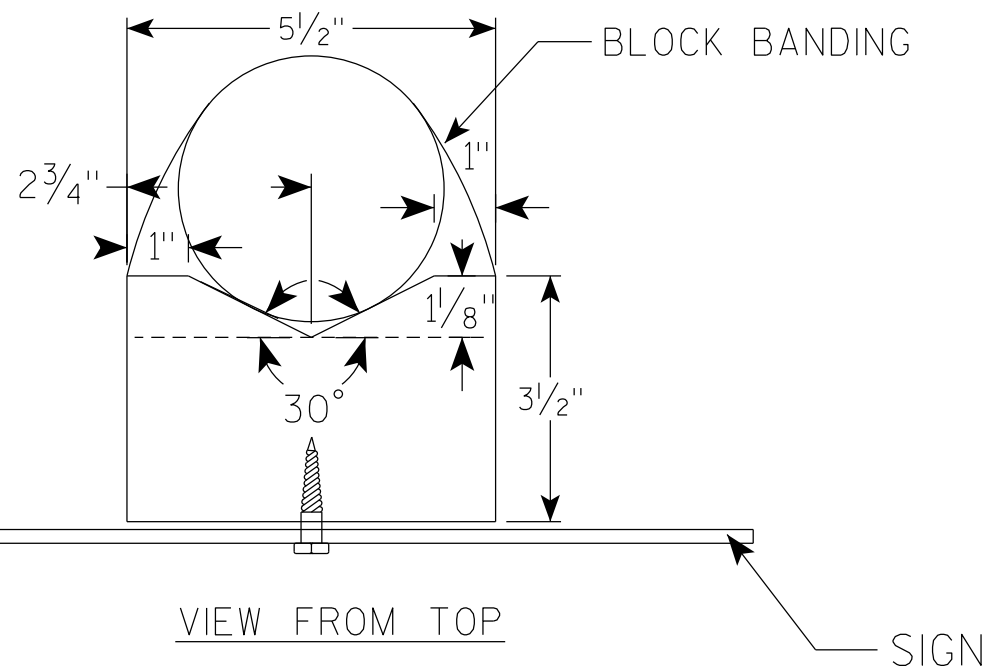
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-9.4

VIEW FROM
BACK



VIEW FROM SIDE



GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, $\frac{3}{4}$ " WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
 - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
 - b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $1\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE $\frac{3}{8}$ " X $2\frac{1}{2}$ "

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

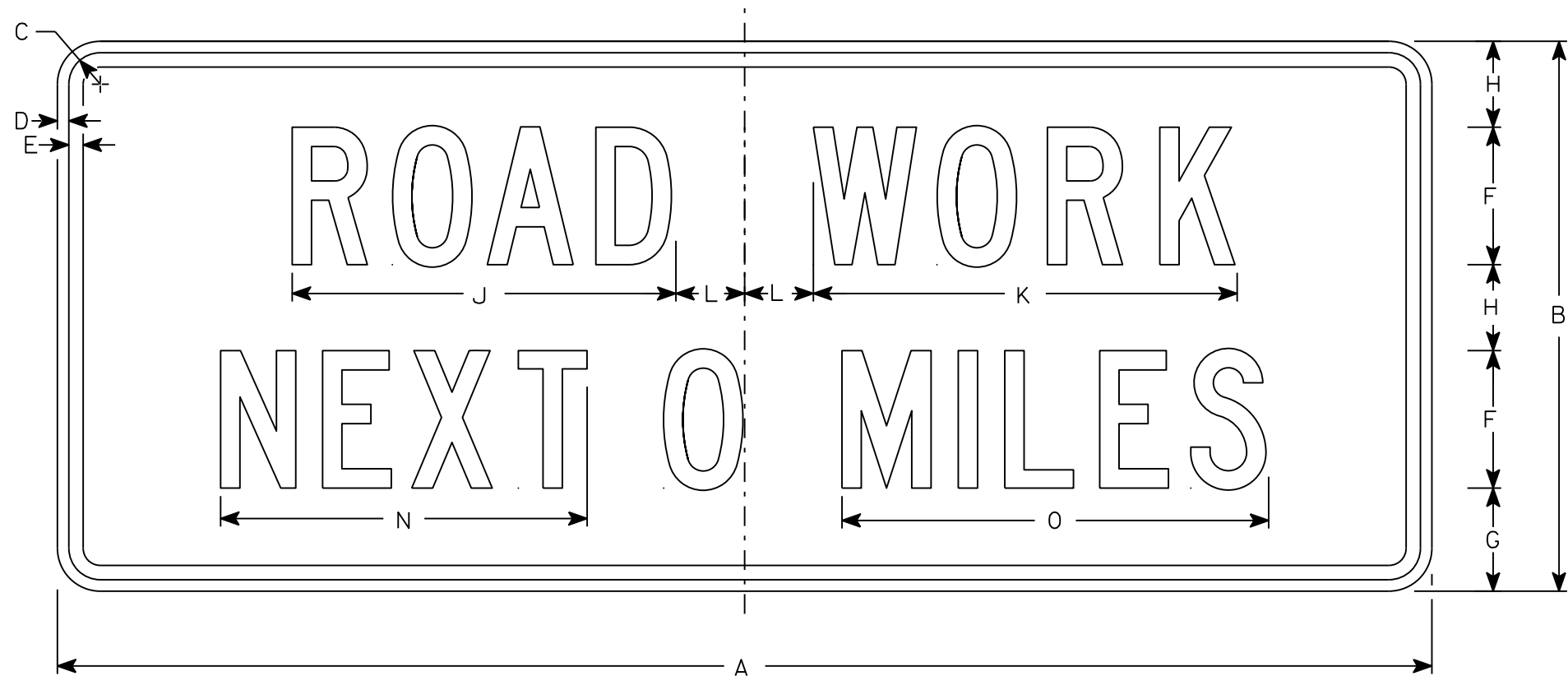
DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO:

SHEET NO: 110

E

7



G20-1

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Orange
Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Round distance to nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10
3																											
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10
5																											

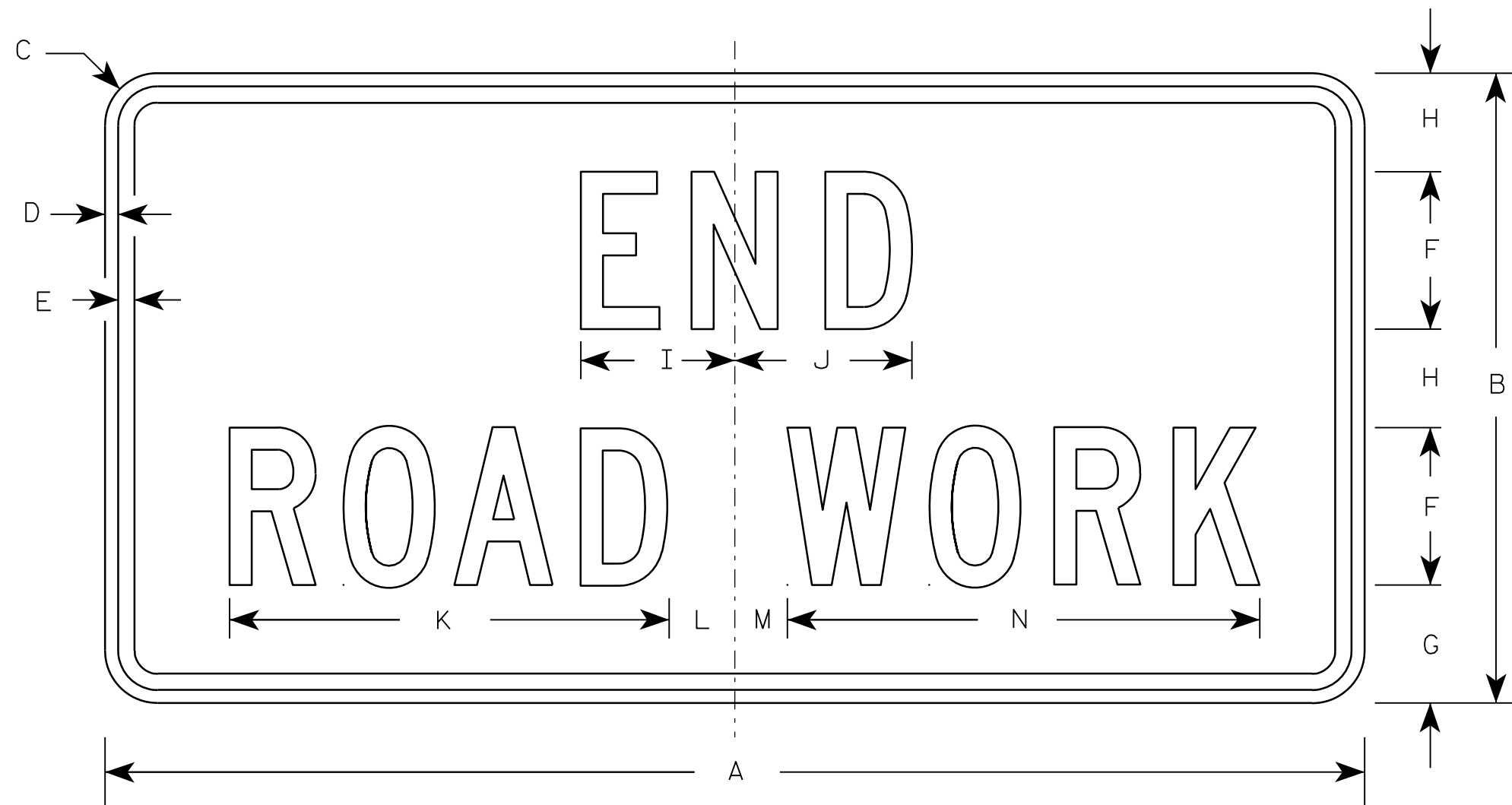
STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/14/17 PLATE NO. G20-1.8

7



G20-2A

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

Metric equivalent
for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

STANDARD SIGN

G20-2A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 9/30/09 PLATE NO. G20-2A.8

7

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - D
- 4. Substitute appropriate numeral and adjust spacing to achieve proper balance.



G20-57

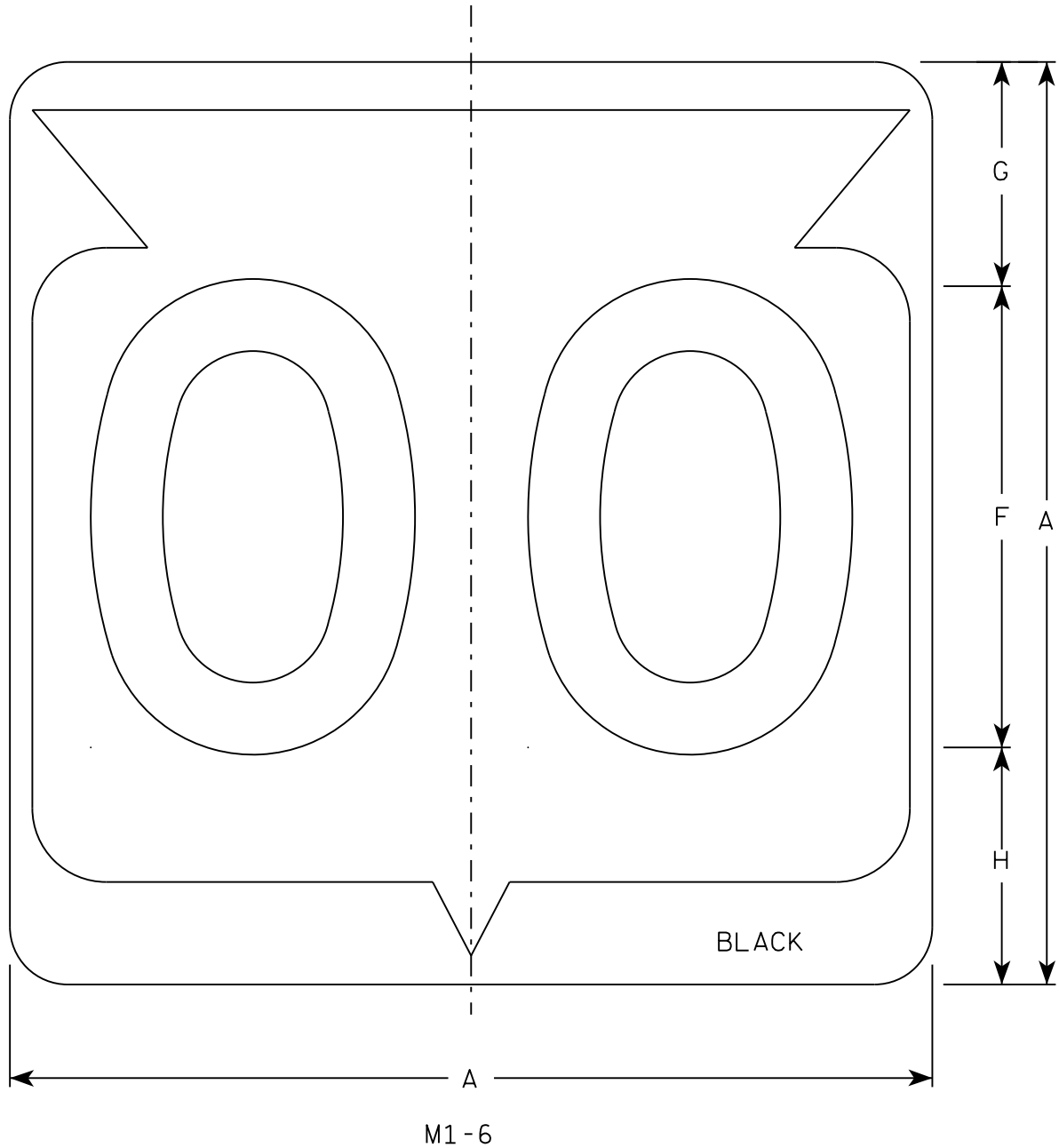
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2																											
3	72	36	1 1/8	1/2	5/8	6	5	4	15 5/8	1 5/8	5	9 1/4	21 1/4	3 1/2	1 1/2	23 1/4		29 7/8	1 3/4	3 1/4	28 1/2						18.0
4	96	48	2 1/4	3/4	1	8	6 1/2	5 1/2	20 5/8	2 1/4	6	12 1/4	28 1/4	4 3/8	1 5/8	31		39 1/4	2	4	37 7/8						32.0
5																											

STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

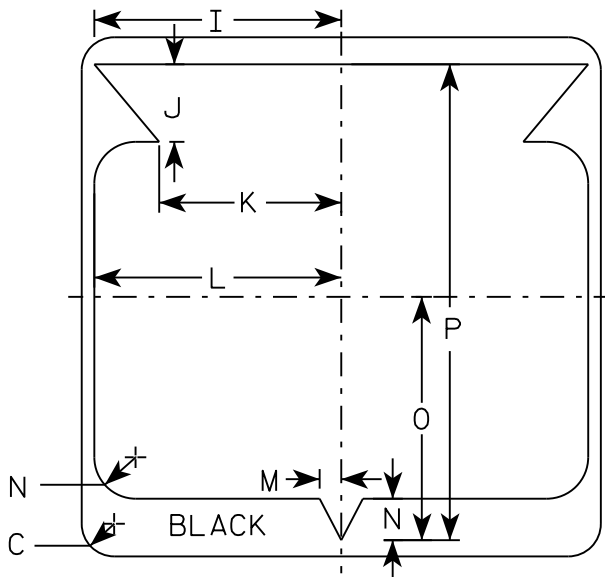
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/22/19 PLATE NO. G20-57.3



NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D except 3 number signs Series C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



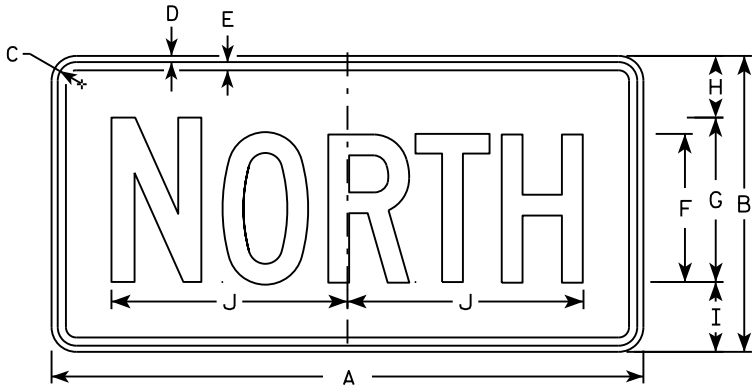
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0

STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

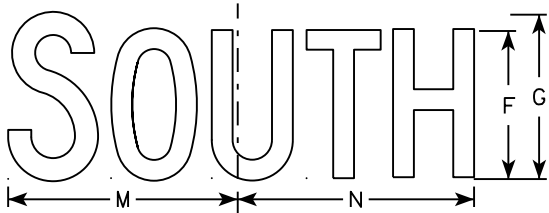
DATE 3/16/18 PLATE NO. M1-6.10



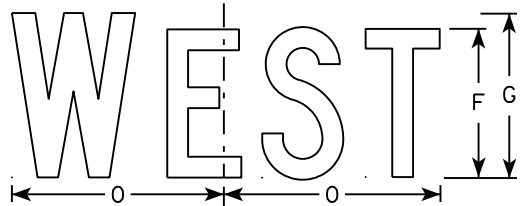
M3-1
MM3-1
MP3-1



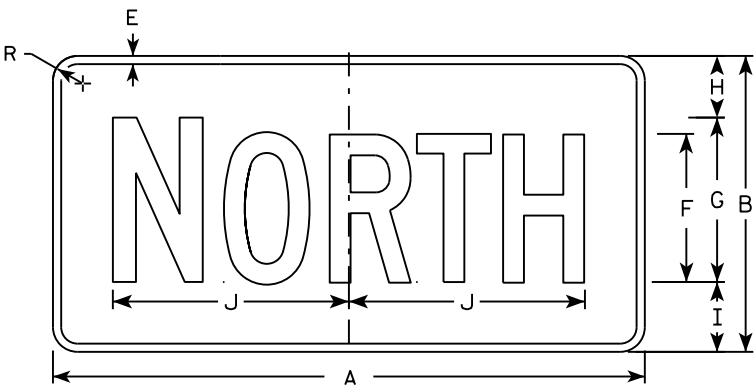
M3-2
MM3-2
MP3-2



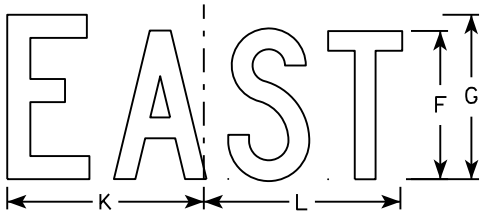
M3-3
MM3-3
MP3-3



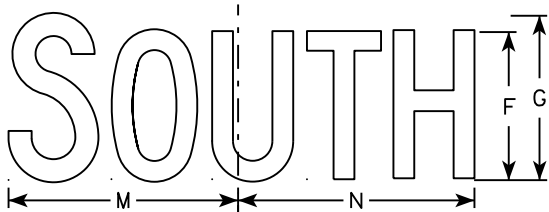
M3-4
MM3-4
MP3-4



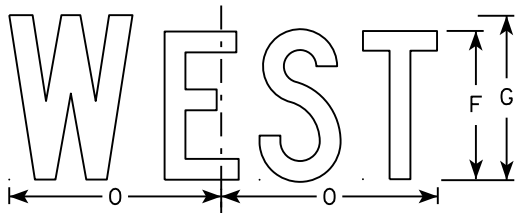
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

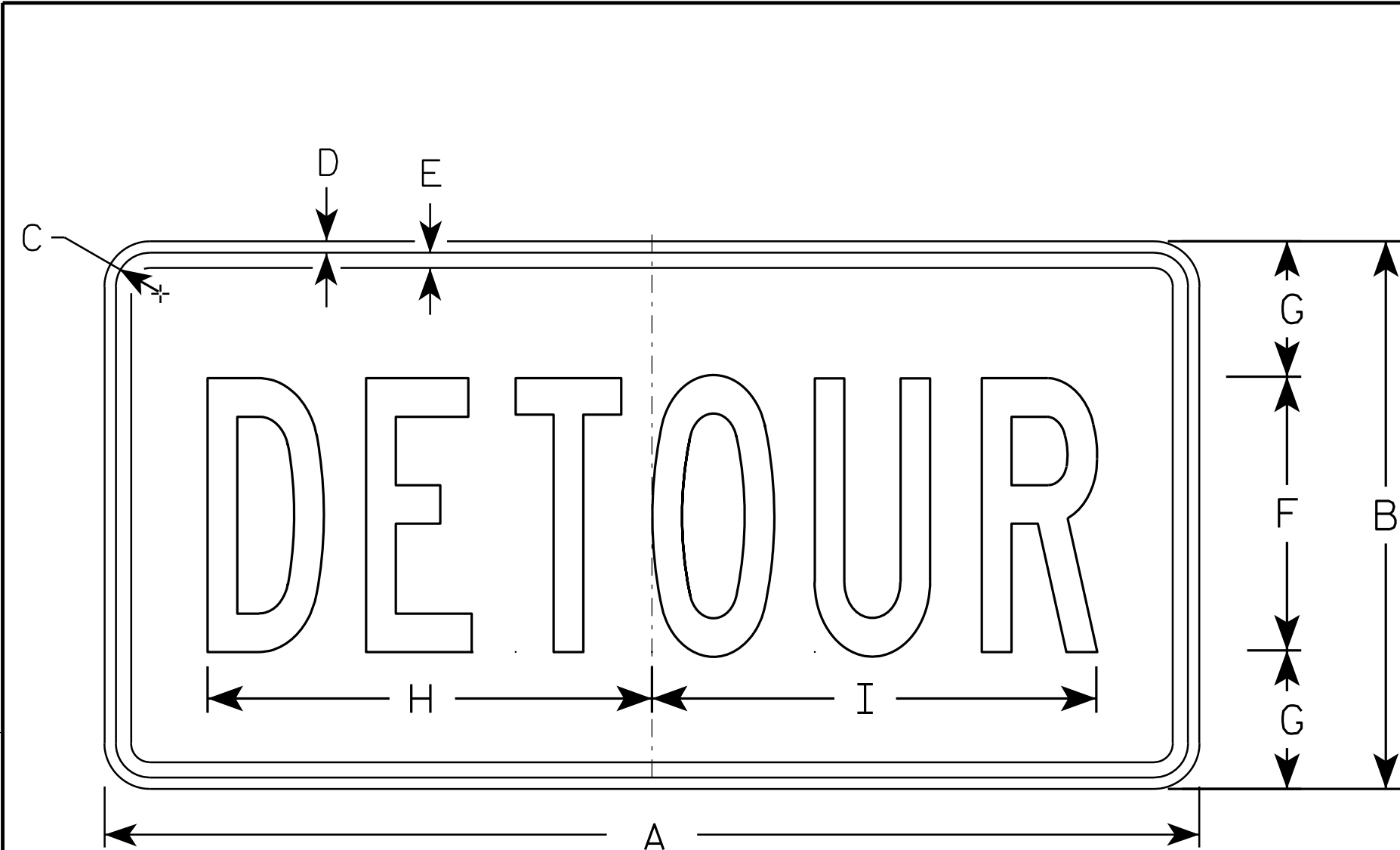
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thru M3-4
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. 115 M3-1.14



M4 - 8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

STANDARD SIGN

M4 - 8

WISCONSIN DEPT OF TRANSPORTATION

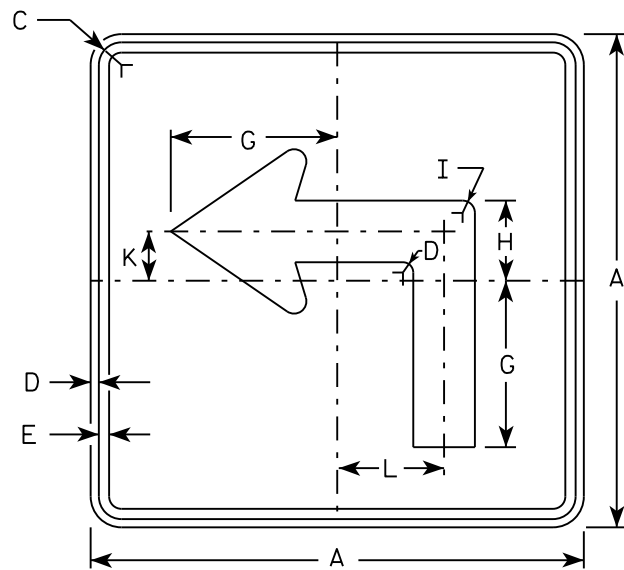
APPROVED

Matthew R. Rauch

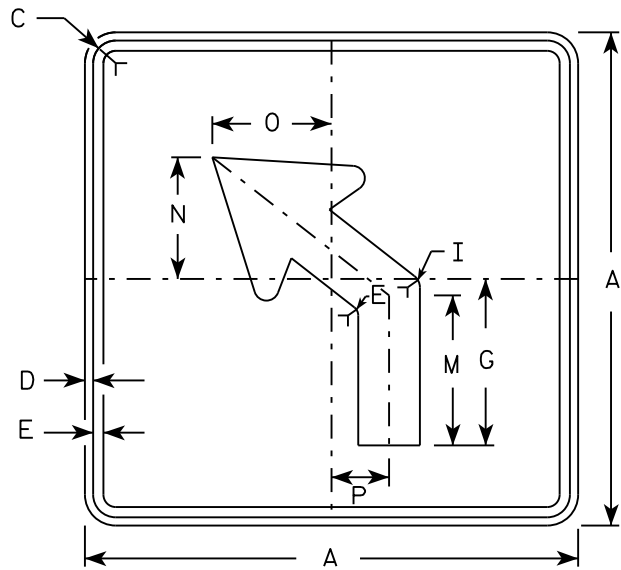
for State Traffic Engineer

DATE 11/10/10

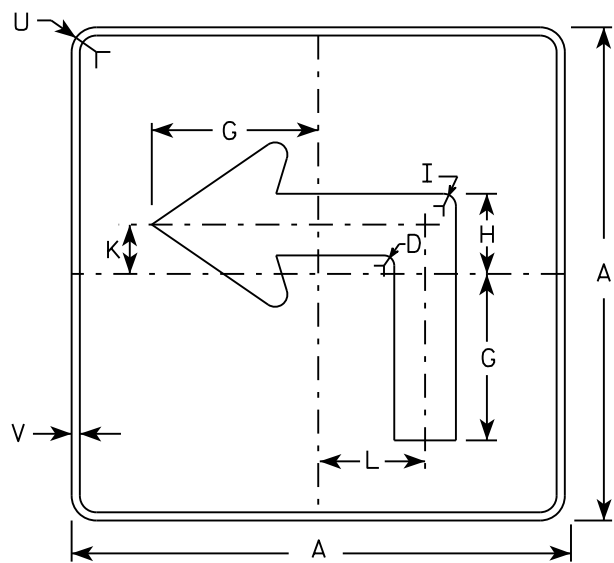
PLATE NO. M4-8.2



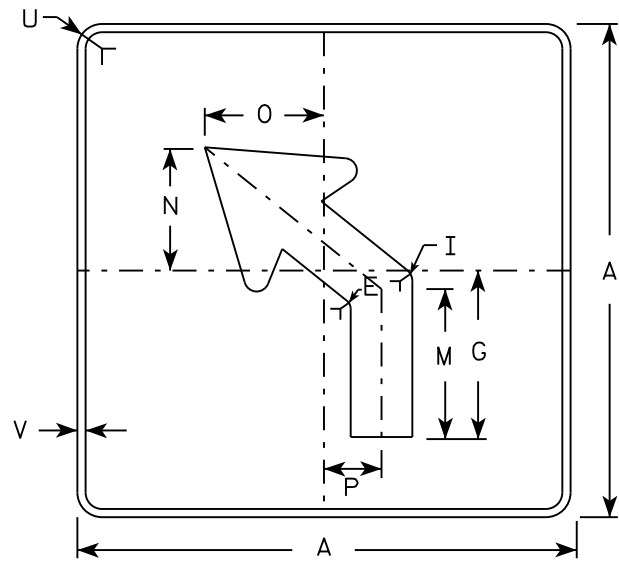
M5-1L
MM5-1L
M05-1L
MP5-1L



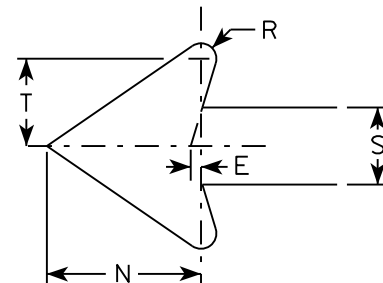
M5-2L
MM5-2L
M05-2L
MP5-2L



MB5-1L
MK5-1L
MN5-1L
MR5-1L



MB5-2L
MK5-2L
MN5-2L
MR5-2L



NOTES

- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- | | |
|-----------------|---|
| M5-1 and M5-2 | Background - White |
| | Message - Black |
| MB5-1 and MB5-2 | Background - Blue |
| | Message - White |
| MK5-1 and MK5-2 | Background - Green |
| | Message - White |
| MM5-1 and MM5-2 | Background - White |
| | Message - Green |
| MN5-1 and MN5-2 | Background - Brown |
| | Message - White |
| M05-1 and M05-2 | Background - Orange - Type F Reflective |
| | Message - Black |
| MP5-1 and MP5-2 | Background - White - Type H Reflective |
| | Message - Blue |
| MR5-1 and MR5-2 | Background - Brown |
| | Message - Yellow |
- M5-1R same as M5-1L except arrow points right.
- M5-2R same as M5-2L except arrow tilts right.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3	1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 1/8	4 7/8	7/8		3	6 1/2	9 1/8	7 1/2	7 1/4	3 1/2		3/4	3 3/4	4 1/4	1 7/8	1/2					6.25

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN
M5-1 & M5-2

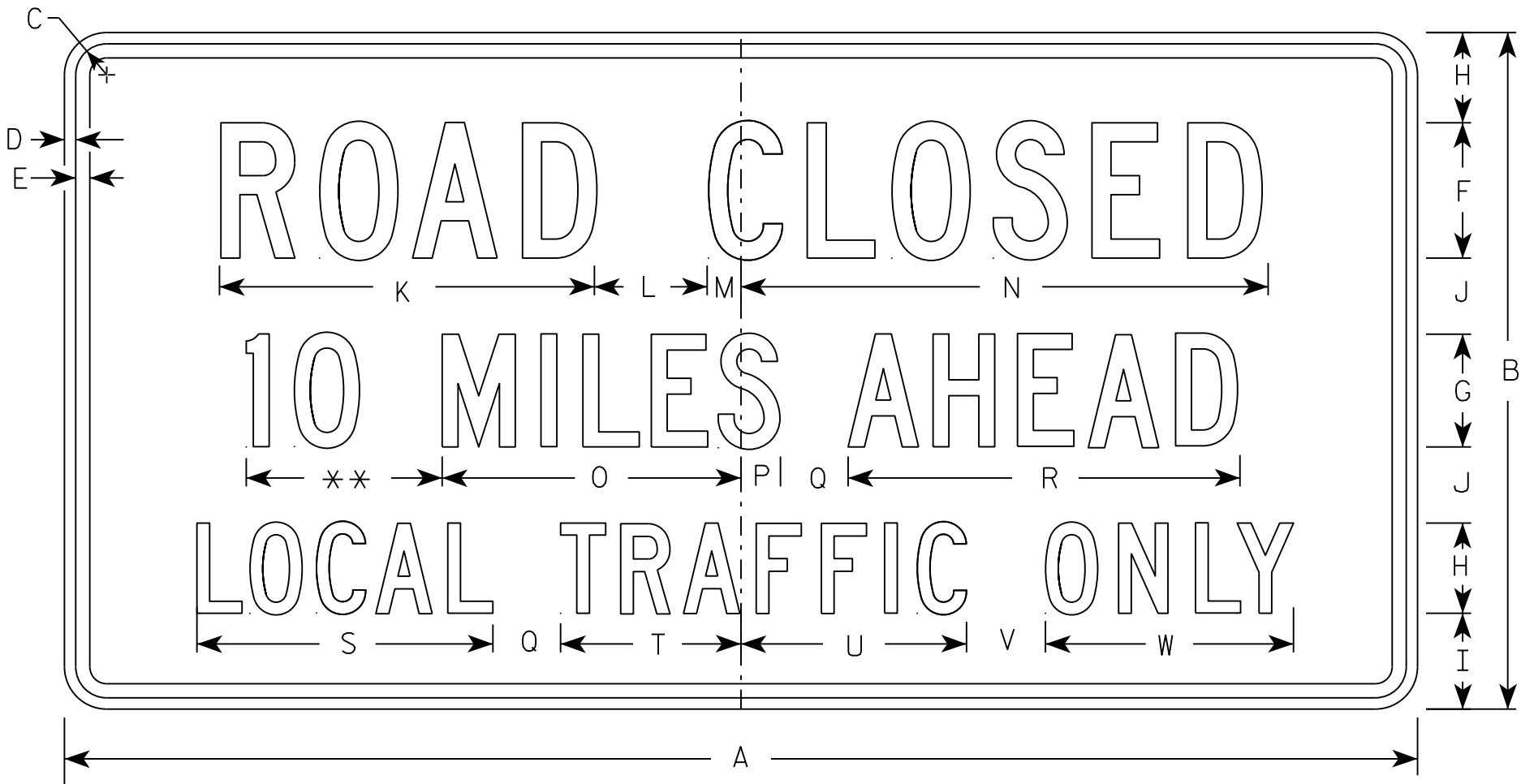
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLATE 117 M5-1.13

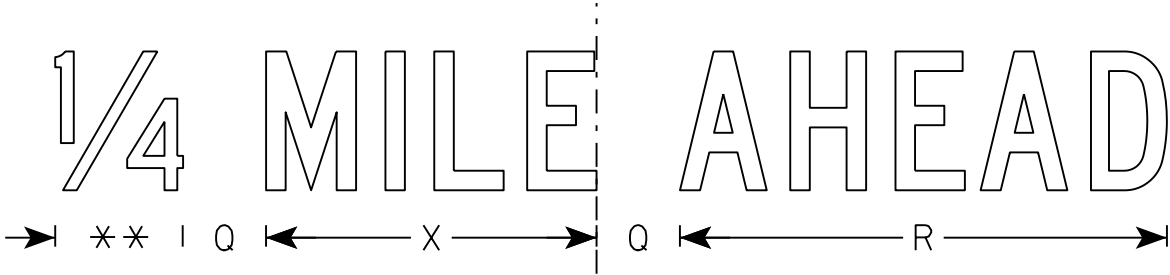
NOTES

- 1. Sign is Type II - Type H Reflective
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Substitute appropriate numerals to nearest quarter mile and optically adjust spacing to achieve proper balance.



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	11 1/8	3	1 1/8	15 1/4	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4	7 1/8			4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	16 5/8	5	1 1/2	23	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11	11 7/8			12.5
3																											
4																											
5																											

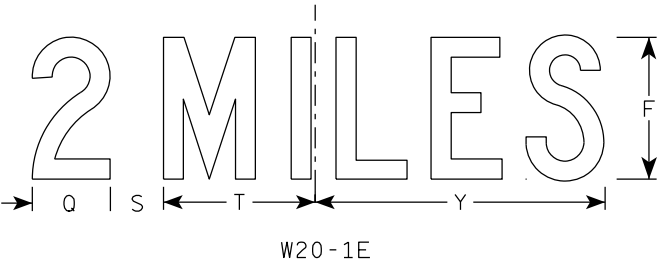
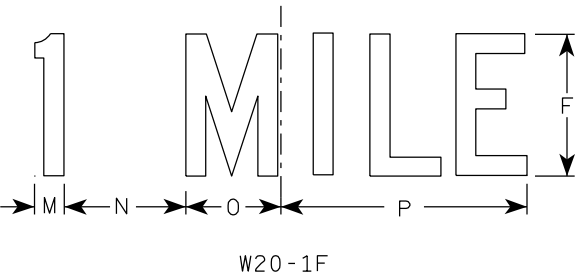
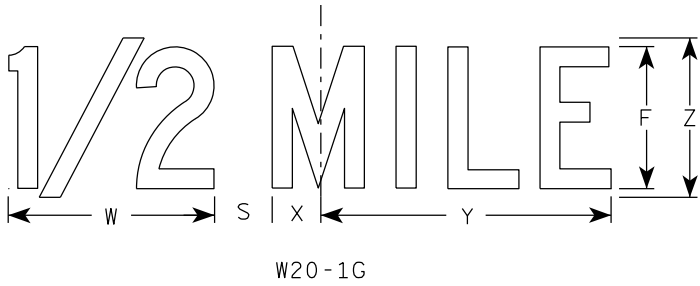
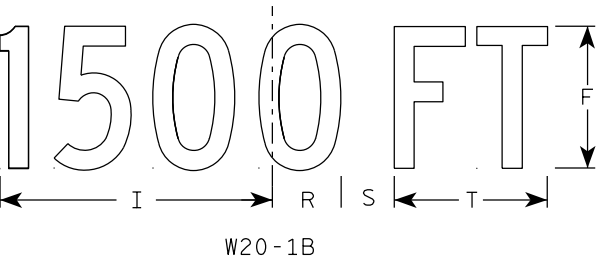
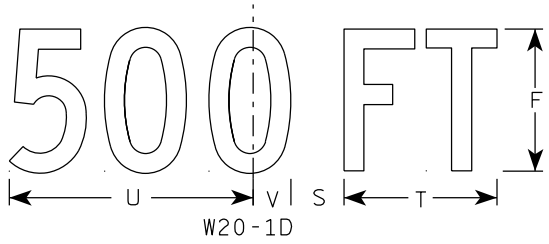
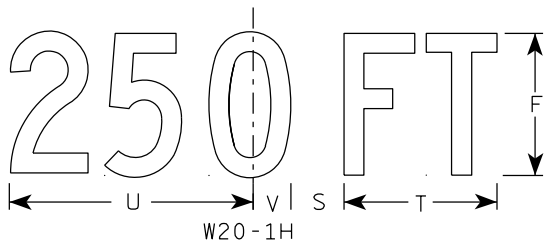
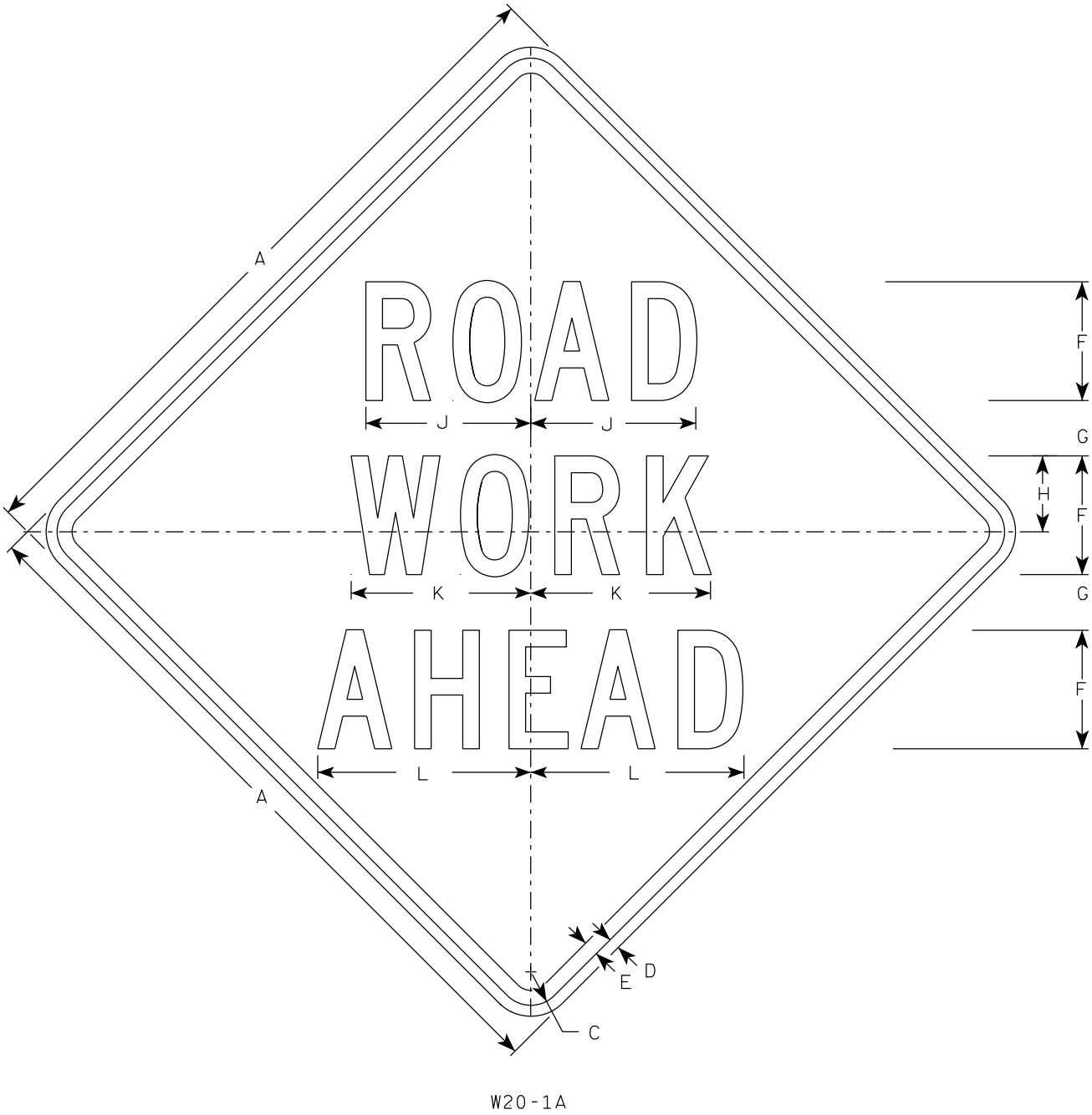
STANDARD SIGN
R11-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/15/17 PLATE NO. R11-3.8

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Orange
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



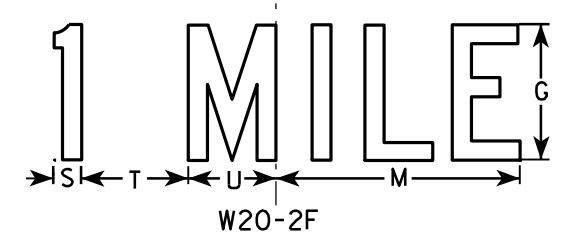
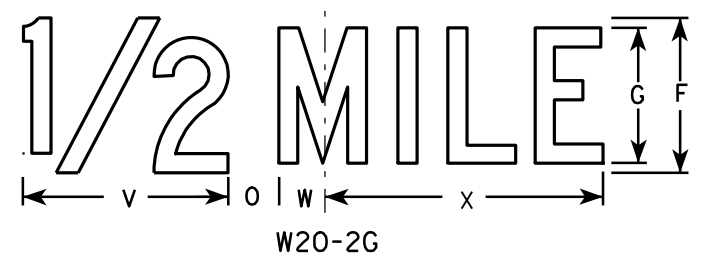
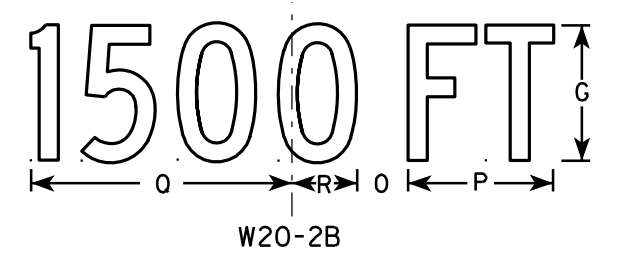
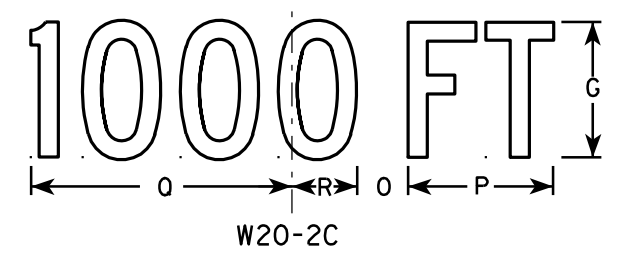
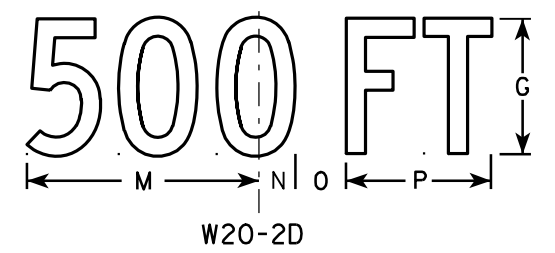
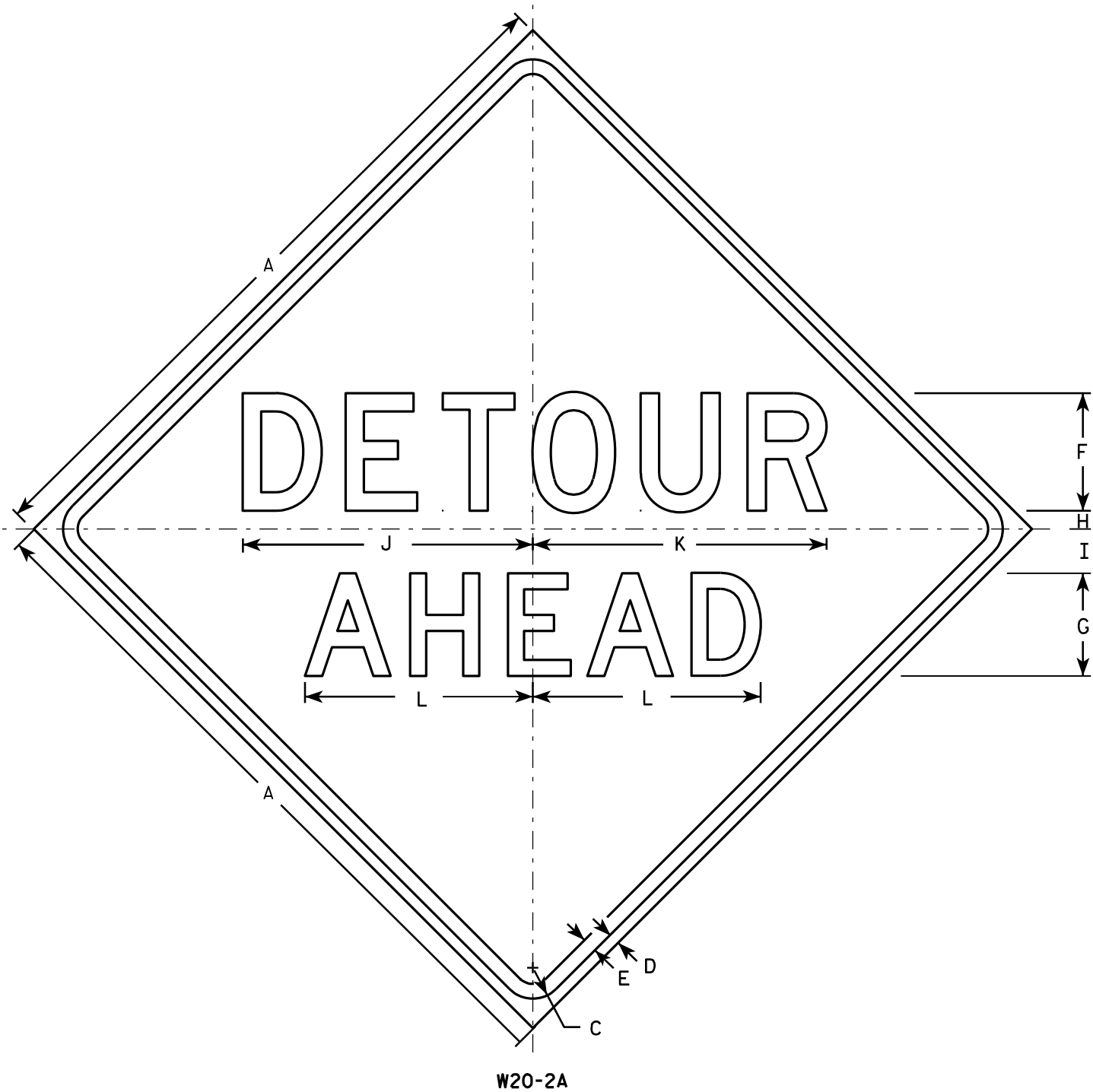
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	A _{req} sq. ft.
1	36		1 5/8	5/8	3/4	5	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-2.6

PROJECT NO:
HWY:
COUNTY:
SHEET NO: 121

BEAMGUARD

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
78+75	0.00	0.00	4.38	0	0	0	0	0	0
79+50	2.49	0.00	31.24	3	0	49	3	61	-58
80+14	2.79	0.00	68.84	6	0	119	9	210	-201
80+39	0.00	0.00	52.88	1	0	56	10	280	-270
80+49	0.00	0.00	38.65	0	0	17	10	301	-291
80+64	0.00	0.00	0.00	0	0	11	10	315	-305
83+37	0.00	0.00	0.00	0	0	0	10	315	-305
83+52	0.00	0.00	34.95	0	0	10	10	328	-318
83+62	0.00	0.00	48.58	0	0	16	10	348	-338
83+88	0.00	0.00	76.49	0	0	60	10	423	-413
84+50	0.00	0.00	35.55	0	0	129	10	584	-574
85+23	0.00	0.00	0.00	0	0	48	10	644	-634
116+74	0.00	0.00	0.00	0	0	0	10	644	-634
117+25	0.00	0.00	24.13	0	0	23	10	673	-663
117+73	0.00	0.00	53.23	0	0	69	10	759	-749
117+78	0.00	0.00	56.72	0	0	10	10	771	-761
117+98	0.00	0.00	78.31	0	0	50	10	834	-824
118+03	0.00	0.00	94.40	0	0	16	10	854	-844
118+08	0.00	0.00	106.11	0	0	19	10	878	-868
118+14	0.00	0.00	94.36	0	0	22	10	905	-895
118+23	0.00	0.00	35.17	0	0	22	10	933	-923
118+28	0.00	0.00	0.00	0	0	3	10	936	-926
123+91	0.00	0.00	0.00	0	0	0	10	936	-926
123+97	0.00	0.00	4.91	0	0	1	10	938	-928
124+06	0.00	0.00	27.29	0	0	5	10	944	-934
124+11	0.00	0.00	41.17	0	0	6	10	951	-941
124+16	0.00	0.00	39.27	0	0	7	10	960	-950
124+22	0.00	0.00	34.34	0	0	8	10	970	-960
124+41	0.00	0.00	24.56	0	0	21	10	996	-986
124+47	0.00	0.00	24.48	0	0	5	10	1,003	-993
125+00	0.00	0.00	15.84	0	0	40	10	1,053	-1,043
125+60	0.00	0.00	0.00	0	0	18	10	1,075	-1,065
145+50	0.00	0.00	0.00	0	0	0	10	1,075	-1,065
146+50	0.00	0.00	21.16	0	0	39	10	1,124	-1,114
146+96	0.00	0.00	11.53	0	0	28	10	1,159	-1,149
147+22	0.00	0.00	40.41	0	0	25	10	1,190	-1,180
147+32	0.00	0.00	53.77	0	0	17	10	1,211	-1,201
147+34	0.00	0.00	51.11	0	0	4	10	1,216	-1,206
147+46	0.00	0.00	32.17	0	0	19	10	1,240	-1,230
147+59	0.00	0.00	43.63	0	0	18	10	1,263	-1,253
147+70	0.00	0.00	46.37	0	0	18	10	1,285	-1,275
147+84	0.00	0.00	0.00	0	0	12	10	1,300	-1,290
151+53	0.00	0.00	0.00	0	0	0	10	1,300	-1,290
151+67	0.00	0.00	9.55	0	0	2	10	1,303	-1,293
151+78	0.00	0.00	2.34	0	0	2	10	1,305	-1,295
151+90	0.00	0.00	1.95	0	0	1	10	1,306	-1,296
152+03	0.00	0.00	16.07	0	0	4	10	1,311	-1,301
152+05	0.00	0.00	17.87	0	0	1	10	1,313	-1,303
152+15	0.00	0.00	19.22	0	0	7	10	1,321	-1,311
152+40	0.00	0.00	19.64	0	0	18	10	1,344	-1,334
153+00	0.00	0.00	23.52	0	0	48	10	1,404	-1,394
153+75	0.00	0.00	4.94	0	0	40	10	1,454	-1,444
176+50	0.00	0.00	0.48	0	0	229	10	1,740	-1,730
177+25	0.00	0.00	14.71	0	0	21	10	1,766	-1,756
177+85	0.00	0.00	2.80	0	0	19	10	1,790	-1,780
178+10	0.00	0.00	28.32	0	0	14	10	1,808	-1,798
178+21	0.00	0.00	52.60	0	0	16	10	1,828	-1,818
178+35	0.00	0.00	0.00	0	0	14	10	1,845	-1,835
190+92	0.00	0.00	0.00	0	0	0	10	1,845	-1,835
191+06	0.00	0.00	14.38	0	0	4	10	1,850	-1,840

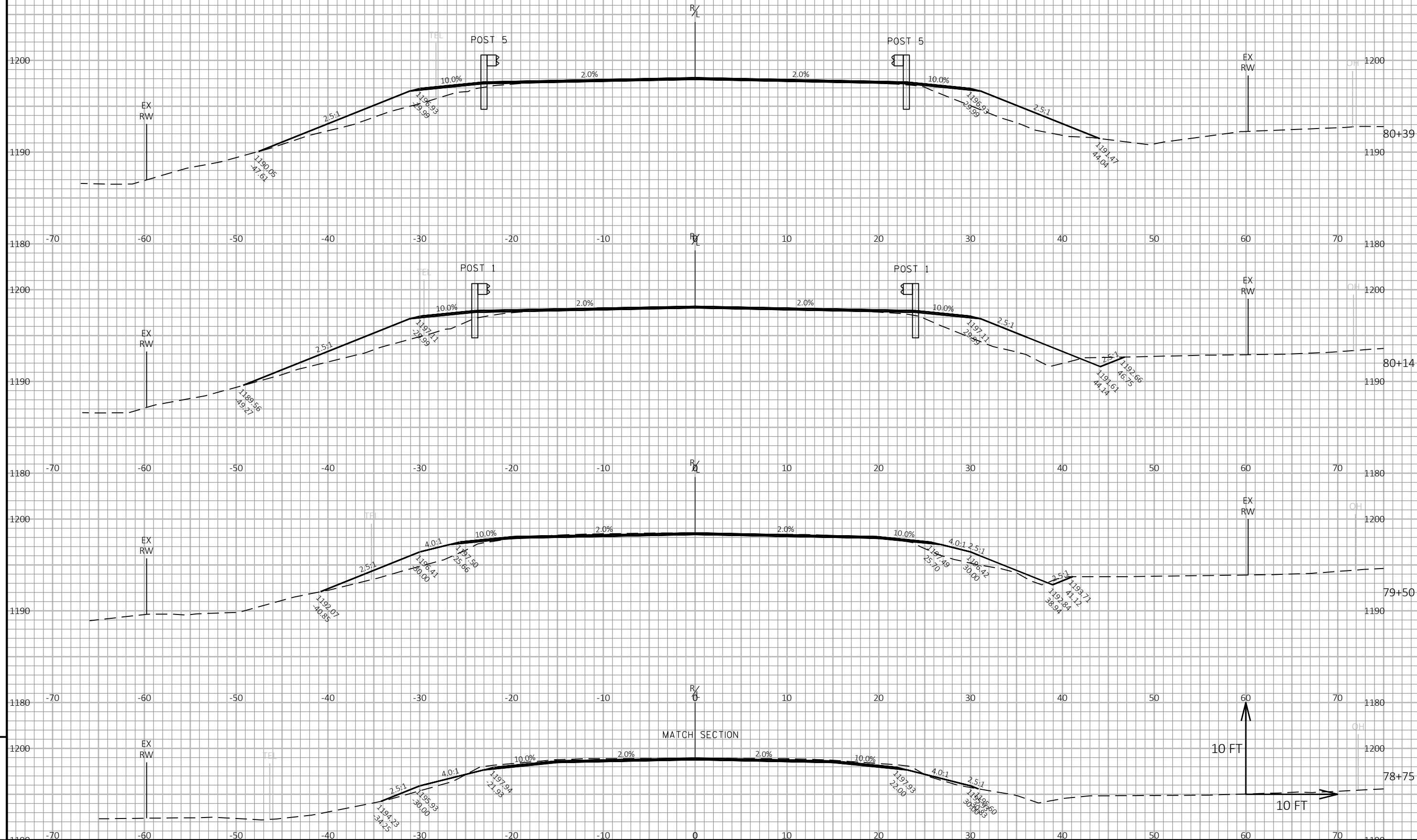
BEAMGUARD

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
191+17	0.00	0.00	9.02	0	0	5	10	1,856	-1,846
191+42	0.00	0.00	1.87	0	0	5	10	1,863	-1,853
191+75	0.00	0.00	21.04	0	0	14	10	1,880	-1,870
192+09	0.00	0.00	0.00	0	0	13	10	1,896	-1,886
420+50	0.00	0.00	0.00	0	0	0	10	1,896	-1,886
420+75	0.00	0.00	32.65	0	0	15	10	1,915	-1,905
420+98	0.00	0.00	37.95	0	0	30	10	1,953	-1,943
421+23	0.00	0.00	62.54	0	0	47	10	2,011	-2,001
421+34	0.00	0.00	64.29	0	0	26	10	2,044	-2,034
421+48	0.00	0.00	0.00	0	0	17	10	2,065	-2,055
423+50	0.00	0.00	0.00	0	0	0	10	2,065	-2,055
423+76	0.00	0.00	130.52	0	0	63	10	2,144	-2,134
424+00	0.00	0.00	0.00	0	0	58	10	2,216	-2,206
427+79	0.00	0.00	0.00	0	0	0	10	2,216	-2,206
427+94	0.00	0.00	45.30	0	0	12	10	2,231	-2,221
428+04	0.00	0.00	33.69	0	0	15	10	2,250	-2,240
428+29	0.00	0.00	18.48	0	0	24	10	2,280	-2,270
428+50	0.00	0.00	11.38	0	0	12	10	2,295	-2,285
428+75	0.00	0.00	0.00	0	0	5	10	2,301	-2,291

CULVERT

STATION	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT NOTE 1	SALVAGED/UNUSABLE PAVEMENT MATERIAL NOTE 2	FILL NOTE 3	CUT 1.00 NOTE 1	EXPANDED FILL 1.25	MASS ORDINATE NOTE 8
423+19	0.00	0.00	0.00	0	0	0	0	0	0
423+21	48.28	0.00	0.00	2	0	0	2	0	2
423+70	312.48	0.00	0.00	327	0	0	329	0	329
423+71	0.00	0.00	0.00	6	0	0	335	0	335
423+81	0.00	0.00	0.00	0	0	0	335	0	335
423+82	315.21	0.00	0.00	6	0	0	341	0	341
424+31	50.83	0.00	0.00	332	0	0	673	0	673
424+33	0.00	0.00	0.00	2	0	0	675	0	675

NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION



PROJECT NO: 6360-06-70

HWY: STH 107

COUNTY: MARATHON

CROSS SECTIONS: GUARDRAIL AND CULVERT

SHEET 123

FILE NAME : N:\PDS\C3D\63600600\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 1

PLOT DATE : 3/18/2021 7:47 AM

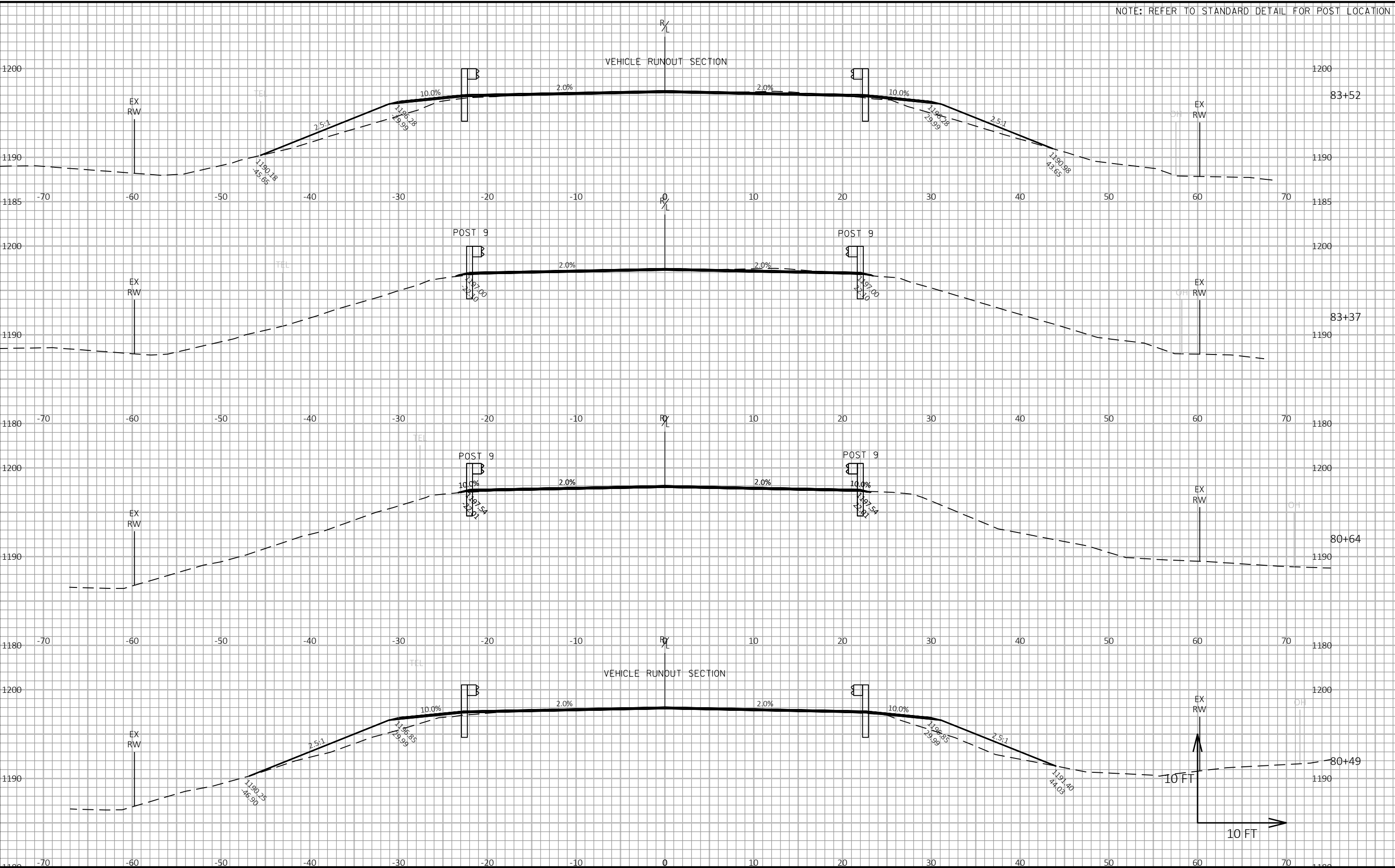
PLOT BY : CASPER, ANDREW P

PLOT NAME :

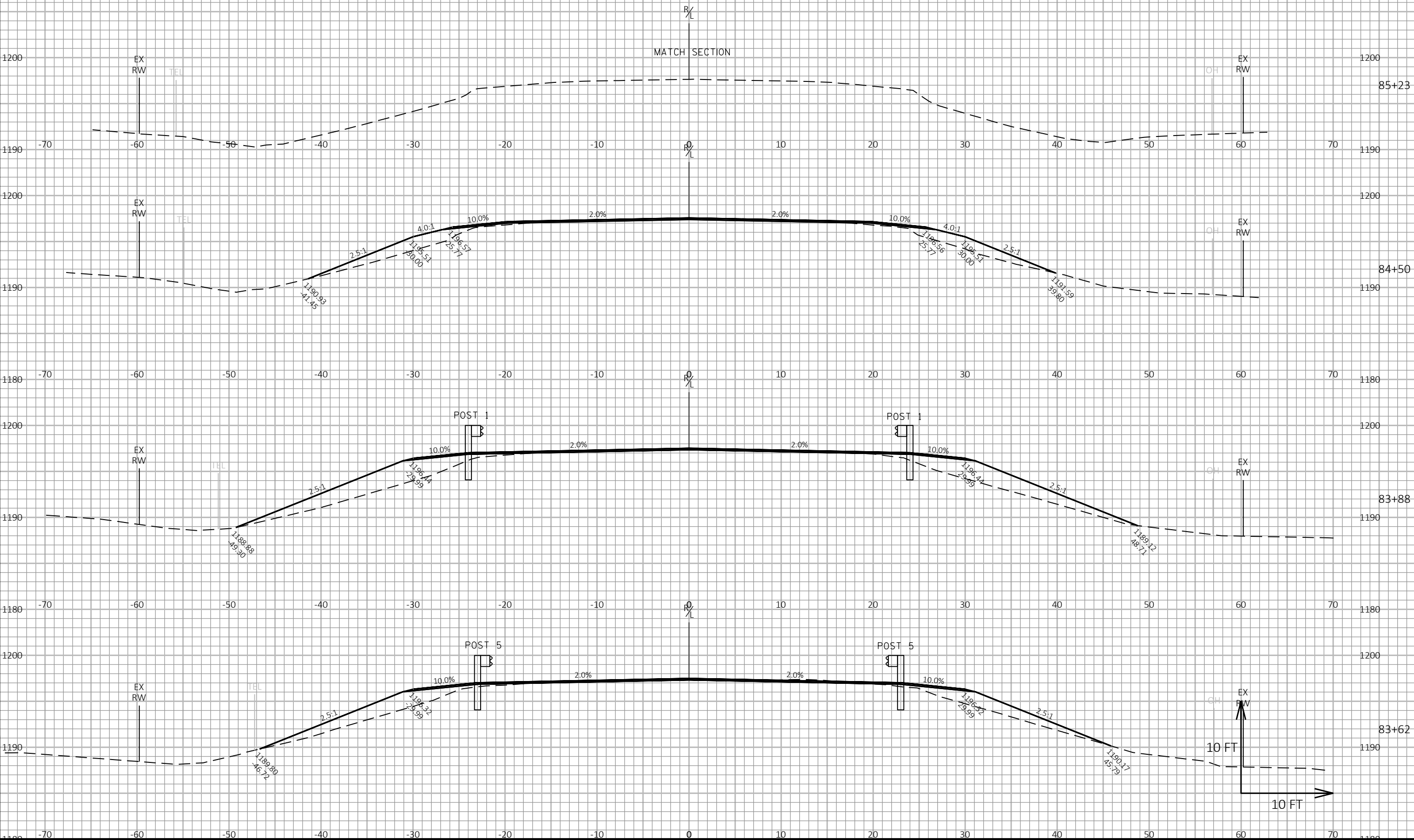
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDs SHEET 49

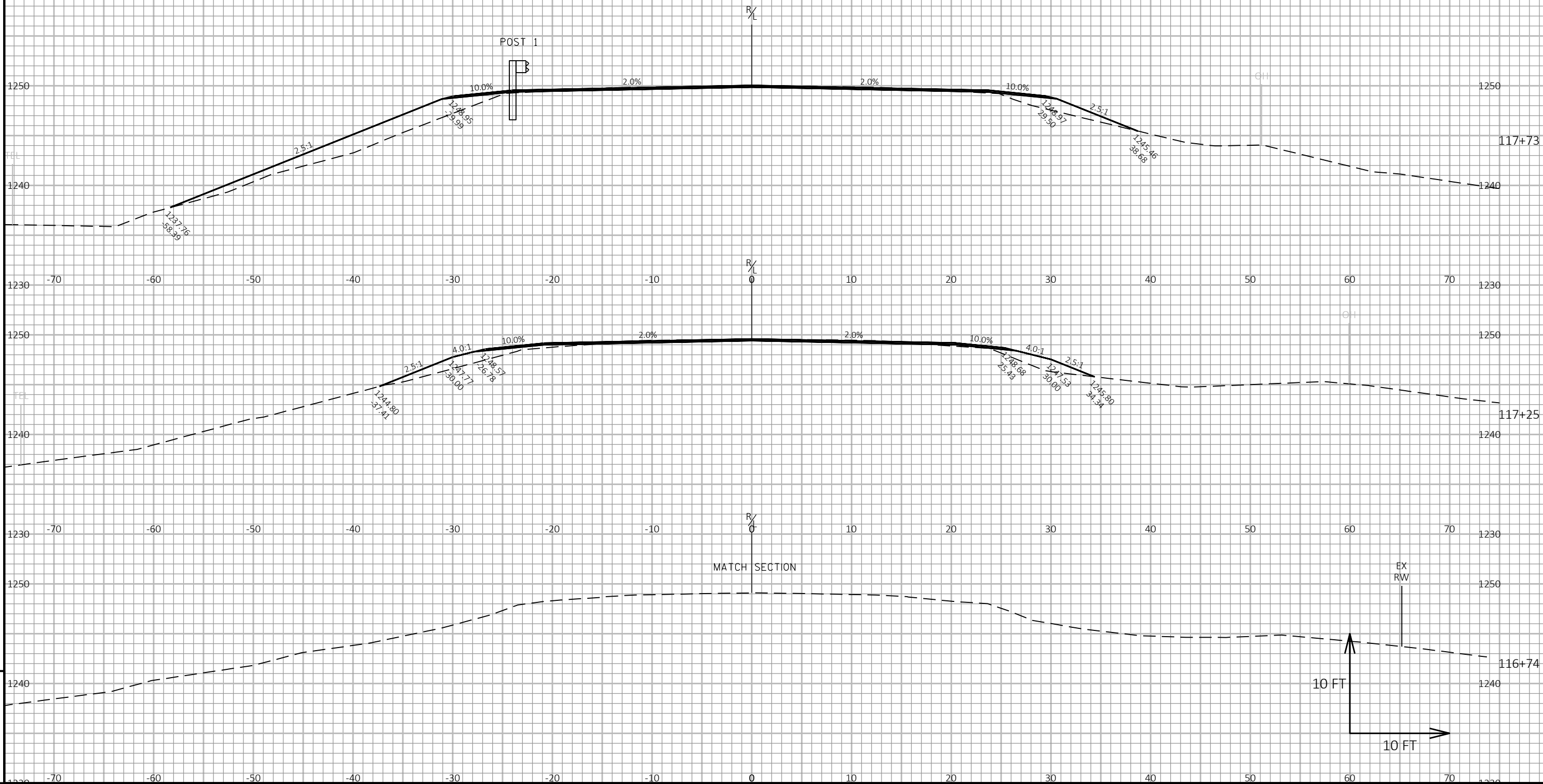
NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION



NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION



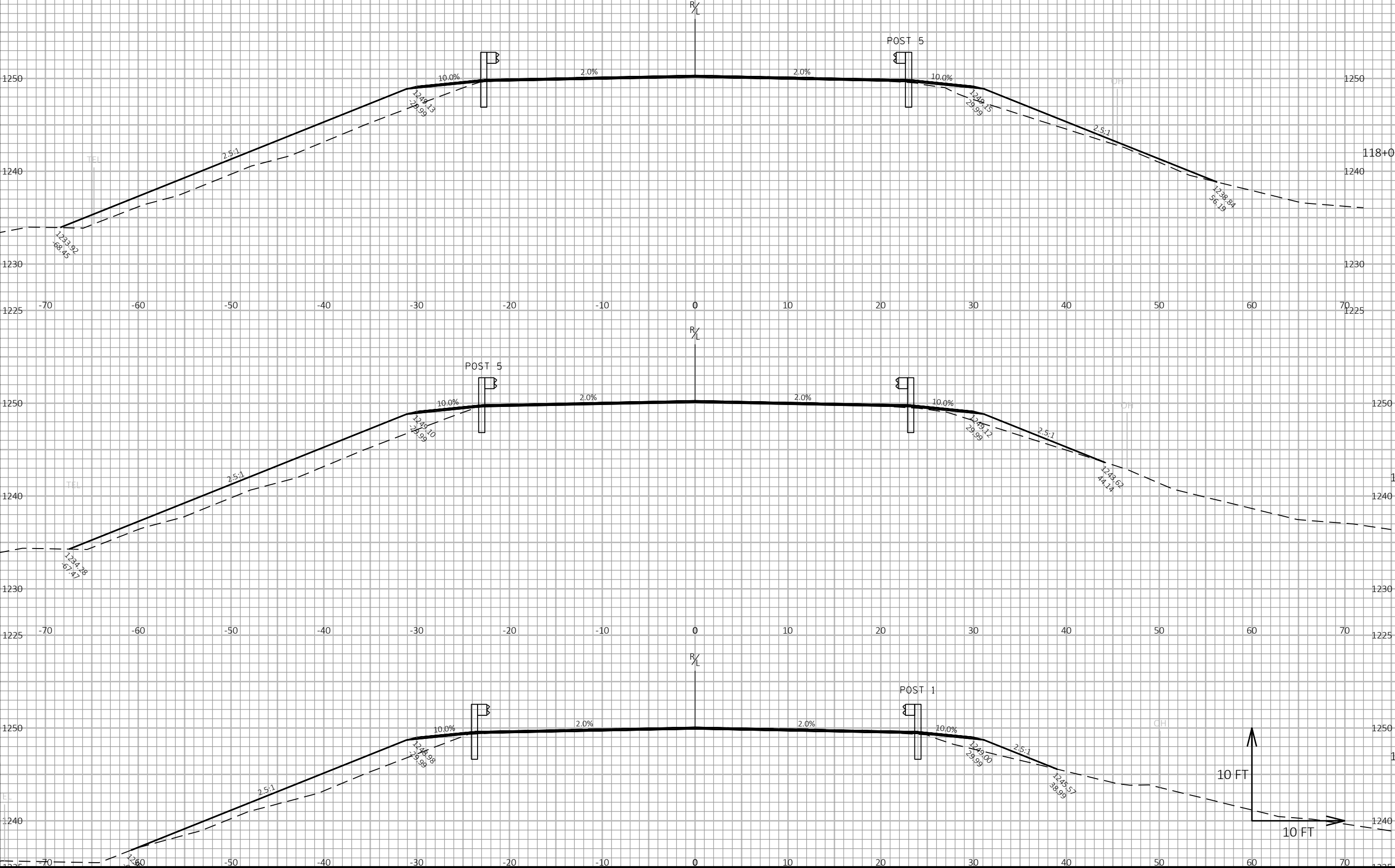
NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION



9

9

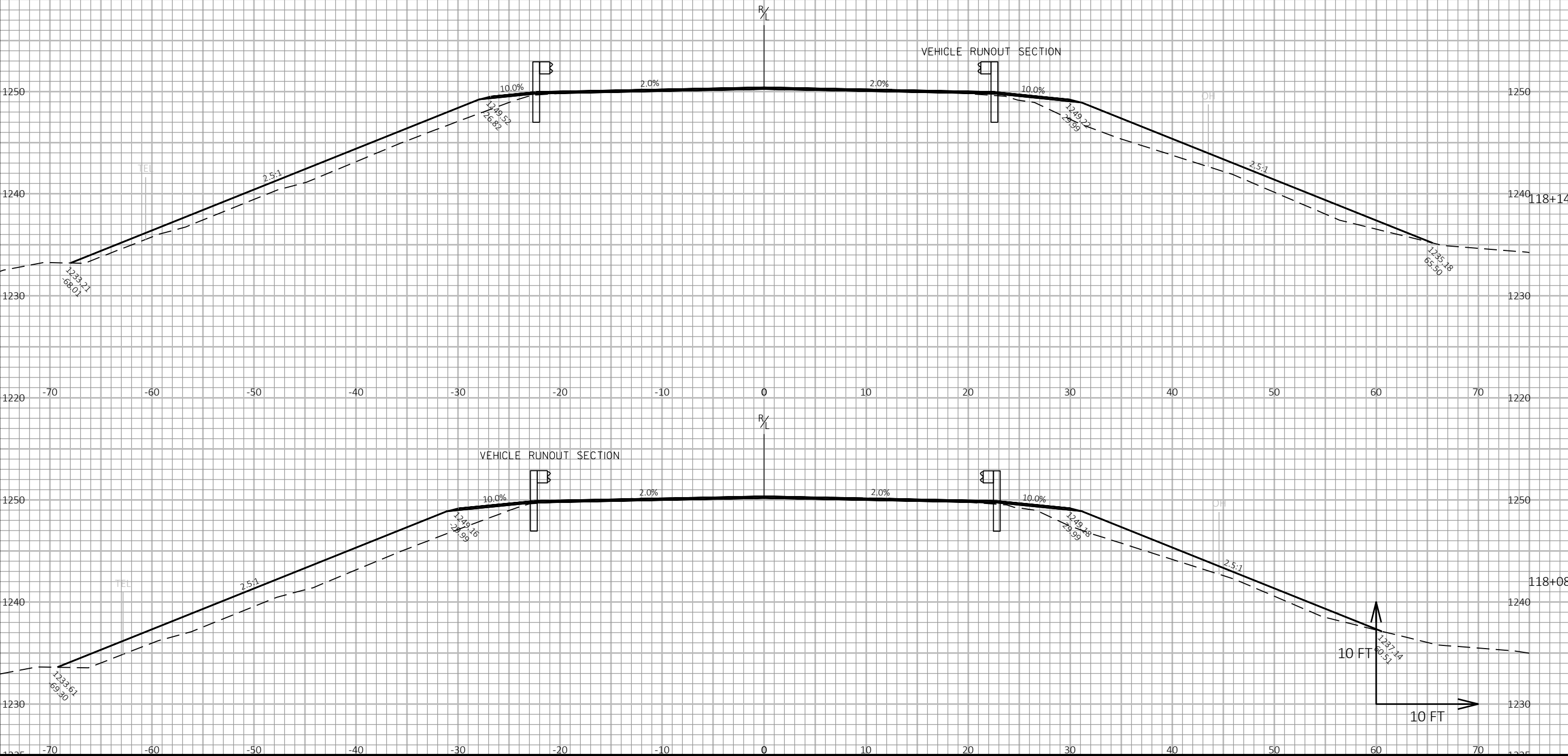
NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION



9

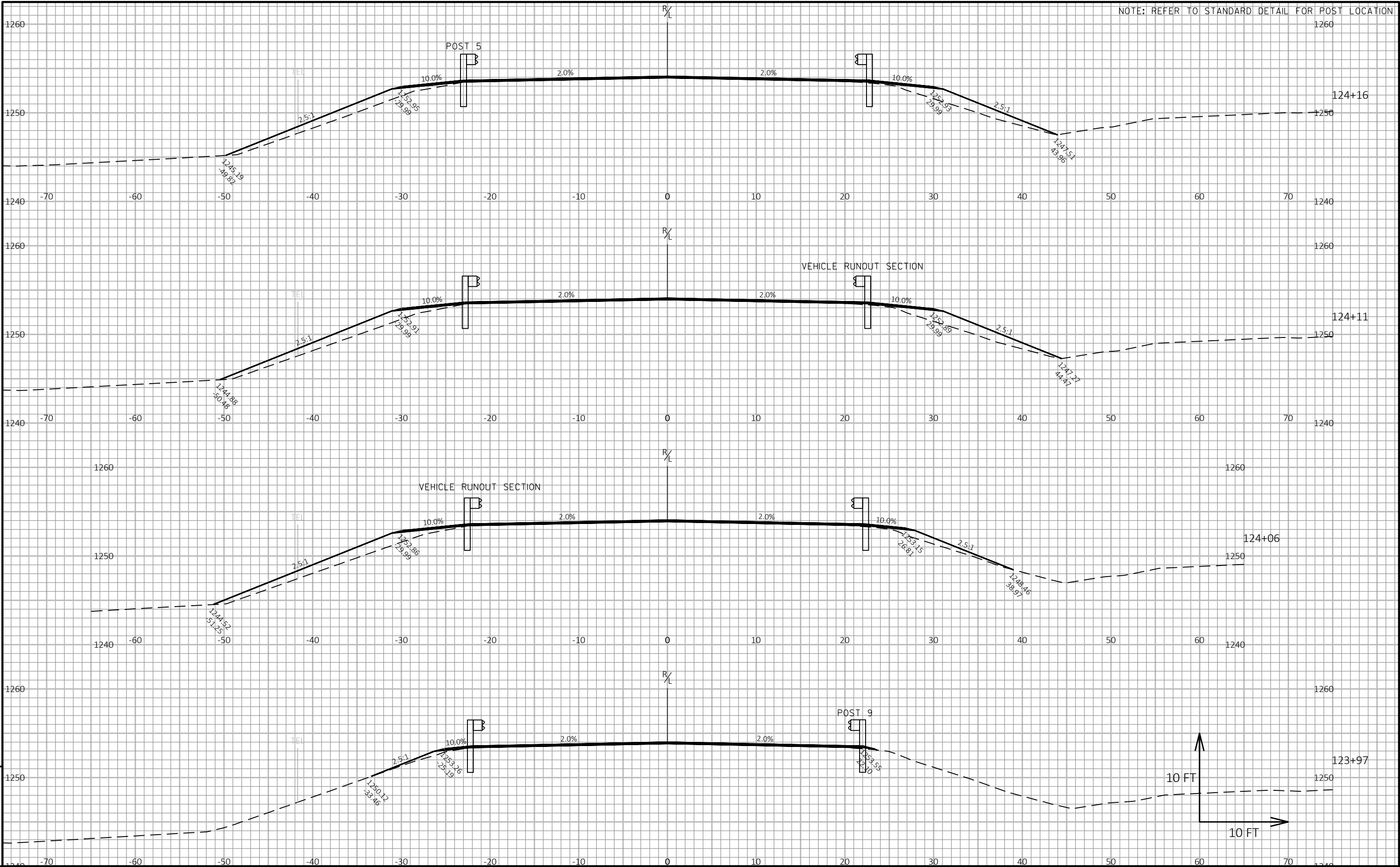
9

NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION

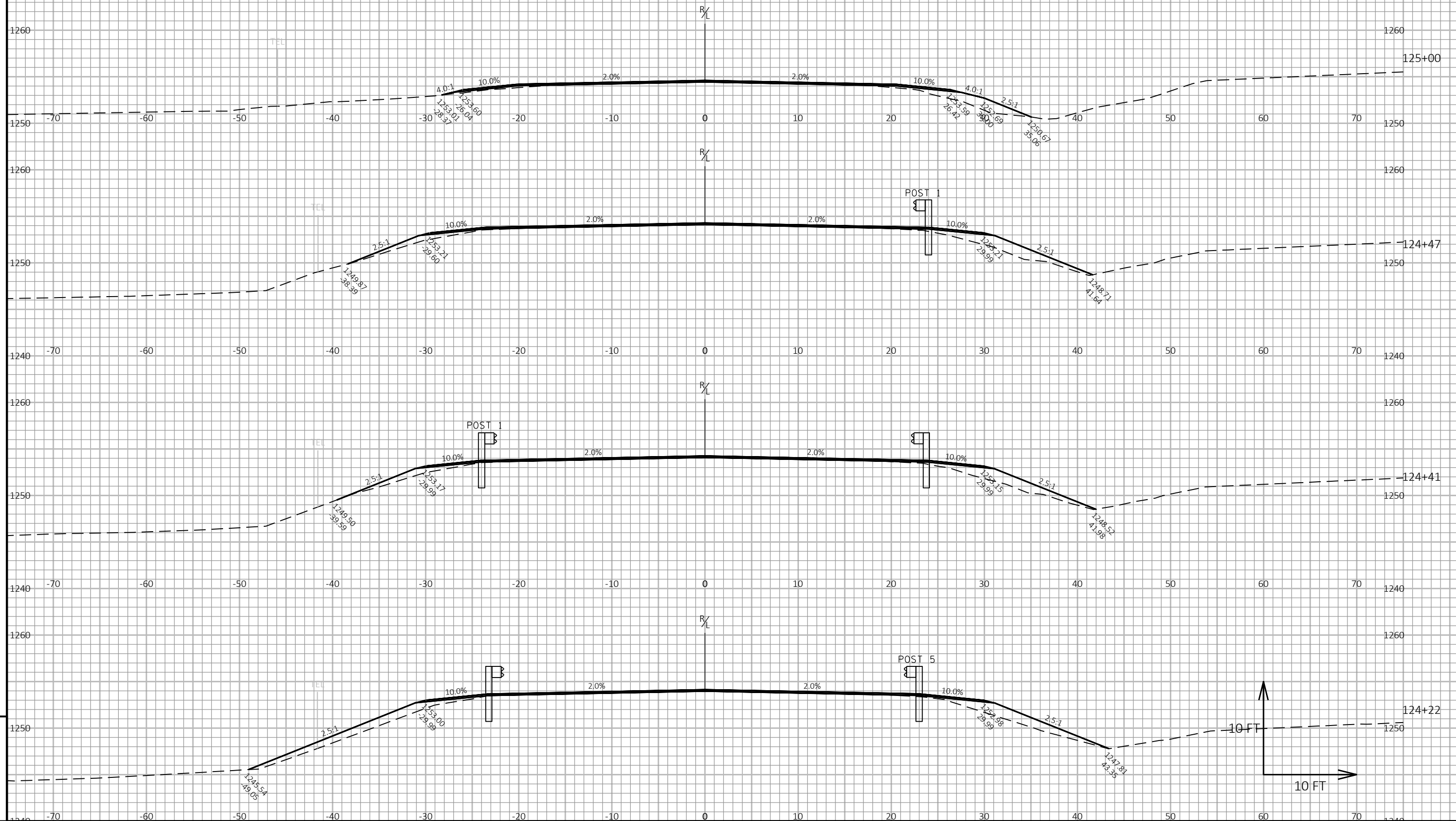


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NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION



PROJECT NO:	6360-06-70
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HWY: STH 107

COUNTY: MARATHON

CROSS SECTIONS: GUARDRAIL AND CULVERT

SHEET 131

FILE NAME : N:\PDS\C3D\63600600\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 9

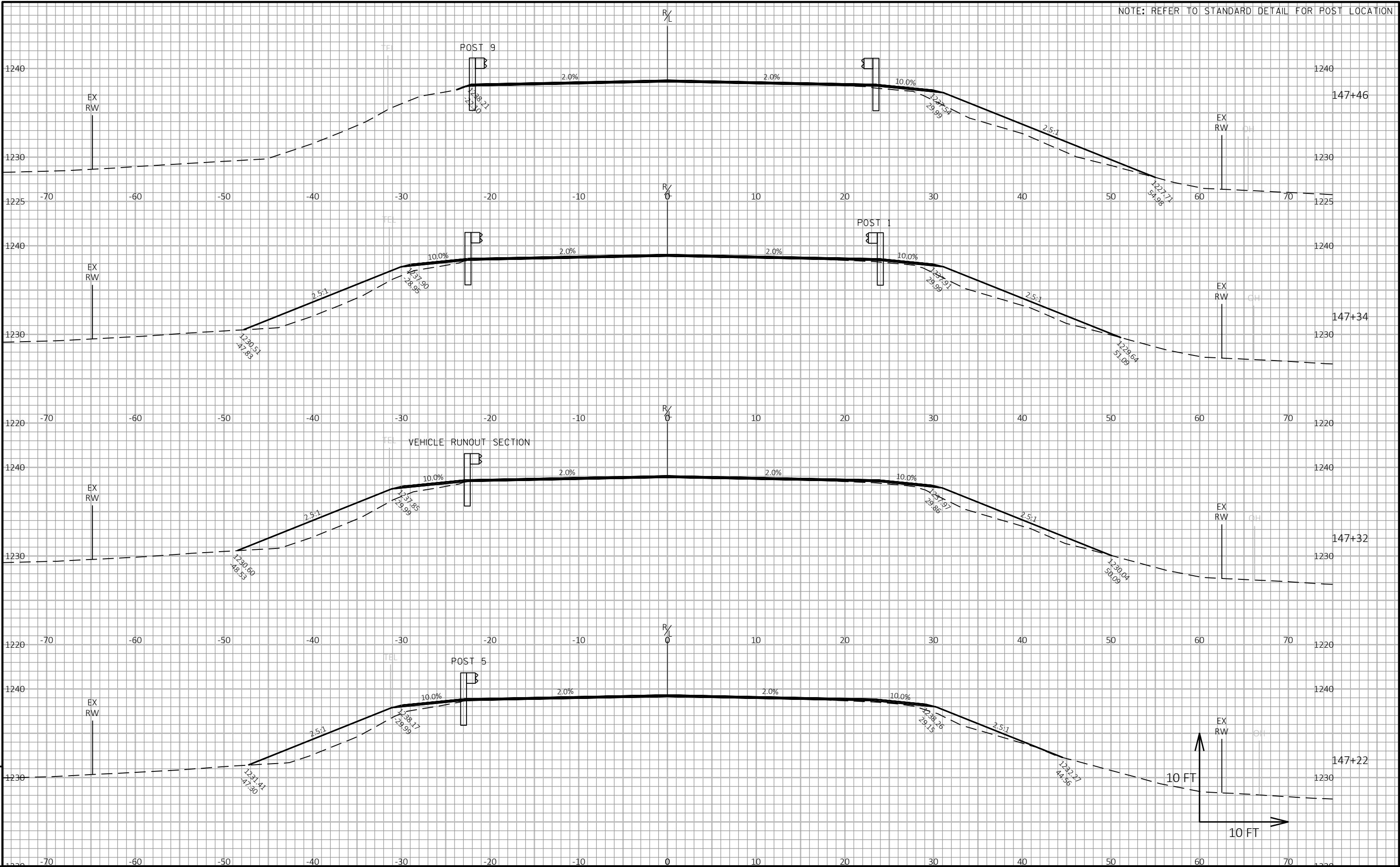
PLOT DATE : 3/18/2021 7:49 AM

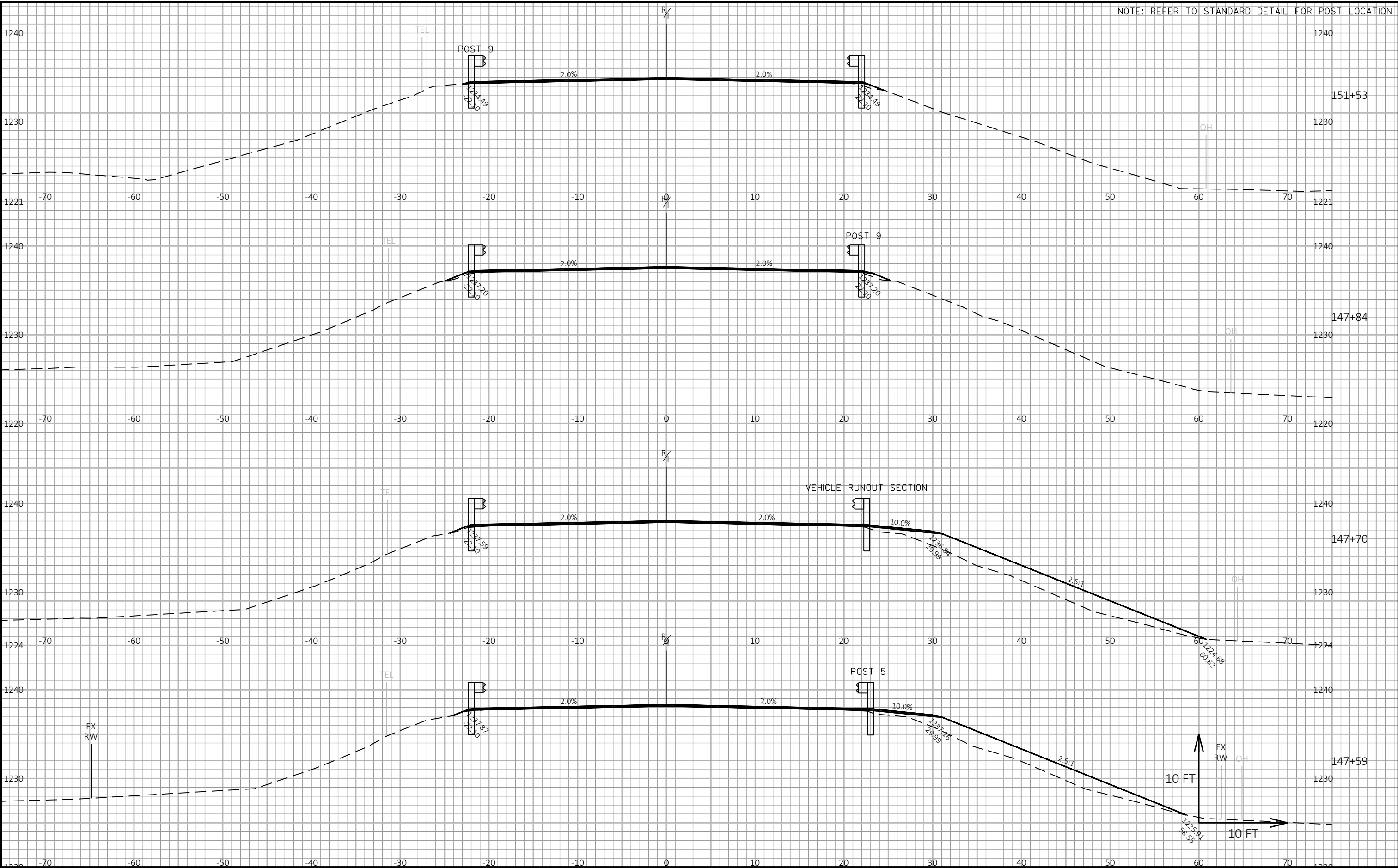
PLOT BY : CASPER, ANDREW P

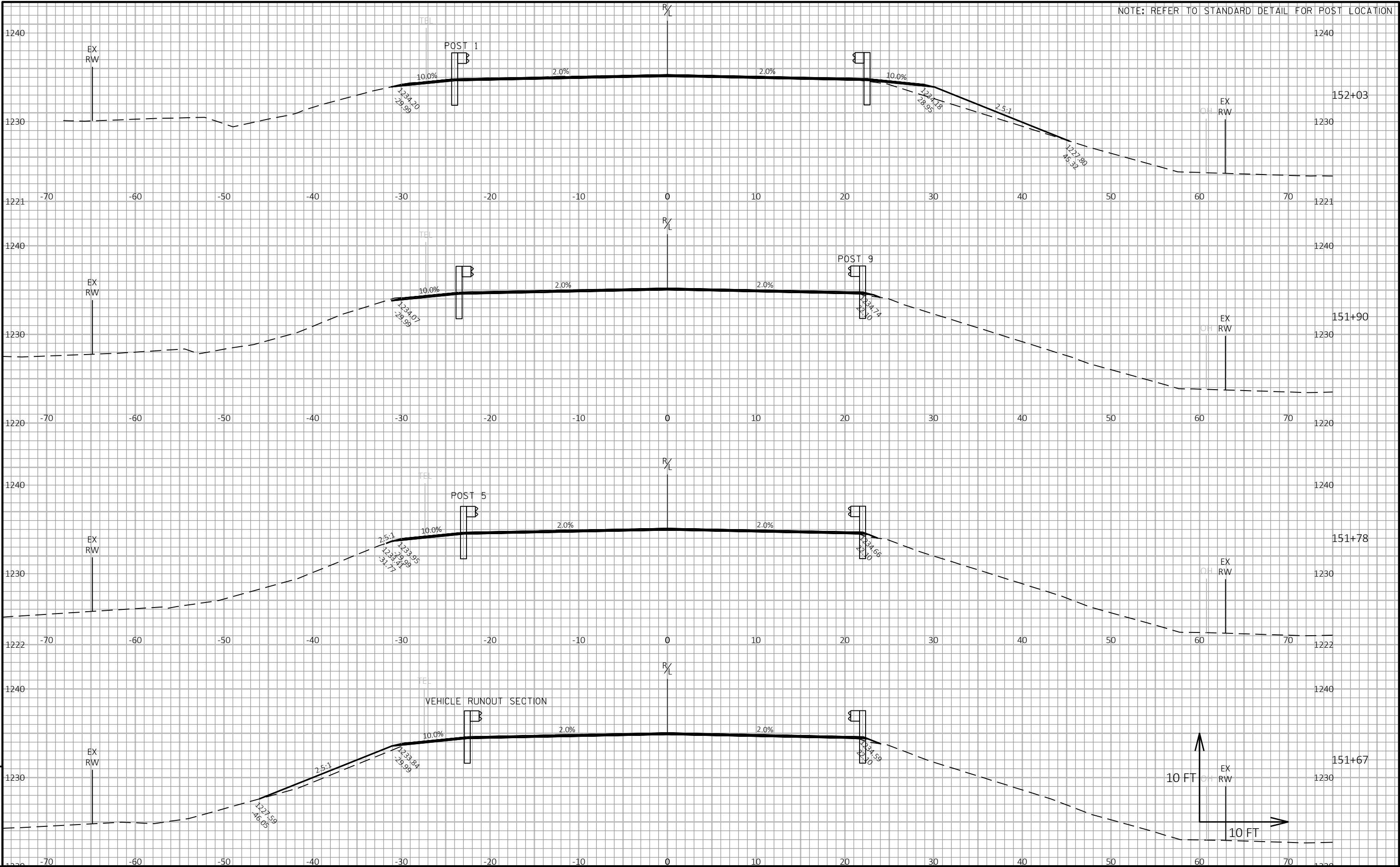
PLOT NAME :

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

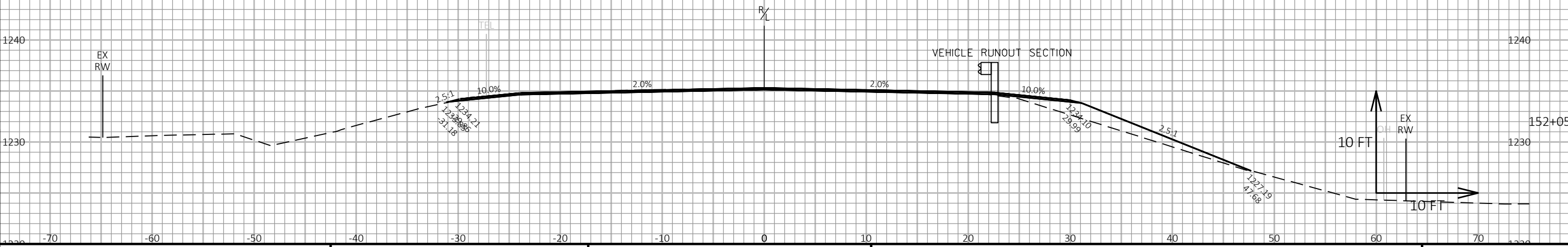
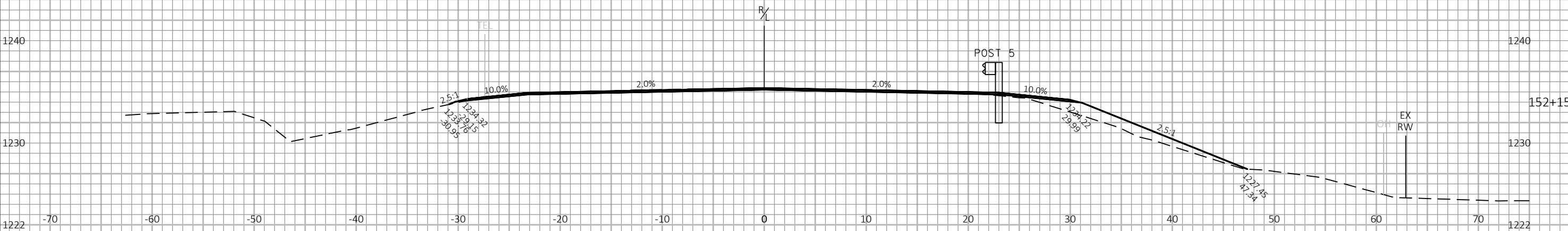
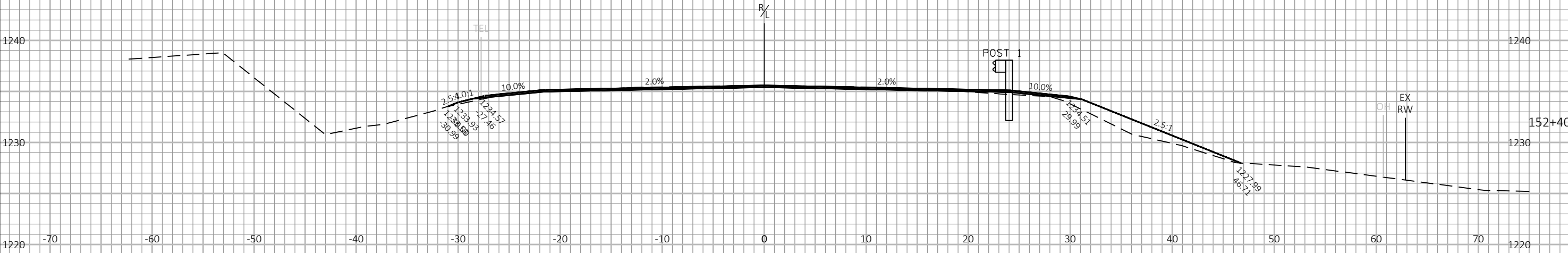
WISDOT/CADDS SHEET 49



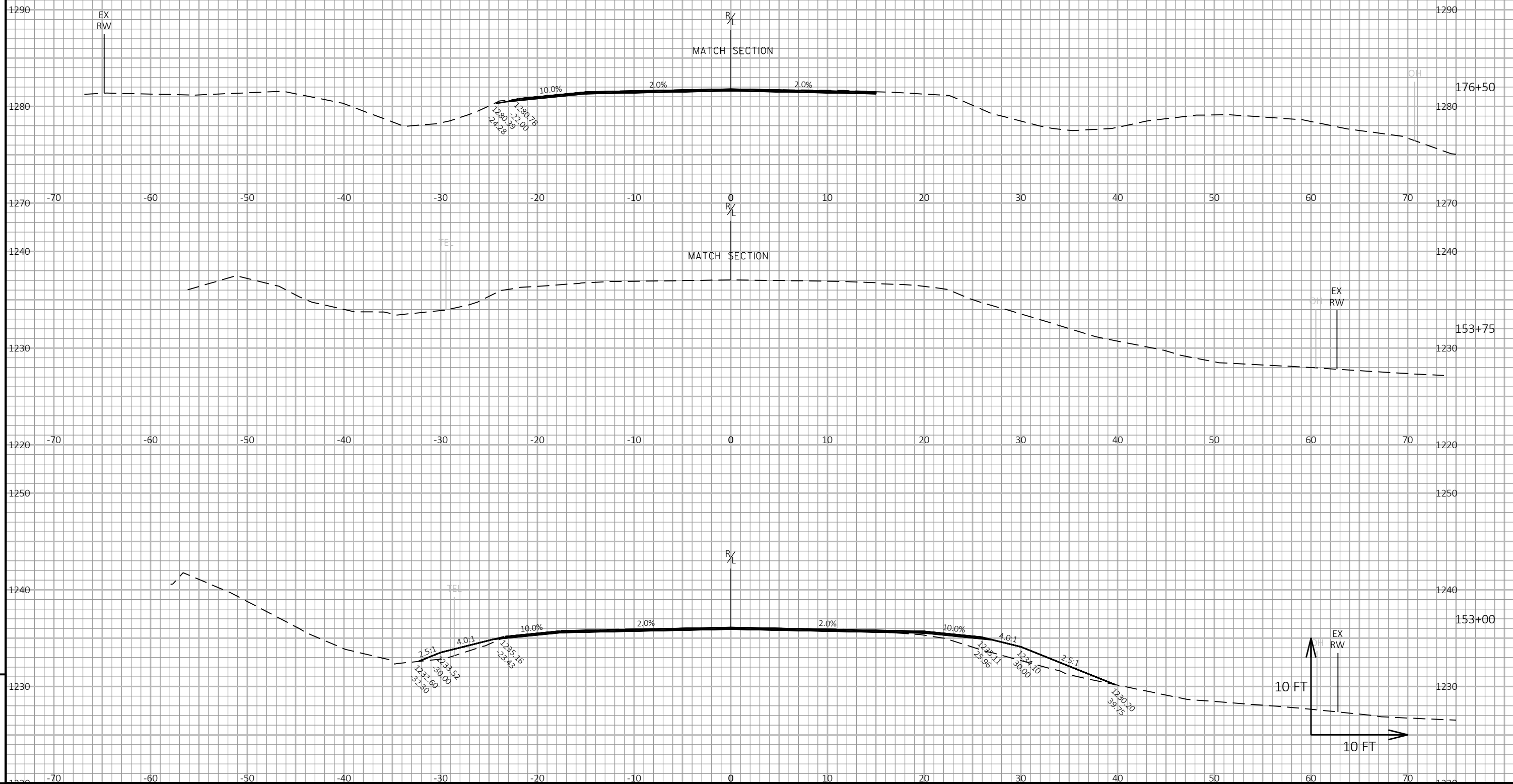




NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION



NOTE: REFER TO STANDARD DETAIL FOR POST LOCATION



PROJECT NO:	6360-06-70
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HWY: STH 107

COUNTY: MARATHON

CROSS SECTIONS: GUARDRAIL AND CULVERT

SHEET 137



FILE NAME : N:\PDS\C3D\63600600\SHEETSPLAN\090201-XS.DWG
LAYOUT NAME - 15

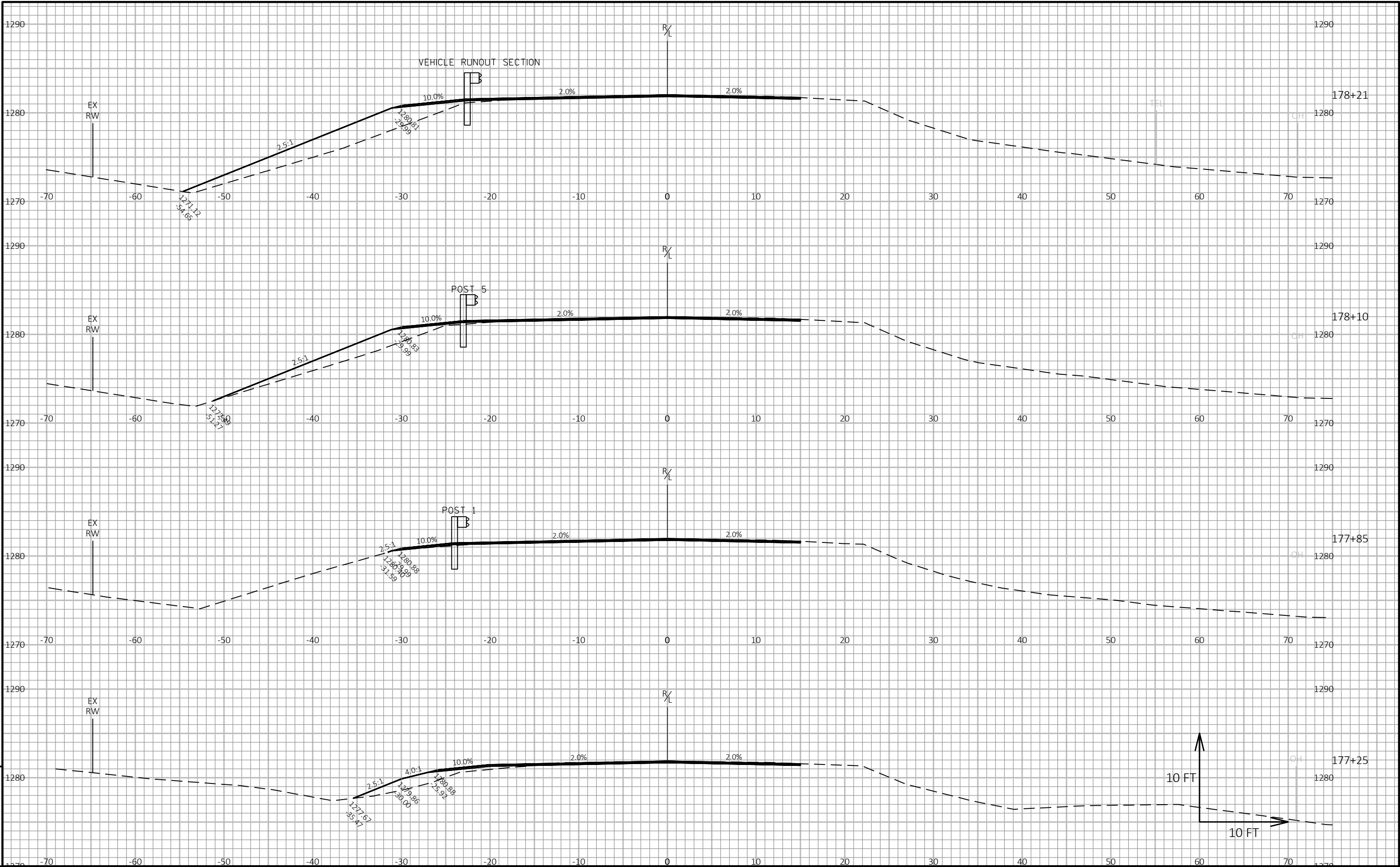
PLOT DATE : 3/18/2021 7:50 AM

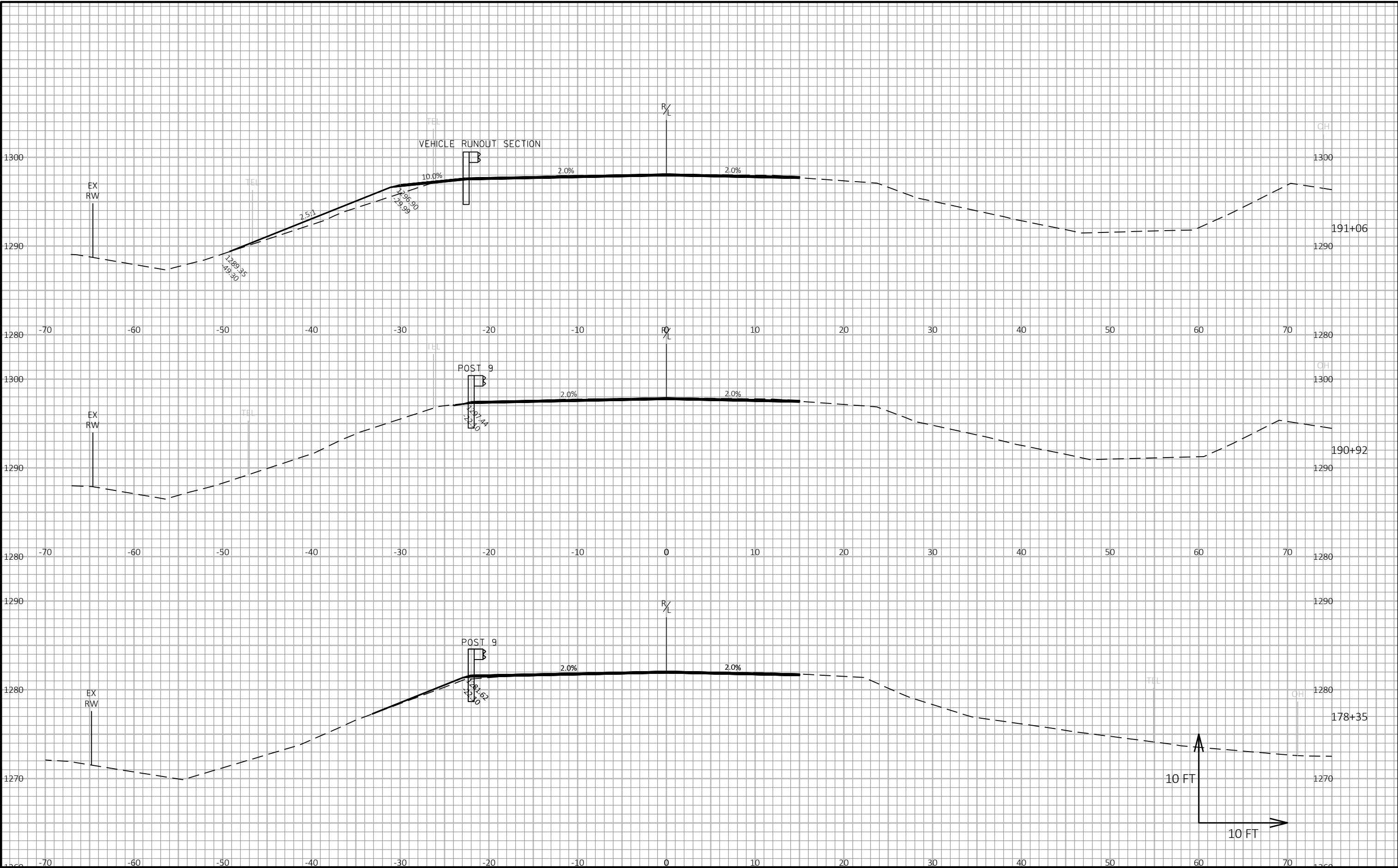
PLOT BY : CASPER, ANDREW P

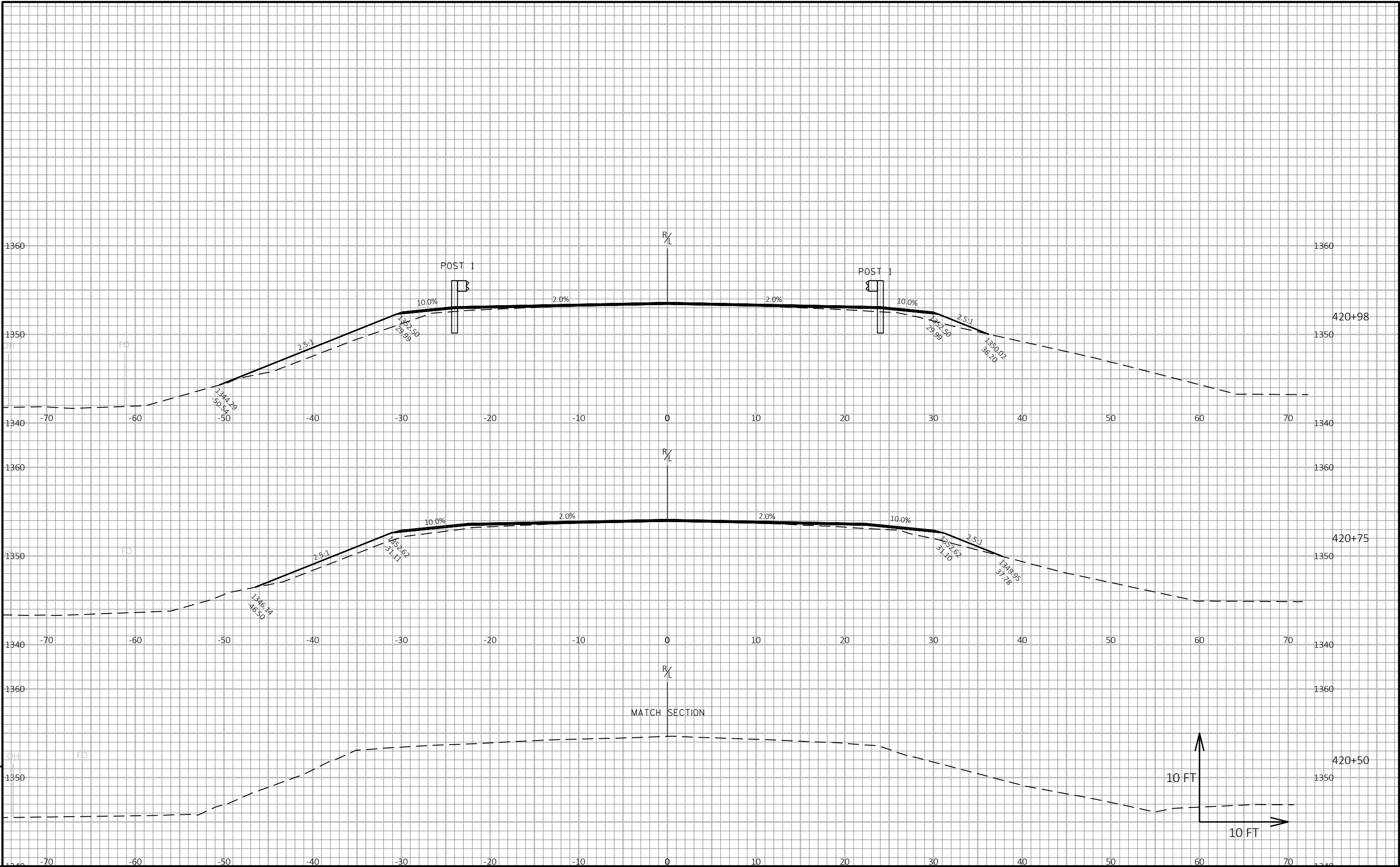
PLOT NAME :

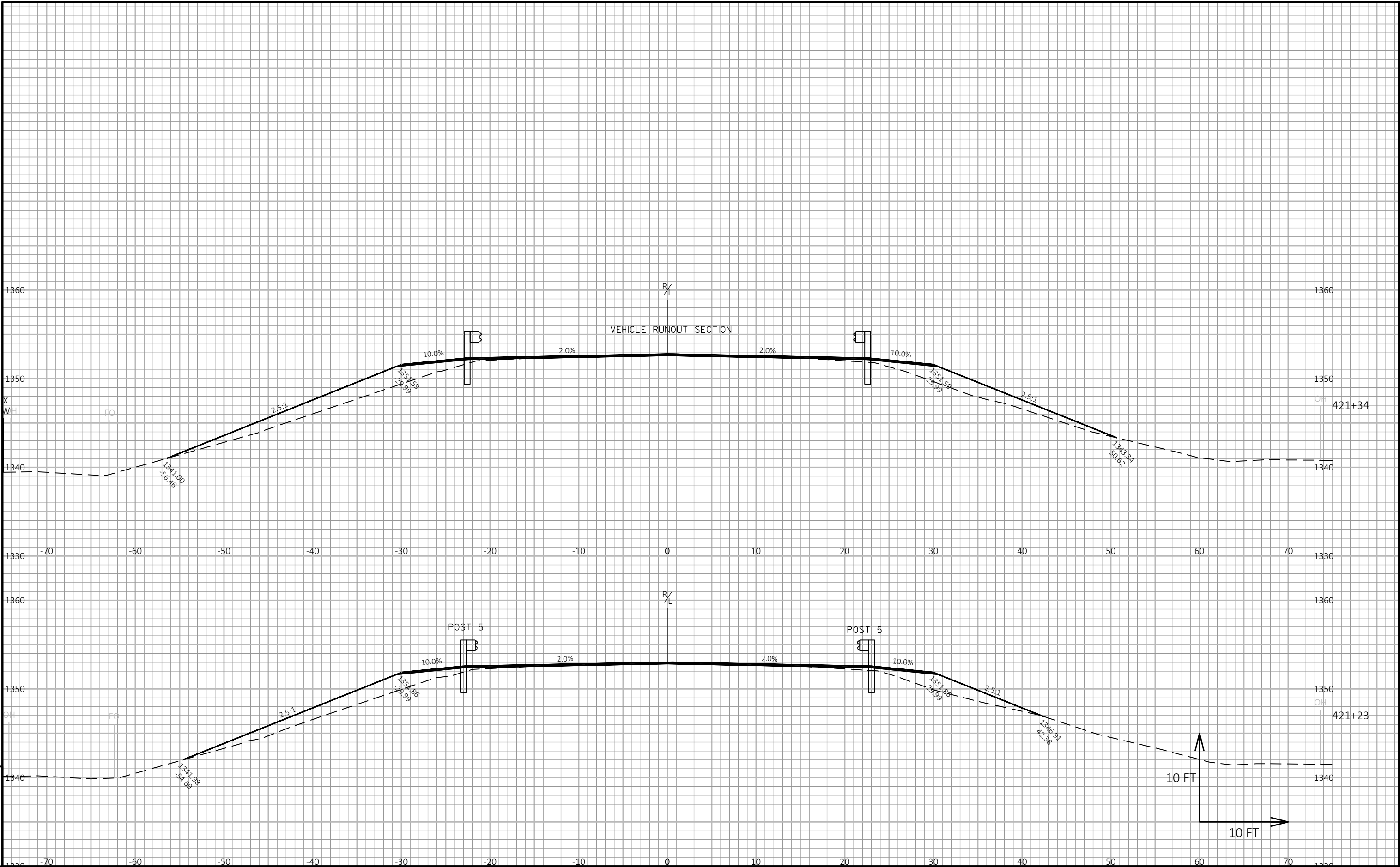
PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

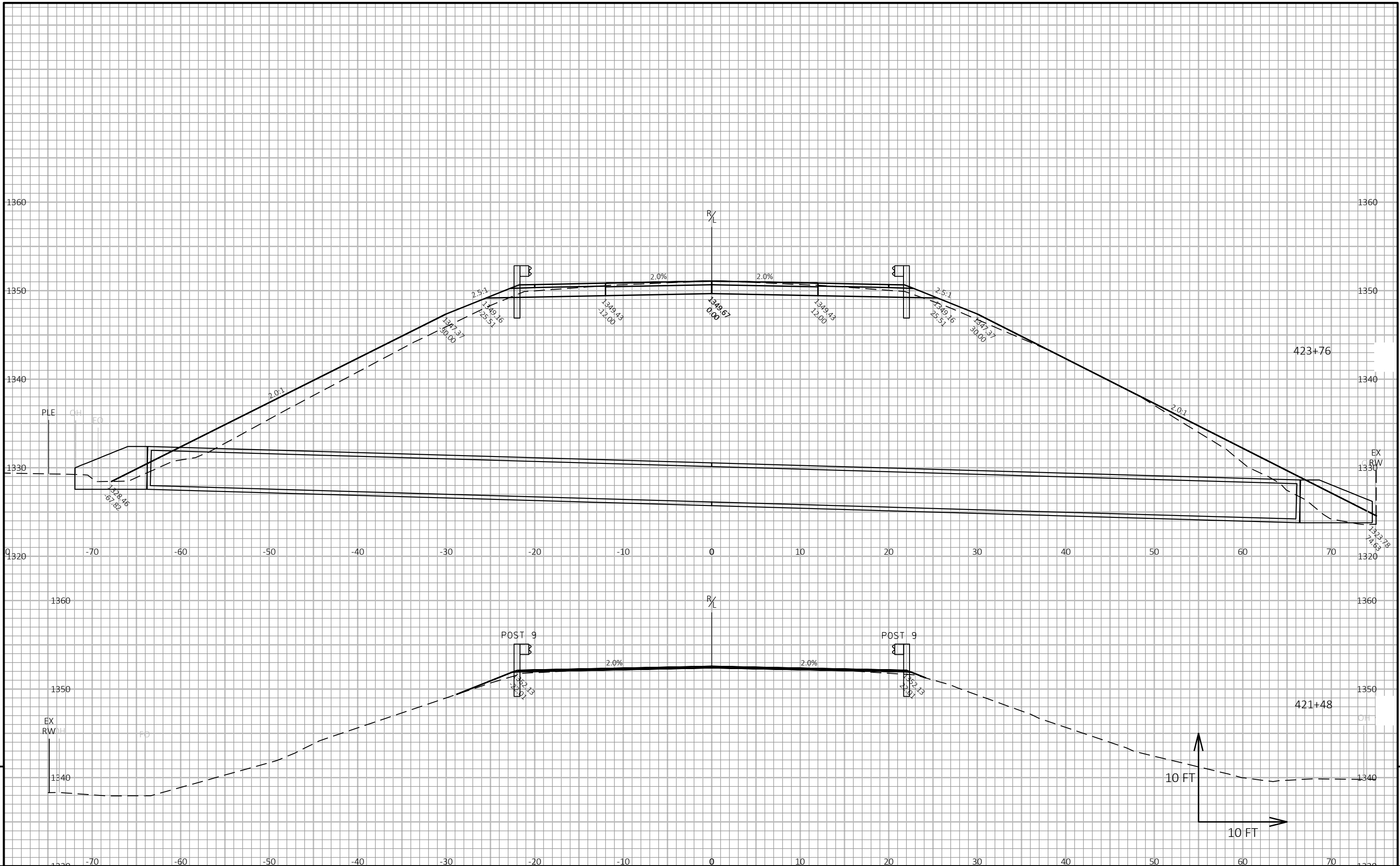
WISDOT/CADDS SHEET 49











PROJECT NO: 6360-06-70

HWY: STH 107

COUNTY: MARATHON

CROSS SECTIONS: GUARDRAIL AND CULVERT

SHEET 143

FILE NAME : N:\PDS\C3D\63600600\SHEETS\PLAN\090201-XS.DWG
LAYOUT NAME - 21

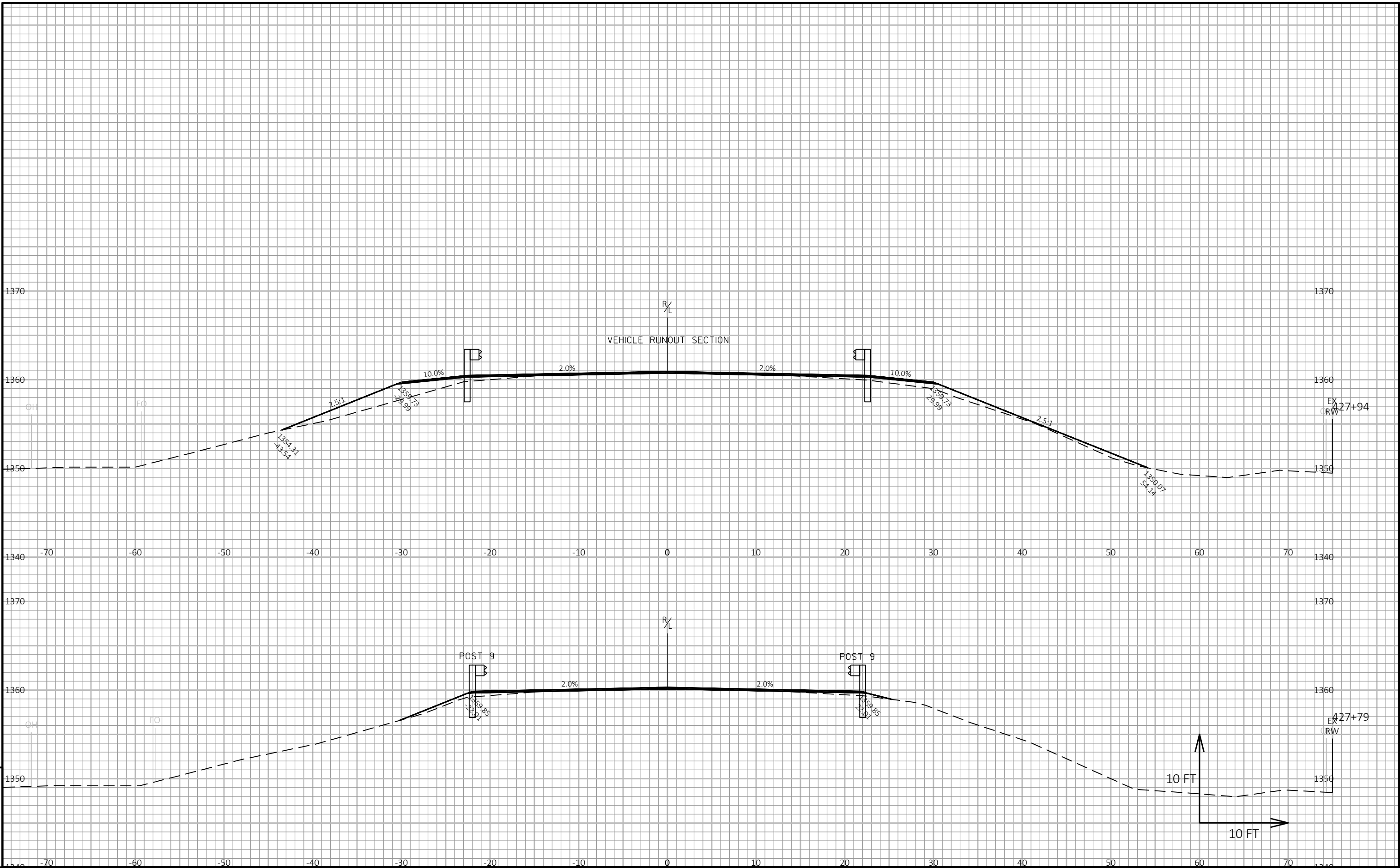
PLOT DATE : 3/18/2021 7:52 AM

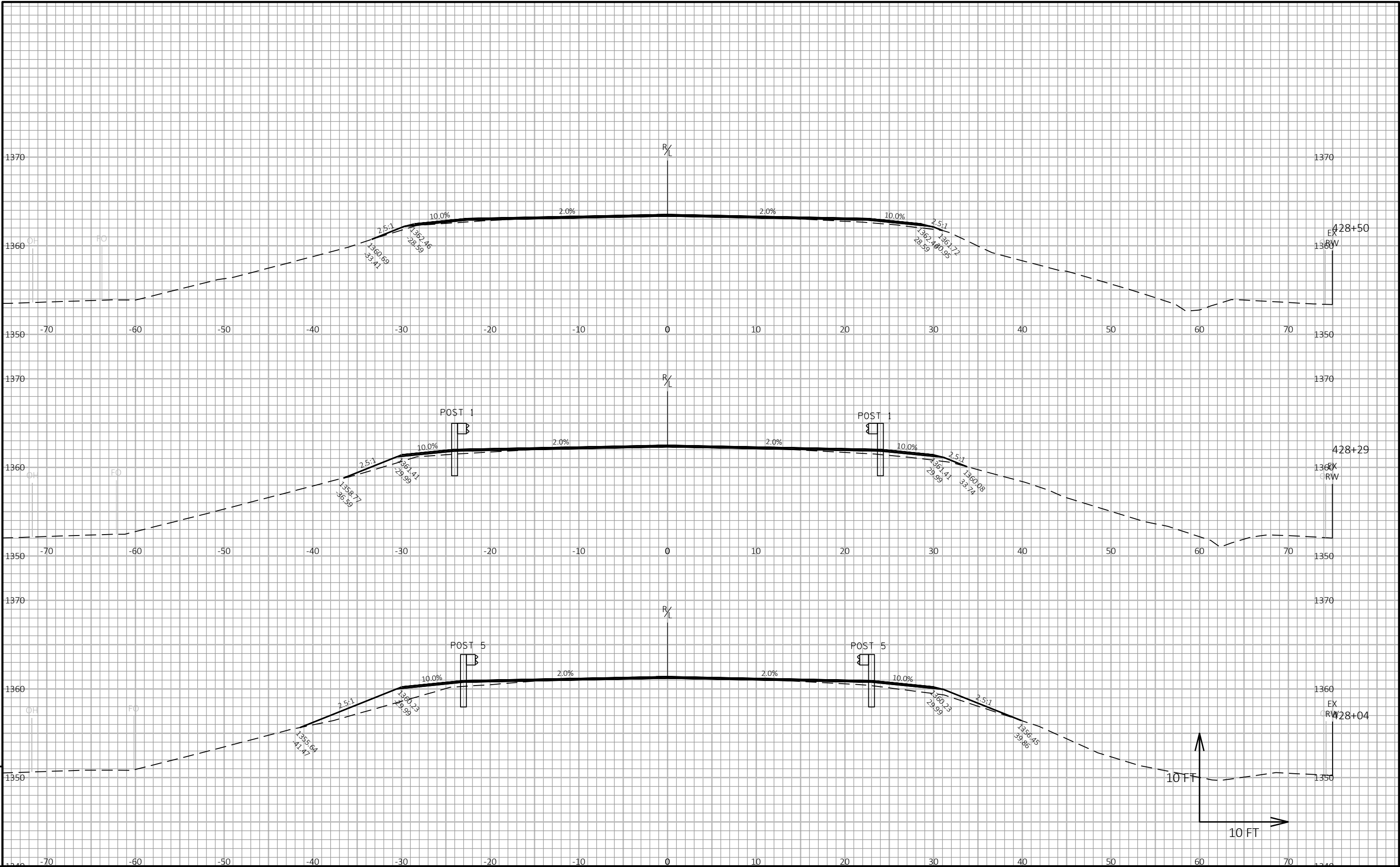
PLOT BY : CASPER, ANDREW P

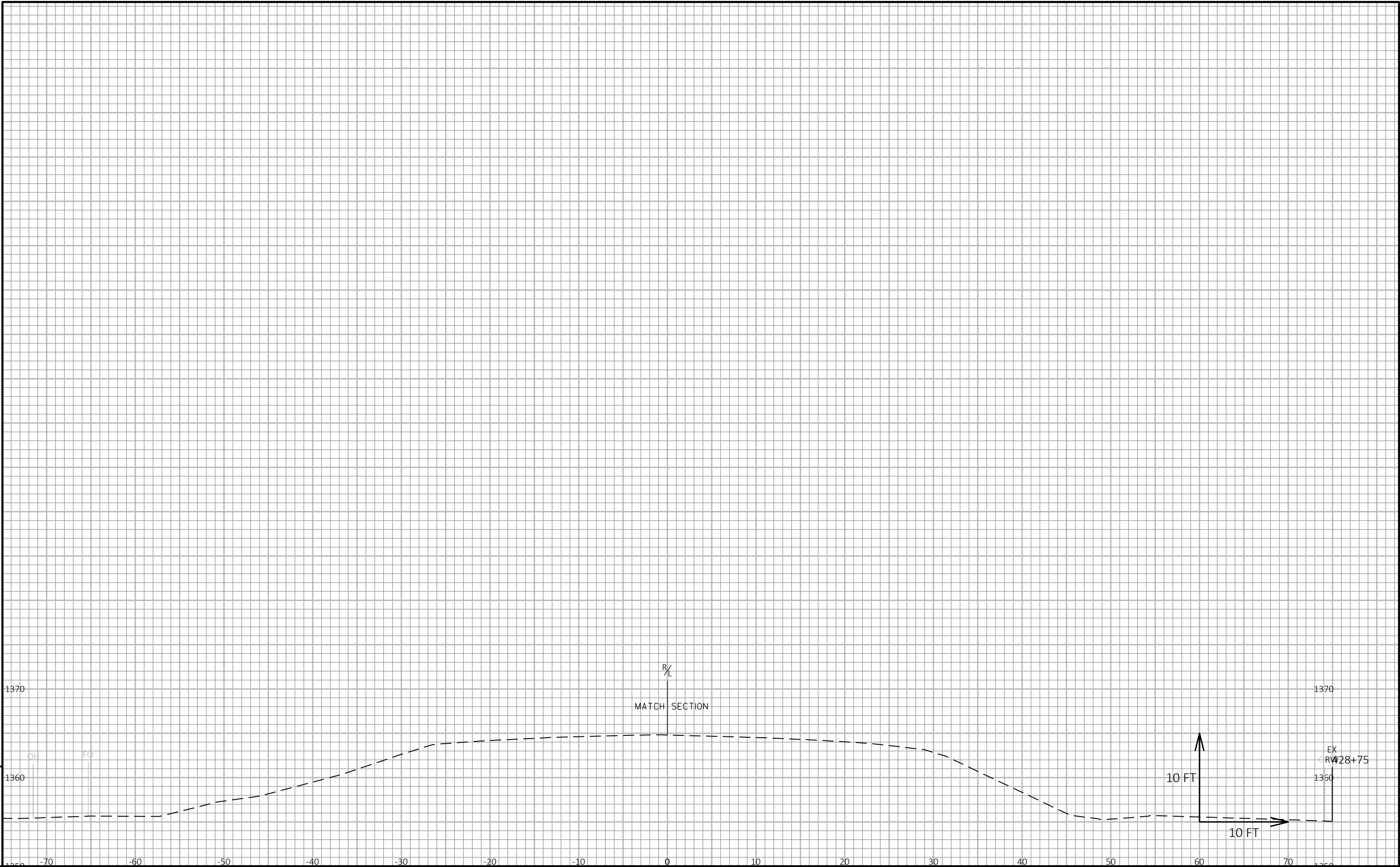
PLOT NAME :

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

WISDOT/CADDs SHEET 49





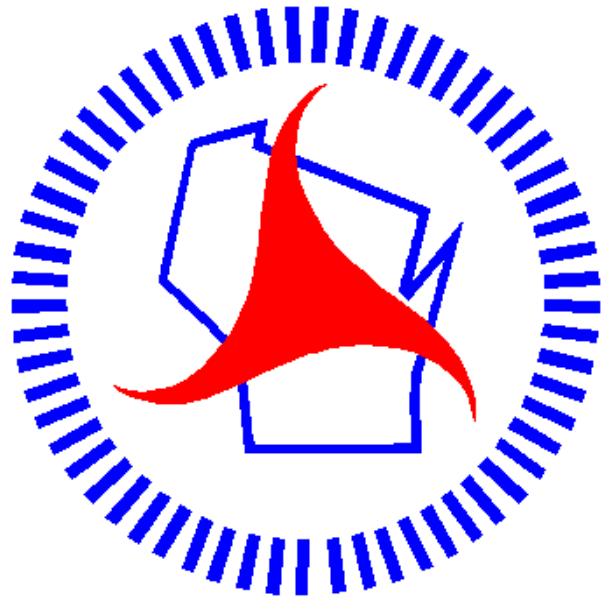


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PROJECT NO: 6360-06-70	HWY: STH 107	COUNTY: MARATHON	CROSS SECTIONS: GUARDRAIL AND CULVERT	SHEET 146	E
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Notes



Wisconsin Department of Transportation

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