

GRE
PROJECT ID:
WITH: N/A

4430-22-71

COUNTY:
DOOR

AUGUST 2025
ORDER OF SHEETS

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

TOTAL SHEETS = 86



DESIGN DESIGNATION

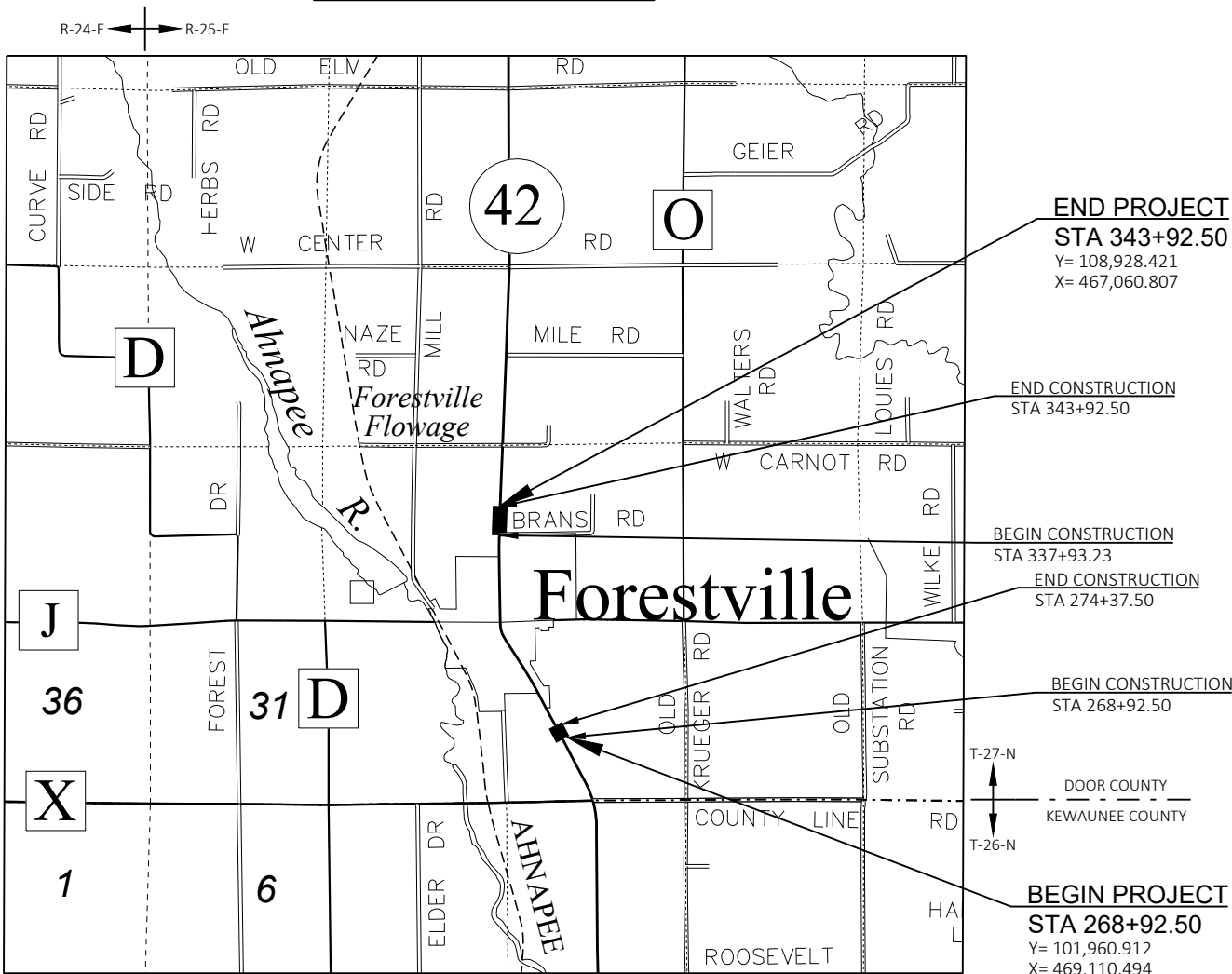
A.A.D.T.	2027	=	1600
A.A.D.T.	2047	=	1900
D.H.V.		=	261
D.D.		=	60/40
T.		=	14.3%
DESIGN SPEED		=	55 MPH
ESALS		=	570,000

CONVENTIONAL SYMBOLS

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

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

	ROCK
	LABEL
	95.36
	300'EB
	E
	FO
	G
	SAN
	SS
	T
	W
	TELEPHONE POLE
	POWER POLE



LAYOUT
SCALE 0 1.0
TOTAL NET LENGTH OF CENTERLINE = 0.000 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), DOOR COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 18.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
4430-22-71	WISC 2025573	1

ORIGINAL PLANS PREPARED BY

raSmith

CREATIVITY BEYOND ENGINEERING

rasmith.com

WISCONSIN

ADAM J. NIKOLAI
E-45999-6
WAUKESHA
WI

PROFESSIONAL ENGINEER

04/18/2025
(Date)

(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor WISDOT

Designer raSmith

Project Manager PAUL BRAUER

Regional Examiner REGIONAL EXAMINER

Regional Supervisor DANIEL SEGERSTROM

APPROVED FOR THE DEPARTMENT

DATE: 4/25/2025

(Signature)

E

UTILITIES CONTACTS

AT&T WISCONSIN
COMMUNICATION LINE
CHUCK BARTELT
70 E DIVISION ST
FOND DU LAC, WI 54935
PHONE: (920) 410-5104
EMAIL: CB1461@ATT.COM

BRIGHTSPEED OF NORTHEASTERN WISCONSIN, LLC
COMMUNICATION LINE
SCOTT HEINZELMAN
144 N PEARL ST
BERLIN, WI 54923
PHONE: (608) 716-5964
EMAIL: SCOTT.HEINZELMAN@BRIGHTSPEED.COM

WISCONSIN PUBLIC SERVICE CORPORATION
ELECTRICITY
TOM GORAL
677 BAETEN RD
GREEN BAY, WI 54304
PHONE: (920) 493-2365
EMAIL: THOMAS.GORAL@WISCONSINPUBLICSERVICE.COM

ORDER OF SECTION 2 DETAIL SHEETS

- GENERAL NOTES
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- PAVING DETAILS
- EROSION CONTROL PLAN
- DETOUR PLAN

WISCONSIN DNR LIAISON

MATT SCHAEVE
DNR NORTHEAST REGION HQ
2984 SHAWANO AVE
GREEN BAY, WI 54313
PHONE: (920) 366-1544
EMAIL: MATTHEW.SCHAEVE@WISCONSIN.GOV

REGION SURVEY COORDINATOR

MICHAEL ANDRASCHKO, RLS
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944 VANDERPERREN WAY
GREEN BAY, WI 54304
PHONE: (920) 492-4166
EMAIL: MICHAEL.ANDRASCHKO.DOT.WI.GOV

DESIGN PROJECT MANAGER

PAUL BRAUER, P.E.
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944 VANDERPERREN WAY
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PHONE: (920) 492-5629
EMAIL: PAUL.BRAUER@DOT.WI.GOV

DESIGN PROJECT LEADER

DOUG SENSO, P.E.
RASMITH
100 WEST LAWRENCE ST, STE 412
APPLETON, WI 54911-5754
PHONE: (920) 843-5731
EMAIL: DOUG.SENSO@RASMITH.COM

COUNTY HIGHWAY COMMISSIONER

THAD ASH
DOOR COUNTY
1001 S DULUTH AVE
STURGEON BAY, WI 54235-3812
PHONE: (920) 746-2504
EMAIL: TASH@CO.DOOR.WI.US

GENERAL NOTES

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

DO NOT DRIVE OR STORE EQUIPMENT, OR STORE CONSTRUCTION MATERIALS IN ENVIRONMENTALLY SENSITIVE AREAS, WETLANDS OR WATERWAYS.

DO NOT APPLY FERTILIZER WITHIN 20' OF A WATER BODY OR WETLAND.

UPSTREAM WATER SURFACE ELEVATIONS OF UNNAMED TRIBUTARIES TO THE AHNAPEE RIVER FROM A STORM THAT OCCURS ON AVERAGE ONCE EVERY TWO YEARS (Q2) ARE AS FOLLOWS:

- STATION 271+63: 629.09
- STATION 341+51: 646.82

RUNOFF COEFFICIENT TABLE

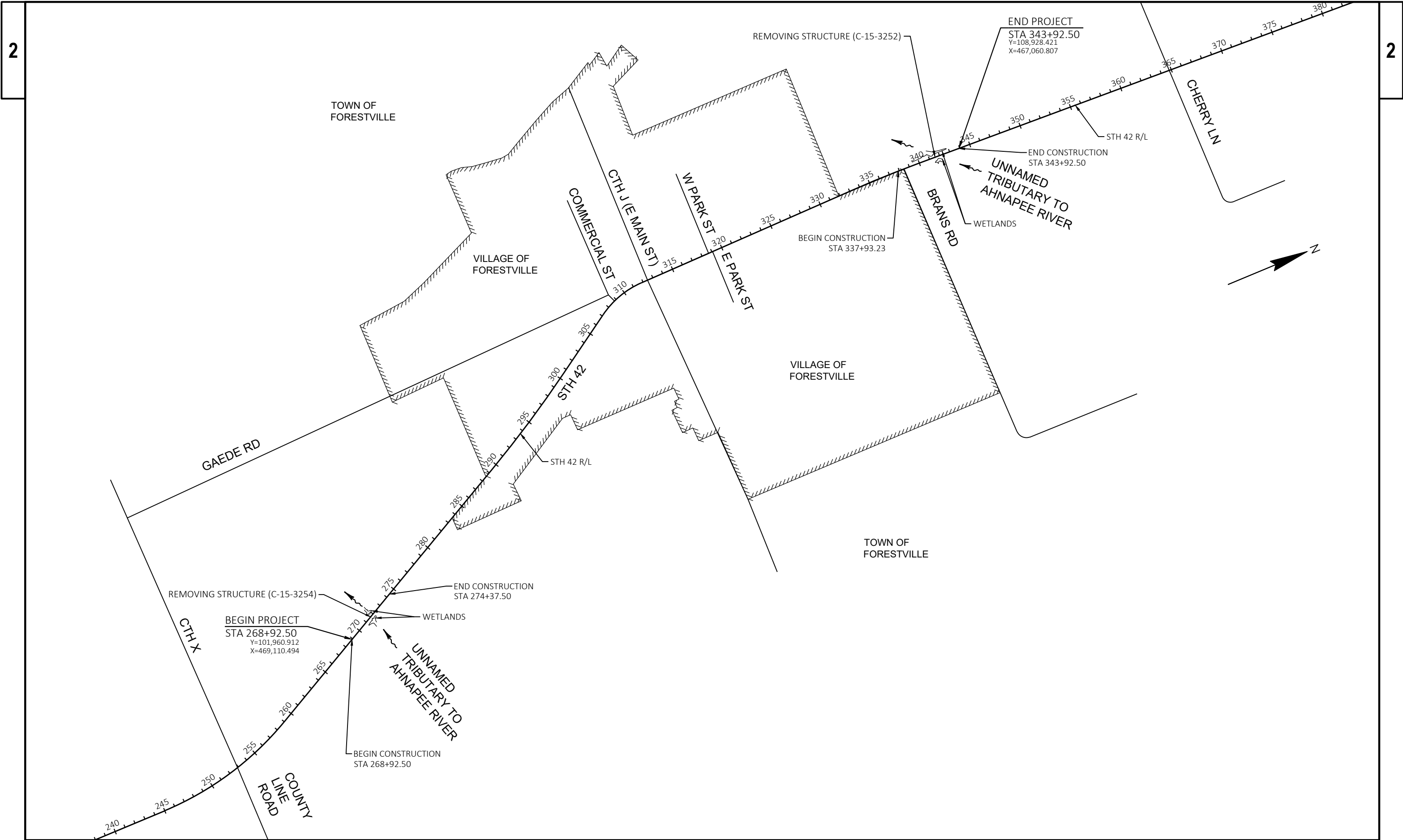
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS:	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
	.22	.30	.38	.26	.34	.44	.30	.37	.50	.34	.41	.56
MEDIAN STRIPTURF:	.19	.20	.24	.19	.22	.26	.20	.23	.30	.20	.25	.30
	.24	.26	.30	.25	.28	.33	.26	.30	.37	.27	.32	.40
SIDE SLOPETURF:			.25			.27			.28			.30
			.32			.34			.36			.38
PAVEMENT:												
ASPHALT:	.70 - .95											
CONCRETE:	.80 - .95											
BRICK:	.70 - .80											
DRIVES, WALKS:	.75 - .85											
ROOFS:	.75 - .95											
GRAVEL ROADS, SHOULDERS:	.40 - .60											

TOTAL PROJECT AREA = 2.74 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 1.86 ACRES

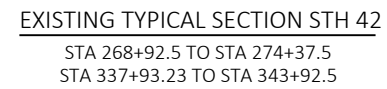
DIGGERSHOTLINE

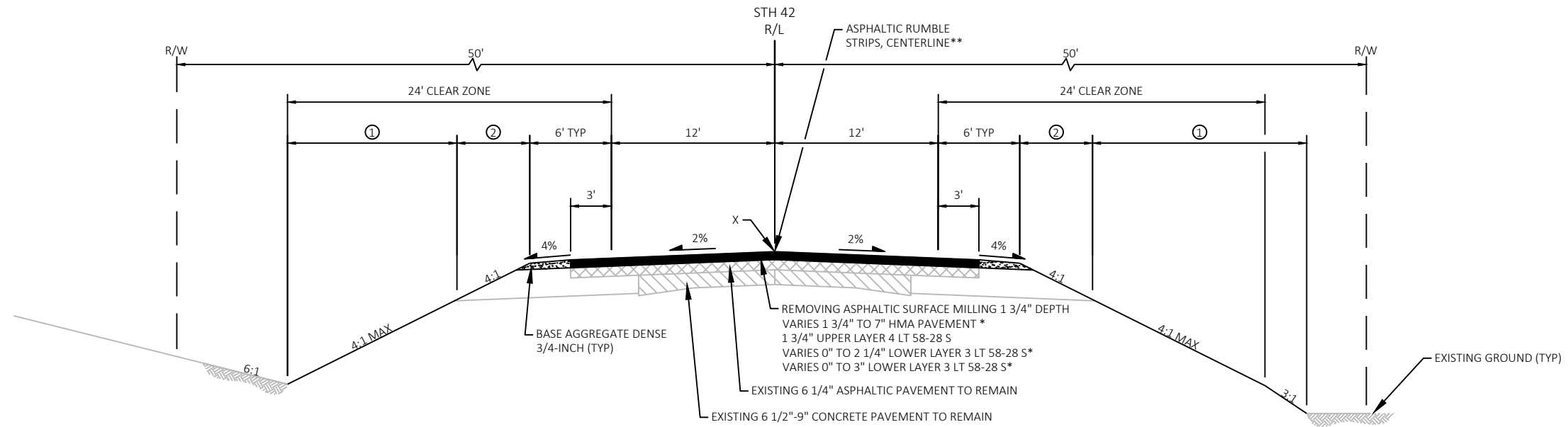
Dial 811 or (800)242-8511

www.DiggersHotline.com



PROJECT NO: 4430-22-71	HWY: STH 42	COUNTY: DOOR	PROJECT OVERVIEW	SHEET	E
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FINISHED TYPICAL SECTION STH 42

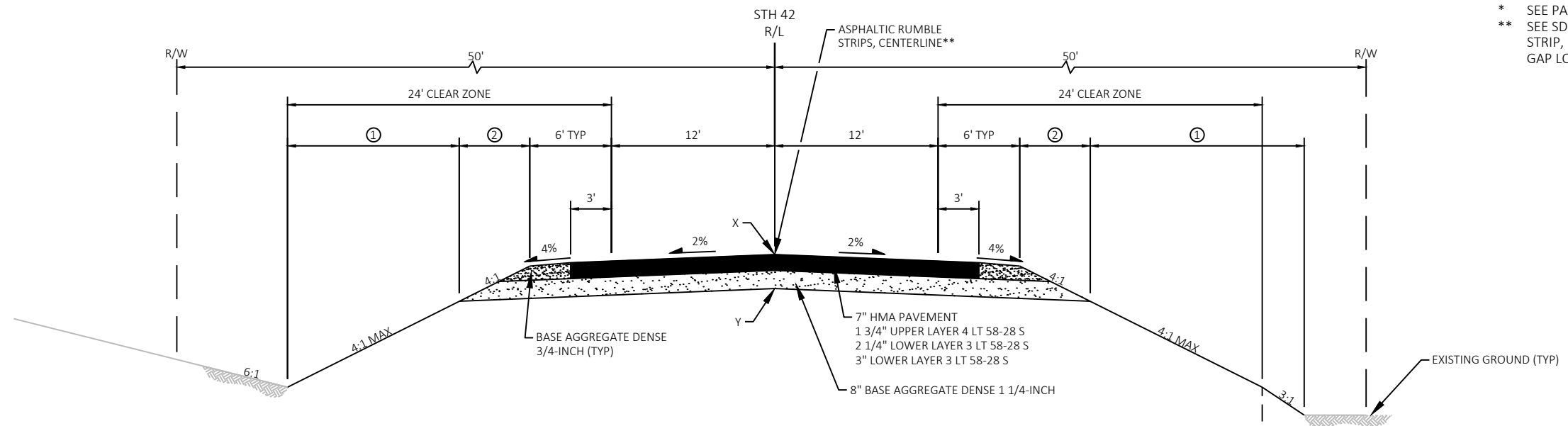
STA 268+92.5 TO STA 270+03.5
 STA 273+19.5 TO STA 274+37.5
 STA 337+93.23 TO STA 339+12
 STA 342+78.5 TO STA 343+92.5
 V = 55 MPH

- ① SALVAGED TOPSOIL OR TOPSOIL, SEEDING MIXTURE NO. 30, FERTILIZER TYPE B, EROSION MAT URBAN CLASS I TYPE B

- ② SEEDING MIXTURE NO. 30, FERTILIZER TYPE B

"X" = POINTS REFERRED TO ON PROFILE
 "Y" = POINTS REFERRED TO ON CROSS SECTIONS

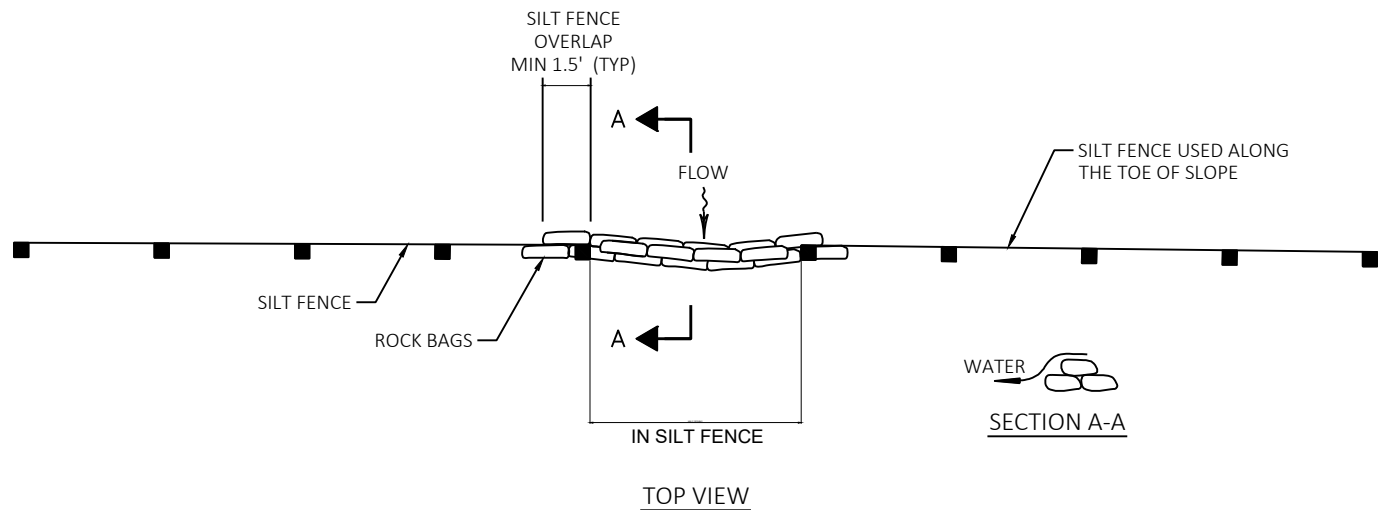
- * SEE PAVEMENT WEDGING DETAIL
 ** SEE SDD "2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING" FOR GROOVE SPACING AND GAP LOCATIONS



FINISHED TYPICAL SECTION STH 42

STA 270+03.5 TO STA 273+19.5
 STA 339+12 TO STA 342+78.5
 V = 55 MPH

FLAT BOTTOM DITCH SECTION
 STA 270+75 TO STA 271+40



ROCK BAGS USED FOR SILT FENCE RELIEF DETAIL

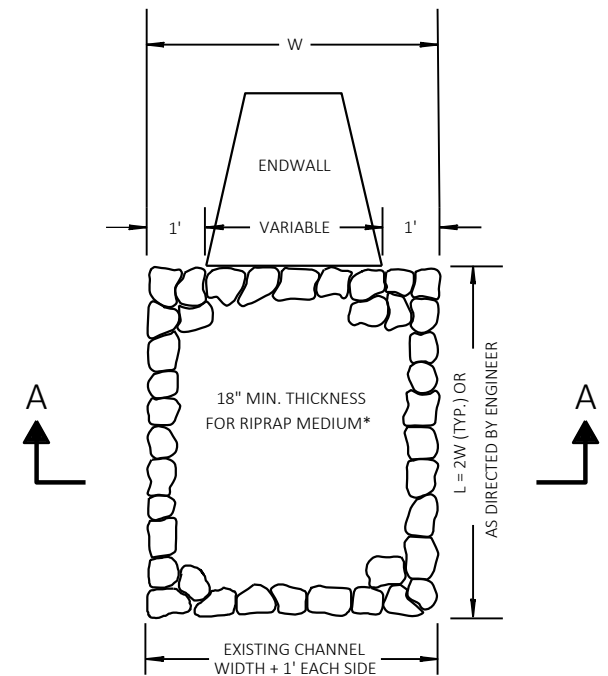
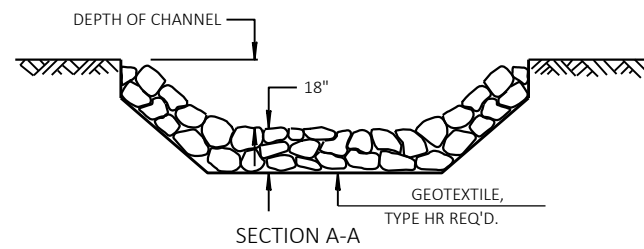
REINFORCED CONCRETE ELLIPTICAL PIPE									
EQUIV. DIA. (INCHES)	DIMENSIONS (INCHES)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
90	113	72	9	36 ½	58	38	96	113	1.6 TO 1

** NOMINAL SIZE

NOTES:

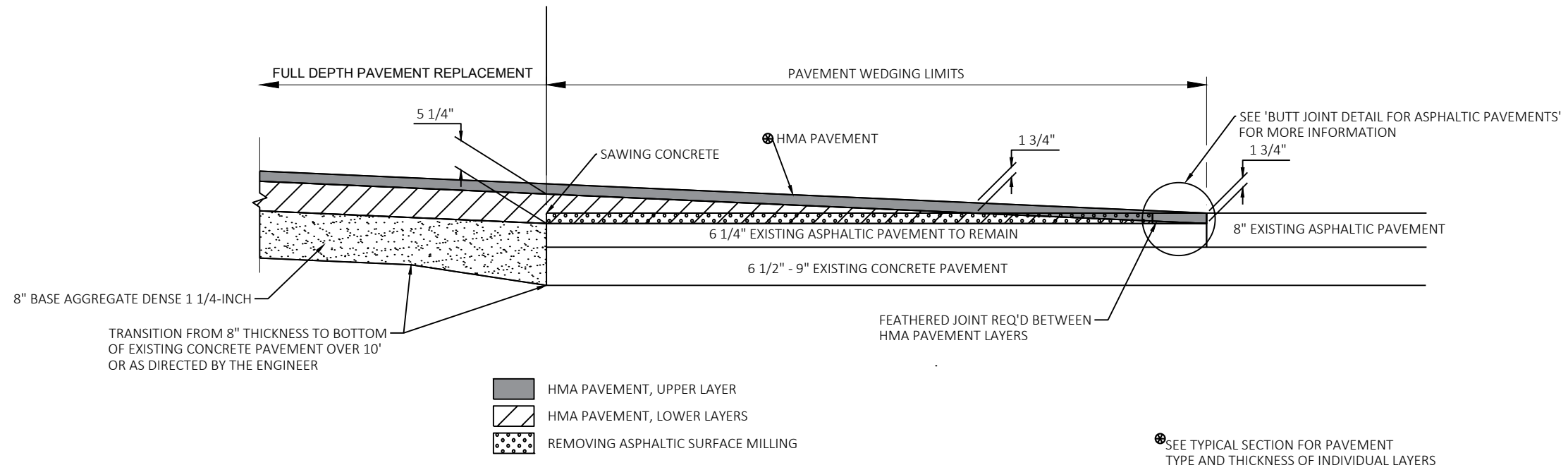
- THIS TABLE SUPPLEMENTS SDD 8F2 APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
- 72X113-INCH HORIZONTAL ELLIPTICAL ENDWALL IS NOT FLARED

APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZTONAL ELLIPTICAL 72X113-INCH DETAILS



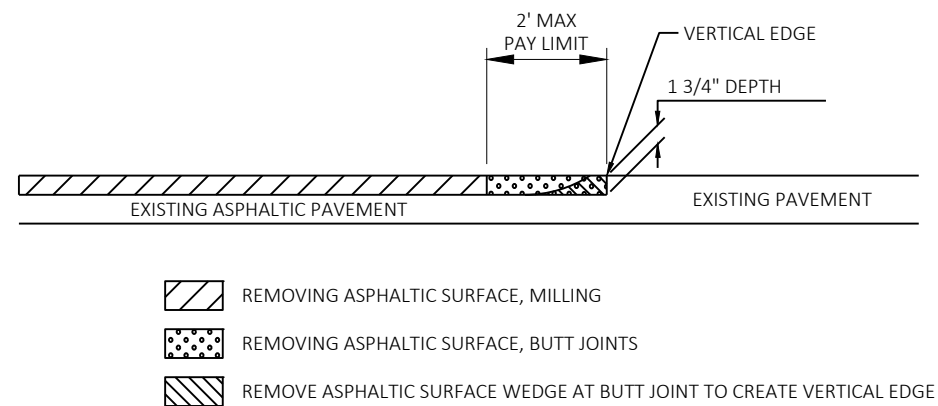
* GEOTEXTILE TYPE HR REQUIRED BENEATH AND AT VERTICAL SIDES OF RIPRAP

RIPRAP MEDIUM TREATMENT AT CULVERTS

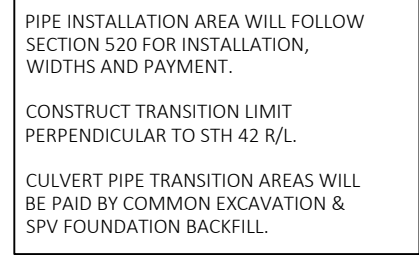


PAVEMENT WEDGING DETAIL

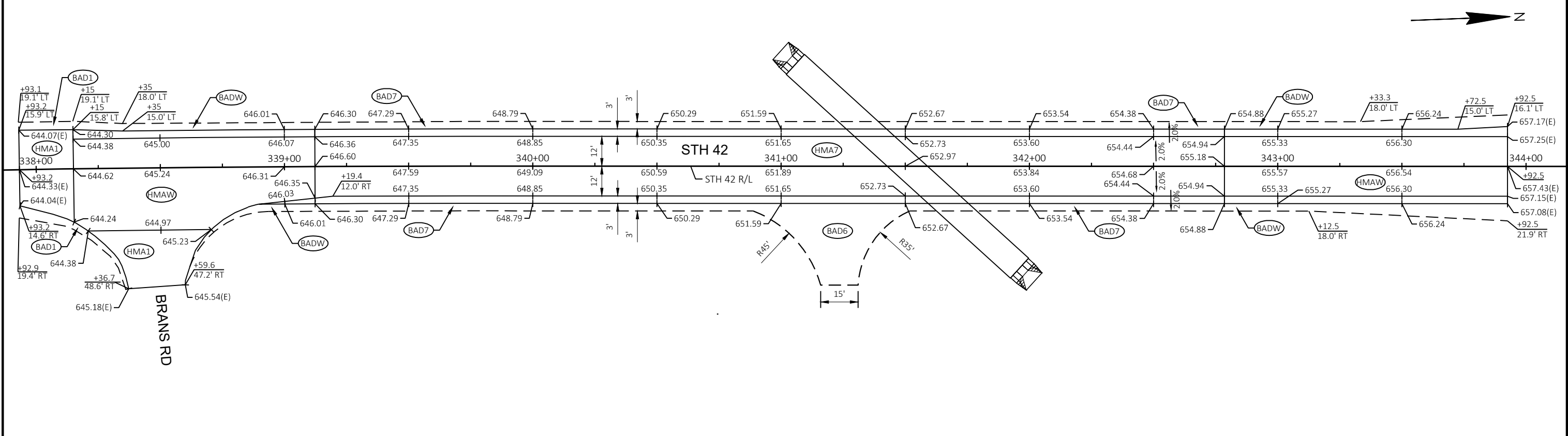
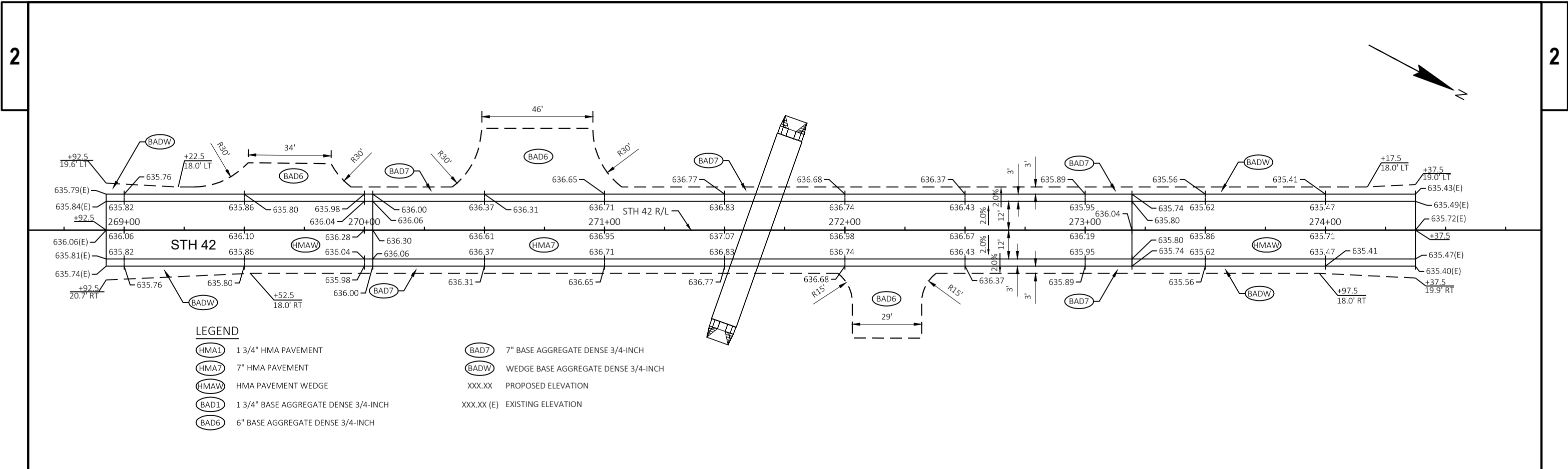
STA 268+92.5 TO STA 270+03.5
STA 273+19.5 TO STA 274+37.5
STA 338+15 TO STA 339+12
STA 342+78.5 TO STA 343+92.5



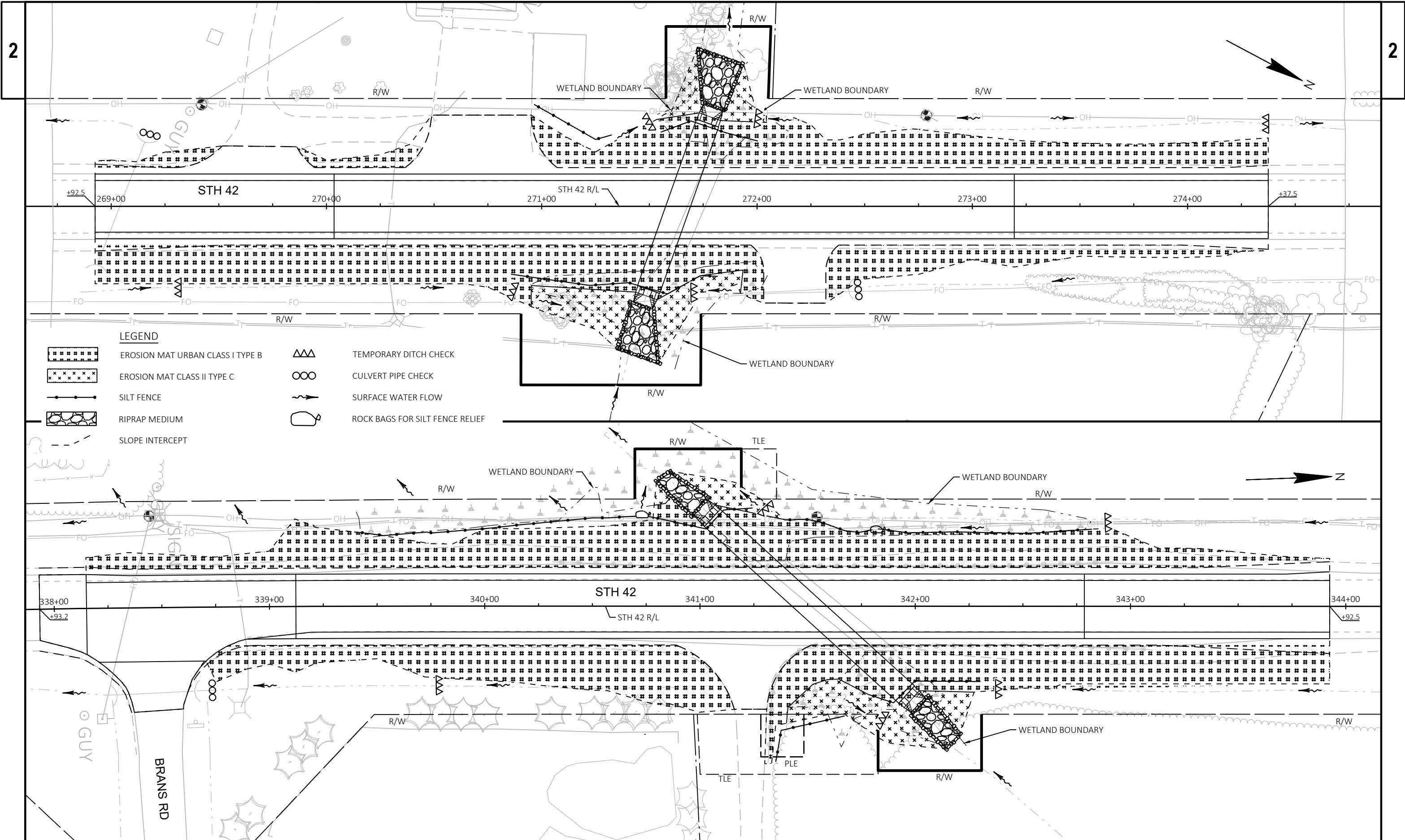
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS



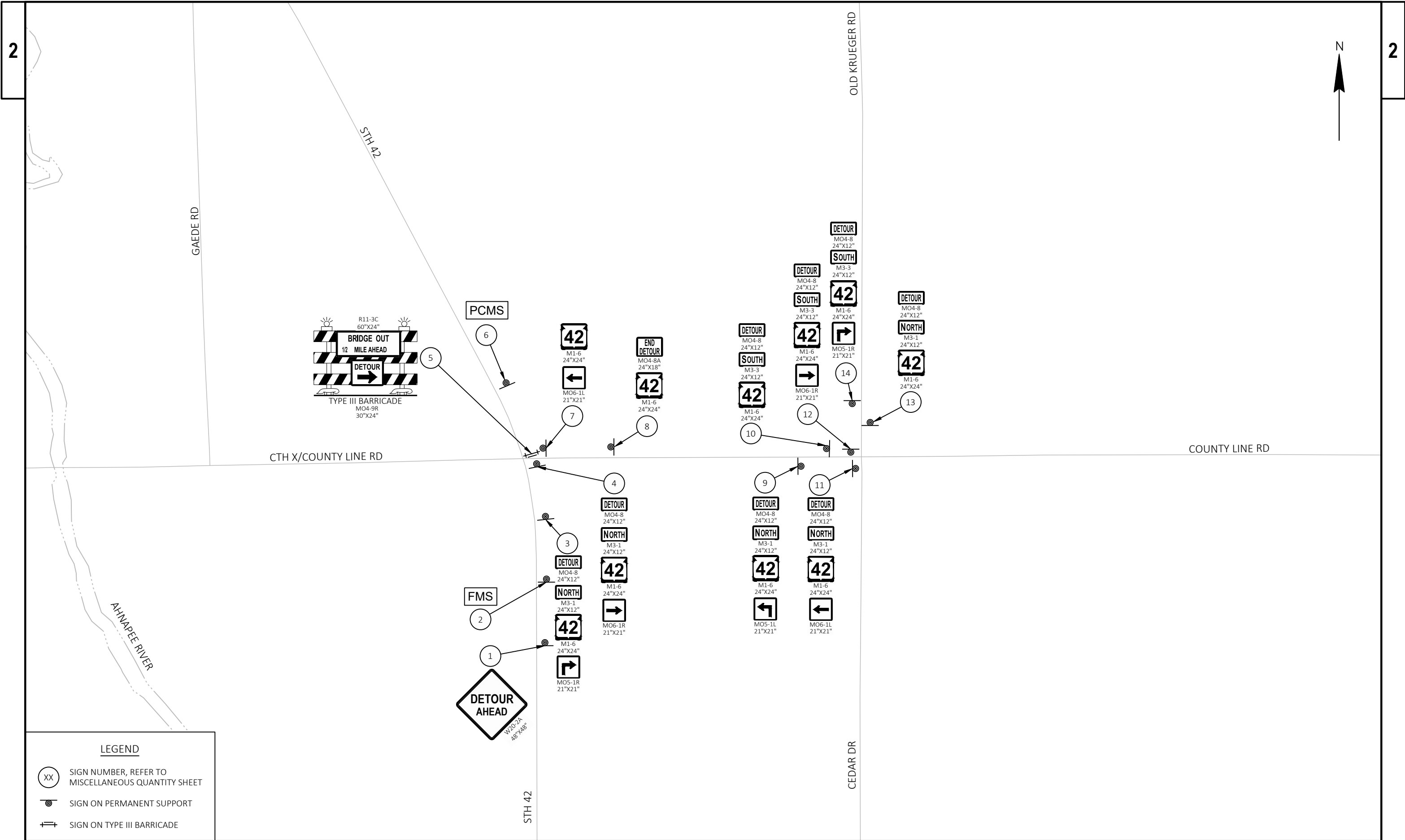
NEW CULVERT PIPES WITH TRANSITION



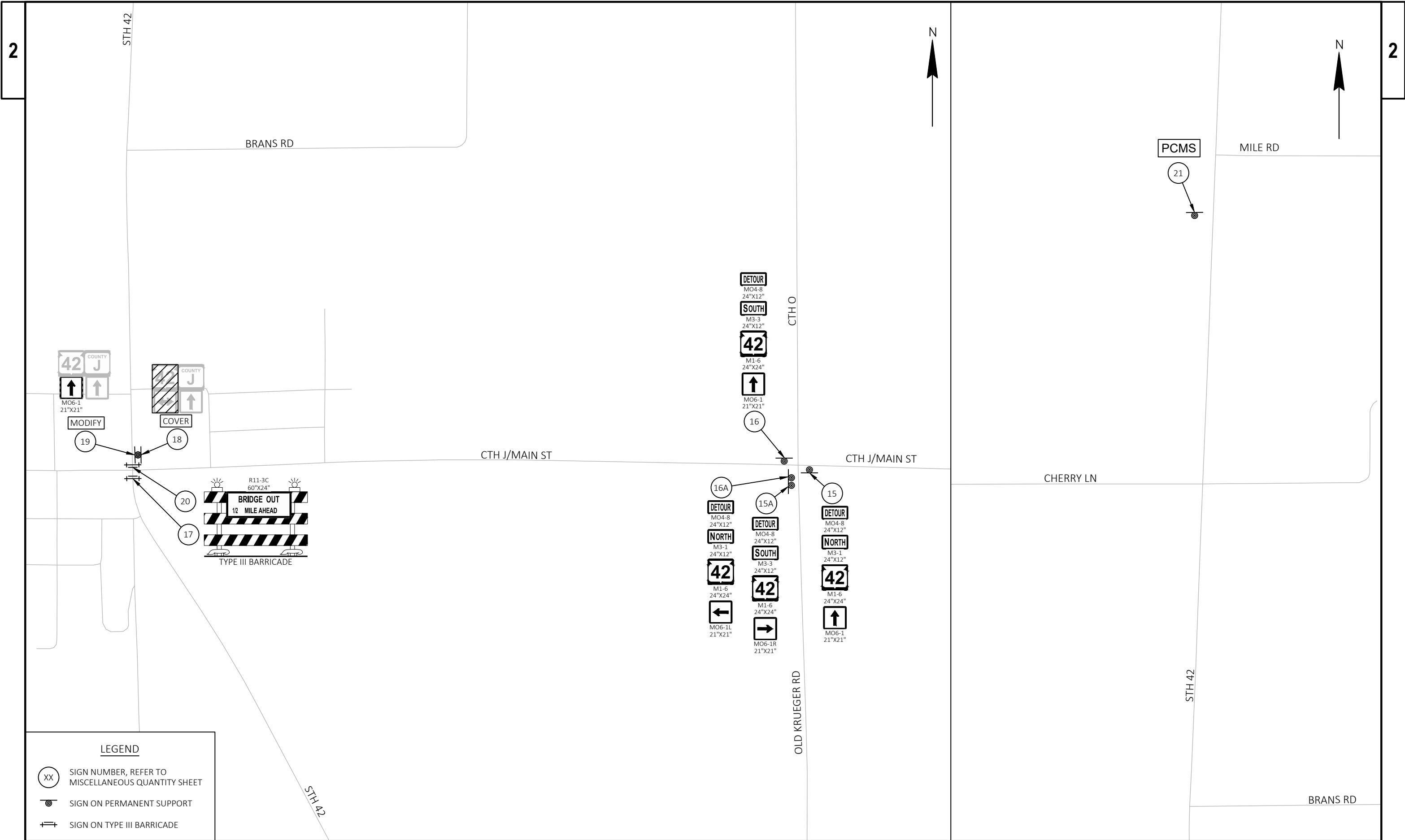
PROJECT NO: 4430-22-71	HWY: STH 42	COUNTY: DOOR	PAVING DETAILS	SHEET	E
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- LEGEND
- | | | | |
|--|----------------------------------|--|---------------------------------|
| | EROSION MAT URBAN CLASS I TYPE B | | TEMPORARY DITCH CHECK |
| | EROSION MAT CLASS II TYPE C | | CULVERT PIPE CHECK |
| | SILT FENCE | | SURFACE WATER FLOW |
| | RIPRAP MEDIUM | | ROCK BAGS FOR SILT FENCE RELIEF |
| | SLOPE INTERCEPT | | |



PROJECT NO: 4430-22-71		HWY: STH 42		COUNTY: DOOR		DETOUR SIGNING DETAILS		SHEET		E	
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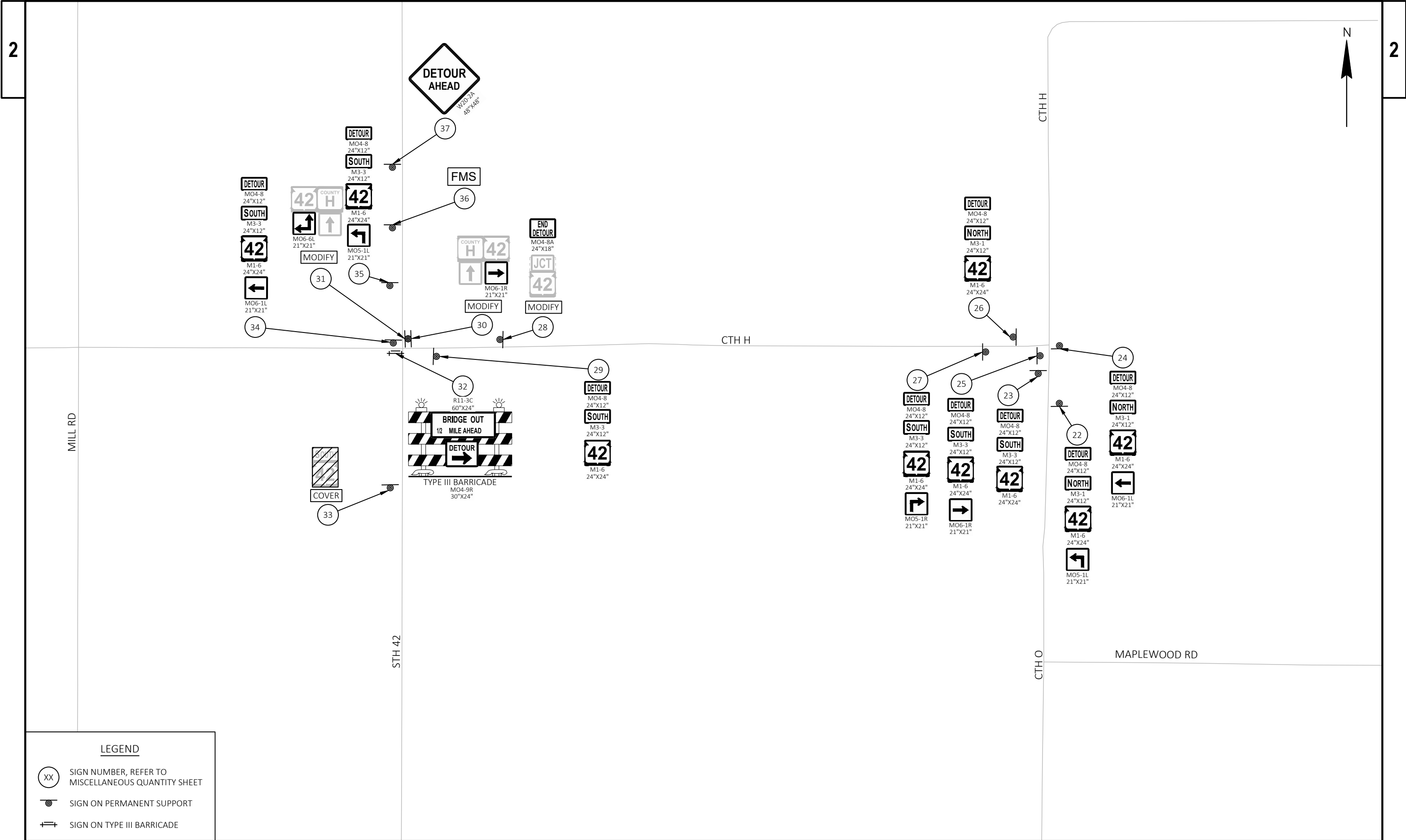
LEGEND

XX

SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITY SHEET

SIGN ON PERMANENT SUPPORT

SIGN ON TYPE III BARRICADE



LEGEND

-  SIGN NUMBER, REFER TO MISCELLANEOUS QUANTITY SHEET
-  SIGN ON PERMANENT SUPPORT
-  SIGN ON TYPE III BARRICADE

PROJECT NO: 4430-22-71

HWY: STH 42

COUNTY: DOOR

DETOUR SIGNING DETAILS

SHEET

E

Estimate Of Quantities

4430-22-71					
Line	Item	Item Description	Unit	Total	Qty
0002	201.0205	Grubbing	STA	3.000	3.000
0004	203.0220	Removing Structure (structure) 01. C-15-3254	EACH	1.000	1.000
0006	203.0220	Removing Structure (structure) 02. C-15-3252	EACH	1.000	1.000
0008	204.0100	Removing Concrete Pavement	SY	1,520.000	1,520.000
0010	204.0110	Removing Asphaltic Surface	SY	830.000	830.000
0012	204.0115	Removing Asphaltic Surface Butt Joints	SY	33.000	33.000
0014	204.0120	Removing Asphaltic Surface Milling	SY	1,675.000	1,675.000
0016	204.0180	Removing Delineators and Markers	EACH	7.000	7.000
0018	205.0100	Excavation Common	CY	1,162.000	1,162.000
0020	208.0100	Borrow	CY	889.000	889.000
0022	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 4430-22-71	EACH	1.000	1.000
0024	213.0100	Finishing Roadway (project) 01. 4430-22-71	EACH	1.000	1.000
0026	305.0110	Base Aggregate Dense 3/4-Inch	TON	545.000	545.000
0028	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,715.000	1,715.000
0030	450.4000	HMA Cold Weather Paving	TON	1,360.000	1,360.000
0032	455.0605	Tack Coat	GAL	560.000	560.000
0034	460.2000	Incentive Density HMA Pavement	DOL	875.000	875.000
0036	460.5223	HMA Pavement 3 LT 58-28 S	TON	945.000	945.000
0038	460.5224	HMA Pavement 4 LT 58-28 S	TON	415.000	415.000
0040	465.0560	Asphaltic Rumble Strips, Centerline	LF	1,145.000	1,145.000
0042	606.0200	Riprap Medium	CY	85.000	85.000
0044	614.0920	Salvaged Rail	LF	325.000	325.000
0046	614.0925	Salvaged Guardrail End Treatments	EACH	4.000	4.000
0048	618.0100	Maintenance and Repair of Haul Roads (project) 01. 4430-22-71	EACH	1.000	1.000
0050	619.1000	Mobilization	EACH	1.000	1.000
0052	624.0100	Water	MGAL	29.000	29.000
0054	625.0100	Topsoil	SY	765.000	765.000
0056	625.0500	Salvaged Topsoil	SY	2,285.000	2,285.000
0058	627.0200	Mulching	SY	1,900.000	1,900.000
0060	628.1504	Silt Fence	LF	735.000	735.000
0062	628.1520	Silt Fence Maintenance	LF	190.000	190.000
0064	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0066	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0068	628.2008	Erosion Mat Urban Class I Type B	SY	2,975.000	2,975.000
0070	628.2027	Erosion Mat Class II Type C	SY	490.000	490.000
0072	628.7504	Temporary Ditch Checks	LF	244.000	244.000
0074	628.7555	Culvert Pipe Checks	EACH	68.000	68.000
0076	628.7560	Tracking Pads	EACH	6.000	6.000
0078	628.7570	Rock Bags	EACH	38.000	38.000
0080	629.0210	Fertilizer Type B	CWT	4.400	4.400
0082	630.0130	Seeding Mixture No. 30	LB	218.000	218.000
0084	630.0300	Seeding Borrow Pit	LB	27.000	27.000
0086	630.0500	Seed Water	MGAL	78.000	78.000
0088	633.5200	Markers Culvert End	EACH	4.000	4.000
0090	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	1.000	1.000
0092	637.2230	Signs Type II Reflective F	SF	5.560	5.560
0094	638.2102	Moving Signs Type II	EACH	1.000	1.000
0096	642.5001	Field Office Type B	EACH	1.000	1.000
0098	643.0300	Traffic Control Drums	DAY	495.000	495.000

Estimate Of Quantities

4430-22-71

Line	Item	Item Description	Unit	Total	Qty
0100	643.0420	Traffic Control Barricades Type III	DAY	1,566.000	1,566.000
0102	643.0705	Traffic Control Warning Lights Type A	DAY	2,340.000	2,340.000
0104	643.0900	Traffic Control Signs	DAY	5,067.000	5,067.000
0106	643.0920	Traffic Control Covering Signs Type II	EACH	2.000	2.000
0108	643.1000	Traffic Control Signs Fixed Message	SF	52.000	52.000
0110	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0112	643.5000	Traffic Control	EACH	1.000	1.000
0114	645.0120	Geotextile Type HR	SY	238.000	238.000
0116	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	2,505.000	2,505.000
0118	646.6466	Cold Weather Marking Epoxy 6-Inch	LF	2,505.000	2,505.000
0120	648.0100	Locating No-Passing Zones	MI	1.070	1.070
0122	650.4500	Construction Staking Subgrade	LF	683.000	683.000
0124	650.5000	Construction Staking Base	LF	683.000	683.000
0126	650.6000	Construction Staking Pipe Culverts	EACH	2.000	2.000
0128	650.9911	Construction Staking Supplemental Control (project) 01. 4430-22-71	EACH	1.000	1.000
0130	650.9920	Construction Staking Slope Stakes	LF	1,145.000	1,145.000
0132	690.0150	Sawing Asphalt	LF	125.000	125.000
0134	690.0250	Sawing Concrete	LF	120.000	120.000
0136	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	100.000	100.000
0138	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	200.000	200.000
0140	SPV.0035	Special 01. Foundation Backfill	CY	708.000	708.000
0142	SPV.0060	Special 01. Apr Endwalls for Culvert Pipe Reinforce Conc Horiz Elliptical 72x113-Inch	EACH	4.000	4.000
0144	SPV.0090	Special 01. Culvert Pipe Reinforce Conc Horiz Elliptical CI HE-IV 72x113-Inch	LF	204.000	204.000

GRUBBING <table><tr><th>ROADWAY</th><th>STATION</th><th>TO</th><th>STATION</th><th>SIDE</th><th>201.0205 GRUBBING STA</th></tr><tr><td colspan="6">STH 42</td></tr><tr><td></td><td>271+00</td><td>-</td><td>272+00</td><td>LT/RT</td><td>1</td></tr><tr><td></td><td>341+00</td><td>-</td><td>343+00</td><td>RT</td><td>2</td></tr><tr><td colspan="5">TOTAL 0010</td><td>3</td></tr></table>						ROADWAY	STATION	TO	STATION	SIDE	201.0205 GRUBBING STA	STH 42							271+00	-	272+00	LT/RT	1		341+00	-	343+00	RT	2	TOTAL 0010					3	REMOVALS <table><tr><th>ROADWAY</th><th>STATION</th><th>TO</th><th>STATION</th><th>203.0220.01 REMOVING STRUCTURE (STRUCTURE) (01. C-15-3254) EACH</th><th>203.0220.02 REMOVING STRUCTURE (STRUCTURE) (02. C-15-3252) EACH</th><th>204.0100 REMOVING CONCRETE PAVEMENT SY</th><th>204.0110 REMOVING ASPHALTIC SURFACE SY</th><th>204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY</th><th>204.0120 REMOVING ASPHALTIC SURFACE MILLING SY</th><th>204.0180 REMOVING DELINEATORS AND MARKERS EACH</th><th>614.0920 SALVAGED RAIL LF</th><th>614.0925 SALVAGED GUARDRAIL END TREATMENTS EACH</th></tr><tr><td colspan="13">STH 42</td></tr><tr><td></td><td>268+92.5</td><td>-</td><td>274+37.5</td><td>1</td><td>---</td><td>705</td><td>320</td><td>14</td><td>750</td><td>4</td><td>---</td><td>---</td></tr><tr><td></td><td>337+93.23</td><td>-</td><td>343+92.5</td><td>---</td><td>1</td><td>815</td><td>510</td><td>19</td><td>925</td><td>3</td><td>325</td><td>4</td></tr><tr><td colspan="4">TOTAL 0010</td><td>1</td><td>1</td><td>1,520</td><td>830</td><td>33</td><td>1,675</td><td>7</td><td>325</td><td>4</td></tr></table>										ROADWAY	STATION	TO	STATION	203.0220.01 REMOVING STRUCTURE (STRUCTURE) (01. C-15-3254) EACH	203.0220.02 REMOVING STRUCTURE (STRUCTURE) (02. C-15-3252) EACH	204.0100 REMOVING CONCRETE PAVEMENT SY	204.0110 REMOVING ASPHALTIC SURFACE SY	204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS SY	204.0120 REMOVING ASPHALTIC SURFACE MILLING SY	204.0180 REMOVING DELINEATORS AND MARKERS EACH	614.0920 SALVAGED RAIL LF	614.0925 SALVAGED GUARDRAIL END TREATMENTS EACH	STH 42														268+92.5	-	274+37.5	1	---	705	320	14	750	4	---	---		337+93.23	-	343+92.5	---	1	815	510	19	925	3	325	4	TOTAL 0010				1	1	1,520	830	33	1,675	7	325	4
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			205.0100 COMMON EXCAVATION (CY) (1)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (CY) (2)(3)	AVAILABLE MATERIAL (CY) (4)	SPV.0035.01 FOUNDATION BACKFILL (CY) (5)	UNEXPANDED FILL (CY)	EXPANDED FILL (CY) (6)	MASS ORDINATE +/- (CY) (7)(8)	208.0100 BORROW (CY)
DIVISION	FROM/TO STATION	LOCATION	CUT (CY) (2)			EXPANSION FACTOR 1.15		EXPANSION FACTOR 1.25		
DIVISION 1										
DIVISION 1 SUBTOTAL	268+92.50/274+37.50	ROADWAY	224	389	-165	0	481	602	-767	
	271+63	SOUTH CULVERT	235	0	235	271	0	0	235	
			459	389	70	271	481	602	-532	532
DIVISION 2										
DIVISION 2 SUBTOTAL	338+15.00/343+92.50	ROADWAY	323	492	-169	0	454	568	-737	
	341+51	NORTH CULVERT	380	0	380	437	0	0	380	
			703	492	211	437	454	568	-357	357
GRAND TOTAL			1,162	881	281	708	935	1,170	-889	889

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT COLUMN. ITEM NUMBER 205.0100

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

(3) SALVAGED/UNUSABLE PAVEMENT MATERIAL IS QUANTIFIED TO THE BOTTOM OF EXISTING PAVEMENT. THIS ASSUMES THE EXISTING PAVEMENT STRUCTURE IS SALVAGED OR WASTED.
THE EXISTING PAVEMENT STRUCTURE IS NOT SHOWN IN CROSS SECTIONS.

(4) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

(5) CULVERT TRANSITIONS EXCAVATIONS BELOW THE PAVEMENT SECTION PER THE DETAIL ARE BACKFILLED WITH ITEM SPV.0035.01 FOUNDATION BACKFILL. FOUNDATION BACKFILL IN PIPE TRENCH IS INCIDENTAL TO PIPE ITEMS.
FOUNDATION BACKFILL = COMMON EXCAVATION FOR PIPE TRANSITION * FOUNDATION BACKFILL EXPANSION FACTOR

(6) EXPANDED FILL FACTOR = 1.25
EXPANDED FILL = UNEXPANDED FILL * FILL EXPANSION FACTOR

(7) MASS ORDINATE = AVAILABLE MATERIAL - EXPANDED FILL

(8) 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.

ALL ITEMS CATEGORY 0010 UNLESS NOTED

PROJECT NO: 4430-22-71	HWY: STH 42	COUNTY: DOOR	MISCELLANEOUS QUANTITIES	SHEET:	E
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WATER

				624.0100	
				WATER	
				BASE	EXCAVATION/
				AGGREGATE	DUST
				COMPACTION	CONTROL
ROADWAY	STATION	TO	STATION	MGAL	MGAL
STH 42					
	268+92.5	-	274+37.5	12	1
	337+93.23	-	343+92.5	14	2
SUBTOTAL				26	3
TOTAL 0010				29	

EROSION CONTROL ITEMS

				606.0200	628.1504	628.1520	628.1905	628.1910	628.2008	628.2027	628.7504	628.7555	628.7560	628.7570	645.0120
				RIPRAP MEDIUM CY	SILT FENCE LF	SILT FENCE MAINTENANCE LF	MOBILIZATIONS	MOBILIZATIONS	EROSION MAT	EROSION MAT	TEMPORARY	CULVERT PIPE			GEOTEXTILE TYPE
							EROSION CONTROL EACH	EMERGENCY EROSION CONTROL EACH	URBAN CLASS I TYPE B SY	CLASS II TYPE C SY	DITCH CHECKS LF	CHECKS EACH	TRACKING PADS EACH	ROCK BAGS EACH	HR SY
ROADWAY	STATION	TO	STATION												
STH 42															
	268+92.5	-	274+37.5	43	155	40	2	1	1,000	200	120	34	2	---	115
	337+93.23	-	343+92.5	25	430	110	2	1	1,380	190	75	20	3	30	75
UNDISTRIBUTED				17	150	40	---	---	595	100	49	14	1	8	48
TOTAL 0010				85	735	190	4	2	2,975	490	244	68	6	38	238

RESTORATION ITEMS

				*							
				625.0100	625.0500	627.0200	629.0210	630.0130	630.0300	630.0500	
				TOPSOIL	SALVAGED	MULCHING	FERTILIZER	SEEDING	SEEDING	SEED WATER	
ROADWAY	STATION	TO	STATION	SY	SY	SY	TYPE B	MIXTURE NO. 30	BORROW PIT	MGAL	
STH 42											
	268+92.5	-	274+37.5	300	900	---	1.1	77	---	20	
	337+93.23	-	343+92.5	395	1,175	---	1.4	97	---	25	
BORROW PIT											
				---	---	1,520	1.0	---	21	17	
UNDISTRIBUTED				70	210	380	0.9	44	6	16	
TOTAL 0010				765	2,285	1,900	4.4	218	27	78	

* TOPSOIL ONLY TO BE USED AFTER ALL SALVAGED TOPSOIL ON SITE HAS BEEN UTILIZED

ALL ITEMS CATEGORY 0010 UNLESS NOTED

PERMANENT SIGNING ITEMS					
			634.0618 POSTS WOOD 4X6-INCH X 18-FT EACH	637.2230 SIGN TYPE II REFLECTIVE F SF	638.2102 MOVING SIGNS TYPE II EACH
ROADWAY	SIGN CODE	W X H			
STH 42					
UNDISTRIBUTED	W14-3	48" X 36"	1	5.56	1
TOTAL 0010			1	5.56	1

TRAFFIC CONTROL ITEMS														
				**		**		*	**		*	**		*
				643.0300		643.0420		643.0705		643.0900				
				TRAFFIC		TRAFFIC		TRAFFIC		TRAFFIC				
				CONTROL		CONTROL		CONTROL		CONTROL				
ESTIMATED				CONTROL		BARRICADES		WARNING		CONTROL				
CALENDAR				DRUMS		TYPE III		LIGHTS TYPE A		SIGNS				
ROADWAY	STATION	TO	STATION	DAYS	EACH	DAY	EACH	DAY	EACH	DAY	EACH	DAY		
STH 42														
	268+92.5	-	274+37.5	45	5	225	14	630	20	900	8	360		
	337+93.23	-	343+92.5	45	5	225	14	630	20	900	8	360		
UNDISTRIBUTED					---	45	---	126	---	180	---	72		
TOTAL 0010					495		1,386		1,980		792			
* ADDITIONAL QUANTITIES SHOWN IN TRAFFIC CONTROL DETOUR SIGN SUMMARY														
** FOR INFORMATION ONLY														

SAWING ITEMS					
				690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
ROADWAY	STATION	TO	STATION		
STH 42					
	268+92.5	-	274+37.5	60	60
	337+93.23	-	343+92.5	65	60
TOTAL 0010				125	120

PAVEMENT MARKING ITEMS								
				646.2040		646.6466		648.0100
				MARKING LINE GROOVED WET REF		COLD WEATHER MARKING EPOXY		LOCATING NO-PASSING ZONES
				EPOXY 6-INCH		6-INCH		
ROADWAY	STATION	TO	STATION	LF (WHITE)	LF (YELLOW)	LF	MI	REMARKS
STH 42								
	268+92.5	-	274+37.5	1,090	140	1,230	0.53	55 MPH
	337+93.23	-	343+92.5	1,125	150	1,275	0.54	55 MPH
SUBTOTALS				2,215	290	2,505	1.07	
TOTAL 0010				2,505		2,505	1.07	

STAKING ITEMS								
				650.4500		650.5000		650.6000
				CONSTRUCTION STAKING		CONSTRUCTION STAKING		CONSTRUCTION STAKING
				SUBGRADE		STAKING PIPE		CONSTRUCTION SUPPLEMENTAL
				LF		CULVERTS		(PROJECT) (01. 4430-22-71)
ROADWAY	STATION	TO	STATION	LF	LF	EACH	EACH	CONSTRUCTION STAKING SLOPE
STH 42								
	268+92.5	-	274+37.5	316	316	1	---	545
	337+93.23	-	343+92.5	367	367	1	---	600
TOTAL 0010				683	683	2	1	1,145

CULVERT PIPE ITEMS											
									633.5200	SPV.0060.01	SPV.0090.01
										SPECIAL (01. APRON	SPECIAL (01. CULVERT
										ENDWALLS FOR CULVERT	PIPE REINFORCED
										PIPE REINFORCED	CONCRETE
										CONCRETE HORIZONTAL	HORIZONTAL
										ELLIPTICAL 72X113-INCH)	ELLIPTICAL CLASS HE-IV
										EACH	72X113-INCH)
ROADWAY	STATION	INLET	TO	STATION	DISCHARGE	TO	STATION	SLOPE	MARKERS		
		STATION	OFFSET	STATION	OFFSET	STATION	STATION	FT/FT	CULVERT END		
			SIDE						EACH		
			ELEV								
STH 42											
	271+49.6	38.64	RT	627.44	271+77	38.64	LT	627.24	0.0024	2	82
	341+96	41.02	RT	643.72	341+05.7	41.02	LT	643.29	0.0036	2	122
TOTAL 0010									4	4	204
ALL ITEMS CATEGORY 0010 UNLESS NOTED											

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 45 DAYS	643.0900 SIGNS	643.0420 BARRICADES TYPE III	643.0705 WARNING LIGHTS TYPE A	643.1000 SIGNS FIXED MESSAGE	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE DAYS	NO. OF CYCLES	643.0920 COVERING TYPE II SIGNS	REMARKS
						DAYS	DAY	DAY	SF	EACH			
1	STH 42, S. OF COUNTY LINE RD, PLACE 1500' S. OF COUNTY LINE RD	W 20-2A	48"x48"	1	45	45							
2	STH 42, S. OF COUNTY LINE RD, PLACE 1000' S. OF COUNTY LINE RD	FMS	78"x48"	1					26				SEE SIGN DETAIL SHEET
3	STH 42, S. OF COUNTY LINE RD, PLACE 500' S. OF COUNTY LINE RD	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 5-1R	21"x21"	1	45	45							
4	STH 42, AT COUNTY LINE RD, PLACE AT COUNTY LINE RD INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1R	21"x21"	1	45	45							
5	STH 42, AT COUNTY LINE RD, PLACE IN NE QUADRANT OF COUNTY LINE RD INTERSECTION	R 11-3C	60"x24"	1	45	45	45	90					1/2 MILE
	"	M 4-9R	30"x24"	1	45	45							
6	STH 42, N. OF COUNTY LINE RD, PLACE ON RIGHT SHOULDER, FIELD DETERMINE LOCATION	PCMS		1						7			PLACE IN ADVANCE OF CLOSURE
7	COUNTY LINE RD, AT STH 42, PLACE RIGHT OF EXISTING R1-1 SIGN AT STH 42 INTERSECTION	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1L	21"x21"	1	45	45							
8	COUNTY LINE RD, E. OF STH 42, PLACE 750' E. OF STH 42	MO 4-8A	24"x18"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
9	COUNTY LINE RD, W. OF OLD KRUEGER RD, PLACE 500' W. OF OLD KRUEGER RD	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 5-1L	21"x21"	1	45	45							
10	COUNTY LINE RD, W. OF OLD KRUEGER RD, PLACE 250' W. OF OLD KRUEGER RD	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
11	COUNTY LINE RD, AT OLD KRUEGER RD, PLACE AT OLD KRUEGER RD INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1L	21"x21"	1	45	45							
12	OLD KRUEGER RD, AT COUNTY LINE RD, PLACE RIGHT OF EXISTING R1-1 SIGN AT COUNTY LINE RD INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1R	21"x21"	1	45	45							
13	OLD KRUEGER RD, N. OF COUNTY LINE RD, PLACE 250' N. OF COUNTY LINE RD	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
14	OLD KRUEGER RD, N. OF COUNTY LINE RD, PLACE 500' N. OF COUNTY LINE RD	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 5-1R	21"x21"	1	45	45							
15	OLD KRUEGER RD, AT CTH J, PLACE RIGHT OF EXISTING R1-1 SIGN AT CTH J INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1	21"x21"	1	45	45							AHEAD
15A	CTH J, AT CTH O, PLACE RIGHT OF EXISTING R1-1 SIGN AT CTH O INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1R	21"x21"	1	45	45							
16	CTH O, AT CTH J, PLACE RIGHT OF EXISTING R1-1 SIGN AT CTH J INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1	21"x21"	1	45	45							AHEAD

PAGE SUBTOTALS

51

2,205

45

90

26

7

0

* ADDITIONAL QUANTITIES SHOWN IN TRAFFIC CONTROL ITEMS

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

PROJECT NUMBER: 4430-22-71

HWY: STH 42

COUNTY: DOOR

MISCELLANEOUS QUANTITIES

SHEET

E

TRAFFIC CONTROL DETOUR SIGN SUMMARY

SIGN NO.	LOCATION	SIGN CODE	SIZE W X H	NUMBER IN SERVICE	APPROX. SERVICE PERIOD 45 DAYS	* 643.0900 SIGNS	* 643.0420 BARRICADES TYPE III	* 643.0705 WARNING LIGHTS TYPE A	643.1000 SIGNS FIXED MESSAGE	643.1050 SIGNS PORTABLE CHANGEABLE MESSAGE	NO. OF CYCLES	643.0920 COVERING TYPE II SIGNS	REMARKS
						DAYS	DAY	DAY	SF	DAYS		EACH	
16A	CTH J, AT CTH O, PLACE RIGHT OF EXISTING R1-1 SIGN AT CTH O INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1L	21"x21"	1	45	45							
17	STH 42, AT CTH J, PLACE IN ROADWAY ON SOUTH LEG OF 42/J INTERSECTION	R 11-3C	60"x24"	1	45	45	45	90					1/2 MILE
18	CTH J, AT STH 42, COVER EXISTING J13-2 SIGN AS SHOWN										1	1	COVER "42" PORTION OF SIGN
19	CTH J, AT STH 42, MODIFY EXISTING J13-2 SIGN AS SHOWN	MO 6-1	21"x21"	1	45	45							AHEAD
20	STH 42, AT CTH J, PLACE IN ROADWAY ON NORTH LEG OF 42/J INTERSECTION	R 11-3C	60"x24"	1	45	45	45	90					1/2 MILE
21	STH 42, N. OF CTH J, PLACE ON RIGHT SHOULDER, FIELD DETERMINE LOCATION	PCMS		1						7			PLACE IN ADVANCE OF CLOSURE
22	CTH O, S. OF CTH H, PLACE 500' S. OF CTH H	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 5-1L	21"x21"	1	45	45							
23	CTH O, S. OF CTH H, PLACE 250' S. OF CTH H	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
24	CTH O, AT CTH H, PLACE RIGHT OF EXISTING J13-2 SIGN AT CTH H INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1L	21"x21"	1	45	45							
25	CTH H, AT CTH O, PLACE RIGHT OF EXISTING J13-2 SIGN AT CTH O INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1R	21"x21"	1	45	45							
26	CTH H, W. OF CTH O, PLACE 250' W. OF CTH O	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
27	CTH H, W. OF CTH O, PLACE 500' W. OF CTH O	MO 4-8	24"x12"	1	45	45							
	"	M 3-1	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 5-1R	21"x21"	1	45	45							
28	CTH H, E. OF STH 42, MODIFY EXISTING J1-1 SIGN AS SHOWN	MO 4-8A	24"x18"	1	45	45							
29	CTH H, E. OF STH 42, PLACE 250' E. OF STH 42 INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
30	CTH H, AT STH 42, MODIFY EXISTING J13-2 SIGN AS SHOWN	MO 6-1R	21"x21"	1	45	45							
31	CTH H, AT STH 42, MODIFY EXISTING J13-2 SIGN AS SHOWN	MO 6-6	21"x21"	1	45	45							LEFT-AHEAD
32	STH 42, AT CTH H, PLACE IN SW QUADRANT OF CTH H INTERSECTION	R 11-3C	60"x24"	1	45	45	45	90					3 1/2 MILES
	"	MO 4-9L	30"x24"	1	45	45							
33	STH 42, S. OF CTH H, COVER EXISITNG J4-1 SIGN AS SHOWN										1	1	COVER ENTIRE SIGN
34	STH 42, AT CTH H, PLACE RIGHT OF EXISITNG J13-1 SIGN AT CTH H INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 6-1L	21"x21"	1	45	45							
35	STH 42, N. OF CTH H, PLACE 500' N. OF CTH H INTERSECTION	MO 4-8	24"x12"	1	45	45							
	"	M 3-3	24"x12"	1	45	45							
	"	M 1-6	24"x24"	1	45	45							42
	"	MO 5-1L	21"x21"	1	45	45							
36	STH 42, N. OF CTH H, PLACE 1000' N. OF CTH H INTERSECTION	FMS	78"x48"	1					26				SEE SIGN DETAIL SHEET
37	STH 42, N. OF CTH H, PLACE 1500' N. OF CTH H INTERSECTION	W 20-2A	48"x48"	1	45	45							
PAGE SUBTOTALS				48		2,070	135	270	26	7		2	
DETOUR TOTALS				99		4,275	180	360	52	14		2	

* ADDITIONAL QUANTITIES SHOWN IN TRAFFIC CONTROL ITEMS

PLAN SHEET PRODUCED

BY WisDOT - NE REGION

CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
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

PARCEL NUMBER 25
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 PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
NATIONAL GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
PARALLEL OFFSETS

UTILITY NUMBER 40
R/W MONUMENT
NON-MONUMENTED R/W POINT
FOUND IRON PIN
VALVE (GAS, WATER, ETC.)
SIGN
OFF-PREMISE SIGN
SIGN
SIGN
SIGN

ACCESS POINT/ DRIVEWAY CONNECTION
ACCESS RIGHTS
ACRES
AND OTHERS
CENTERLINE
CERTIFIED SURVEY MAP
CORNER
DOCUMENT
EASEMENT
HIGHWAY EASEMENT
LAND CONTRACT
MONUMENT
PAGE
PERMANENT LIMITED EASEMENT
PROPERTY LINE
RECORDED AS
REFERENCE LINE

CONVENTIONAL ABBREVIATIONS
AP
AR
AC.
ET.AL.
C/L
CSM
COR.
DOC.
EASE.
H.E.
LC
MON.
P
PLE
PL
(100')
R/L

RELEASE OF RIGHTS
REMAINING
RIGHT-OF-WAY
SECTION
TEMPORARY LIMITED EASEMENT
VOLUME

ROR
REM.
R/W
SEC.
STA.
TLE
V.

CONVENTIONAL UTILITY SYMBOLS

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

NON-COMPENSABLE
COMPENSABLE

POWER POLE
TELEPHONE POLE
TELEPHONE PEDESTAL
ELECTRIC TOWER

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), DOOR COUNTY, NAD 83 (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 1"X 24"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 NEW REFERENCE LINES.

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

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

PARCEL AND UTILITY IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE DETAIL PAGE(S).

INFORMATION FOR THE BASIS OF EXISTING HIGHWAY RIGHT-OF-WAY POINTS OF REFERENCE AND ACCESS CONTROL ARE LISTED ON THE DETAIL PAGE(S).

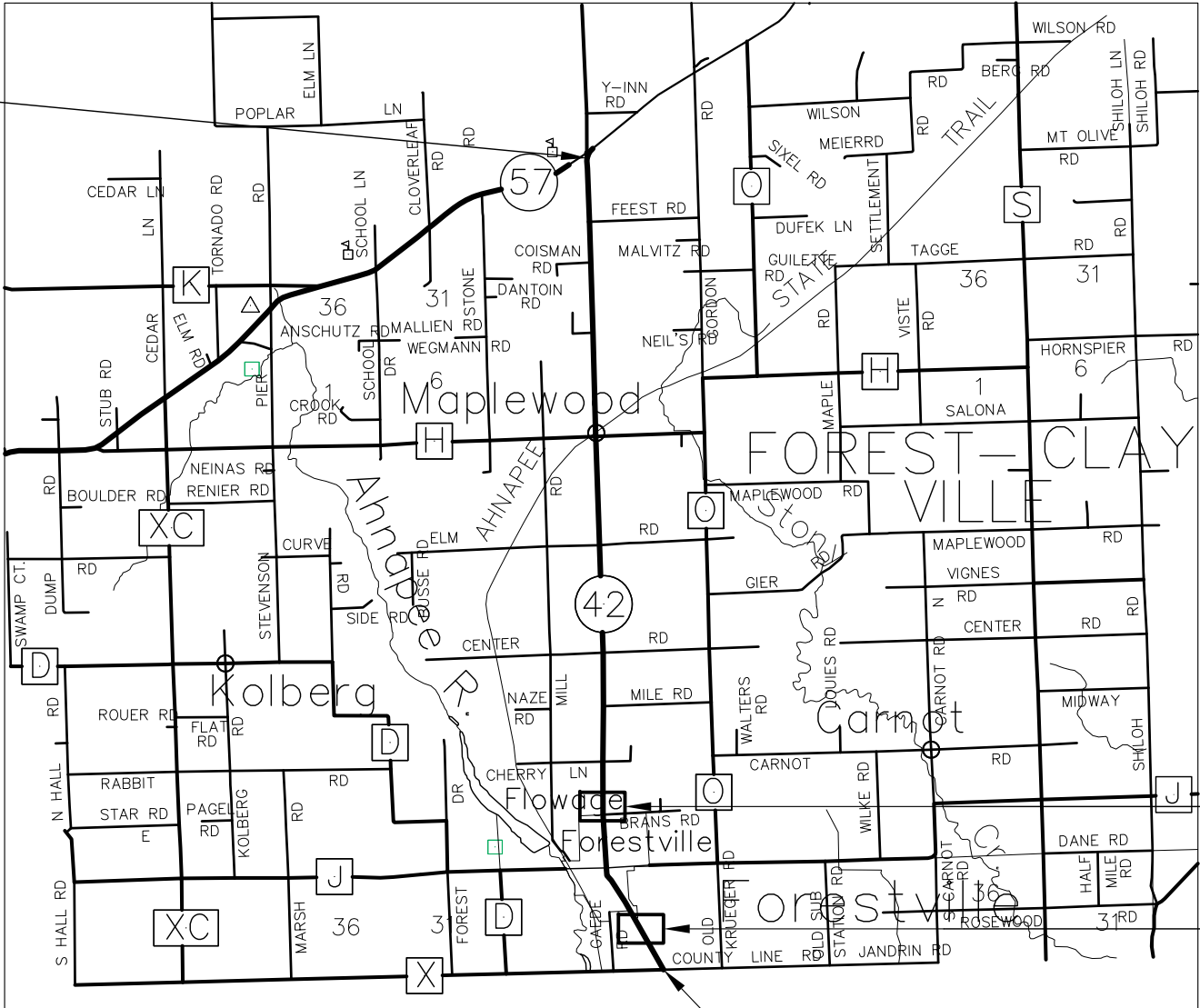
FOR THE CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN GREEN BAY.

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

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

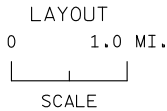
THIS PLAT IS A GRAPHIC REPRESENTATION AND IS FOR REFERENCE PURPOSES ONLY. DEEDS MUST BE CHECKED TO DETERMINE PROPERTY BOUNDARIES AND ACCESS RIGHTS.

BEGIN RELOCATION ORDER
PROJECT 4430-22-20
STATION 656+91.03



R 25 E

R 26 E



TOTAL NET LENGTH OF CENTERLINE = 7.80 MI.



REVISION DATE
10/15/2024 N.C.

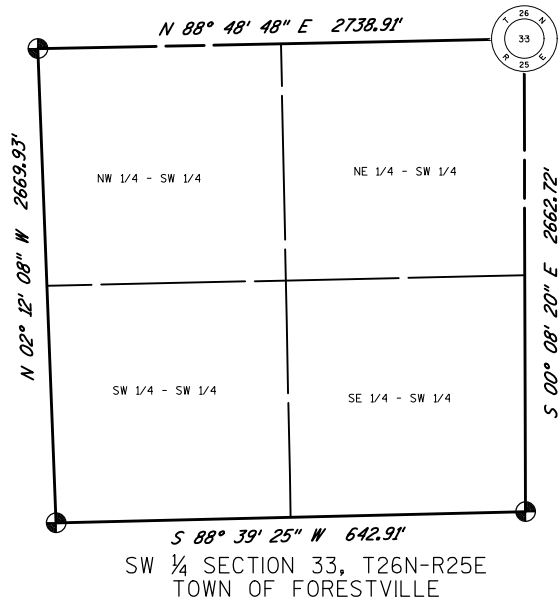
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED:

DATE: 06/14/2023

Jon L. Herbel
JON L. HERBEL

R/W PROJECT NUMBER 4430-22-20	SHEET NUMBER	TOTAL SHEETS
CONSTRUCTION PROJECT NUMBER 4430-22-71	4.01	3
PLAT OF RIGHT OF WAY REQUIRED FOR ALGOMA - STURGEON BAY CTH X - CENTER ROAD		
DOOR COUNTY		STH 42



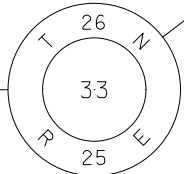
TOWN

RIGHT-OF-WAY R

STH 42

NE 1/4 - SW 1/4

BERNTSEN ALUM.
CAP MON.
DOOR COUNTY
Y=103186.431
X=469895.273



PAR.1		
PT-PT	BEARING	DISTANCE
100-101	S 00°08'20" E	1129.08'
101-102	S 89°53'54" W	837.92'
102-105	N 27°57'39" W	90.50'
105-107	N 62°10'41" E	49.92'
107-108	N 27°57'05" W	83.56'
108-109	N 62°10'41" E	33.08'
109-110	S 27°57'05" E	83.56'
110-107	S 62°10'41" W	33.08'

PAR.2		
PT-PT	BEARING	DISTANCE
100-101	S 00°08'20" E	1129.08'
101-102	S 89°53'54" W	837.92'
102-106	N 27°59'10" W	157.70'
106-111	S 62°02'52" W	50.00'
111-112	S 62°02'52" W	33.48'
112-113	N 27°57'05" W	48.72'
113-114	N 64°02'56" E	33.50'
114-111	S 27°57'05" E	47.55'

POINT TABLE				
POINT NUMBER	STATION	OFFSET	Y	X
101	266+08.44	740.81'	102,057.352	469,898.013
102	270+00.00	0.00'	102,055.864	469,060.090
103	265+00.00	0.00'	101,614.230	469,294.523
104	275+00.00	0.00'	102,497.499	468,825.657
105	270+90.50	0.00'	102,135.799	469,017.659
106	271+57.70	0.00'	102,195.159	468,986.149
107	270+90.38	49.92'	102,159.098	469,061.809
108	271+73.94	49.93'	102,232.911	469,022.643
109	271+73.86	83.02'	102,248.351	469,051.901
110	270+90.30	83.00'	102,174.539	469,091.067
111	271+57.71	-50.07'	102,171.690	468,941.920
112	271+57.72	-83.55'	102,155.998	468,912.349
113	272+06.44	-83.54'	102,199.038	468,889.511
114	272+05.26	-50.06'	102,213.696	468,919.630

(100) BRIGHTSPEED OF NORTHEAST WISCONSIN, LLC-COMMUNICATION
NO RECORD OF EASEMENT
PARCEL 1

(102) 66' EASEMENT
WISCONSIN TELEPHONE COMPANY
VOL.13 PG.541
DOC.#216328A
PARCEL 1

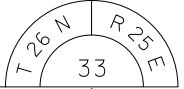
RIGHT OF WAY GRANT
DOC.#346550
PARCEL 1

TAX ID#010 0033262531C

(100) (BLANKET)
TELEPHONE BURIED PLANT
RIGHT-OF-WAY EASEMENT
FORESTVILLE TELEPHONE
COMPANY, INC.
VOL. 357 PG. 414
DOC.#436398
PARCEL 2

TAX ID#010 0033262534A

BERNTSEN ALUM.
CAP MON.
DOOR COUNTY
Y=100523.723
X=469901.734



FORESTVILLE

SCHEDULE OF LANDS & INTERESTS REQUIRED						
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	FEE RW ACRE(S) OR (S.F.) REQUIRED			T.L.E. AREA
			NEW	EXISTING	TOTAL	
1	JOSEPH E. BINARD & MARIE Y. BINARD	FEE	2764	-	2764	-
2	LYNN A. CLARK & JULIE A. CLARK	FEE	1611	-	1611	-
-	-	-	-	-	-	-

*AREA FIGURES ARE REFERENCED TO THIS SHEET ONLY.

SCHEDULE OF UTILITIES & INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
100	BRIGHTSPEED OF NORTHEASTERN WISCONSIN, LLC-COMMUNICATION	RELEASE OF RIGHTS
102	AT & T WISCONSIN	RELEASE OF RIGHTS

BASIS OF EXISTING R/W

ROAD NAME	PROJECT	YEAR
STH 42	3439	1935
"	T 01-4 (28)	1962
"	4430-10-21	2018

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

REVISION DATE 10/15/2024	DATE 06/14/2023	0 25 50 GRAPHIC SCALE, FEET	HWY: STH 42	STATE R/W PROJECT NUMBER 4430-22-20	PLAT SHEET NO: 4.02
			COUNTY: DOOR CO.	CONSTRUCTION PROJECT NUMBER 4430-22-71	PS&E SHEET NO: ----- E

SCHEDULE OF LANDS & INTERESTS REQUIRED			*AREA FIGURES ARE REFERENCED TO THIS SHEET ONLY.			
PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	FEE R/W ACRE(S) OR (S.F.) REQUIRED			T.L.E. AREA
			NEW	EXISTING	TOTAL	
3	MICHAEL J. KASTEN & MAVIS A. KASTEN	FEE & TLE	1153	3290	4443	381
4	NICHOLAS J. WELDON	FEE & TLE	1258	6752	8010	1930
-	-	-	-	-	-	-

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

SCHEDULE OF UTILITIES & INTERESTS REQUIRED		
UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
100	BRIGHTSPEED OF NORTHEASTERN WISCONSIN, LLC-COMMUNICATION	RELEASE OF RIGHTS
101	WISCONSIN PUBLIC SERVICE CORPORATION-ELECTRICITY	RELEASE OF RIGHTS
102	AT&T WISCONSIN	RELEASE OF RIGHTS

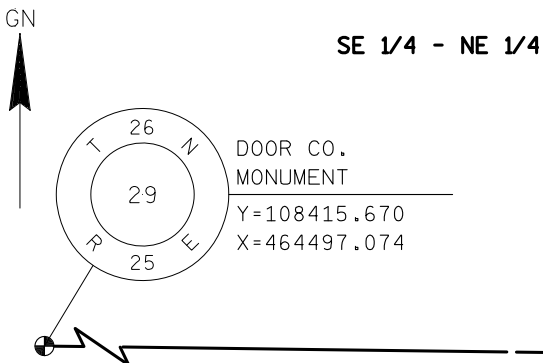
BASIS OF EXISTING R/W

ROAD NAME	PROJECT	YEAR
STH 42	3439	1935
"	T 01-4 (28)	1962
"	4430-10-21	2018

(100) (BLANKET)
TELEPHONE BURIED PLANT
RIGHT-OF-WAY EASEMENT
FORESTVILLE TELEPHONE
COMPANY, INC.
VOL.357 PG.193
DOC.#436231
PARCEL 3

(101) GRANT FOR TRANSMISSION LINE
WISCONSIN PUBLIC SERVICE CORPORATION
VOL.19 MISC. PG.139
DOC.#231957
PARCEL 3

Curve 8
PC Y 107,863.642 X 467,038.507 333+27.29
CTR Y 108,082.960 X 478,036.320
PI Y 108,186.099 X 467,032.076
Direction Back N01°08'31"W
Radius 11,000.00'
Delta 3°21'32"(RT)
Length 644.86'
Tangent 322.52'
Chord Direction N00°32'13"E Distance 644.77'
Direction Ahead N02° 12' 59"E
PT Y 108,508.380 X 467,044.550 339+72.14

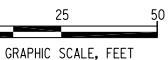


POINT TABLE				
POINT NUMBER	STATION	OFFSET	Y	X
116	338+46.46	-0.42'	108,382.780	467,039.986
117	364+76.54	-0.40'	111,010.919	467,141.005
118	340+69.73	0.23'	108,605.883	467,048.558
119	340+69.73	-0.00'	108,605.892	467,048.318
120	341+19.18	-49.78'	108,657.227	467,000.494
121	340+69.73	-49.77'	108,607.816	466,998.595
122	340+69.73	-73.09'	108,608.719	466,975.285
123	341+19.18	-73.12'	108,658.129	466,977.184
124	341+35.54	-73.11'	108,674.478	466,977.812
125	341+35.54	-49.78'	108,673.576	467,001.123
126	342+30.79	0.19'	108,766.829	467,054.744
127	341+82.75	50.20'	108,716.886	467,102.861
128	342+30.81	50.19'	108,764.908	467,104.707
129	342+30.81	76.37'	108,763.903	467,130.862
130	341+82.76	76.38'	108,715.881	467,129.016
131	341+82.76	78.10'	108,715.815	467,130.739
132	341+00.10	78.12'	108,633.213	467,127.564
133	340+98.72	50.23'	108,632.916	467,099.634
134	341+28.28	50.22'	108,662.454	467,100.769
135	341+28.29	70.00'	108,661.703	467,120.536
136	341+48.29	69.99'	108,681.689	467,121.296
137	341+48.28	50.21'	108,682.440	467,101.537
138	345+00.00	0.00'	109,035.840	467,064.964
139	339+72.14	0.00'	108,508.380	467,044.550
140	341+35.54	0.00'	108,671.651	467,050.869
141	341+35.54	0.22'	108,671.642	467,051.085
142	340+94.50	0.23'	108,630.639	467,049.509
143	338+93.18	320.39'	108,419.367	467,362.015
144	338+84.41	116.97'	108,417.103	467,158.425
145	339+48.53	50.34'	108,482.945	467,093.971
146	339+96.96	50.25'	108,531.228	467,095.725
147	339+96.93	-49.75'	108,535.069	466,995.799
148	336+61.76	-49.14'	108,198.610	466,987.787
149	333+26.68	-48.91'	107,862.061	466,989.616
150	269+22.05	-50.12'	101,963.520	469,052.379
151	340+97.03	50.23'	108,631.229	467,099.569

PAR.3-FEE		
PT-PT	BEARING	DISTANCE
116-118	N 02°12'05" E	223.26'
118-121	N 87°47'01" W	50.00'
121-122	N 87°47'01" W	23.33'
122-123	N 02°12'05" E	49.45'
123-120	S 87°47'01" E	23.33'
120-125	N 02°12'05" E	16.36'
125-141	S 87°47'01" E	50.00'
141-118	S 02°12'05" W	65.81'
PAR.3-TLE		
116-118	N 02°12'05" E	223.26'
118-121	N 87°47'01" W	50.00'
121-120	N 02°12'05" E	49.45'
120-123	N 87°47'01" W	23.33'
123-124	N 02°12'05" E	16.36'
124-125	S 87°47'01" E	23.33'
125-120	S 02°12'05" W	16.36'

TAX ID#010 0029262514A

MAG SPIKE
DOOR CO.
Y=108382.784
X=467039.982



REVISION DATE
10/15/2024 N.C.

DATE 06/14/2023

HWY: STH 42

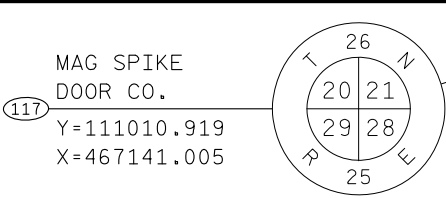
COUNTY: DOOR CO.

STATE R/W PROJECT NUMBER 4430-22-20

CONSTRUCTION PROJECT NUMBER 4430-22-71

PLAT SHEET NO: 4.03

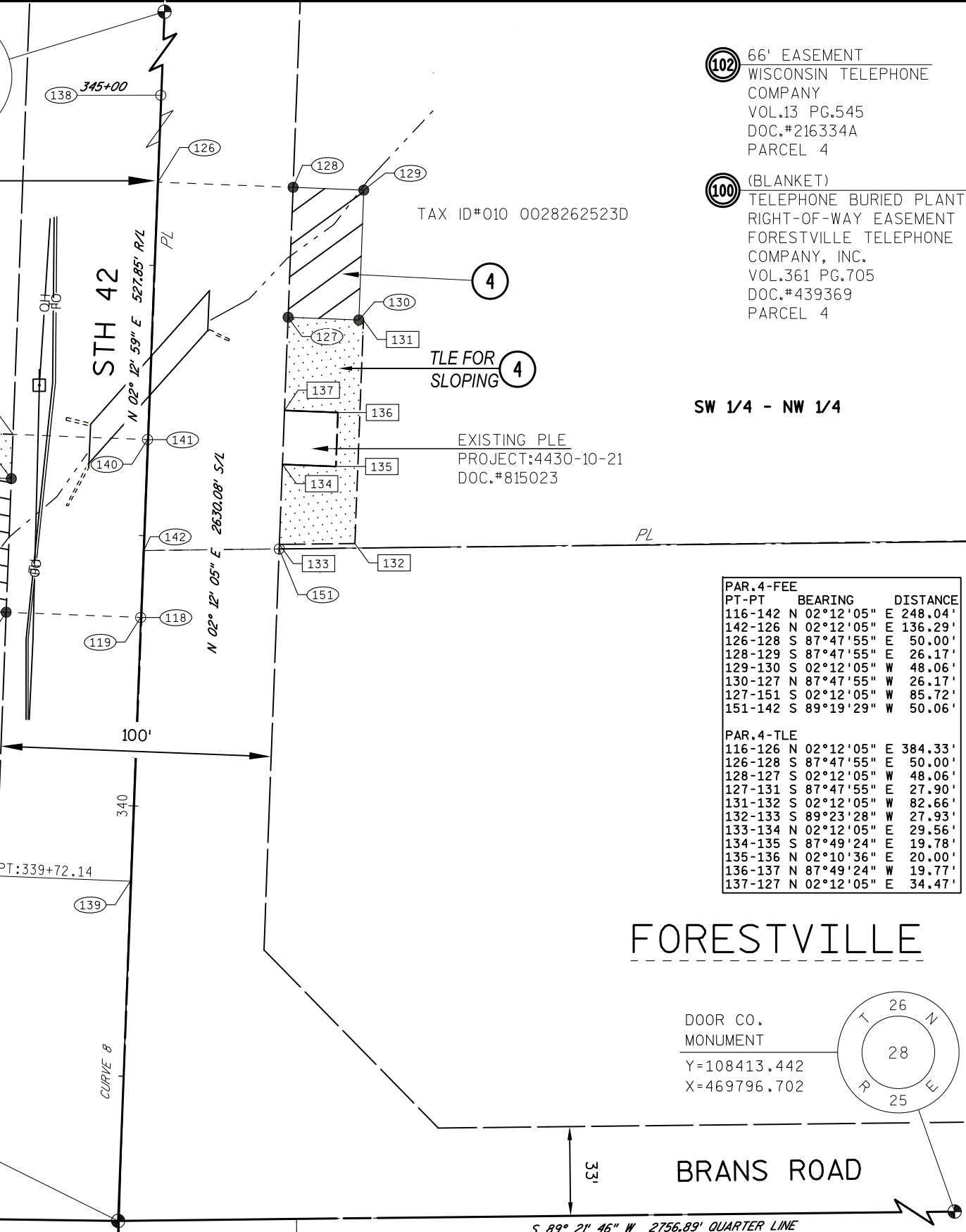
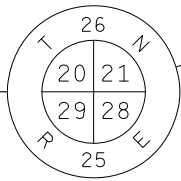
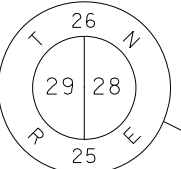
PS&E SHEET NO: ----- E



RIGHT-OF-WAY R

3 TLE FOR SLOPING

OF



(102) 66' EASEMENT
WISCONSIN TELEPHONE
COMPANY
VOL.13 PG.545
DOC.#216334A
PARCEL 4

(100) (BLANKET)
TELEPHONE BURIED PLANT
RIGHT-OF-WAY EASEMENT
FORESTVILLE TELEPHONE
COMPANY, INC.
VOL.361 PG.705
DOC.#439369
PARCEL 4

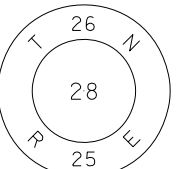
SW 1/4 - NW 1/4

EXISTING PLE
PROJECT:4430-10-21
DOC.#815023

PAR.4-FEE		
PT-PT	BEARING	DISTANCE
116-142	N 02°12'05" E	248.04'
142-126	N 02°12'05" E	136.29'
126-128	S 87°47'55" E	50.00'
128-129	S 87°47'55" E	26.17'
129-130	S 02°12'05" W	48.06'
130-127	N 87°47'55" W	26.17'
127-151	S 02°12'05" W	85.72'
151-142	S 89°19'29" W	50.06'
PAR.4-TLE		
116-126	N 02°12'05" E	384.33'
126-128	S 87°47'55" E	50.00'
128-127	S 02°12'05" W	48.06'
127-131	S 87°47'55" E	27.90'
131-132	S 02°12'05" W	82.66'
132-133	S 89°23'28" W	27.93'
133-134	N 02°12'05" E	29.56'
134-135	S 87°49'24" E	19.78'
135-136	N 02°10'36" E	20.00'
136-137	N 87°49'24" W	19.77'
137-127	N 02°12'05" E	34.47'

FORESTVILLE

DOOR CO.
MONUMENT
Y=108413.442
X=469796.702

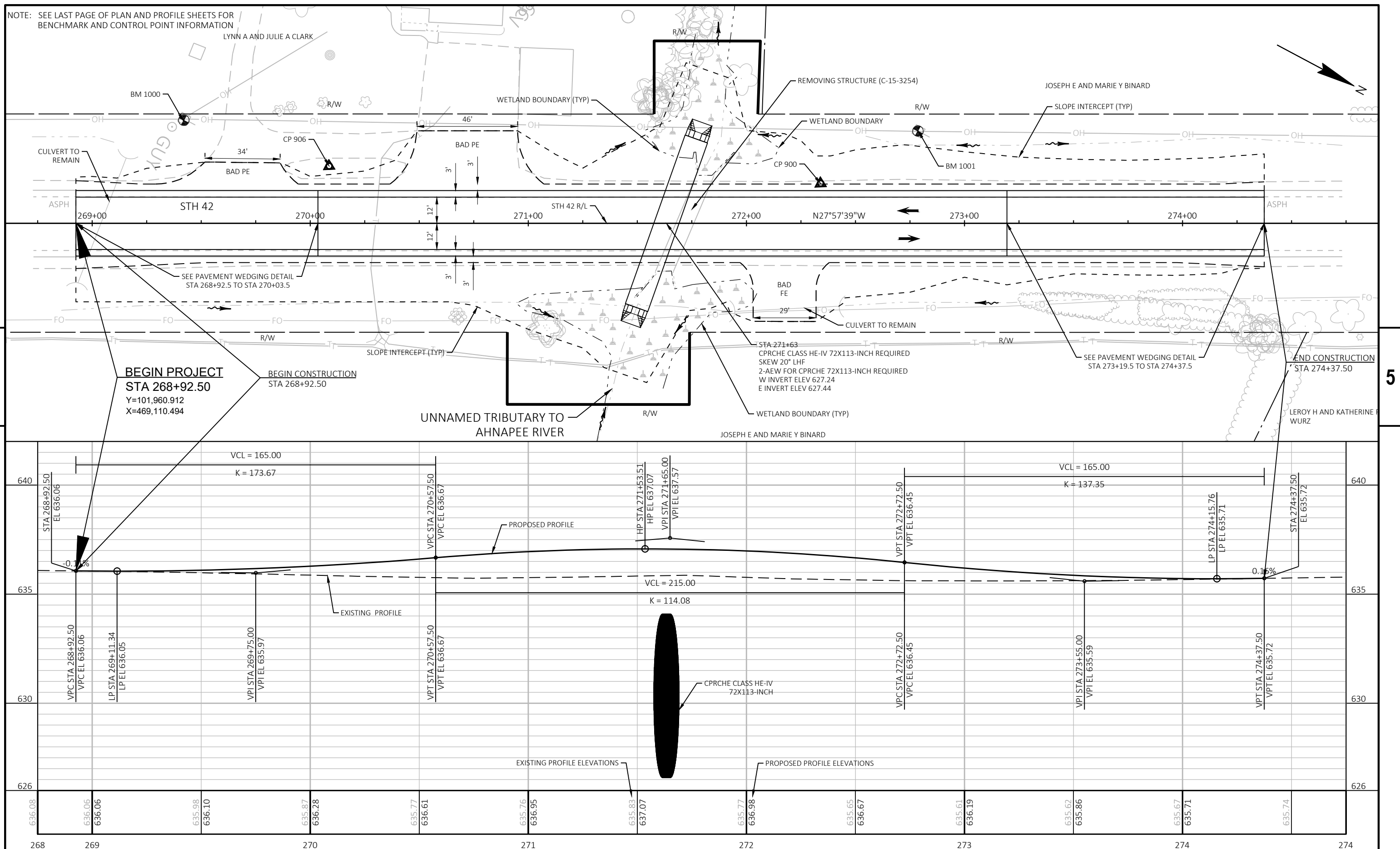


BRANS ROAD

S 89° 21' 46" W 2756.89' QUARTER LINE

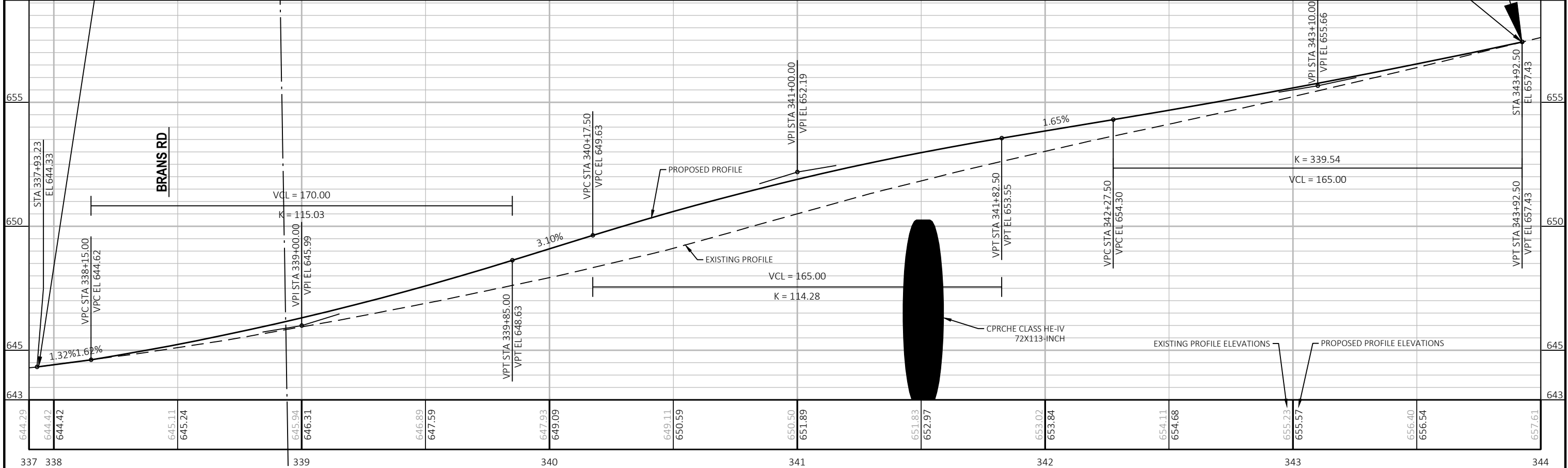
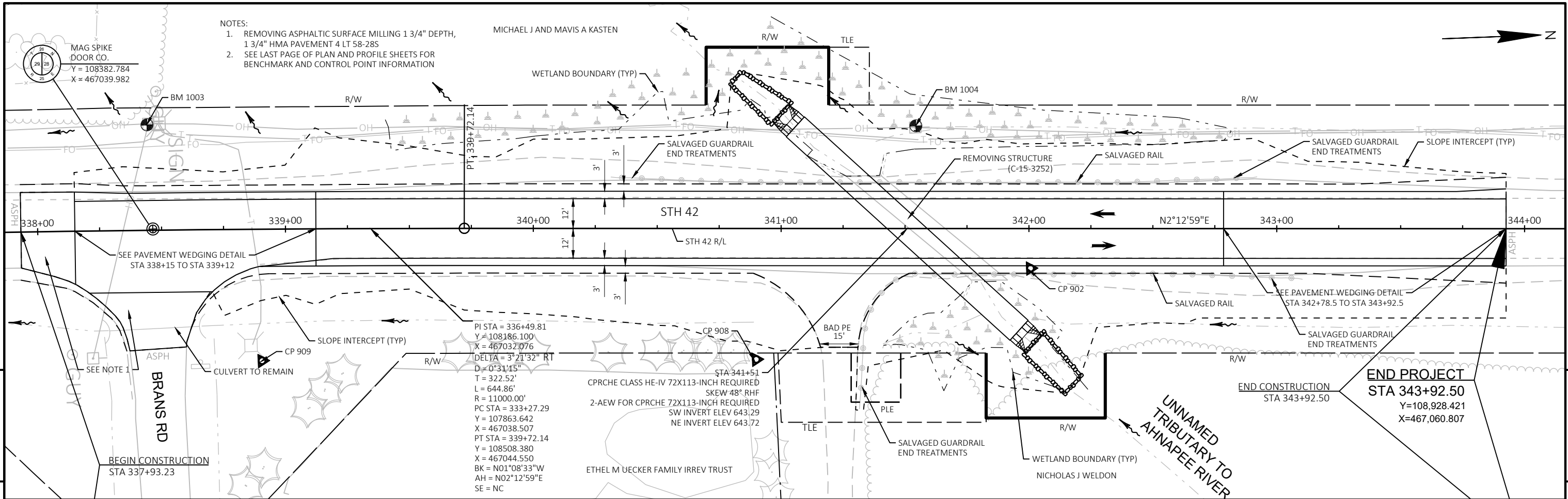
S 89° 15' 33" E 2543.12' QUARTER LINE

NOTE: SEE LAST PAGE OF PLAN AND PROFILE SHEETS FOR
BENCHMARK AND CONTROL POINT INFORMATION



PROJECT NO:	4430-22-71	HWY:	STH 42	COUNTY:	DOOR	PLAN AND PROFILE:	PIPE CULVERT STA 271+63	SHEET	E
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FILE NAME : K:\1202715.09\CIVIL3D\44302200\SHEETSPLAN\050101-PP.DWG	PLOT DATE :	2/26/2025 7:31 PM	PLOT BY :	NIKOLAI, ADAM	PLOT NAME :		PLOT SCALE :	1 IN=40 FT		
LAYOUT NAME - 050101.pp									WISDOT/CADD SHEET 44	



PROJECT NO:	4430-22-71	HWY:	STH 42	COUNTY:	DOOR	PLAN AND PROFILE:	PIPE CULVERT STA 341+51	SHEET	E
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FILE NAME : K:\1202715.09\CIVIL3D\44302200\SHEETS\PLAN\050101-PP.DWG
LAYOUT NAME - 050102-pp

PLOT DATE : 2/26/2025 7:32 PM

PLOT BY : NIKOLAI, ADAM

PLOT NAME :

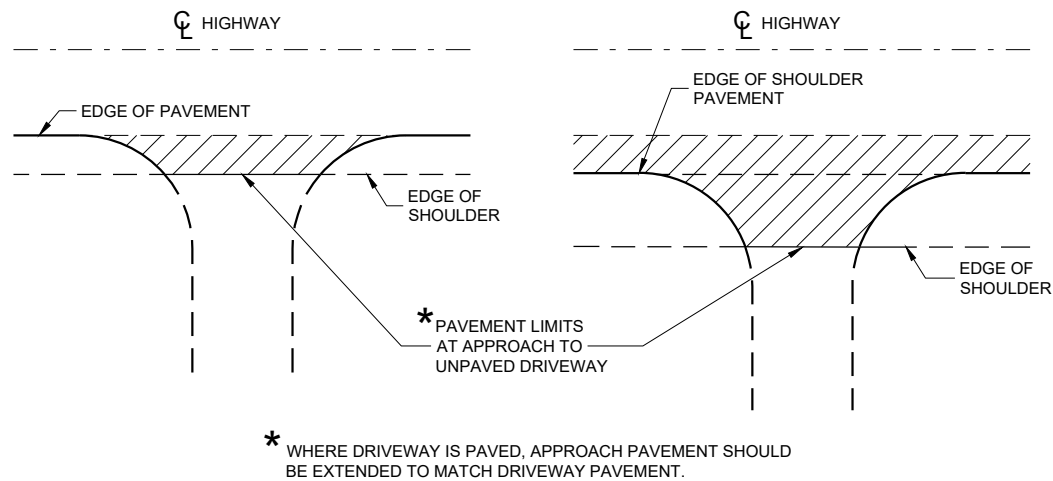
PLOT SCALE : 1 IN=40 FT

WISDOT/CADDs SHEET 44

BENCHMARKS AND CONTROL POINTS TABLE						
POINT	STATION	OFFSET	Y COORDS	X COORDS	ELEVATION	DESCRIPTION
BM 1000	269+41.97	47.17 LT	101982.494	469045.629	636.98	60D NAIL SET IN POWER POLE 2625 33L13 EAST SIDE OF POLE SOUTHWEST CORNER OF DRIVEWAY FIRE NUMBER S185 APPROX 1,700' NORTHWEST OF CTH X
BM 1001	272+78.62	42.27 LT	102282.140	468892.116	633.09	60D NAIL SET IN POWER POLE 2625 33L15 EAST SIDE OF POLE APPROX 100' NORTH OF CULVER C-15-3254 WEST SIDE OF STH 42
BM 1002	276+10.09	37.95 LT	102576.951	468740.522	632.20	60D NAIL SET IN POWER POLE 2625 33L16 WEST SIDE OF STH 42 APPROX 450' NORTH OF CULVERT C-15-3254
BM 1003	338+44.55	42.43 LT	108382.002	466997.942	643.12	60D NAIL SET IN POWER POLE 2625 29R64 EAST SIDE OF POLE AT INTERSECTION OF STH 42 AND BRANS RD WEST OF INTERSECTION
BM 1004	341+54.33	41.37 LT	108692.031	467010.256	648.71	60D NAIL SET IN POWER POLE 2625 29E13 SOUTH SIDE OF POLE APPROX 330' NORTH OF STH 42 AND BRANS RD INTERSECTION WEST SIDE OF STH 42
BM 1005	344+45.39	41.04 LT	108982.862	467021.840	656.86	60D NAIL SET IN POWER POLE 2625 29E14 EAST SIDE OF POLE APPROX 620' NORTH OF STH 42 AND BRANS RD INTERSECTION WEST SIDE OF STH 42
CP 900	272+34.04	18.24 LT	102254.032	468934.249	635.20	60D NAIL
CP 901	259+18.34	21.00 LT	101090.622	469548.700	643.78	60D NAIL
CP 902	342+00.57	16.02 RT	108736.012	467069.395	652.78	60D NAIL
CP 903	357+21.28	17.33 RT	110255.540	467129.514	690.96	60D NAIL
CP 906	270+08.64	26.21 LT	102051.206	469032.887	635.51	60D NAIL
CP 907	271+40.57	130.94 LT	102118.628	468878.527	631.61	60D NAIL
CP 908	340+89.96	52.81 RT	108624.060	467101.873	647.76	60D NAIL
CP 909	338+90.14	53.08 RT	108424.769	467094.740	645.85	60D NAIL
CP 910	337+92.33	94.61 LT	108330.763	466944.482	641.88	60D NAIL
CP 950	319+08.32	54.11 LT	106443.879	467012.699	631.66	FENO MARKER 6090-08-00 901

Standard Detail Drawing List

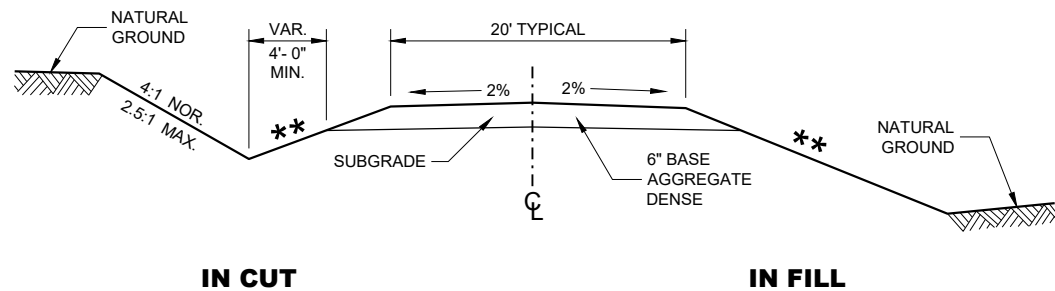
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08D22-01	DRIVEWAYS WITHOUT CURB & GUTTER RESURFACING PROJECTS RURAL
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E14-01	TRACKING PAD
08E15-01	CULVERT PIPE CHECK
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13C19-03	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-09B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C02-09C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C02-09H	MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING
15C08-23A	PERMANENT LONGITUDINAL PAVEMENT MARKINGS
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)



PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

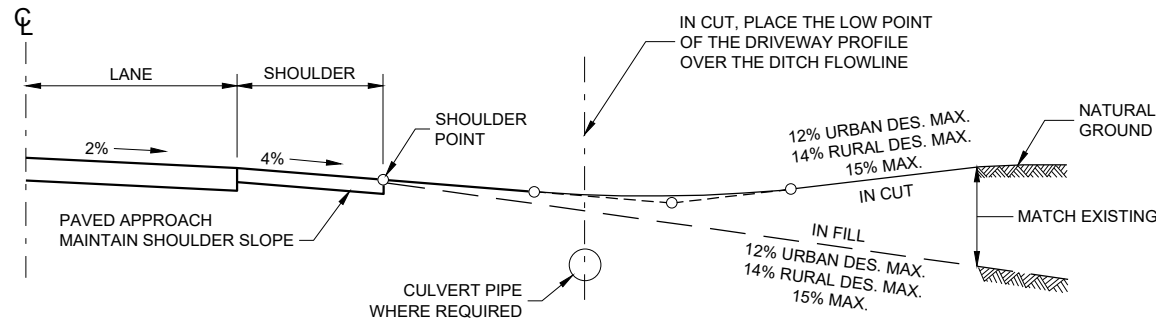
**RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)**



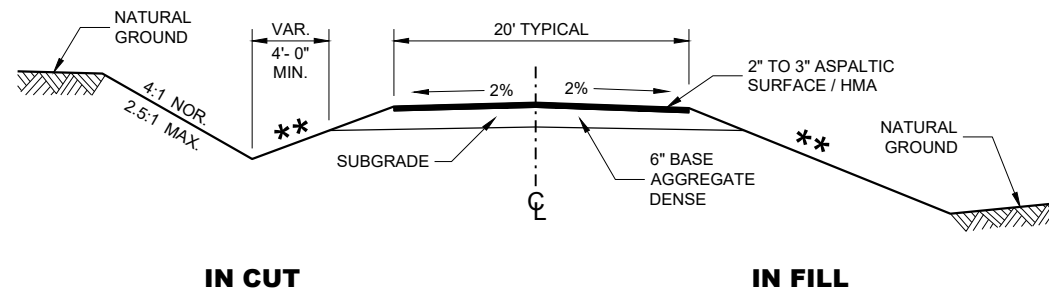
**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
AGGREGATE SURFACE**

** 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

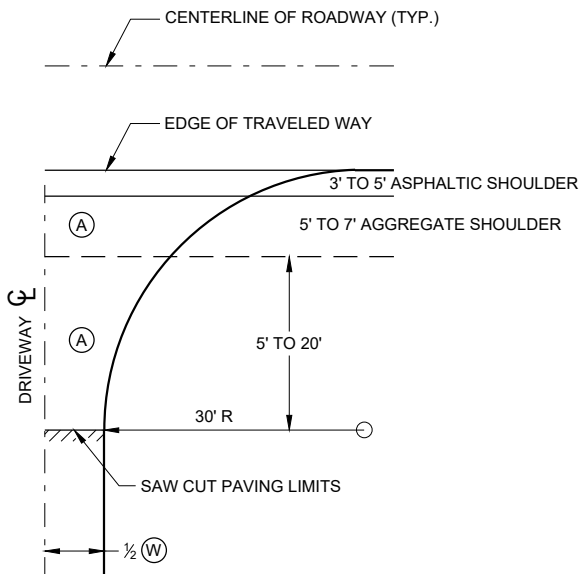


**TYPICAL CROSS SECTION FOR
PRIVATE DRIVE OR FIELD ENTRANCE
ASPHALTIC SURFACE**

**DRIVEWAYS WITHOUT
CURB AND GUTTER**

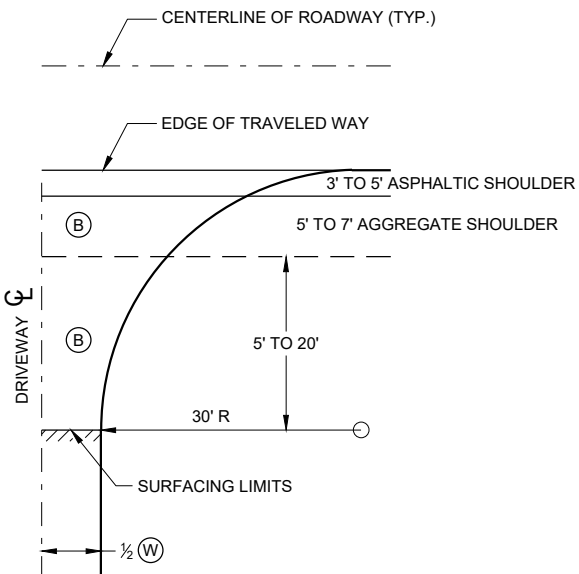
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

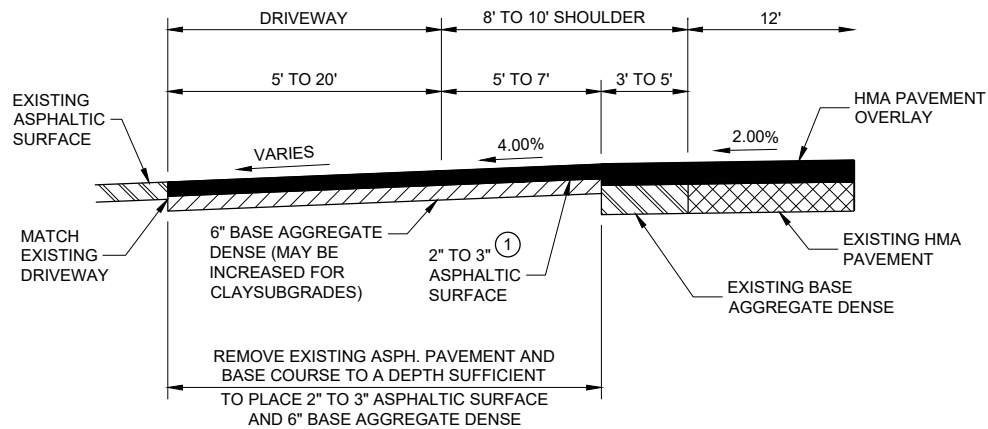


**PLAN VIEW
HALF SECTION**

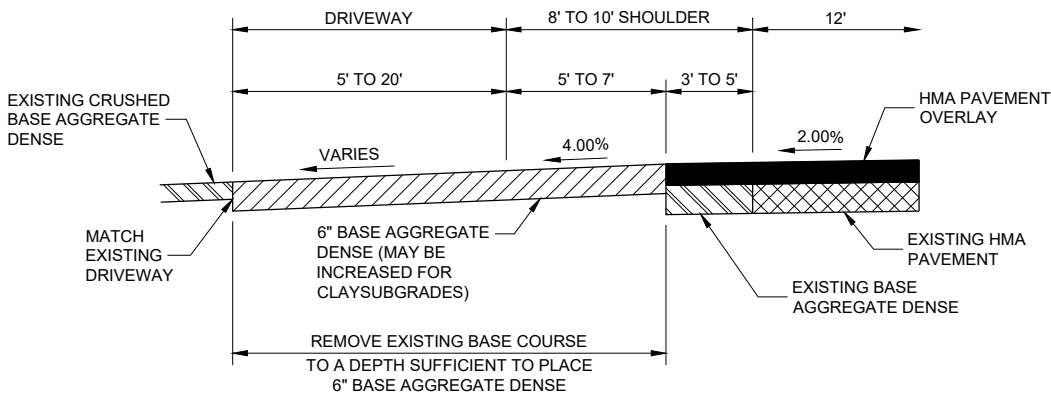
- (A) : PAID FOR AS ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES. (TON)
- (B) : PAID FOR AS BASE AGGREGATE DENSE 1 1/4" (TON)
- (W) : DRIVEWAY WIDTH 16' MIN. - 24' MAX.



**PLAN VIEW
HALF SECTION**



**PROFILE VIEW
RURAL ENTRANCE
WITH ASPHALTIC SURFACE
RESURFACING PROJECTS**



**PROFILE VIEW
RURAL ENTRANCE
WITH AGGREGATE SURFACE
6" BASE AGGREGATE DENSE
RESURFACING PROJECTS**

GENERAL NOTES

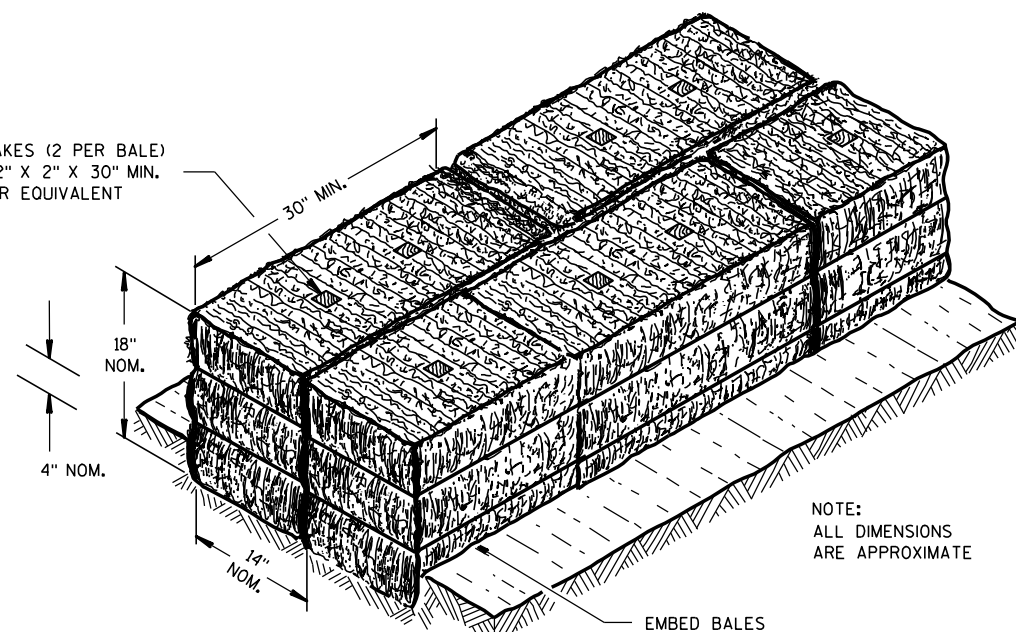
- ① DESIGN WILL DETERMINE FINAL DRIVEWAY ASPHALTIC THICKNESS BASED ON TYPE OF USAGE AND LOADINGS.

**DRIVEWAYS WITHOUT CURB
AND GUTTER RESURFACING
PROJECTS RURAL**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2016 /S/ Rodney Taylor
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA

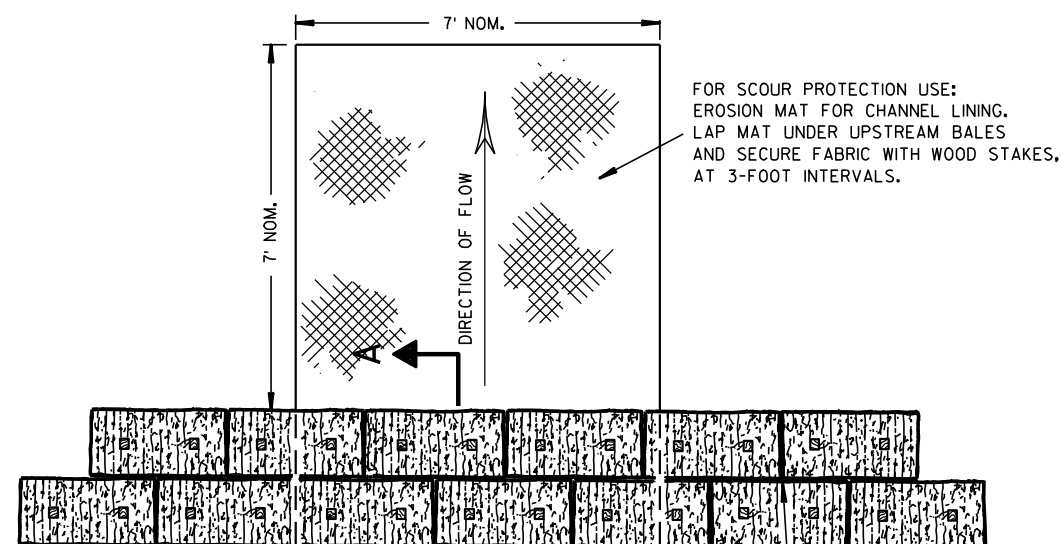
WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



NOTE:
ALL DIMENSIONS
ARE APPROXIMATE

EMBED BALES

SECTION A-A

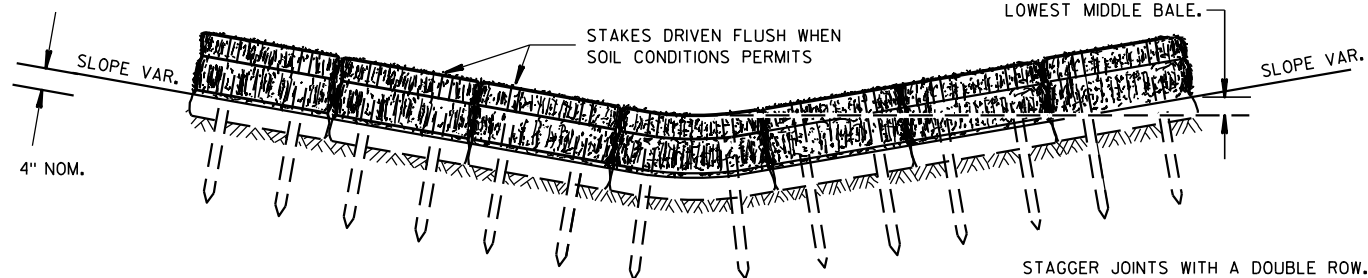


FOR SCOUR PROTECTION USE:
EROSION MAT FOR CHANNEL LINING.
LAP MAT UNDER UPSTREAM BALES
AND SECURE FABRIC WITH WOOD STAKES,
AT 3-FOOT INTERVALS.

PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



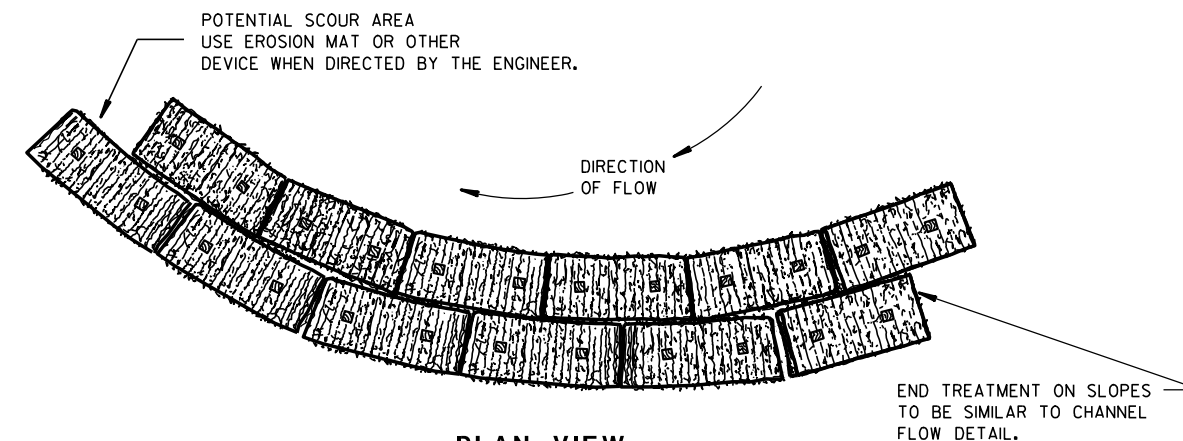
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

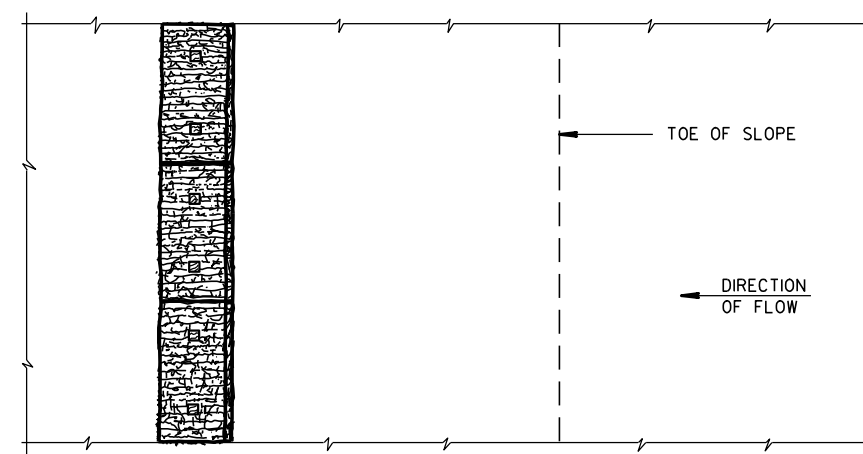
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

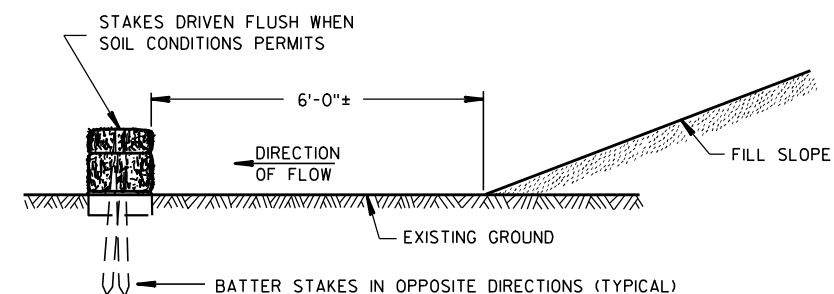


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

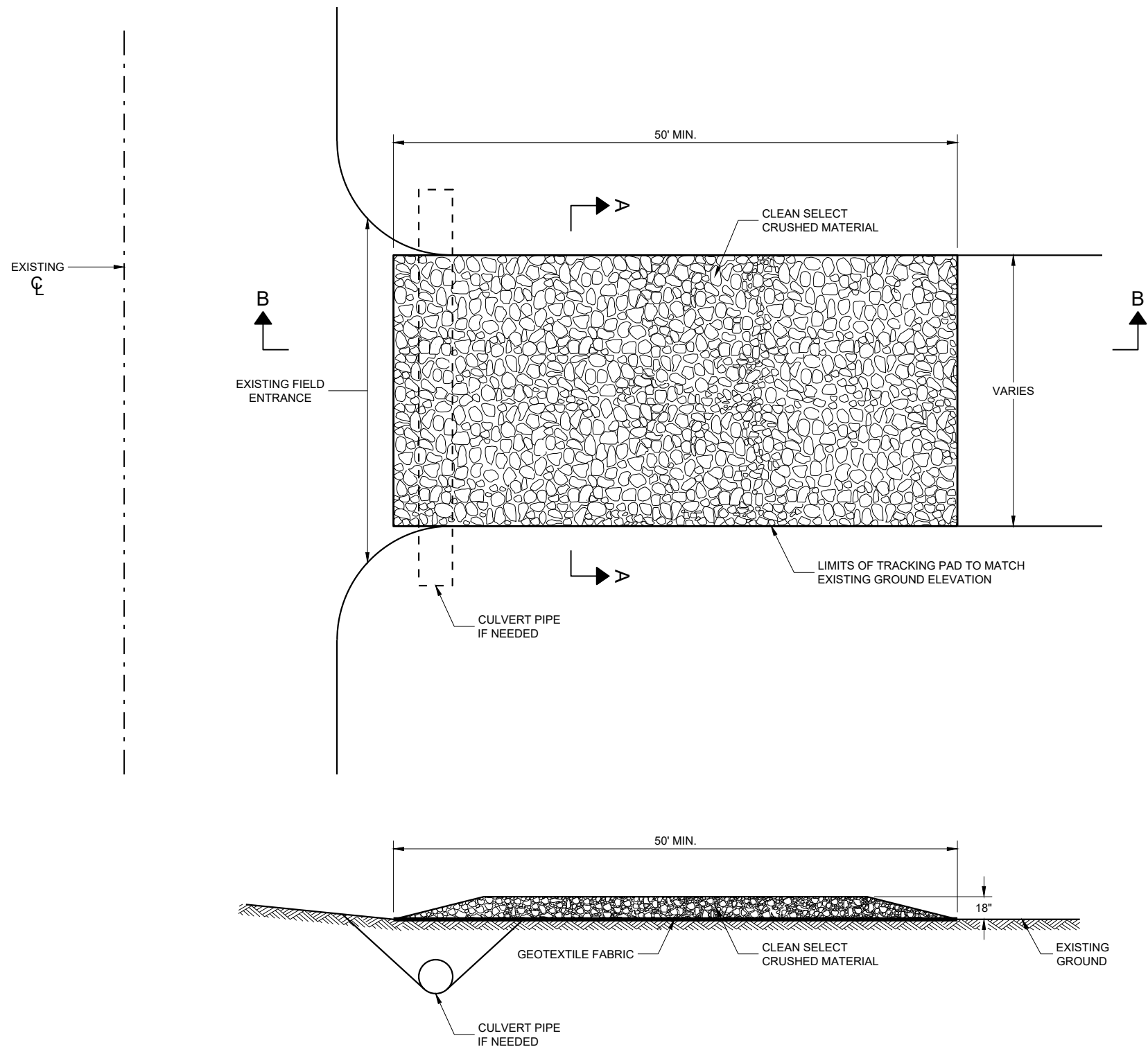
FHWA



- 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.



SILT FENCE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 4-29-05 DATE	/s/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER



SECTION B - B

GENERAL NOTES

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

TRACKING PAD SHALL BE INSPECTED DAILY. DEFICIENT AREAS SHALL BE REPAIRED OR REPLACED IMMEDIATELY.

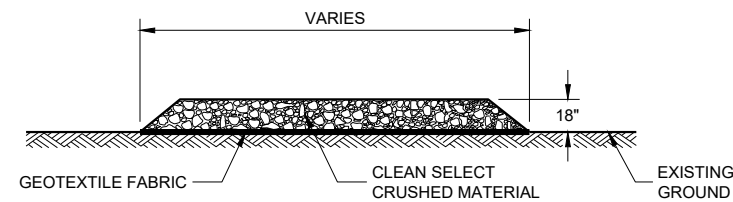
TRACKING PAD TO BE REMOVED AFTER CONSTRUCTION IS COMPLETED.

TRACKING PAD SHALL BE THE FULL WIDTH OF THE EGRESS POINT.

SURFACE WATER MUST BE PREVENTED FROM PASSING THROUGH THE TRACKING PAD. FLOWS SHALL BE DIVERTED AWAY, AROUND OR CONVEYED UNDER THE TRACKING PAD.

CULVERT PIPE OR OTHER BMP USED TO DIVERT WATER AWAY, AROUND OR UNDER THE TRACKING PAD SHALL BE DESIGNED TO CONVEY THE 2 YEAR - 24 HOUR EVENT.

THE COST OF ADDITIONAL BMP TO DIVERT WATER ARE INCIDENTAL TO THE TRACKING PAD BID ITEM.



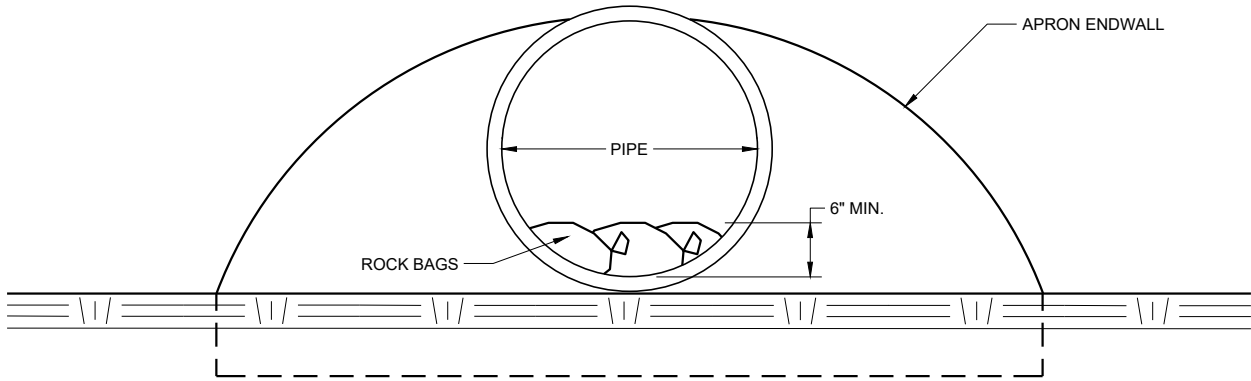
SECTION A - A

TRACKING PAD

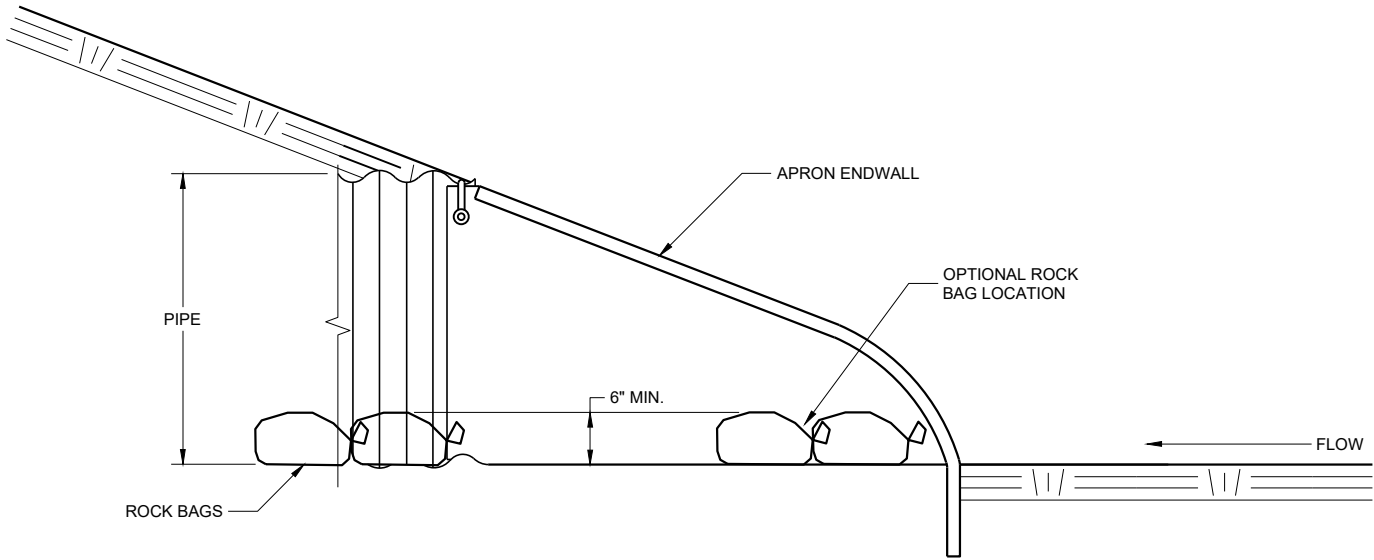
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
3/24/2011
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

FHWA



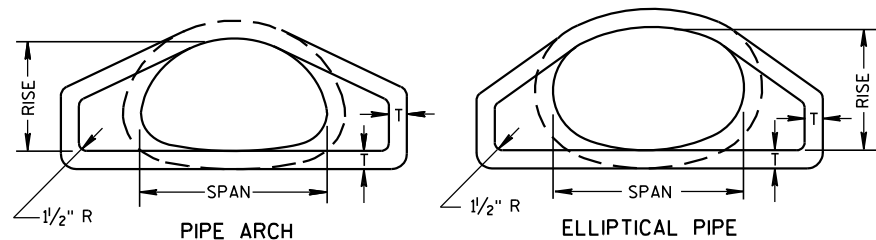
END VIEW



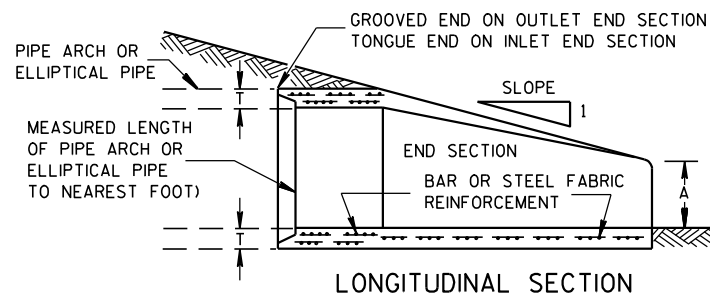
SIDE VIEW

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 ENGINEER
FHWA	

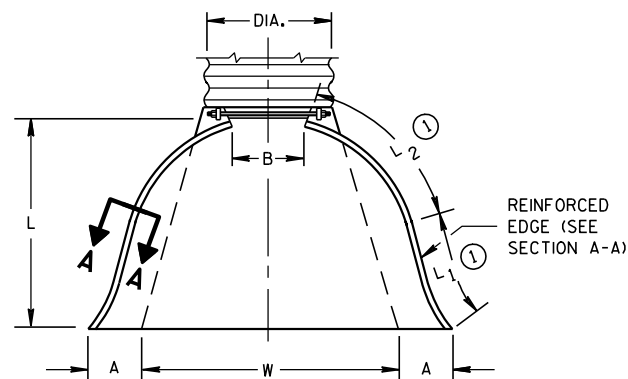


END VIEW

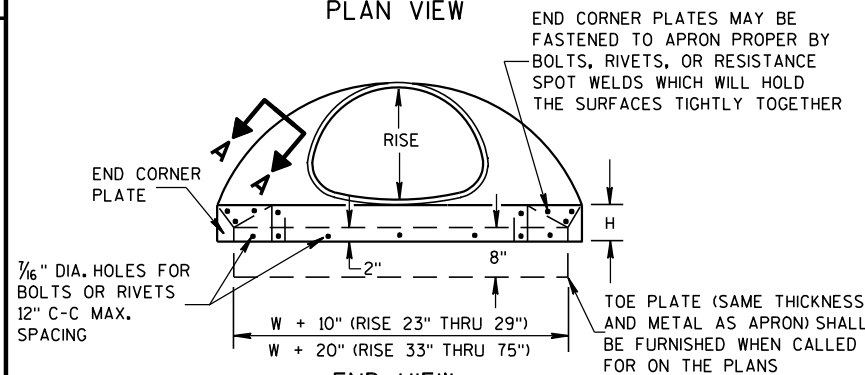


LONGITUDINAL SECTION

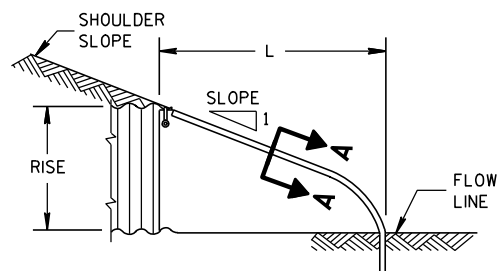
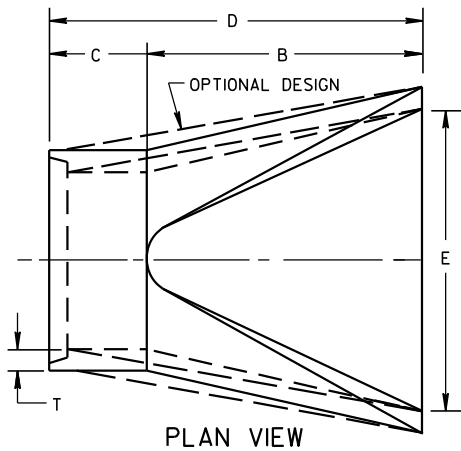
CONCRETE ENDWALLS



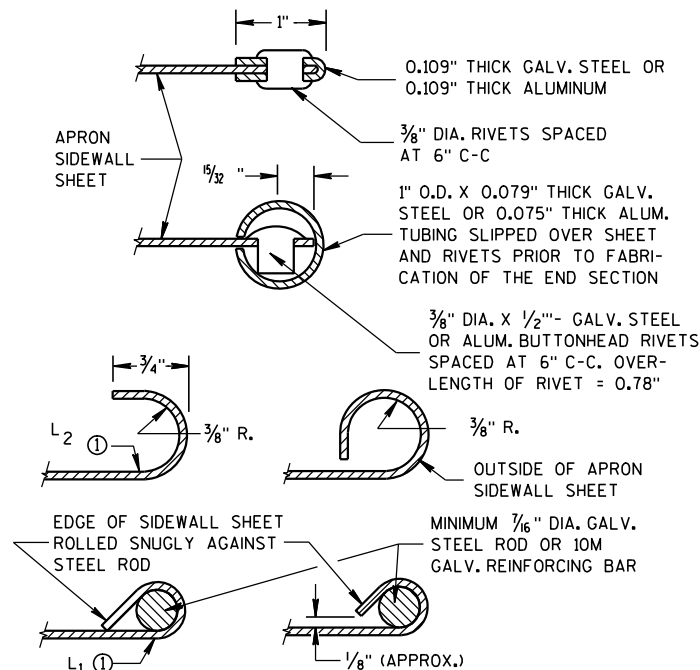
PLAN VIEW



END VIEW

SIDE ELEVATION
METAL ENDWALLS

PLAN VIEW

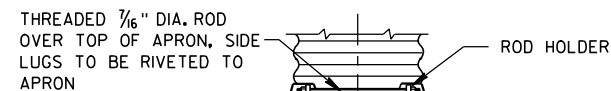


SECTION A-A

2- 2 2/3" X 1/2" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

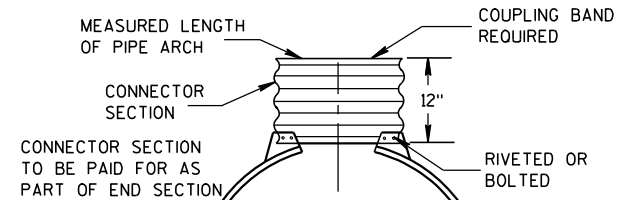
3" X 1" CORRUGATIONS													
EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES

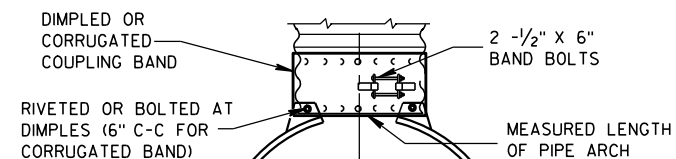
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHESNOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	**SPAN	**RISE	T	A	B	C	D	E	
24	29	18	3	8 1/2	39	33	72	48	3 to 1
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4 1/2	15 1/8	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28 1/2	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	**SPAN	**RISE	T	A	B	C	D	E	
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1
42	53	34	5	15 1/4	60	36	96	78	2 1/2 to 1
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1

**NOMINAL SIZE

GENERAL NOTES

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

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

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

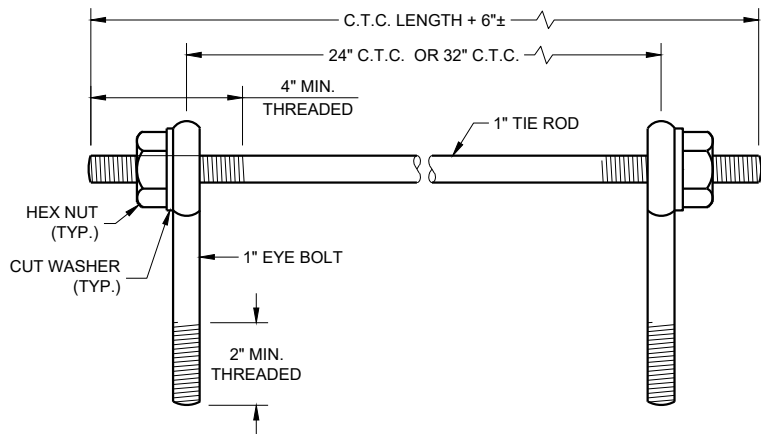
① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPESTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

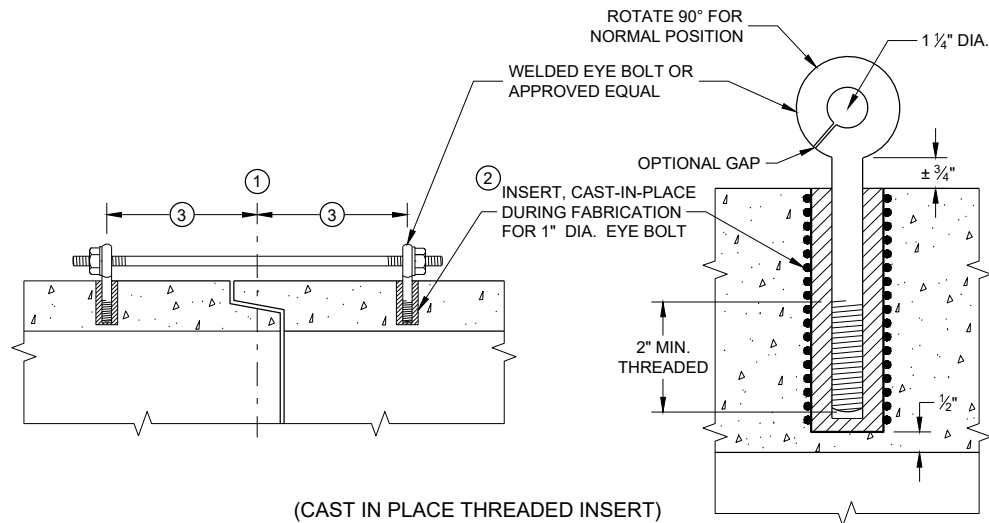
11/30/94
DATE/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER

FHWA



EYE BOLTS AND TIE ROD

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 1)



(CAST IN PLACE THREADED INSERT)
LONGITUDINAL SECTIONS

GENERAL NOTES

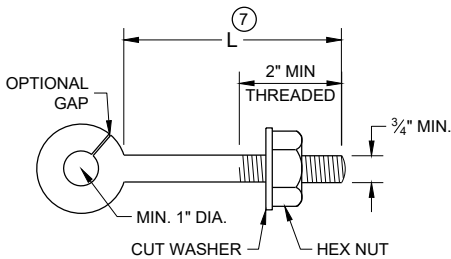
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

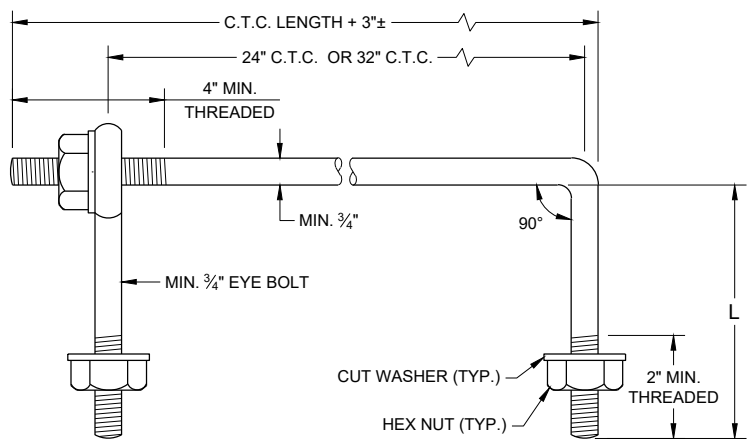
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 1 CENTER LINE OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.
- 2 THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.
- 3 HOLES SHALL BE CAST-IN-PLACE OR DRILLED PER THE APPLICABLE DETAIL, AND EQUAL DISTANCE FROM THE CENTERLINE OF THE JOINT.
- 4 BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.
- 5 OPENING TO BE ROD DIAMETER PLUS 1 INCH.
- 6 LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.
- 7 EYE BOLT LENGTH DETERMINED BY WALL THICKNESS, BELL THICKNESS AND BOLT PROJECTION INSIDE PIPE.

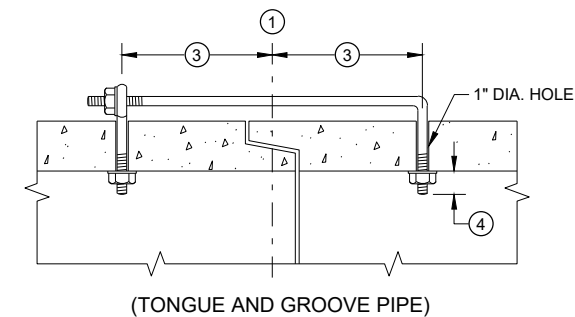


EYE BOLT 7

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



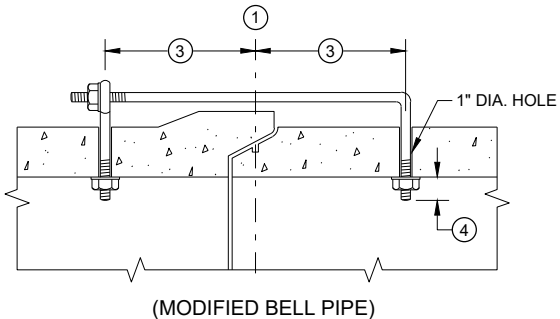
EYE BOLT AND TIE ROD



LONGITUDINAL SECTION

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

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

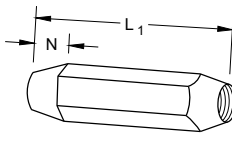


(MODIFIED BELL PIPE)

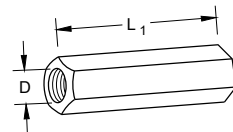
ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L ₁	N
12 - 60	5/8	5/8	5	1/2
66 - 84	3/4	3/4	5	1/2
90 - 144	1	1	7	1 1/16

DIMENSIONS SHOWN ARE IN INCHES

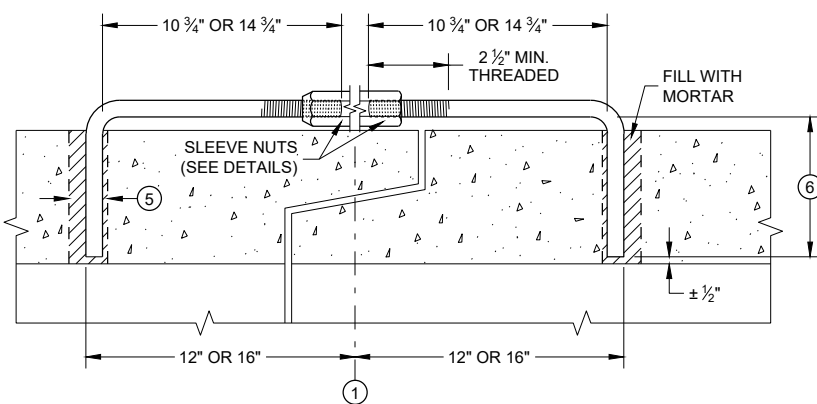


TAPERED



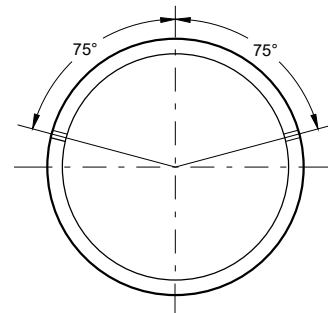
PLAIN

RIGHT AND LEFT THREADS
SLEEVE NUTS



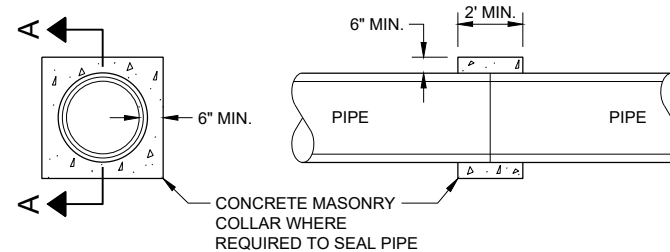
LONGITUDINAL SECTION

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



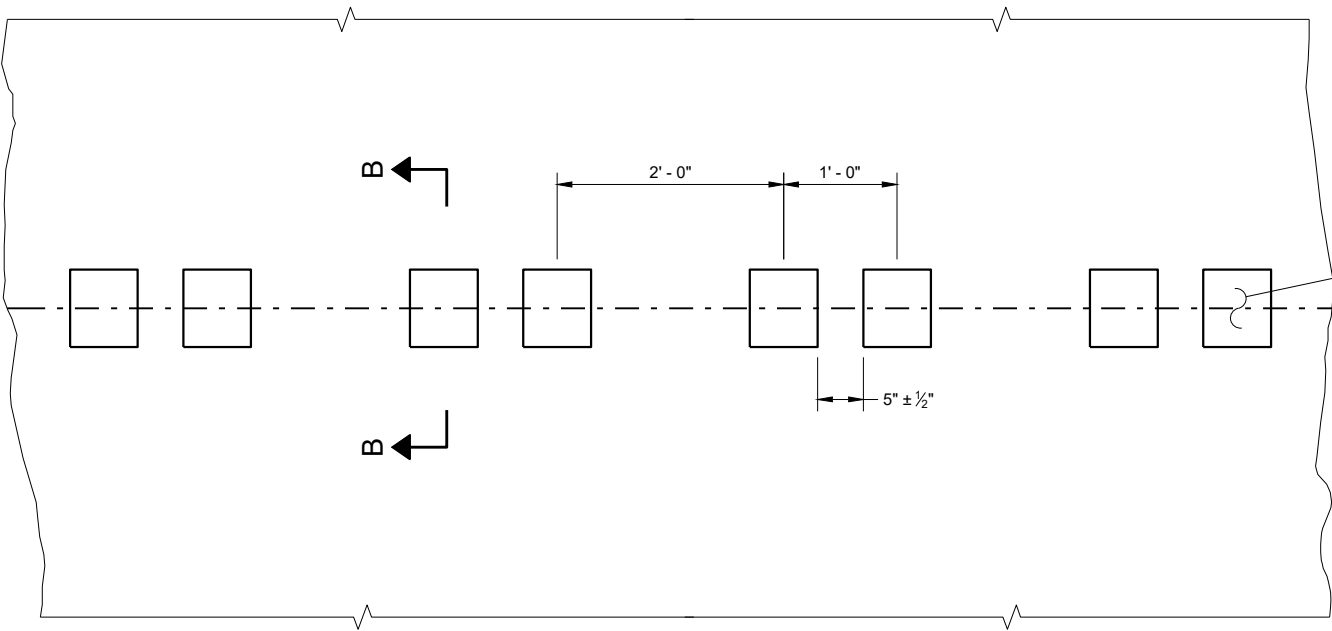
SECTION A - A

CONCRETE COLLAR DETAIL

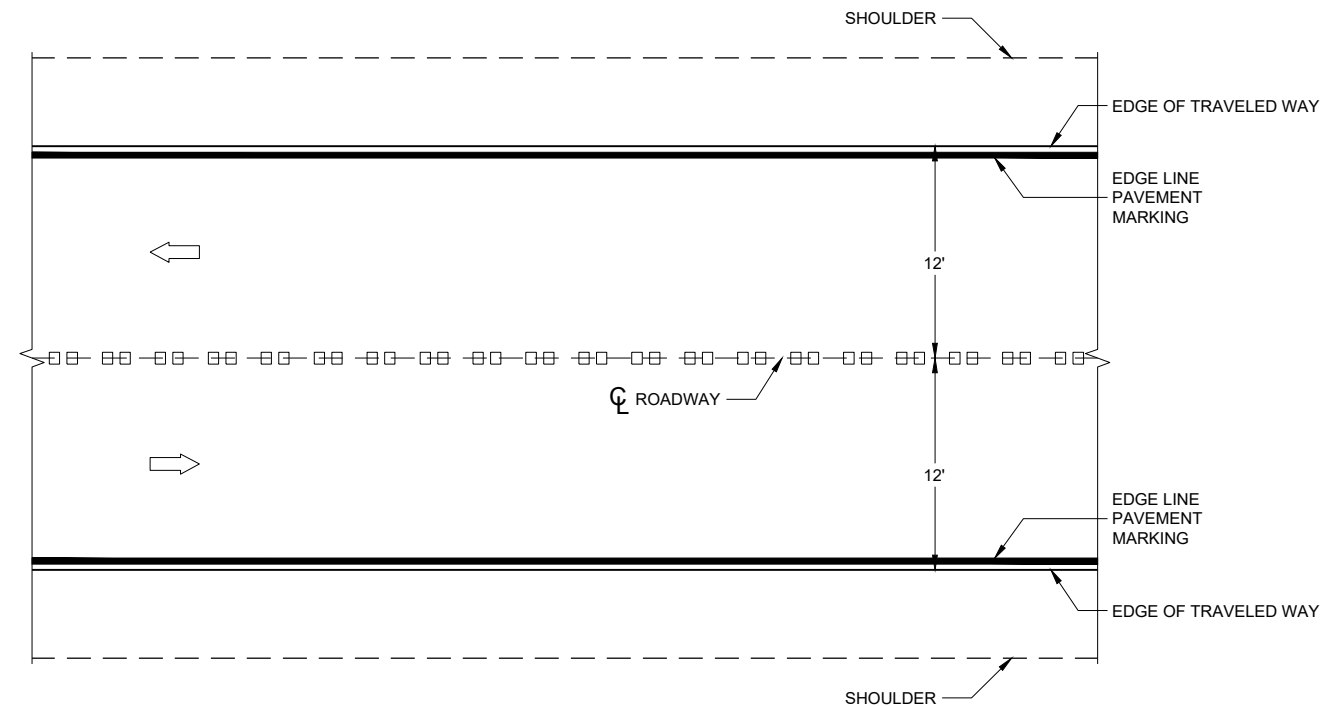
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

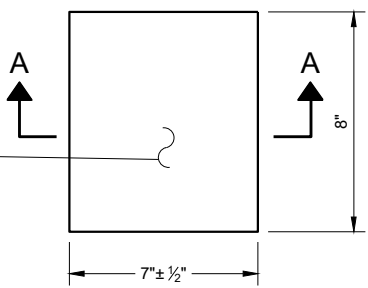


PLAN DETAIL VIEW

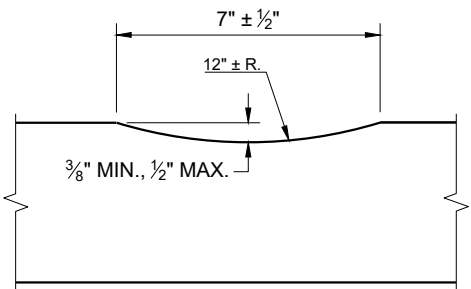


PLAN VIEW

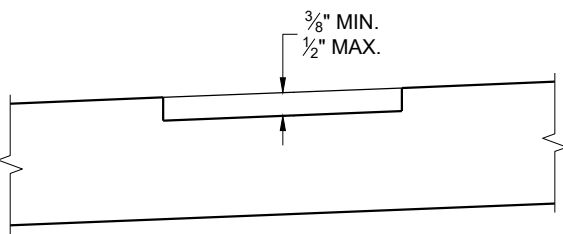
CENTERLINE RUMBLE STRIPS - ASPHALT



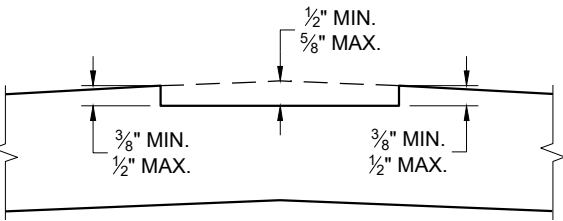
PLAN VIEW
(SINGLE GROOVE)



SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY

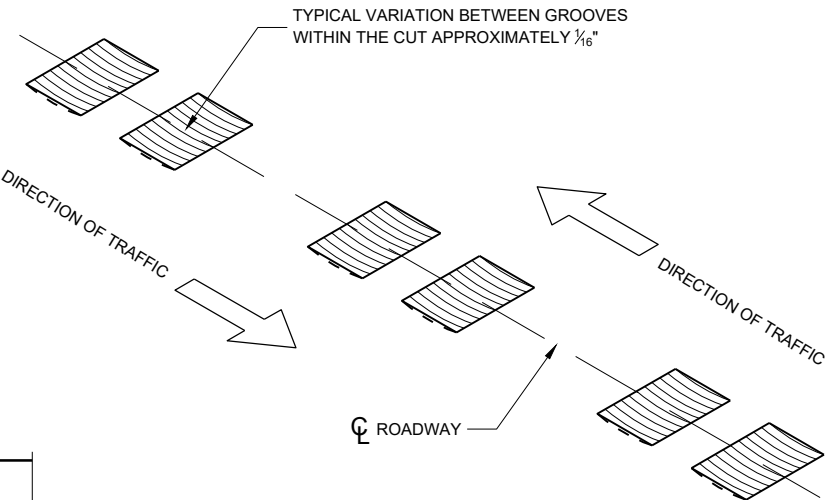


SECTION B - B
CROWNED ROADWAY

GENERAL NOTES

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

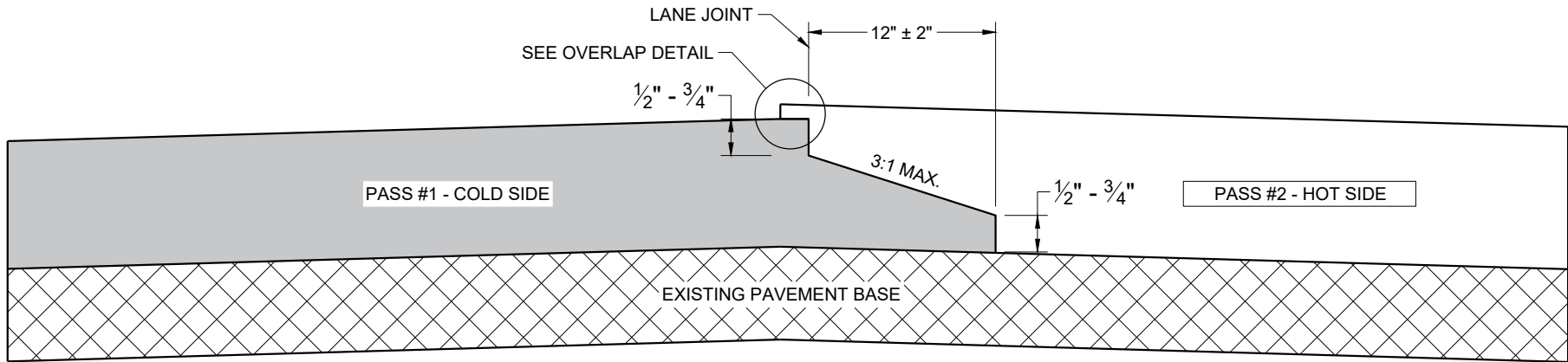
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



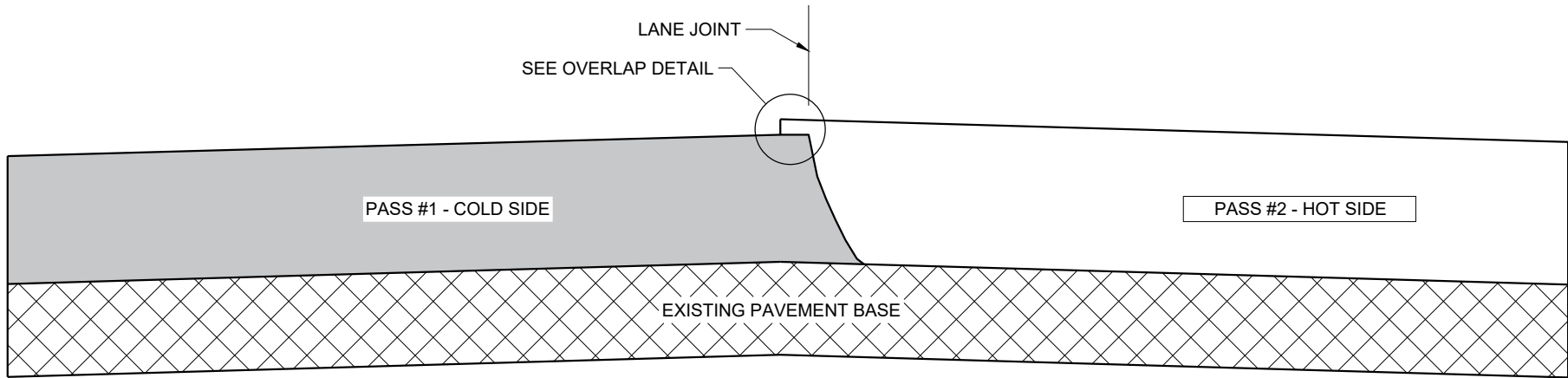
ISOMETRIC

CENTERLINE RUMBLE STRIPS - ASPHALT

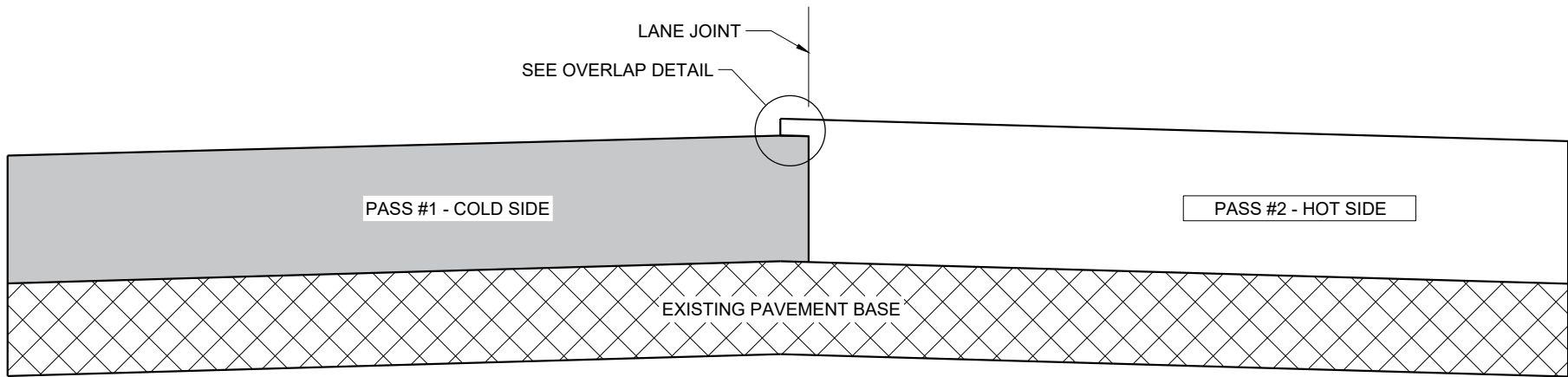
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT (MILLED)**

GENERAL NOTES

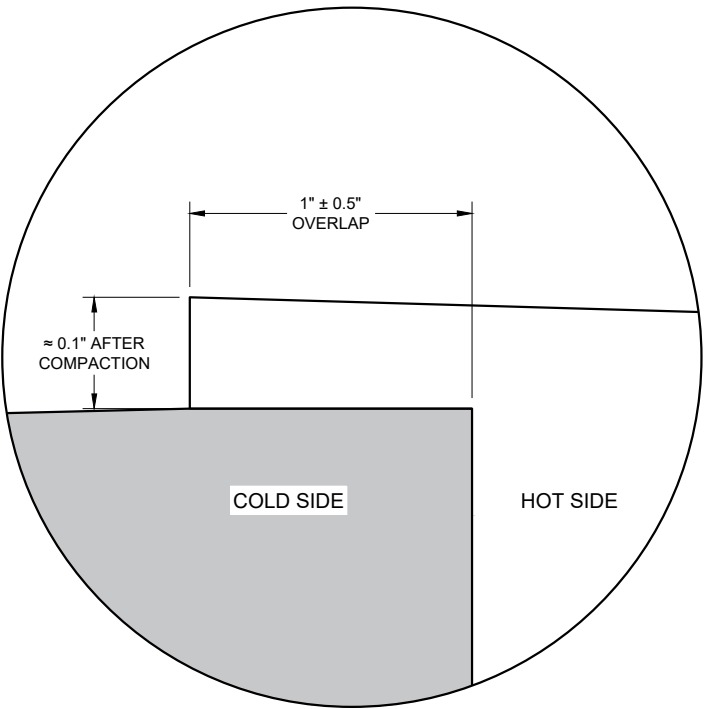
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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.

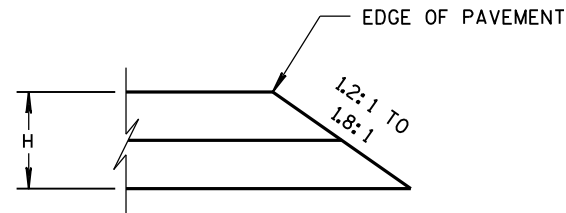


OVERLAP DETAIL (TYPICAL)

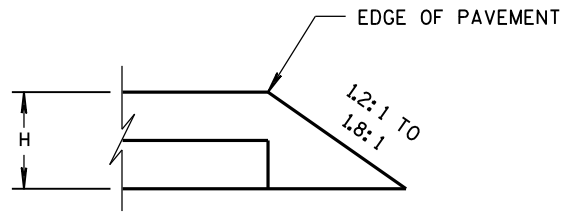
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

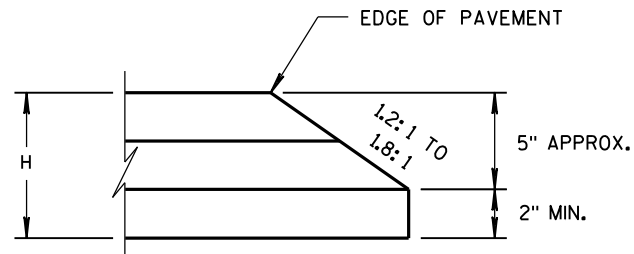
APPROVED
November 2020 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER
FHWA



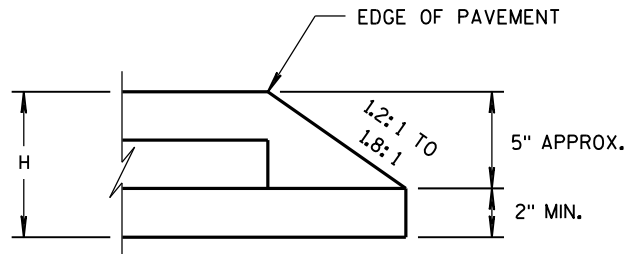
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

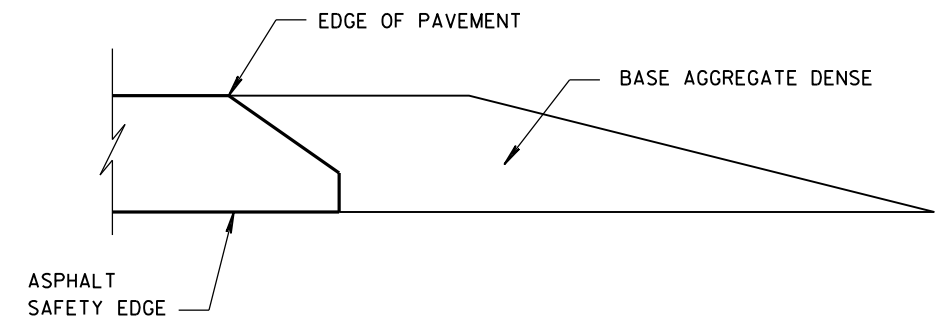


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

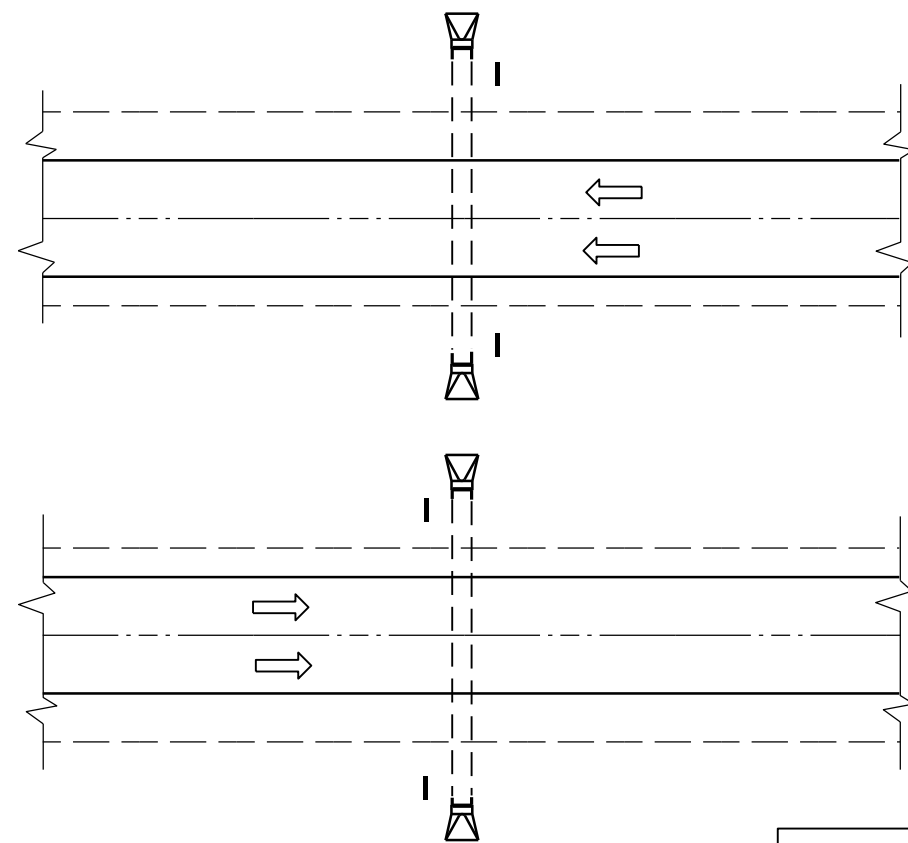
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

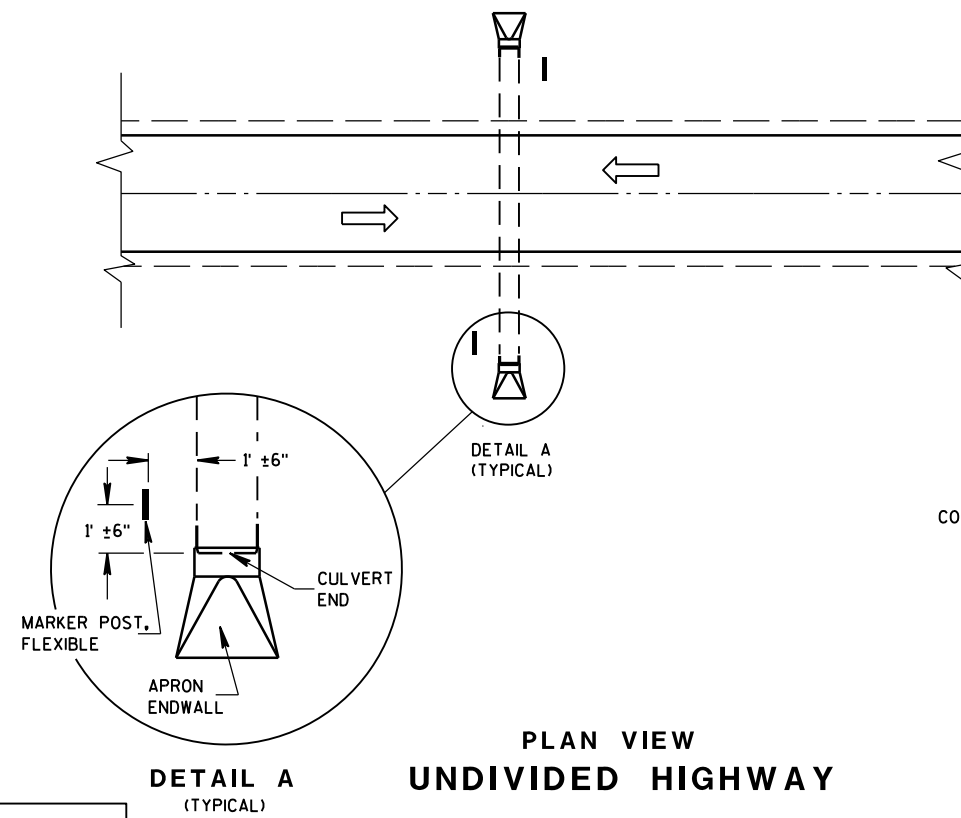
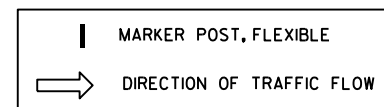
11/30/2012
DATE

FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER



PLAN VIEW
DIVIDED HIGHWAY

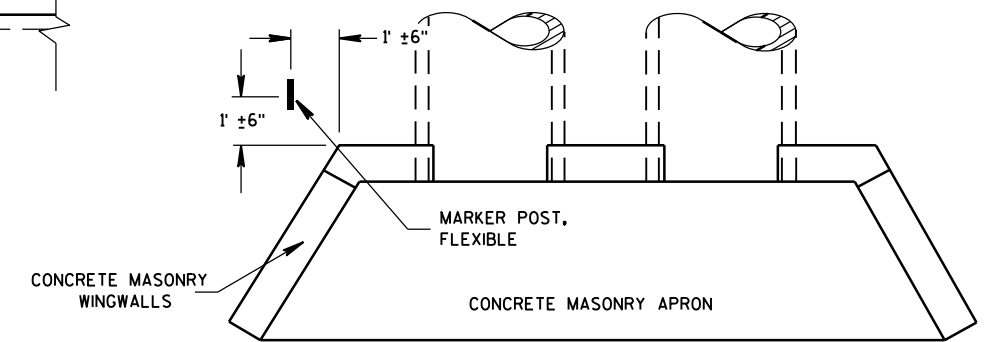


PLAN VIEW
UNDIVIDED HIGHWAY

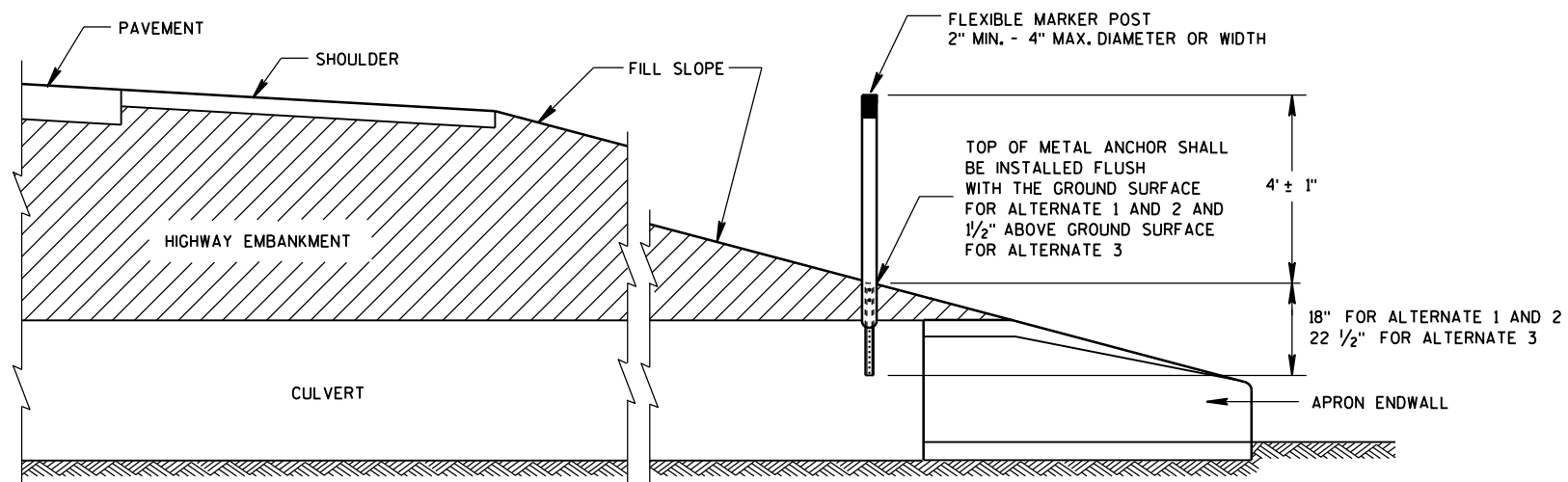
FLEXIBLE MARKER POST LOCATION

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.



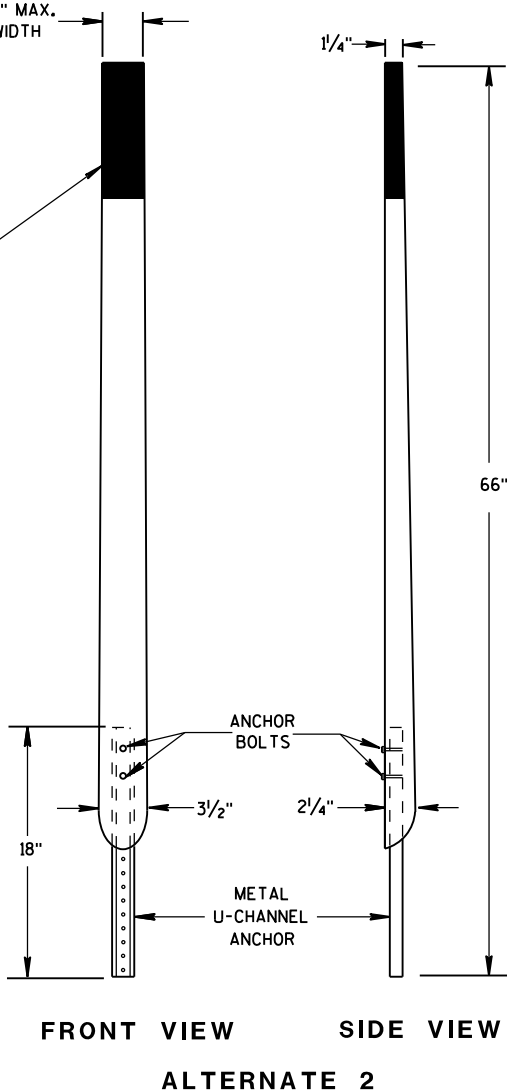
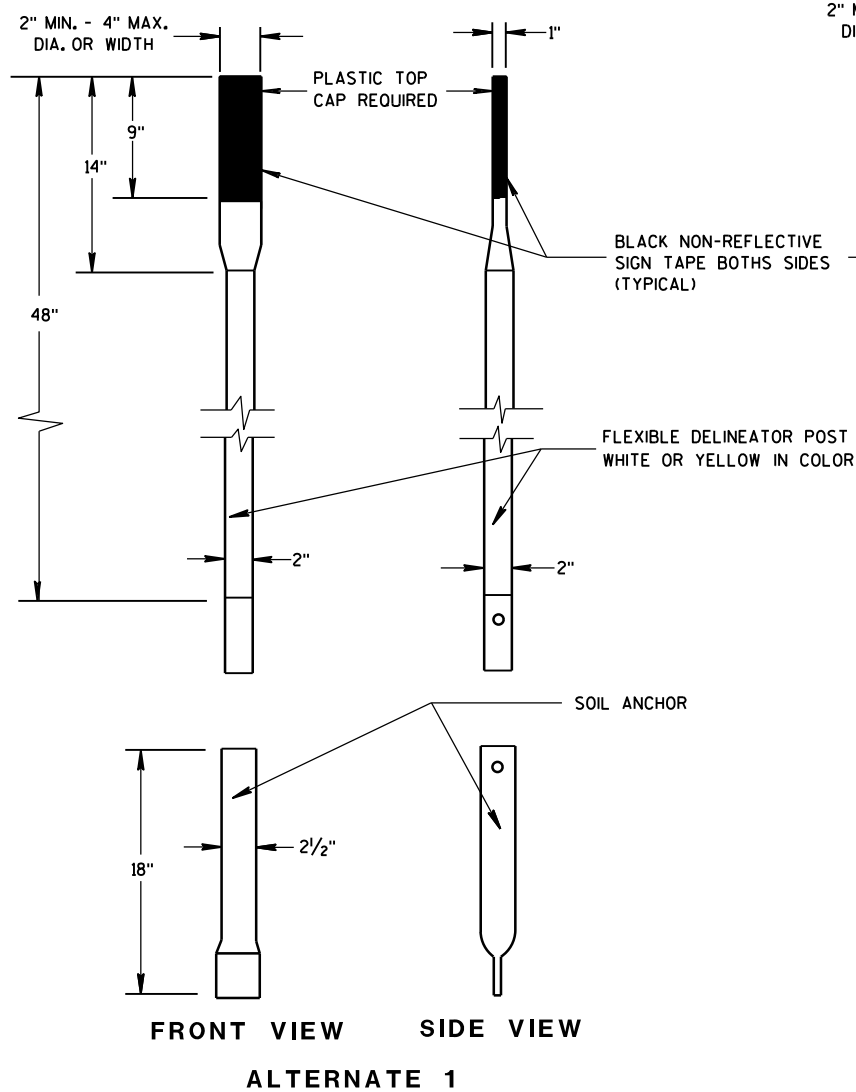
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



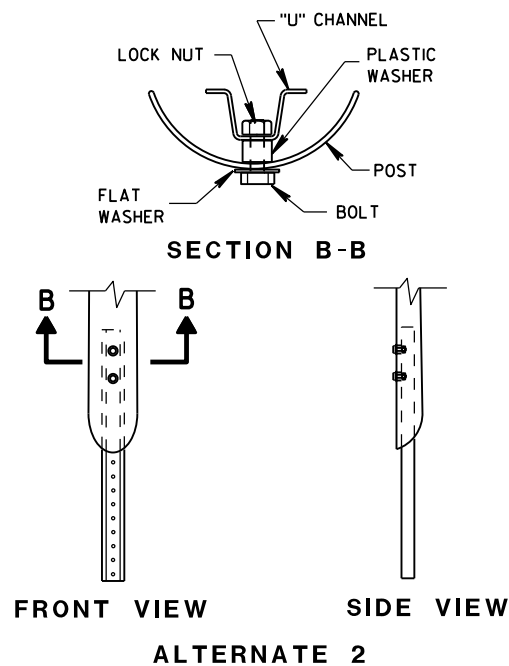
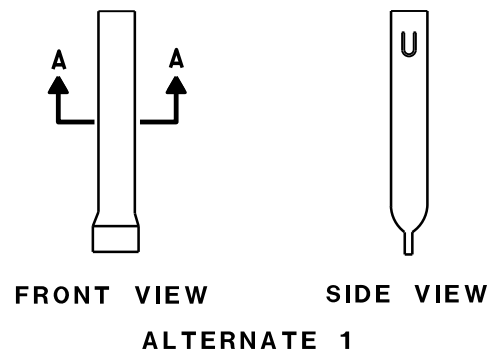
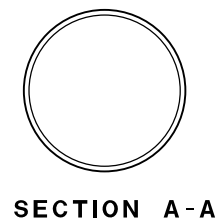
CROSS SECTION
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST
FOR CULVERT END

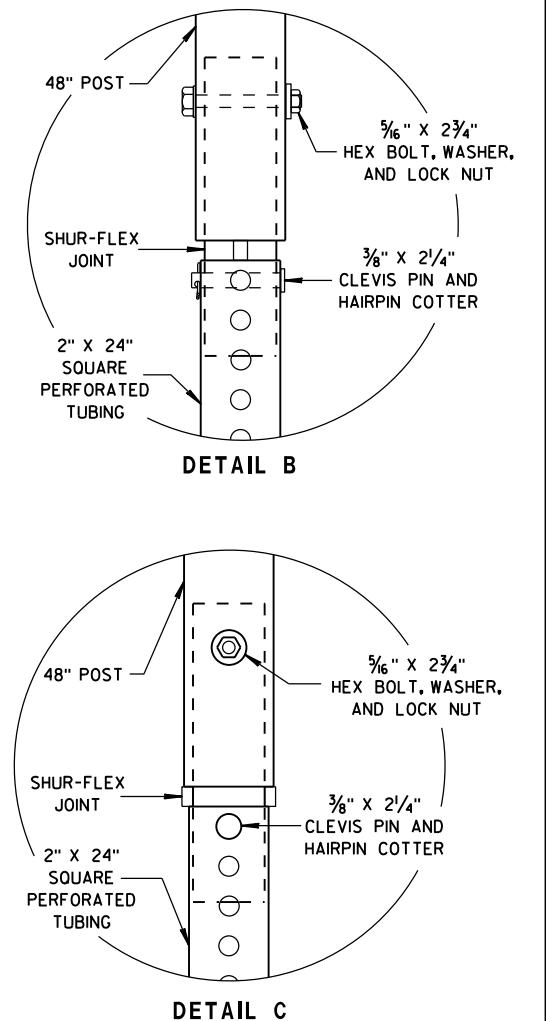
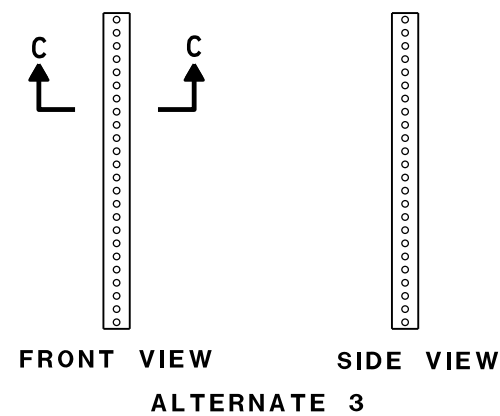
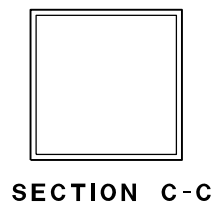
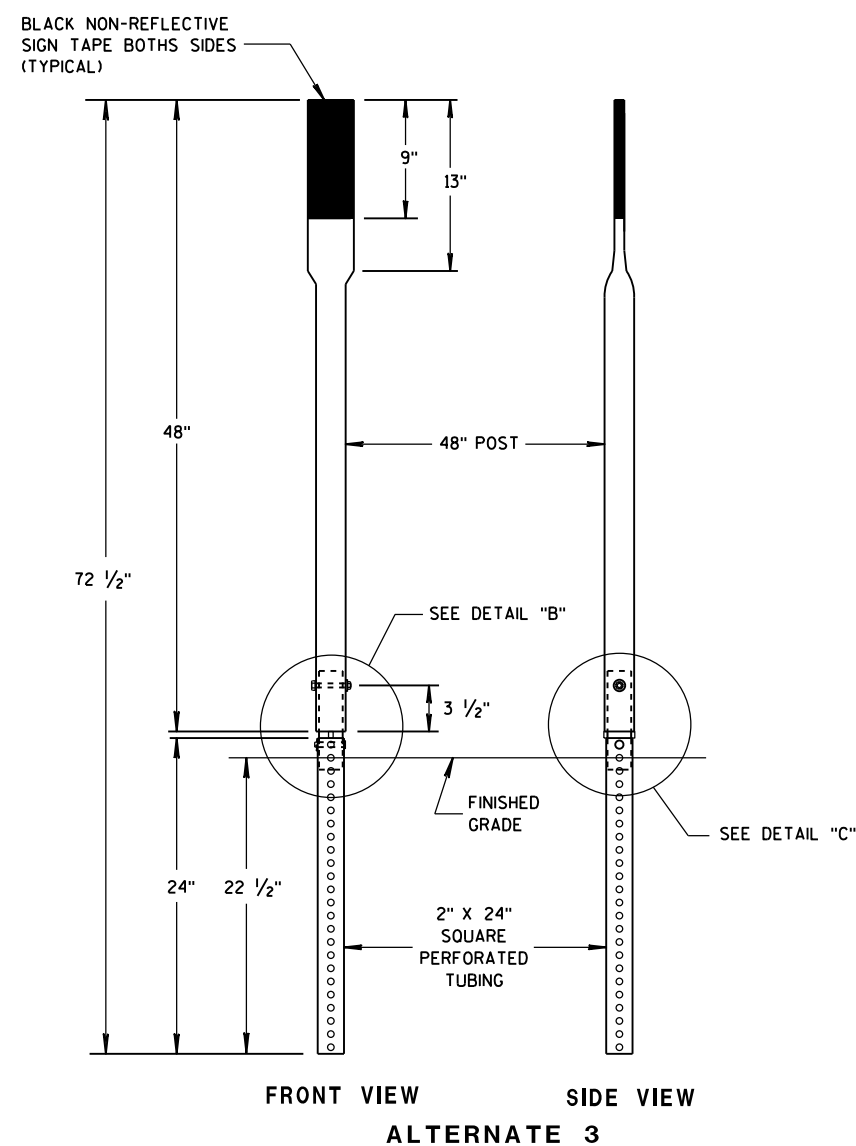
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



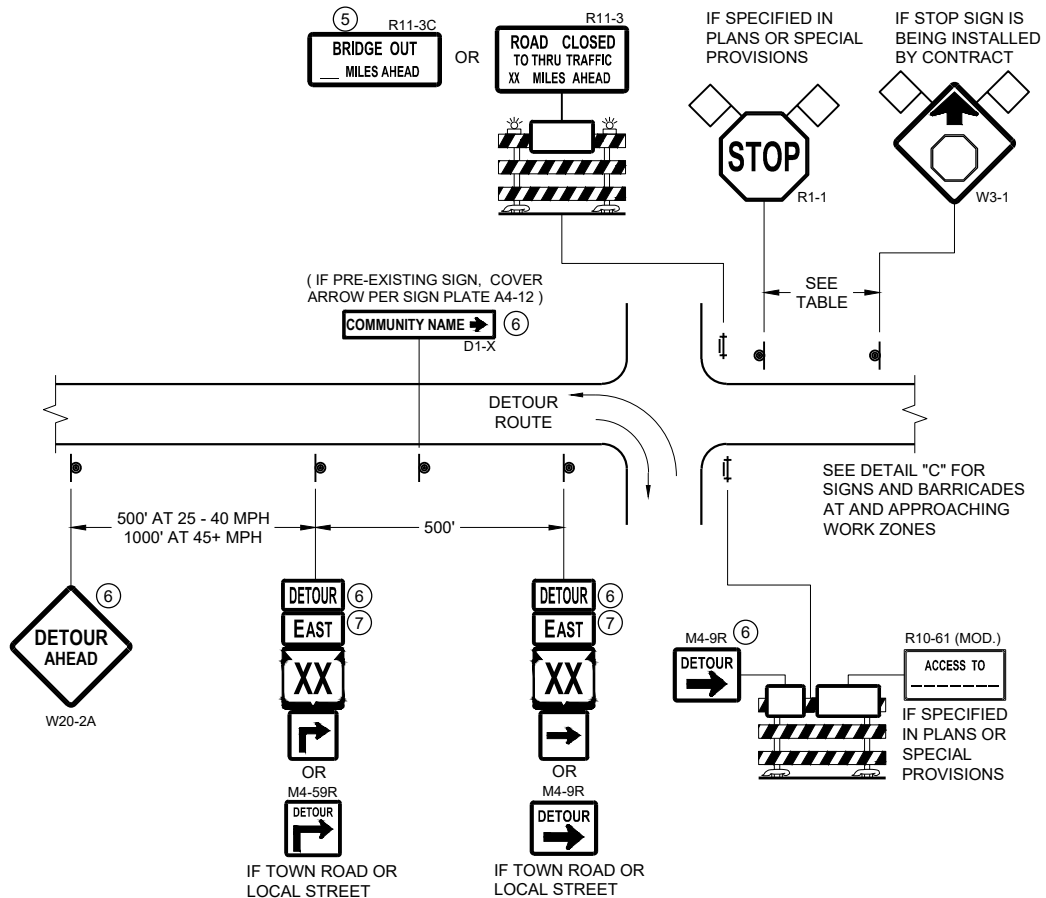
FLEXIBLE MARKER POSTS



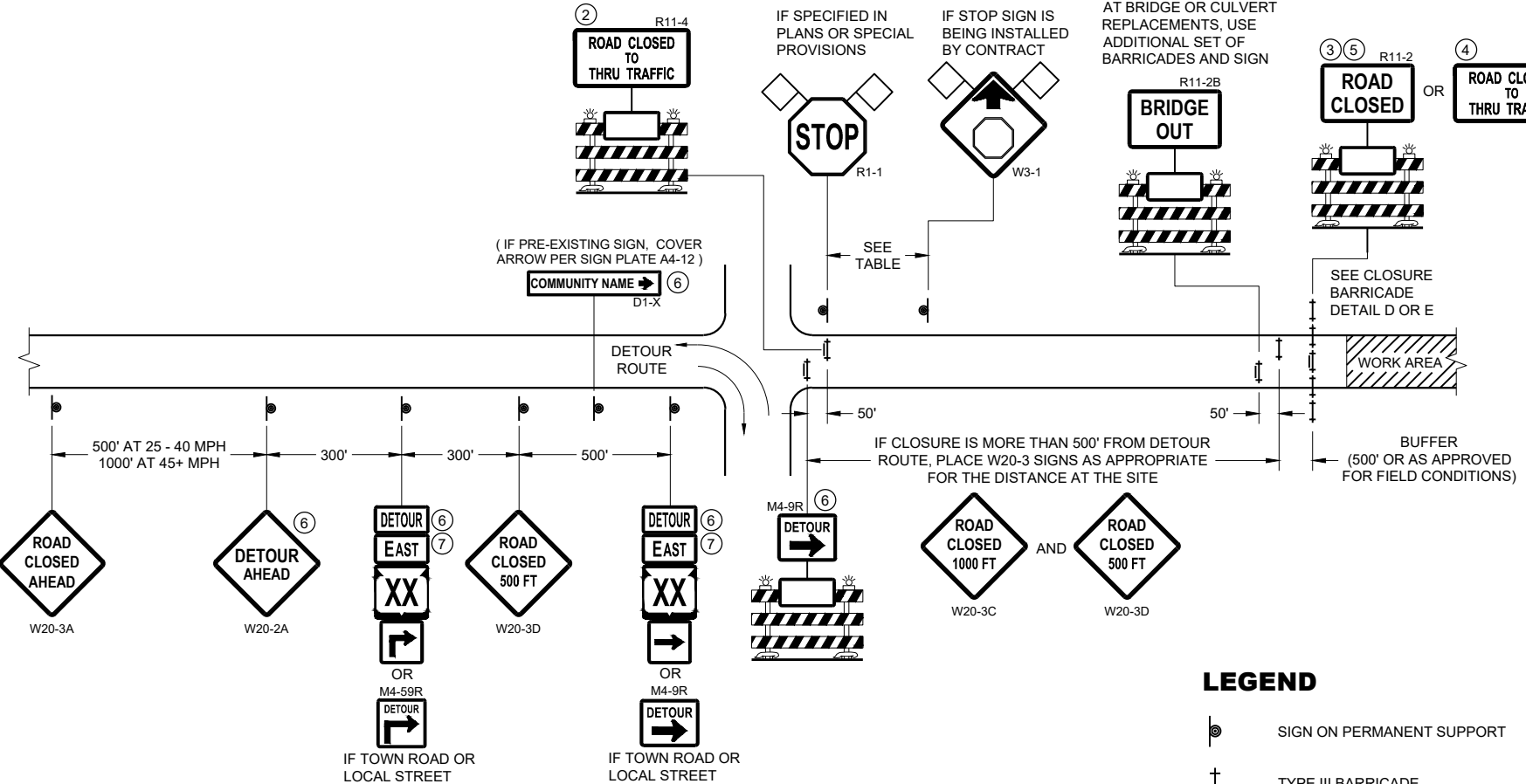
FLEXIBLE MARKER POST ANCHORS



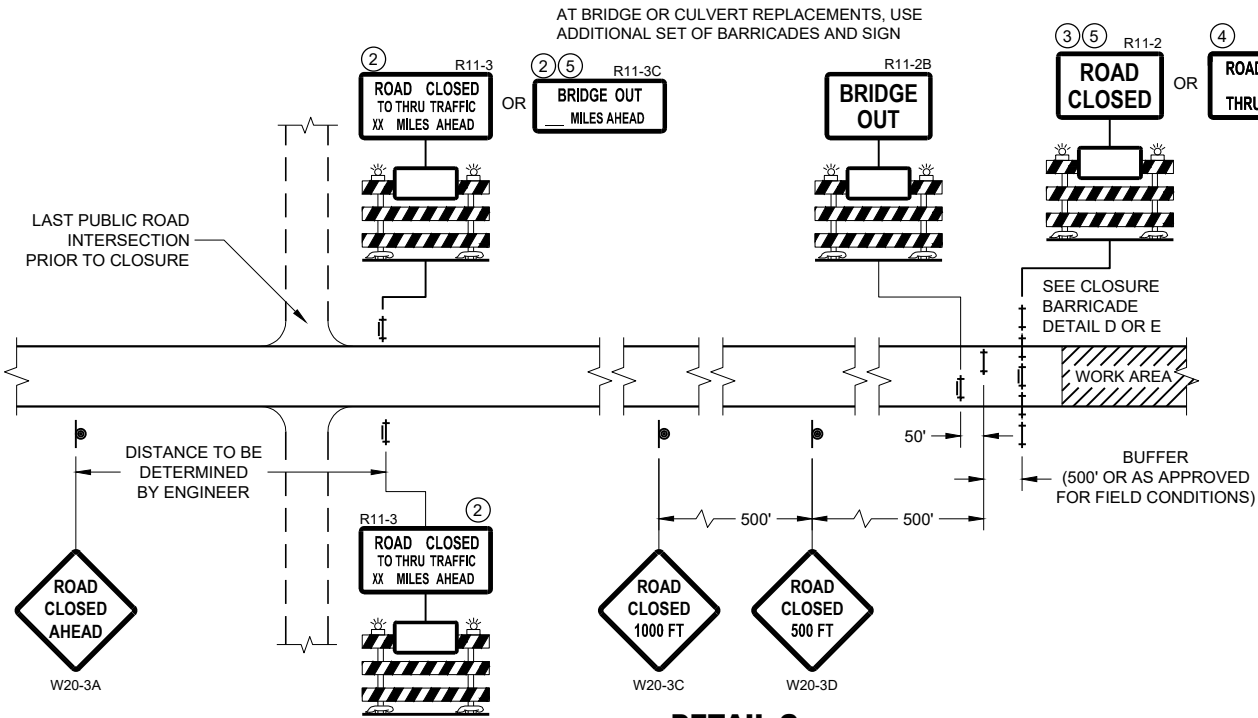
FLEXIBLE MARKER POST FOR CULVERT END	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 10/1/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR
WORK ZONE LESS THAN ½ MILE FROM
DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

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

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

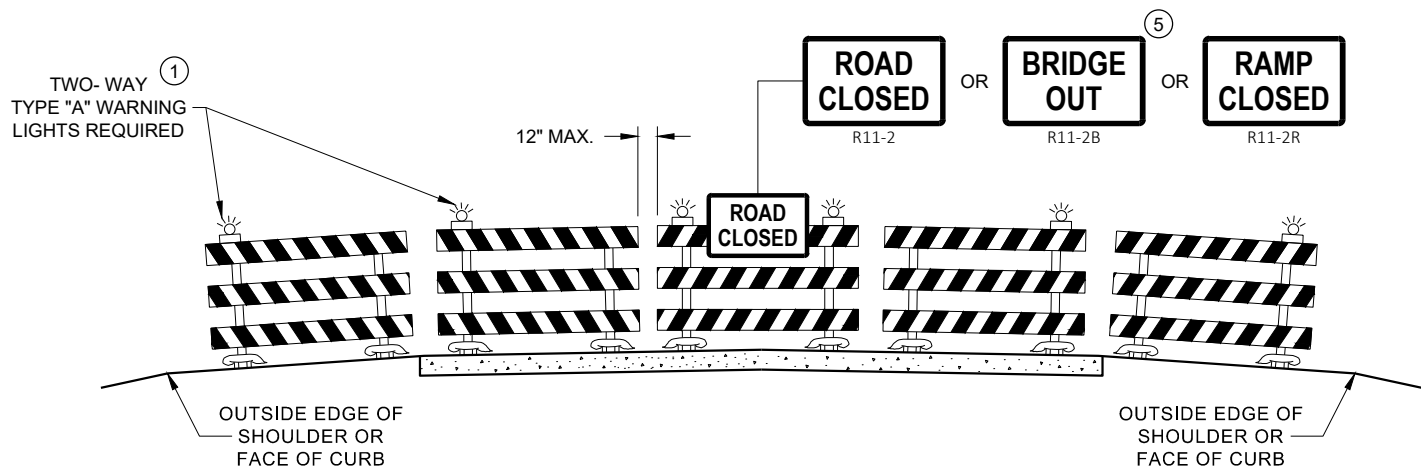
LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)
- DETOUR M4 - 8
- EAST M3 - X
- XX M1 - 4 OR XX M1 - 6 OR COUNTY M1 - 5A
- OR M05 - 1 OR M06 - 1

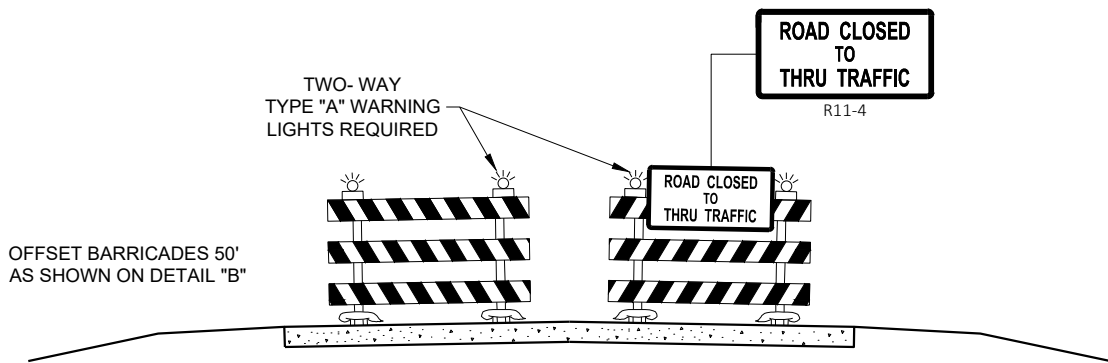
**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

SEE SDD 15C2 - SHEET "a" FOR LEGEND

GENERAL NOTES

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

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

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

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION, OR FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL "D" FOR FULL ROAD CLOSURES.

TYPE "A" LOW - INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11 - 2, R11 - 3, M4 - 9, R11 - 4, AND R10 - 61 SIGNS PLACED ON THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL OR BOTTOM RAILS.

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

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11 - 2 SHALL BE 48" X 30"
- R11 - 3 SHALL, R11 - 4 AND R10 - 61 SHALL BE 60 " X 30"
- M4 - 9 SHALL BE 30" X 24"
- M3 - X SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M4 - 8 SHALL BE 24" X 12" (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS)
- M1 - 4, M1 - 5A AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- MO5 - 1 AND MO6 - 1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- D1 - X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1 - 1 SHALL BE 36" X 36"

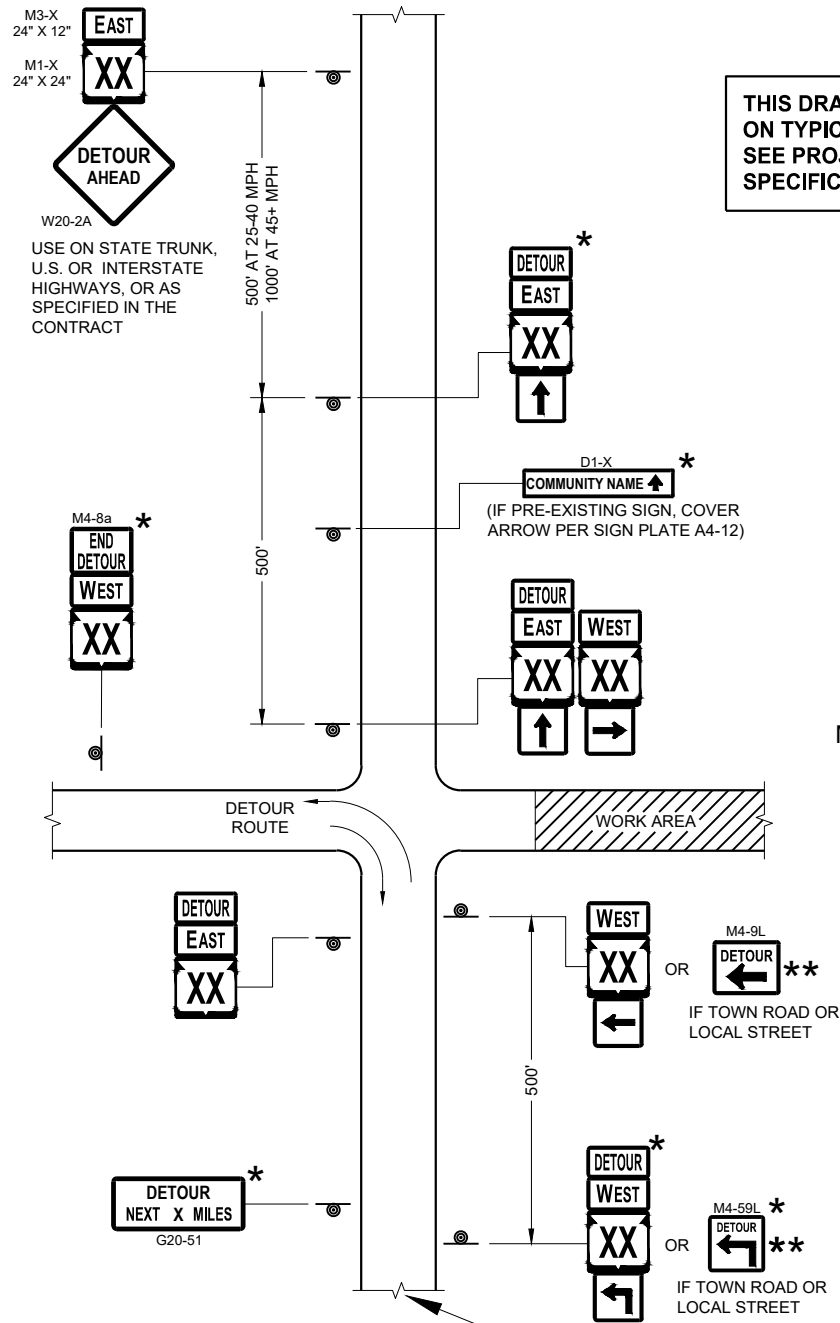
- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8 FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT AN INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "D".
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL "E".
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11 - 2 AND R11 - 3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS
FOR
VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

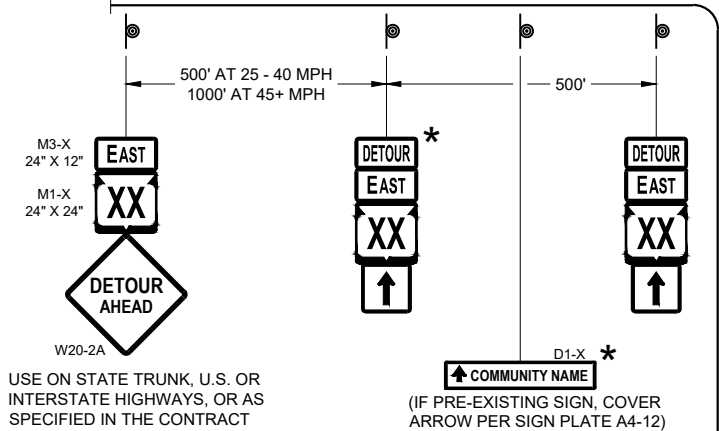
FHWA



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

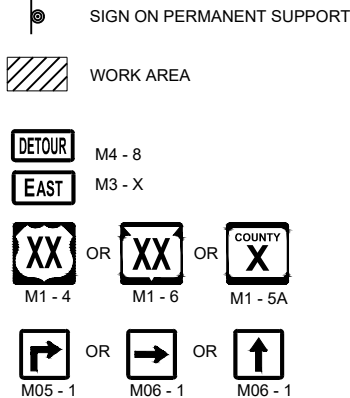
THIS DRAWING PROVIDES GENERAL GUIDANCE
ON TYPICAL DETOUR SIGN LAYOUT AND SPACING.
SEE PROJECT DETOUR SIGNING SHEETS FOR
SPECIFIC DETAILS FOR EACH PROJECT.

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.

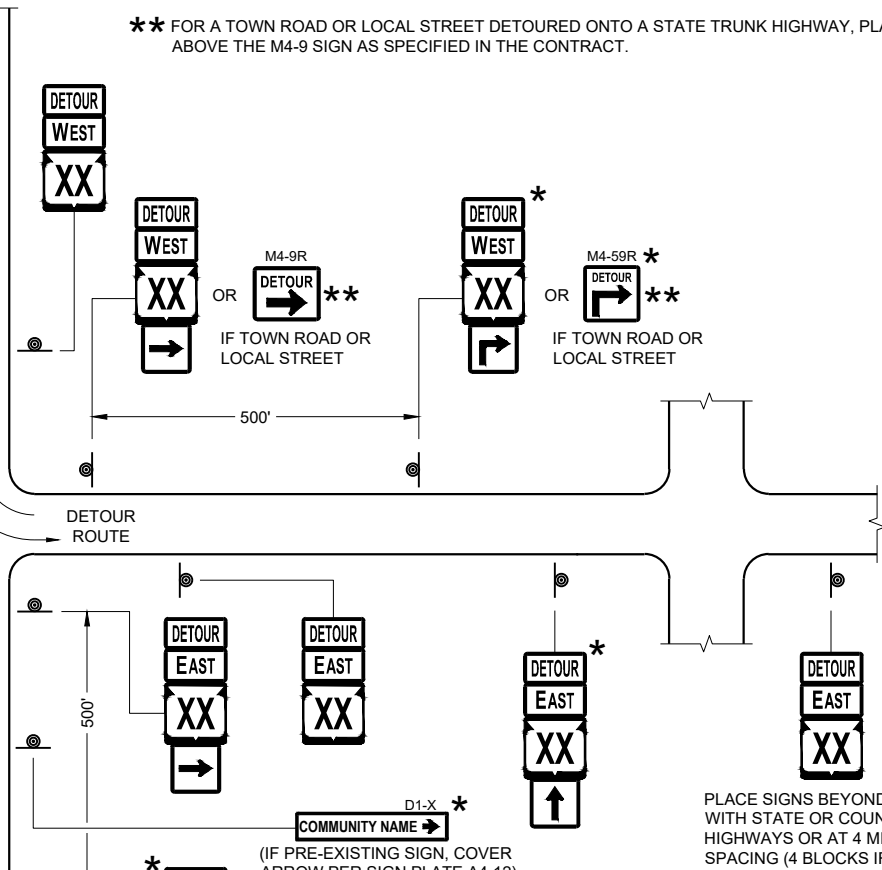
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

"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" (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS)
- M05-1 AND M06-1 SHALL BE 21" X 21" (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS)
- M4-9 AND M4-59 SHALL BE 30" X 24"
- M4-8a SHALL BE 24" X 18"
- G20-51 SHALL BE 60" X 24"
- W20-2A SHALL BE 48" X 48"
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



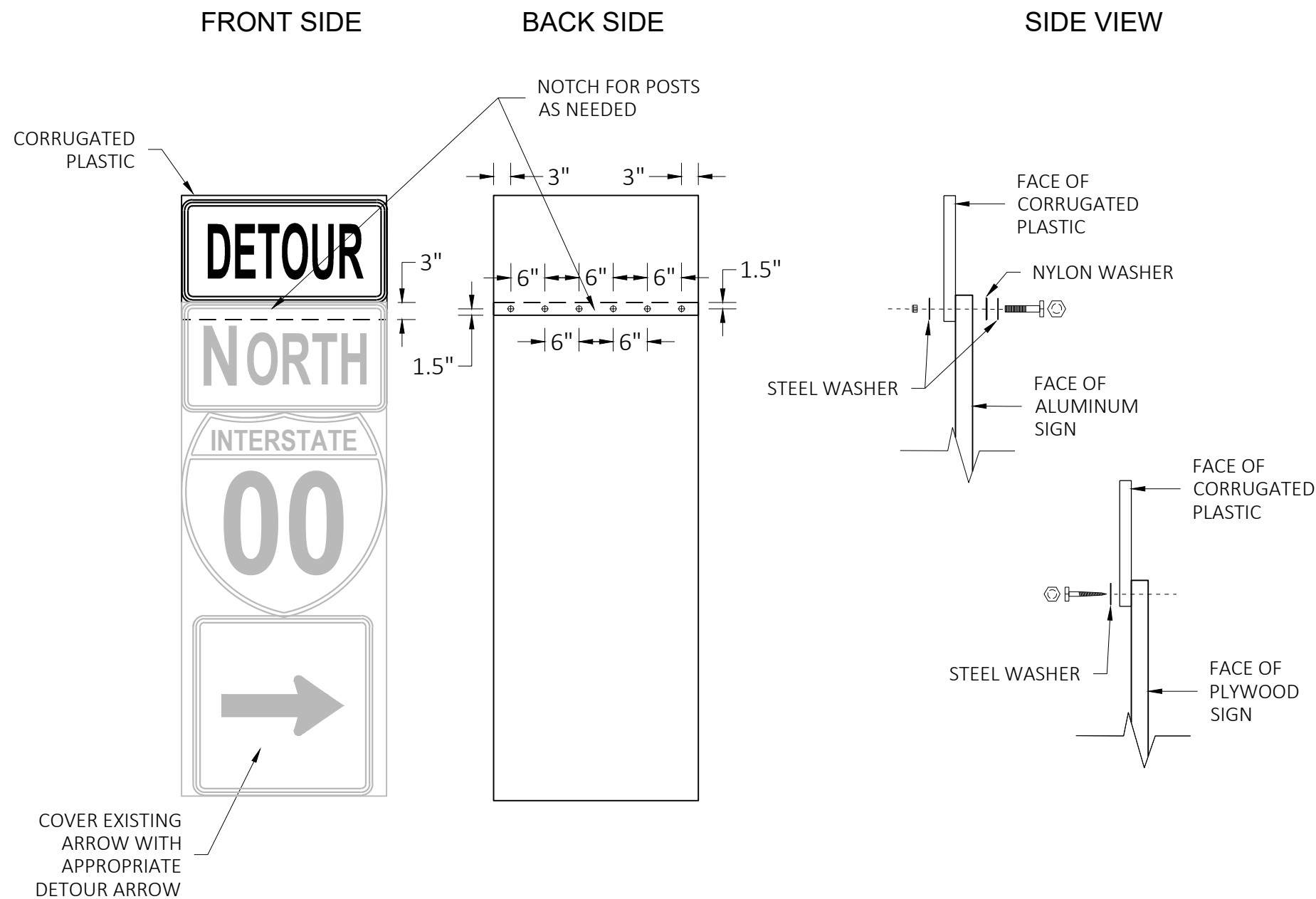
PLACE SIGNS BEYOND INTERSECTIONS
WITH STATE OR COUNTY TRUNK
HIGHWAYS OR AT 4 MILE MAXIMUM
SPACING (4 BLOCKS IF URBAN AREA)

DETOUR SIGNING
FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



GENERAL NOTES

CELLS OF CORRUGATED PLASTIC SHALL BE VERTICALLY ORIENTED.

PROVIDE A 0.4-INCH THICK BASE CORRUGATED PLASTIC WITH A 0.035-INCH WALL THICKNESS AND 0.4-INCH CELL SIZE.

FOR 36" WIDE SIGNS: USE 6 FASTENERS AS SHOWN.

FOR 24" WIDE SIGNS: USE 4 FASTENERS WITH EDGE SPACING AS SHOWN AND 6" SPACING BETWEEN FASTENERS.

METAL WASHERS, NUTS, BOLTS AND LAGS SHALL HAVE HEXAGONAL HEADS AND SHALL BE EITHER:

- HOT DIP GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: A 153, CLASS D, OR SC 3.
- ELECTRO-GALVANIZED IN ACCORDANCE WITH ASTM DESIGNATION: B 633, TYPE III, SC3

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

PLYWOOD SIGNS:

LAG SCREWS - 5/16" x 1"

ALUMINUM SIGNS:

MACHINE BOLTS - 5/16" x 1-1/4" LENGTH W/NUTS

WASHERS:

1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL

1-1/4" O.D. x 3/8" I.D. x .080 NYLON

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

MODIFIED ROUTE ASSEMBLY FOR DETOUR SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

May 2023

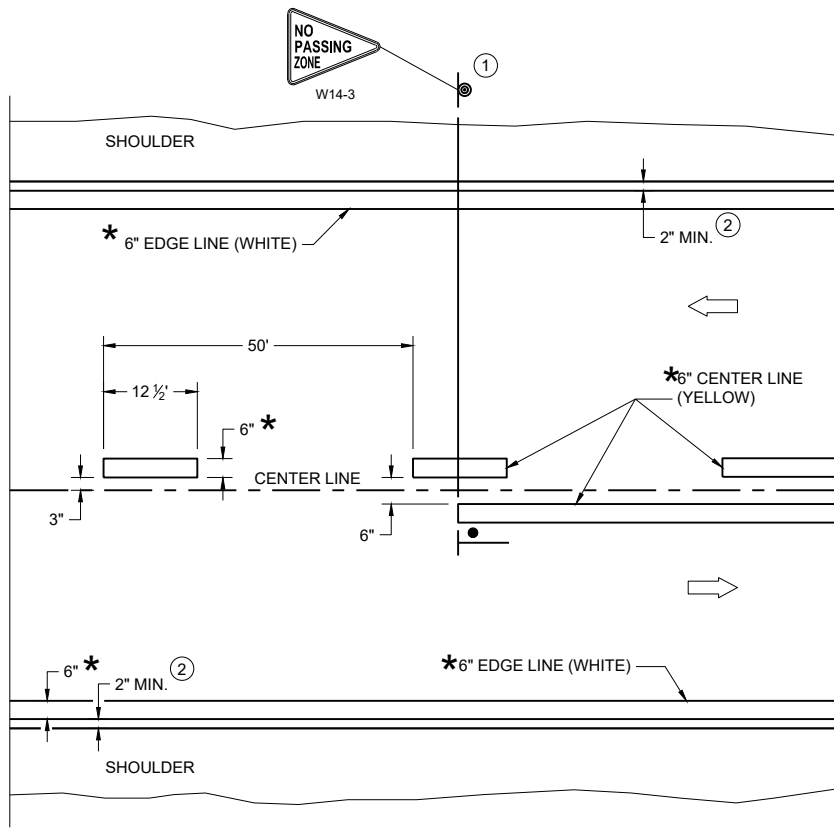
DATE

FHWA

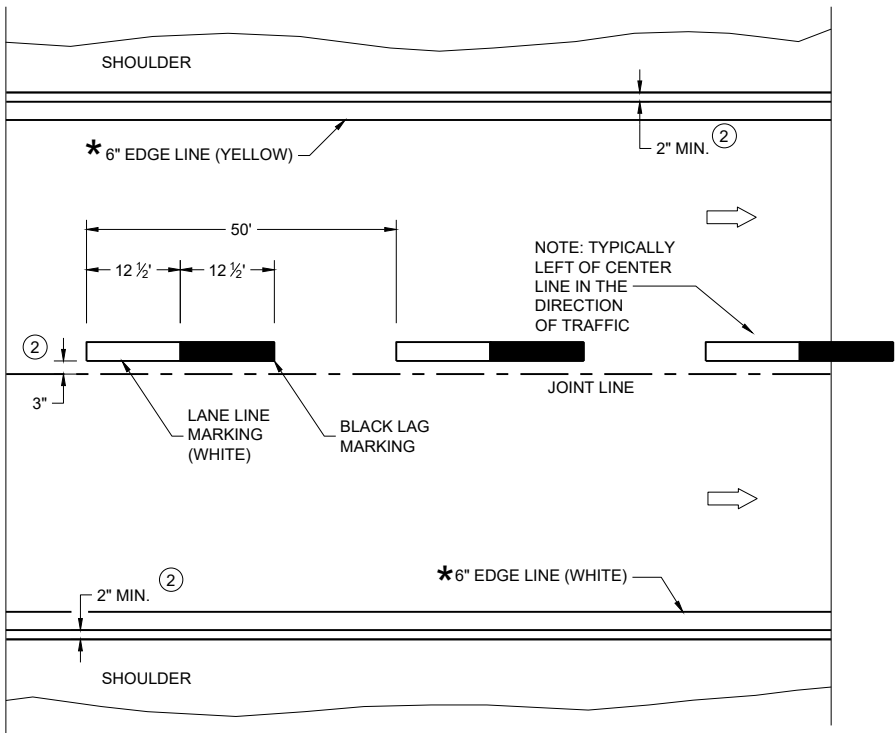
/S/ Andrew Heidtke

ROADWAY STANDARDS DEVELOPMENT

ENGINEER



TWO WAY TRAFFIC



ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

GENERAL NOTES

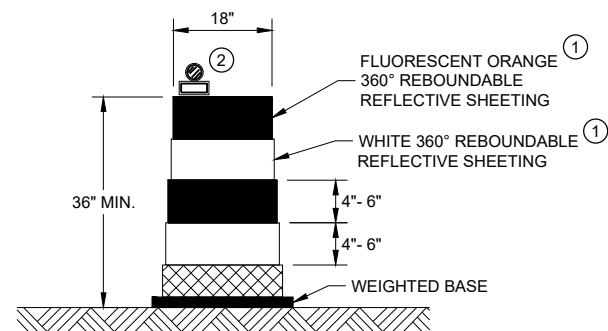
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING
- ② MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

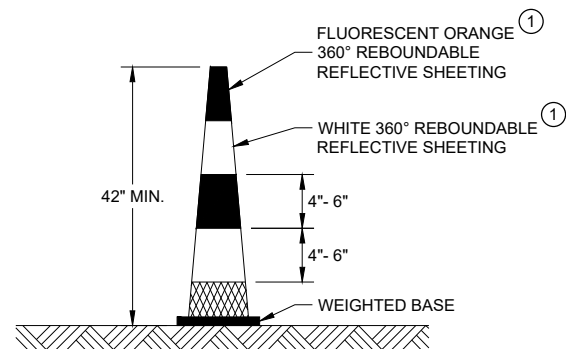
- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC

PERMANENT LONGITUDINAL PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver Statewide Pavement Marking Engineer
FHWA	



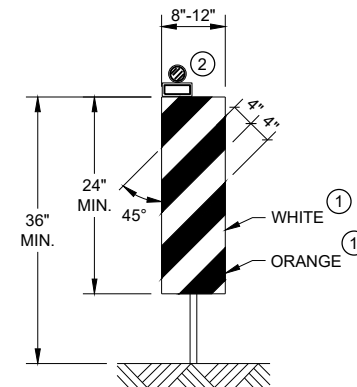
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



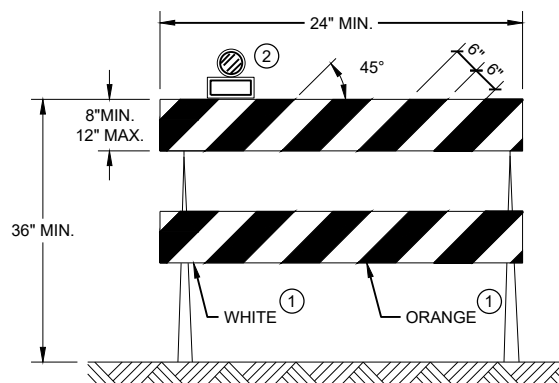
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS
BALLAST WIDTHS
RANGE FROM 14"-20"



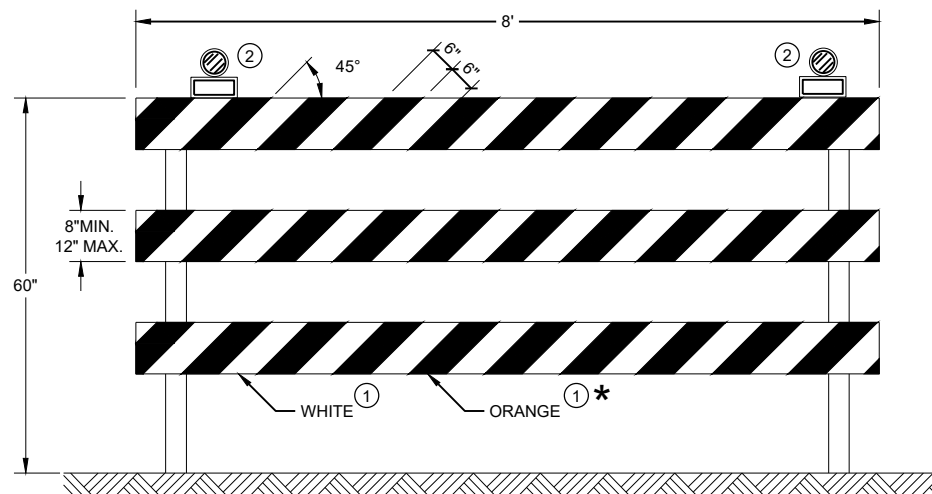
VERTICAL PANEL

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



TYPE II BARRICADE

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



TYPE III BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

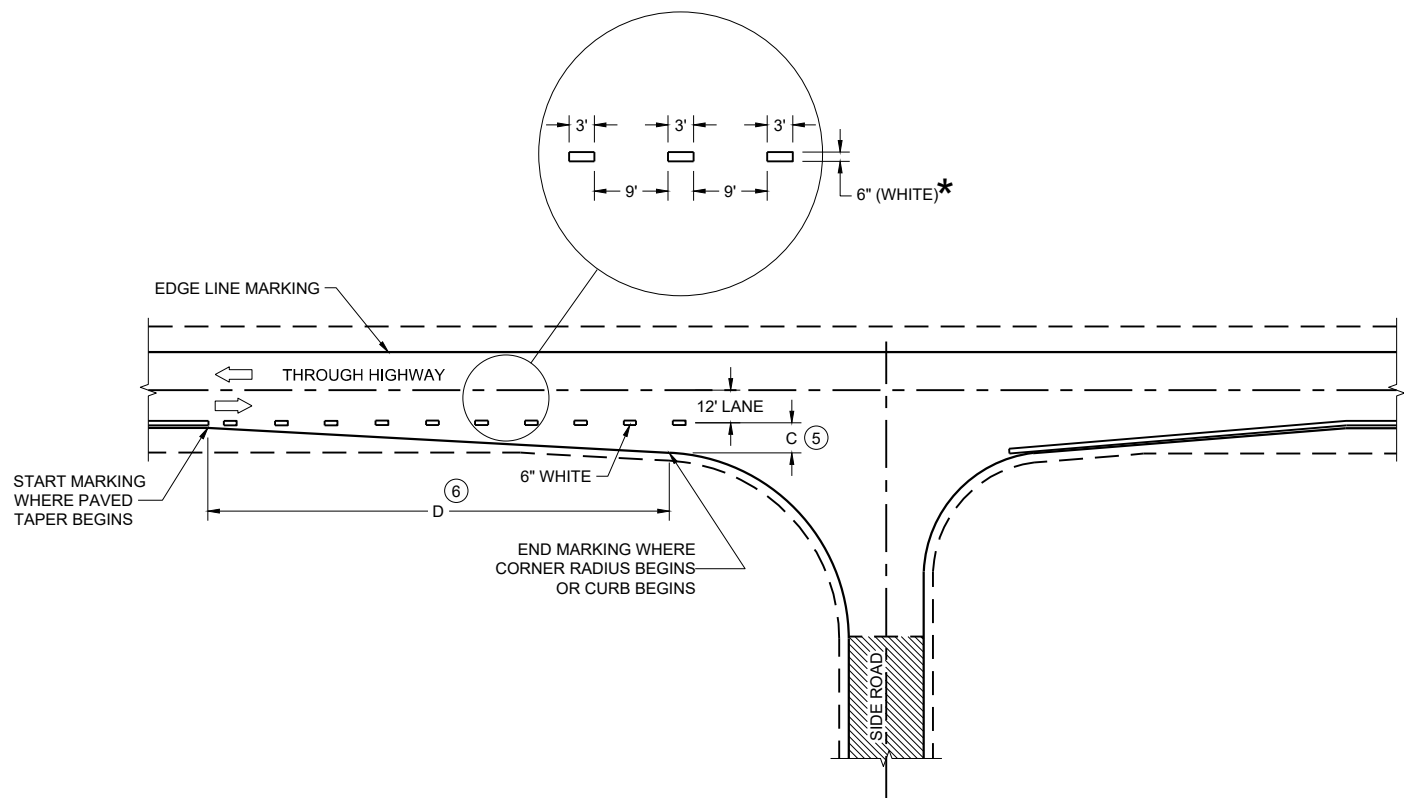
GENERAL NOTES

- 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.

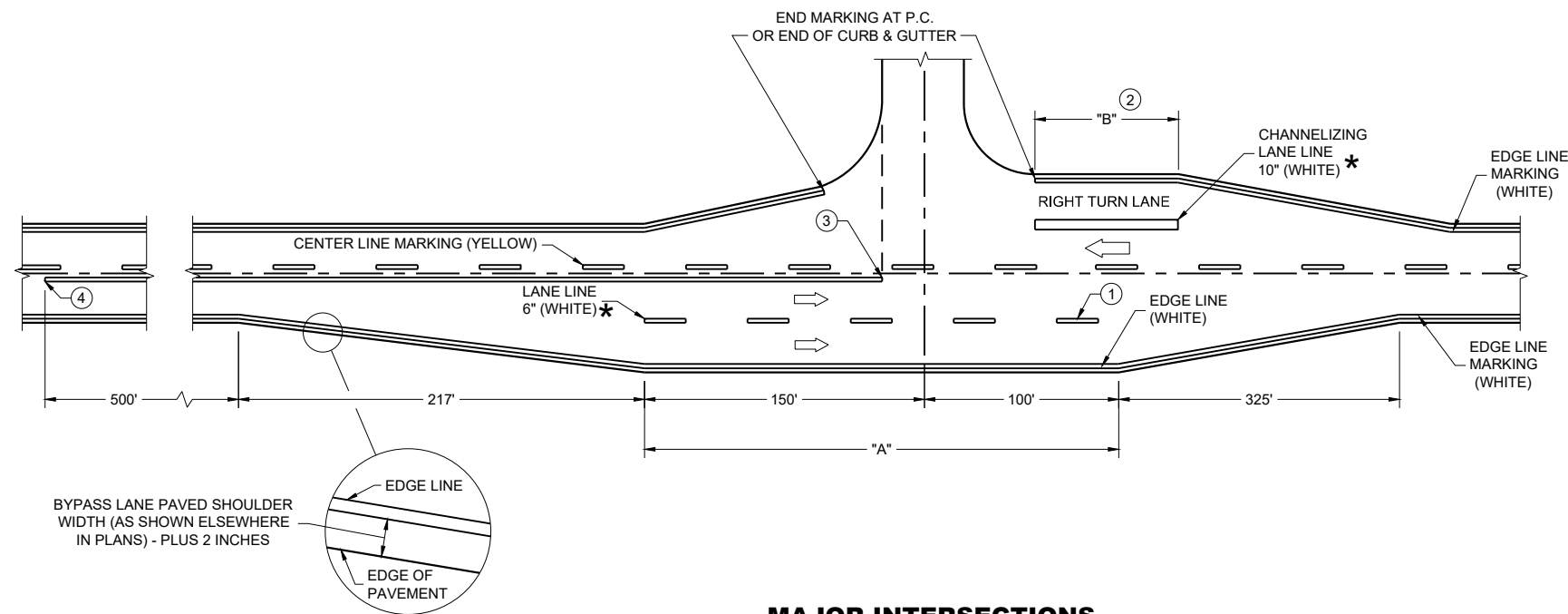
**CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2022 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



MINOR INTERSECTION



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

*CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

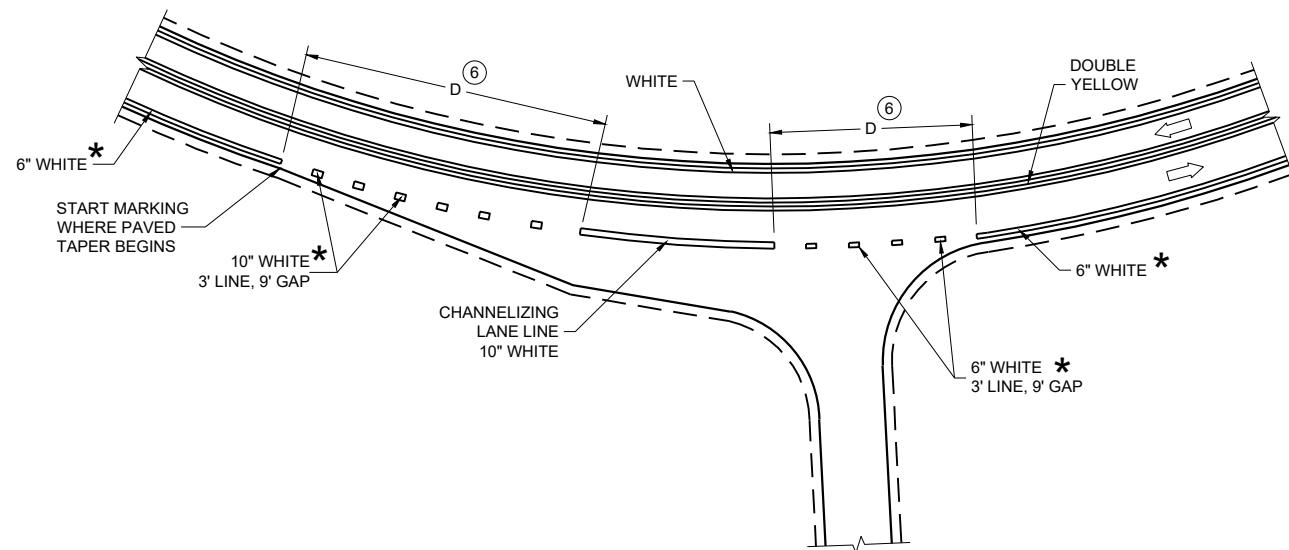
GENERAL NOTES

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

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

LEGEND

➡ DIRECTION OF TRAVEL

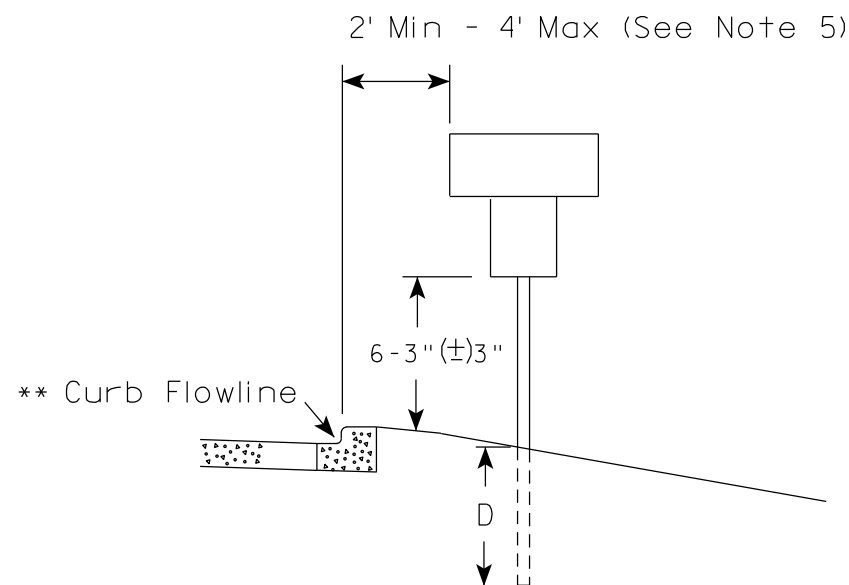
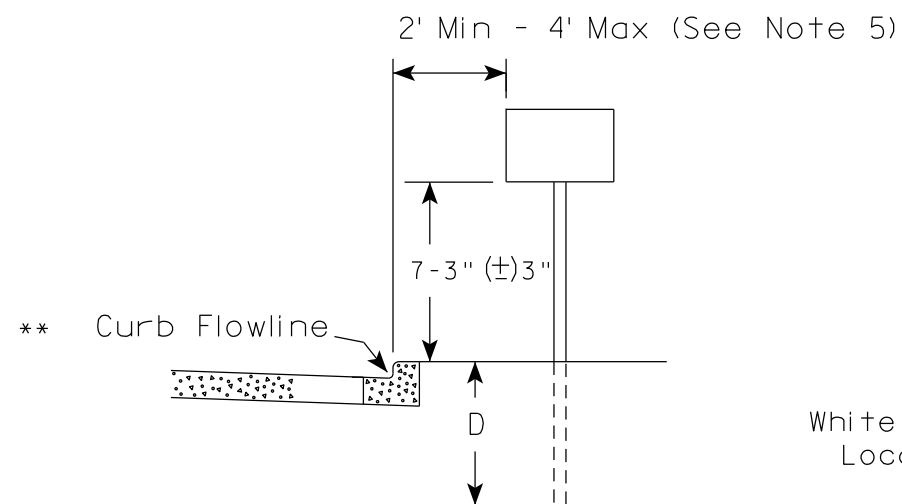


INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

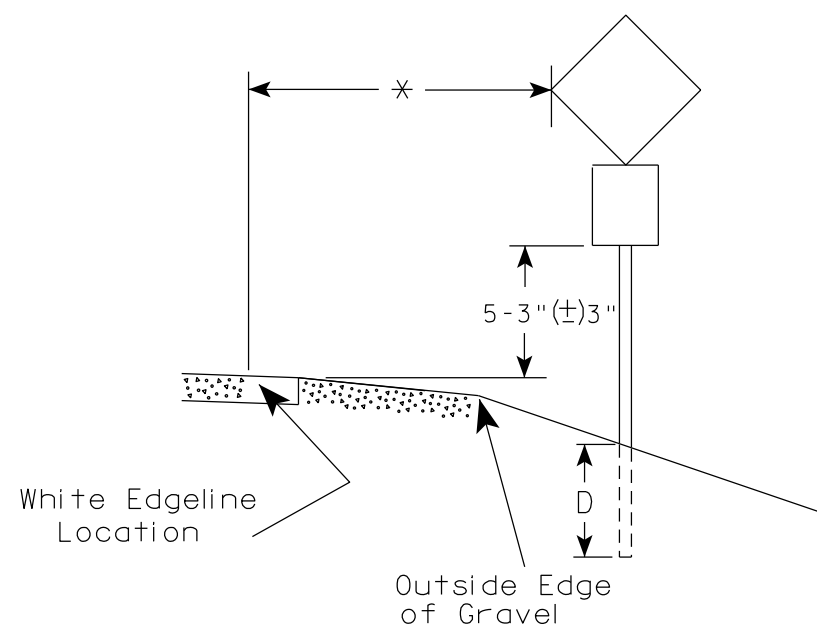
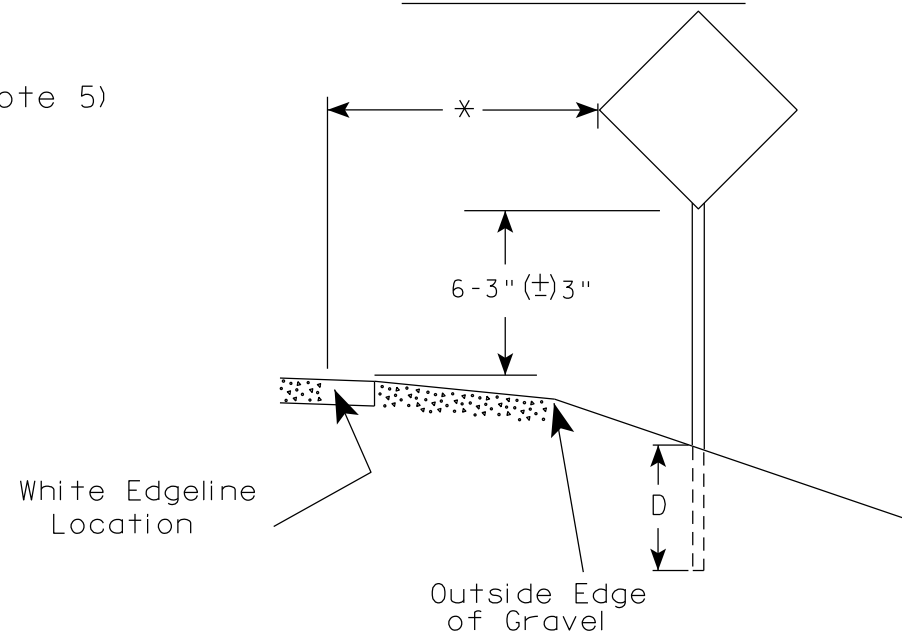
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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.

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" (±) 3". The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±) 3".
- For expressways and freeways, mounting height is 7'-3" (±) 3" or 6'-3" (±) 3" depending upon existence of a sub-sign.
- Minimum mounting height for signs mounted on traffic signal poles is 5'-3" (±) 3".
- Offset distance shall be consistent with existing signs or consistent throughout length of project.
- Folding signs shall be mounted at a height of 5'-3" (±) 3" or as directed by the Engineer.

POST EMBEDMENT DEPTH

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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 12/6/23

PLATE NO. A4-3.23

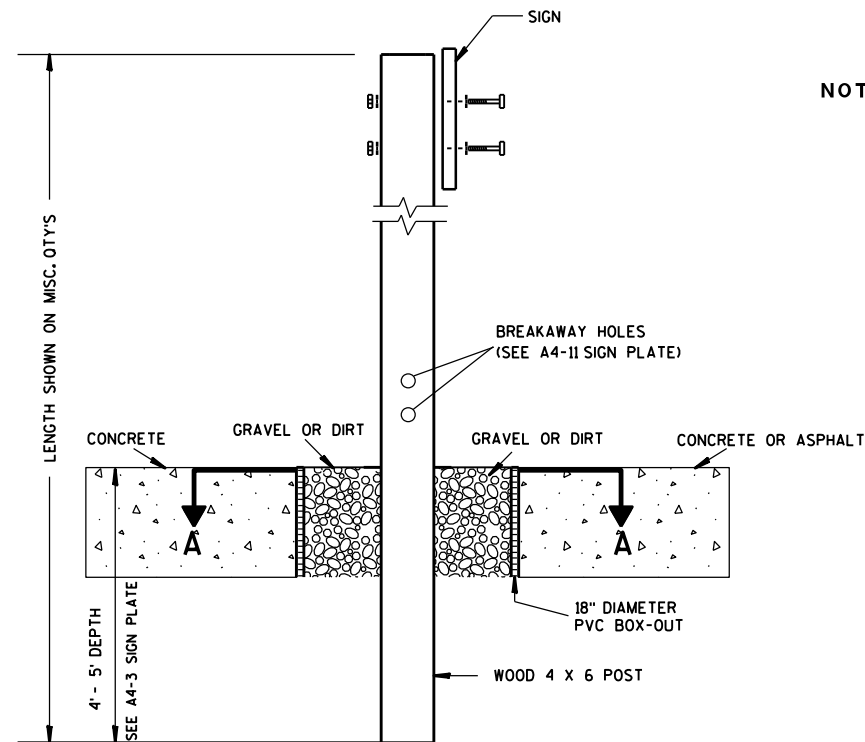
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

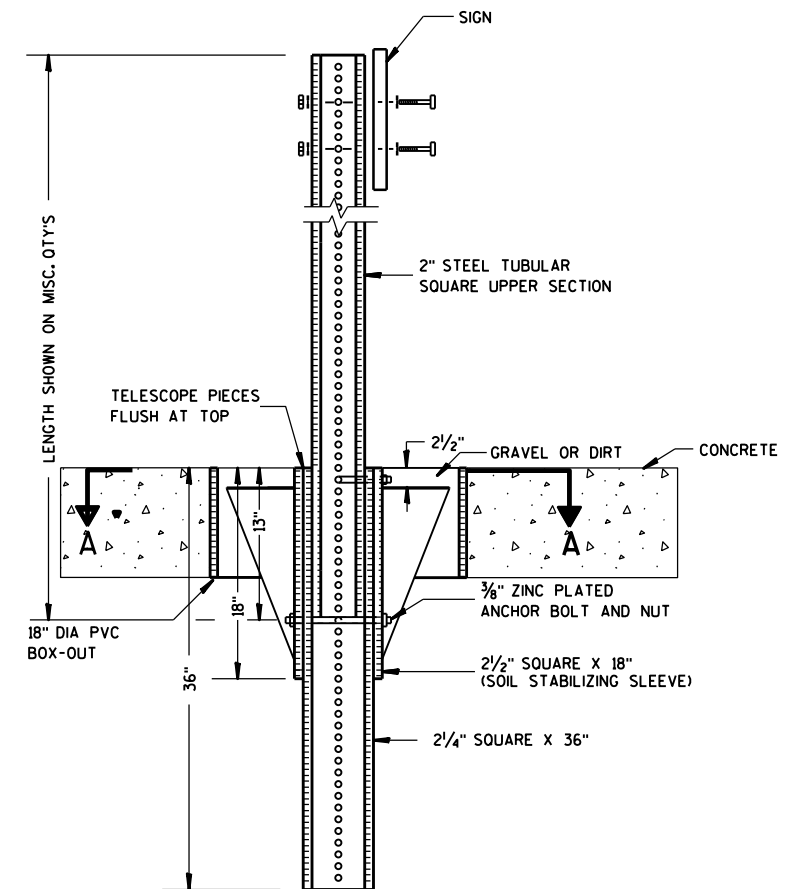
E



ELEVATION VIEW

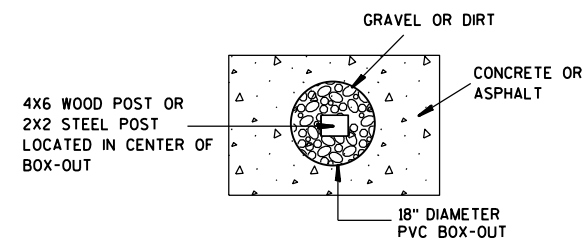
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

PROJECT NO:

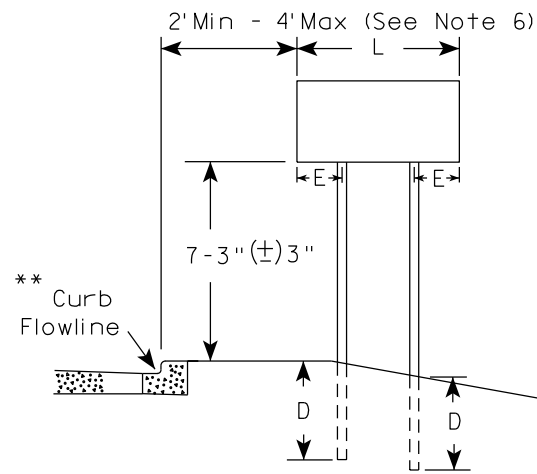
HWY:

COUNTY:

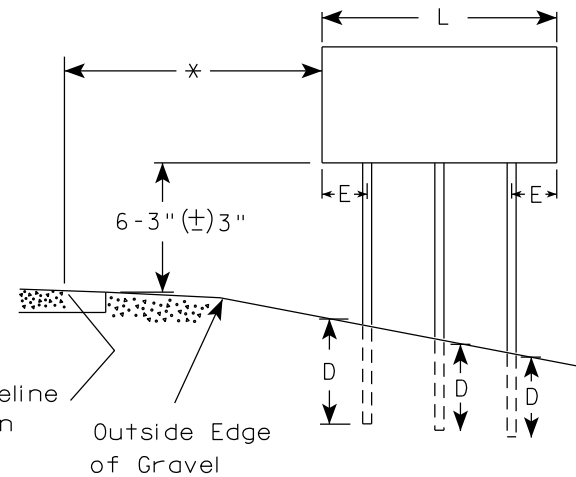
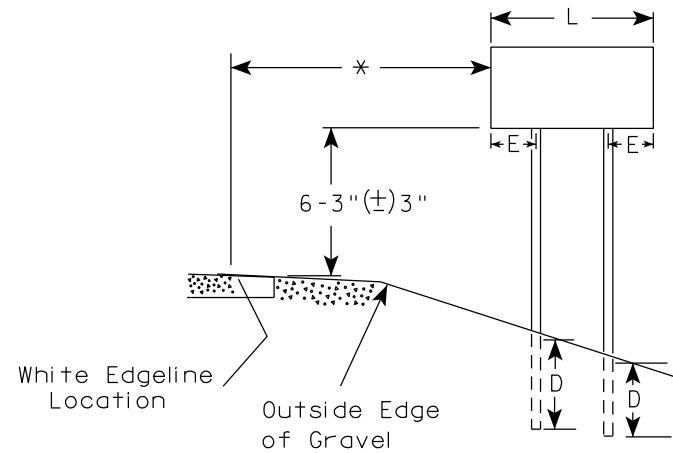
SHEET NO:

E

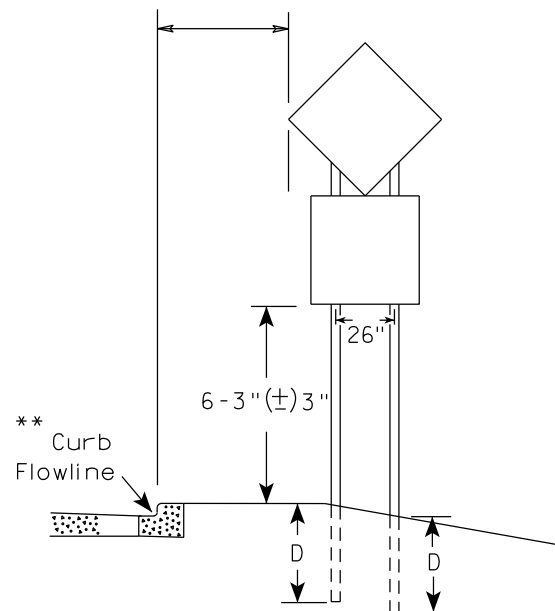
URBAN AREA



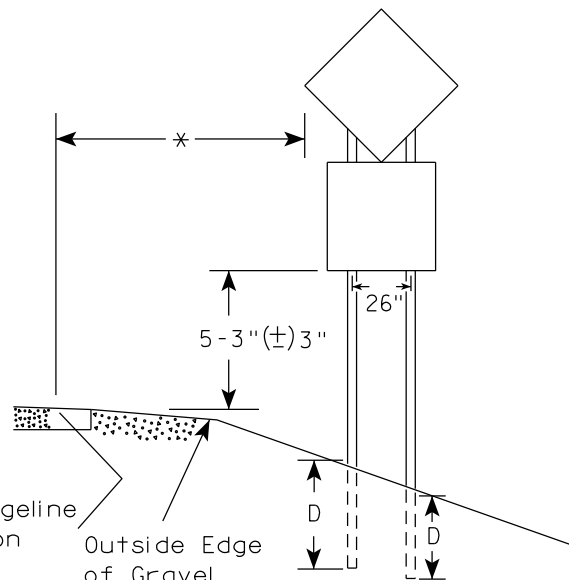
RURAL AREA (See Note 3)



2' Min - 4' Max (See Note 6)



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 12/6/23	PLATE NO. A4-4.16

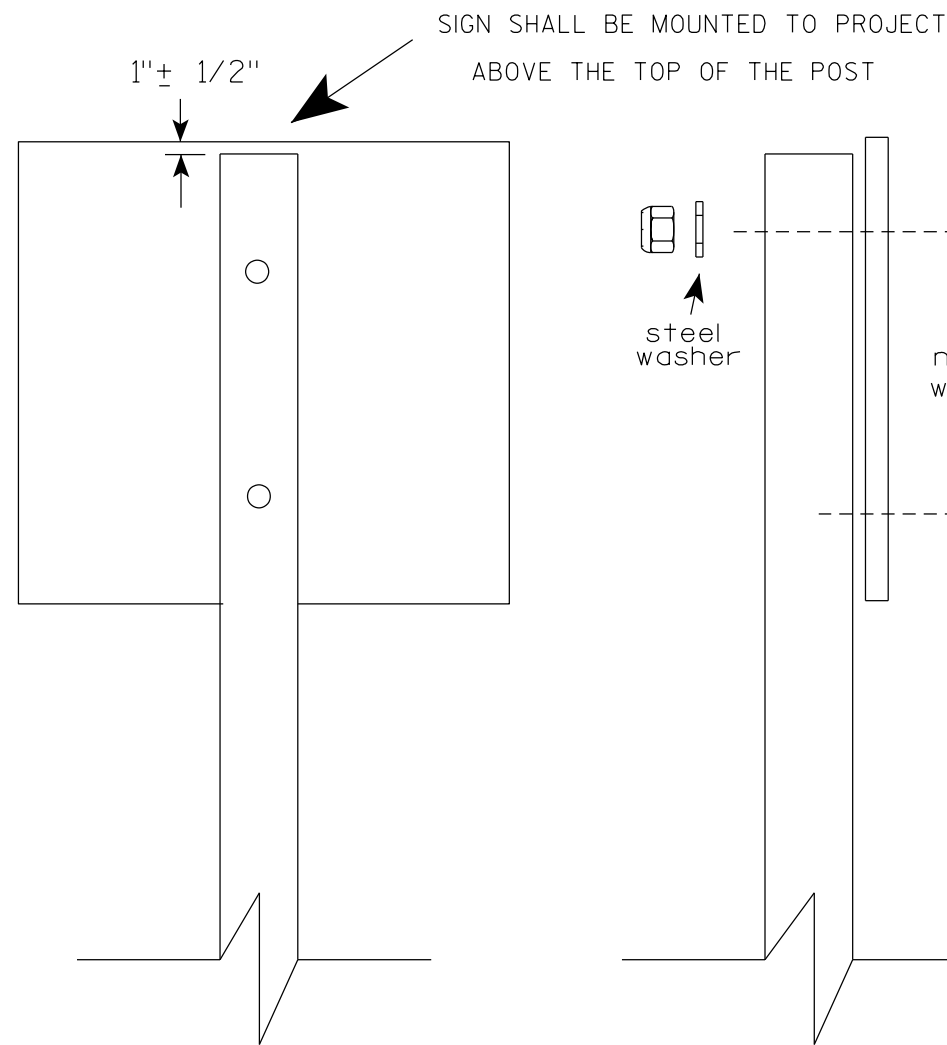
GENERAL NOTES

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

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

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

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



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.

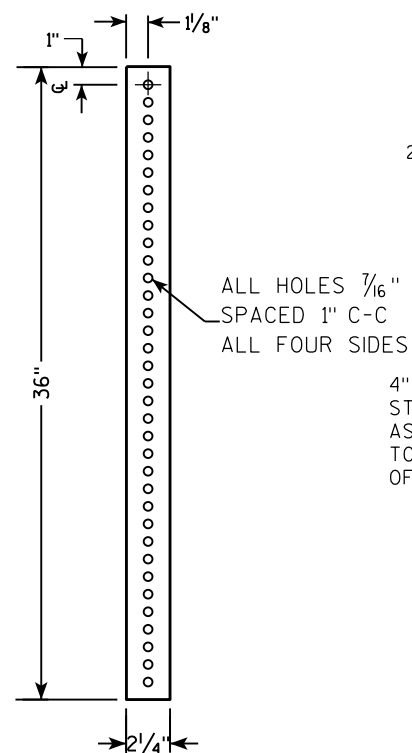
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- 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

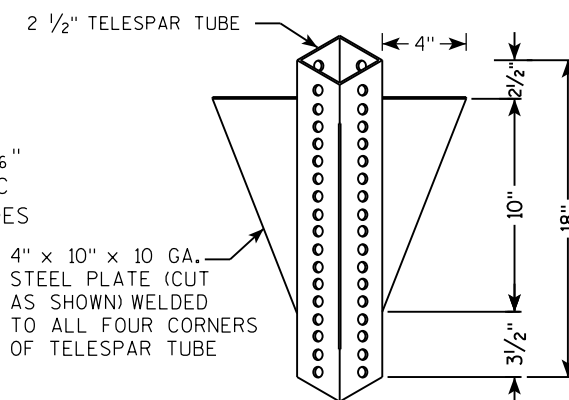
* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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



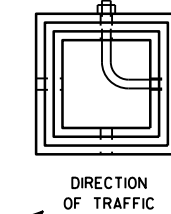
**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**

[illegible]

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY:

- TELESCOPE PIECES FLUSH AT TOP**: Indicated by a dimension line on the left.
- 2" STEEL TUBULAR SQUARE UPPER SECTION**: The main vertical support.
- ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES**: Specification for the perforations in the upper section.
- SIGN**: Attached to the top of the upper section.
- SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL**: Reference to a separate plate for hardware details.
- 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT**: Hardware used to secure the post to the base.
- 1"**: Dimension for the offset of the anchor bolt from the post face.
- 3/8" ZINC PLATED ANCHOR BOLT AND NUT**: Hardware used to secure the base plate to the ground.
- 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)**: The base plate of the post.
- 2 1/4" SQUARE X 36"**: The main vertical support post.
- Dimensions**:
 - 36" (Total height of the main post section)
 - 18" (Height of the upper section)
 - 12" (Height of the lower section)
- Arrows A**: Indicate downward forces or weights applied to the top and bottom of the post.

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthae R Rauch

for State Traffic Engineer

DATE 2/05/15 PLATE NO. A4-9.9

PROJECT NO:

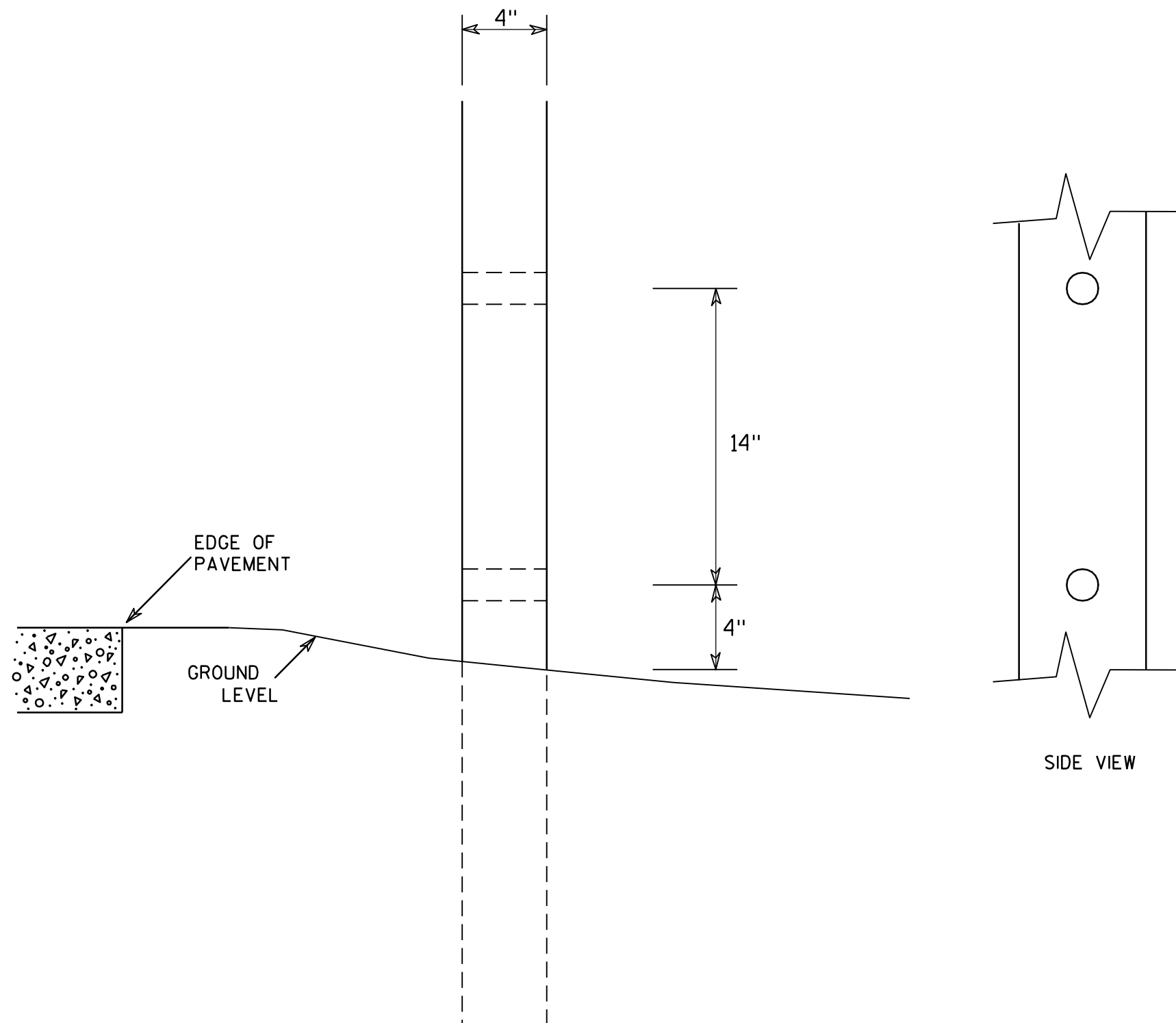
HWY:

COUNTY:

SHEET NO:

1

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

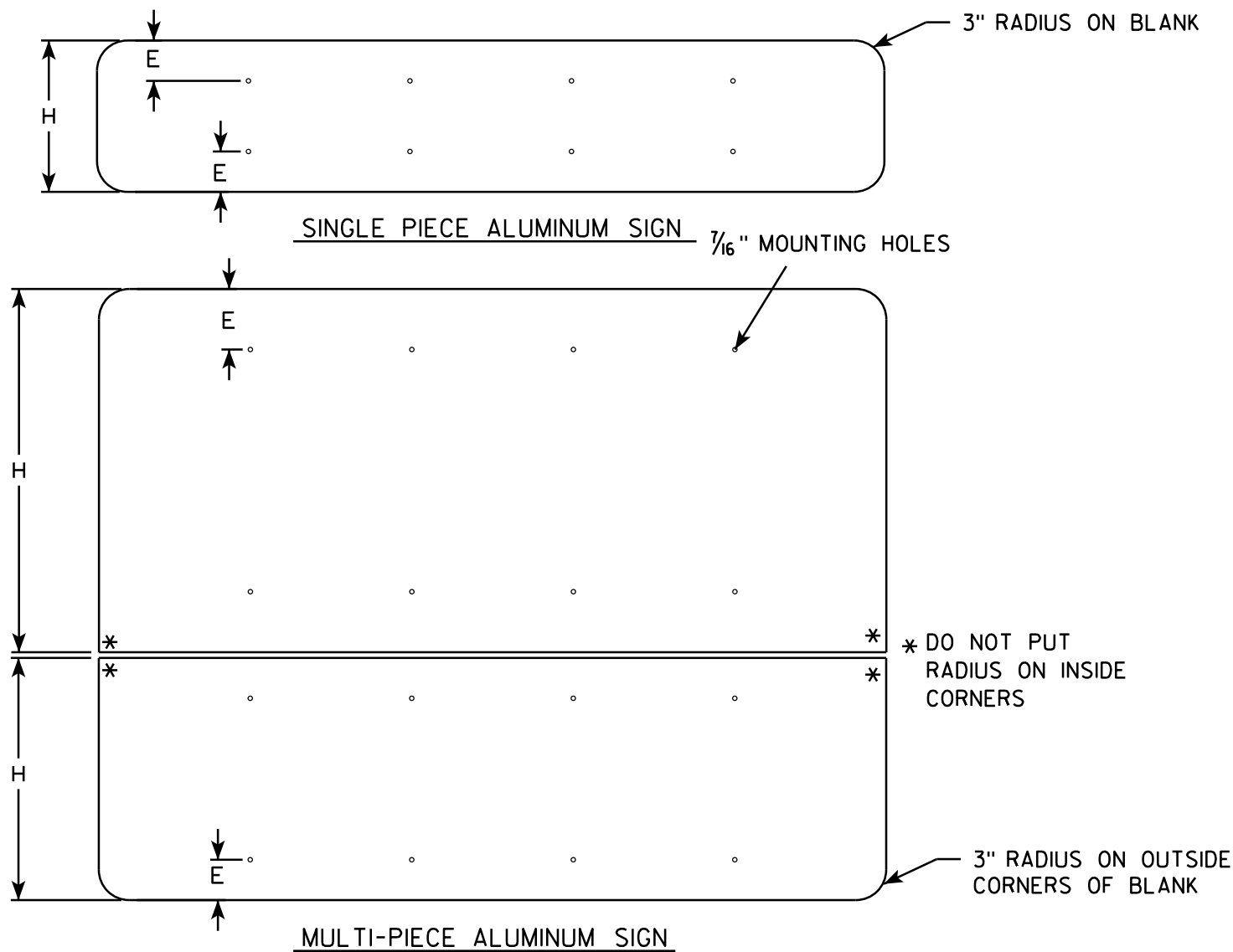
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

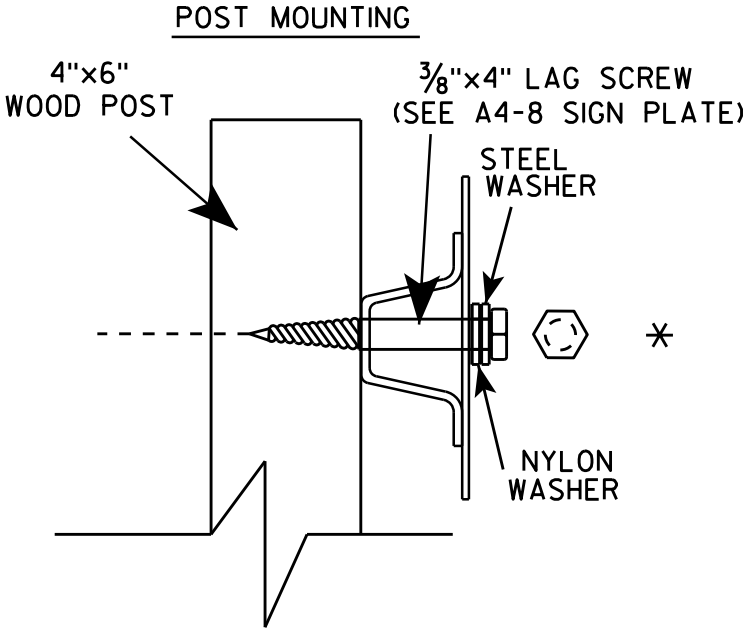
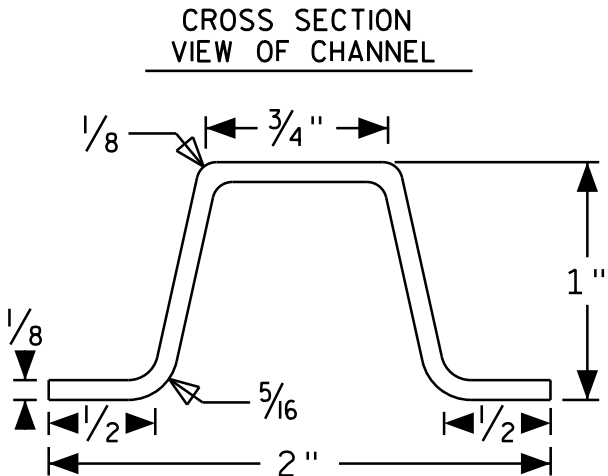
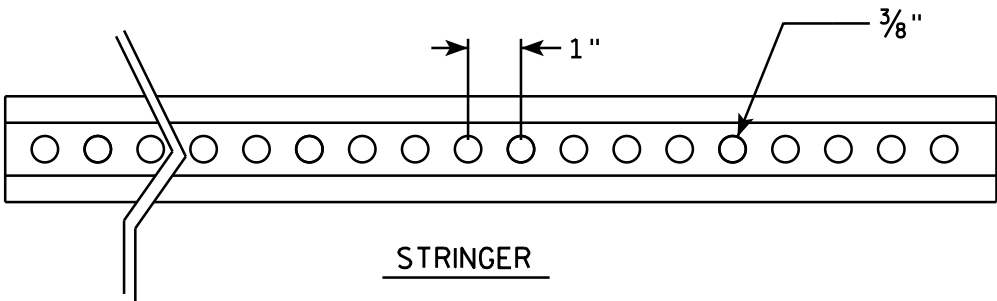
E



GENERAL NOTES

- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES			
78"	72"	2	16"	15"	31"	47"	63"
84"	72"	2	17"	16 1/2"	33 1/2"	50 1/2"	67 1/2"
90"	72"	2	18"	18"	36"	54"	72"
96"	90"	2	19"	19 1/2"	38 1/2"	57 1/2"	76 1/2"
102"	90"	2	20"	21"	41"	61"	81"
108"	90"	2	21"	22 1/2"	43 1/2"	64 1/2"	85 1/2"
114"	108"	3	15"	12"	27"	42"	57" 72" 87" 102"
120"	108"	3	16"	12"	28"	44"	60" 76" 92" 108"
126"	108"	3	17"	12"	29"	46"	63" 80" 97" 114"
132"	126"	3	18"	12"	30"	48"	66" 84" 102" 120"
138"	126"	3	19"	12"	31"	50"	69" 88" 107" 126"
144"	126"	3	20"	12"	32"	52"	72" 92" 112" 132"



SIGN STRINGER
MOUNTING REQUIREMENTS

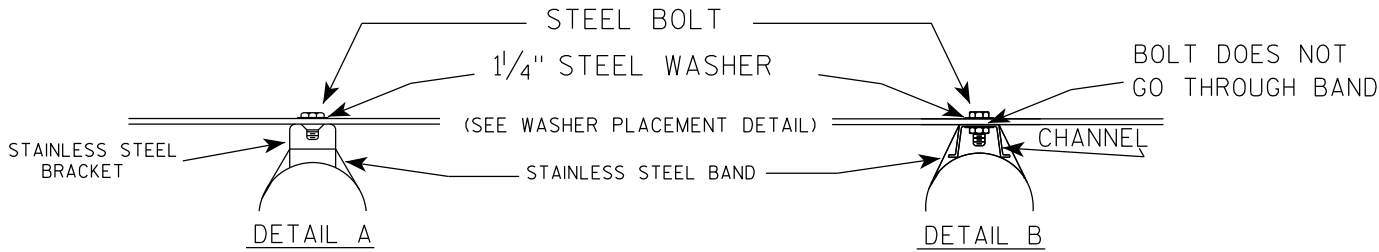
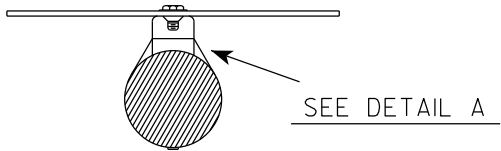
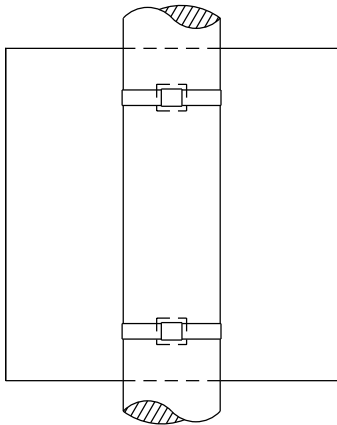
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

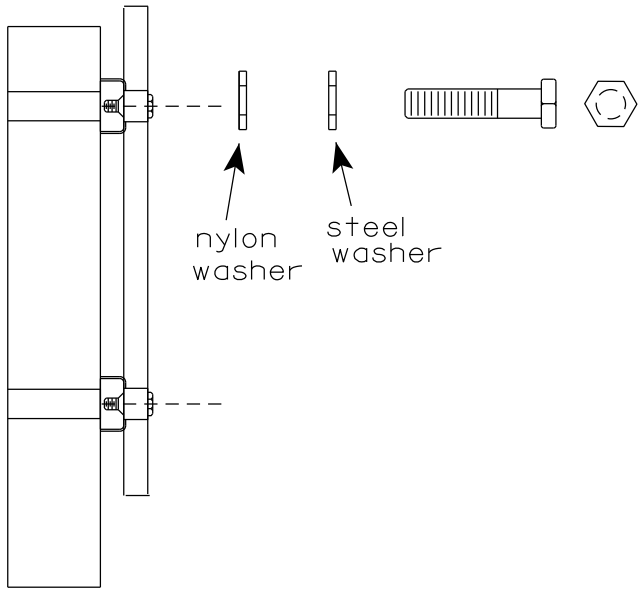
DATE 4/26/16 PLATE NO. A4-18.1

BANDING

SINGLE SIGN



WASHER PLACEMENT

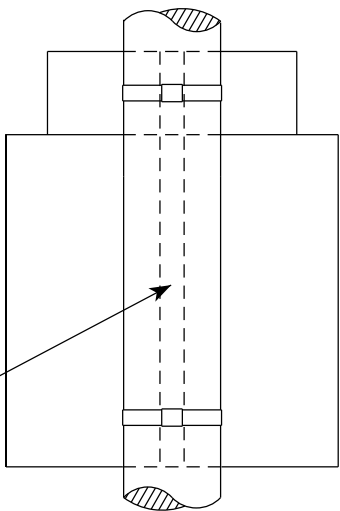


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

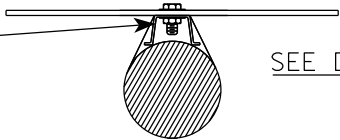
GENERAL NOTES

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



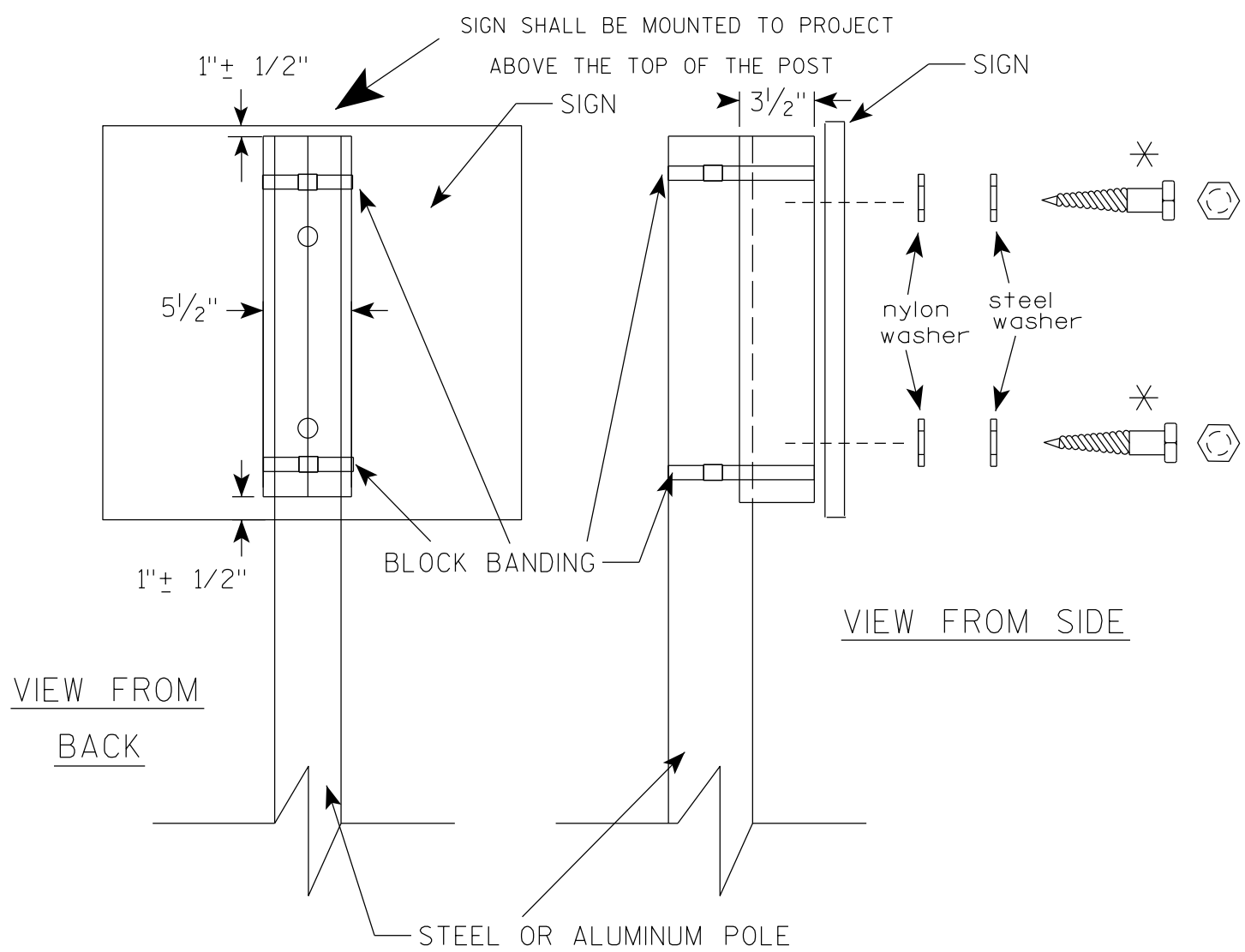
CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



STANDARD SIGN
SIGN BANDING DETAILS

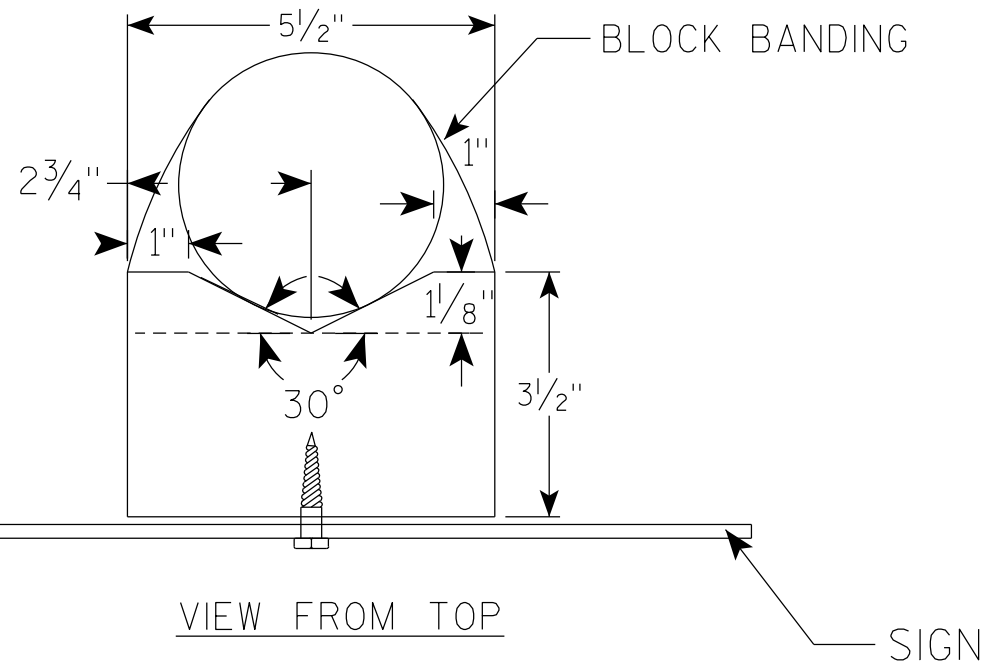
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4



VIEW FROM
BACK

VIEW FROM SIDE



VIEW FROM TOP

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 $\frac{1}{4}$ " O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ "
8. NYLON WASHERS SHALL BE $\frac{1}{4}$ " 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

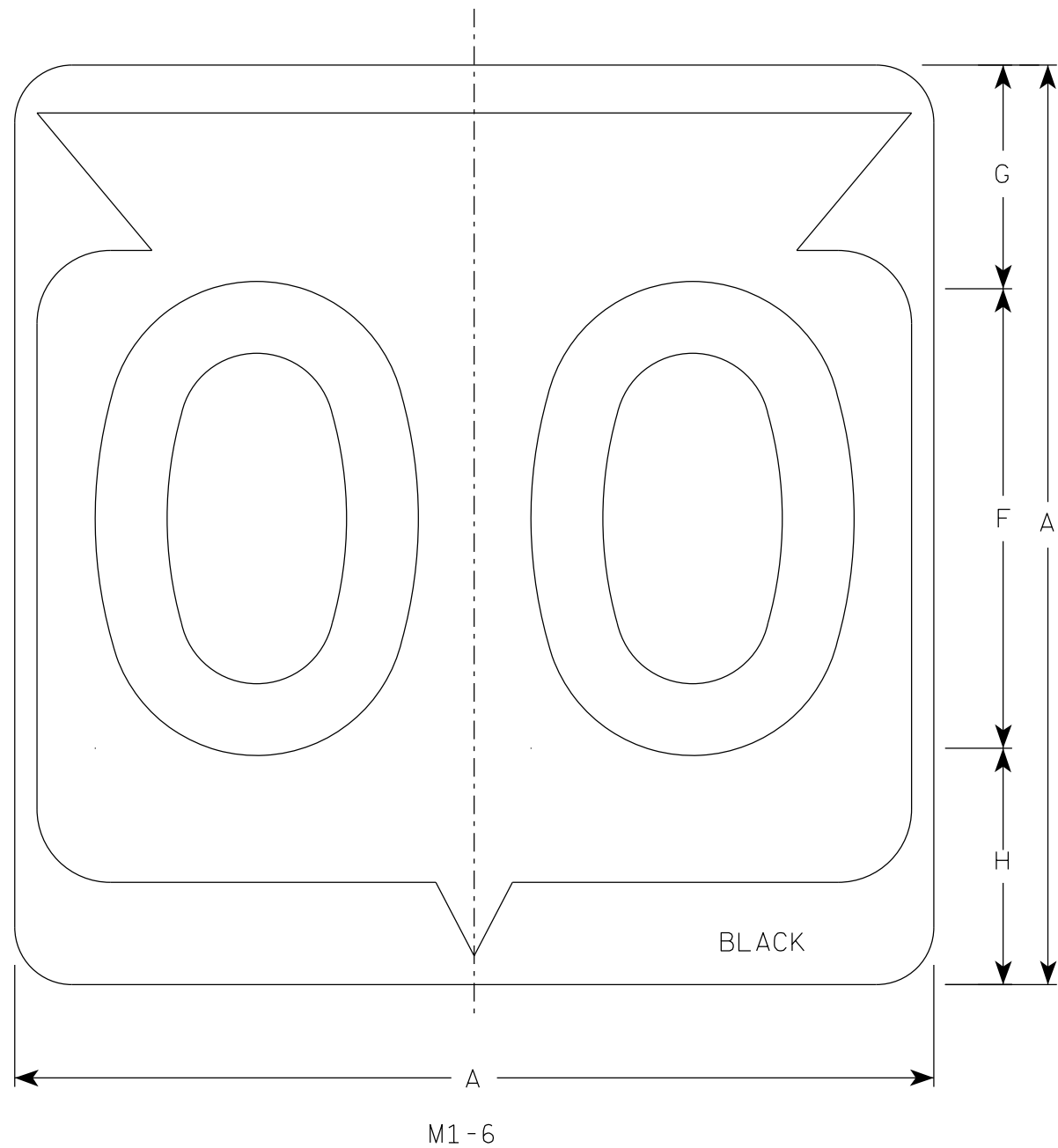
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/19/2022 PLATE NO. A5-10.3

PROJECT NO:

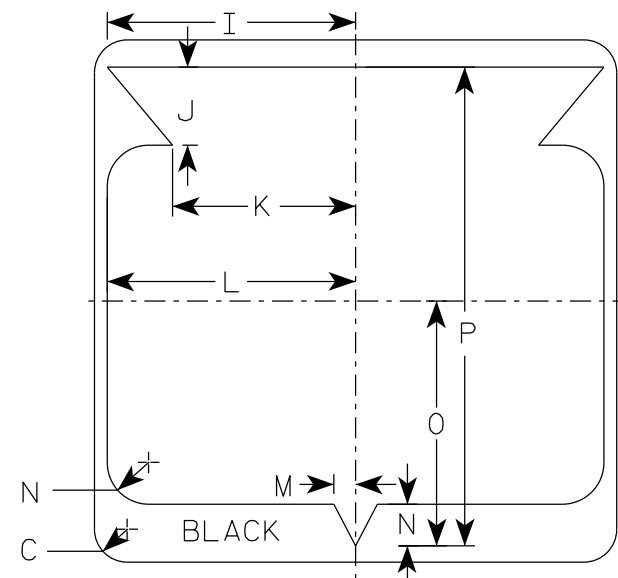
SHEET NO:

E



NOTES

1. Sign is Type II - Type H Reflective
2. Color:
Background - White
Message - Black
3. Message Series - D except 3 number signs Series C



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

STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/8/2022 PLATE NO. M1-6.11

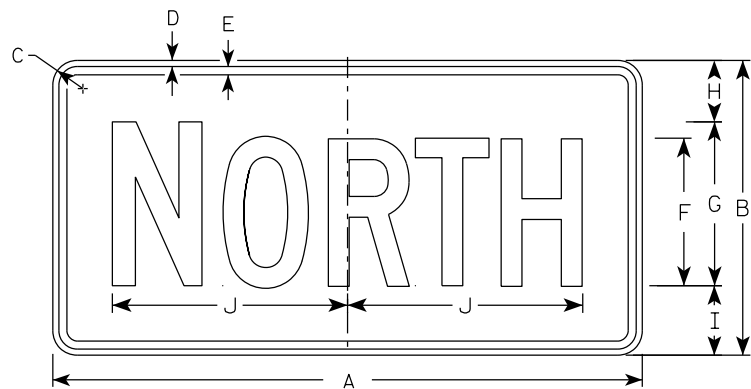
PROJECT NO:

HWY:

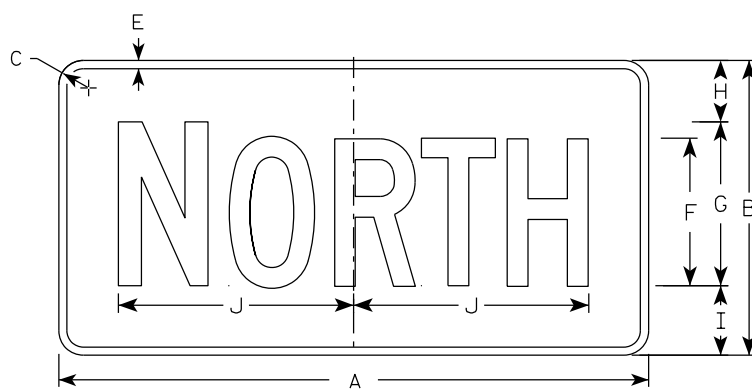
COUNTY:

SHEET NO:

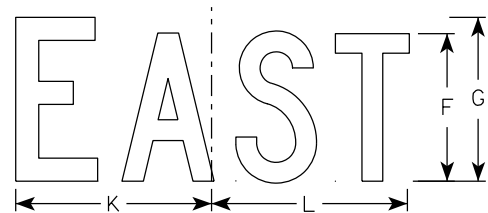
E



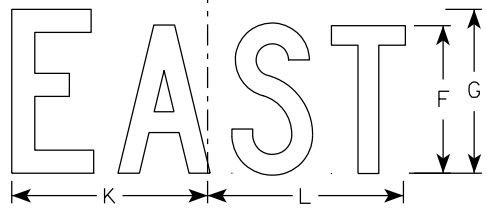
M3-1
MM3-1
MP3-1



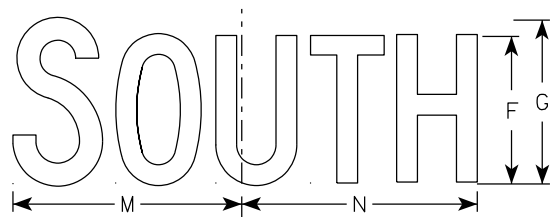
MB3-1
MK3-1
MN3-1



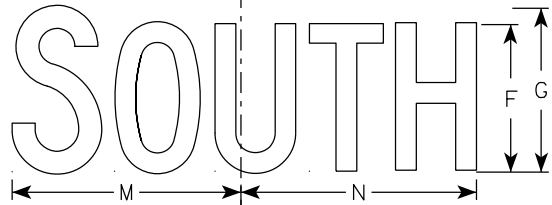
M3-2
MM3-2
MP3-2



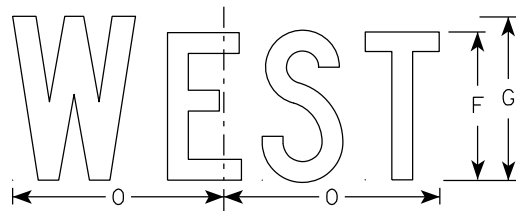
MB3-2
MK3-2
MN3-2



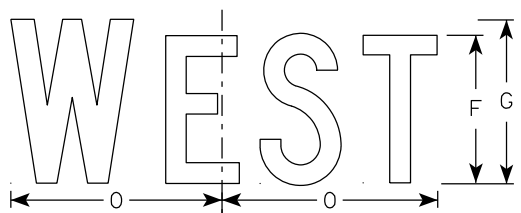
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

- All Signs Type II - Type H Reflective
- Color:
 - Background - See note 5
 - Message - See note 5
- Message Series - C
- 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.
- 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
- Note the first letter of each direction is larger than the remainder of the message.

7

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																											
2S	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
2M	24	12	1 1/2	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4												2.00
3	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
4	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5
5	36	18	1 1/2	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13												4.5

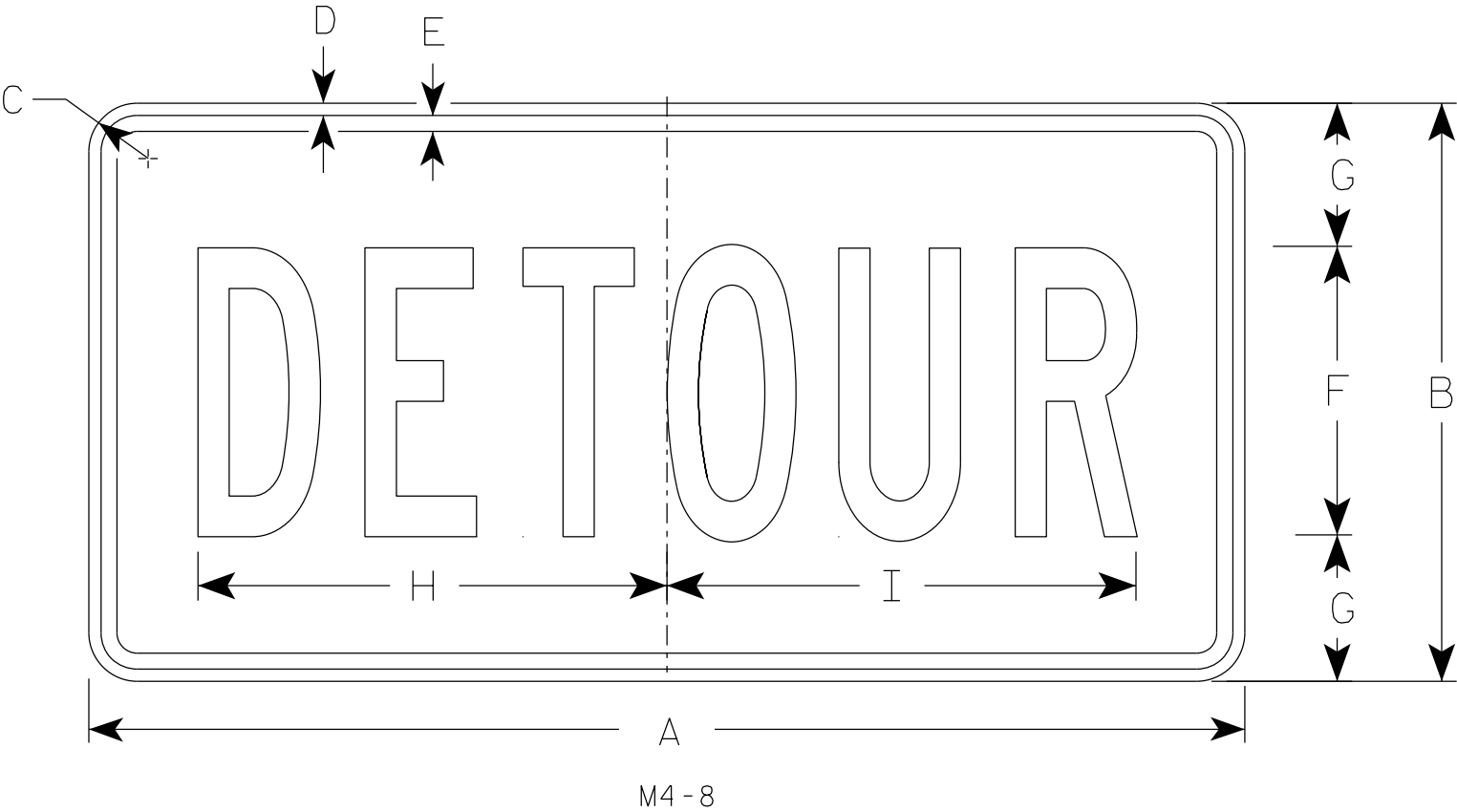
PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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7

7

NOTES

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



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

STANDARD SIGN

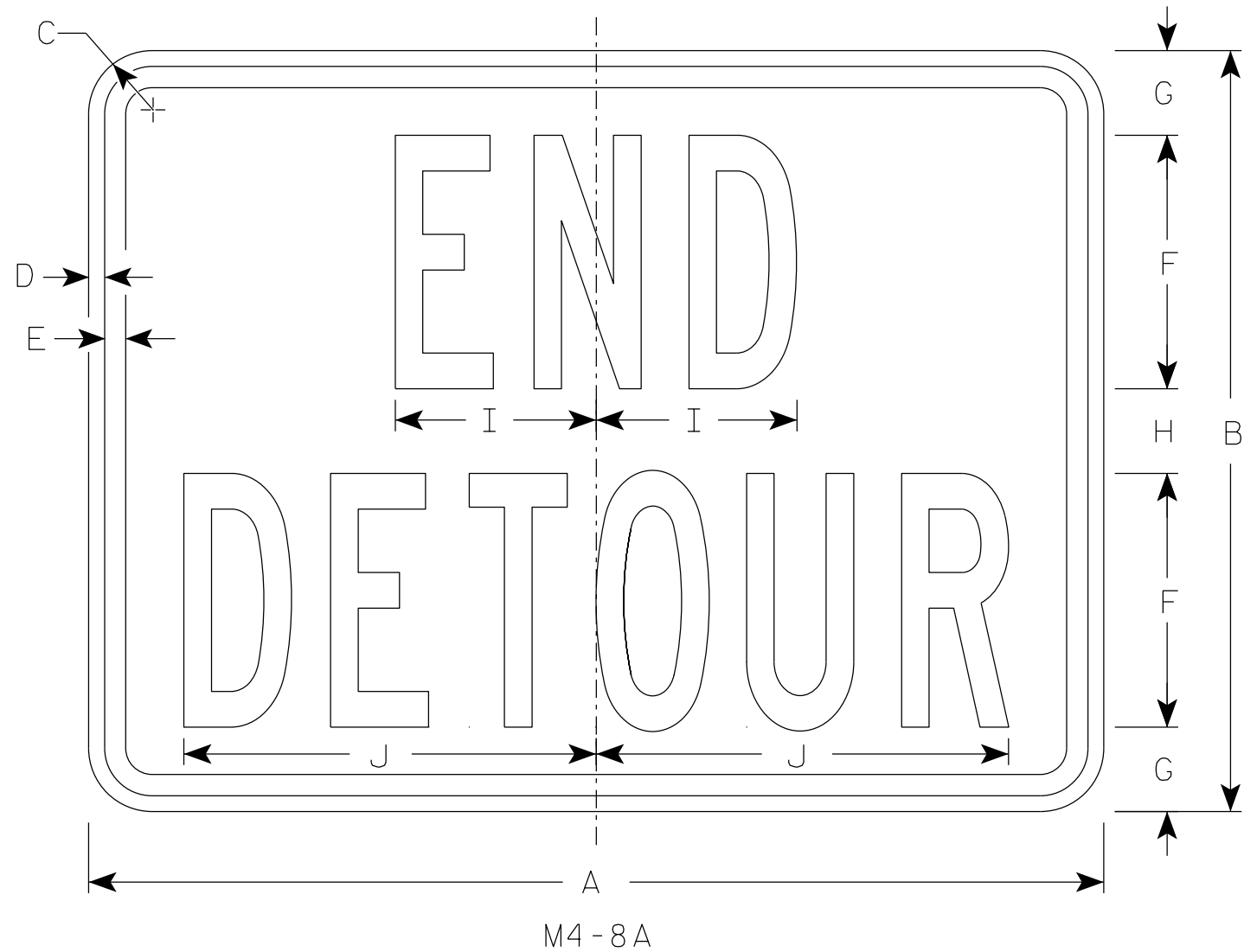
M4 - 8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 2/9/2023 PLATE NO. M4-8.4

7



NOTES

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

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	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
2M	24	18	1 1/2	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4	30	24	1 1/2	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
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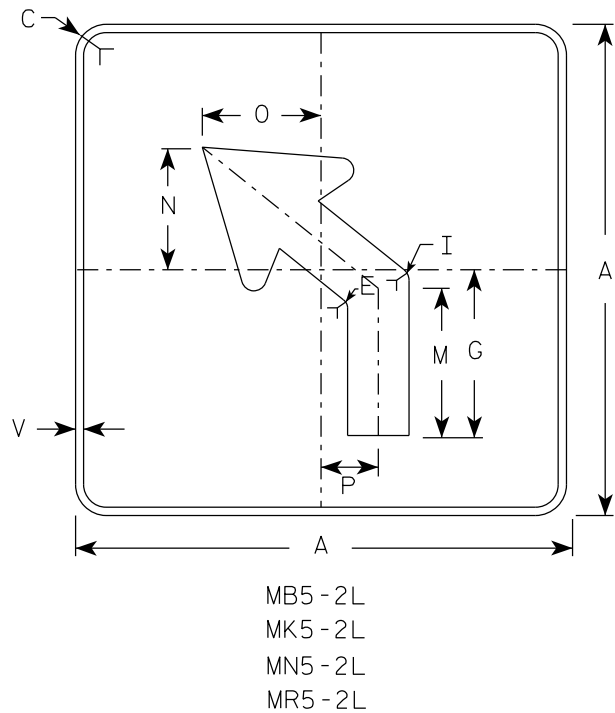
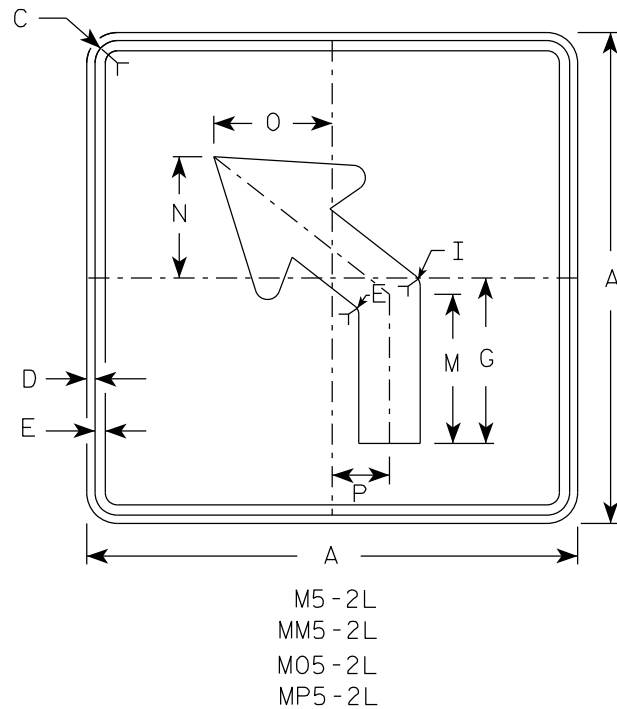
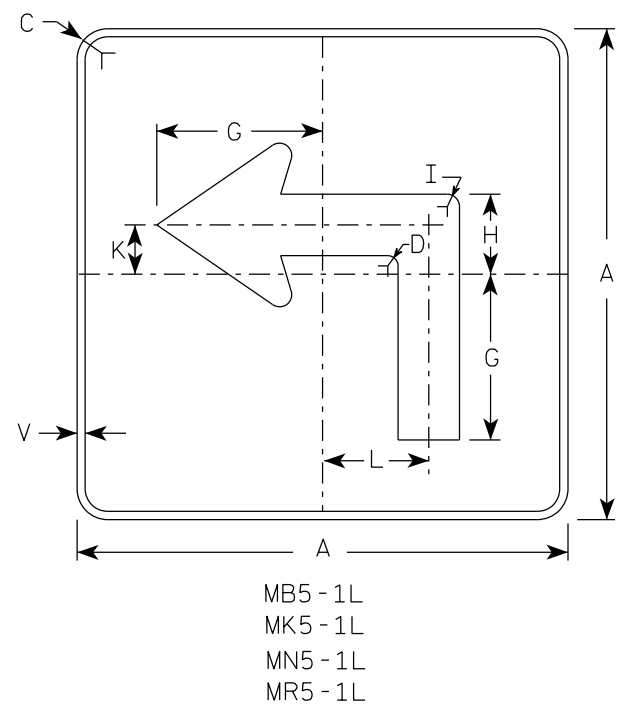
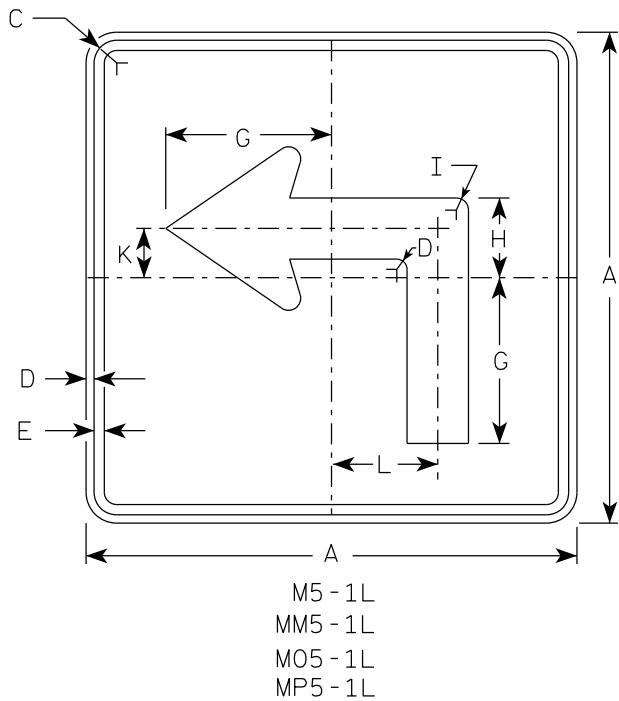
STANDARD SIGN

M4-8A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

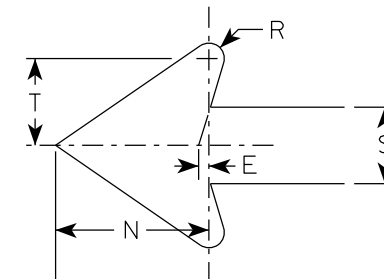
DATE 2/9/2023 PLATE NO. M4-8A.4



NOTES

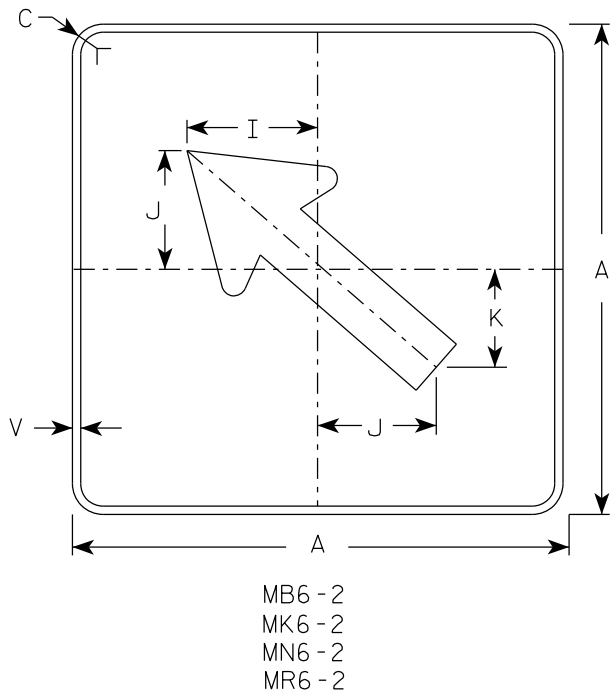
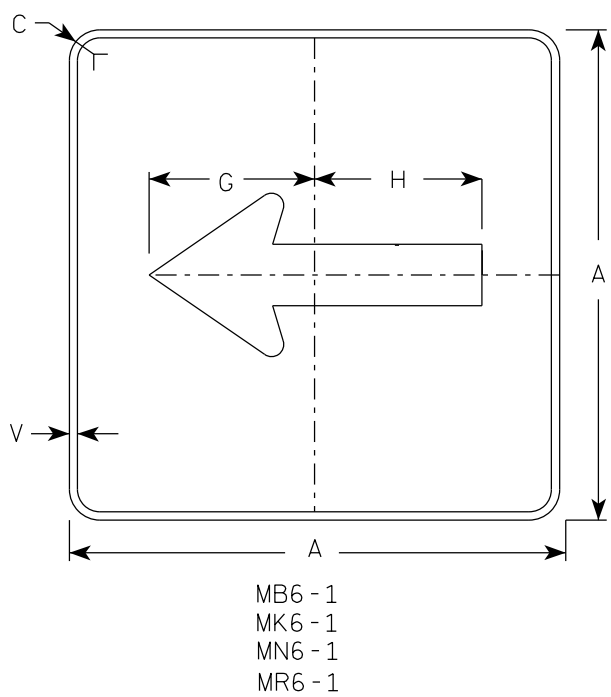
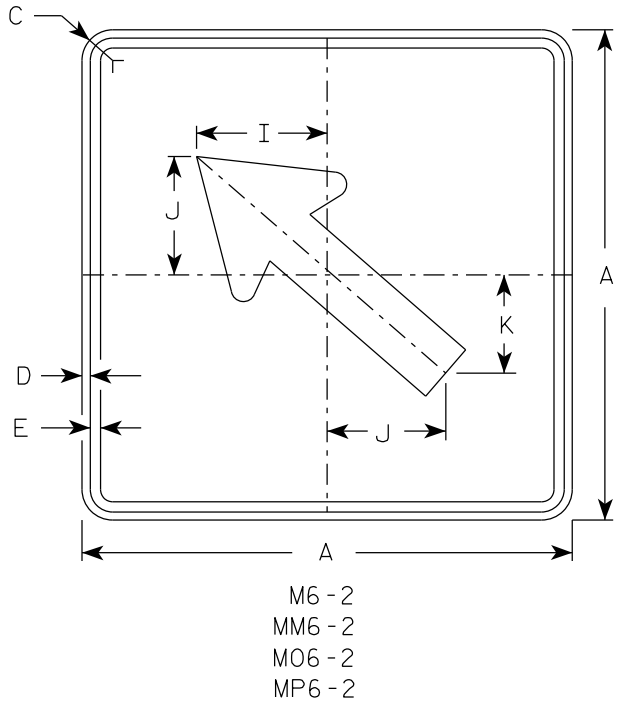
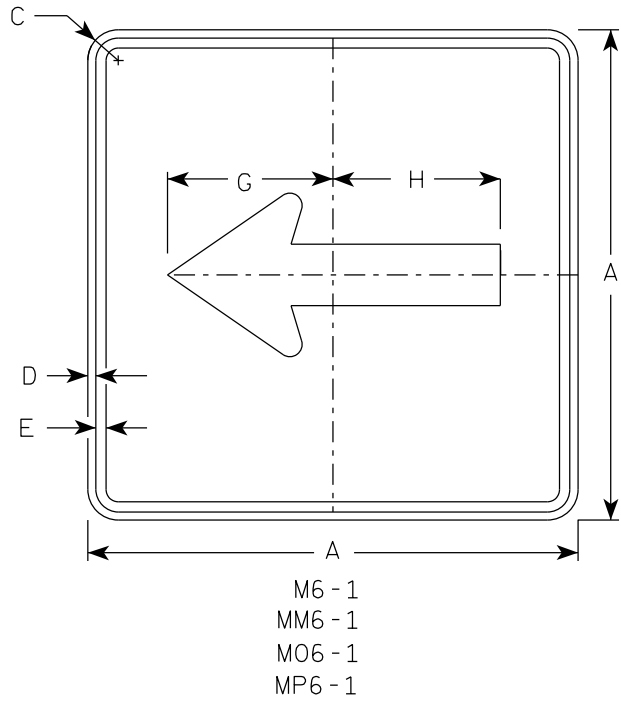
- Signs are Type II - Type H reflective except as shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- | | | |
|-----------|-------|---|
| 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 |
| | | 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.

ARROW DETAIL

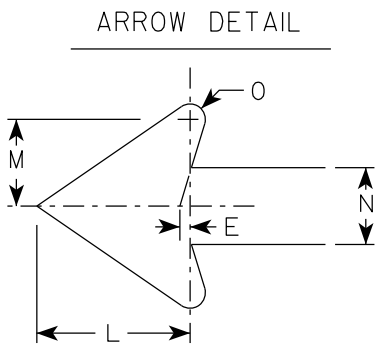


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
2M	21		1 1/2	3/8	3/8		7	3 3/8	5/8		2 1/8	4 1/2	6 3/8	5 1/4	5	2 1/2		1/2	2 5/8	3		1/2					3.06
3	30		1 7/8	1/2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

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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- 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.
 - M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow



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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

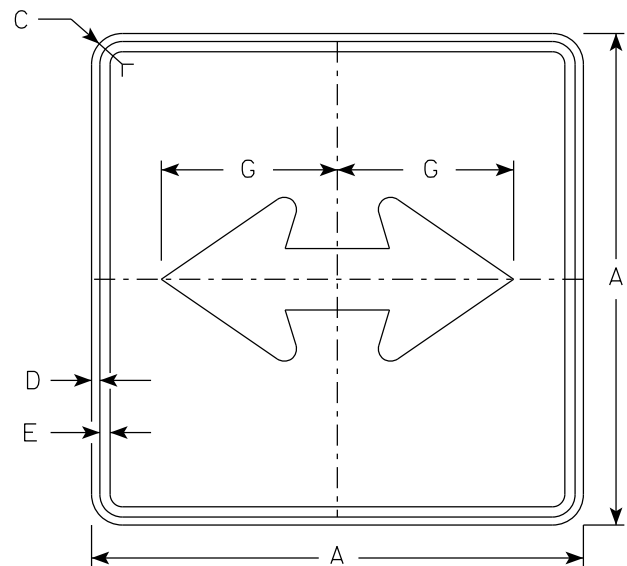
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

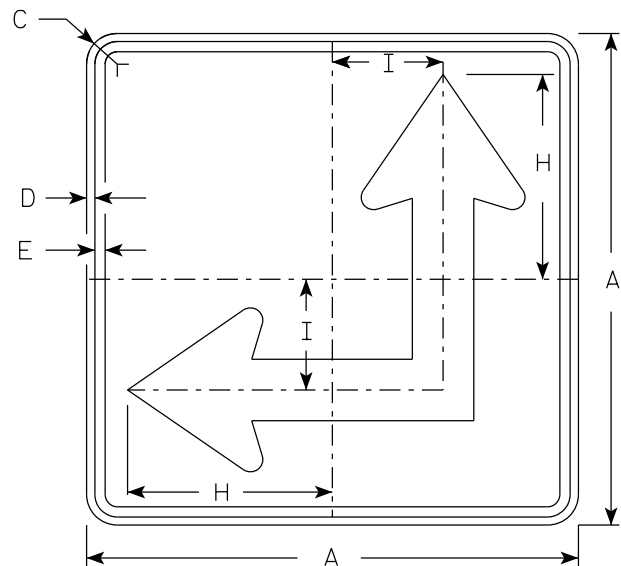
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

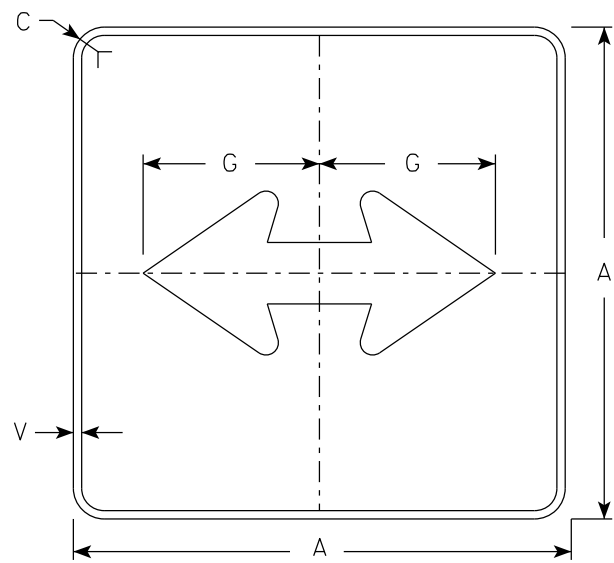
DATE 2/13/2023 PLATE NO. M6-1.16



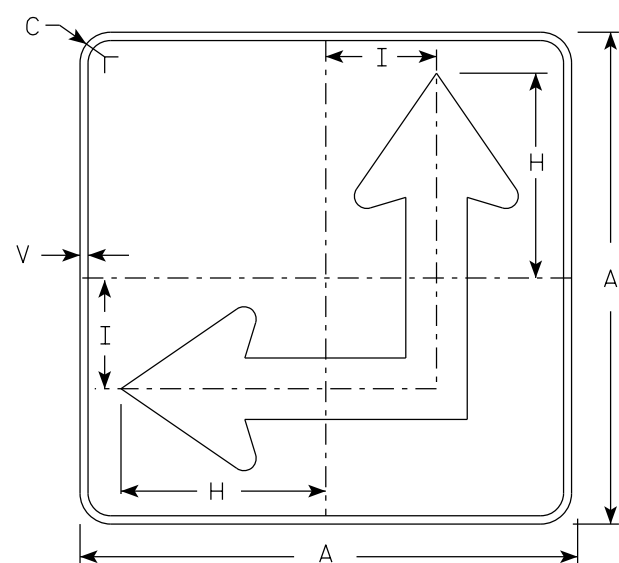
M6 - 4
MM6 - 4
M06 - 4
MP6 - 4



M6 - 6
MM6 - 6
M06 - 6
MP6 - 6



MB6 - 4
MK6 - 4
MN6 - 4
MR6 - 4

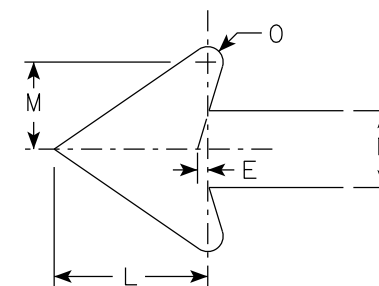


MB6 - 6
MK6 - 6
MN6 - 6
MR6 - 6

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.
- M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
M06-4 and M06-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.

ARROW DETAIL

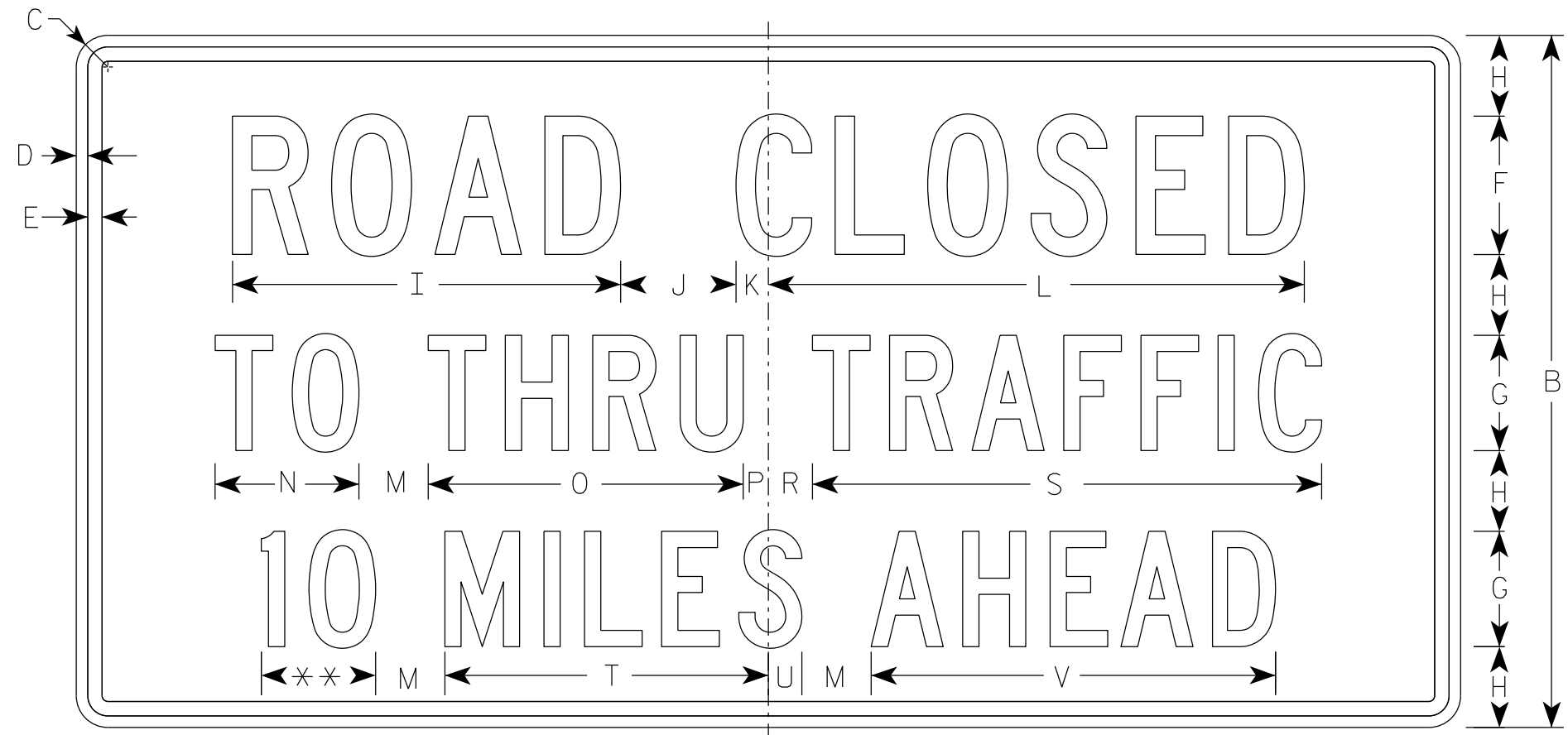


SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	21		1 1/2	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2							1/2					3.06
2M	21		1 1/2	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2							1/2					3.06
3	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
4	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25
5	30		1 7/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4							1/2					6.25

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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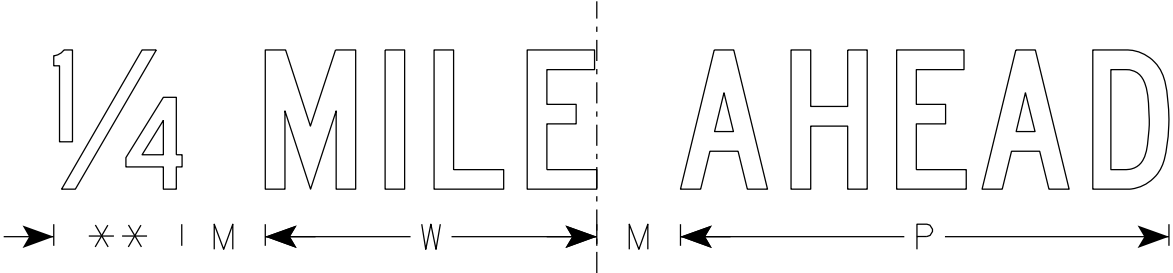
7

7



R11-3

** See Note 5



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/2	3/8	3/8	4	3	2	11 1/4	3	1 1/8	15 3/8	2	3 3/4	8 1/4	5/8		1 3/8	13 1/4	8 3/8	7/8	10 1/2	7 1/8				4.5
2S	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
2M	60	30	1 7/8	1/2	5/8	6	5	3 1/2	16 7/8	5	1 3/8	23 1/4	3	6 1/4	13 5/8	1 1/8		1 7/8	22 1/8	14	1 1/2	17 1/2	11 7/8				12.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

NOTES

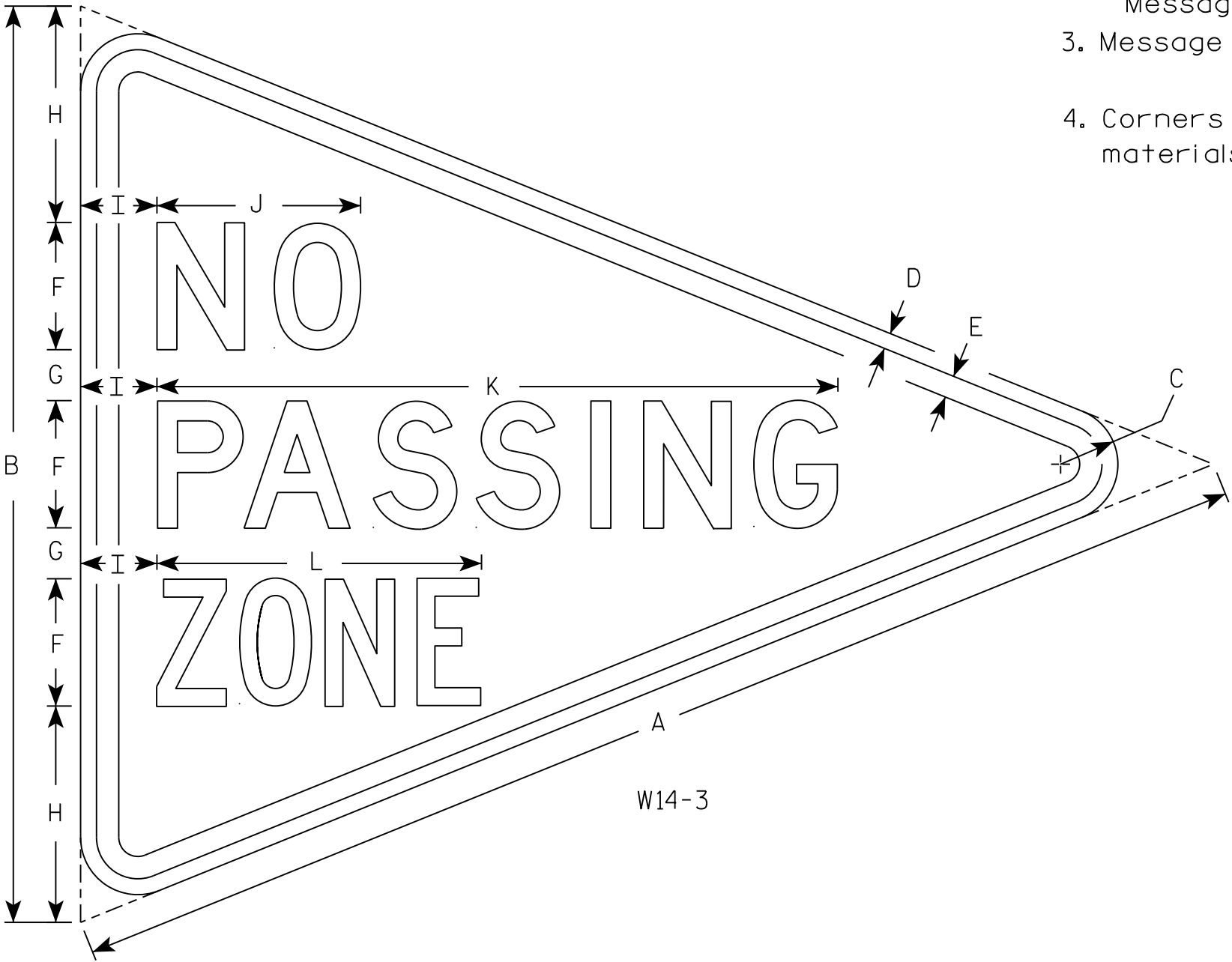
1. Sign is Type II - Type H Reflective
2. Color:

Background - White

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

NOTES

- 1. Sign is Type II - Type F Reflective
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - Lines 1 and 2 are Series D.
Line 3 is series C.
- 4. Corners and borders shall be rounded on all base materials for this sign.



7

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																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

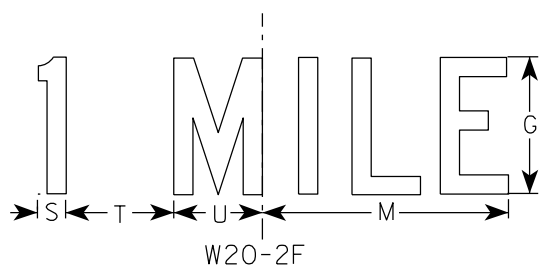
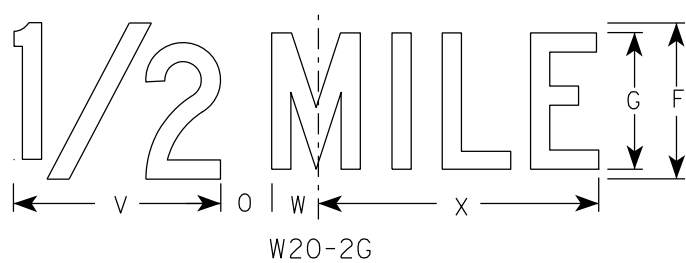
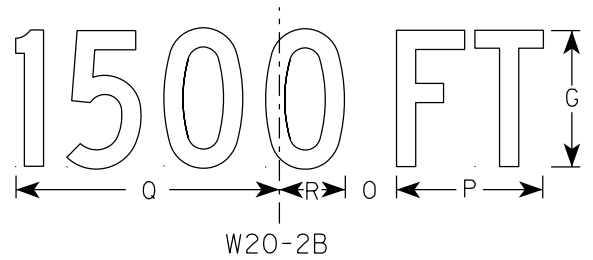
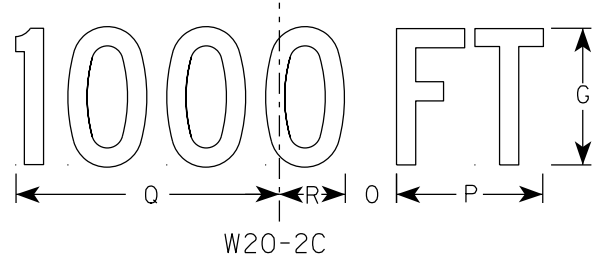
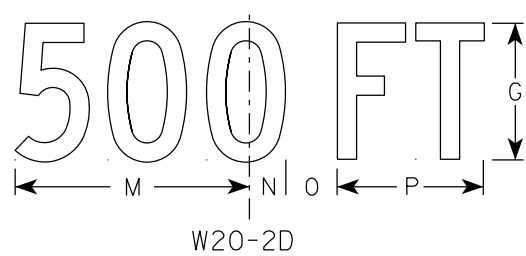
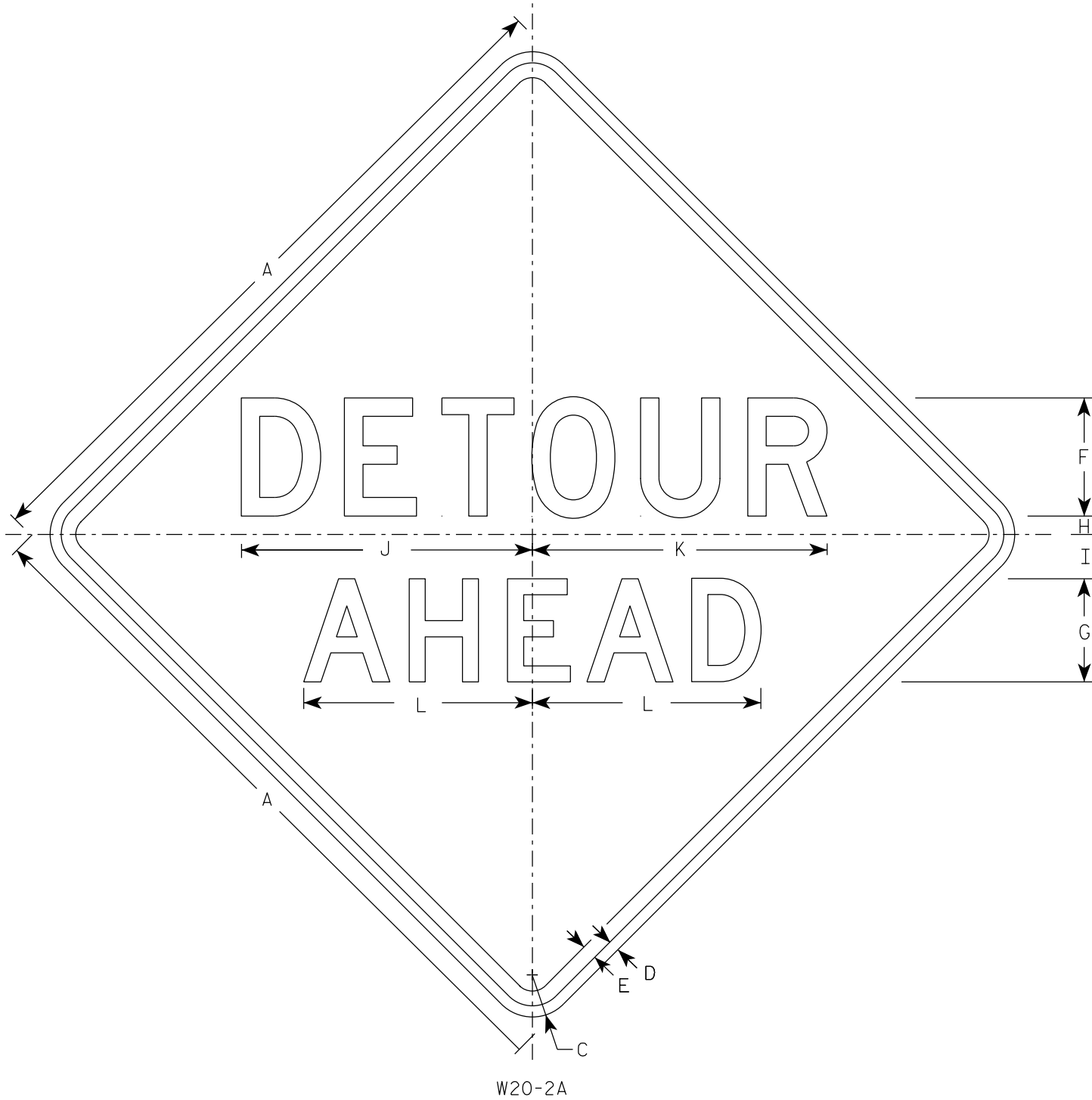
E

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W14-3.10



NOTES

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

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

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

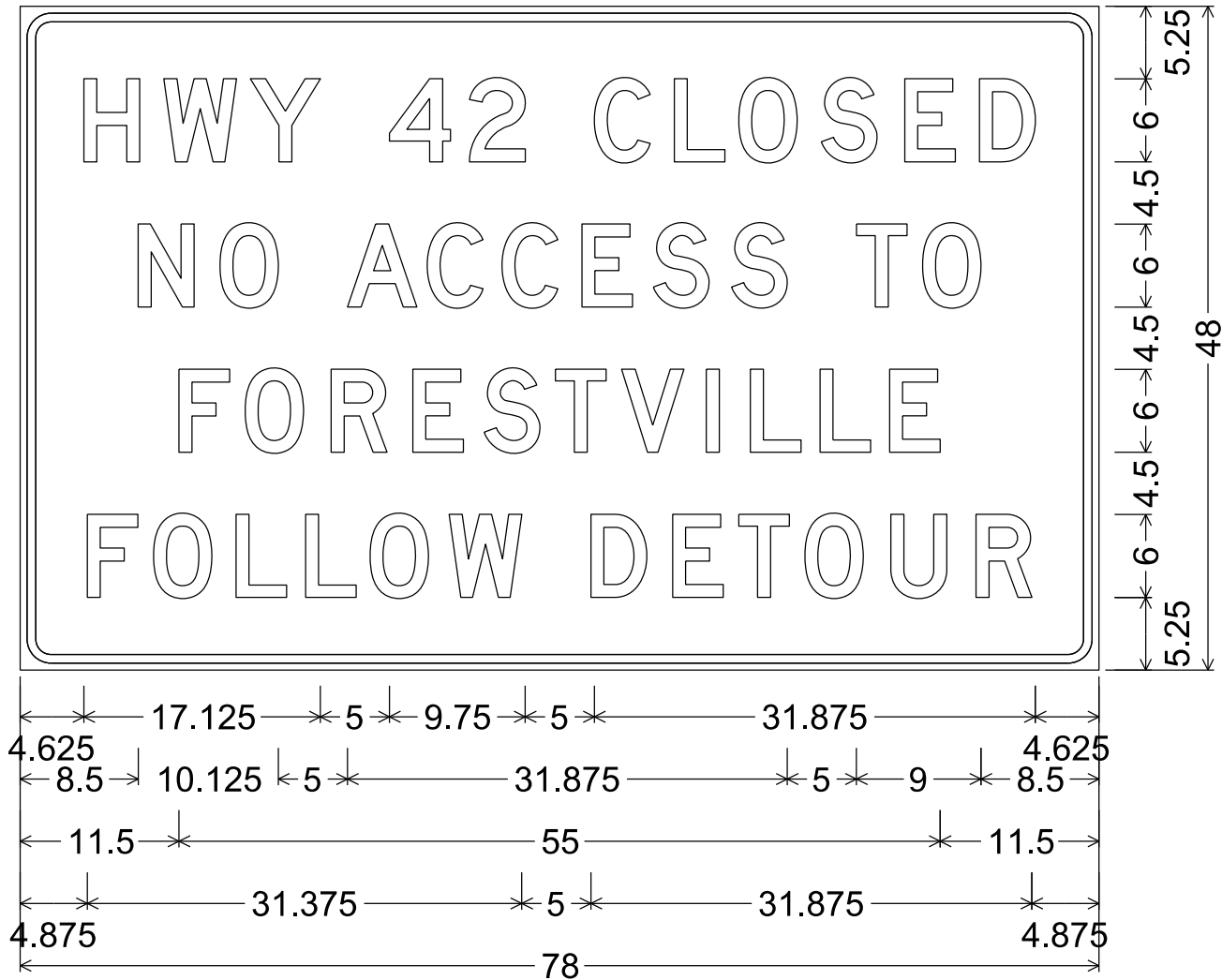
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/10/2024 PLATE NO. W20-2.7

NOTES

- 1. Fixed Message Sign Type II - Type F Reflective
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - D



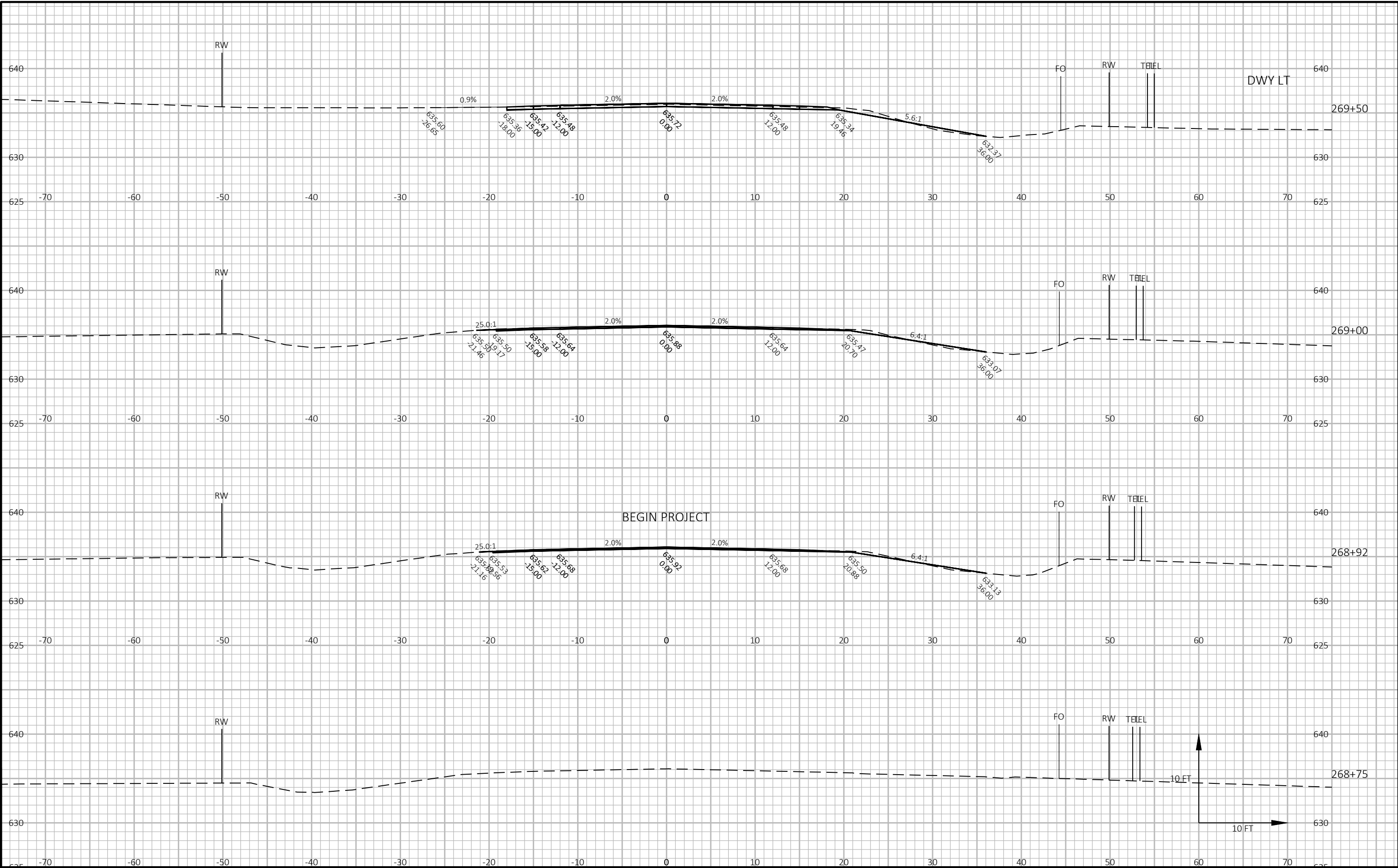
2.250" Radius, 0.625" Border, 0.500" Indent

DIVISION 1 - SOUTH CULVERT

STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDNATE
						1.00	1.25	
268+92.50	0.00	1.32	0.95	0	0	0	0	0
269+00.00	7.50	1.51	1.12	0	0	0	0	0
269+50.00	50.00	3.76	1.39	5	2	5	3	3
270+00.00	50.00	0.80	3.96	4	5	9	9	0
270+03.49	3.49	1.07	2.70	0	0	9	9	0
270+03.50	0.01	56.05	2.69	0	0	9	9	0
270+50.00	46.50	17.86	9.13	64	10	73	21	52
271+00.00	50.00	8.98	29.20	25	35	98	65	33
271+50.00	50.00	15.47	128.07	23	146	121	248	-127
272+00.00	50.00	1.89	59.45	16	174	137	465	-328
272+50.00	50.00	9.51	25.19	11	78	148	563	-415
273+00.00	50.00	28.42	3.66	35	27	183	596	-413
273+19.50	19.50	65.76	1.44	34	2	217	599	-382
273+19.51	0.01	0.08	1.74	0	0	217	599	-382
273+50.00	30.49	1.34	0.32	1	1	218	600	-382
274+00.00	50.00	2.67	0.03	4	0	222	600	-378
274+37.50	37.50	0.70	1.24	2	1	224	601	-377

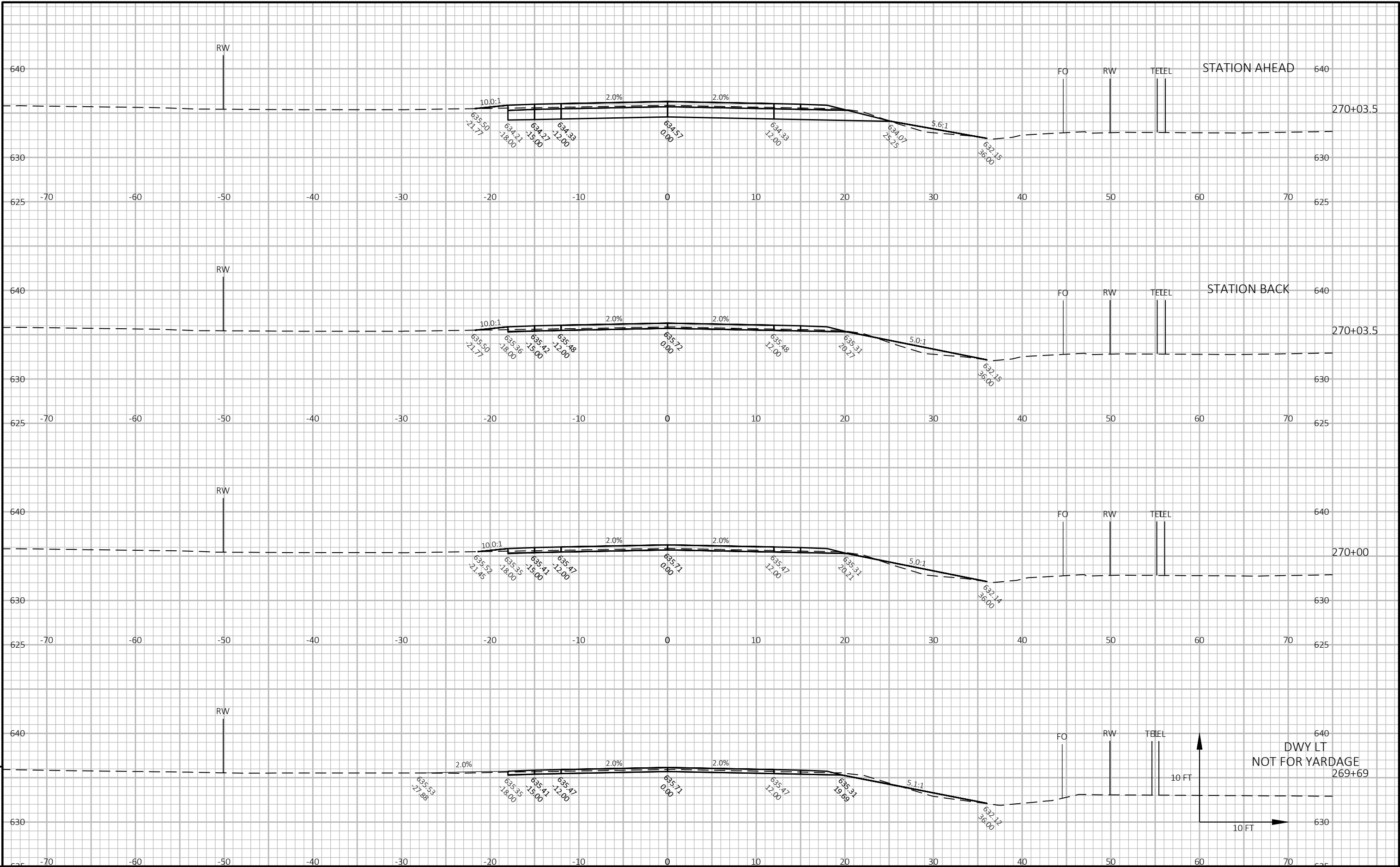
DIVISION 2 - NORTH CULVERT

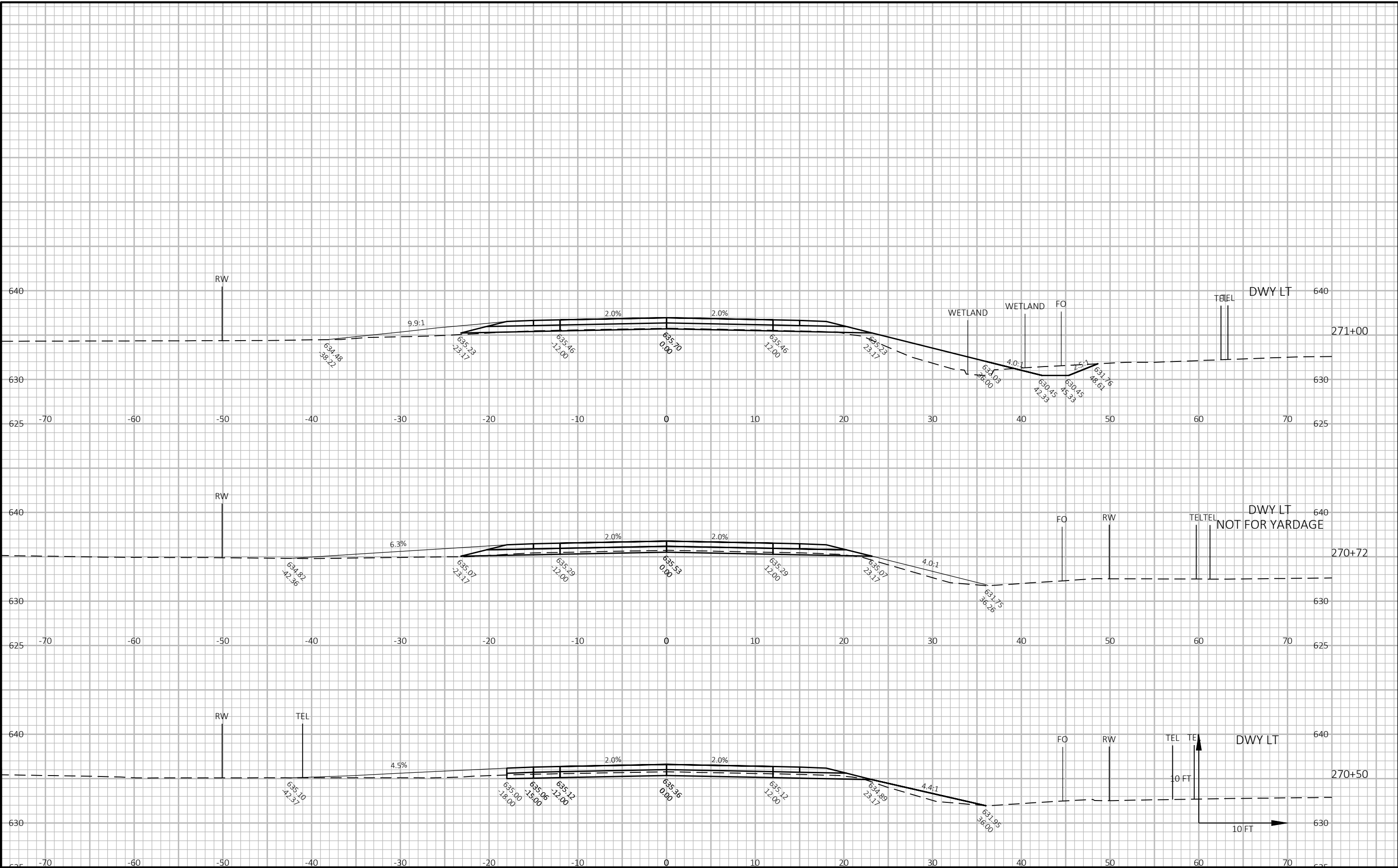
STATION	DISTANCE	AREA (SF)		INCREMENTAL VOL (CY) (UNADJUSTED)		CUMULATIVE VOL (CY)		
		CUT	FILL	CUT	FILL	CUT	EXPANDED FILL	MASS ORDNATE
						1.00	1.25	
338+15.00	0.00	0.45	0.00	0	0	0	0	0
338+50.00	35.00	0.97	0.00	1	0	1	0	1
339+00.00	50.00	1.90	0.00	3	0	4	0	4
339+11.99	11.99	0.84	0.00	1	0	5	0	5
339+12.00	0.01	76.81	0.00	0	0	5	0	5
339+50.00	38.00	26.51	0.00	73	0	78	0	78
340+00.00	50.00	4.74	6.37	29	6	107	8	100
340+50.00	50.00	2.01	25.96	6	30	113	45	68
341+00.00	50.00	4.11	104.61	6	121	119	196	-77
341+50.00	50.00	5.45	19.54	9	115	128	340	-212
342+00.00	50.00	34.03	88.55	37	100	165	465	-300
342+50.00	50.00	40.75	0.40	69	82	234	568	-334
342+78.50	28.50	82.96	0.00	65	0	299	568	-269
342+78.51	0.01	11.99	0.00	0	0	299	568	-269
343+00.00	21.49	8.34	0.00	8	0	307	568	-261
343+50.00	50.00	5.15	0.01	12	0	319	568	-249
343+92.50	42.50	0.56	0.21	4	0	323	568	-245

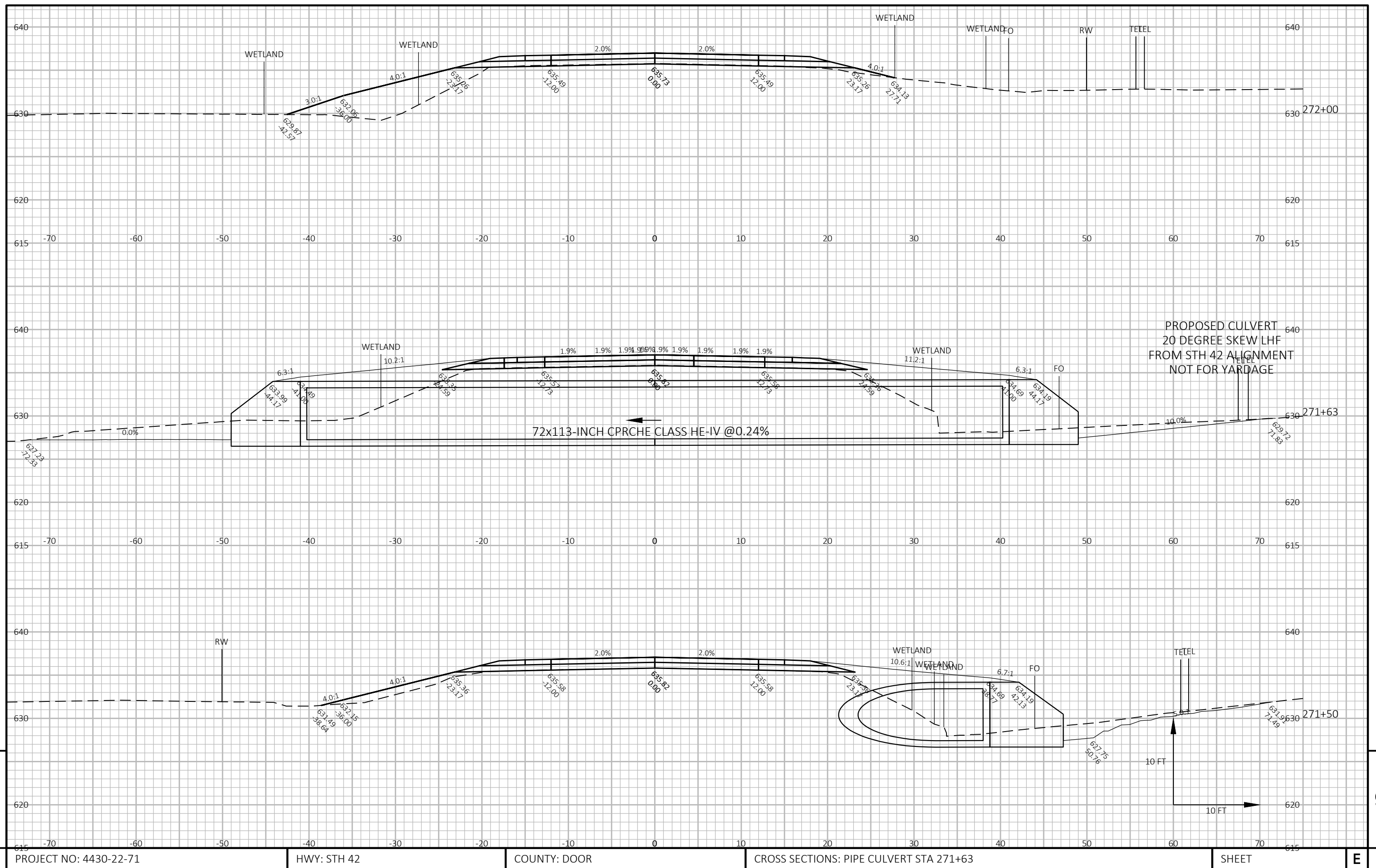


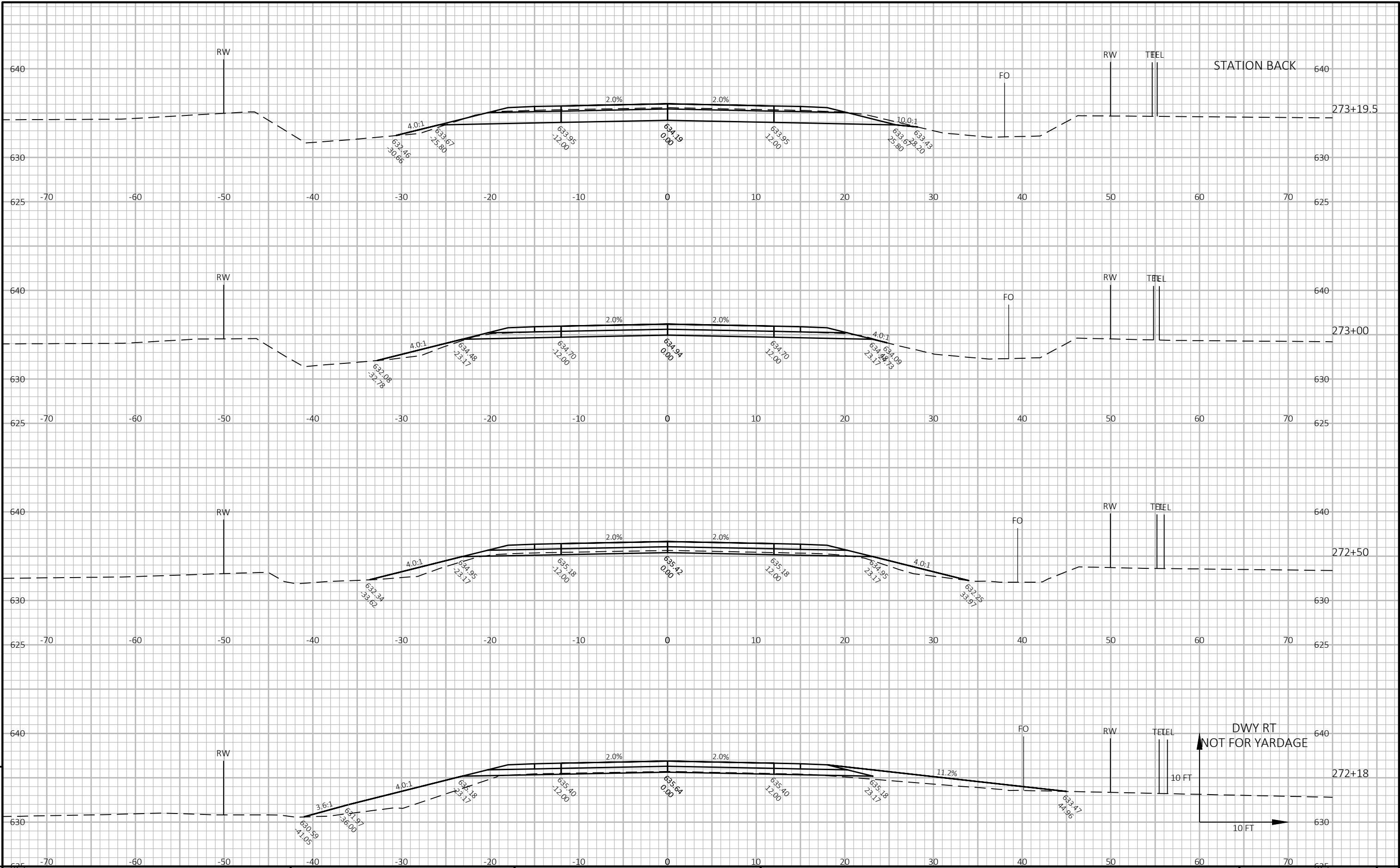
9

9



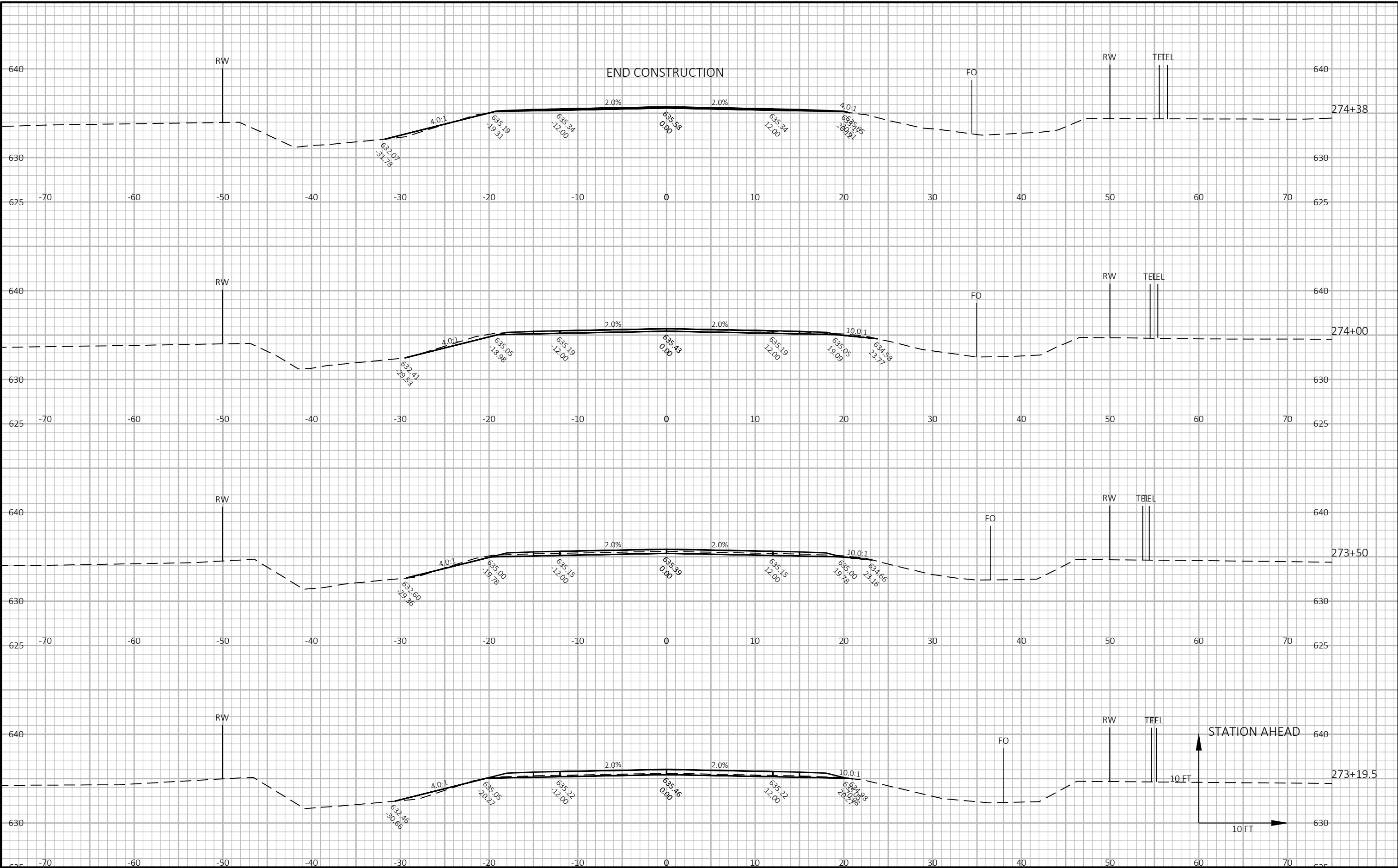






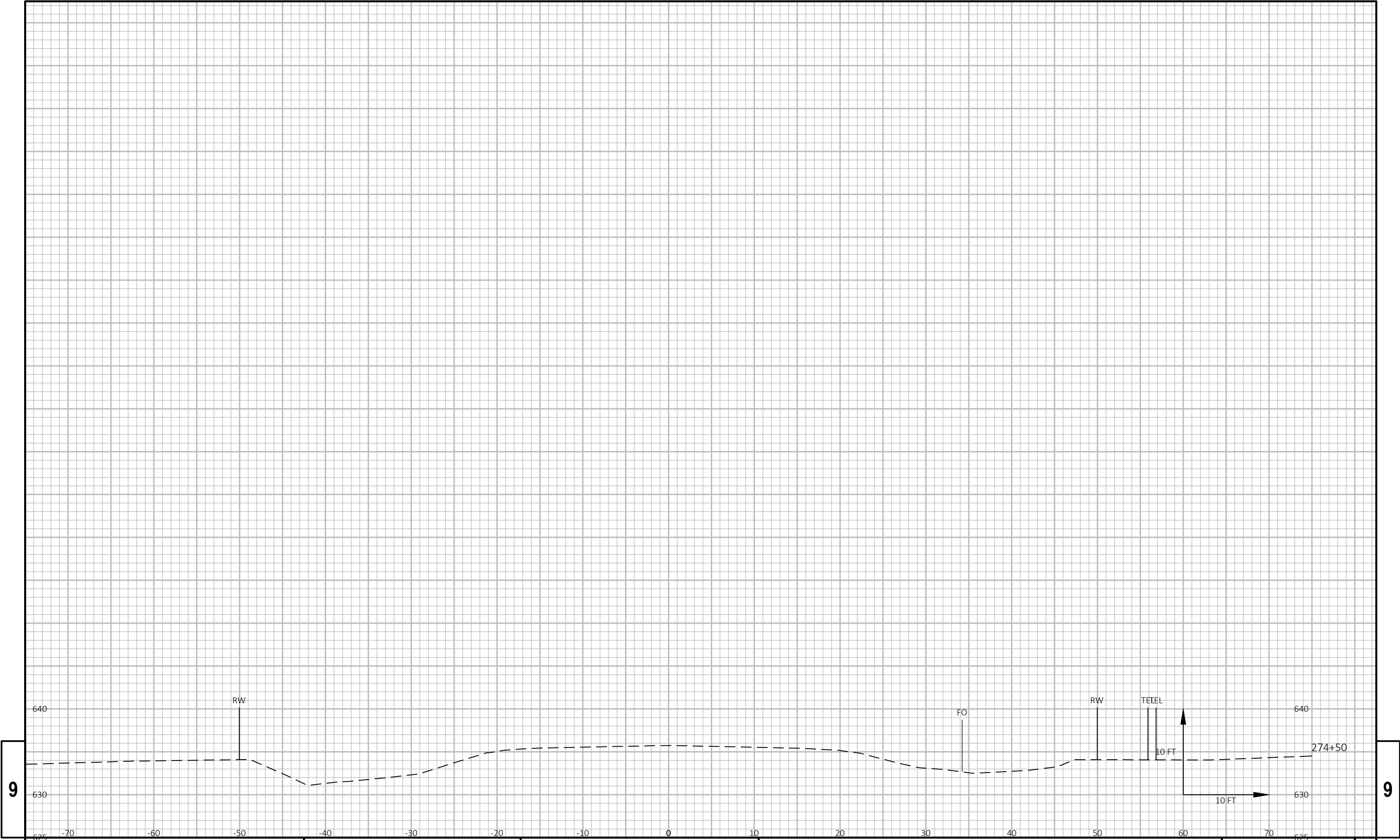
9

9



9

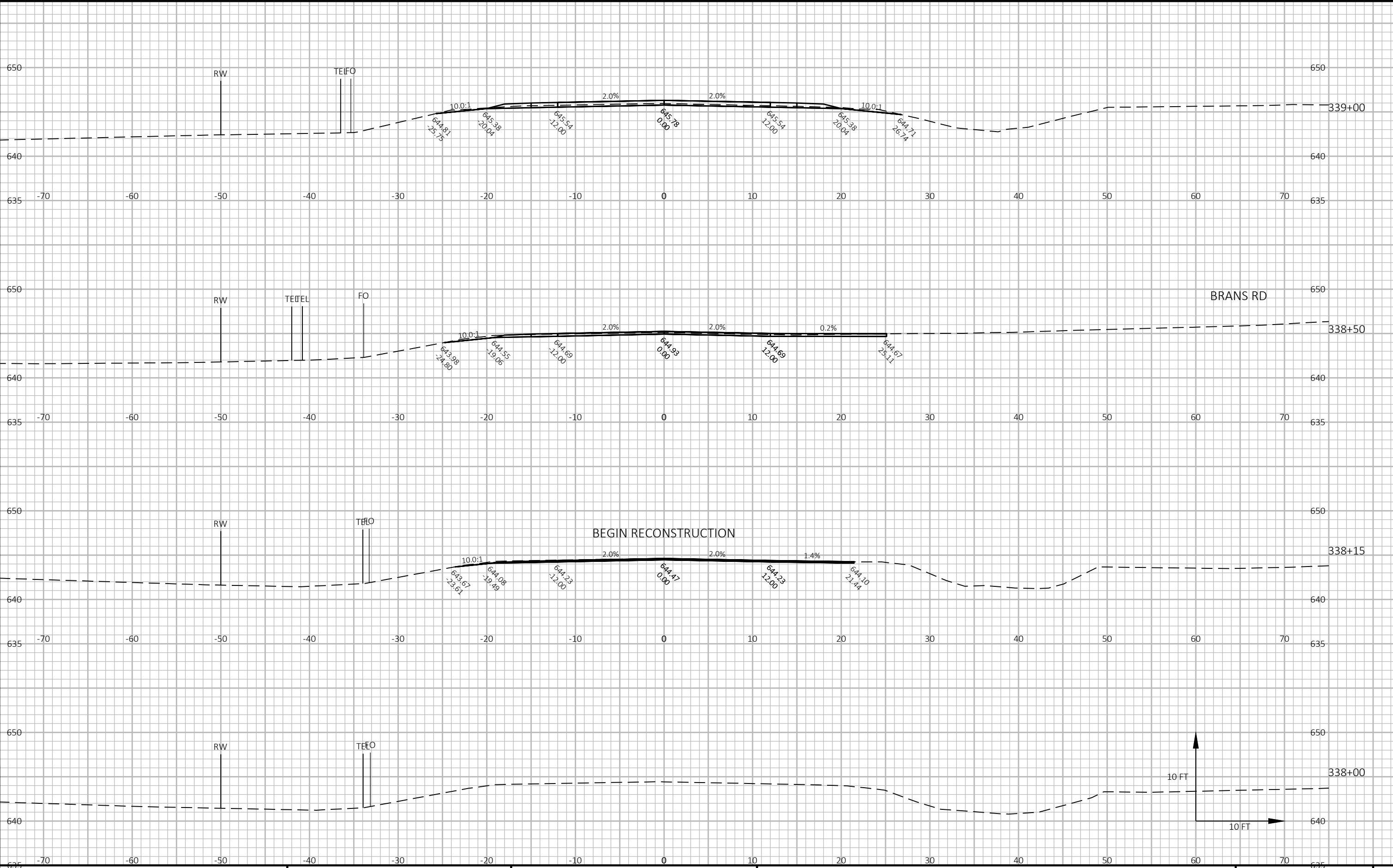
9



9

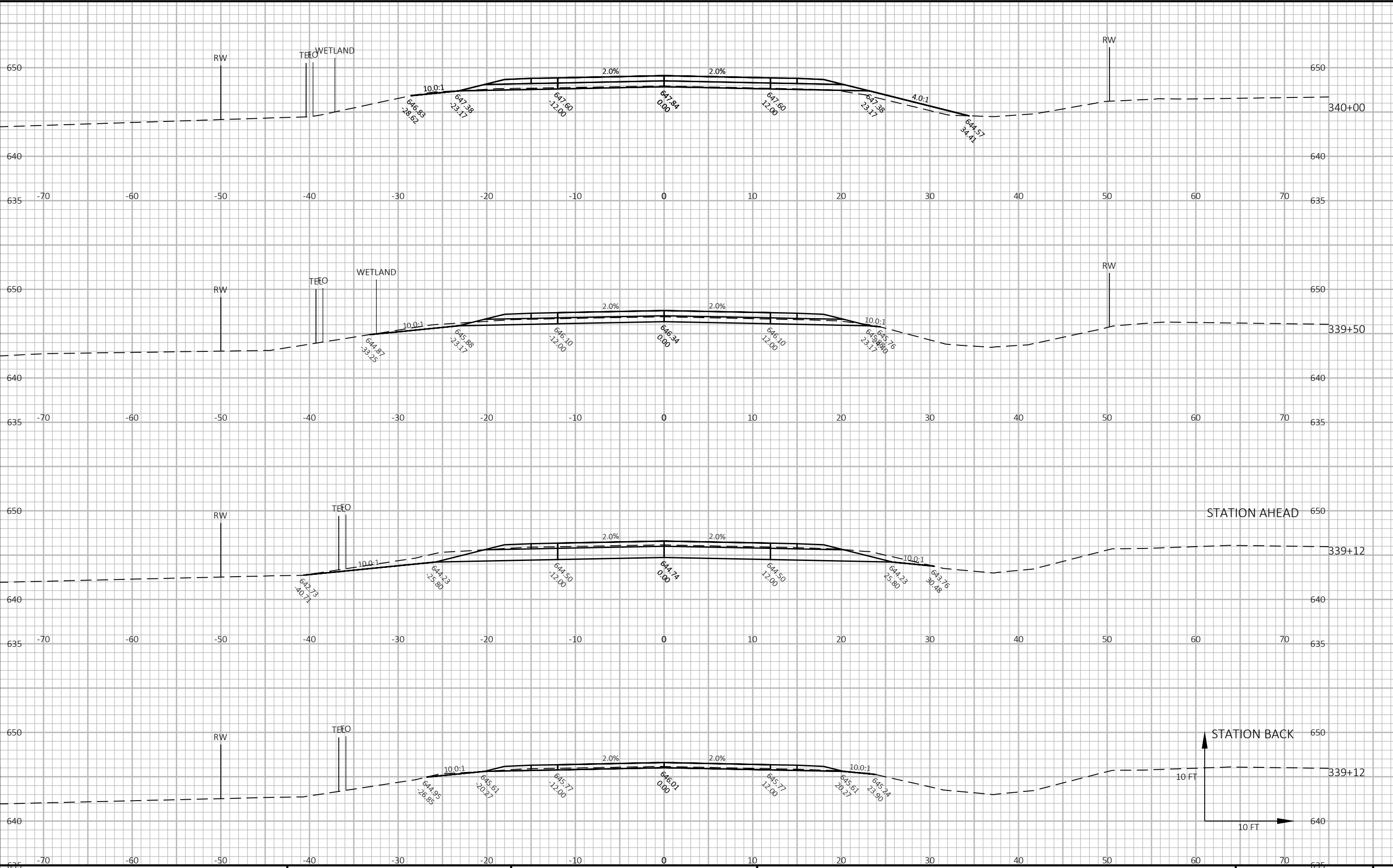
9

PROJECT NO: 4430-22-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: PIPE CULVERT STA 271+63	SHEET	E
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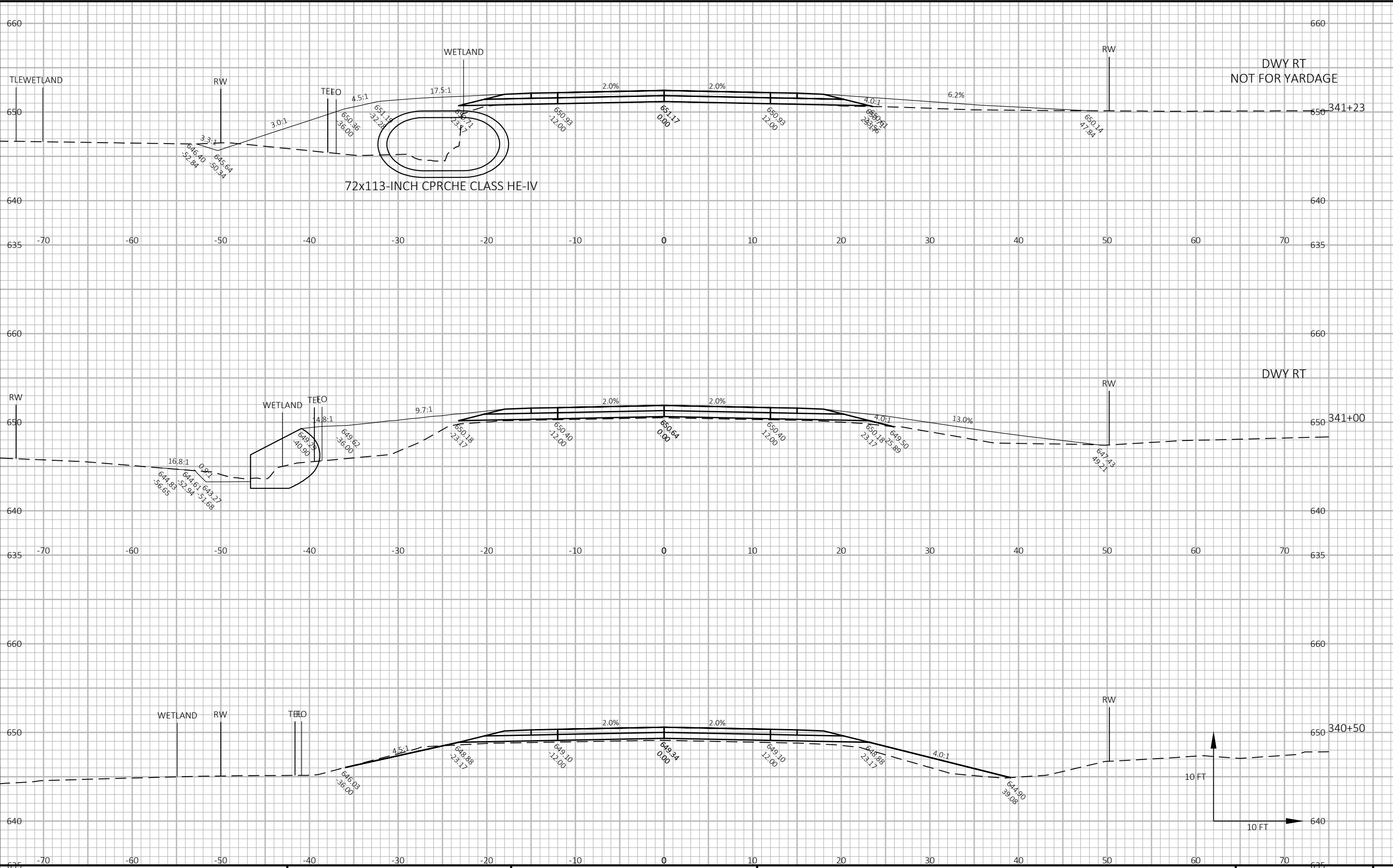
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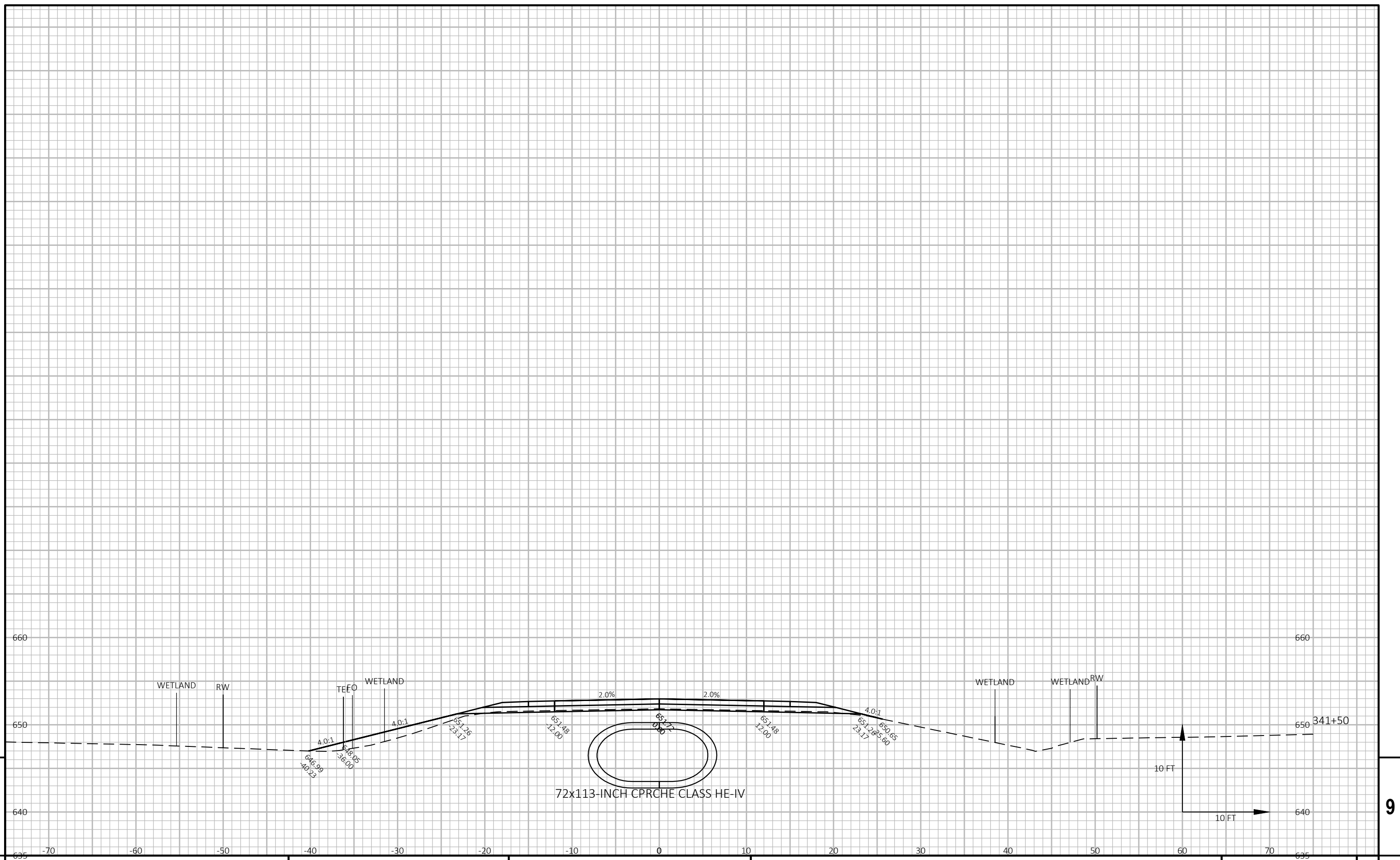
9

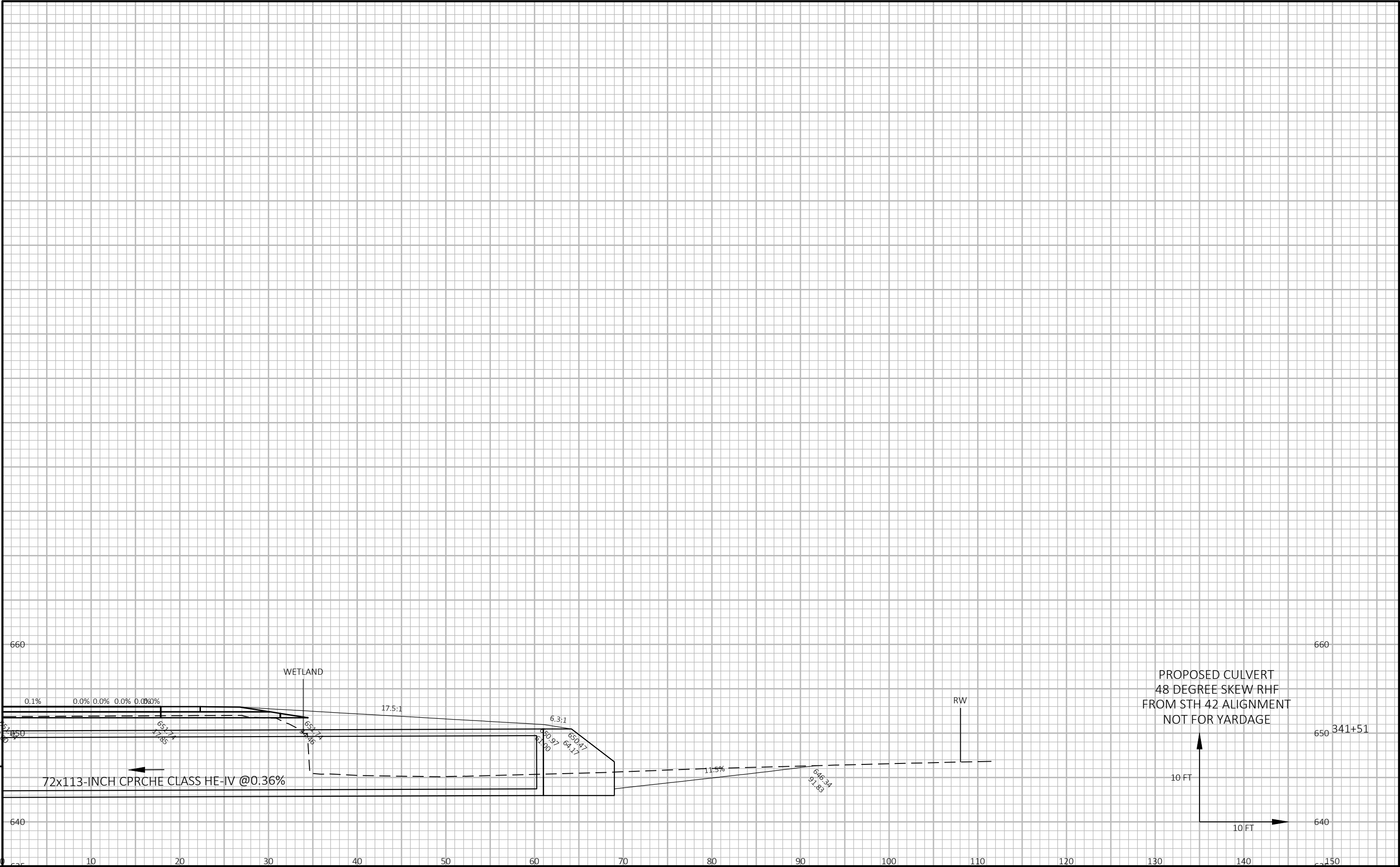


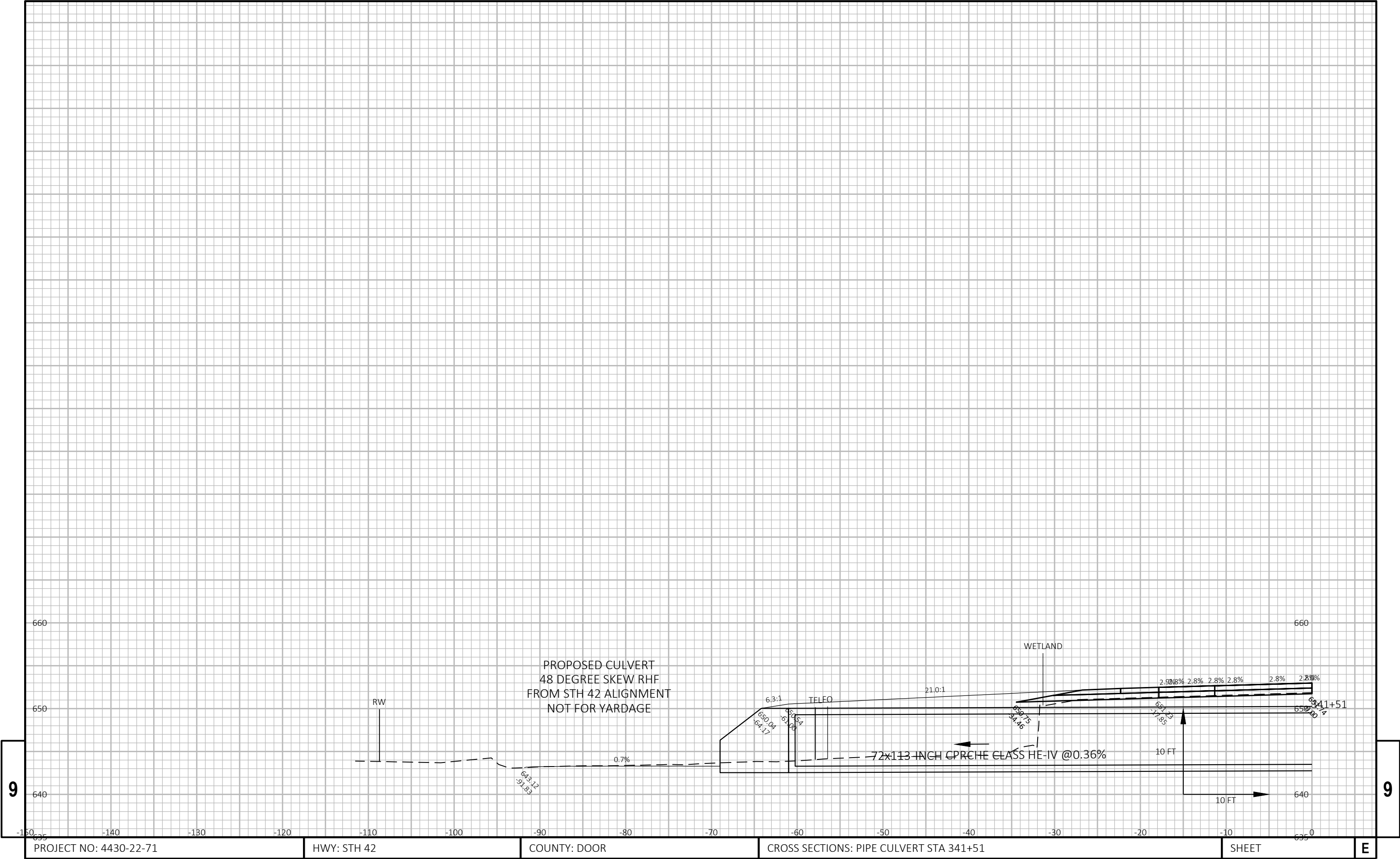
9

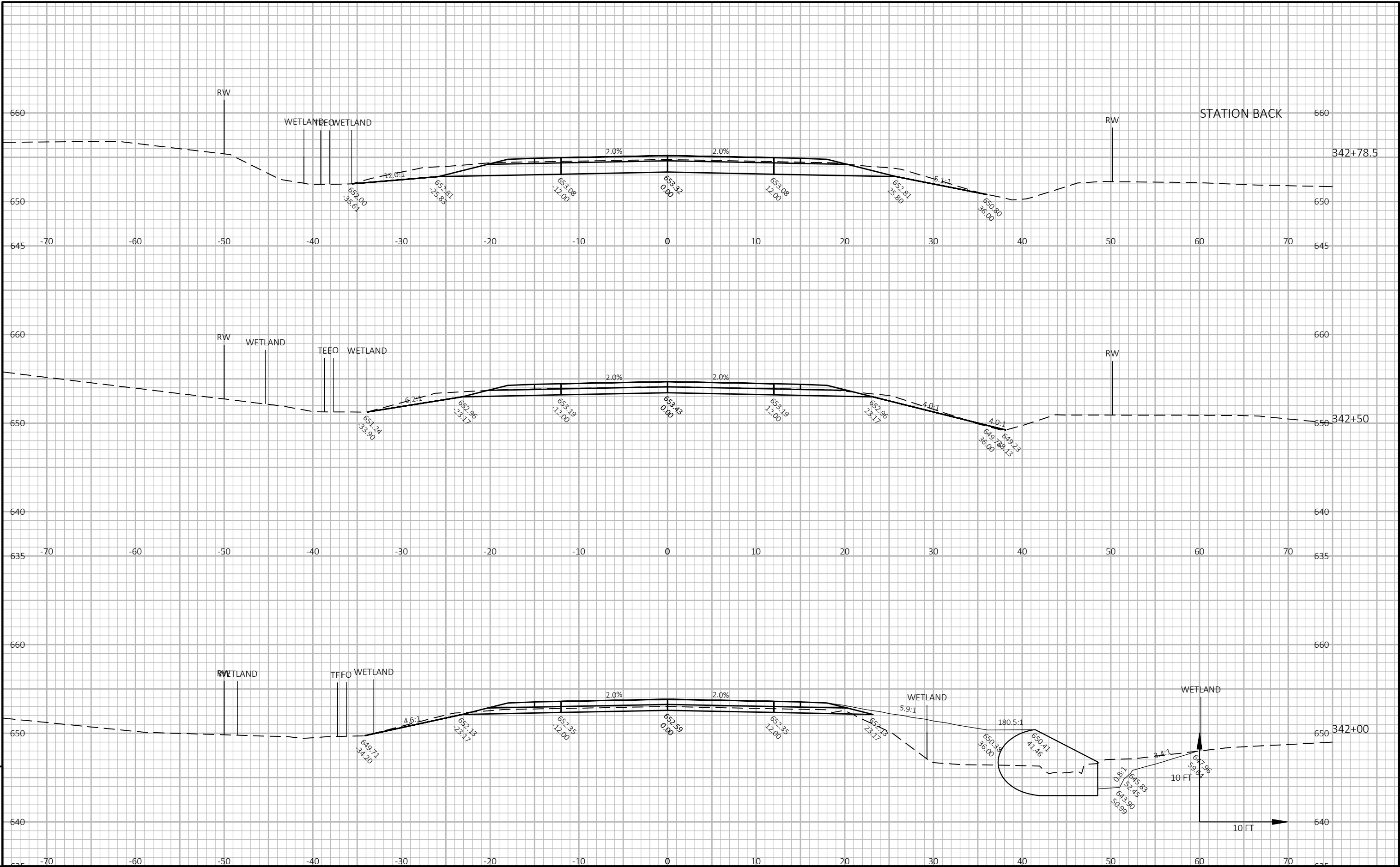
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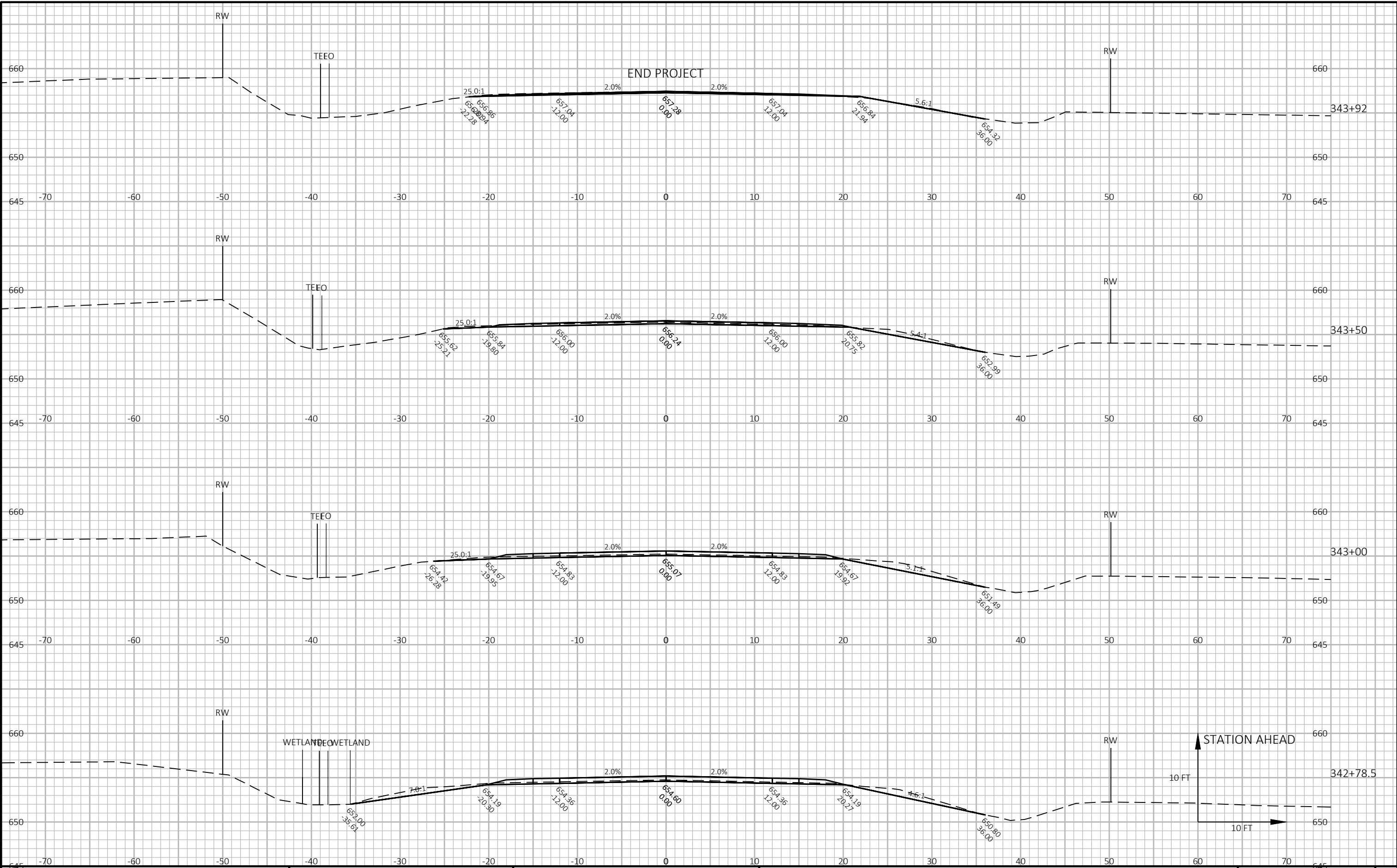






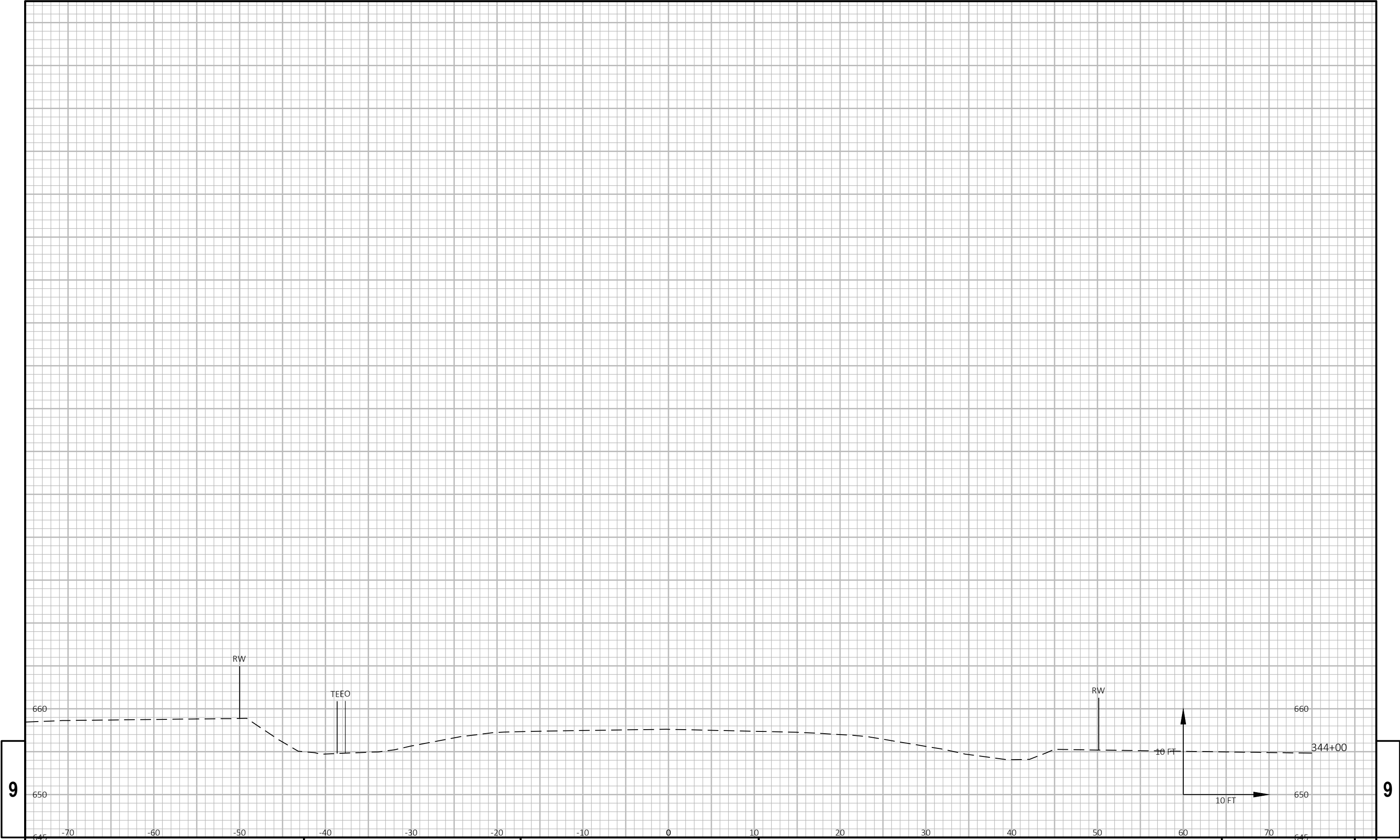






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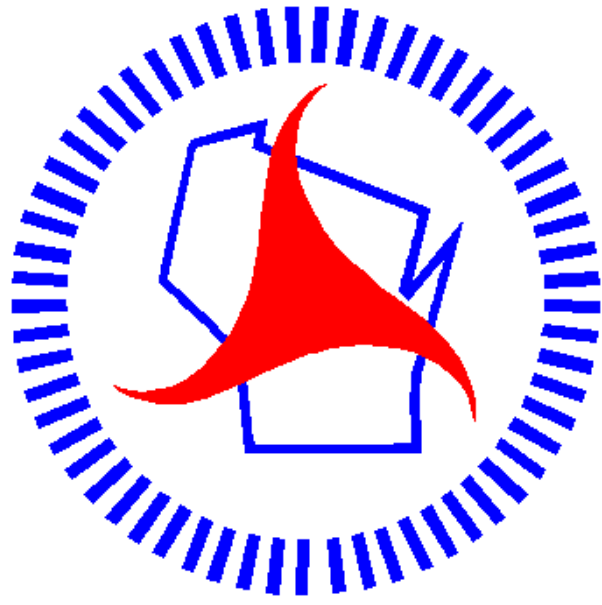


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PROJECT NO: 4430-22-71	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: PIPE CULVERT STA 341+51	SHEET	E
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Notes



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