

SUP
PROJECT ID:
WITH: N/A

8520-01-75

26

COUNTY:
SAWYER

JANUARY 2024

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 (Includes Erosion Control Plan)
Section No.	6	Standard Detail Drawings
Section No.	7	Sign Plates
Section No.	8	Structure Plans
Section No.	8	Computer Earthwork Data
Section No.	9	Cross Sections

TOTAL SHEETS = 68

PROJECT LOCATION



DESIGN DESIGNATION

A.A.D.T. (2025)	=	11,130
A.A.D.T. (2045)	=	13,740
D.H.V.	=	1,415
D.D.	=	60/40
T.	=	77%
DESIGN SPEED	=	35 MPH, 55 MPH
ESALS	=	2,790,000

CONVENTIONAL SYMBOLS

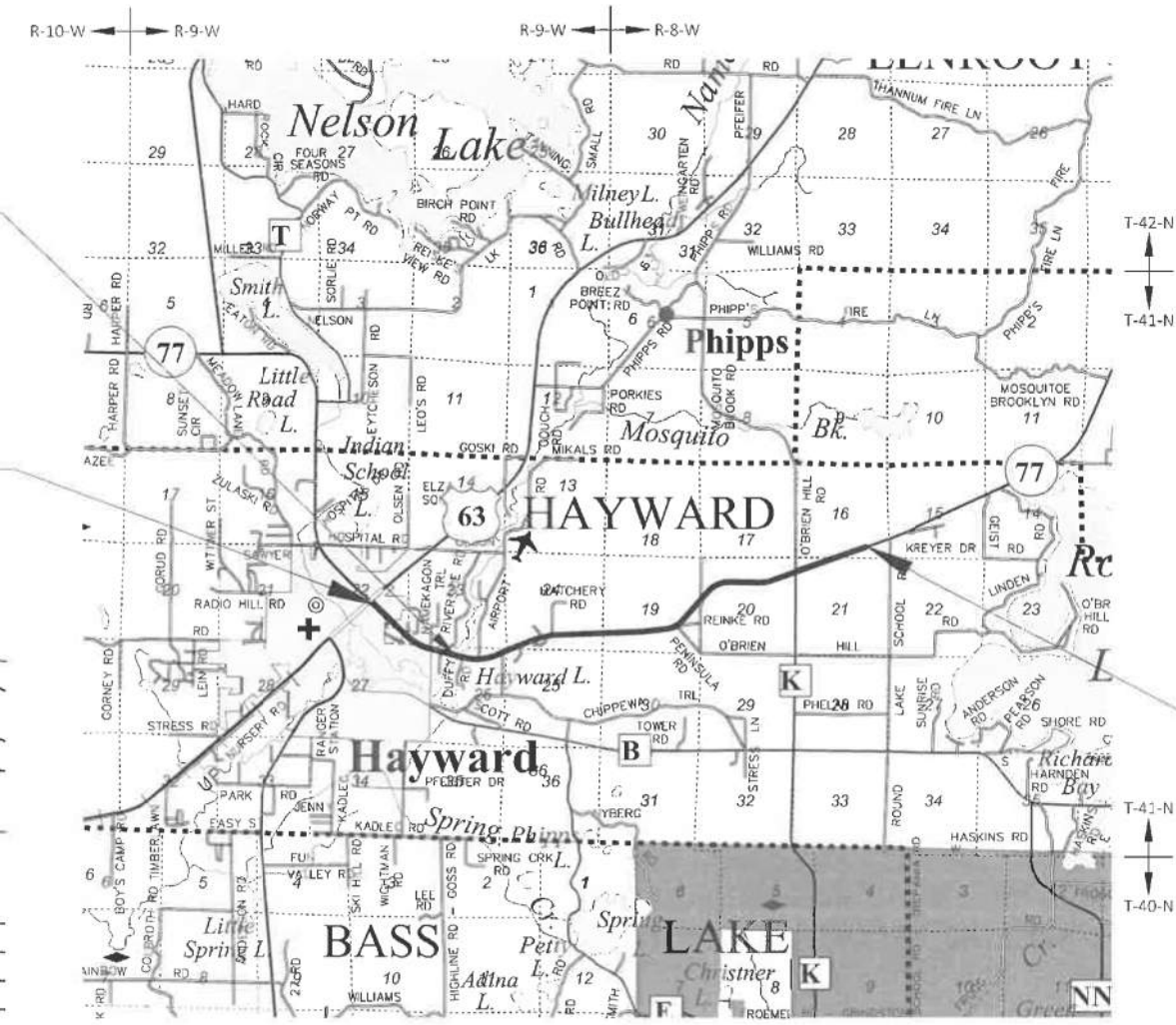
PLAN	
CORPORATE LIMITS	
PROPERTY LINE	
LOT LINE	
LIMITED HIGHWAY EASEMENT	
EXISTING RIGHT OF WAY	
PROPOSED OR NEW R/W LINE	
SLOPE INTERCEPT	
REFERENCE LINE	
EXISTING CULVERT	
PROPOSED CULVERT (Box or Pipe)	
COMBUSTIBLE FLUIDS	
MARSH AREA	
WOODED OR SHRUB AREA	

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	
OVERHEAD	
SANITARY SEWER	
STORM SEWER	
TELEPHONE	
WATER	
UTILITY PEDESTAL	
POWER POLE	
TELEPHONE POLE	

NET EXEMPTION TO C/L LENGTH
STA 266+29 TO STA 267+85
STRUCTURE B-57-061

BEGIN PROJECT
STA 211+06.64
Y= 439,491.425
X= 619,822.376



LAYOUT
SCALE 0 2 MI.
TOTAL NET LENGTH OF CENTERLINE = 5.670 MI.

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

HAYWARD - CLAM LAKE

USH 63 TO CTH K

STH 77

SAWYER COUNTY

STATE PROJECT NUMBER

8520-01-75

STATE PROJECT

8520-01-75

FEDERAL PROJECT

PROJECT

WISC 2024132

CONTRACT

1

ORIGINAL PLANS PREPARED BY

CORRE
ENGINEERING

MADISON | EAU CLAIRE | WAUKESHA | APPLETON | TOMAH | WAUSAU

DATE: _____ (Professional Engineer Signature)



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	WISDOT
Surveyor	CORRE INC
Designer	TYSON PELKOEFER, PE
Project Manager	TOU YANG, PE
Regional Examiner	TARA WEISS, PE
Regional Supervisor	

APPROVED FOR THE DEPARTMENT
DATE: _____
Tyson Pelkofer
(Signature)

E

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.

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

CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS AT ALL TIMES.

CONTRACTOR SHALL MAINTAIN TRAFFIC ON STH 77 WHILE INSTALLING CULVERTS.

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

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

3.25 INCH HMA PAVEMENT TYPE 5 MT 58-34 V, SHALL BE CONSTRUCTED WITH 1.5 INCH UPPER LAYER AND 1.75 INCH LOWER LAYER.

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

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

NO TREES OR SHRUBS ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.

REMOVING THE EXISTING APRON ENDWALLS AND FOR DISPOSING OF THE EXISTING APRON ENDWALLS SHALL BE INCIDENTAL TO THE APRON ENDWALLS FOR CULVERT PIPE ITEMS.

UNDER THE ASPHALTIC SURFACE BID ITEM, FURNISH ASPHALTIC MIXTURE MEETING THE REQUIREMENT FOR 4 MT 58-34 S, OR GREATER, UNDER STANDARD SPEC 460.2. THE ENGINEER WILL NOT REQUIRE THE CONTRACTOR TO CONFORM TO THE QUALITY MANAGEMENT PROGRAM SPECIFIED IN STANDARD SPEC 460.2.8.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
TYPICAL SECTIONS
CONSTRUCTION DETAILS
PAVEMENT MARKING

UTILITY CONTACTS

COMMUNICATIONS

LUMEN
BRIAN HUHN
PO BOX 78
HAWKINS, WI 54530
PHONE: (608) 615-7347
PHONE (MOBILE): (715) 563-8294
EMAIL: BRIAN.HUHN@LUMEN.COM

ELECTRICITY

JUMP RIVER ELECTRIC COOPERATIVE
KURT HARRIS
1102 W 9TH ST N
LADYSMITH, WI 54848
PHONE: (715) 532-5524
PHONE (MOBILE): (715) 827-0146
EMAIL: KHARRIS@JREC.COM

GAS/PETROLEUM

WE ENERGIES
STEVEN CHAVERS
104 W SOUTH ST
RICE LAKE, WI 54868
PHONE: (715) 234-9605
PHONE (MOBILE): (715) 213-4327
EMAIL: STEVEN.CHAVERS@WE-ENERGIES.COM

COMMUNICATIONS

SPECTRUM
JAMEY OLDEEN
2304 S MAIN STREET
RICE LAKE, WI 54868
PHONE: (715) 719-0561
PHONE (MOBILE): (715) 651-7488
EMAIL: JAMEY.OLDEEN@CHARTER.COM

ELECTRICITY

XCEL ENERGY - ELECTRIC
ERIN PETERSON
2400 FARM RD
ASHLAND, WI 54806
PHONE (MOBILE): (715) 220-1837
EMAIL: ERIN.J.PETERSON@XCELENERGY.COM

SEWER

CITY OF HAYWARD
JOHN MCCUE
PO BOX 969
HAYWARD, WI 54843
PHONE: (715) 634-4612
PHONE (MOBILE): (715) 699-4612
EMAIL: PW3@CENTURYTEL.NET

COMMUNICATIONS

NORVADO
GUY FOLSOM
43705 US HWY 63
CABLE, WI 54821
PHONE: (715) 798-7123
PHONE (MOBILE): (715) 580-8123
EMAIL: GFOLSOM@NORVADO.COM

ELECTRIC - TRANSMISSION

XCEL ENERGY - TRANSMISSION
MITCHELL DIENGER
414 NICOLLET MALL, 5TH FLOOR
MINNEAPOLIS, MN 55401
PHONE: (612) 321-3109
PHONE (MOBILE): (608) 386-2233
EMAIL: MITCHELL.A.DIENGER@XCELENERGY.COM

WATER

CITY OF HAYWARD
JOHN MCCUE
PO BOX 969
HAYWARD, WI 54843
PHONE: (715) 634-4612
PHONE (MOBILE): (715) 699-4612
EMAIL: PW3@CENTURYTEL.NET

EMERGENCY CONTACT NEEDED FOR
GAS/PETROLEUM FROM WE ENEGIES

RUNOFF COEFFICIENT TABLE

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

TOTAL PROJECT AREA = - ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = - ACRES

DIGGERSHOTLINE

Dial 811 or (800)242-8511

www.DiggersHotline.com

CONSULTANT CONTACT

CORRE, INC.
1802 WARDEN STREET
EAU CLAIRE, WI 54703

ATTN: MR. KEVIN MEYER, P.E.
TELEPHONE: (715) 299-1894
E-MAIL: KMEYER@CORREINC.COM

DNR LIAISON

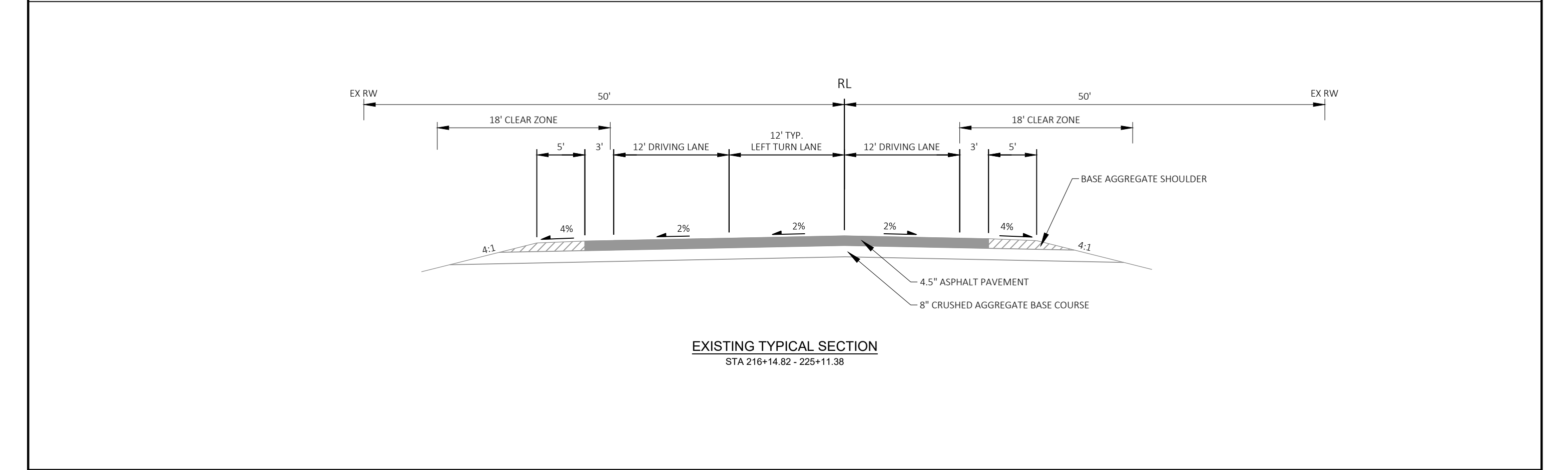
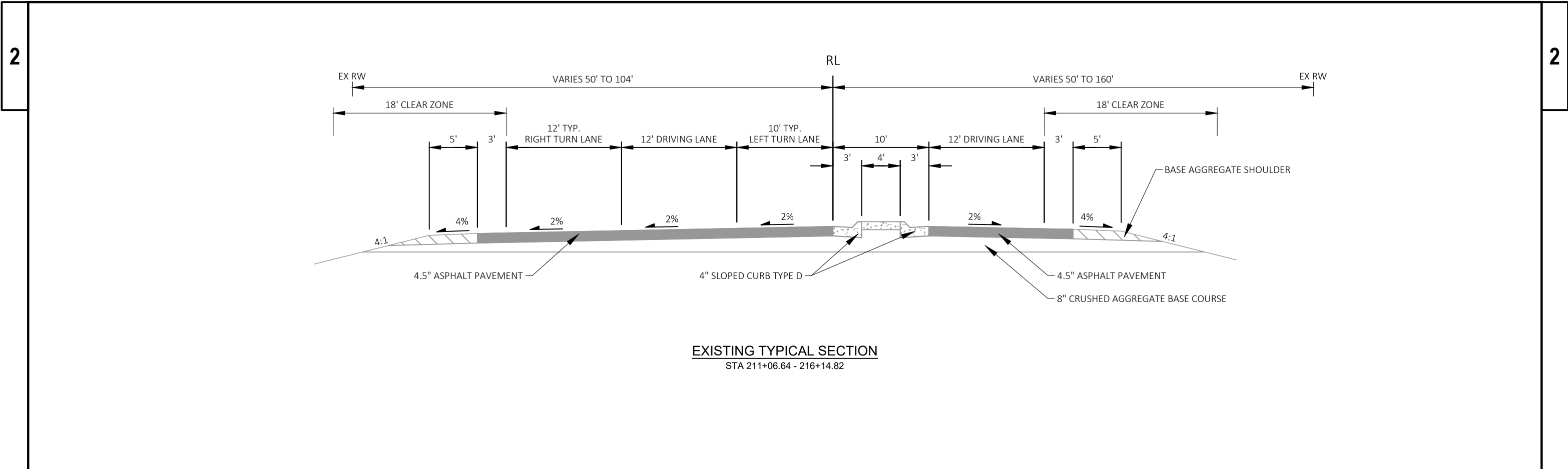
DEPARTMENT OF NATURAL RESOURCES
DNR NORTHERN REGION HEADQUARTERS
810 W MAPLE STREET
SPOONER, WI 54801

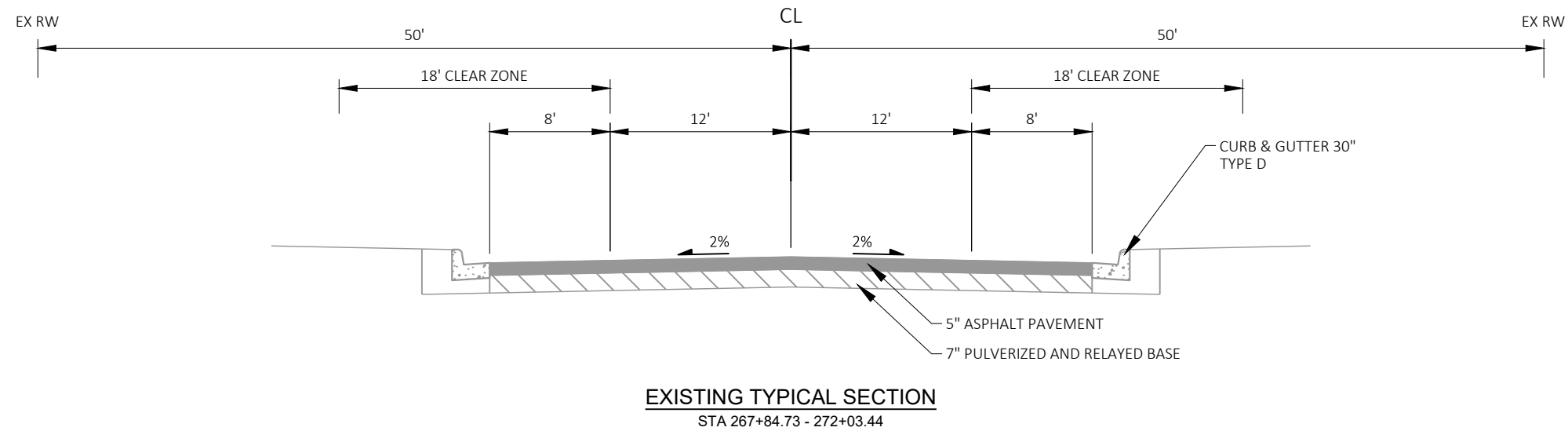
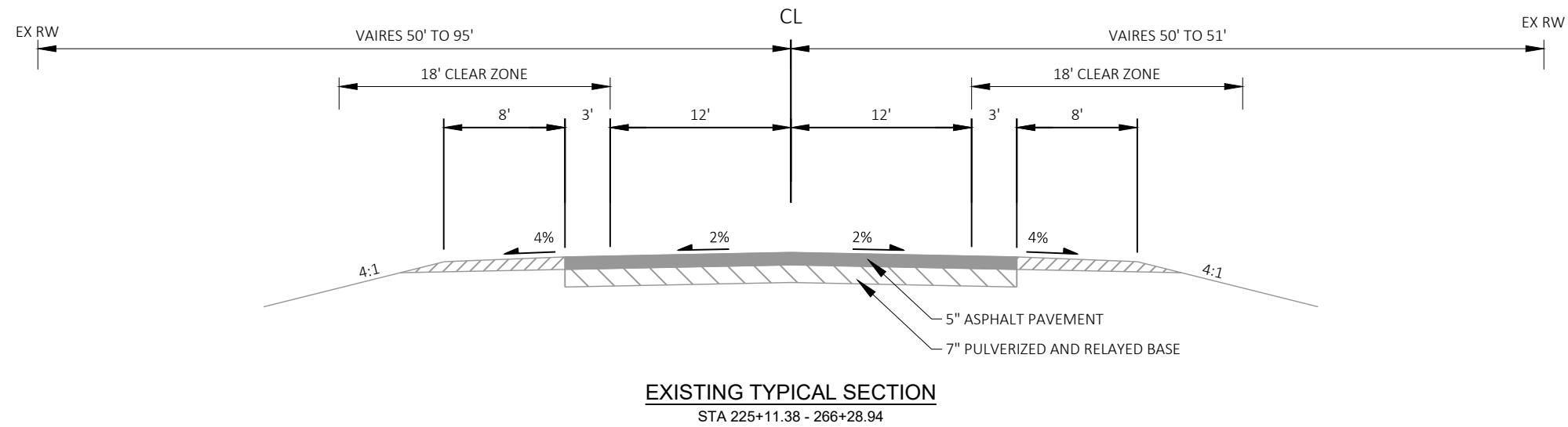
ATTN: MR. SHAWN HASELEU
TELEPHONE: (715) 635-4228
E-MAIL: SHAWN.HASELEU@WISCONSIN.GOV

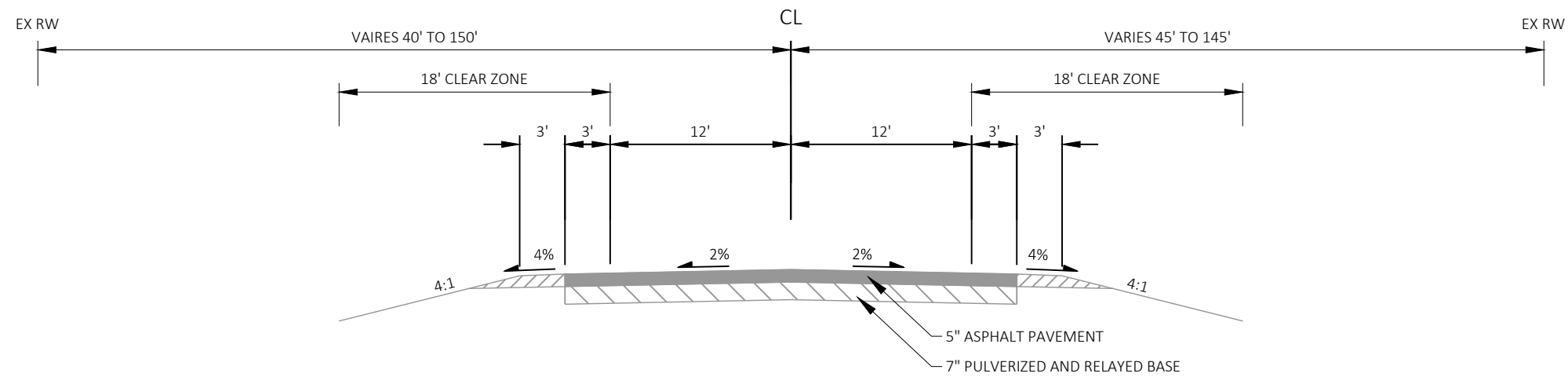
COUNTY CONTACT

SAWYER COUNTY HIGHWAY COMMISSIONER
GARY GEDART
14688 W COUNTY ROAD B
HAYWARD, WI 54843

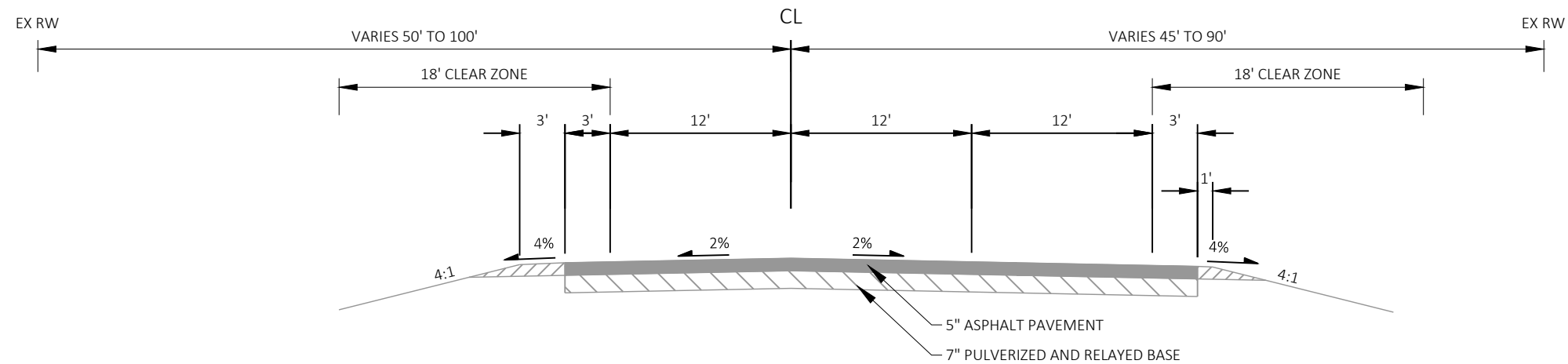
ATTN: MR. GARY GEDART
TELEPHONE: (715) 634-2691
E-MAIL: HIGHWAY@SAWYERCOUNTYGOV.ORG



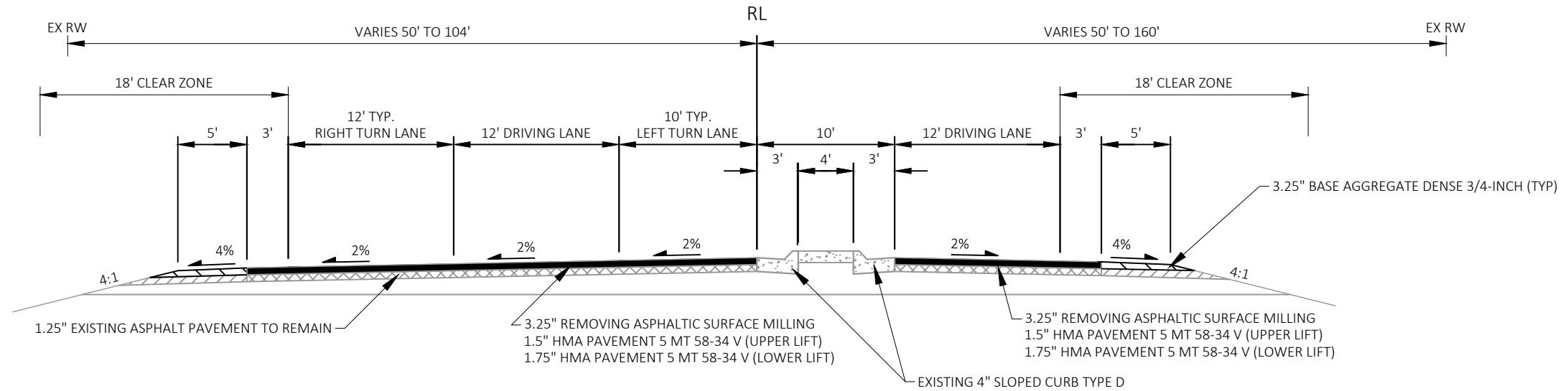




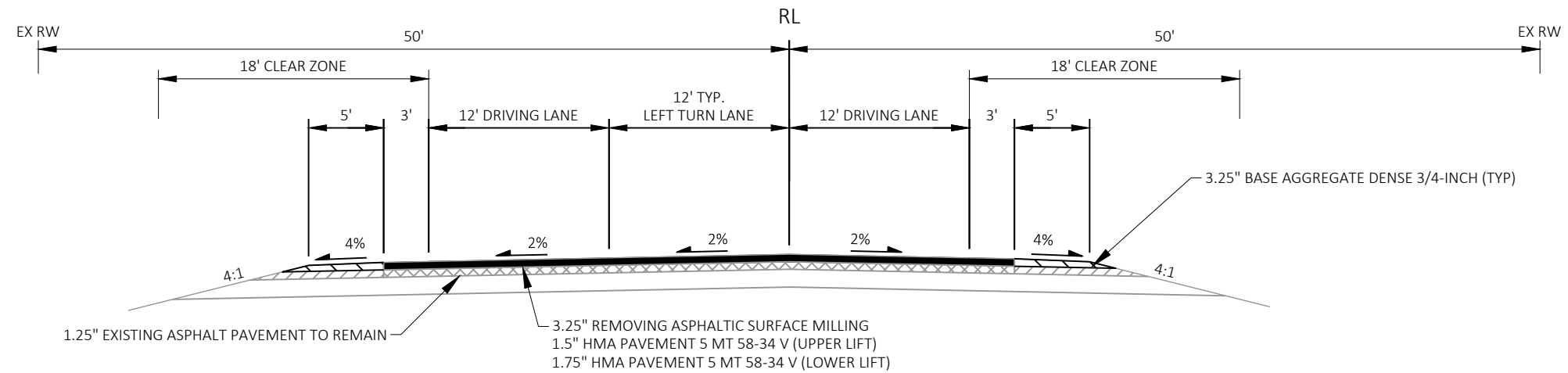
EXISTING TYPICAL SECTION
STA 272+03.44 - 328+47.66
STA 371+24.86 - 512+01.81



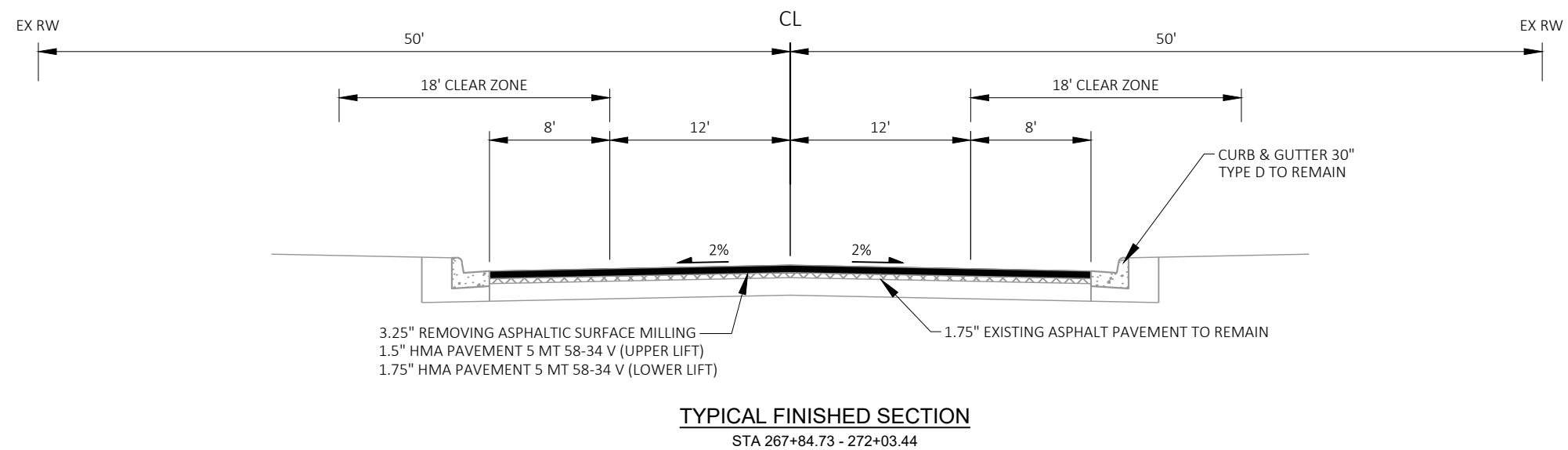
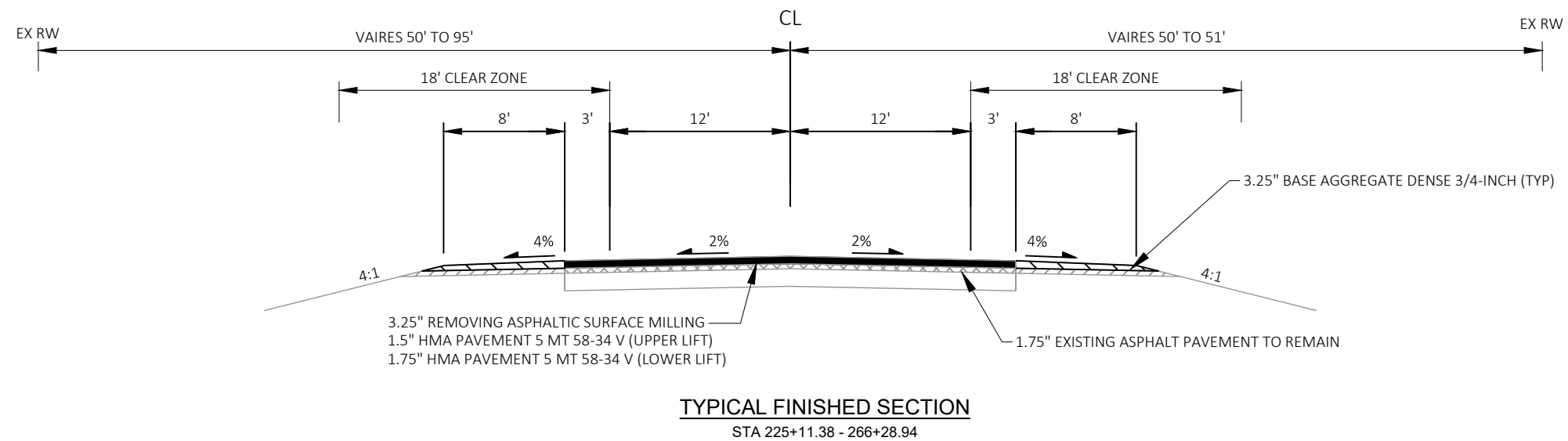
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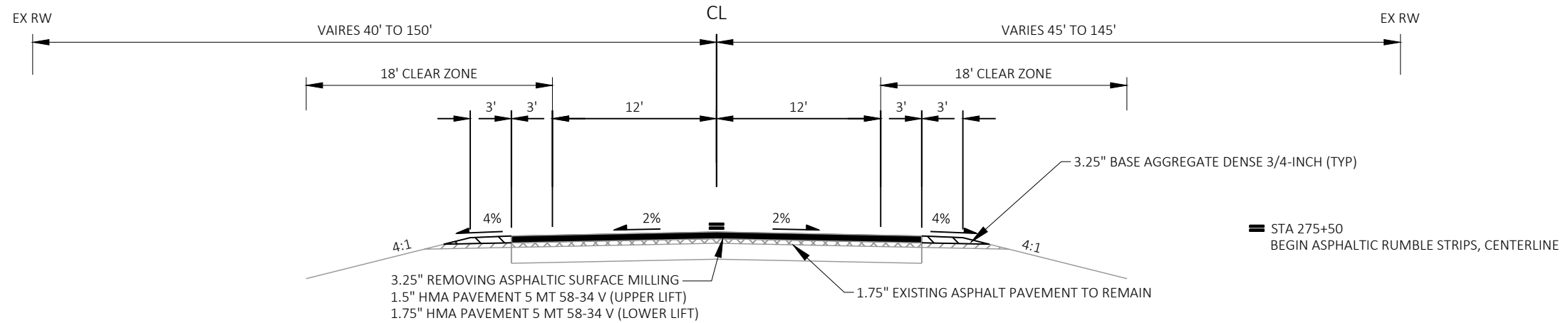


TYPICAL FINISHED SECTION
STA 211+06.64 - 216+14.82



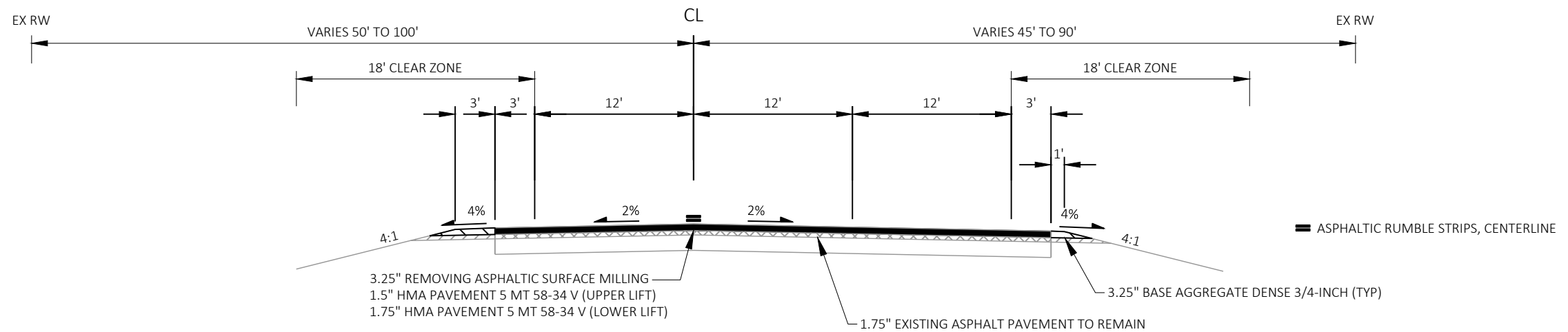
TYPICAL FINISHED SECTION
STA 216+14.82 - 225+11.38





TYPICAL FINISHED SECTION

STA 272+03.44 - 328+47.66
STA 371+24.86 - 512+01.81

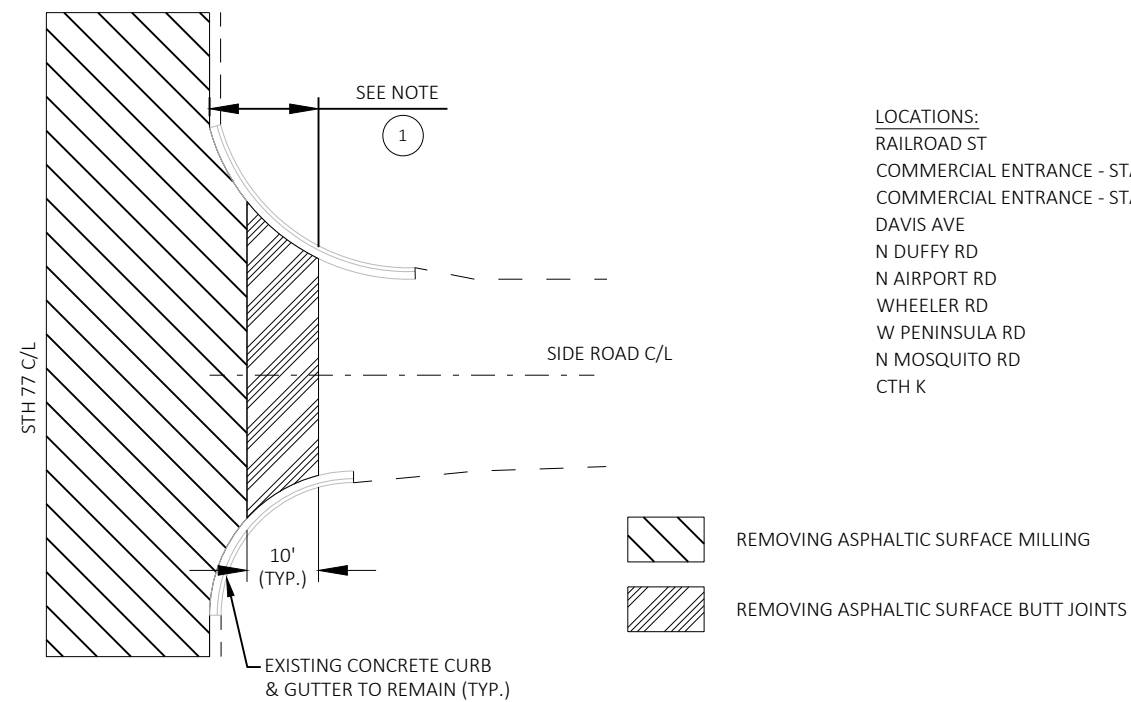


TYPICAL FINISHED SECTION

STA 328+47.66 - 371+24.86

NOTES:

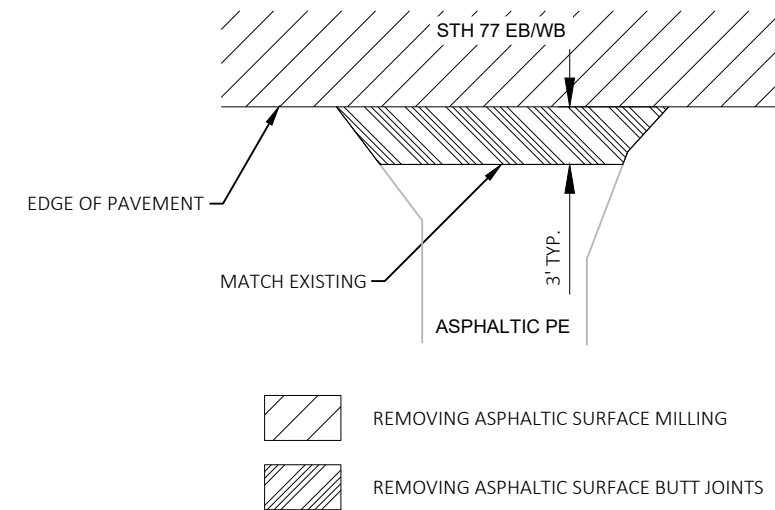
- 1) 20' (TYPICAL) OR AS DIRECTED BY THE ENGINEER.



**DETAIL OF PAVED SIDE ROAD
WITH CURB & GUTTER**

LOCATIONS:

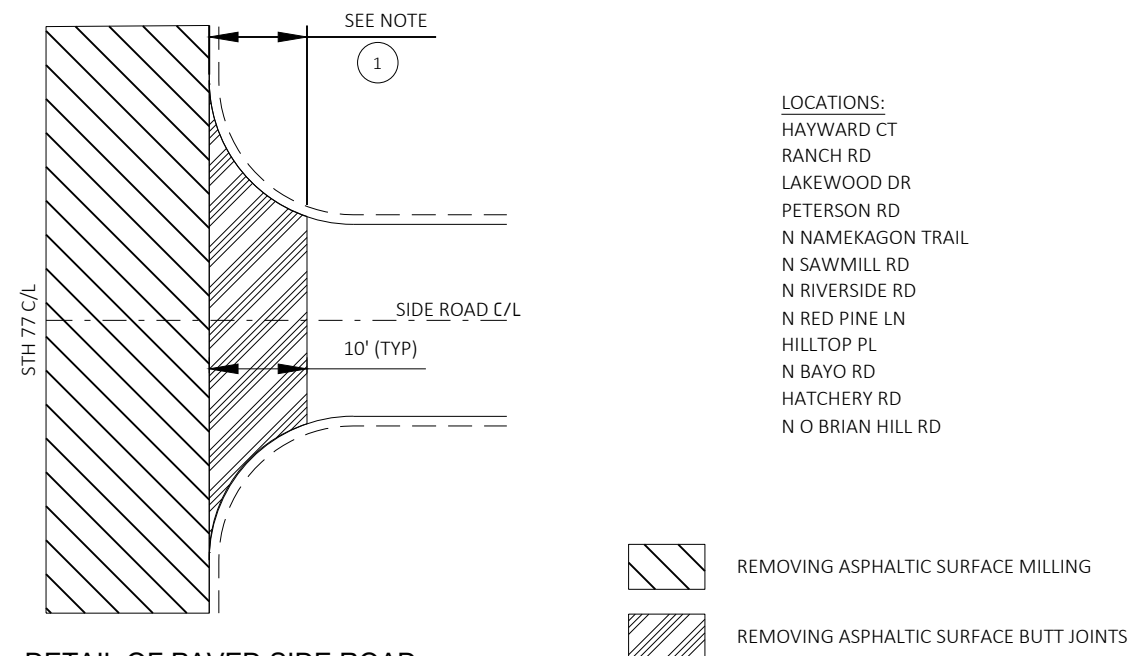
RAILROAD ST
COMMERCIAL ENTRANCE - STA 217+80
COMMERCIAL ENTRANCE - STA 225+00
DAVIS AVE
N DUFFY RD
N AIRPORT RD
WHEELER RD
W PENINSULA RD
N MOSQUITO RD
CTH K



ASPHALTIC PE DETAIL

NOTES:

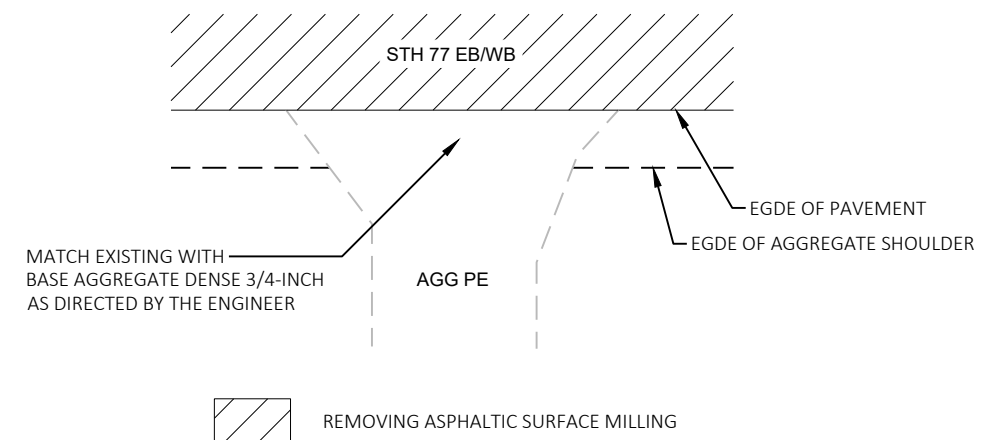
- 1) 10' (TYPICAL) OR AS DIRECTED BY THE ENGINEER.



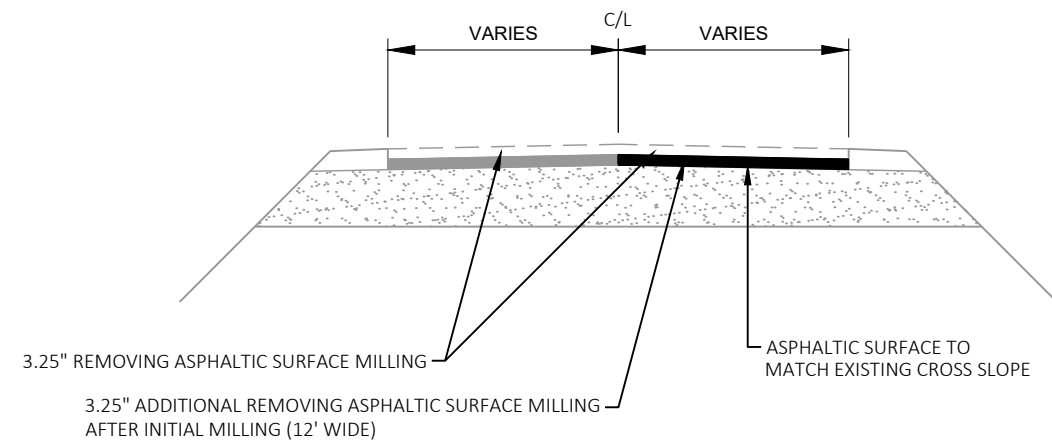
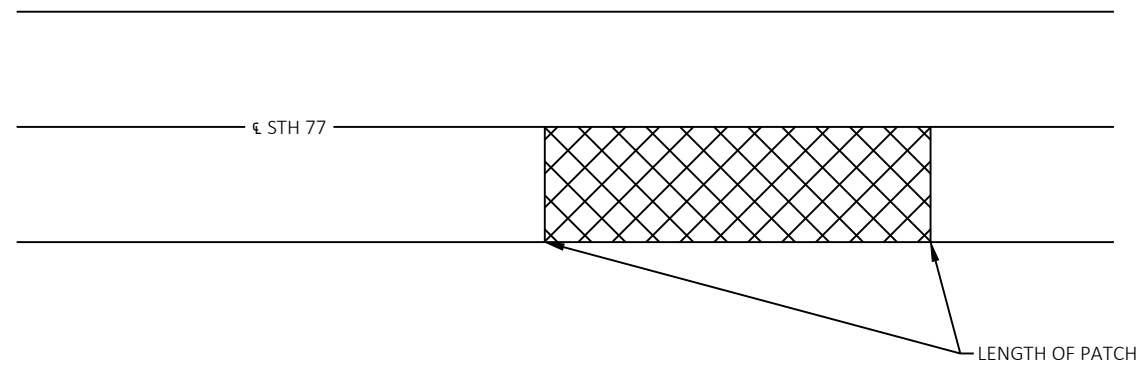
**DETAIL OF PAVED SIDE ROAD
WITH NO CURB & GUTTER**

LOCATIONS:

HAYWARD CT
RANCH RD
LAKEWOOD DR
PETERSON RD
N NAMEKAGON TRAIL
N SAWMILL RD
N RIVERSIDE RD
N RED PINE LN
HILLTOP PL
N BAYO RD
HATCHERY RD
N O BRIAN HILL RD

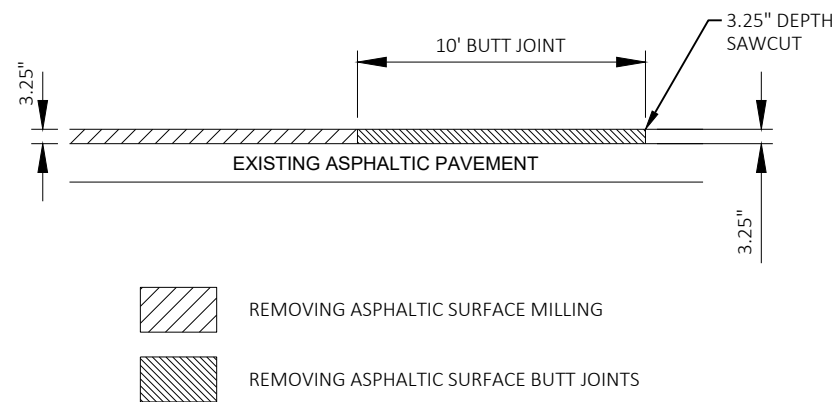


AGG PE DETAIL



ASPHALTIC BASE PATCH PARTIAL DEPTH

LOCATIONS TO BE DETERMINED BY ENGINEER IN THE FIELD



BUTT JOINT MAINLINE AND SIDEROADS

PROJECT NO: 8520-01-75

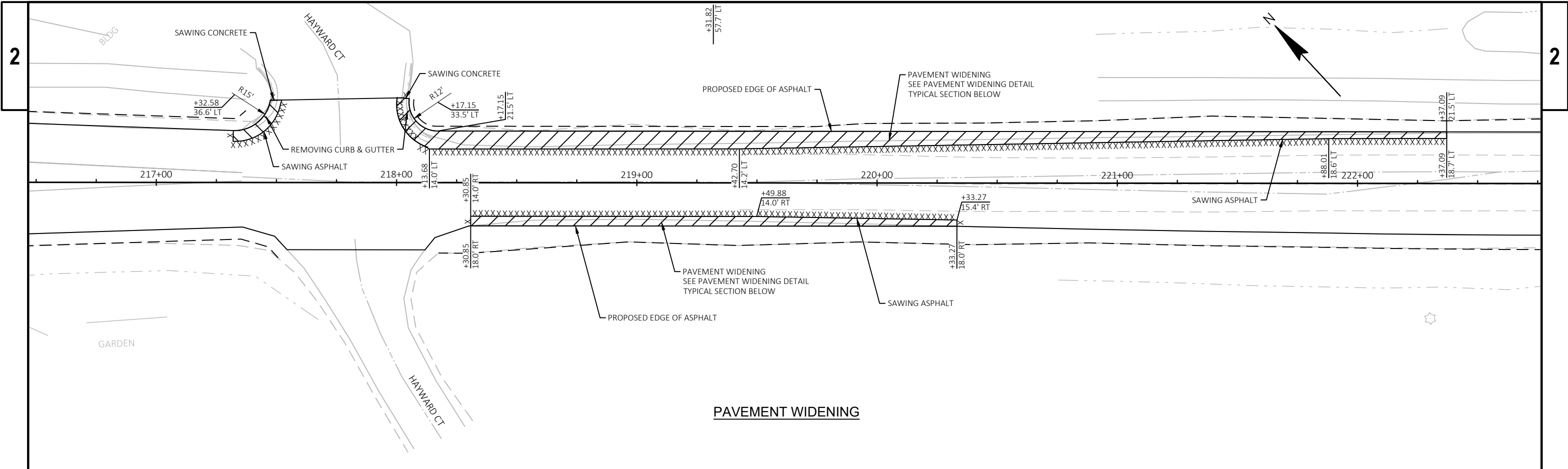
HWY: STH 77

COUNTY: SAWYER

CONSTRUCTION DETAILS

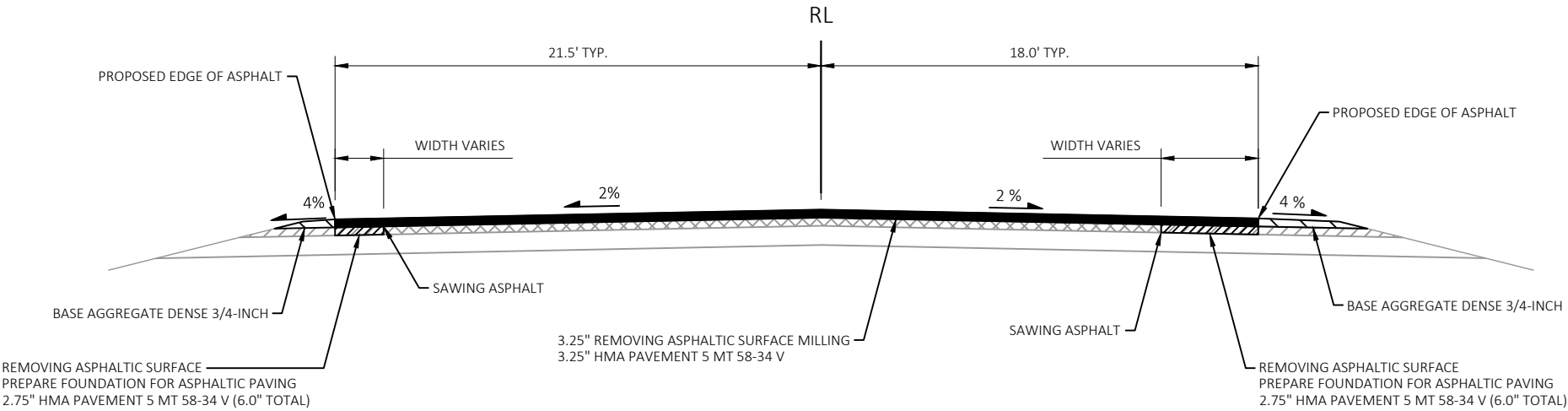
SHEET

E



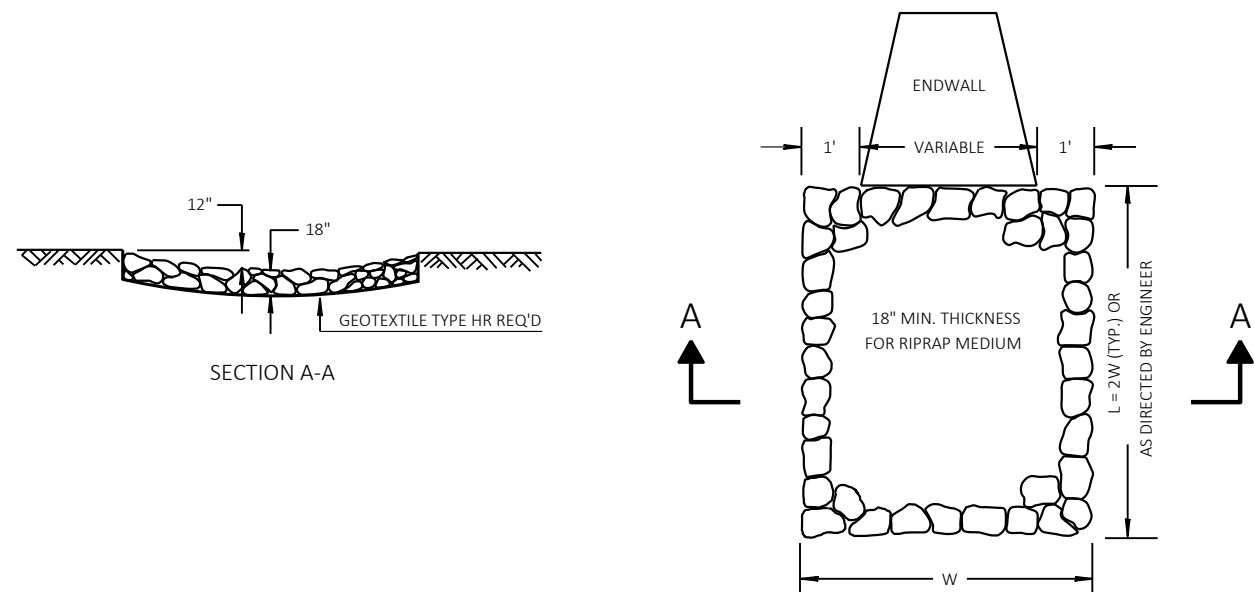
PAVEMENT WIDENING

NOTE:
2.75" HMA PAVEMENT 5 MT 58-34 V SHALL BE PAVED TO MATCH MILLED
SURFACE ELEVATION. 3.25" OVERLAY SHALL BE PLACED FOR ENTIRE PAVEMENT
AREA TO COVER UP THE PAVING JOINT CREATED IN THE WIDENED AREA.

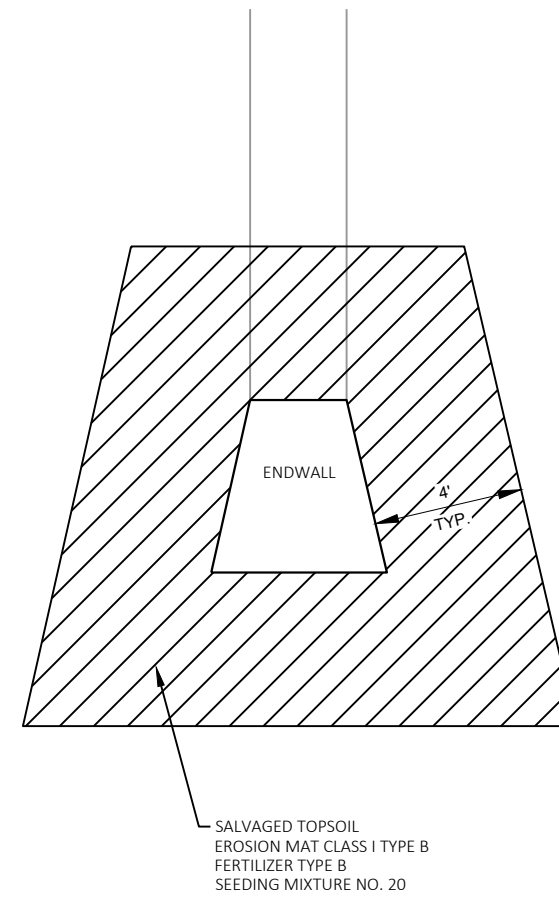


PAVEMENT WIDENING TYPICAL SECTION

PROJECT NO: 8520-01-75	HWY: STH 77	COUNTY: SAWYER	CONSTRUCTION DETAILS	SHEET	E
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RIPRAP TREATMENT AT CULVERTS

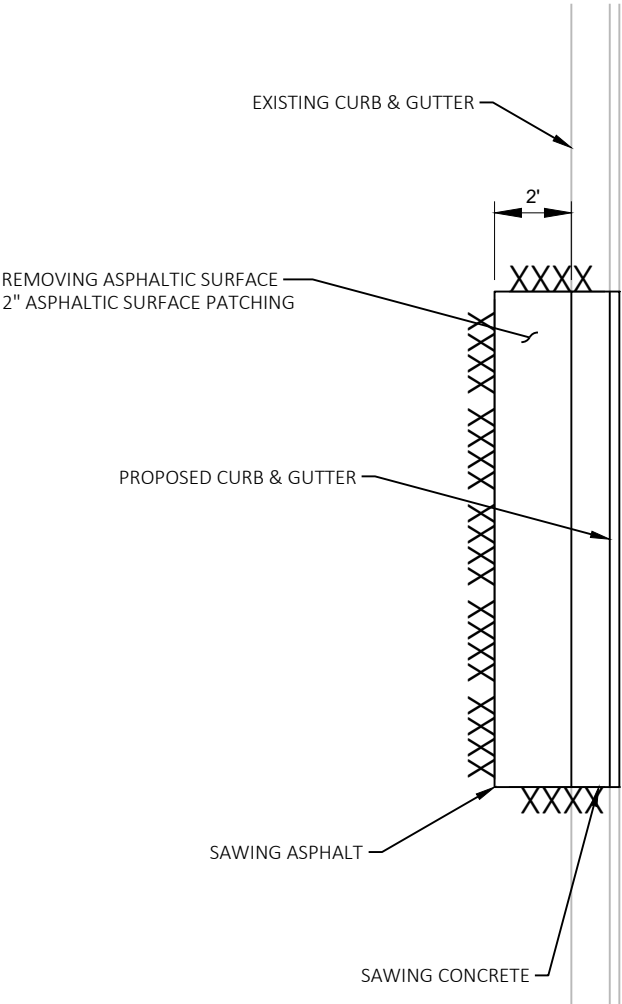


RESTORATION AT APRON ENDWALL REPLACEMENTS

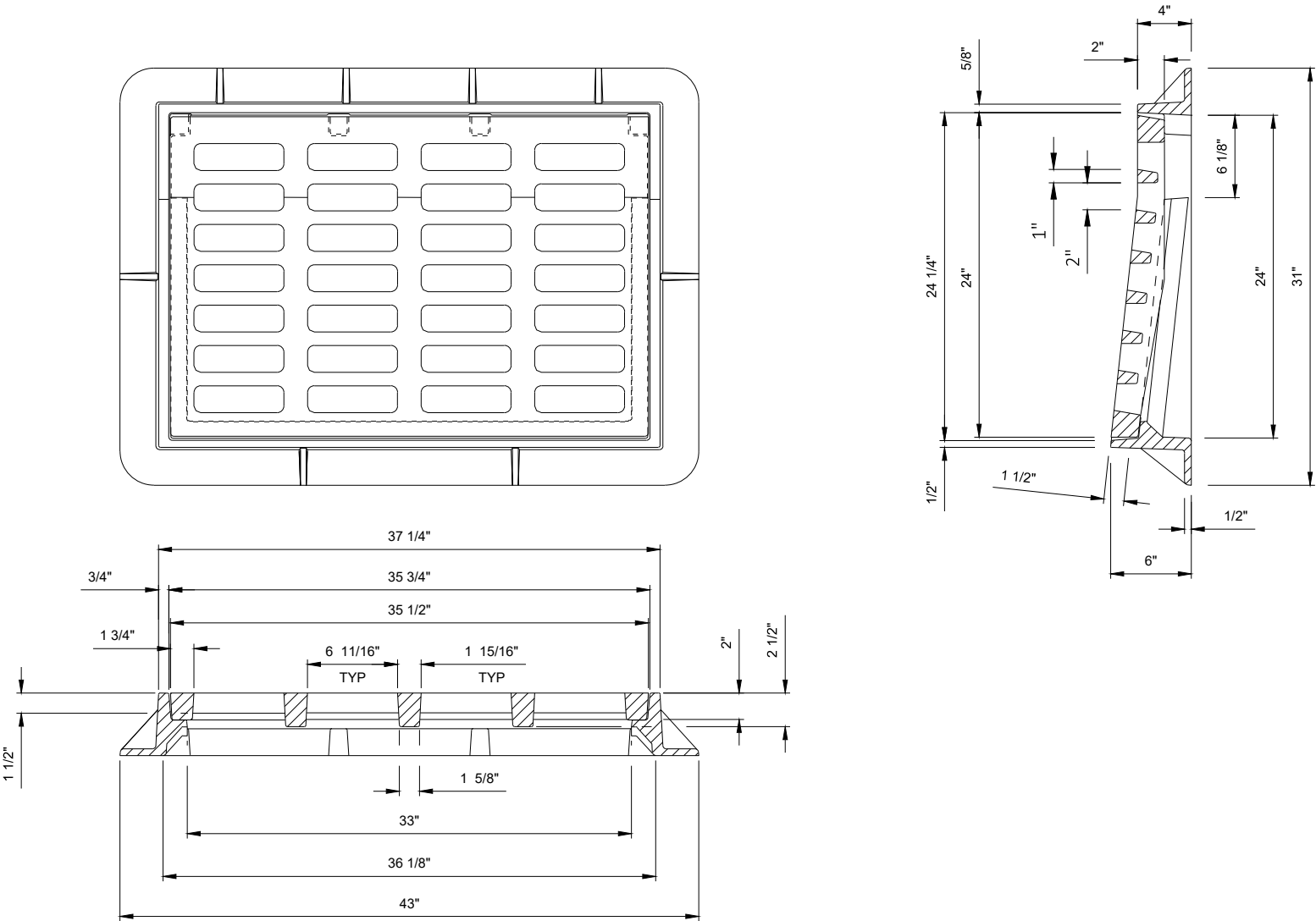
COMPLETE CURB & GUTTER AND ASPHALTIC SURFACE PATCHING BEFORE MILLING.

STA 269+00 - 270+26, CONCRETE CURB & GUTTER 30-INCH TYPE D, SEE PLAN DETAILS FOR DRIVEWAY CURB LOCATIONS.

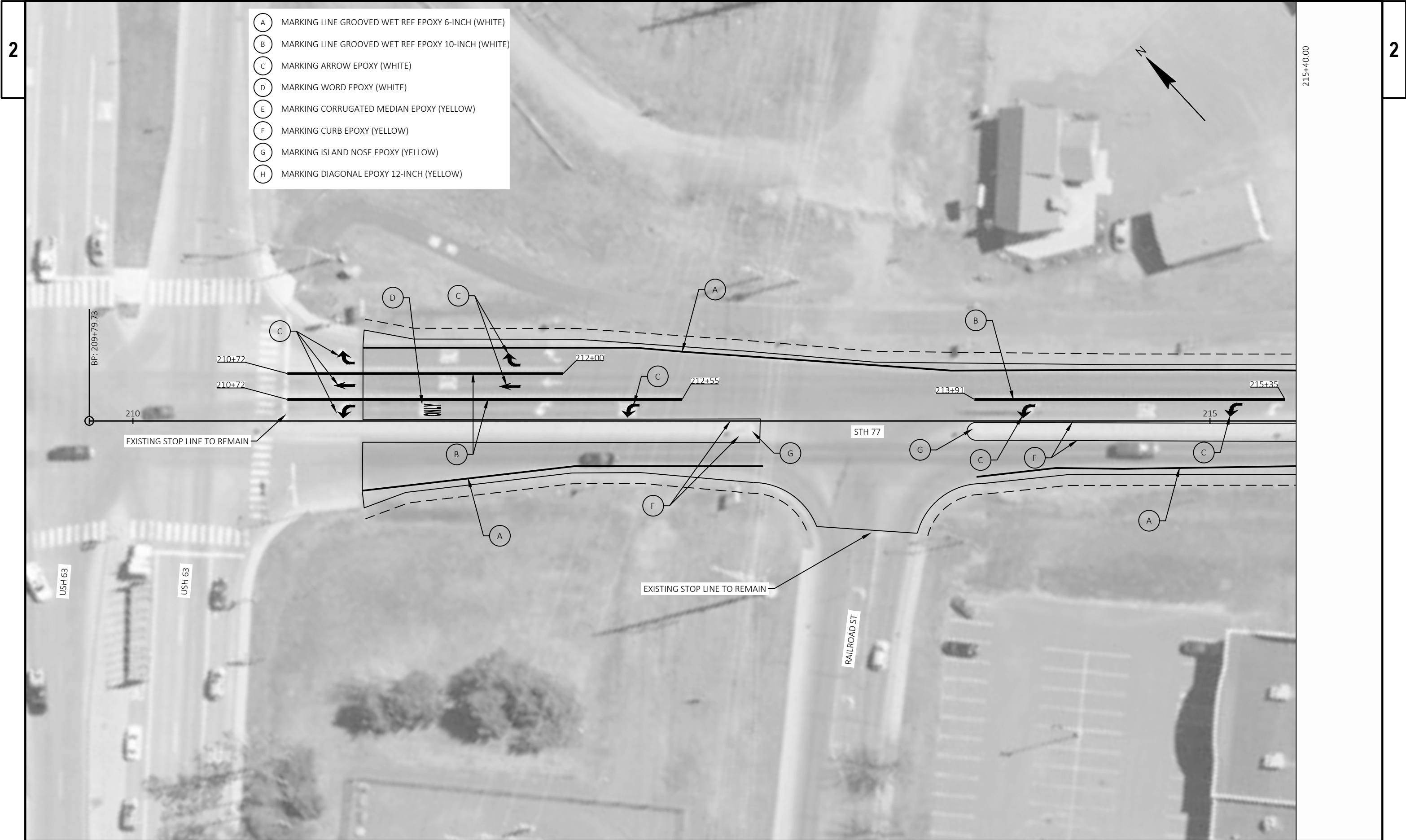
STA 269+42 RT, INLET COVERS TYPE SPECIAL REQUIRED. REMOVAL AND DISPOSAL OF EXISTING INLET COVER SHALL BE CONSIDERED INCIDENTAL TO INLET COVERS TYPE SPECIAL BID ITEM.



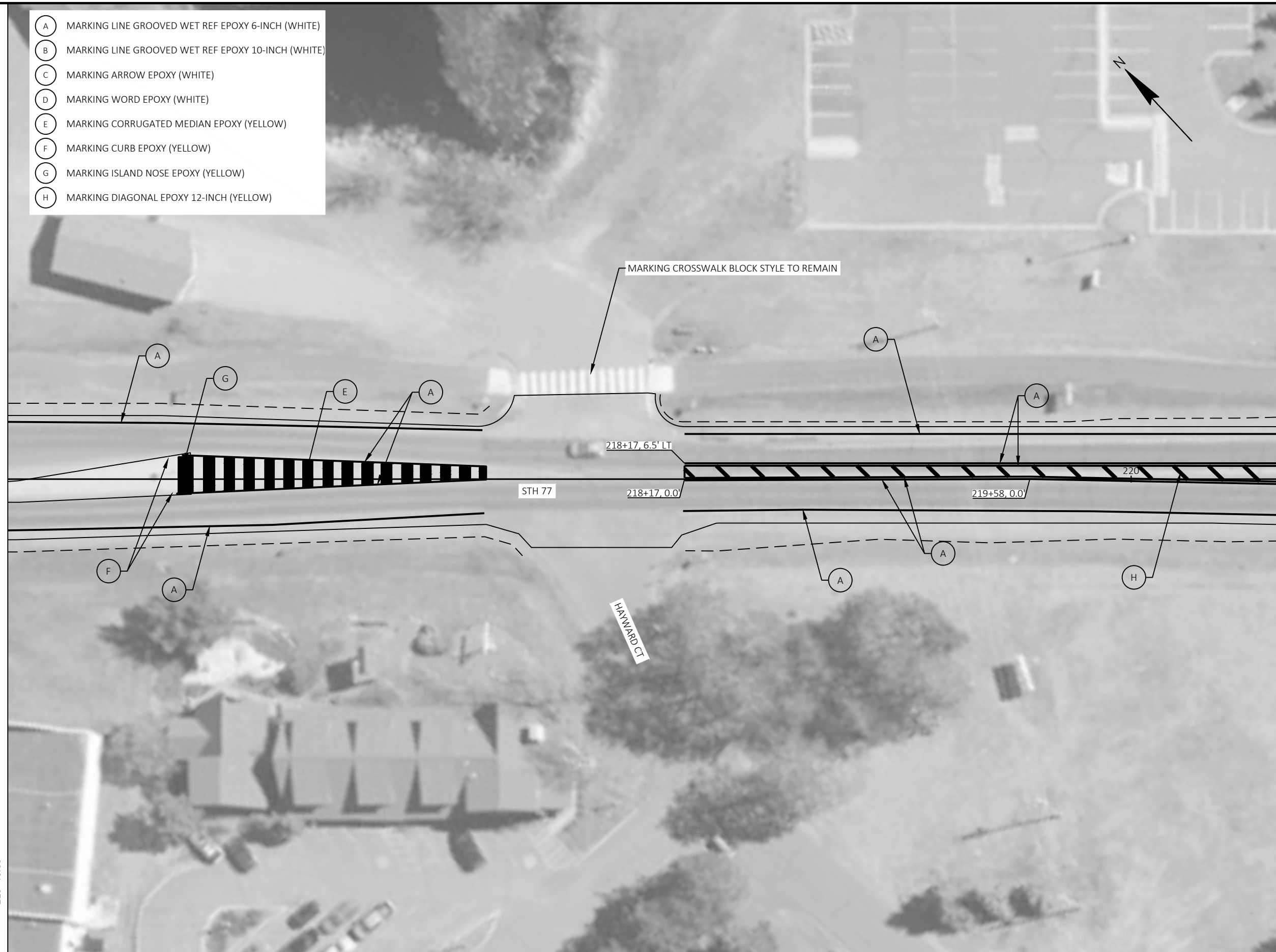
ASPHALT PATCHING AT CURB REMOVAL AND INSTALLATION



INLET COVERS TYPE SPECIAL



- (A) MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- (B) MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
- (C) MARKING ARROW EPOXY (WHITE)
- (D) MARKING WORD EPOXY (WHITE)
- (E) MARKING CORRUGATED MEDIAN EPOXY (YELLOW)
- (F) MARKING CURB EPOXY (YELLOW)
- (G) MARKING ISLAND NOSE EPOXY (YELLOW)
- (H) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)



PROJECT NO: 8520-01-75

HWY: STH 77

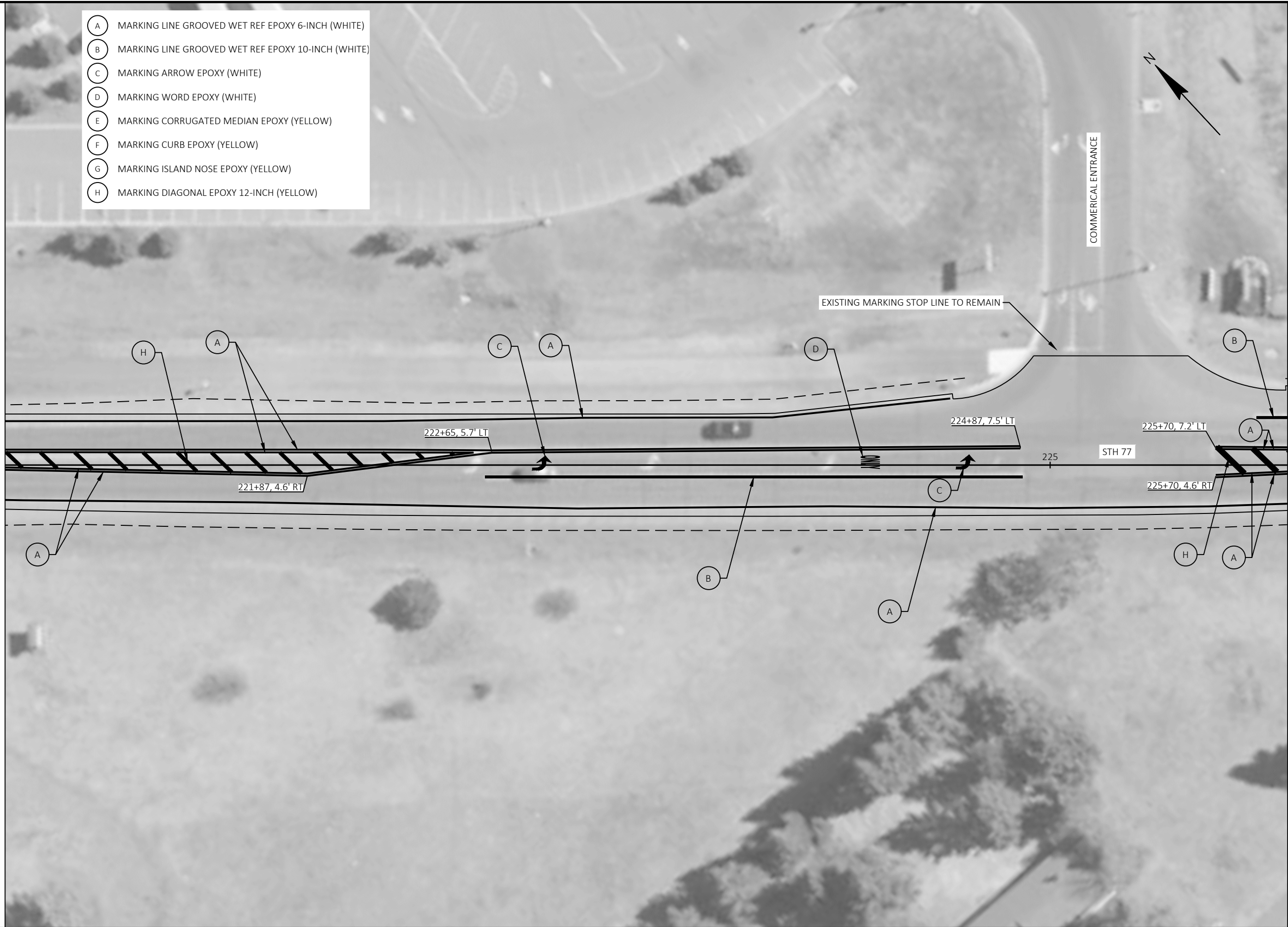
COUNTY: SAWYER

PAVEMENT MARKING

SHEET

E

- (A) MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- (B) MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
- (C) MARKING ARROW EPOXY (WHITE)
- (D) MARKING WORD EPOXY (WHITE)
- (E) MARKING CORRUGATED MEDIAN EPOXY (YELLOW)
- (F) MARKING CURB EPOXY (YELLOW)
- (G) MARKING ISLAND NOSE EPOXY (YELLOW)
- (H) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)



- (A) MARKING LINE GROOVED WET REF EPOXY 6-INCH (WHITE)
- (B) MARKING LINE GROOVED WET REF EPOXY 10-INCH (WHITE)
- (C) MARKING ARROW EPOXY (WHITE)
- (D) MARKING WORD EPOXY (WHITE)
- (E) MARKING CORRUGATED MEDIAN EPOXY (YELLOW)
- (F) MARKING CURB EPOXY (YELLOW)
- (G) MARKING ISLAND NOSE EPOXY (YELLOW)
- (H) MARKING DIAGONAL EPOXY 12-INCH (YELLOW)



PROJECT NO: 8520-01-75

HWY: STH 77

COUNTY: SAWYER

PAVEMENT MARKING

SHEET

E

Estimate Of Quantities

8520-01-75					
Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	154.000	154.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,083.000	2,083.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	116,736.000	116,736.000
0008	204.0150	Removing Curb & Gutter	LF	161.000	161.000
0010	211.0101	Prepare Foundation for Asphaltic Paving (project) 01. 8520-01-75	EACH	1.000	1.000
0012	213.0100	Finishing Roadway (project) 01. 8520-01-75	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,000.000	2,000.000
0016	455.0605	Tack Coat	GAL	13,768.000	13,768.000
0018	460.0105.S	HMA Percent Within Limits (PWL) Test Strip Volumetrics	EACH	1.000	1.000
0020	460.0110.S	HMA Percent Within Limits (PWL) Test Strip Density	EACH	2.000	2.000
0022	460.2005	Incentive Density PWL HMA Pavement	DOL	15,200.000	15,200.000
0024	460.2007	Incentive Density HMA Pavement Longitudinal Joints	DOL	13,660.000	13,660.000
0026	460.2010	Incentive Air Voids HMA Pavement	DOL	20,950.000	20,950.000
0028	460.6645	HMA Pavement 5 MT 58-34 V	TON	20,947.000	20,947.000
0030	460.9000.S	Material Transfer Vehicle	EACH	1.000	1.000
0032	465.0105	Asphaltic Surface	TON	750.000	750.000
0034	465.0110	Asphaltic Surface Patching	TON	200.000	200.000
0036	465.0560	Asphaltic Rumble Strips, Centerline	LF	20,085.000	20,085.000
0038	520.8700	Cleaning Culvert Pipes	EACH	2.000	2.000
0040	520.9700.S	Culvert Pipe Liners (size) 01. 24-Inch	LF	142.000	142.000
0042	520.9700.S	Culvert Pipe Liners (size) 02. 30-Inch	LF	87.000	87.000
0044	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	3.000	3.000
0046	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	5.000	5.000
0048	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	2.000	2.000
0050	525.0324	Apron Endwalls for Culvert Pipe Aluminum 24-Inch	EACH	2.000	2.000
0052	525.0342	Apron Endwalls for Culvert Pipe Aluminum 42-Inch	EACH	2.000	2.000
0054	601.0411	Concrete Curb & Gutter 30-Inch Type D	LF	126.000	126.000
0056	606.0200	Riprap Medium	CY	18.000	18.000
0058	614.0400	Adjusting Steel Plate Beam Guard	LF	452.000	452.000
0060	618.0100	Maintenance and Repair of Haul Roads (project) 01. 8520-01-75	EACH	1.000	1.000
0062	619.1000	Mobilization	EACH	1.000	1.000
0064	624.0100	Water	MGAL	30.000	30.000
0066	625.0500	Salvaged Topsoil	SY	666.000	666.000
0068	628.2004	Erosion Mat Class I Type B	SY	666.000	666.000
0070	628.7555	Culvert Pipe Checks	EACH	33.000	33.000
0072	629.0210	Fertilizer Type B	CWT	1.400	1.400
0074	630.0120	Seeding Mixture No. 20	LB	19.000	19.000
0076	633.5200	Markers Culvert End	EACH	18.000	18.000
0078	642.5001	Field Office Type B	EACH	1.000	1.000
0080	643.0300	Traffic Control Drums	DAY	450.000	450.000
0082	643.0900	Traffic Control Signs	DAY	2,385.000	2,385.000
0084	643.3165	Temporary Marking Line Paint 6-Inch	LF	65,000.000	65,000.000
0086	643.3170	Temporary Marking Line Epoxy 6-Inch	LF	29,900.000	29,900.000
0088	643.5000	Traffic Control	EACH	1.000	1.000
0090	645.0120	Geotextile Type HR	SY	48.000	48.000
0092	646.2040	Marking Line Grooved Wet Ref Epoxy 6-Inch	LF	108,100.000	108,100.000
0094	646.4040	Marking Line Grooved Wet Ref Epoxy 10-Inch	LF	770.000	770.000
0096	646.5020	Marking Arrow Epoxy	EACH	10.000	10.000
0098	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0100	646.7120	Marking Diagonal Epoxy 12-Inch	LF	380.000	380.000

Estimate Of Quantities

8520-01-75

Line	Item	Item Description	Unit	Total	Qty
0102	646.8020	Marking Corrugated Median Epoxy	SF	670.000	670.000
0104	646.8120	Marking Curb Epoxy	LF	25.000	25.000
0106	646.8220	Marking Island Nose Epoxy	EACH	3.000	3.000
0108	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	126.000	126.000
0110	650.8000	Construction Staking Resurfacing Reference	LF	30,095.000	30,095.000
0112	650.9911	Construction Staking Supplemental Control (project) 01. 8520-01-75	EACH	1.000	1.000
0114	690.0150	Sawing Asphalt	LF	2,708.000	2,708.000
0116	690.0250	Sawing Concrete	LF	5.000	5.000
0118	740.0440	Incentive IRI Ride	DOL	24,700.000	24,700.000
0120	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	800.000	800.000
0122	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0124	SPV.0060	Special 01. Resetting Pipe Ends	EACH	1.000	1.000
0126	SPV.0060	Special 02. Inlet Covers Type Special	EACH	1.000	1.000
0128	SPV.0180	Special 01. Ditch Cleaning	SY	490.000	490.000

				204.0110 REMOVING ASPHALTIC SURFACE	
STATION	TO	STATION	LOCATION	SY	REMARKS
217+32	-	217+52	LT	11	PAVEMENT WIDENING
218+00	-	222+37	LT	69	PAVEMENT WIDENING
218+30	-	220+33	RT	46	PAVEMENT WIDENING
269+00	-	270+26	RT	28	REPLACE CURB & GUTTER
				154	

				204.0150 REMOVING CURB & GUTTER	
CATEGORY	STATION	TO	STATION	LOCATION	LF
0010	217+40	-	217+50	LT	13
0010	218+02	-	218+15	LT	22
0010	269+00	-	270+26	RT	126
TOTAL 0010					161

				204.0115 REMOVING ASPHALTIC SURFACE BUTT JOINTS	204.0120 REMOVING ASPHALTIC SURFACE MILLING	
STATION	TO	STATION	LOCATION	SY	SY	REMARKS
211+07	-	266+10	MAINLINE	130	22,400	
	213+50		RAILROAD ST	58	95	
	217+80		HAYWARD CT, NORTH	62	32	
	217+80		HAYWARD CT, SOUTH	76	-	
	225+00		COMMERCIAL ENTRANCE	86	75	
	238+30		RANCH RD	89	95	
	238+30		LAKEWOOD DR	62	100	
	244+50		DAVIS AVE	93	140	
	251+40		PETERSON RD	54	-	
	253+40		N NAMEKAGON TRAIL	100	-	
	259+80		N SAWMILL RD	48	-	
	264+00		N RIVERSIDE RD	58	-	
267+70	-	512+02	MAINLINE	78	88,800	
	272+00		N DUFFY RD	51	69	
	281+00		N AIRPORT RD	71	110	
	294+40		WHEELER RD	79	120	
	303+50		N RED PINE LN	99	-	
	314+00		HILLTOP PL	81	-	
	317+20		N BAYO RD	110	-	
	322+80		HATCHERY RD	130	-	
	390+60		W PENINSULA RD	65	110	
	411+10		N O BRIAN HILL RD, SOUTH	130	-	
	411+60		N O BRIAN HILL RD, NORTH	131	-	
	467+80		N MOSQUITO BROOK RD	71	110	
	467+80		CTH K	71	110	
	-		PROJECT	-	4,200	MISCELLANEOUS REPAIRS
	-		PROJECT	-	170	DRIVEWAYS
				2,083	116,736	

				455.0605 TACK COAT GAL	460.6645 HMA PAVEMENT 5 MT 58-34 V TON
STATION	TO	STATION	LOCATION		
211+07	-	266+29	MAINLINE	2,730	4,130
	213+50		RAILROAD ST	19	28
217+32	-	222+37	LT/RT, PAVEMENT WIDENING	-	58
	217+80		HAYWARD CT, NORTH	12	17
	217+80		HAYWARD CT, SOUTH	10	14
	225+00		COMMERCIAL ENTRANCE	20	30
	238+30		RANCH RD	22	34
	238+30		LAKEWOOD DR	19	28
	244+50		DAVIS AVE	28	42
	251+40		PETERSON RD	7	10
	253+40		N NAMEKAGON TRAIL	12	17
	259+80		N SAWMILL RD	6	9
	264+00		N RIVERSIDE RD	7	11
267+84	-	512+02	MAINLINE	10,670	16,180
	272+10		N DUEEY RD	15	22
	281+00		N AIRPORT RD	21	32
	294+40		WHEELER RD	23	35
	303+50		N RED PINE LN	12	18
	314+00		HILLTOP PL	10	15
	317+20		N BAYORD	14	20
	322+80		HATCHERY RD	16	23
	390+60		W PENINSULA RD	21	31
	411+10		N O BRIAN HILL RD, SOUTH	16	24
	411+60		N O BRIAN HILL RD, NORTH	16	24
	467+80		N MOSQUITO BROOK RD	21	32
	467+80		CTH K	21	32
	-		DRIVEWAYS	-	31
				13,768	20,947

				305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL
STATION	TO	STATION	LOCATION		
211+07	-	266+29	LT/RT	710	11
267+85	-	512+02	LT/RT	1,290	19
				2,000	30

STATION TO		STATION	LOCATION	465.0105 ASPHALTIC SURFACE TON	465.0110 ASPHALTIC SURFACE PATCHING TON	REMARKS
269+00 -		270+26	RT	-	4	REPLACE CURB & GUTTER
		-	PROJECT	750	-	ASPHALTIC BASE PATCH PARTIAL DEPTH
		-	PROJECT	-	200	POT HOLES/RAMPING
				750	200	

STATION	LOCATION	606.0200 RIPRAP MEDIUM CY	645.0120 GEOTEXTILE TYPE HR SY
303+95	LT	9	22
304+30	RT	9	26
		18	48

STATION	LOCATION	SPV.0060.02 SPECIAL (02. INLET COVERS TYPE SPECIAL) EACH
269+42	RT	1
TOTAL 0010		1

STATION	TO	STATION	LOCATION	465.0560 ASPHALTIC RUMBLE STRIPS, CENTERLINE LF
275+50	-	278+83	CL	333
282+83	-	292+35	CL	952
296+35	-	301+60	CL	525
305+60	-	311+97	CL	637
319+16	-	320+88	CL	172
324+88	-	388+59	CL	6,371
392+59	-	409+14	CL	1,655
413+62	-	465+80	CL	5,218
469+80	-	512+02	CL	4,222
TOTAL 0010				20,085

STATION	TO	STATION	LOCATION	614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF
265+14	-	266+29	LT	115
265+15	-	266+29	RT	114
267+84	-	268+74	LT	90
267+84	-	269+17	RT	133
TOTAL 0010				452

STATION TO	STATION	LOCATION	601.0411 CONCRETE CURB & GUTTER 30- INCH TYPE D LF	REMARKS
269+00 -	270+26	RT	126	REPLACE CURB & GUTTER
TOTAL 0010			126	

STATION	LOCATION	628.7555 CULVERT PIPE CHECKS EACH
239+95	RT	4
257+05	RT	4
291+39	LT	4
304+28	RT	6
391+50	RT	4
410+28	RT	4
UNDISTRIBUTED		7
TOTAL 0010		33

STATION	TO	STATION	LOCATION	625.0500 SALVAGED TOPSOIL SY	628.2004 EROSION MAT CLASS I TYPE B SY	629.0210 FERTILIZER TYPE B CWT	630.0120 SEEDING MIXTURE NO. 20 LB	SPV.0180.01 SPECIAL (01. DITCH CLEANING) SY
239+80	-	240+05	RT	30	30	0.1	1	30
239+90	-	240+15	LT	30	30	0.1	1	30
256+95	-	257+20	RT	30	30	0.1	1	30
291+05	-	291+30	RT	30	30	0.1	1	30
291+25	-	291+50	LT	30	30	0.1	1	30
295+32	-	295+71	LT/RT	18	18	0.1	1	-
304+15	-	304+40	LT/RT	39	39	0.1	1	30
390+90	-	391+60	LT/RT	179	179	0.2	4	170
410+05	-	410+65	LT	70	70	0.1	2	70
410+05	-	410+65	RT	70	70	0.1	2	70
UNDISTRIBUTED				140	140	0.3	4	-
				666	666	1.4	19	490

		520.8700	520.9700.S.01	520.9700.S.02	520.9750.S	521.1024	521.1030	525.0324	525.0342	633.5200	SPV.0060.01
		CLEANING	CULVERT PIPE	CULVERT PIPE	CLEANING	APRON	APRON	ENDWALLS FOR	ENDWALLS FOR	MARKERS	SPECIAL (01.
		CULVERT PIPES	LINERS (SIZE) (01.	LINERS (SIZE) (02.	CULVERT PIPES	ENDWALLS FOR	ENDWALLS FOR	ENDWALLS FOR	ENDWALLS FOR		
		EACH	24-INCH)	30-INCH)	FOR LINER	CULVERT PIPE	CULVERT PIPE	CULVERT PIPE	CULVERT PIPE	CULVERT END	RESETTING PIPE
STATION	LOCATION	EACH	LF	LF	VERIFICATION	STEEL 24-INCH	STEEL 30-INCH	ALUMINUM 24-INCH	ALUMINUM 42-INCH	EACH	ENDS)
216+02	LT/RT	-	-	-	-	-	-	-	-	2	-
222+84	ML	1	-	-	-	-	-	-	-	-	-
239+98	LT/RT	1	-	-	-	1	-	-	-	2	-
257+06	LT/RT	-	-	-	-	-	-	-	-	2	-
291+30	LT/RT	-	-	-	-	-	-	2	-	2	-
295+52	LT/RT	-	-	-	-	-	-	-	2	2	-
304+12	LT/RT	-	-	87	1	-	2	-	-	2	1
391+51	LT/RT	-	71	-	1	2	-	-	-	2	-
410+29	LT/RT	-	71	-	1	2	-	-	-	2	-
449+95	LT/RT	-	-	-	-	-	-	-	-	2	-
		2	142	87	3	5	2	2	2	18	1

		643.0300		643.0900			
		TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC		
		CONTROL	CONTROL	CONTROL	CONTROL		
LOCATION	DRUMS	DURATION	DRUMS	SIGNS	DURATION	SIGNS	REMARKS
		DAYS	DAY		DAYS	DAY	
PROJECT	-	-	-	47	45	2,115	ADVANCE WARNING SIGNS
PROJECT	225	2	450	75	2	150	SHOULDER CLOSURE
PROJECT	-	-	-	8	15	120	MILLED SURFACE SIGNS
			450			2,385	

				646.4040	646.5020	646.5120	646.7120	646.8020	646.8120	646.8220
				MARKING LINF GROOVED WET RFF FPOXY 10- INCH LF	MARKING ARROW EPOXY FACH	MARKING WORD FPOXY FACH	MARKING DIAGONAL FPOXY 12-INCH LF	MARKING CORRUGATFD MEDIAN FPOXY SF	MARKING CURB FPOXY LF	MARKING ISLAND NOSF FPOXY FACH
STATION	TO	STATION	LOCATION							
211+07	-	229+00	ML	770	10	2	380	670	25	3
				770	10	2	380	670	25	3

				646.2040	643.3170	643.3165	REMARKS
				MARKING LINE	TEMPORARY	TEMPORARY	
				GROOVED WET	MARKING	MARKING	
				REF EPOXY 6-	LINE EPOXY 6-	LINE PAINT 6-	
STATION	TO	STATION	LOCATION	INCH	INCH	INCH	
				LF	LF	LF	
211+07	-	512+02	CL	19,200	29,900	-	STH 77 YELLOW CENTERLINE
211+07	-	512+02	LT/RT	59,000	-		STH 77 WHITE EDGELINE
218+37	-	512+02	CL	-	-	32,500	MILLED LAYER
218+37	-	512+02	CL	-	-	32,500	LOWER LAYER
275+50	-	512+02	CL	29,900	-		STH 77 AFTER RUMBLES
				108,100	29,900	65,000	

				650.5500	650.8000	650.9911.01	REMARKS
				CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	
				STAKING CURB	STAKING	STAKING	
				GUTTER AND	RESURFACING	SUPPLEMENTAL CONTROL	
				CURB & GUTTER	REFERENCE	(PROJECT) (01. 8520-01-75)	
STATION	TO	STATION	LOCATION	LF	LF	EACH	
211+07	-	512+02	PROJECT	-	30,095	1	
269+00	-	270+26		126	-	-	REPLACE CURB & GUTTER
				126	30,095	1	

				690.0150	REMARKS
				SAWING	
				ASPHALT	
				LF	
STATION	TO	STATION	LOCATION		
		211+06	ML	58	
217+32	-	222+37	LT/RT	700	PAVED SHOULDER WIDENING
269+00	-	270+26	RT	130	REPLACE CURB & GUTTER
		512+02	ML	30	
		-	LT/RT	1,310	SIDE ROADS
		-	LT/RT	480	DRIVEWAYS
				2,708	

				690.0250	REMARKS
				SAWING	
				CONCRETE	
				LF	
STATION	TO	STATION	LOCATION		
269+00	-	270+26	RT	5	REPLACE CURB & GUTTER
TOTAL 0010				5	

POINT TABLE				
POINT NUMBER	STATION	OFFSET	Y	X
PLE 1	222+75.00	50.19', LT	438,733.25	620,712.74
PLE 2	222+75.00	60.00', LT	438,740.44	620,719.42
PLE 3	222+95.00	60.00', LT	438,726.83	620,734.07
PLE 4	222+95.00	50.20', LT	438,719.64	620,727.40
100	226+28.37	50.27', LT	438,492.88	620,971.76
101	225+71.65	0.00'	438,494.62	620,895.99
102	225+15.52	49.75', RT	438,496.35	620,821.00
103	221+48.09	49.84', RT	438,746.29	620,551.68
104	221+01.35	0.00'	438,814.61	620,551.34
105	220+54.33	50.14', LT	438,883.36	620,550.99

R/W - COURSE TABLE				
POINT	-	POINT	BEARING	DISTANCE
100	-	101	N88° 40' 43"W	75.79'
101	-	102	N88° 40' 43"W	75.00'
102	-	103	N47° 08' 16"W	367.43'
103	-	104	N00° 17' 18"W	68.33'
104	-	105	N00° 17' 18"W	68.74'
105	-	PLE 1	S47° 08' 16"E	220.67'
105	-	100	S47° 08' 16"E	574.04'
PLE 4	-	100	S47° 08' 16"E	333.36'

NOTES:

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

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

EXISTING HIGHWAY RIGHT-OF-WAY HEREIN IS BASED ON THE FOLLOWING: EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 77 ESTABLISHED FROM PREVIOUS RIGHT-OF-WAY PLAT (PROJECT 8520-01-23) DATED 7/3/1968, CSM #7502, CSM #7161, CSM #2553 AND CSM #2880.

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

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

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

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

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

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

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

CONVENTIONAL SYMBOLS			CONVENTIONAL ABBREVIATIONS			CONVENTIONAL UTILITY SYMBOLS		
SECTION LINE	---	25	ACCESS RIGHTS	AR	OUTLET	WATER	W	W
QUARTER LINE	---	25	ACRES	AC	PAGE	GAS	G	G
SIXTEENTH LINE	---	25	ALUMINUM	ALUM	PROPERTY LINE	TELEPHONE	T	T
NEW REFERENCE LINE	---	25	AND OTHERS	PT	RECORDED AS	OVERHEAD TRANSMISSION LINES	---	---
NEW R/W LINE	---	25	BACK	BK	REEL / IMAGE	ELECTRIC	E	E
EXISTING R/W LINE	---	25	BLOCK	BLK	REFERENCE LINE	CABLE TELEVISION	---	---
PROPERTY LINE	---	25	C/L	C/L	PERMANENT LIMITED EASEMENT	FIBER OPTIC	---	---
LOT, TIE, AND OTHER MINOR LINES	---	25	CENTERLINE	CL	CERTIFIED SURVEY MAP	R/L	R/L	R/L
ALONG INTERFERENCE	---	25	CONCRETE	CONC	POINT OF BEGINNING	SANITARY SEWER	---	---
CORPORATE LIMITS	---	25	CD	CD	POINT OF CURVATURE	STORM SEWER	---	---
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)	---	25	COUNTY	CO	POINT OF COMPOUND CURVE	ELECTRIC TOWER	---	---
FEE ACQUISITION AREA (HATCHING VALUES BY OWNER)	---	25	CORNER	COR	POINT OF INTERSECTION	NON COMPENSABLE	---	---
TEMP. LIMITED EASEMENT AREA	---	25	DOCUMENT	DOC	REMA	COMPENSABLE	---	---
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)	---	25	EASEMENT	EASE	RIGHT	POWER POLE	---	---
TRANSMISSION STRUCTURES	---	25	EXISTING	EX	RIGHT OF WAY	TELEPHONE POLE	---	---
BUILDING	---	25	EXISTING GAS VALVE	GV	SECTION	TELEPHONE PEDESTAL	---	---
BUILDING (TO BE REMOVED)	---	25	GRID NORTH	GN	SEPTIC VENT	---	---	---
BRIDGE	---	25	HIGHWAY EASEMENT	HE	SQUARE FEET	---	---	---
			IDENTIFICATION	ID	STATE TRUNK HIGHWAY	---	---	---
			NO ACCESS (NEW HIGHWAY)	---	STATION	---	---	---
			NATIONAL GEODETIC SURVEY MONUMENT	NGS	TELEPHONE PEDESTAL	---	---	---
			SIXTEENTH CORNER MONUMENT	NO	TEMPORARY LIMITED EASEMENT	---	---	---
					TRANSPORTATION PROJECT PLAT	---	---	---
					UNITED STATES HIGHWAY	---	---	---
					VOLUME	---	---	---

SCHEDULE OF LANDS & INTERESTS REQUIRED

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

PARCEL NUMBER	OWNER	INTEREST REQUIRED	RIGHT OF WAY REQUIRED			PLE REQUIRED
			NEW (SF)	EXISTING (SF)	TOTAL (SF)	
1	WAL-MART REAL ESTATE BUSINESS TRUST	PLE	---	---	---	196

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER	INTEREST REQUIRED
80	CITY OF HAYWARD (WATER)	RELEASE OF RIGHTS
81	XCEL ENERGY	RELEASE OF RIGHTS
82	CHARTER COMMUNICATIONS	RELEASE OF RIGHTS
83	NORVADO	RELEASE OF RIGHTS

EXISTING UTILITY EASEMENTS

- (80) CITY OF HAYWARD (WATER) DOC. #340882 - PARCEL 1
- (81) XCEL ENERGY UTILITY EASEMENT DEDICATED AS PART OF CSM #7502 - PARCEL 1
- (82) CHARTER COMMUNICATIONS UTILITY EASEMENT DEDICATED AS PART OF CSM #7502 - PARCEL 1
- (83) NORVADO UTILITY EASEMENT DEDICATED AS PART OF CSM #7502 - PARCEL 1

CITY

NE - SE

C S M # 7 1 6 1
L O T 1
V 2 7, P 3 4 6 - 3 4 7
D O C # 3 3 6 0 6 8

C S M # 7 5 0 2
L O T 1
V 3 0, P 1 9 - 2 1
D O C # 3 5 0 7 1 8

OF

C S M # 7 1 6 1
L O T 2
V 2 7, P 3 4 6 - 3 4 7
D O C # 3 3 6 0 6 8

C S M # 7 1 6 1
Q U T L O T 1
V 2 7, P 3 4 6 - 3 4 7
D O C # 3 3 6 0 6 8

HAYWARD

TOWN

SE - SE

PLE - COURSE TABLE

POINT	-	POINT	BEARING	DISTANCE
PLE 1	-	PLE 2	N42° 52' 31"E	9.81'
PLE 2	-	PLE 3	S47° 07' 29"E	20.00'
PLE 3	-	PLE 4	S42° 52' 31"W	9.81'
PLE 4	-	PLE 1	N47° 08' 16"W	20.00'

TRANSPORTATION PROJECT PLAT NO: 8520-01-25 - 4.01

THAT PART OF LOT 1, CERTIFIED SURVEY MAP # 7502, VOLUME 30, PAGES 19-21, DOCUMENT #350718 LOCATED IN THE NE 1/4 OF THE SE 1/4 OF SECTION 22, TOWNSHIP 41 NORTH, RANGE 9 WEST, CITY OF HAYWARD, SAWYER COUNTY, WISCONSIN

RELOCATION ORDER: STH 77, HAYWARD - CLAM LAKE, USH 63 TO CTH K, SAWYER COUNTY

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

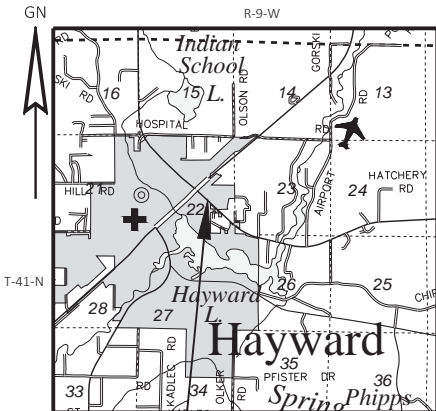
TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND 84.30, WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY AS SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE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

431504
PAULA CHISSER
REGISTER OF DEEDS
SAWYER COUNTY, WI
04/27/2021 09:43 AM
RECORDING FEE 25.00

PAGES: 1

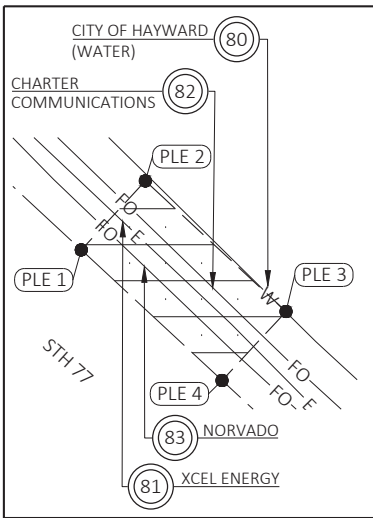
The above recording information verifies that this document has been electronically recorded and returned to the submitter.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 8520-01-25 - 4.01
AMENDMENT NO: _____



PROJECT LOCATION

(LOCATION SKETCH NOT TO SCALE)
SCALE, FEET 0 50 100



PARCEL 1 DETAIL

CORRE ENGINEERING

1802 WARDEN STREET
EAU CLAIRE, WI 54703
(608)828-1011
www.correinc.com



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

SIGNATURE: Bryon M. M. DATE: 3/9/21

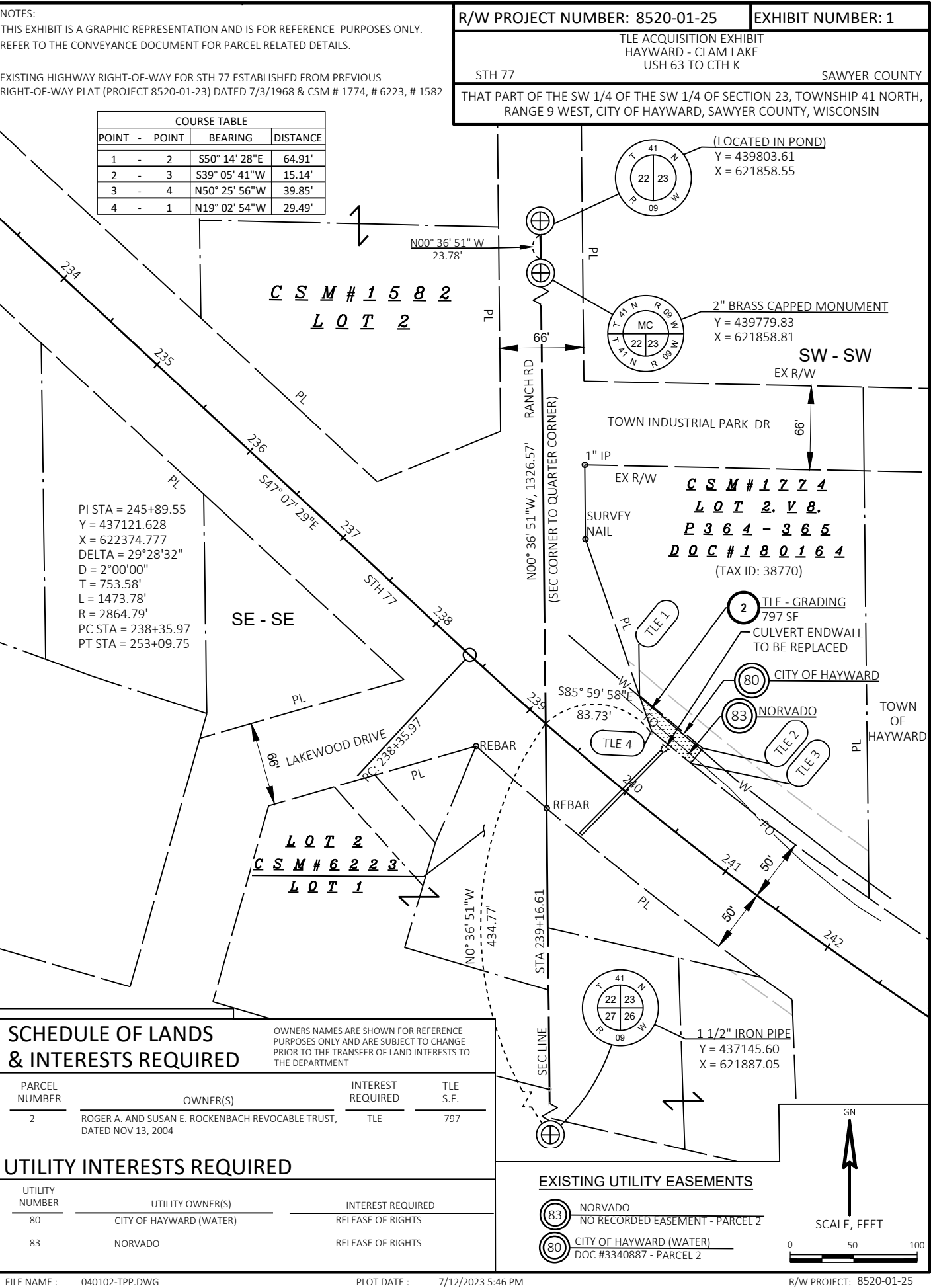
PRINT NAME: BRYON J. MOTSZKO

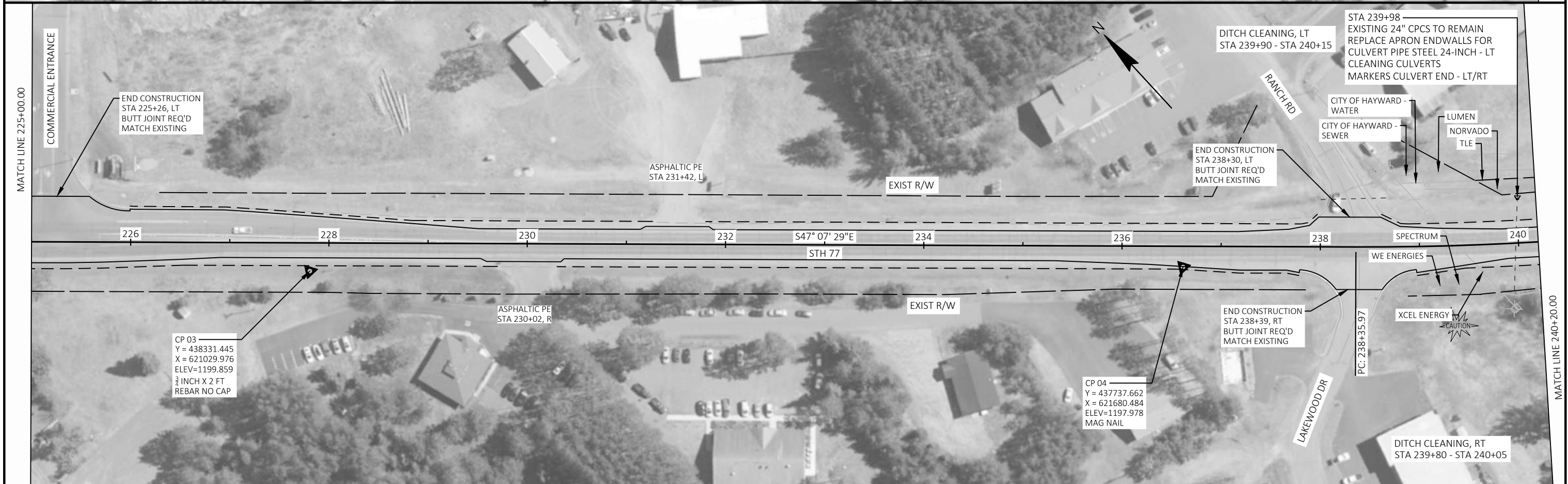
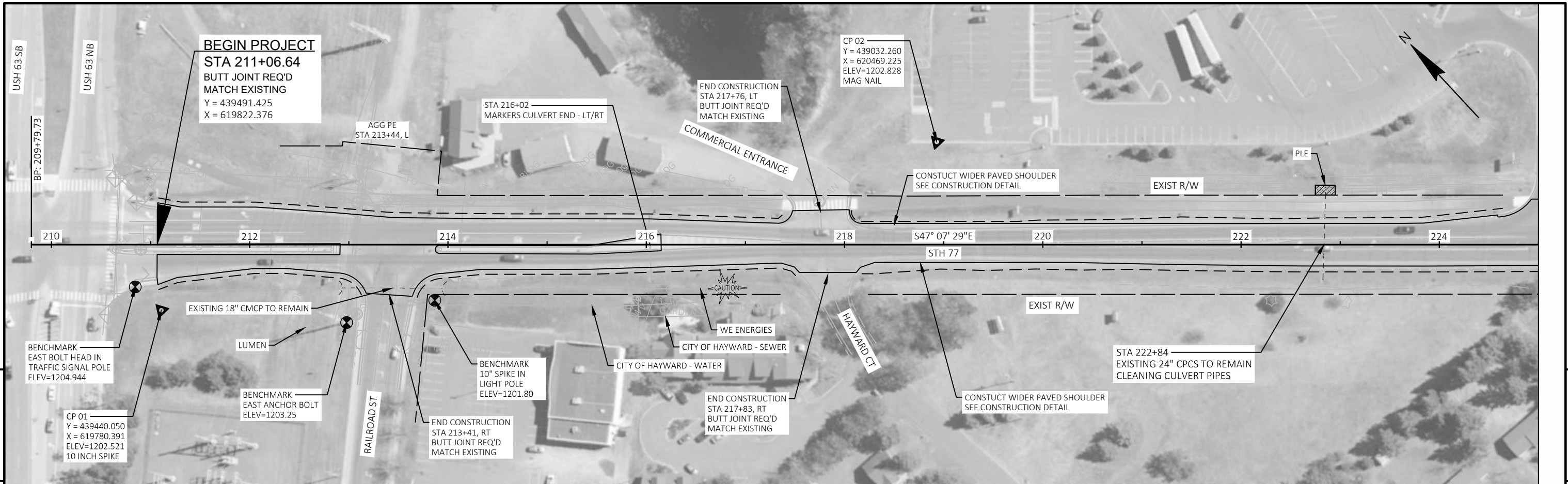
REGISTRATION NUMBER: S-2846

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

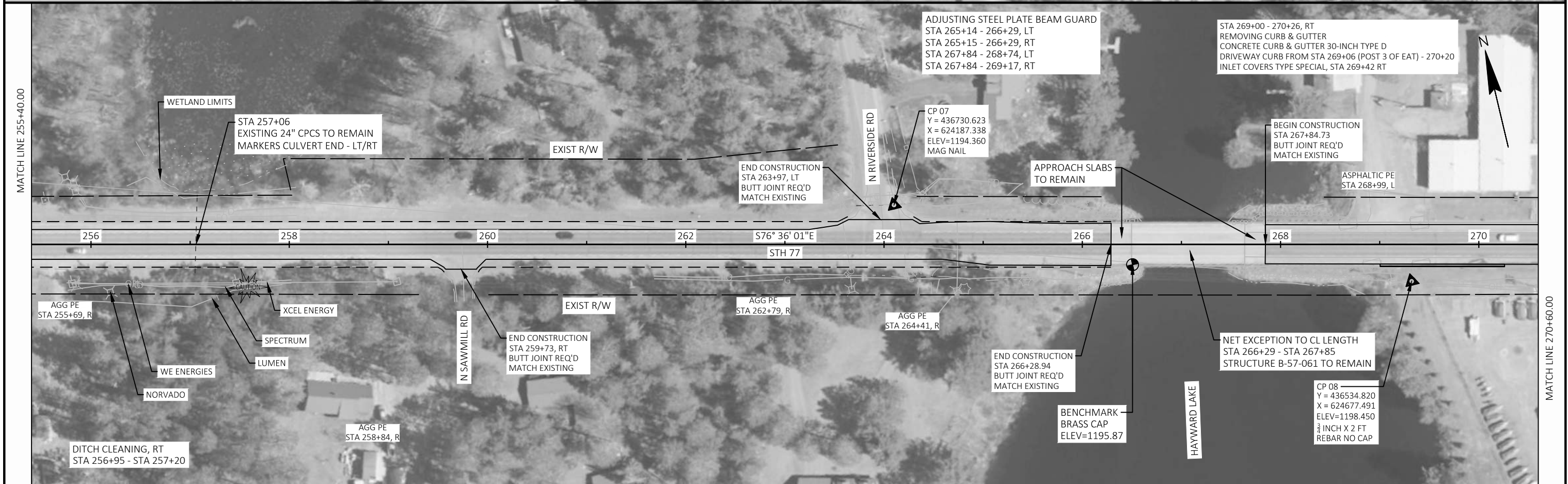
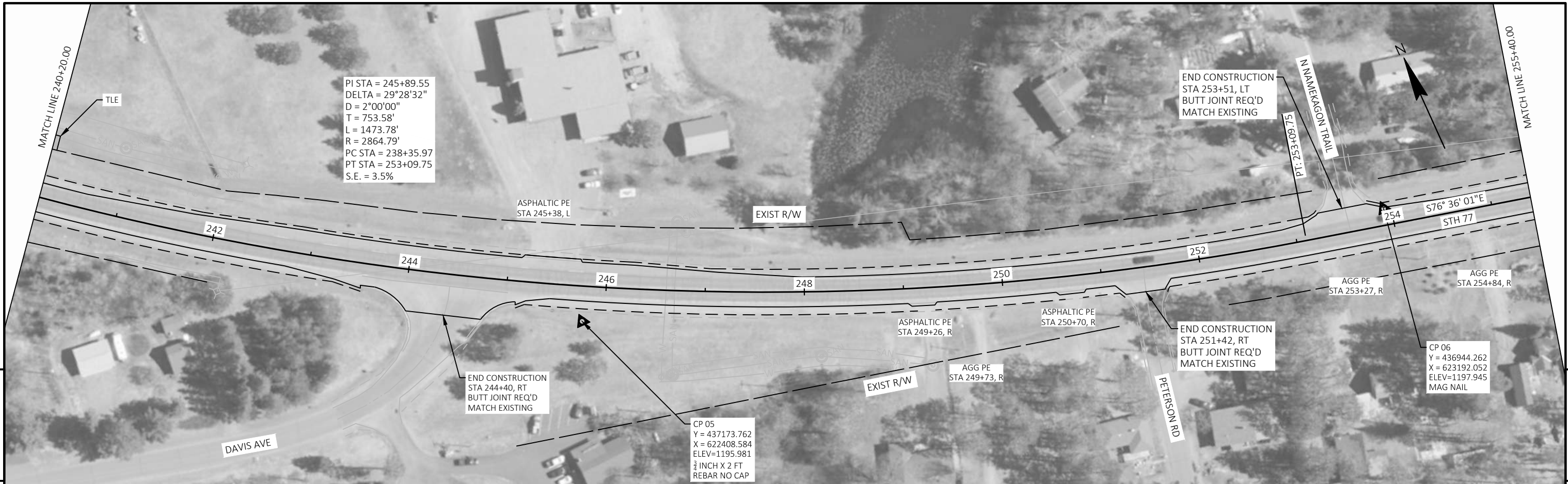
SIGNATURE: Heather L. Dresel

PRINT NAME: HEATHER L. DRESEL

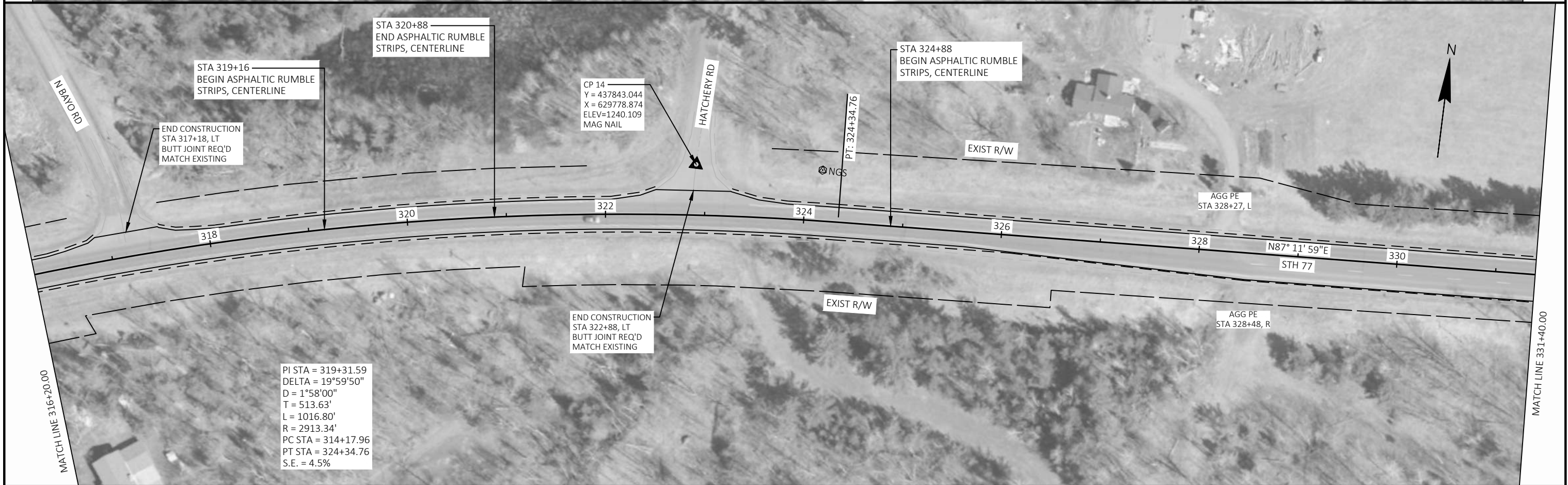
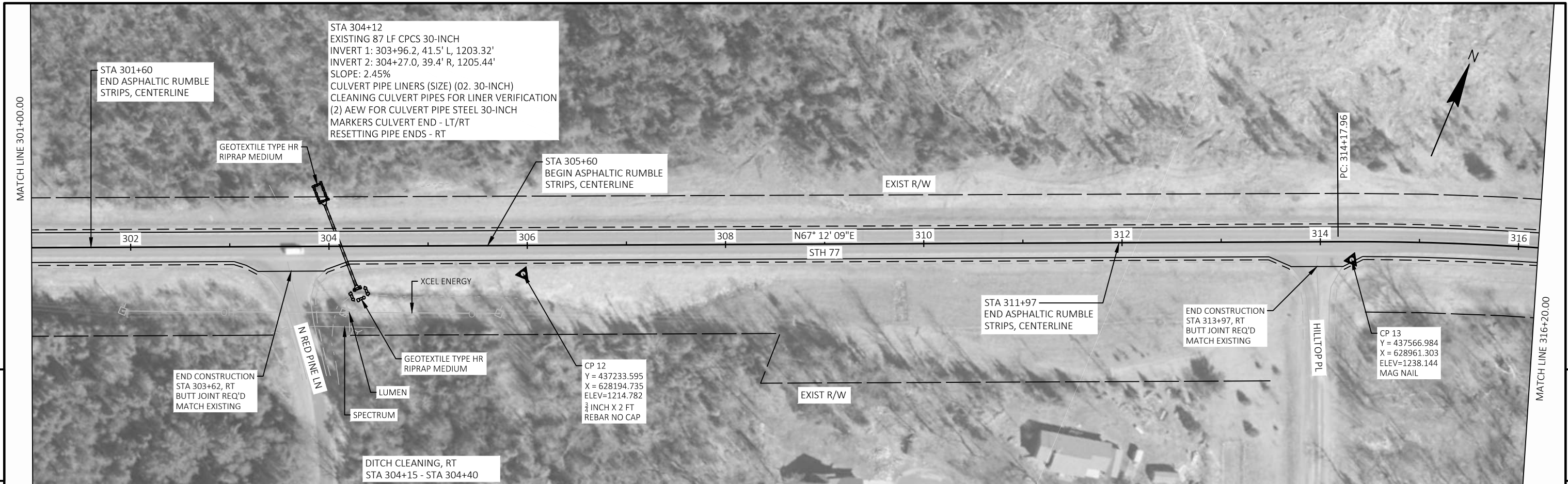




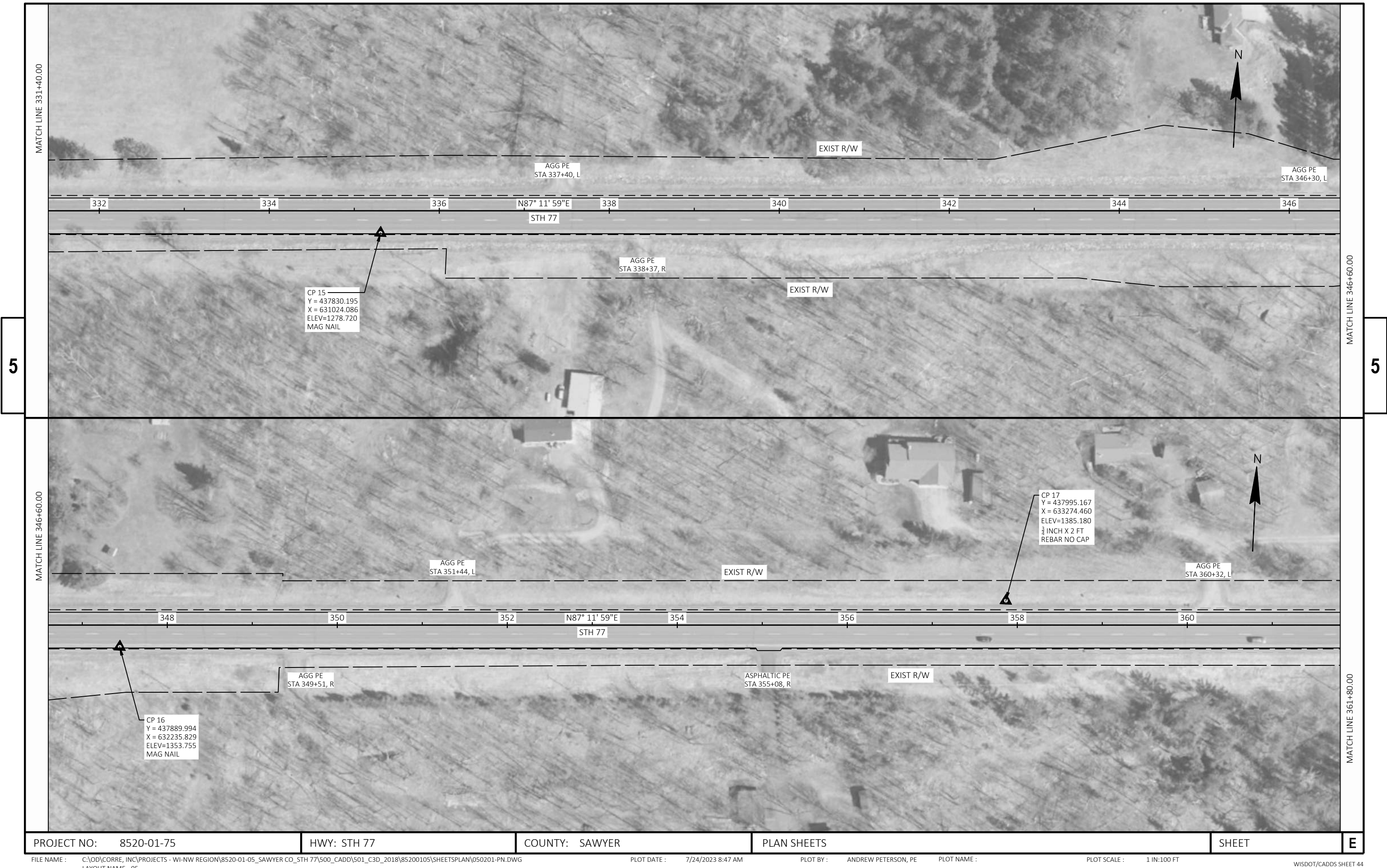
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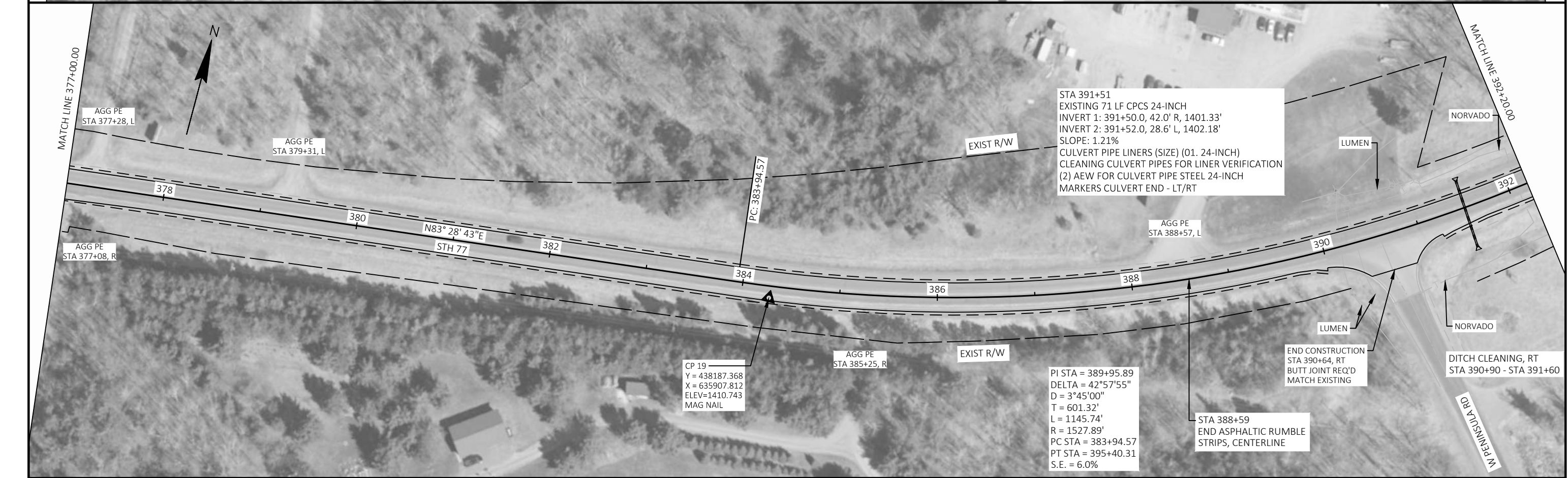
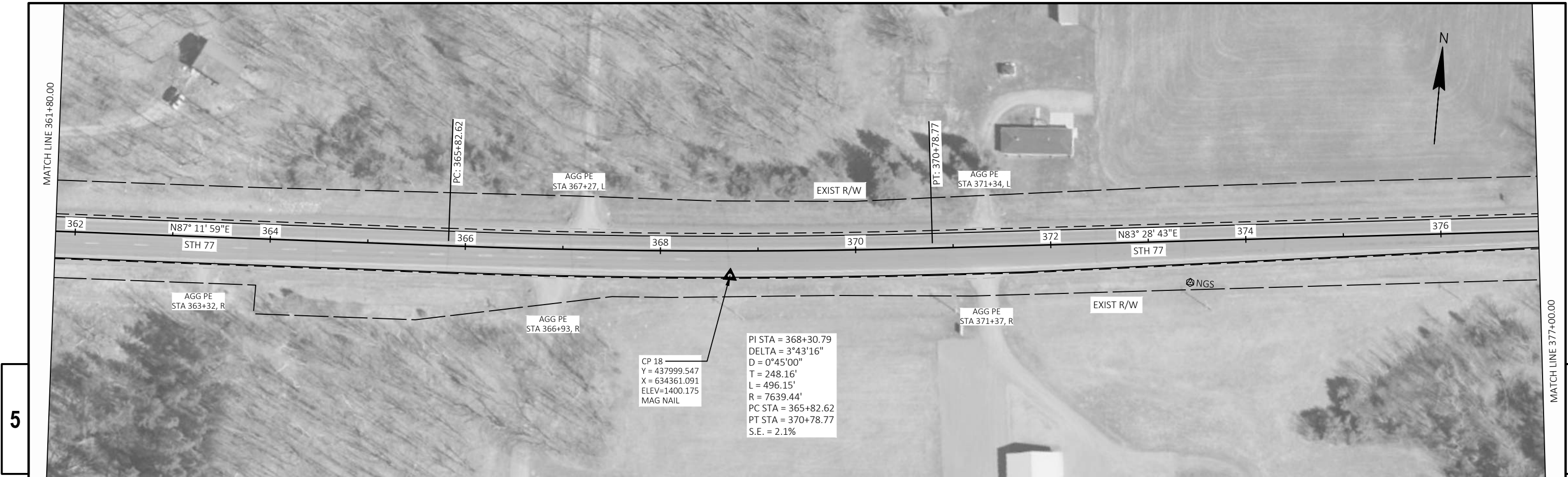


PROJECT NO:	8520-01-75	HWY:	STH 77	COUNTY:	SAWYER	PLAN SHEETS	SHEET	E
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PROJECT NO: 8520-01-75	HWY: STH 77	COUNTY: SAWYER	PLAN SHEETS	SHEET	E
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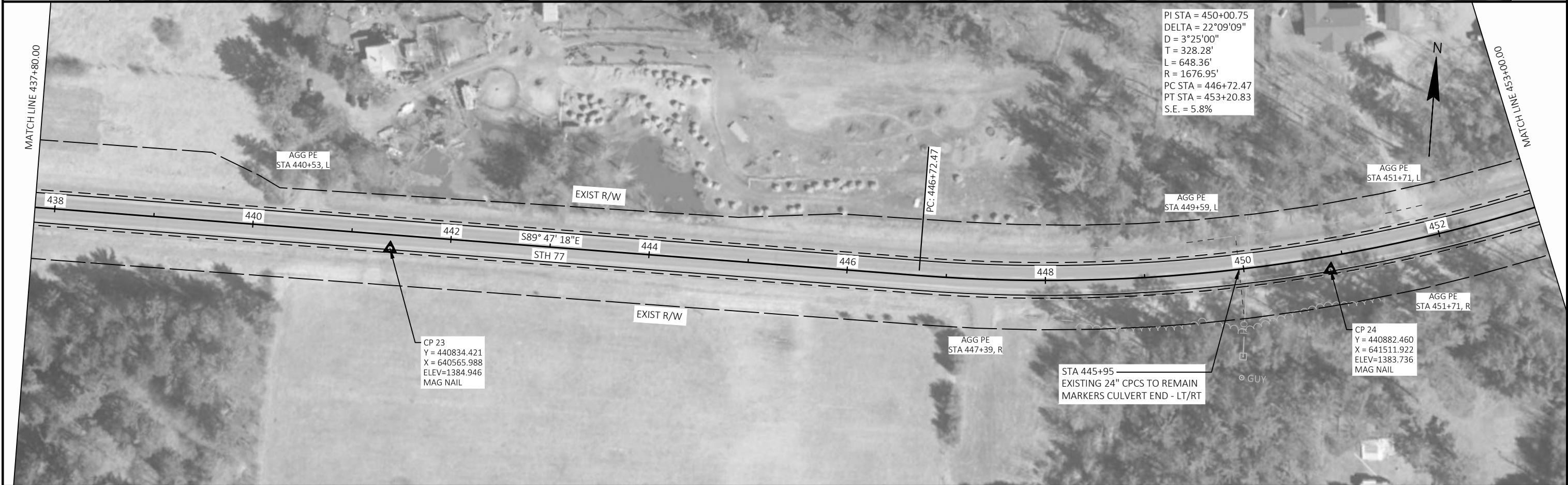




PROJECT NO: 8520-01-75	HWY: STH 77	COUNTY: SAWYER	PLAN SHEETS	SHEET	E
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PROJECT NO: 8520-01-75	HWY: STH 77	COUNTY: SAWYER	PLAN SHEETS	SHEET	E
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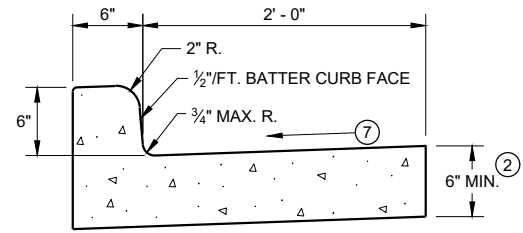
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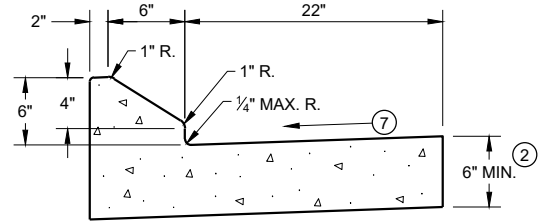
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Standard Detail Drawing List

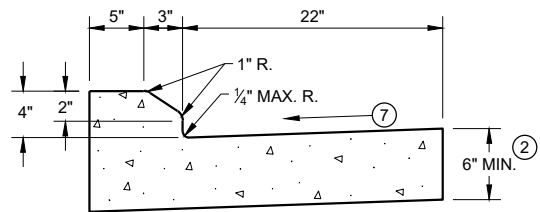
08D01-23A	CONCRETE CURB & GUTTER
08D01-23B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLI CATIONS
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-08	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
13A11-04A	CENTERLINE RUMBLE STRIPS - ASPHALT
13A11-04D	CENTERLINE RUMBLE STRIPS - INTERSECTIONS, DRIVEWAYS, BRIDGES, RAI LROADS
13C19-03	HMA LONGITUDI NAL JOINTS
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-09F	ADVANCED WIDTH RESTRICTION SIGNING
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDI VIDE D ROAD OPEN TO TRAFFIC
15C05-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M. P. H. OR LESS
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-23A	PERMANENT LONGI TUDINAL PAVEMENT MARKINGS
15C08-23B	TEMPORARY LONGI TUDINAL PAVEMENT MARKING
15C08-23C	PAVEMENT MARKING (TURN LANES)
15C08-23D	PAVEMENT MARKING (TURN LANES)
15C11-10B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C12-09A	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-08A	MEDIAN I SLAND MARKING PAVEMENT MARKINGS
15C18-08B	MEDIAN I SLAND MARKING MEDIAN I SLAND NOSE
15C19-08A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C19-08B	MOVING PAVEMENT MARKING OPERATION MULTI -LANE UNDI VIDE D ROADWAY
15C35-06A	PAVEMENT MARKING (INTERSECTIONS)
15C35-06B	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15C35-06C	PAVEMENT MARKING AND SIGNING (CLIMBING LANE & PASSING LANE)
15D28-04	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDI VIDE D ROADWAY
15D44-02	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES



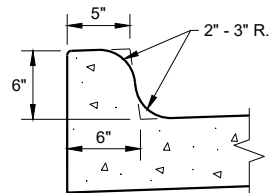
TYPES A^① & D



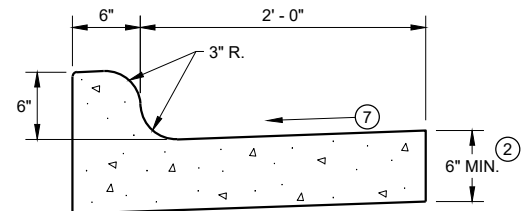
6" SLOPED CURB TYPES G^① & J



4" SLOPED CURB TYPES G^① & J

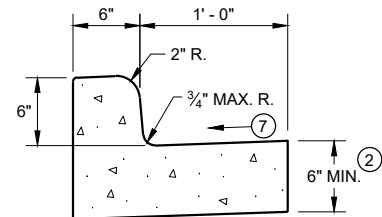


TYPES K^① & L
(OPTIONAL CURB SHAPE)



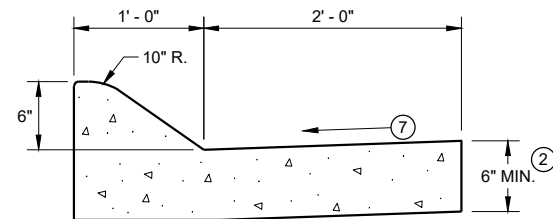
TYPES K^① & L

CONCRETE CURB AND GUTTER 30"

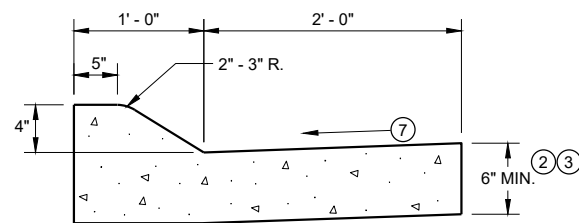


TYPES A^① & D

CONCRETE CURB AND GUTTER 18"

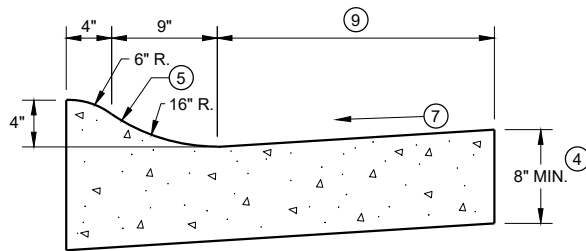


6" SLOPED CURB TYPES A^① & D



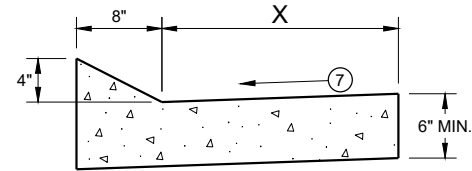
4" SLOPED CURB TYPES A^① & D

CONCRETE CURB AND GUTTER 36"



4" SLOPED CURB TYPES R^① & T

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

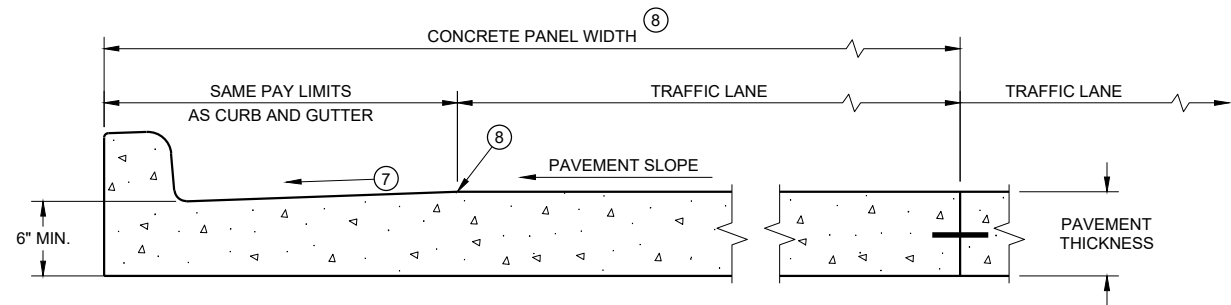


TYPES TBT & TBTT^①

CONCRETE CURB AND GUTTER

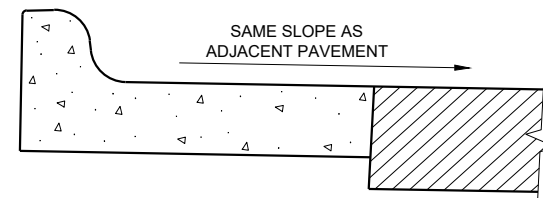
PAVEMENT THICKNESS
AND MAXIMUM CONCRETE
PANEL WIDTH TABLE

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



PARTIAL SECTION OF PAVEMENT*
WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



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

GENERAL NOTES

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

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

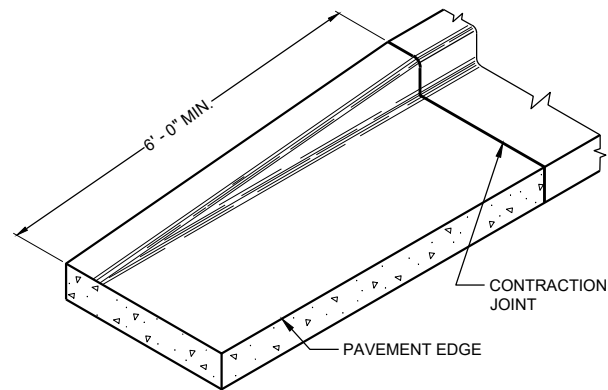
INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

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

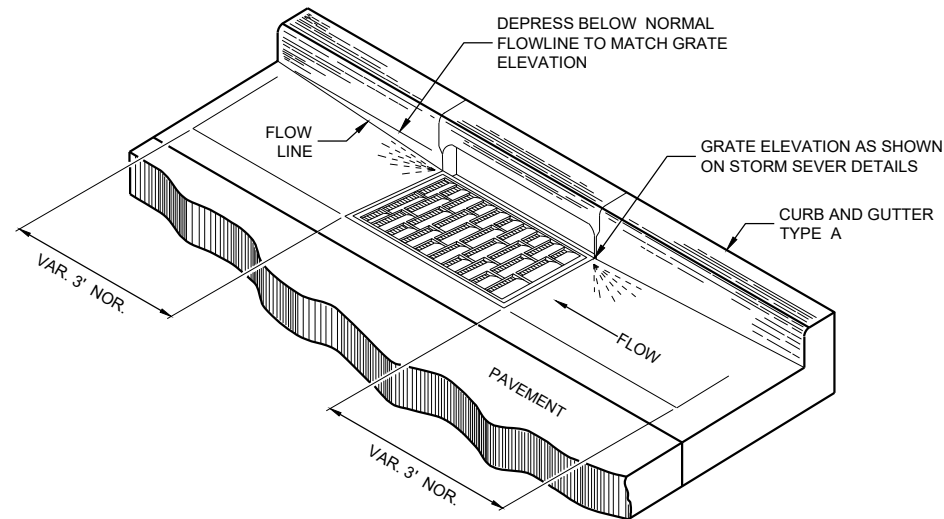
- ① TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ③ USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH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

CONCRETE CURB AND GUTTER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

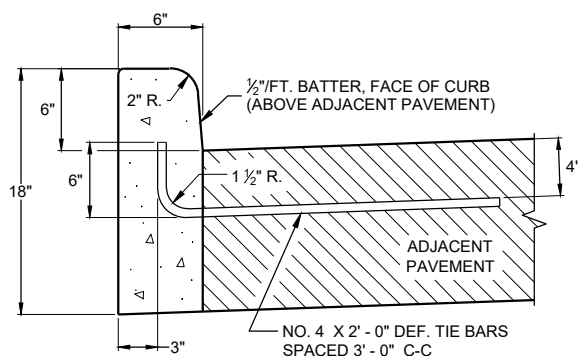


END SECTION CURB AND GUTTER

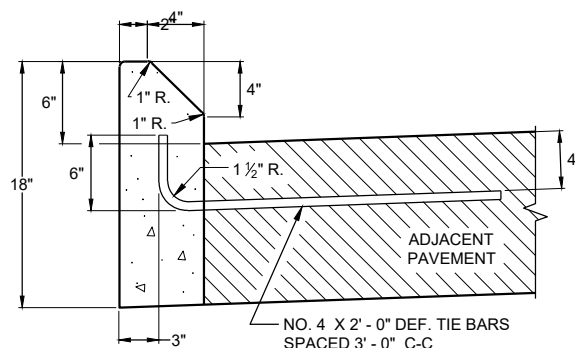


DETAIL OF CURB AND GUTTER AT INLETS

(TYPICAL H INLET COVER SHOWN)

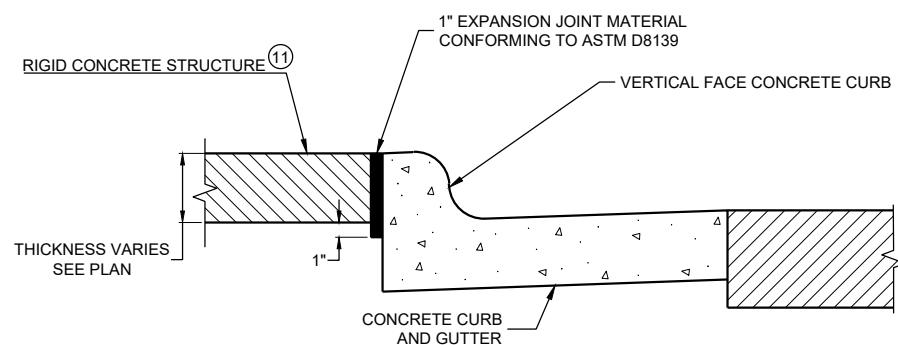


TYPES A^① & D

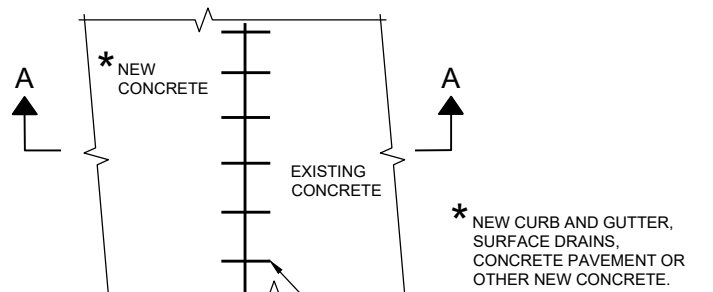


TYPES G^① & J

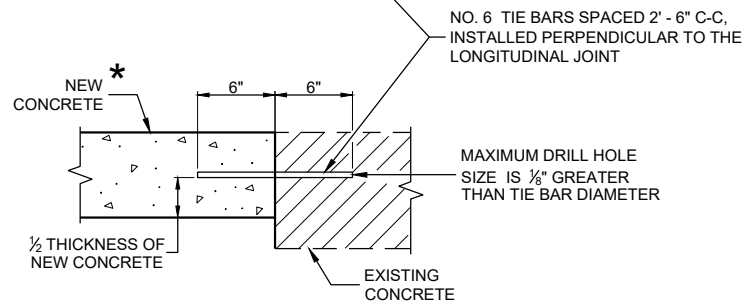
CONCRETE CURB



EXPANSION JOINT DETAIL FOR VERTICAL CURB ABUTTING A RIGID STRUCTURE^⑪



PLAN VIEW



SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT

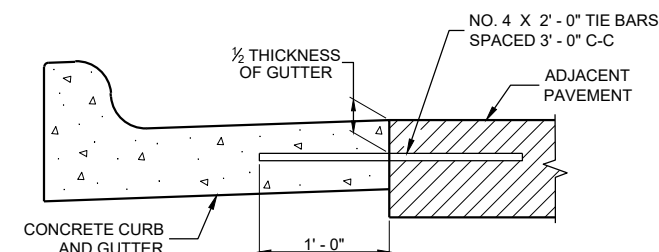
GENERAL NOTES

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

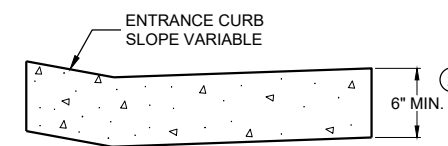
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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

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



TYPICAL TIE BAR LOCATION^①

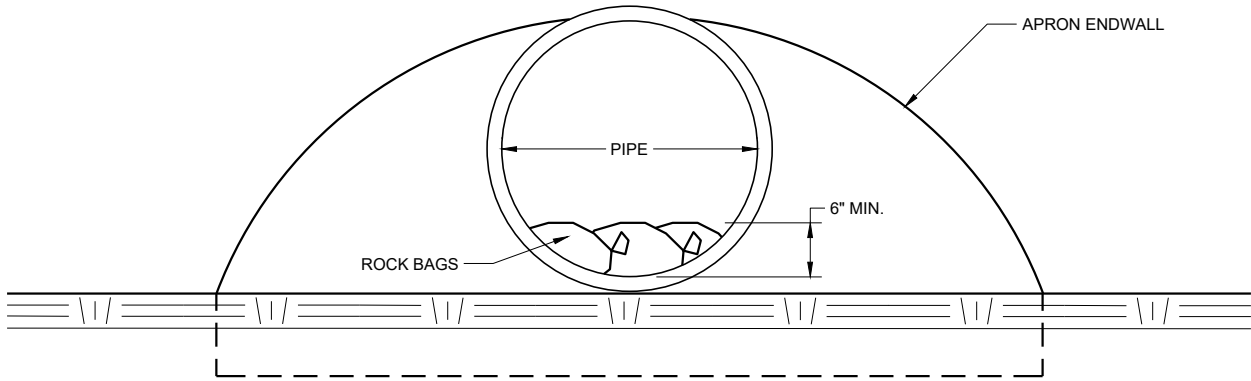


DRIVEWAY ENTRANCE CURB^⑩
(WHEN DIRECTED BY THE ENGINEER)

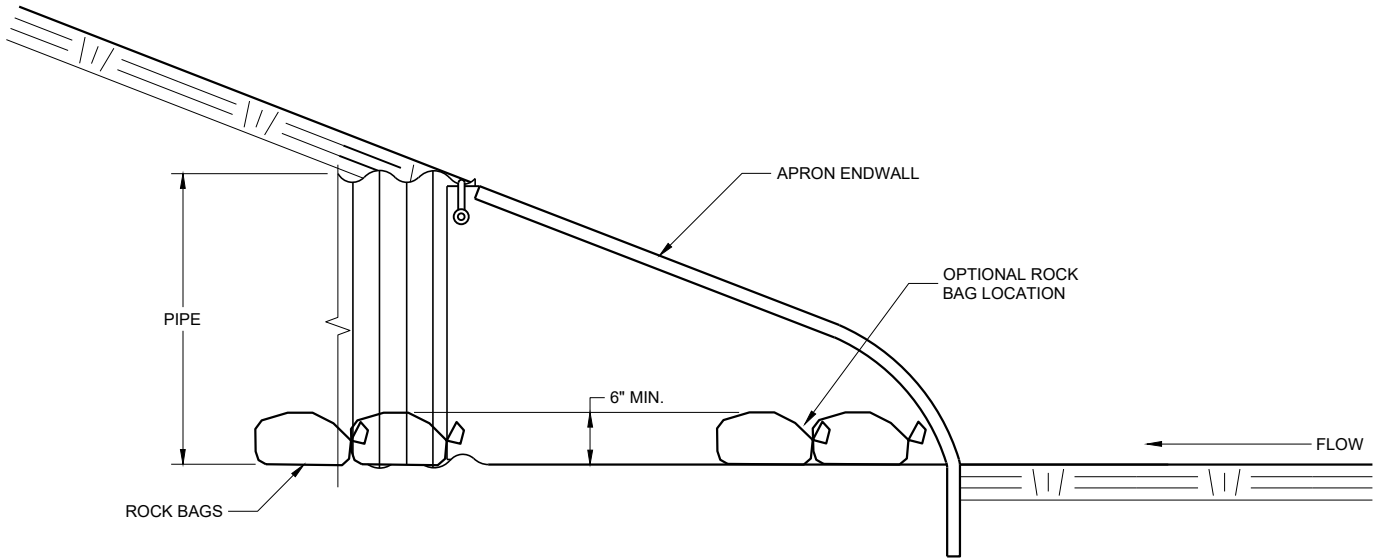
CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



END VIEW



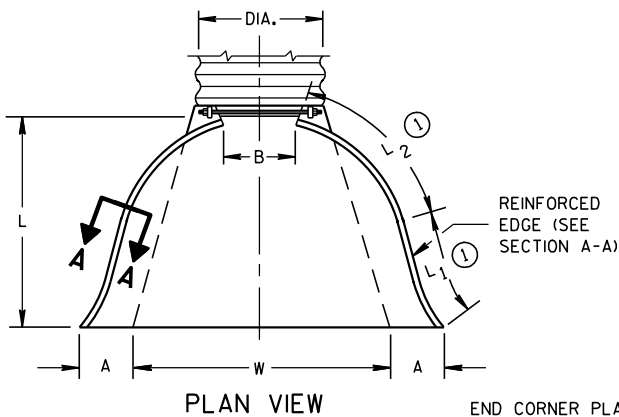
SIDE VIEW

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	

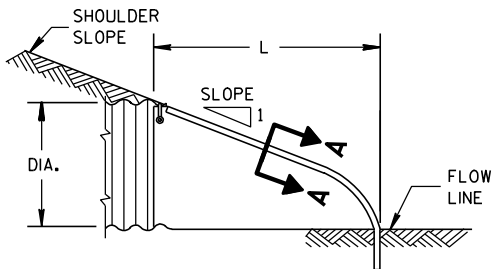
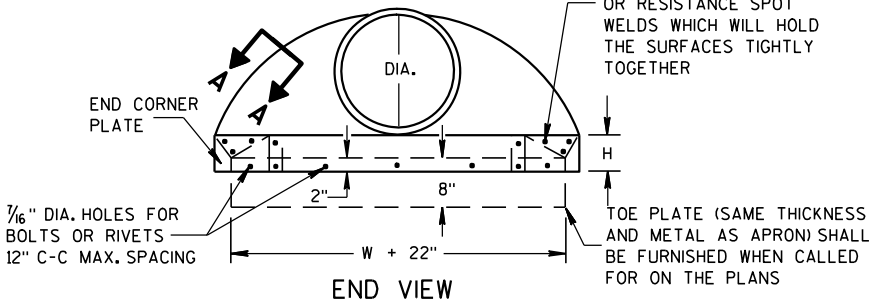
METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE		BODY
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1	1 Pc.
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1	1 Pc.
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1	1 Pc.
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1	1 Pc.
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2	2 Pc.
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2	2 Pc.
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3	3 Pc.
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3	3 Pc.
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3	3 Pc.
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3	3 Pc.
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3	3 Pc.
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3	3 Pc.
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3	3 Pc.
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3	3 Pc.
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3	3 Pc.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES



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

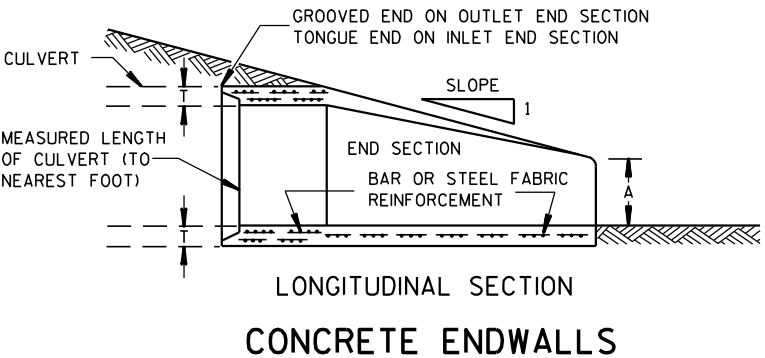
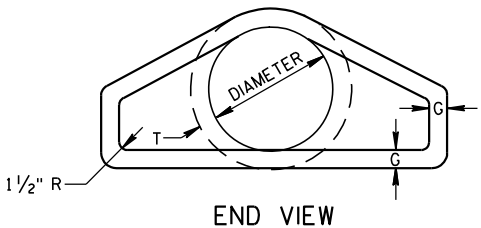
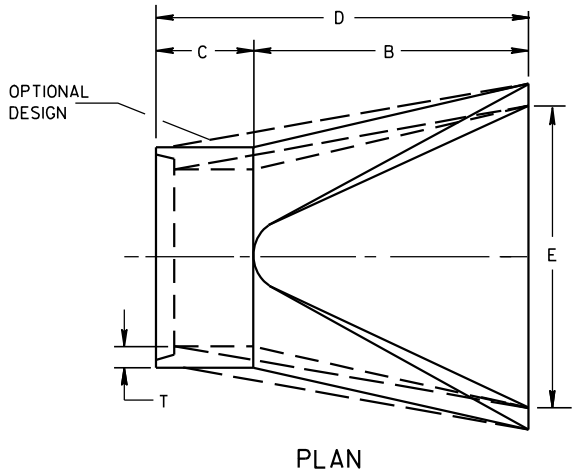
TOE PLATE (SAME THICKNESS AND METAL AS APRON) SHALL BE FURNISHED WHEN CALLED FOR ON THE PLANS



SIDE ELEVATION
METAL ENDWALLS

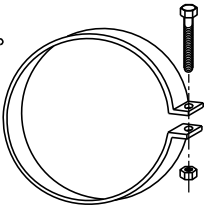
REINFORCED CONCRETE APRON ENDWALLS												
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE				
	T	A	B	C	D	E	G					
12	2	4	24	48 7/8	72 7/8	24	2	3 to 1				
15	2 1/4	6	27	46	73	30	2 1/4	3 to 1				
18	2 1/2	9	27	46	73	36	2 1/2	3 to 1				
21	2 3/4	9	36	37 1/2	73 1/2	42	2 3/4	3 to 1				
24	3	9 1/2	43 1/2	30	73 1/2	48	3	3 to 1				
27	3 1/4	10 1/2	49 1/2	24	73 1/2	54	3 1/4	3 to 1				
30	3 1/2	12	54	19 3/4	73 1/2	60	3 1/2	3 to 1				
36	4	15	63	34 3/4	97 3/4	72	4	3 to 1				
42	4 1/2	21	63	35	98	78	4 1/2	3 to 1				
48	5	24	72	26	98	84	5	3 to 1				
54	5 1/2	27	65	33 1/4-35	98 1/4-100	90	5 1/2	2 2/5 to 1				
60	6	30-35	60	39	99	96	5	2 to 1				
66	6 1/2	24-30	72-78	21-27	99	102	5 1/2	2 to 1				
72	7	24-36	78	21	99	108	6	2 to 1				
78	7 1/2	24-36	78	21	99	114	6 1/2	2 to 1				
84	8	36	90 1/2	21	111 1/2	120	6 1/2	1 1/2 to 1				
90	8 1/2	41	87 1/2	24	111 1/2	132	6 1/2	1 1/2 to 1				

* MINIMUM
** MAXIMUM

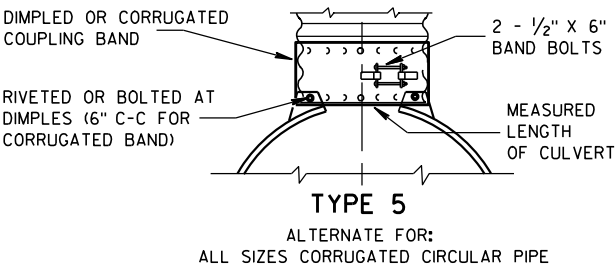
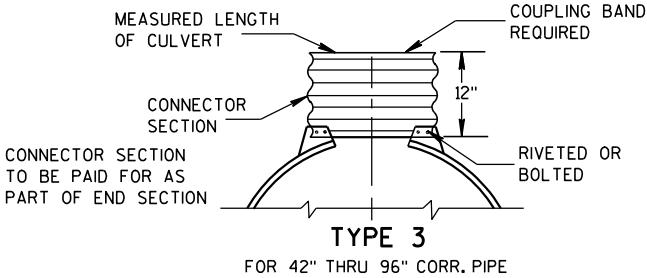
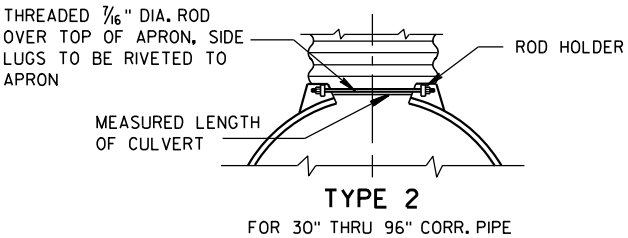
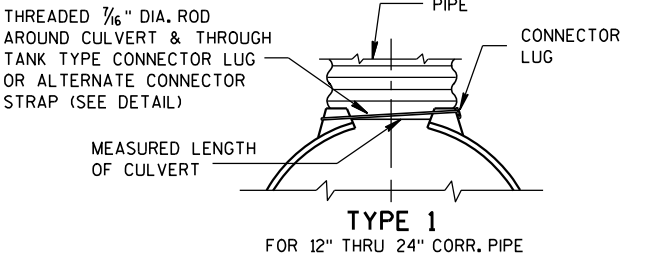


LONGITUDINAL SECTION
CONCRETE ENDWALLS

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



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



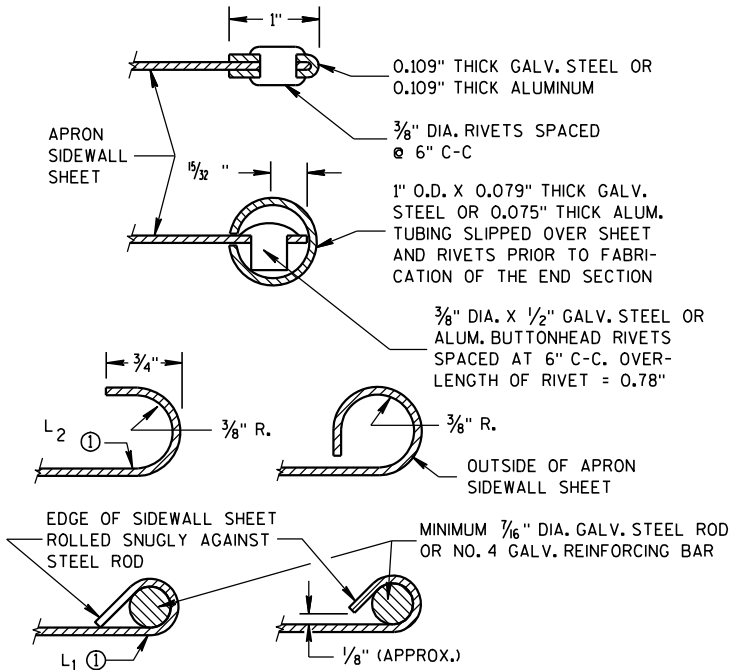
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

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

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

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

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

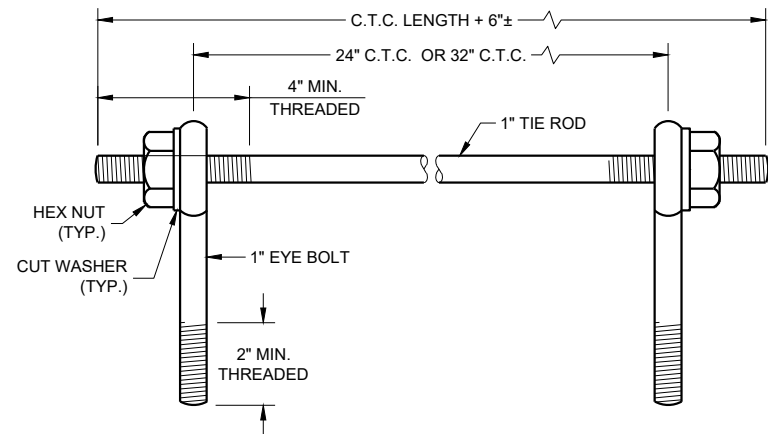
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

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

APRON ENDWALLS FOR
CULVERT PIPE

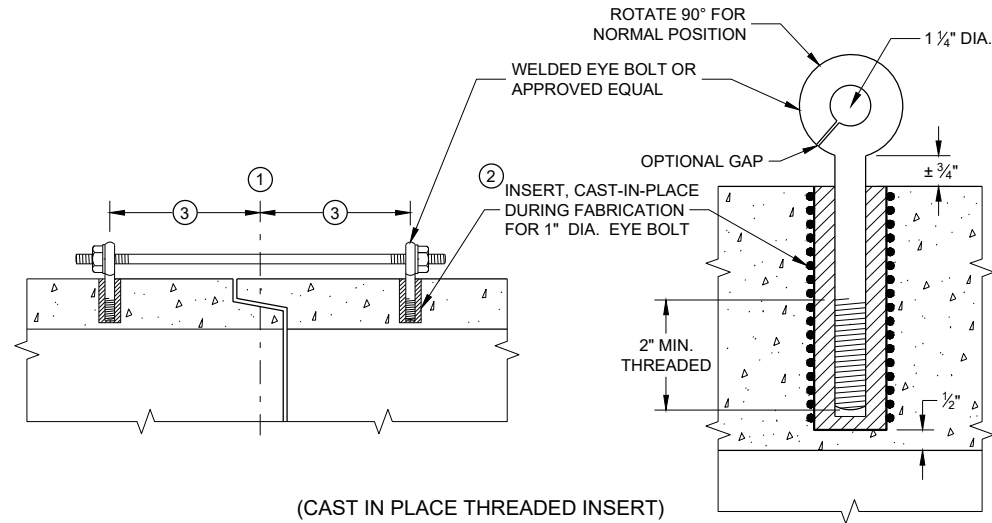
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



EYE BOLTS AND TIE ROD

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



(CAST IN PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

GENERAL NOTES

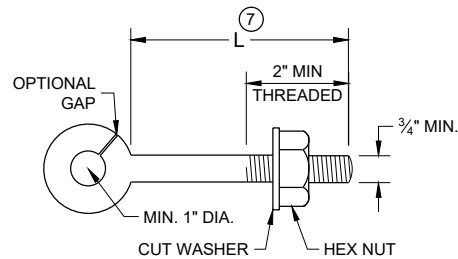
DETAILS OF CONSTRUCTION, MATERIALS, AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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.

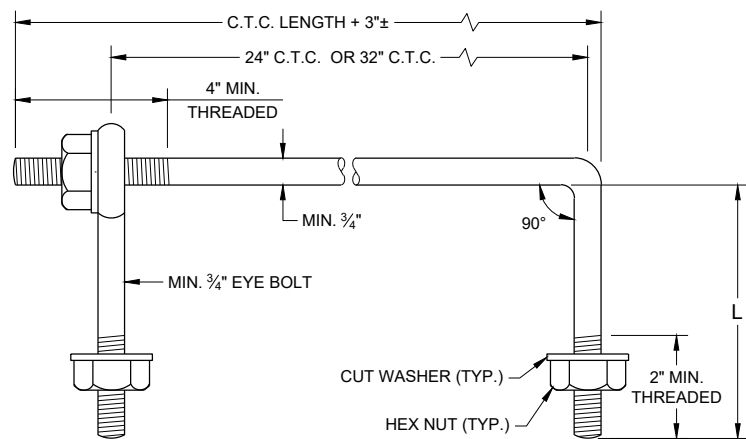
JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

- 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.

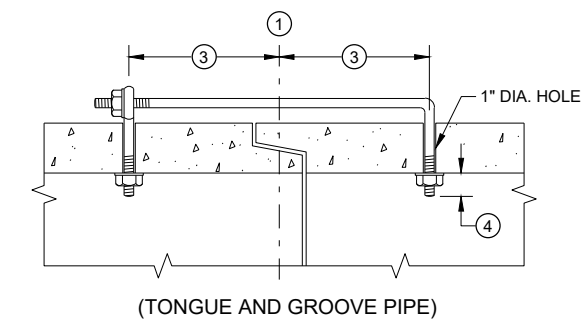


EYE BOLT 7

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

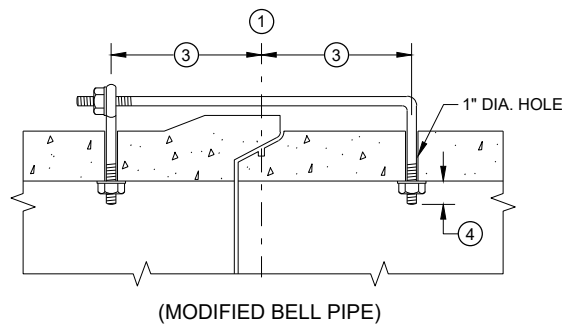


(TONGUE AND GROOVE PIPE)

LONGITUDINAL SECTION

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

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

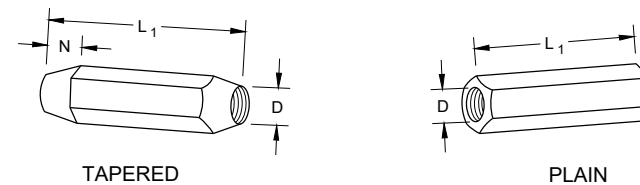


(MODIFIED BELL PIPE)

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

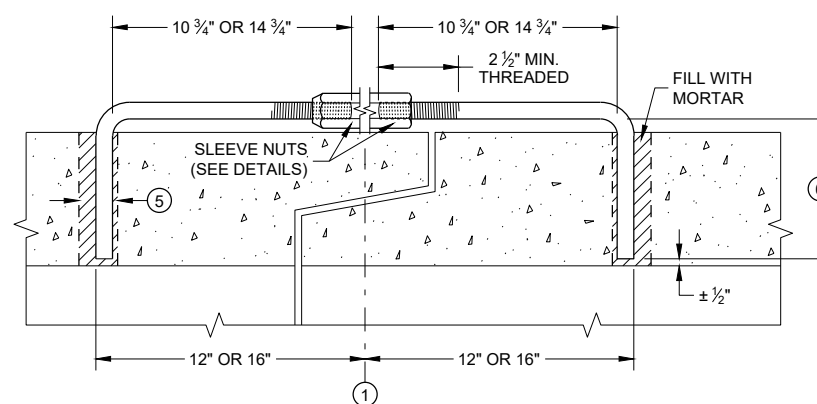
DIMENSIONS SHOWN ARE IN INCHES



TAPERED

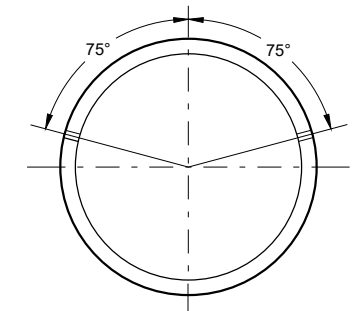
PLAIN

RIGHT AND LEFT THREADS
SLEEVE NUTS



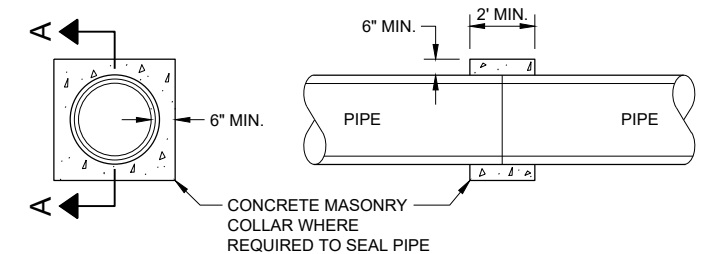
LONGITUDINAL SECTION

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



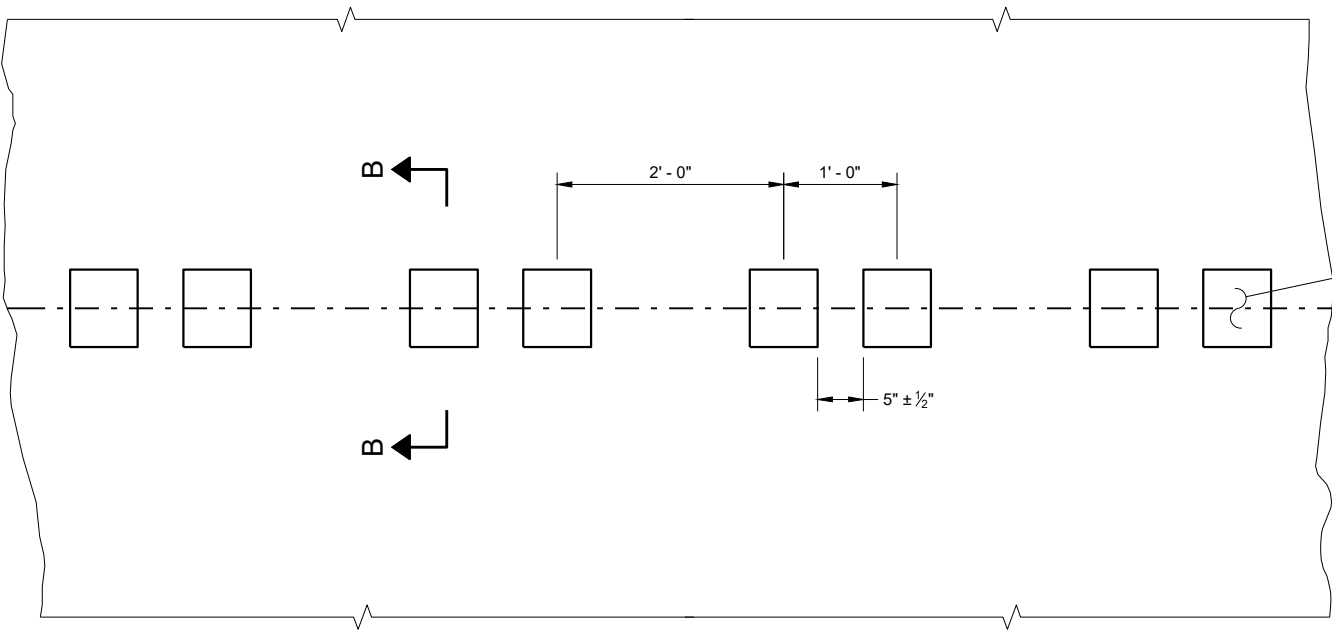
SECTION A - A

CONCRETE COLLAR DETAIL

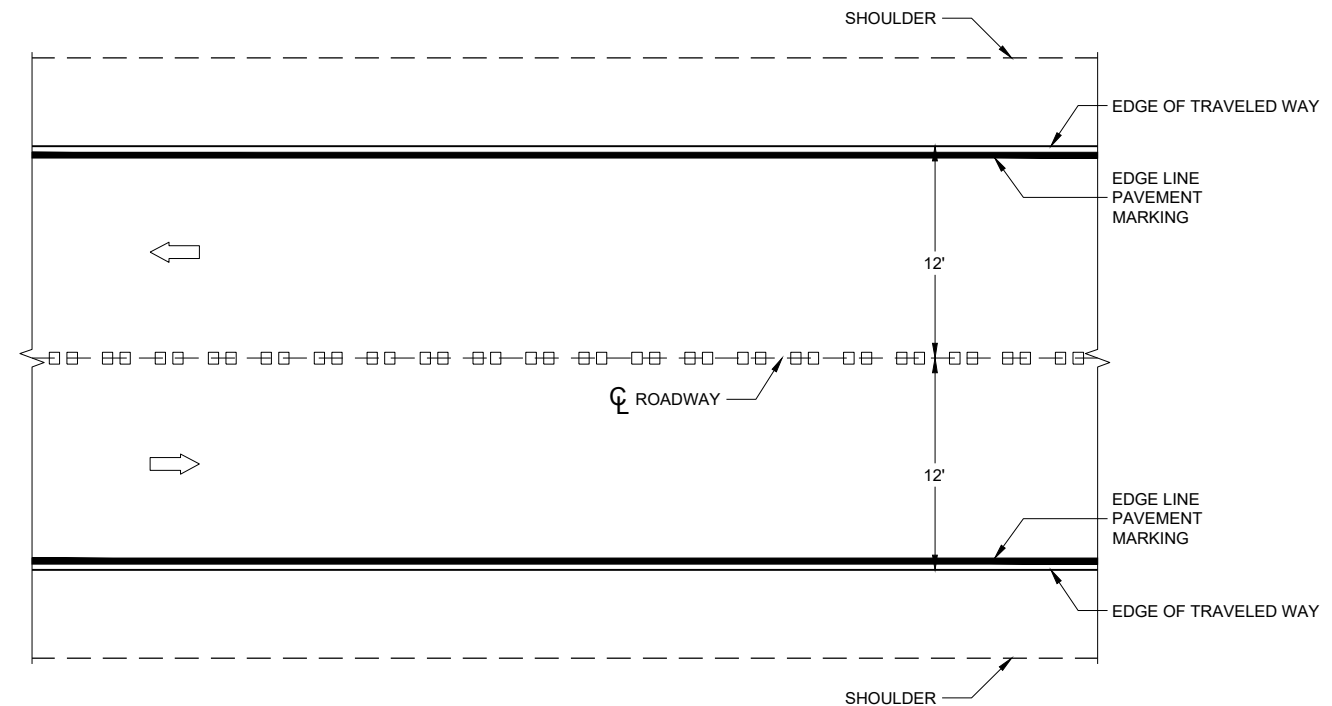
JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

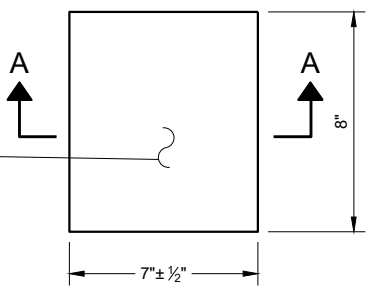


PLAN DETAIL VIEW

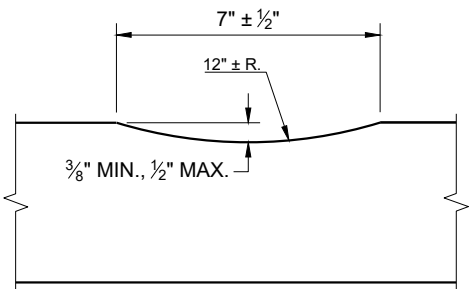


PLAN VIEW

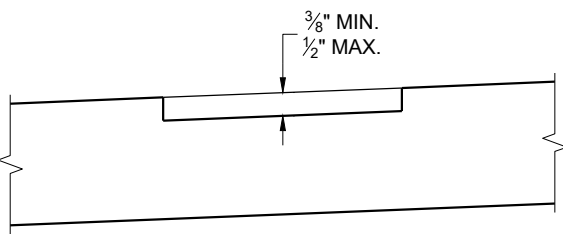
CENTERLINE RUMBLE STRIPS - ASPHALT



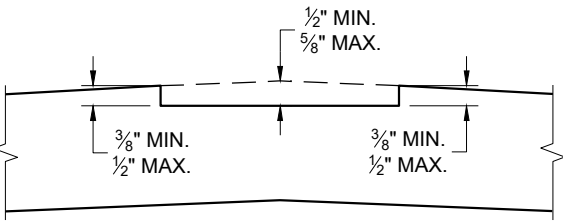
PLAN VIEW
(SINGLE GROOVE)



SECTION A - A



SECTION B - B
SUPERELEVATED ROADWAY

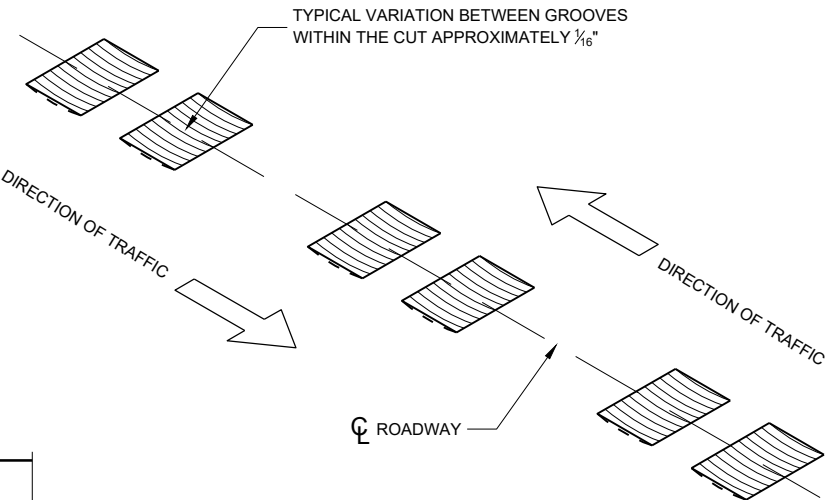


SECTION B - B
CROWNED ROADWAY

GENERAL NOTES

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

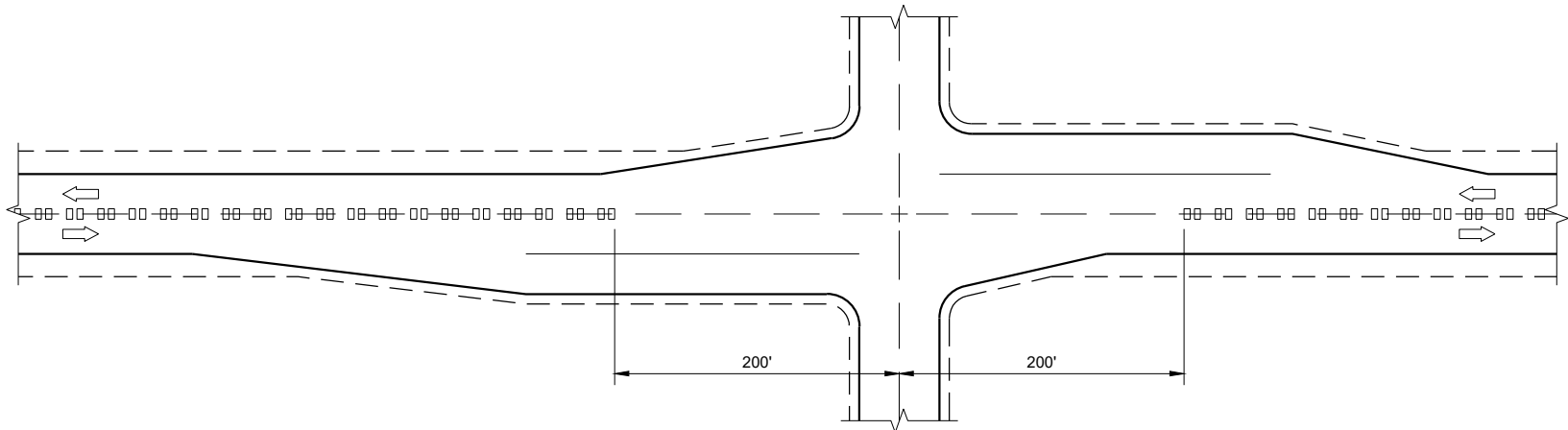
CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS WHEN DIRECTED BY THE ENGINEER.



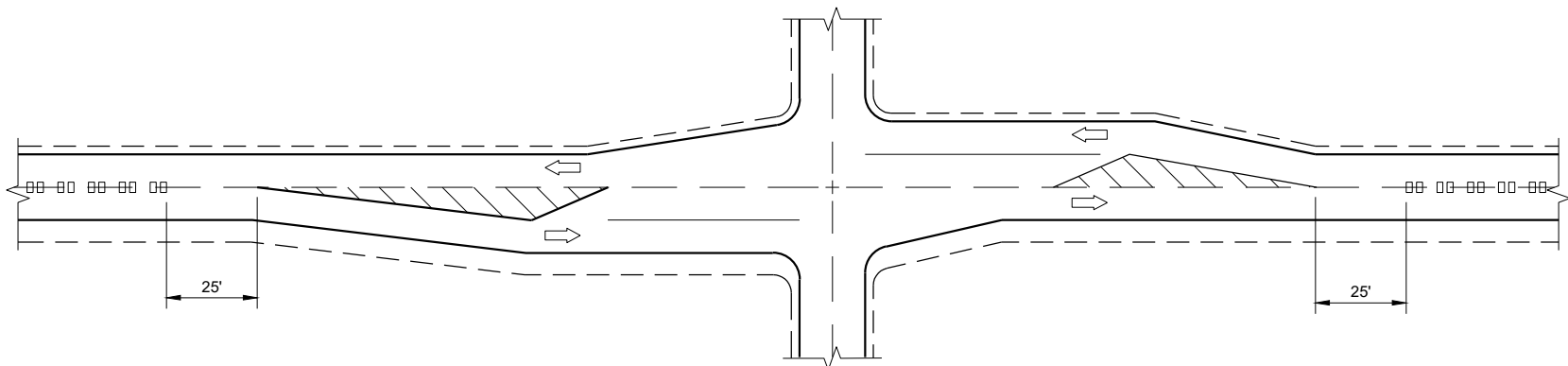
ISOMETRIC

CENTERLINE RUMBLE STRIPS - ASPHALT

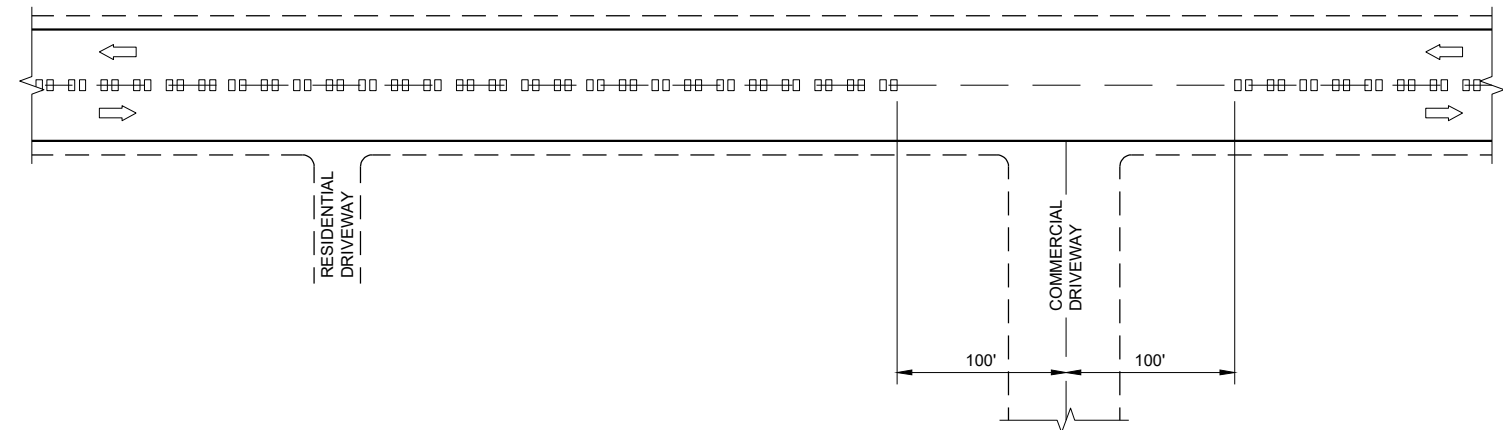
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



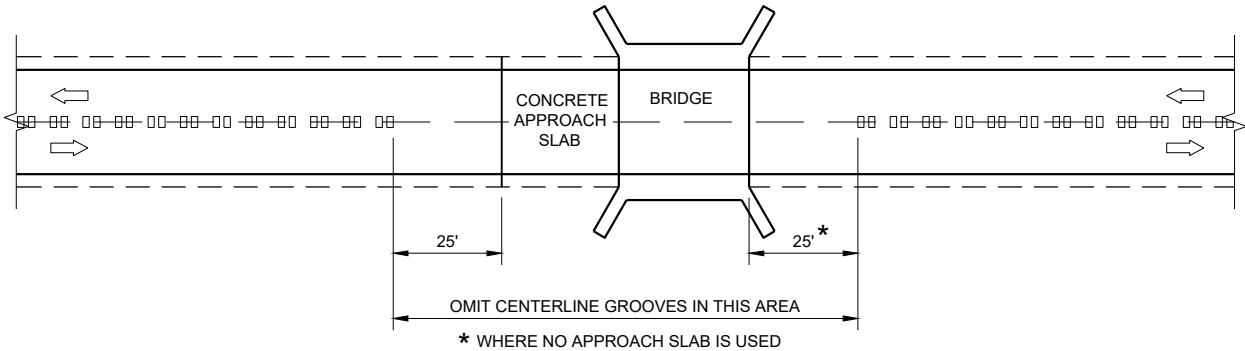
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



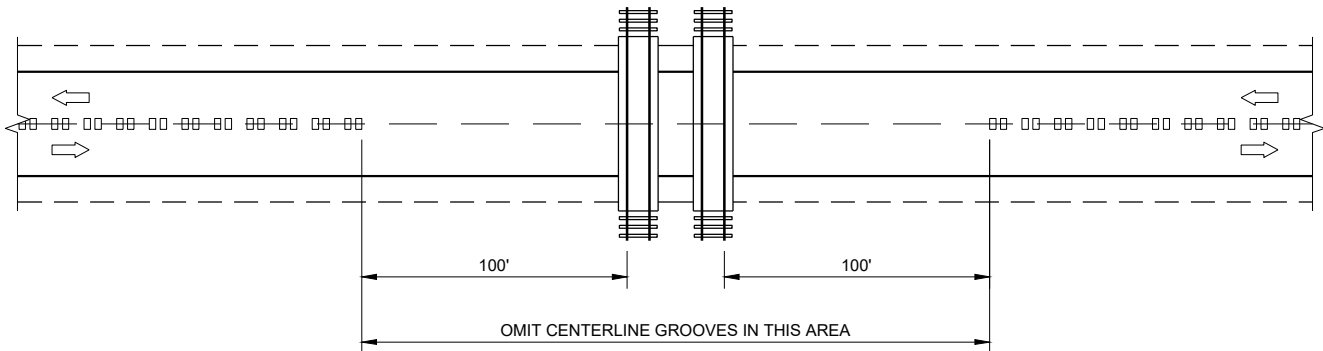
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES

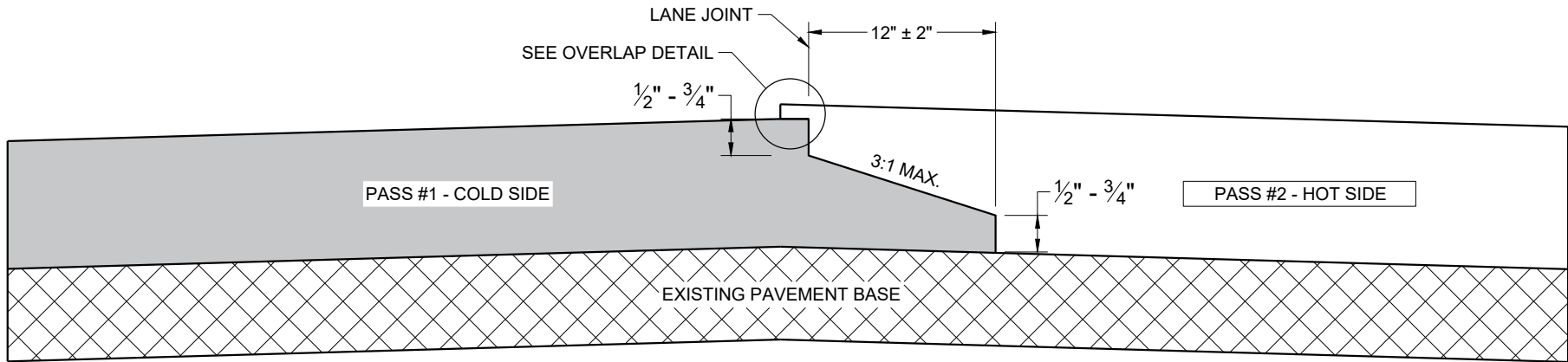


CENTERLINE GROOVES AT RAILROADS

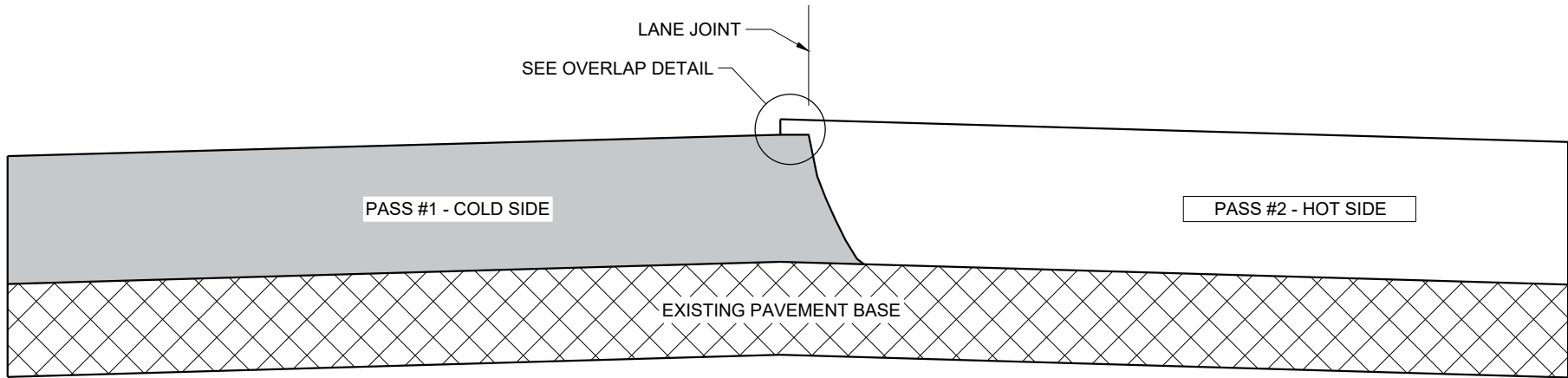
CENTER LINE
RUMBLE STRIPS -
INTERSECTIONS, DRIVEWAYS,
BRIDGES, RAIL ROADS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

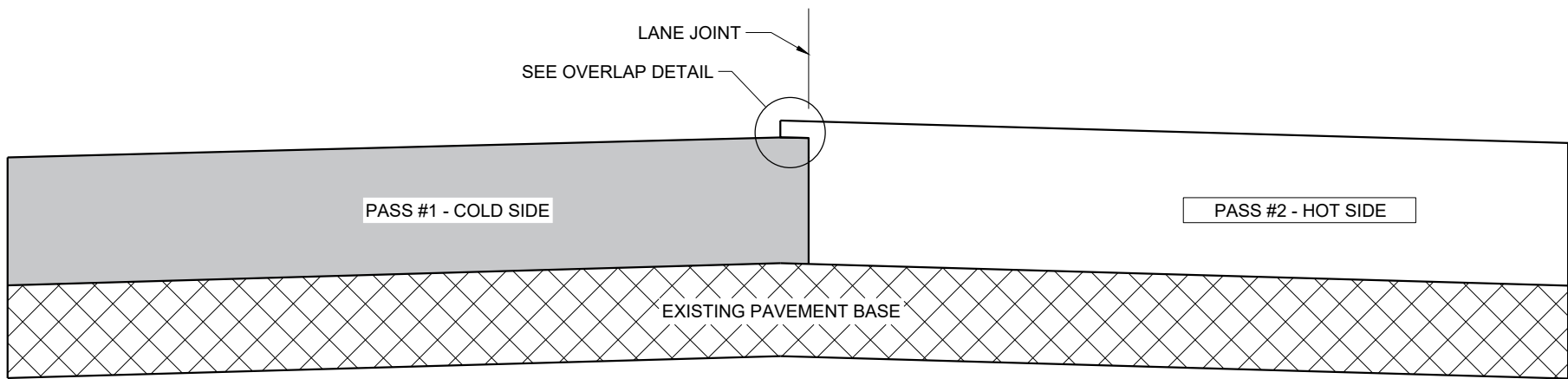
APPROVED
May 2023
DATE /S/ John Jenkins
ROADWAY STANDARDS DEVELOPMENT
ENGINEER
FHWA



**TYPICAL PAVEMENT CROSS SECTION
NOTCHED WEDGE JOINT**



**TYPICAL PAVEMENT CROSS SECTION
VERTICAL JOINT**



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

GENERAL NOTES

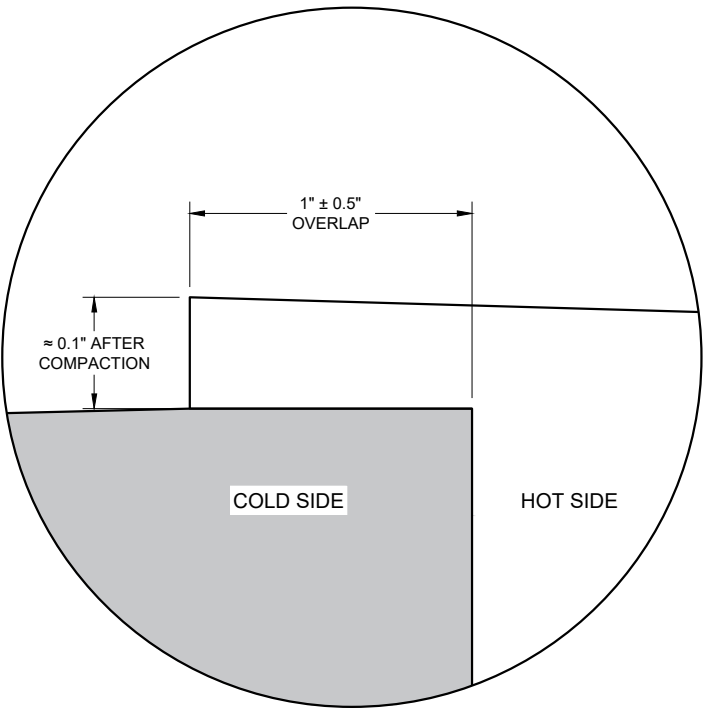
IN ADDITION TO THE DETAILS PROVIDED IN THIS DRAWING, CONFORM TO STANDARD SPECIFICATION 450.3.2.8 FOR WHEN A NOTCHED WEDGE JOINT IS REQUIRED AND FOR GENERAL JOINT CONSTRUCTION REQUIREMENTS.

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

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

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

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

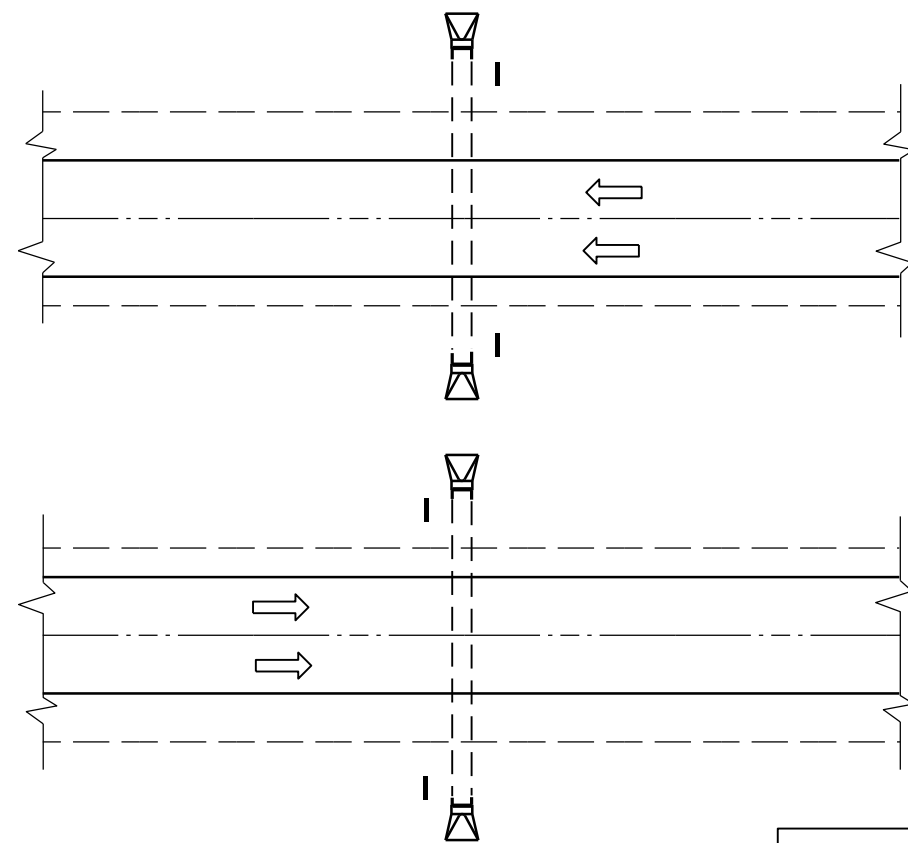


OVERLAP DETAIL (TYPICAL)

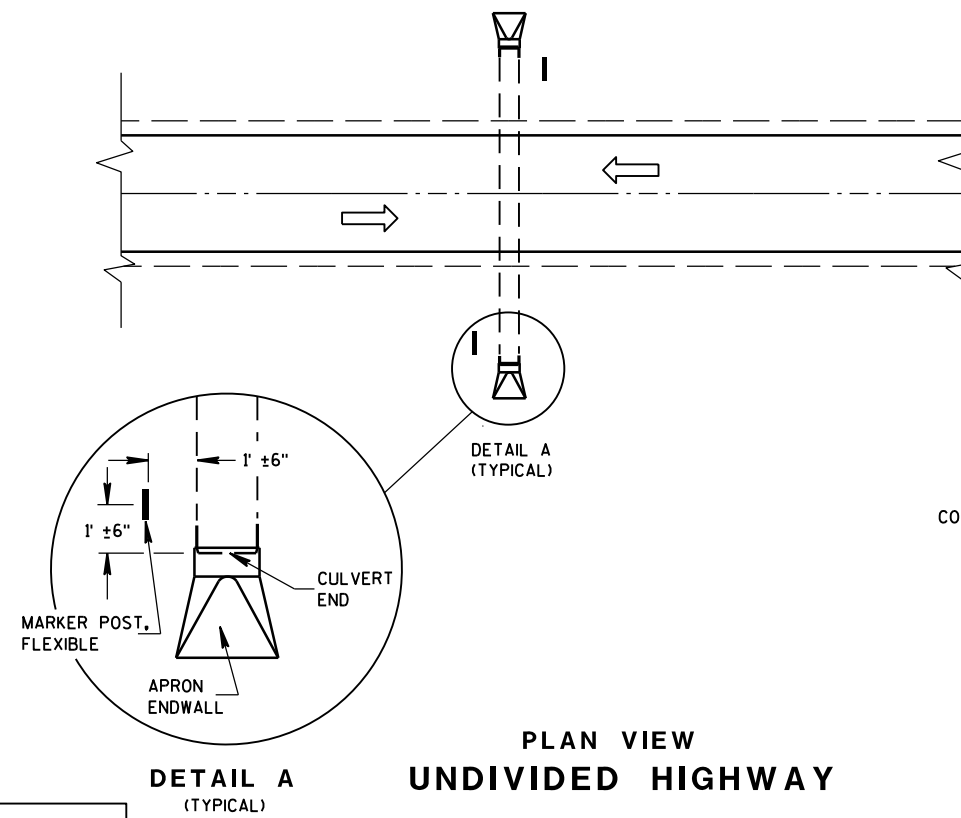
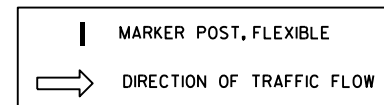
HMA LONGITUDINAL JOINTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



PLAN VIEW
DIVIDED HIGHWAY

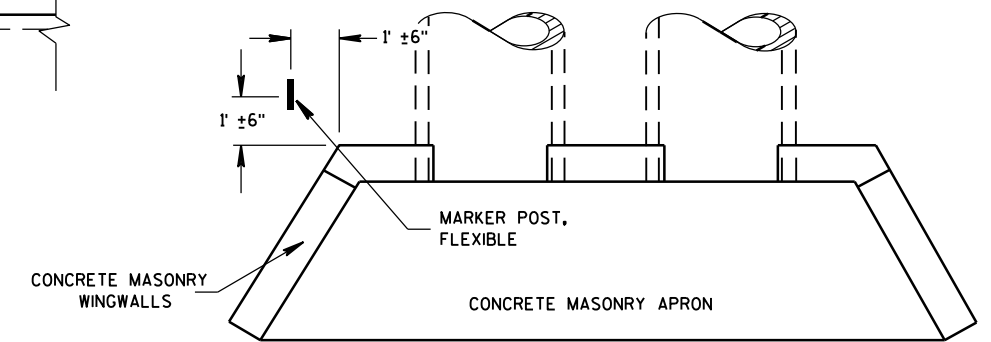


PLAN VIEW
UNDIVIDED HIGHWAY

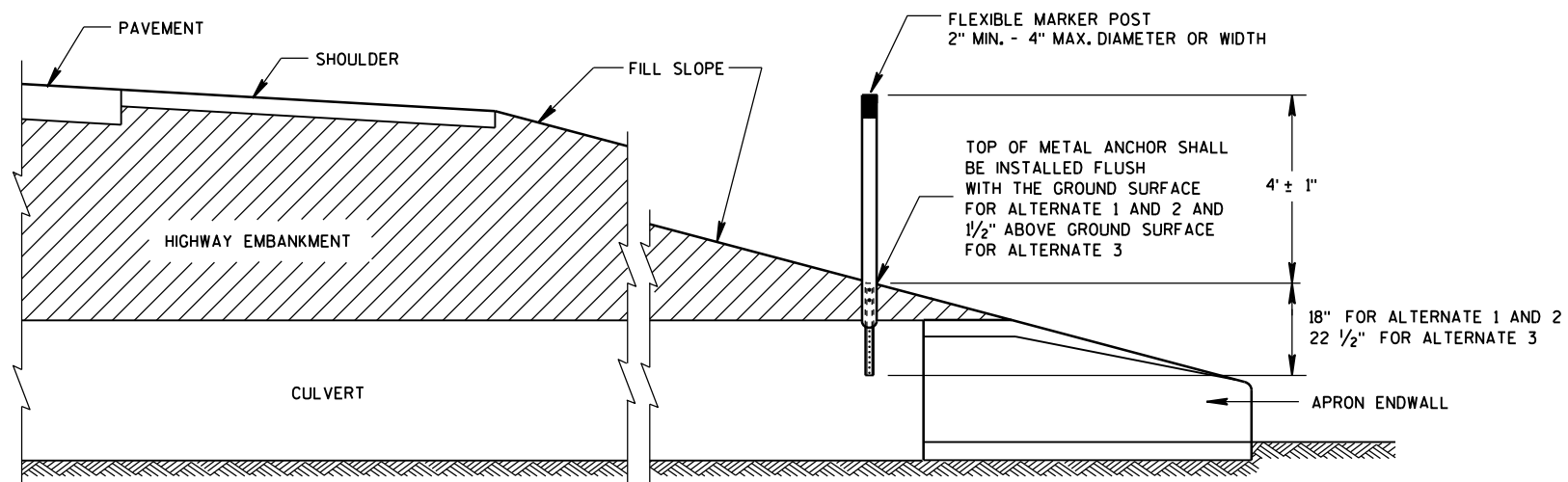
FLEXIBLE MARKER POST LOCATION

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.



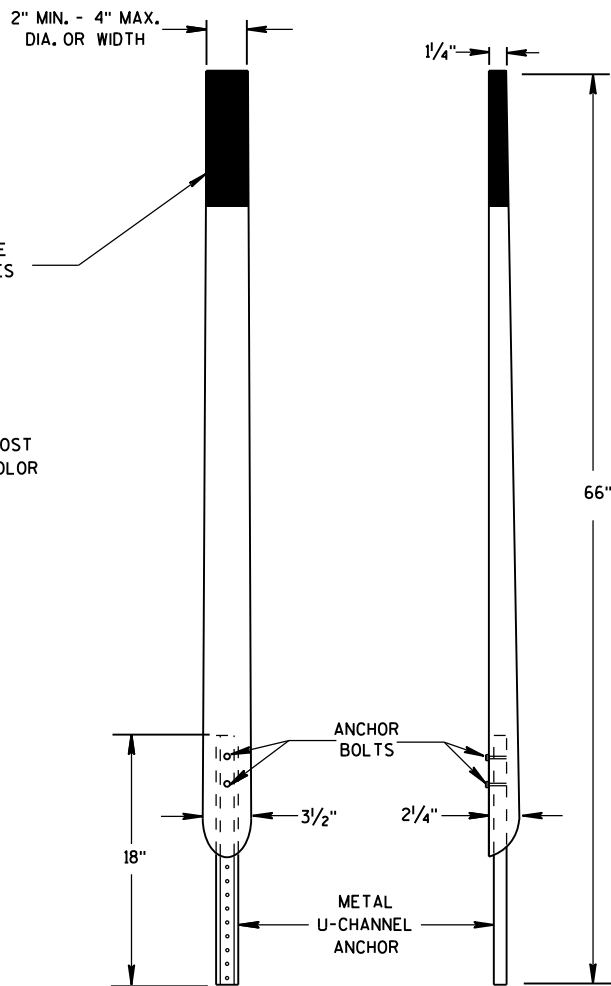
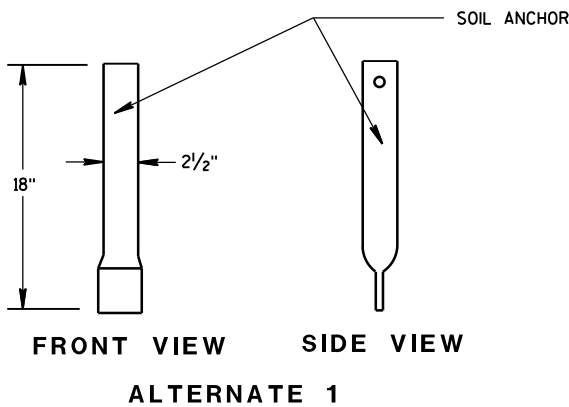
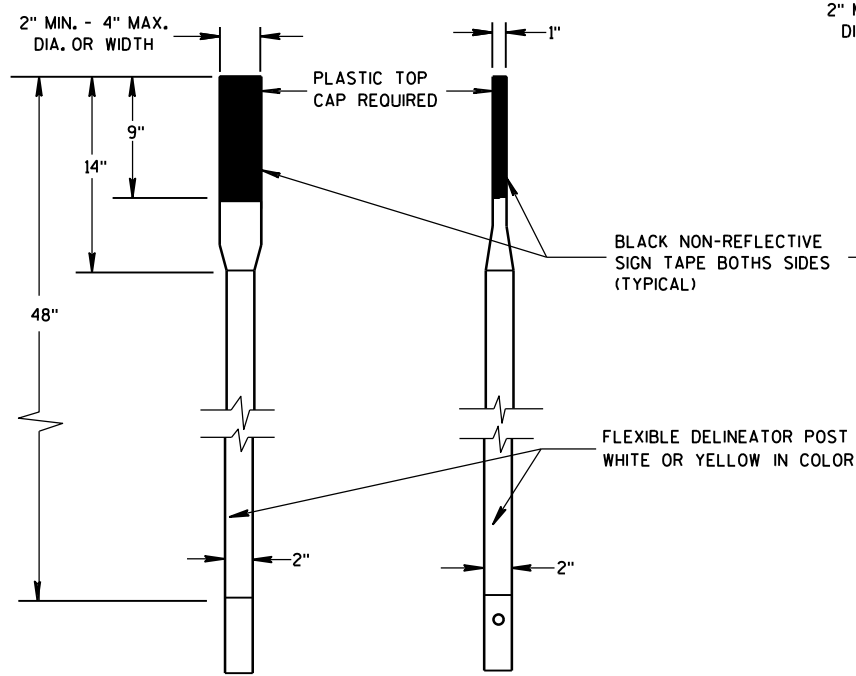
PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH



CROSS SECTION
FLEXIBLE MARKER POST

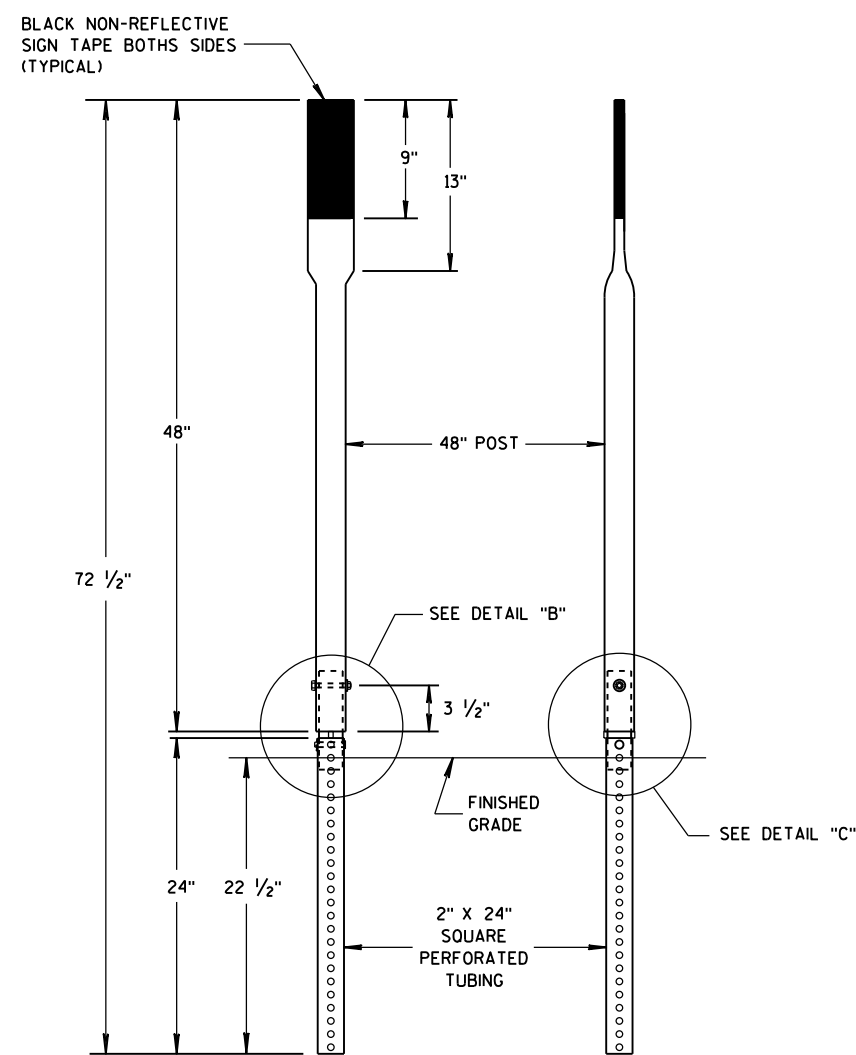
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

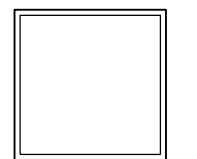


FRONT VIEW SIDE VIEW
ALTERNATE 2

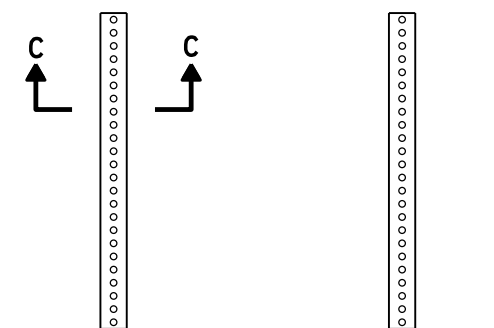
FLEXIBLE MARKER POSTS



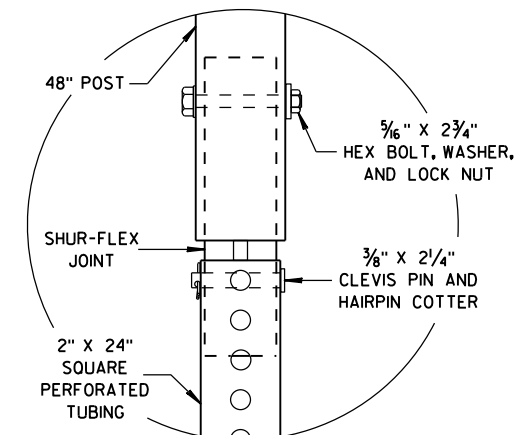
FRONT VIEW SIDE VIEW
ALTERNATE 3



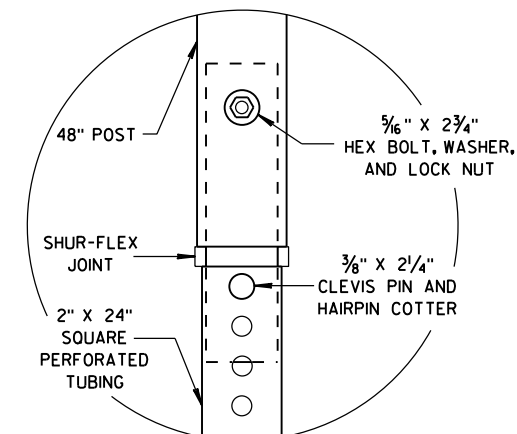
SECTION C-C



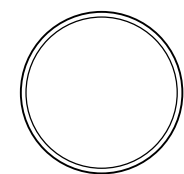
FRONT VIEW SIDE VIEW
ALTERNATE 3



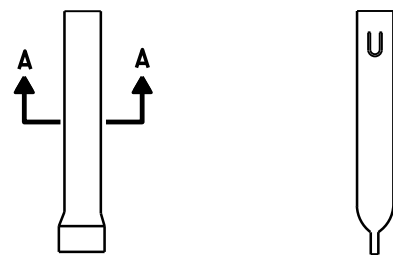
DETAIL B



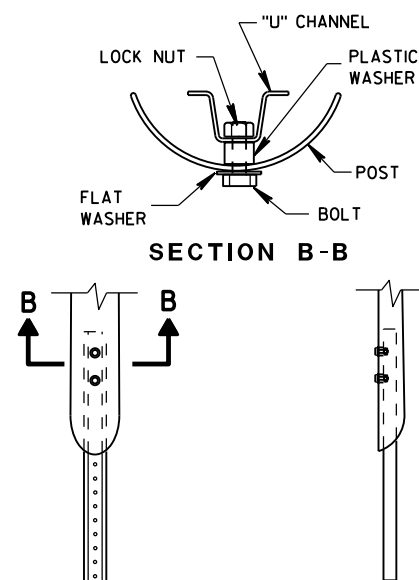
DETAIL C



SECTION A-A



FRONT VIEW SIDE VIEW
ALTERNATE 1



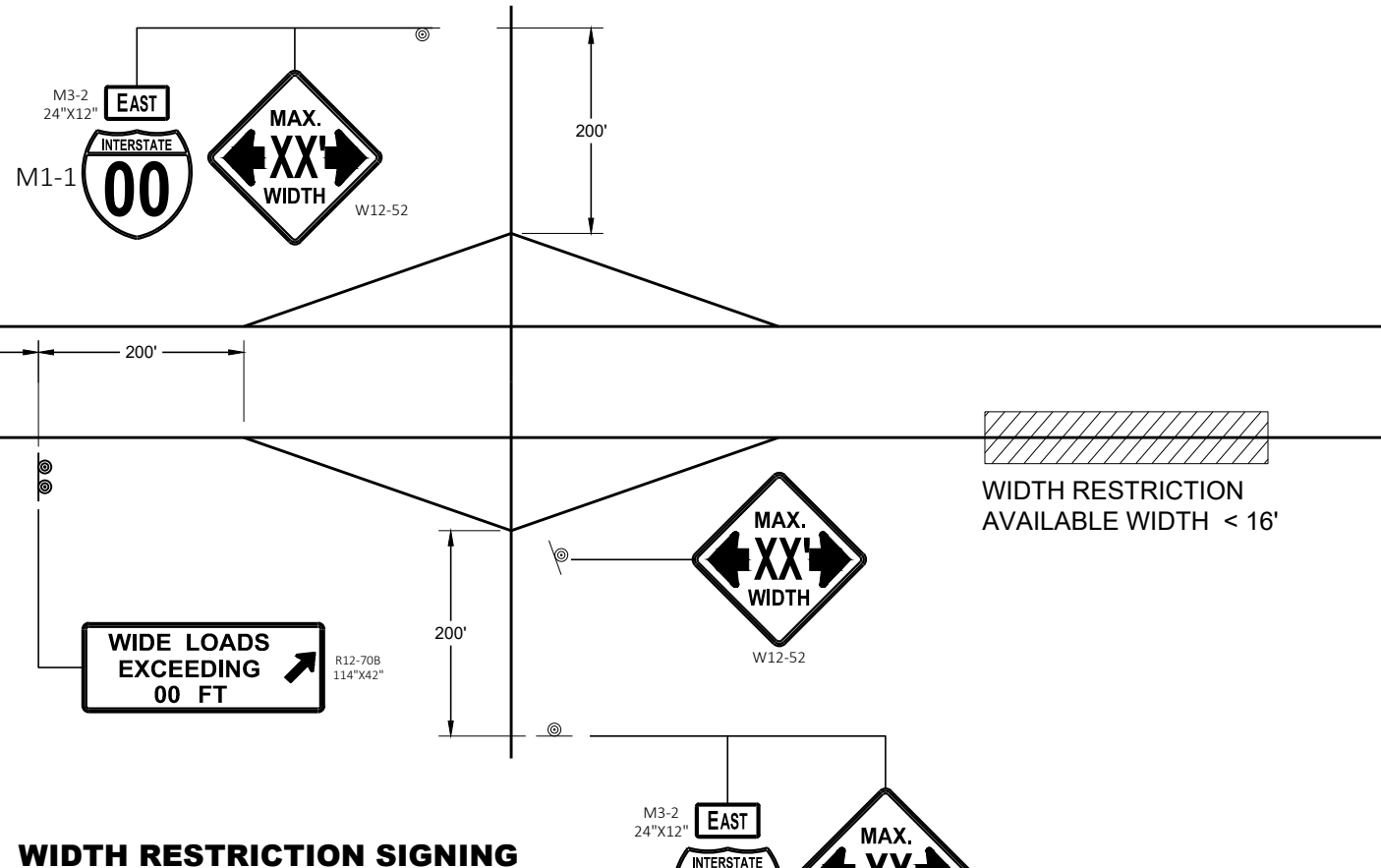
FRONT VIEW SIDE VIEW
ALTERNATE 2

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



LEGEND

⊙ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

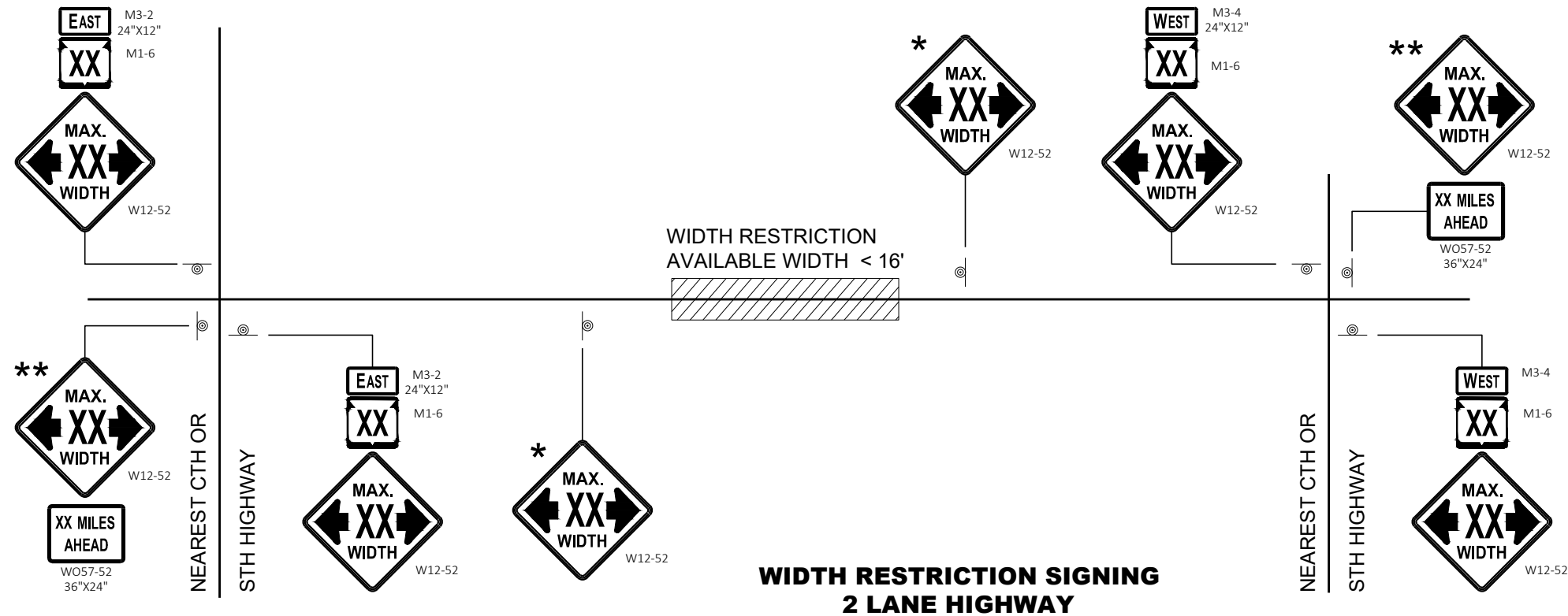
"WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

WIDTH ON SIGN TO BE APPROXIMATELY ONE FOOT LESS THAN AVAILABLE WIDTH.

- * PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.
- ** SIGN SHALL BE VISIBLE FROM ROADWAY.
- *** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.



WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH



ADVANCED WIDTH RESTRICTION SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

GENERAL NOTES

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

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




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

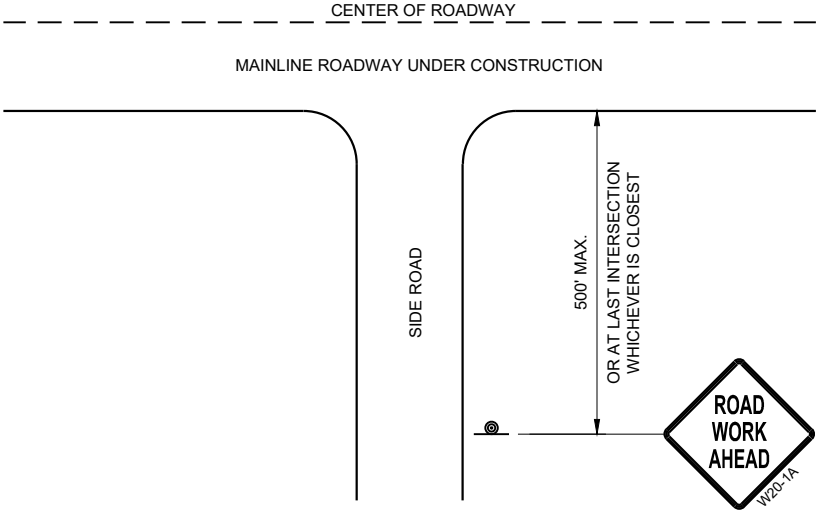
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

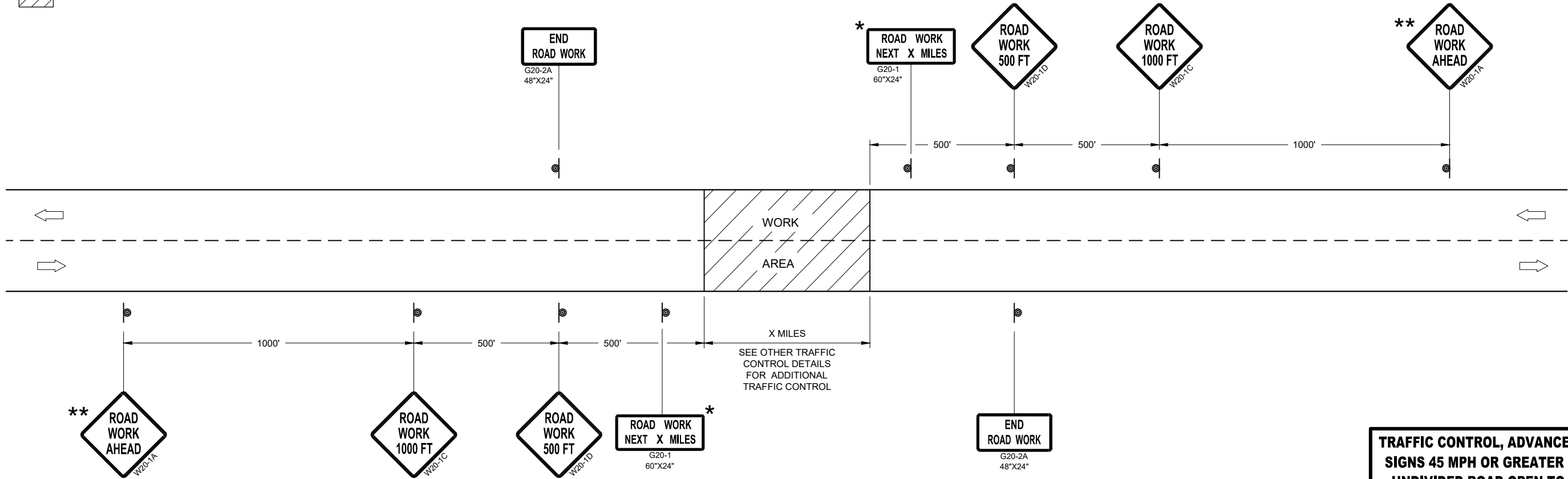
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

GENERAL NOTES

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

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




ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"X36" SIGNS MAY BE USED INSTEAD OF 48" X 48" SIGNS.

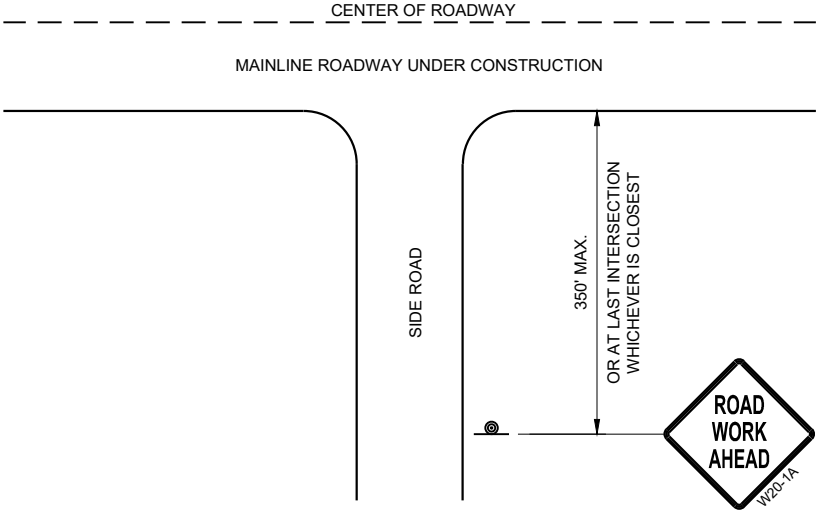
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

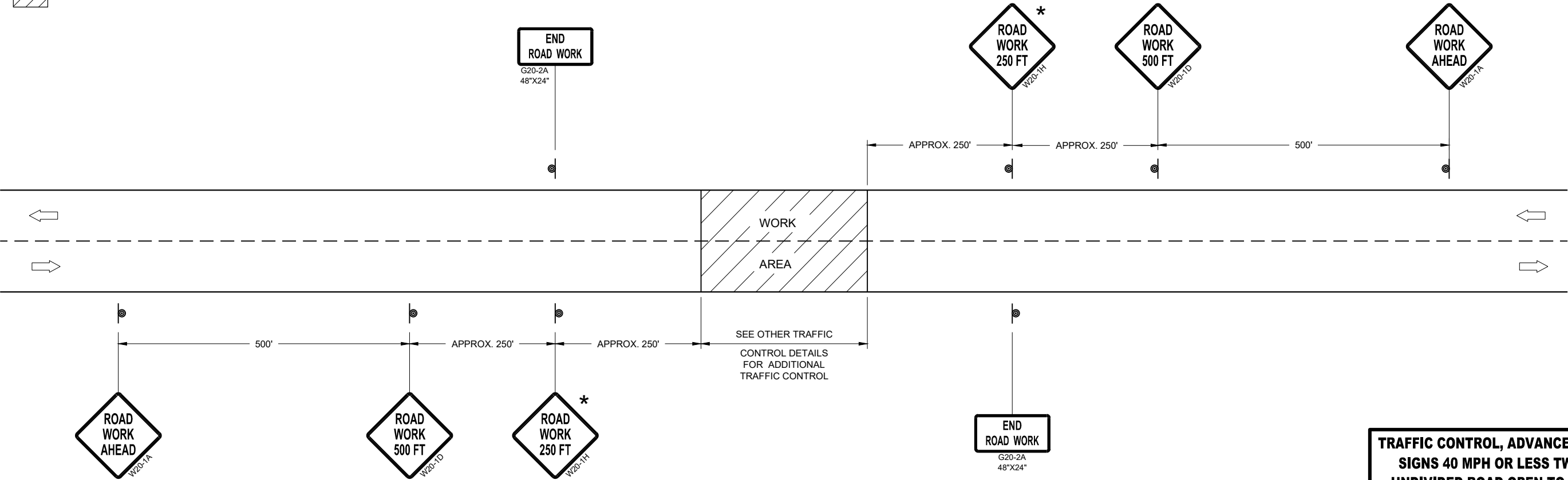
* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FEET" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL

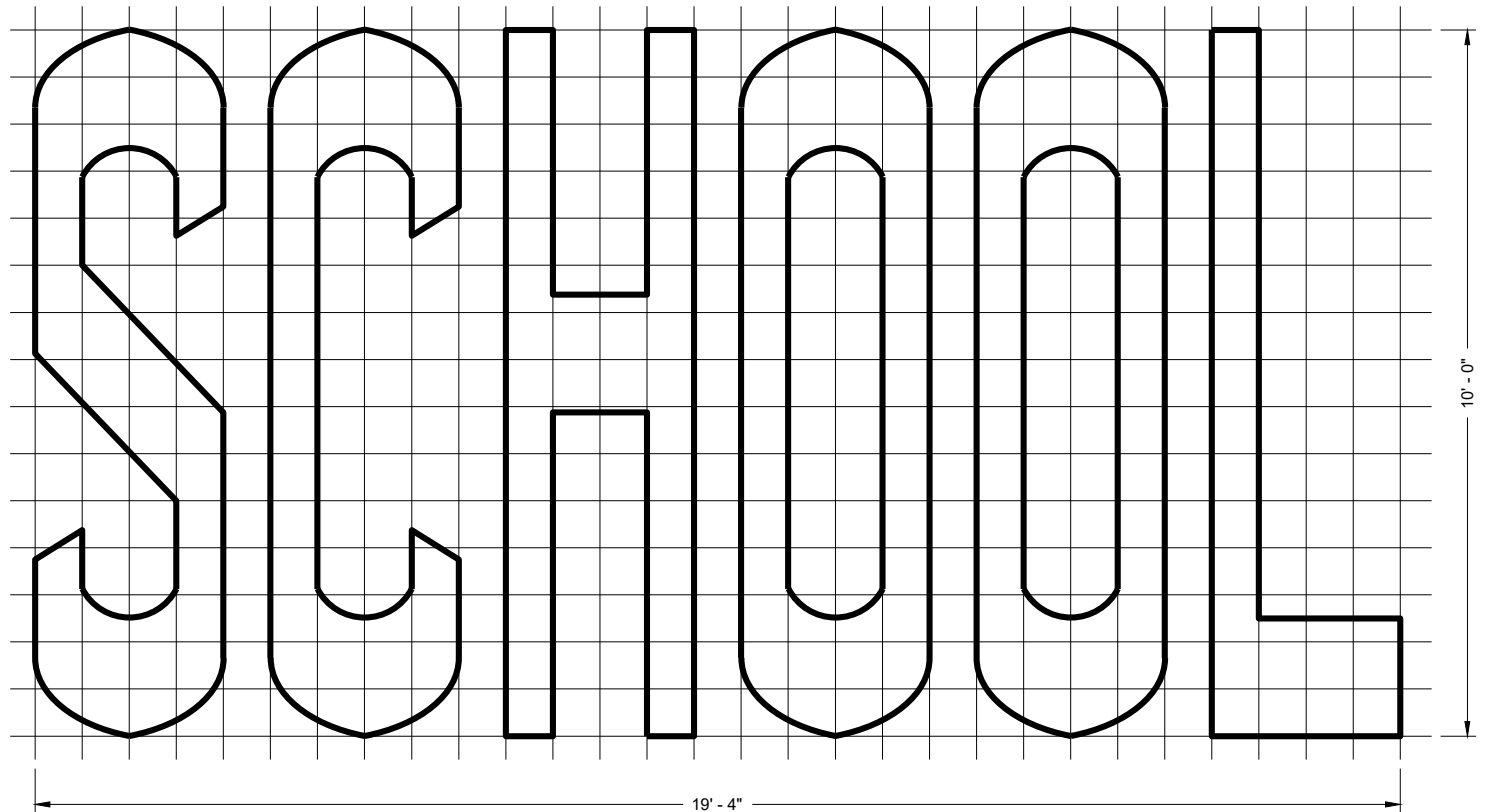
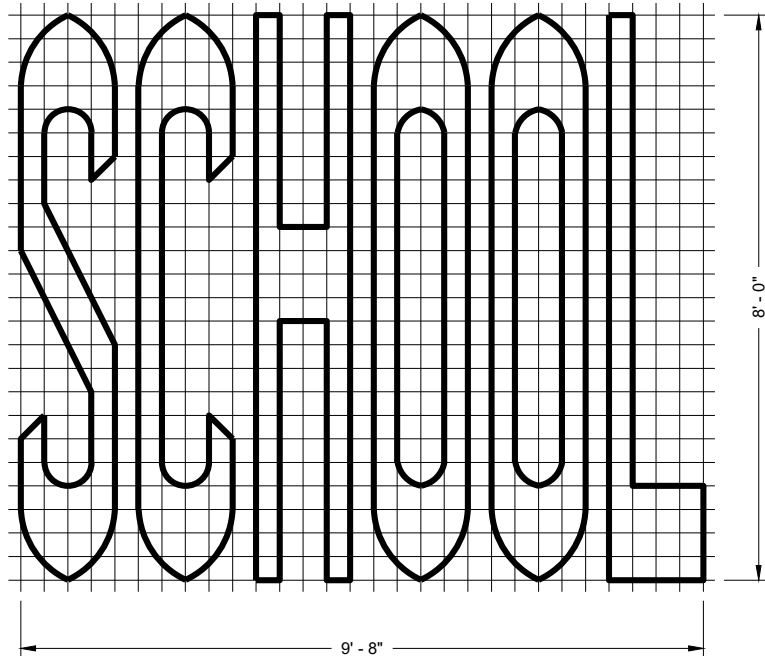
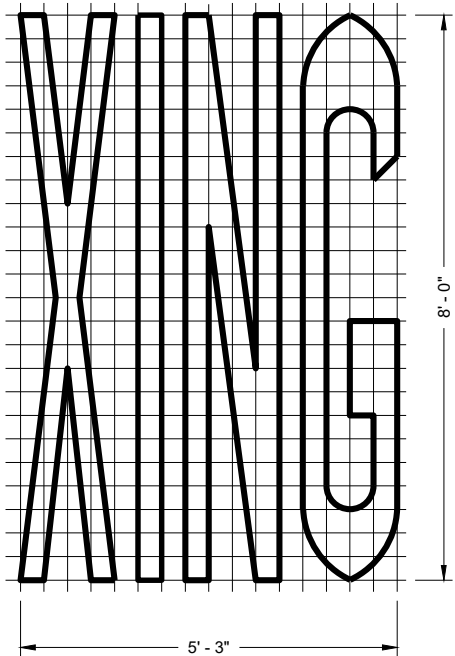
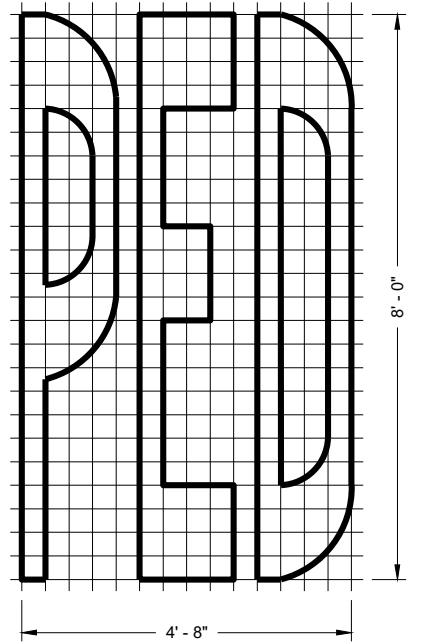
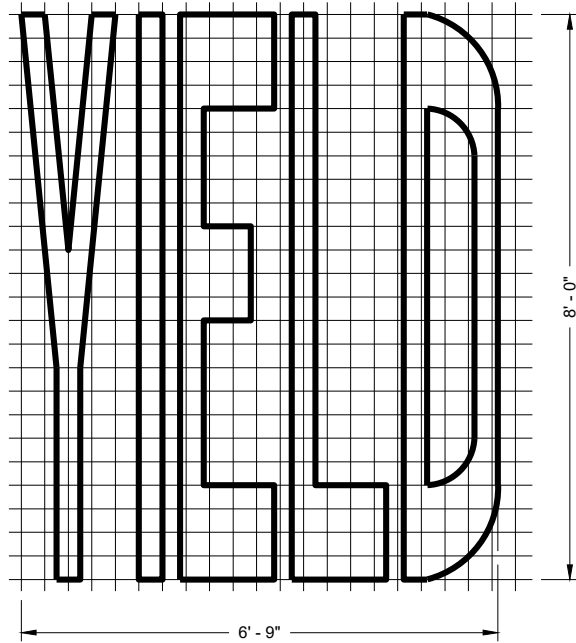
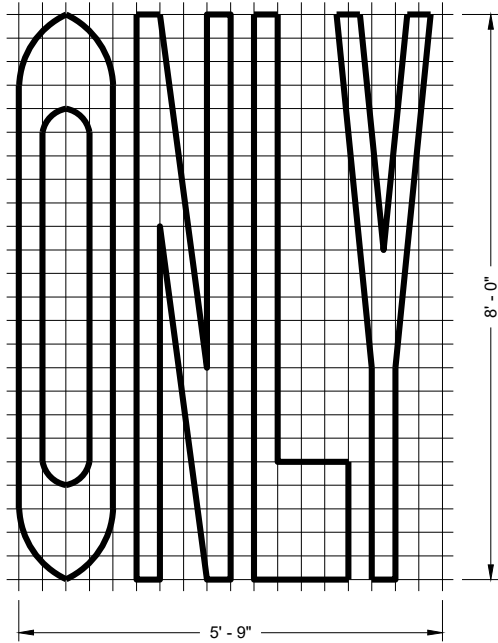
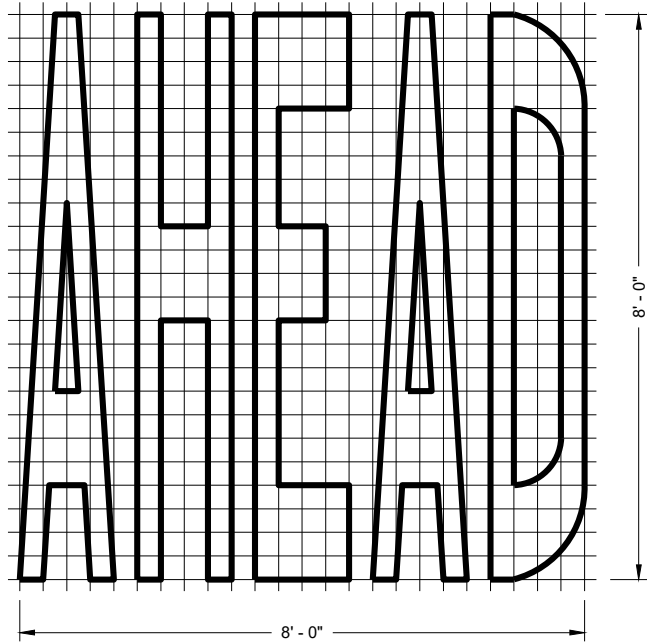
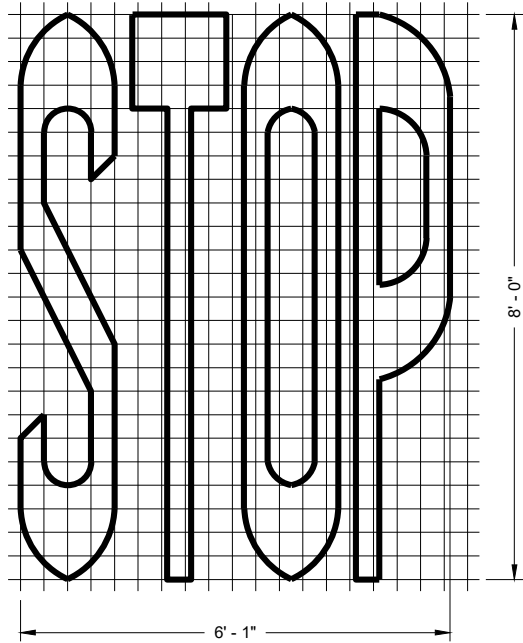


TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40MPH OR LESS

TRAFFIC CONTROL, ADVANCE WARNING
SIGNS 40 MPH OR LESS TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



SINGLE LANE

TWO - LANE

GENERAL NOTES

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

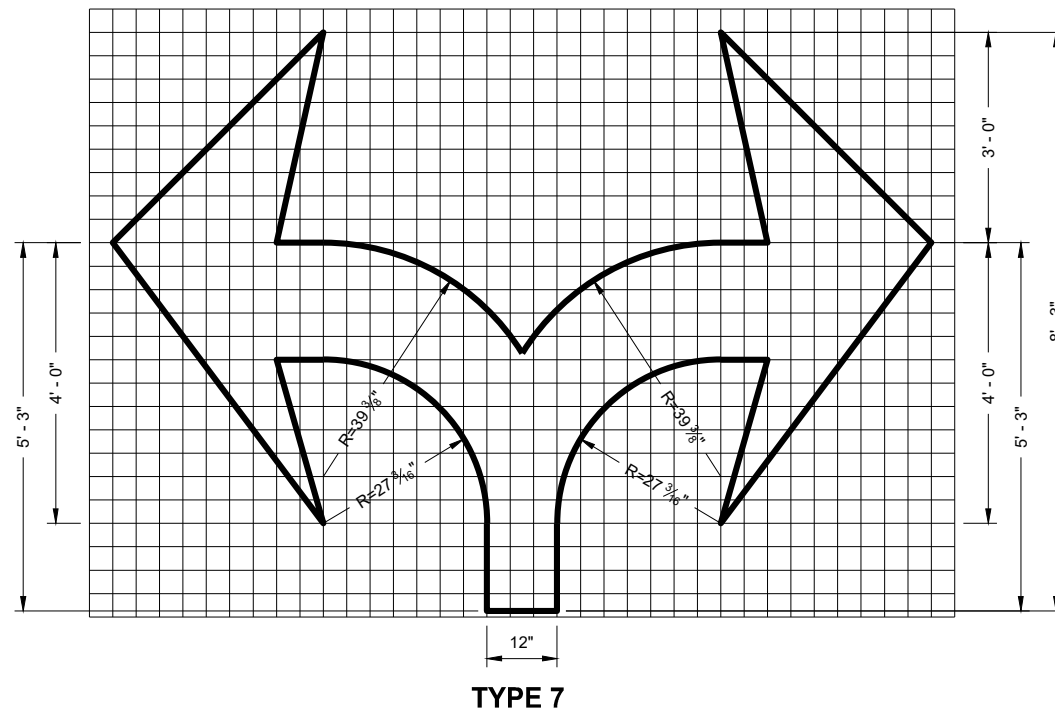
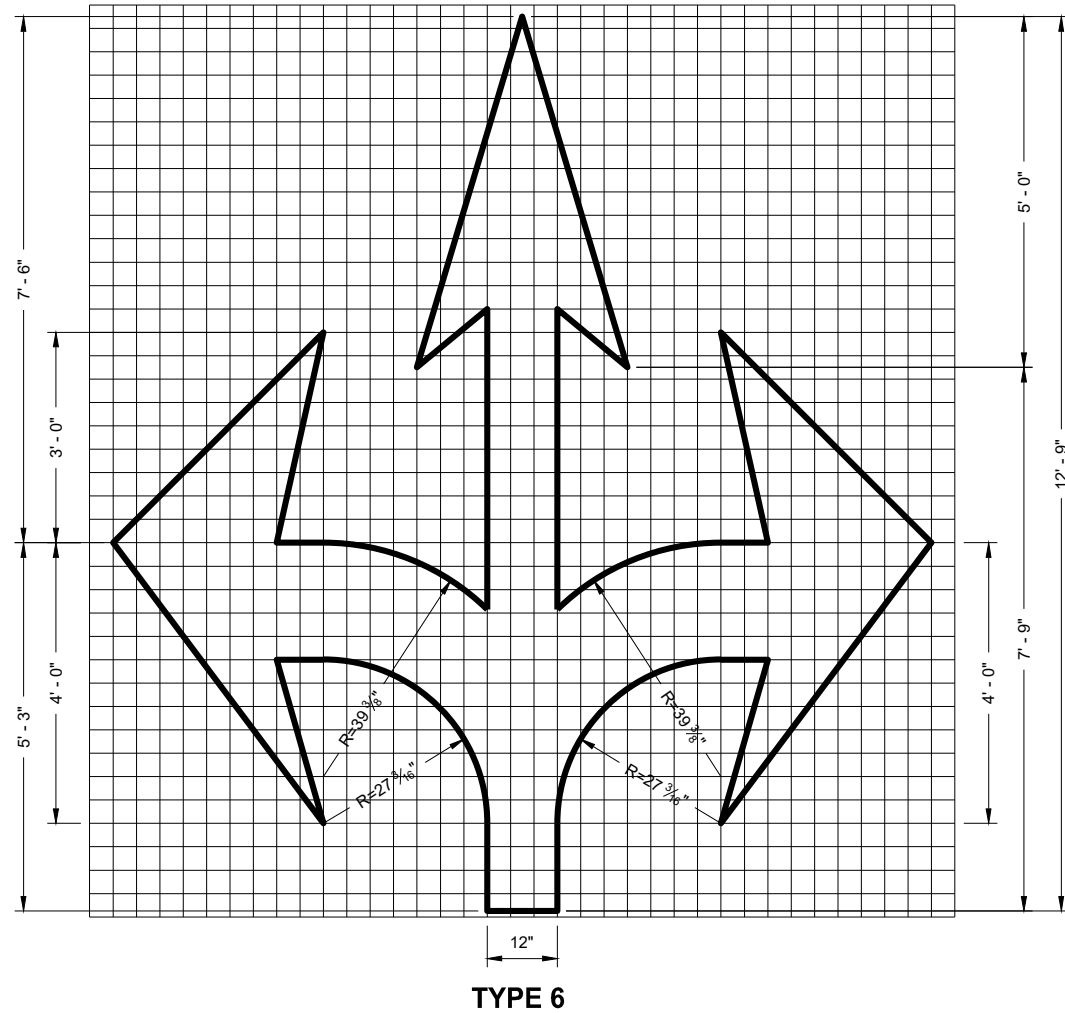
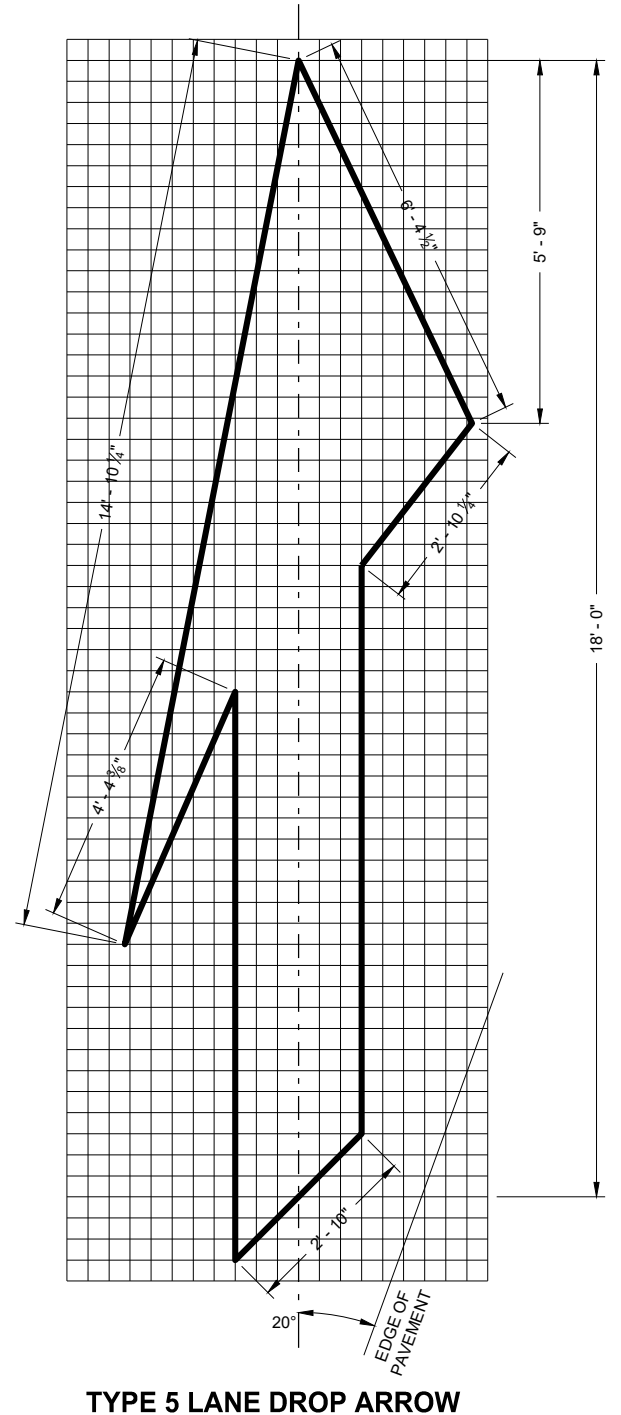
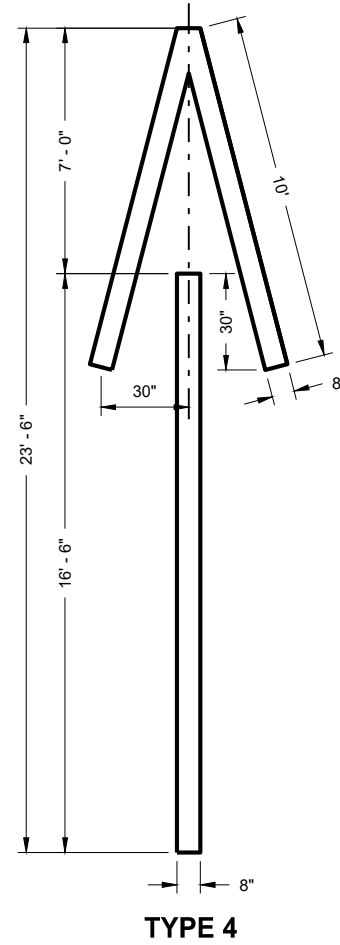
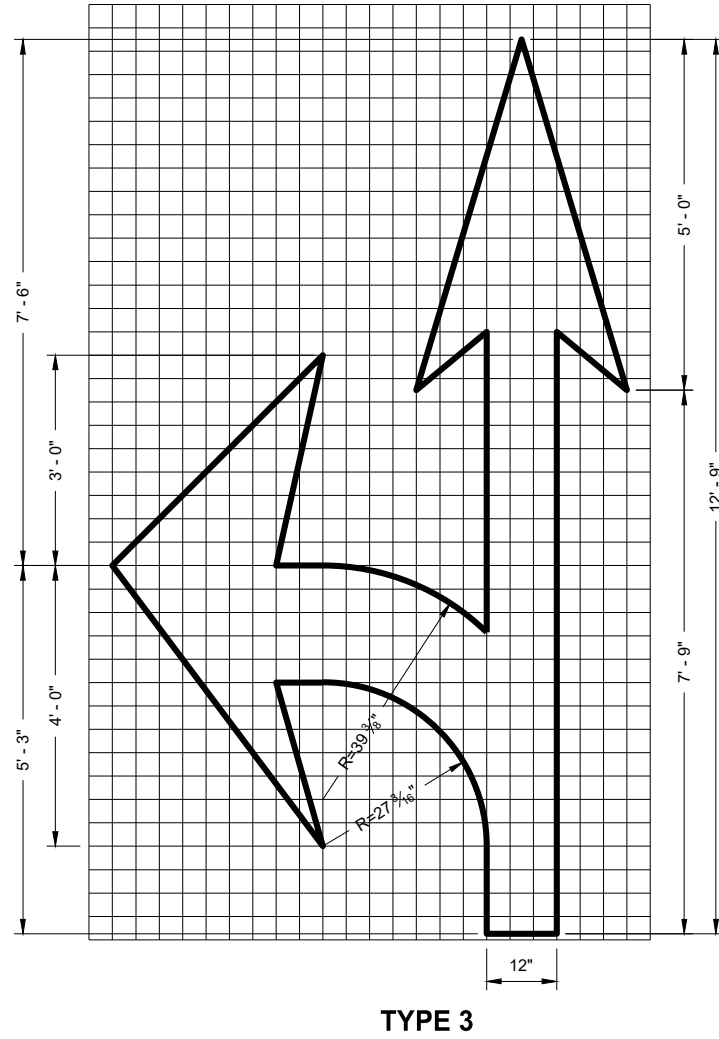
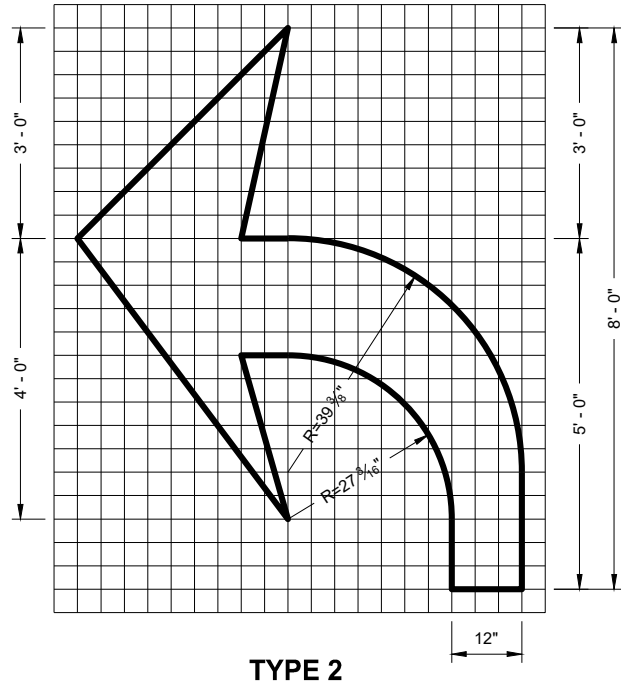
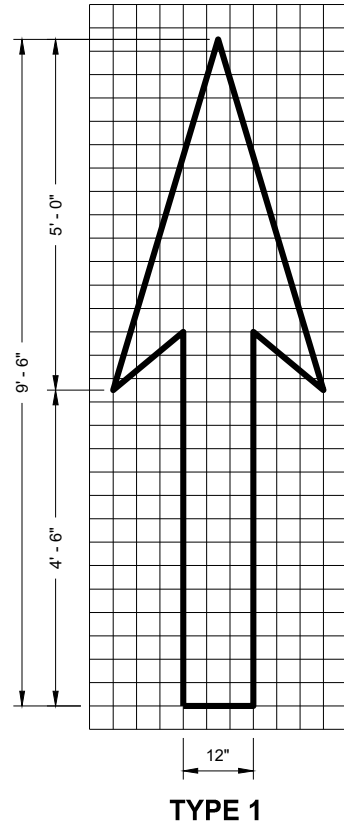
PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER

FHWA



GENERAL NOTES

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

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
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/S/ Matthew Rauch
STATE SIGNING AND MARKING
ENGINEER
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PERMANENT PAVEMENT MARKING

GENERAL NOTES

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

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

LEGEND

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

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

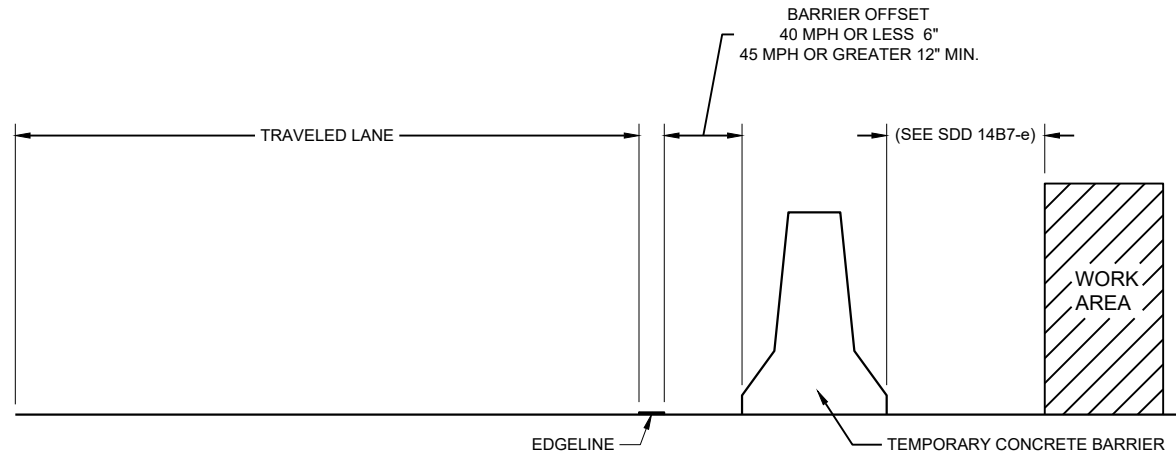
NOTE: TYPICALLY LEFT OF CENTER LINE IN THE DIRECTION OF TRAFFIC

PERMANENT LONGITUDINAL PAVEMENT MARKINGS

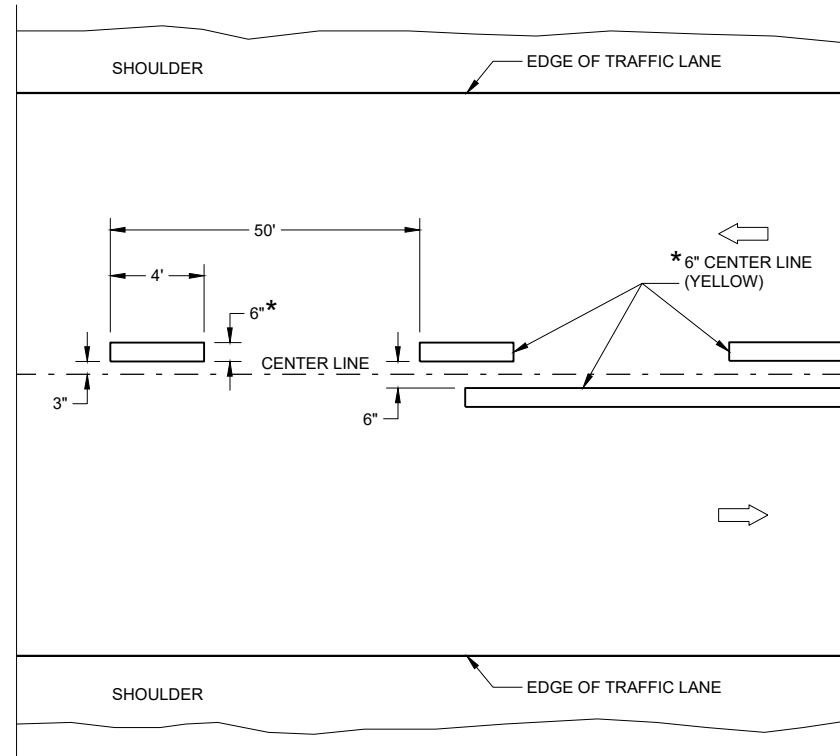
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE

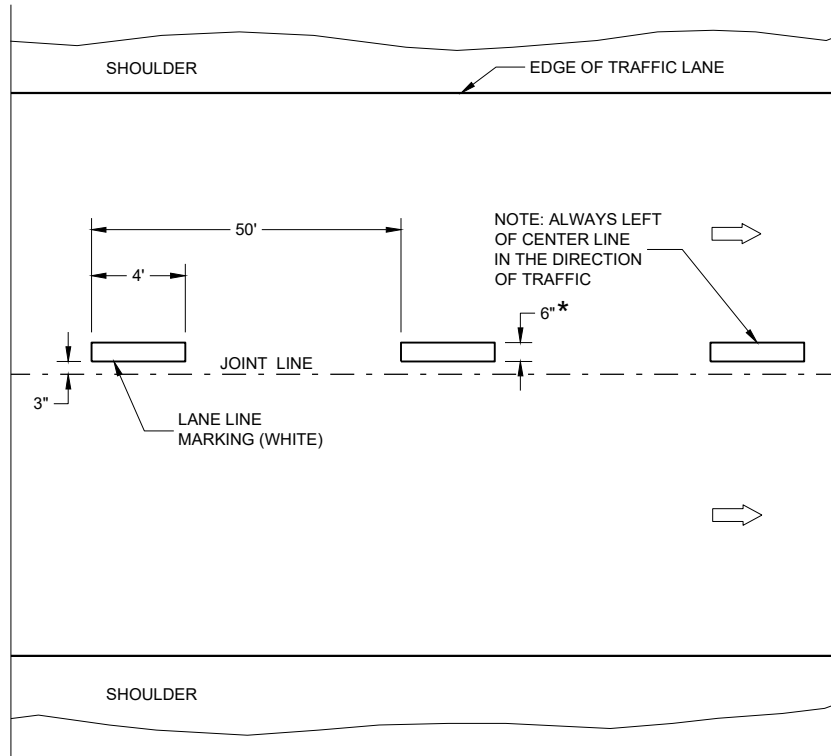
/S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING
ENGINEER



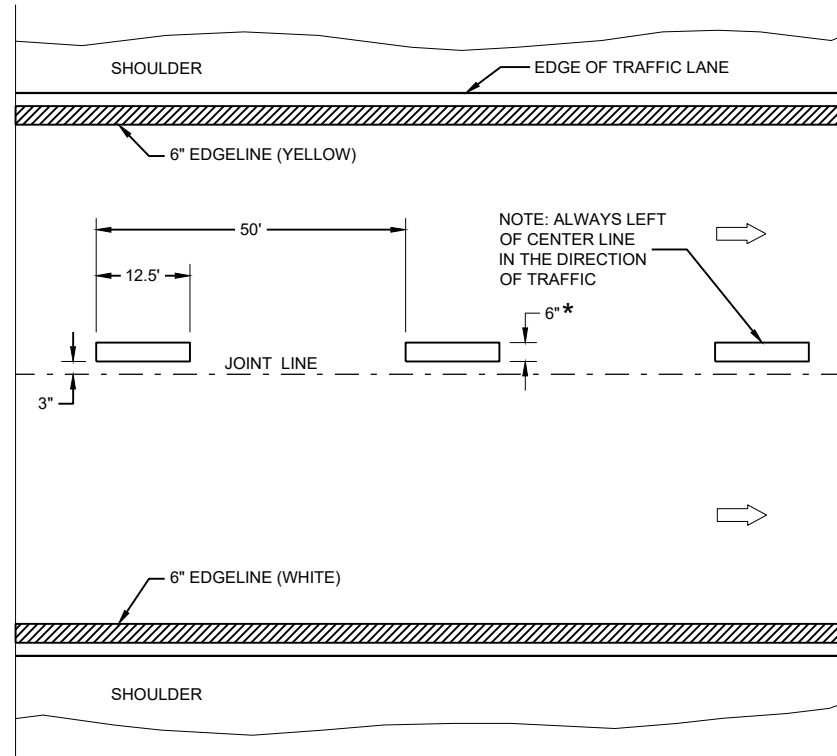
TEMPORARY BARRIER OFFSET FROM EDGE LINE



TWO WAY TRAFFIC



ONE WAY TRAFFIC



FREEWAYS AND EXPRESSWAYS

GENERAL NOTES

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

LEGEND

DIRECTION OF TRAFFIC

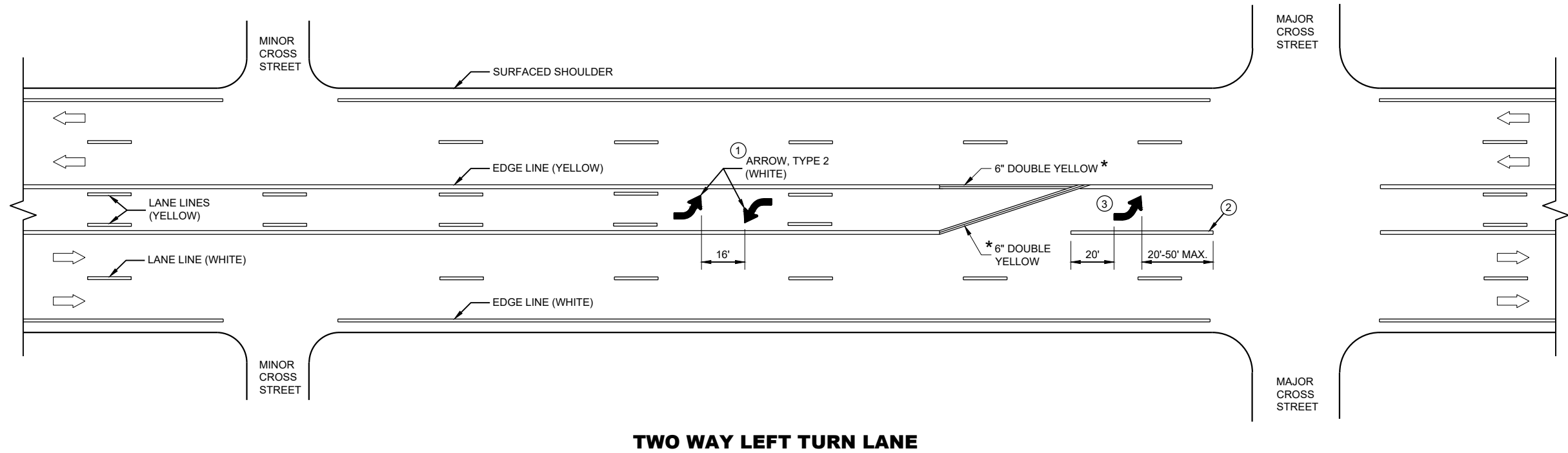
* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

TEMPORARY PAVEMENT MARKING

TEMPORARY LONGITUDINAL PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
STATEWIDE SIGNING AND MARKING
ENGINEER
FHWA



GENERAL NOTES

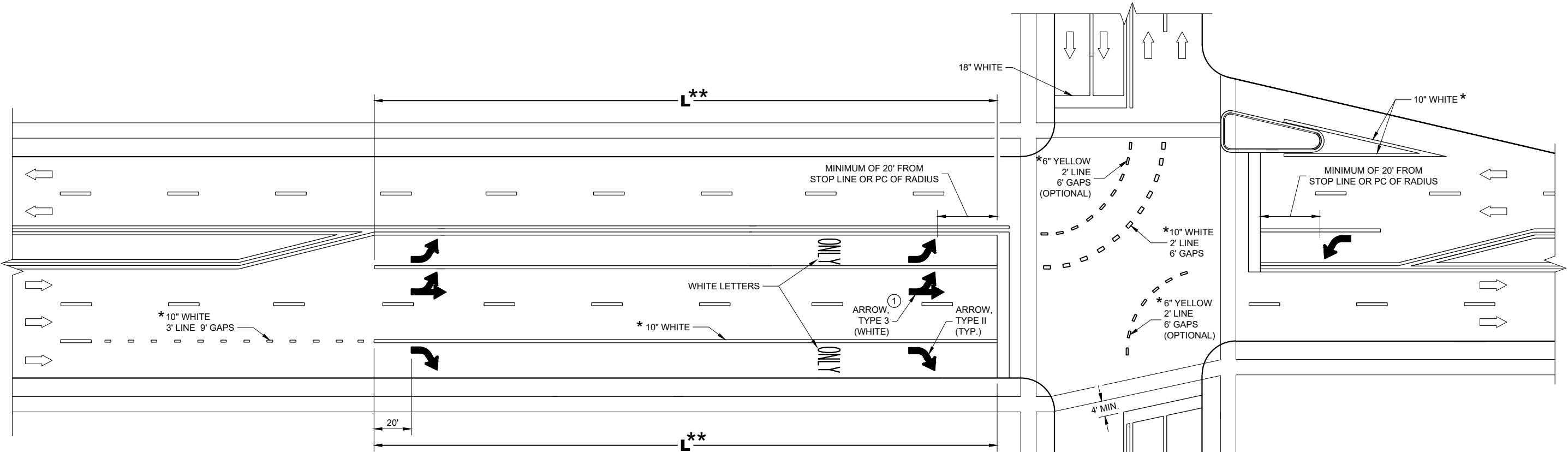
- ① A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ② 10" WHITE
- ③ TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

➡ DIRECTION OF TRAFFIC

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

**PAVEMENT MARKING
(TURN LANES)**

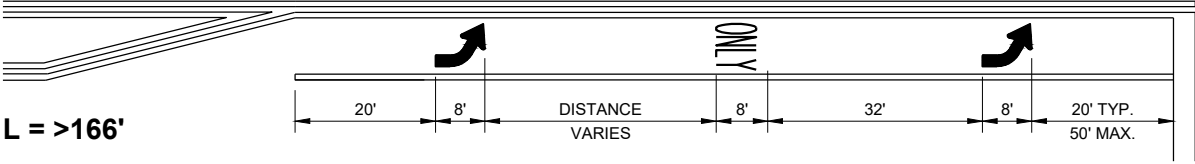
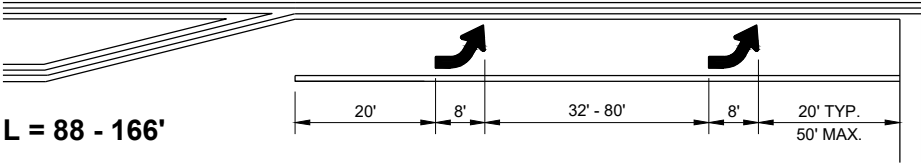
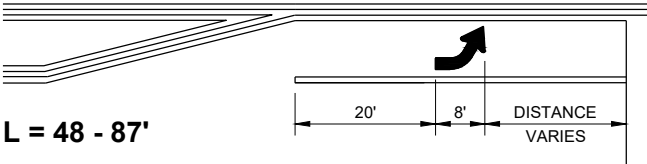
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

TURN LANE OPTIONS

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



GENERAL NOTES

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

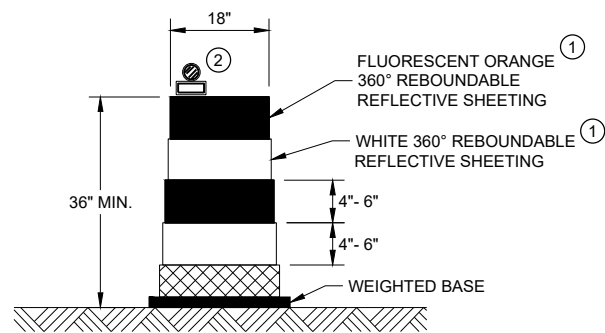
➡ DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

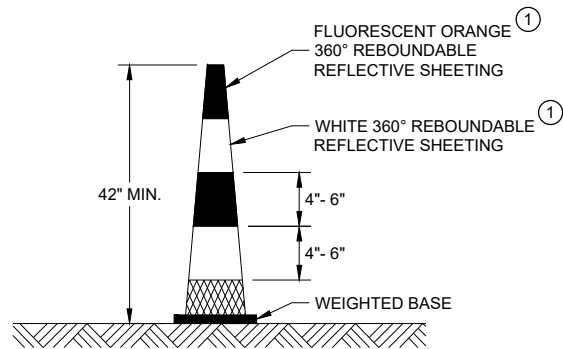
PAVEMENT MARKING
(TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



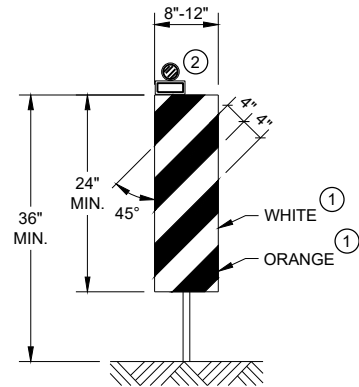
DRUM

BALLAST WIDTHS
RANGE FROM 24"-36"



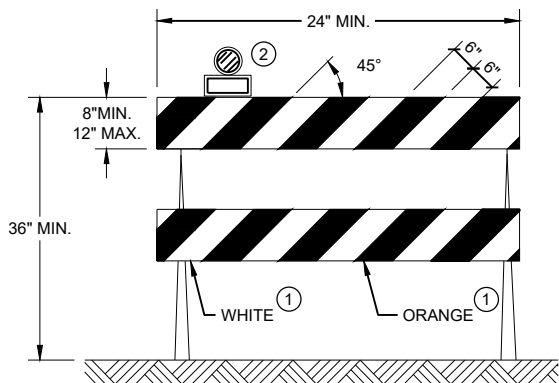
42" CONE

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



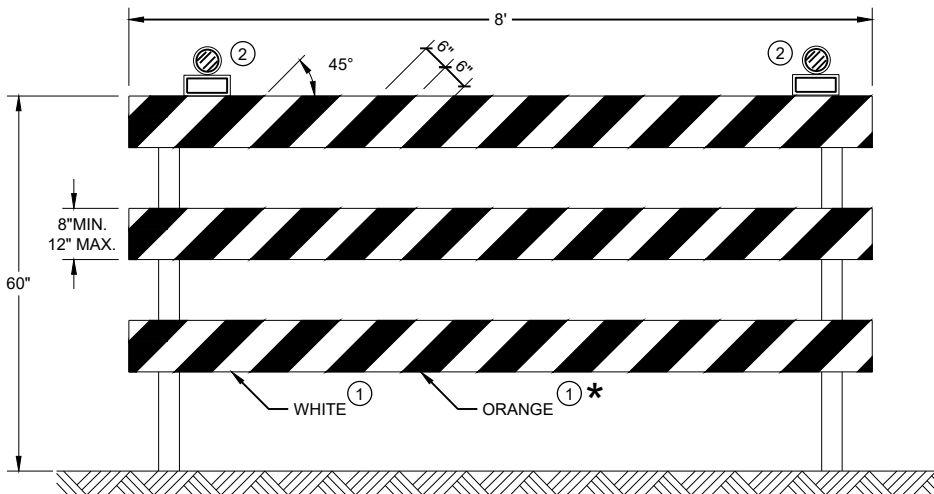
VERTICAL PANEL

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

LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

FLAGGING

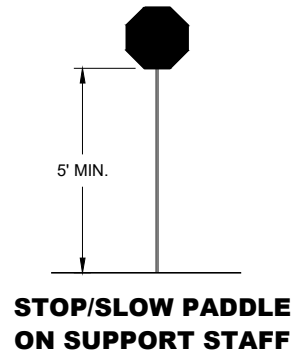
FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

- ① FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

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

TEMPORARY PORTABLE RUMBLE STRIPS

- UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.
- ③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS PLACED TRANSVERSE ACROSS THE LANE AT THE LOCATIONS SHOWN. WITHIN EACH ARRAY, SPACING BETWEEN RUMBLE STRIPS SHALL BE 15 FEET ON CENTER
- ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FROM THE APPROVED PRODUCTS LIST.
- INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.
- PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.
- DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.

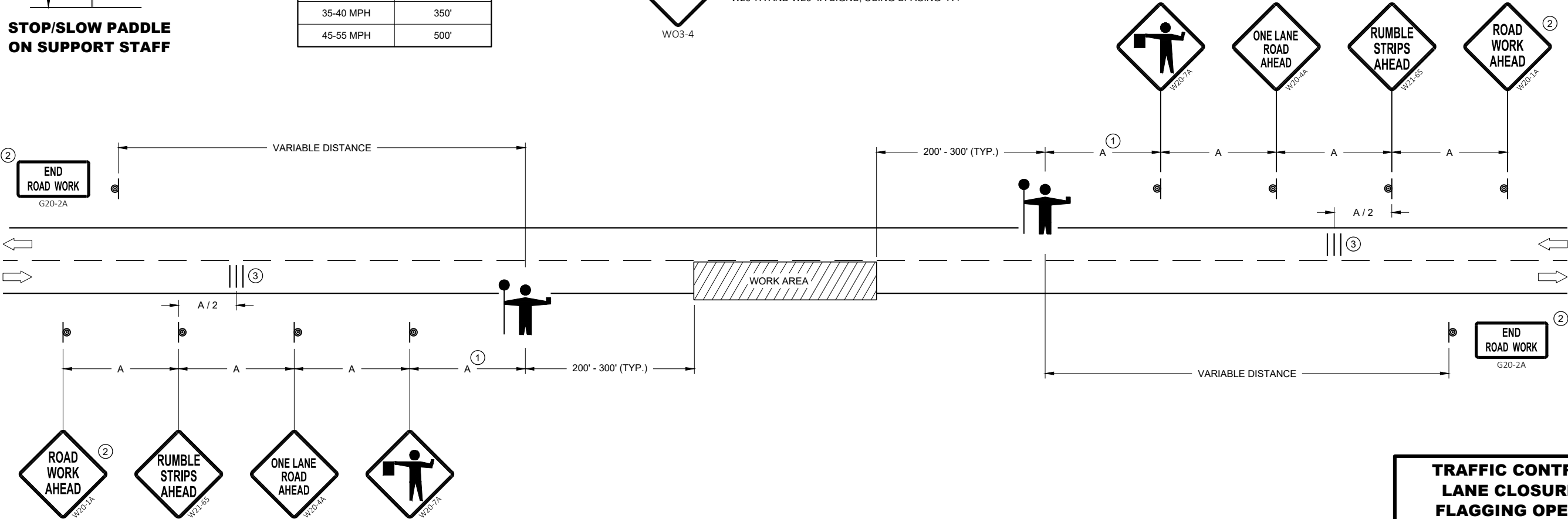


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

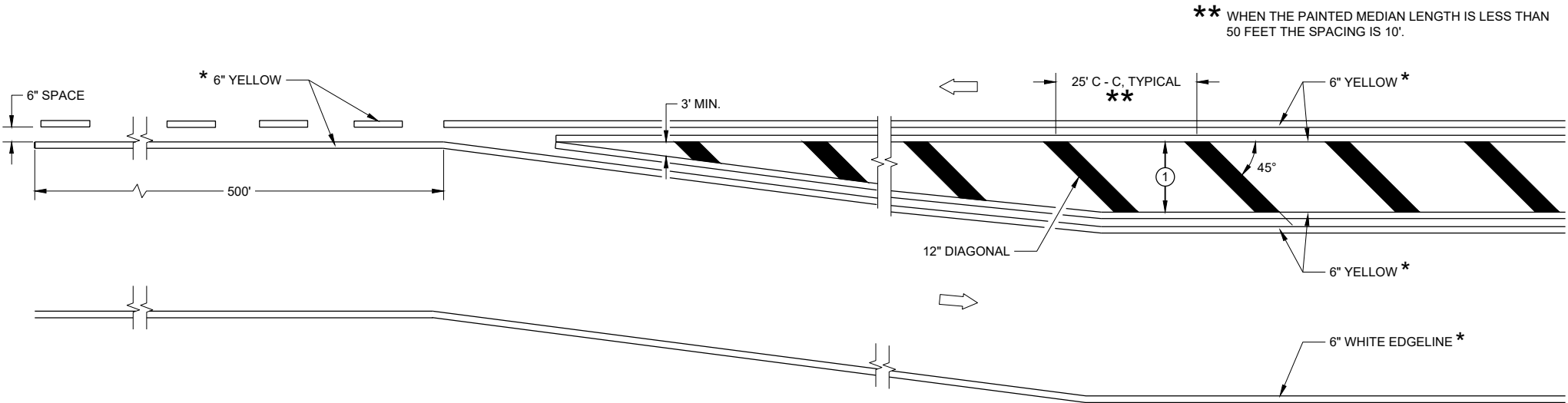
SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



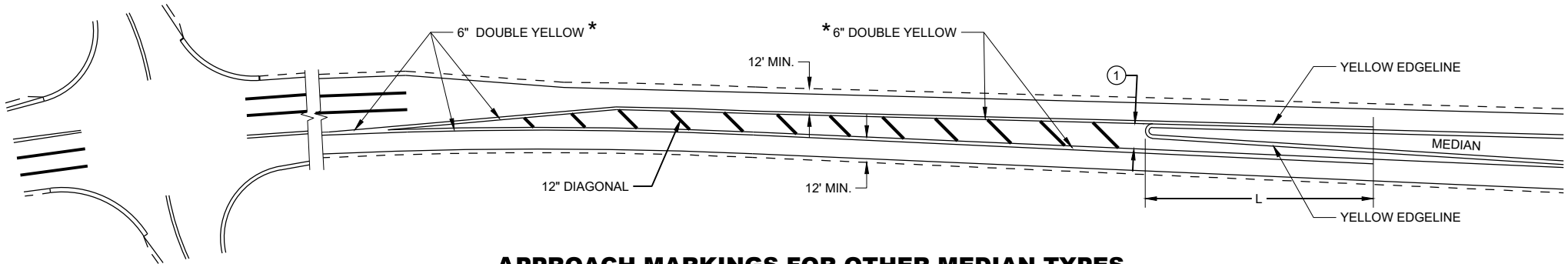
USE OF W03-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



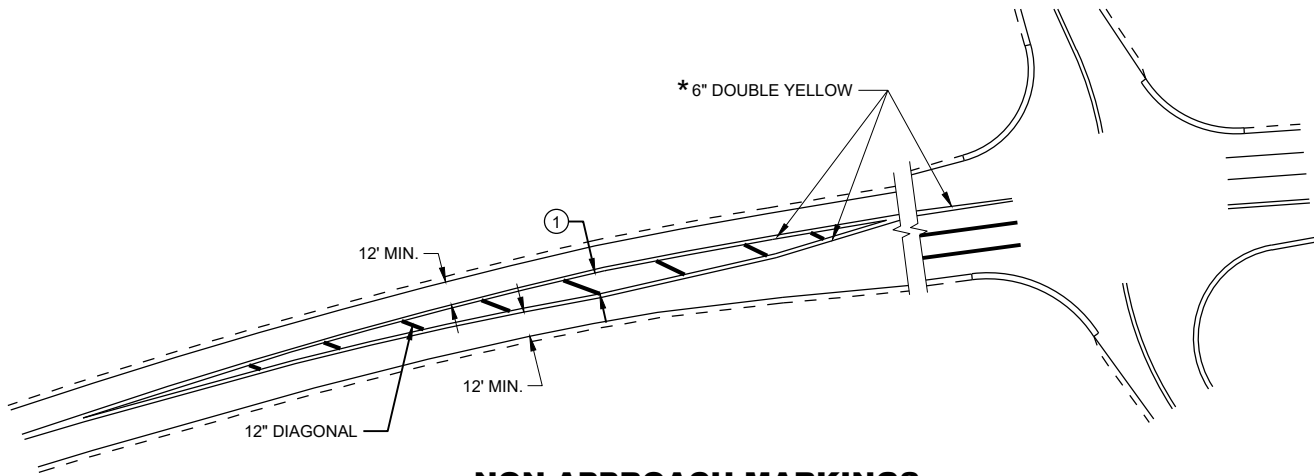
TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2022 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



MEDIAN ISLAND DETAIL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON-APPROACH MARKINGS

GENERAL NOTES

- 1 DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT THE WIDEST POINT. OMIT DIAGONALS IF WIDTH IS LESS THAN 4 FEET.

DIRECTION OF TRAVEL

* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

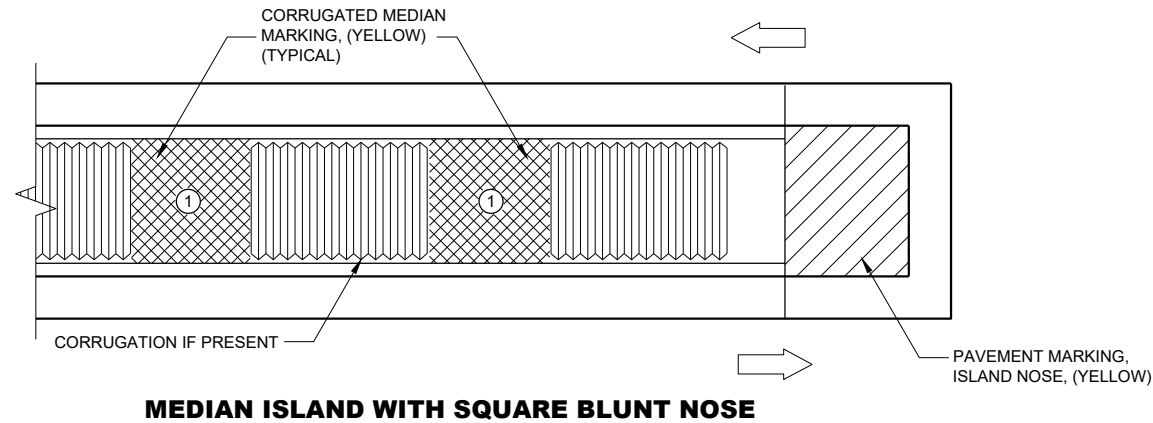
SPEED LIMIT	L
<35 MPH	5'
35> MPH	50'

MEDIAN ISLAND PAVEMENT MARKINGS

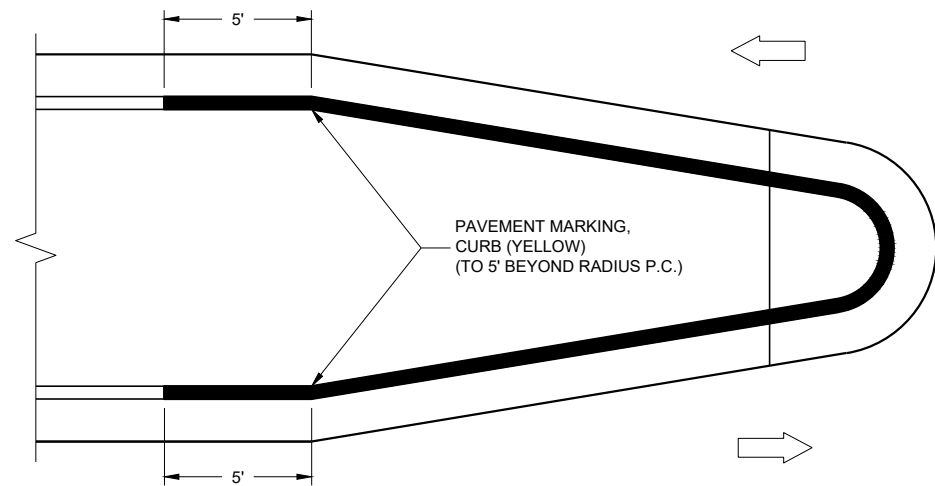
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023
DATE
/S/ Jeannie Silver
STATE SIGNING AND MARKING
ENGINEER

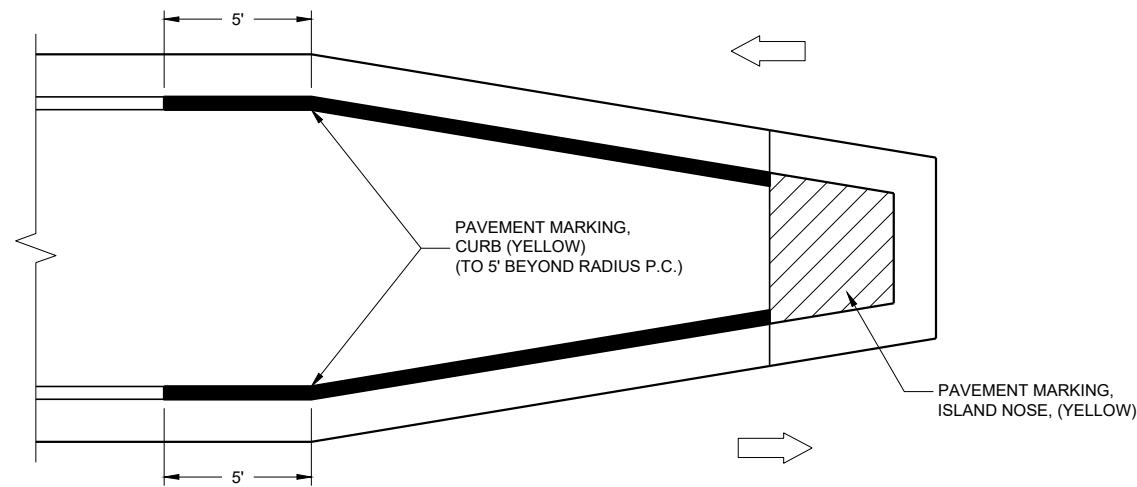
FHWA



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

TYPICAL PLACEMENT OF PAVEMENT MARKING ON MEDIAN ISLANDS

GENERAL NOTES

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

- ① APPLY PAVEMENT MARKING TO THE FLAT PORTION OF CORRUGATED MEDIAN.

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

PAVEMENT MARKINGS, MEDIAN ISLAND NOSE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2023 DATE	/S/ Jeannie Silver STATE SIGNING AND MARKING ENGINEER
FHWA	

V1	LEAD VEHICLE
V2	MARKING VEHICLE
V3	SHADOW VEHICLE

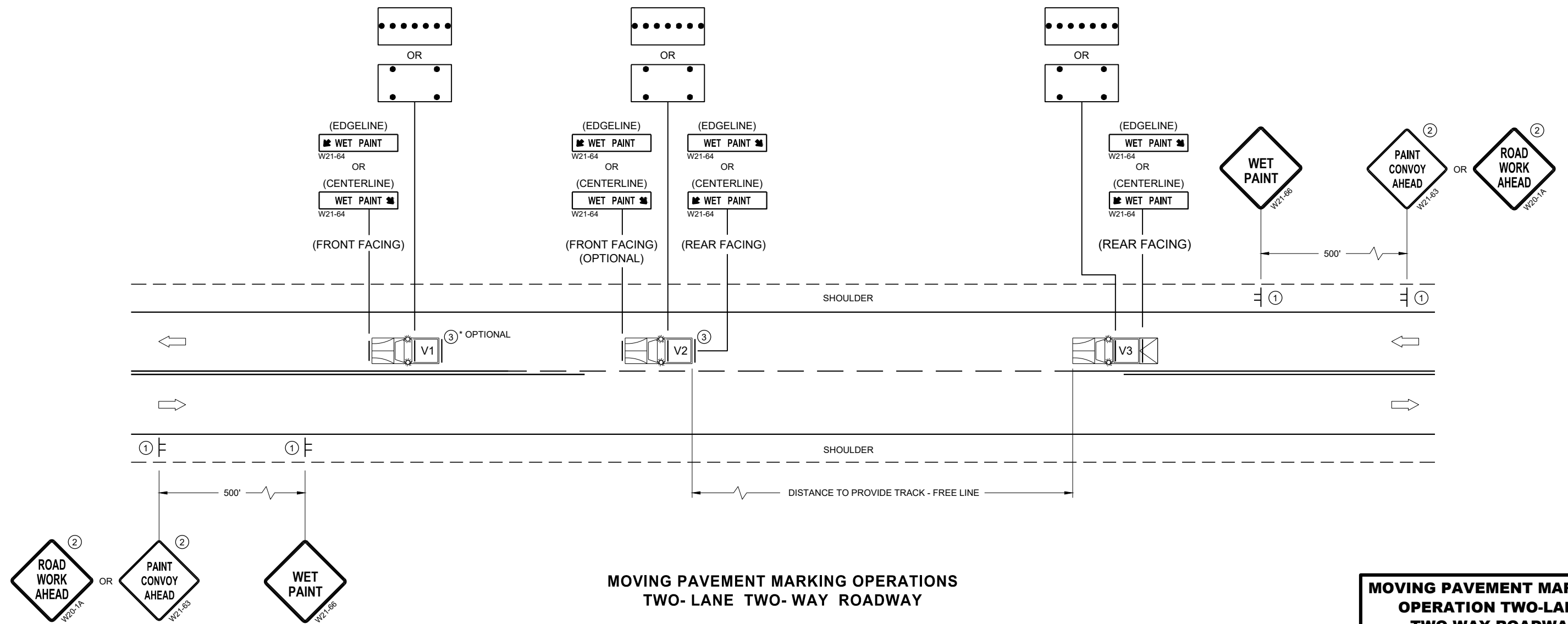


FLASHING ARROW PANEL (CAUTION)

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

CONES SHALL BE A MINIMUM OF 28" FOR WET PAVEMENT MARKING .

- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.
- ③ V1 AND V2 CAN BE SWITCHED SO THAT THE MARKER IS THE LEAD VEHICLE.








APPROVED
February 2023
DATE

/S/ Andrew Heidtke

WORK ZONE ENGINEER

LEGEND

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

GENERAL NOTES

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

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

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

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

WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.

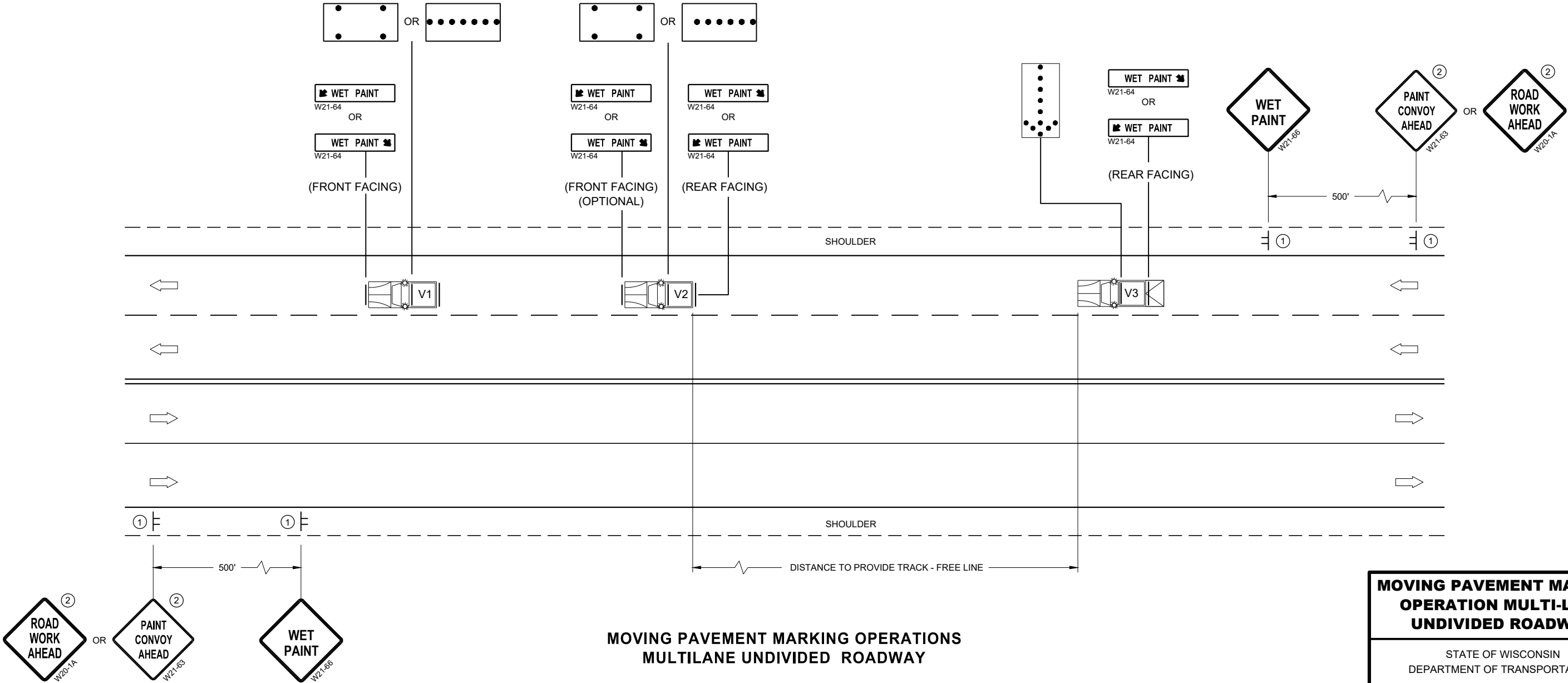
WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.

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

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

CONES SHALL HAVE A MINIMUM HEIGHT OF 28" FOR WET PAVEMENT MARKINGS.

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

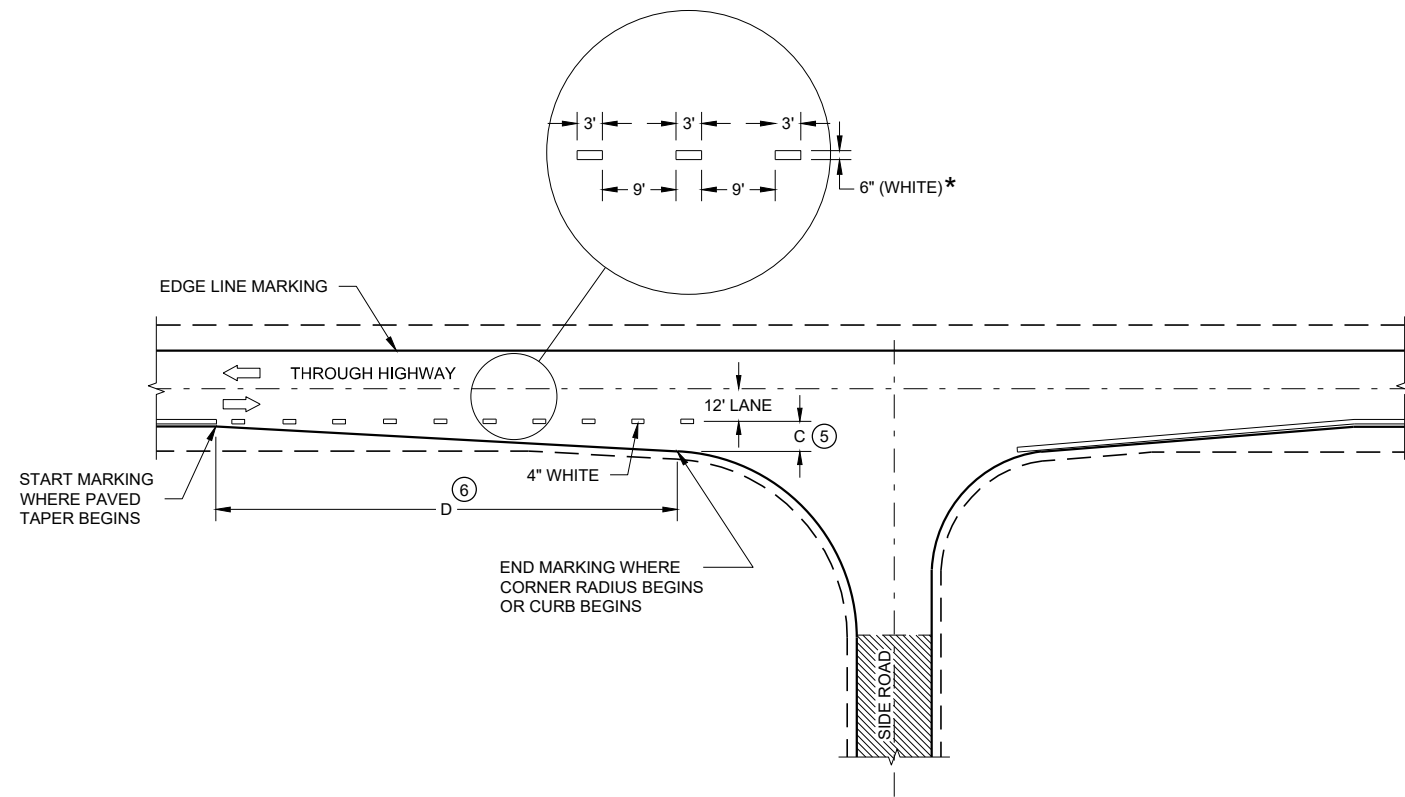


MOVING PAVEMENT MARKING OPERATIONS
MULTILANE UNDIVIDED ROADWAY

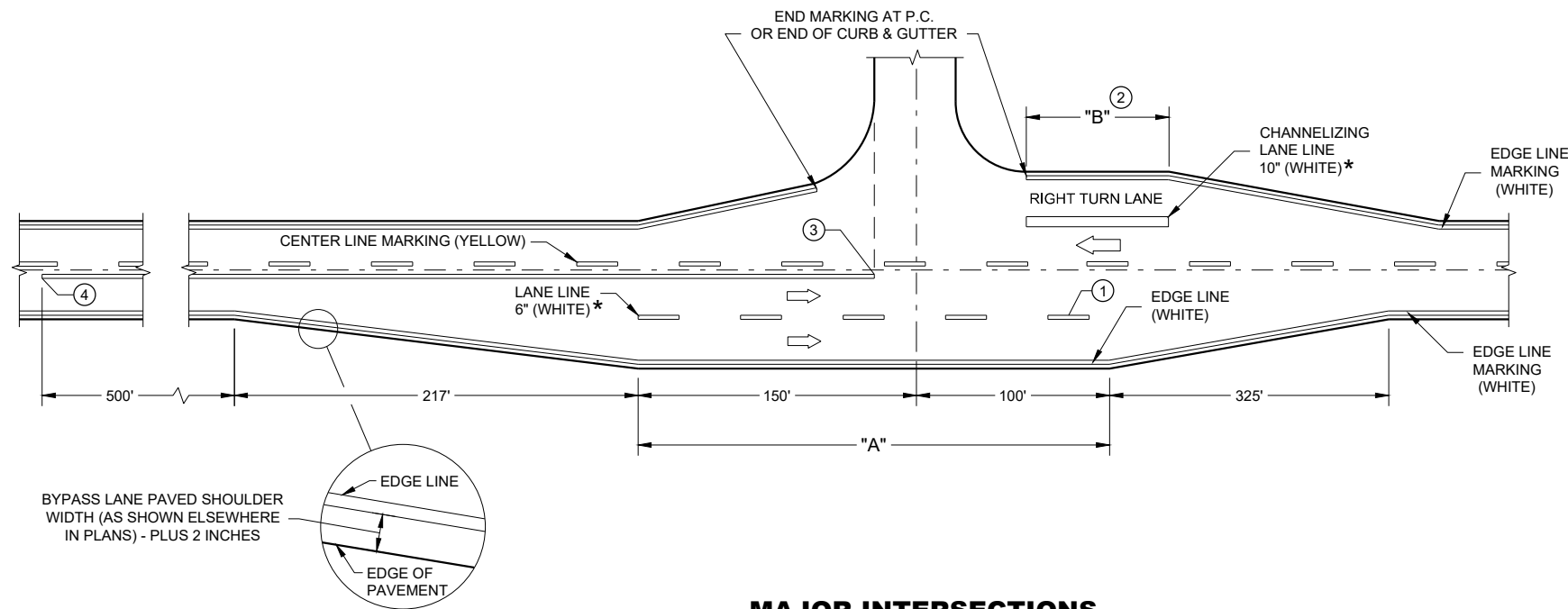
MOVING PAVEMENT MARKING
OPERATION MULTI-LANE
UNDIVIDED ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2023 /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

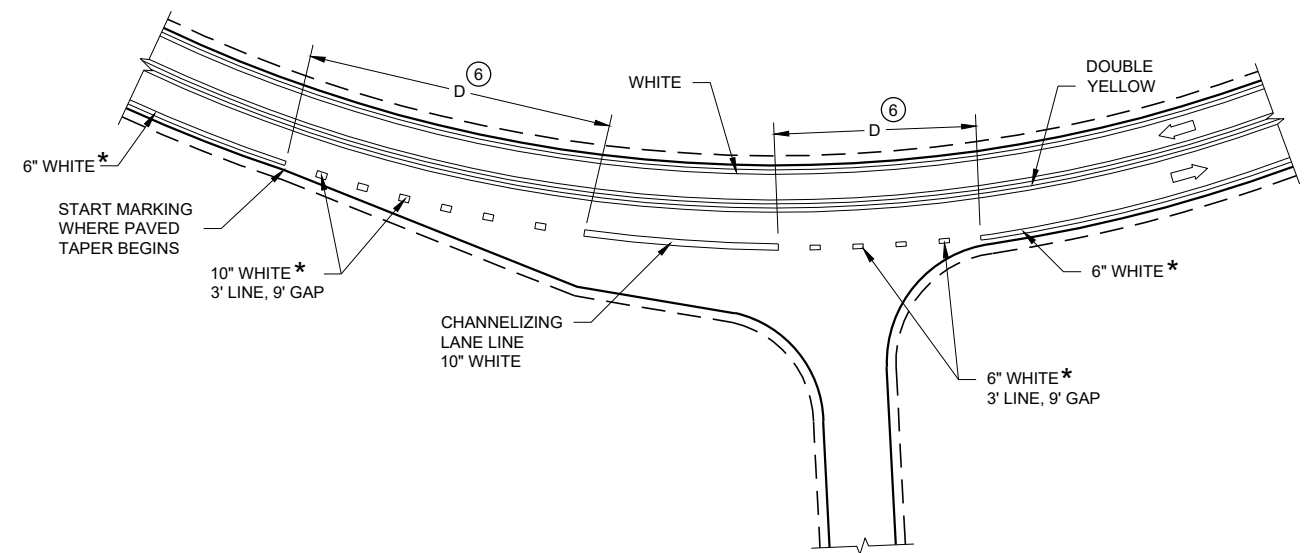
GENERAL NOTES

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

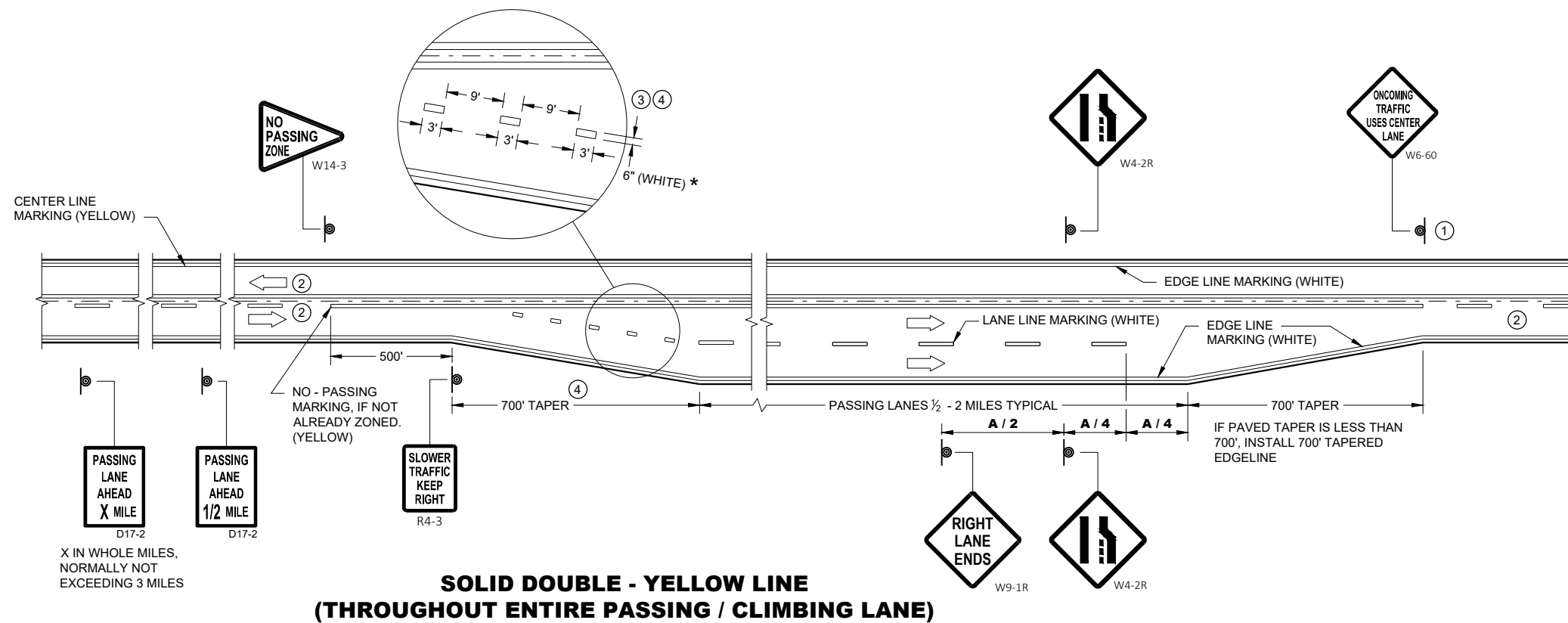
➡ DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

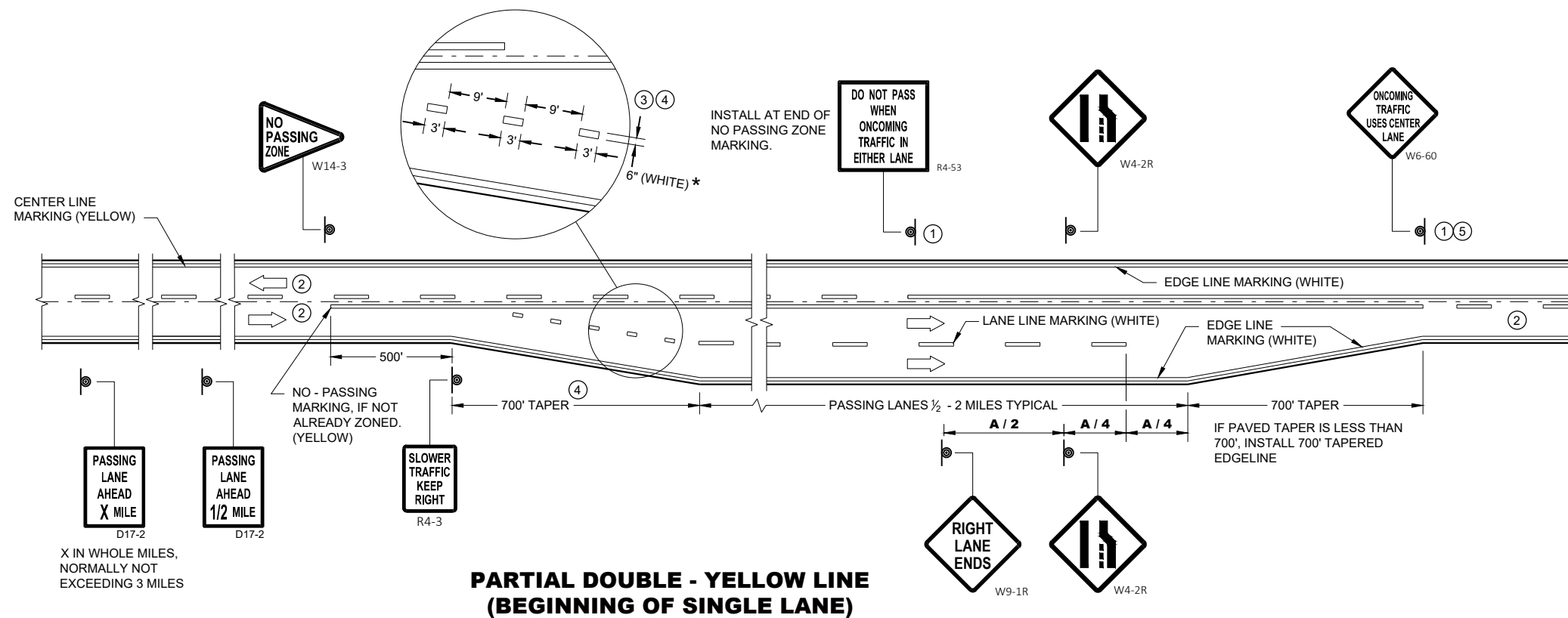


GENERAL NOTES

- ① SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- ② THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- ③ THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ④ WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
- ⑤ REPEAT EVERY 1 MILE UP UNTIL R4-53.

ARROW SYMBOL () SHOWS DIRECTION OF TRAVEL

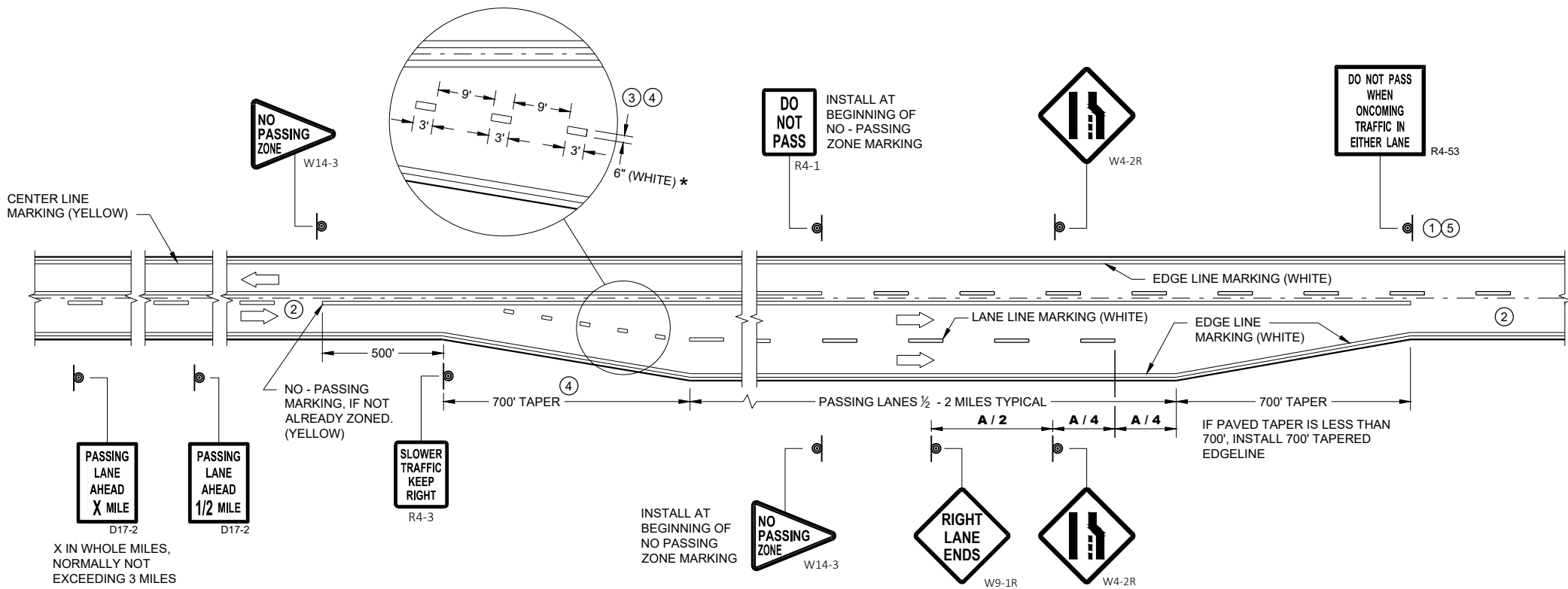
POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990



* CONFIRM MARKING LINE WIDTH WITH THE MISCELLANEOUS QUANTITIES

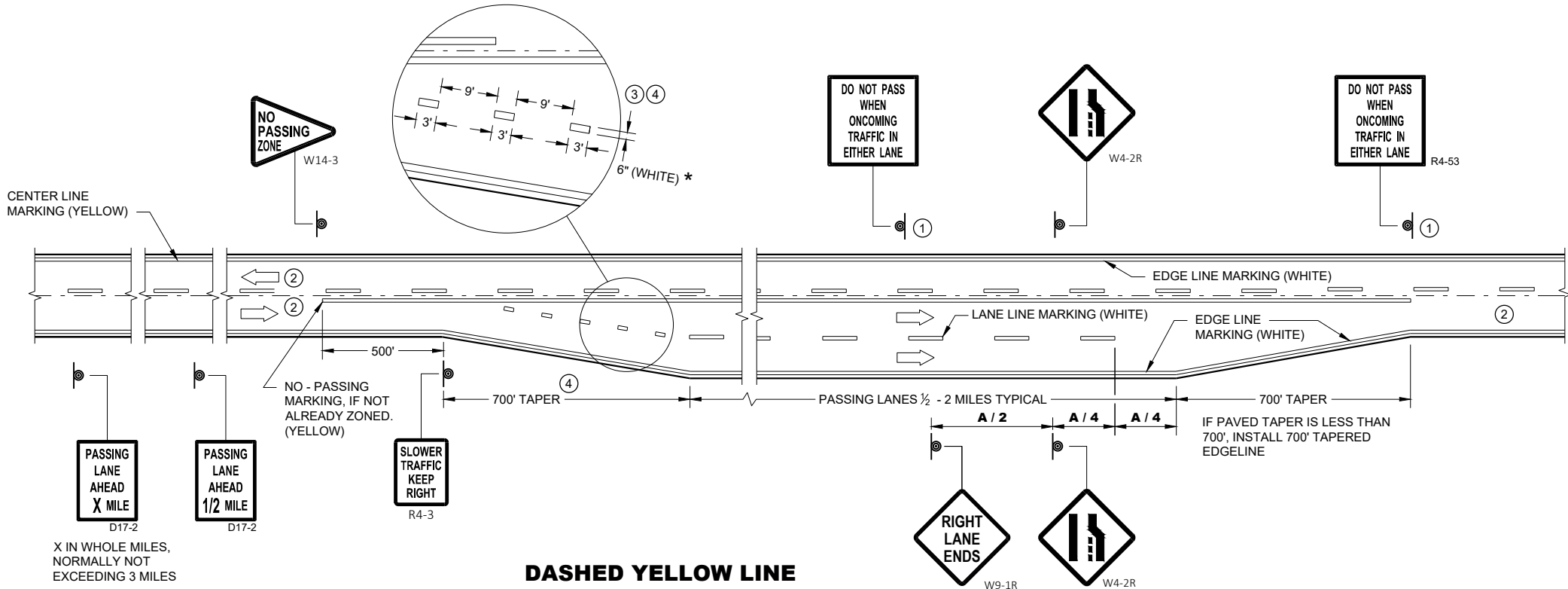
PAVEMENT MARKING & SIGNING (CLIMBING LANE & PASSING LANE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



**SOLID DOUBLE - YELLOW LINE
(END OF SINGLE LANE)**

* CONFIRM MARKING LINE WIDTH WITH
THE MISCELLANEOUS QUANTITIES



**DASHED YELLOW LINE
(THROUGHOUT SINGLE LANE)**

GENERAL NOTES

- 1 SIGN SHALL BE REPEATED AT 1 MILE INCREMENTS OR AT THE DISCRETION OF THE REGIONAL TRAFFIC ENGINEER.
- 2 THERE MAY BE SOLID YELLOW ON THE CENTERLINE DUE TO SIGHT CONDITIONS.
- 3 THE TAPER LENGTH OF THE DOTTED LINE PAVEMENT MARKING SHALL BE 700 FEET, 3' LINE, 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4 WHEN THE ENTRANCE TAPER IS LESS THAN 700 FEET OR THE SHOULDER WIDTH IN THE PASSING / CLIMBING LANE IS LESS THAN THE ADJACENT HIGHWAY, DO NOT INSTALL DOTTED LINE PAVEMENT MARKING.
- 5 REPEAT EVERY ONE MILE UP UNTIL NO PASSING ZONE.

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

DISTANCE TABLE





POSTED OR 85th PERCENTILE SPEED	DISTANCE "A"
45	775
50	885
55	990

**PAVEMENT MARKING & SIGNING
(CLIMBING LANE & PASSING LANE)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2023 /S/ Jeannie Silver
DATE STATE SIGNING AND MARKING
ENGINEER
FHWA

LEGEND

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

GENERAL NOTES

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

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

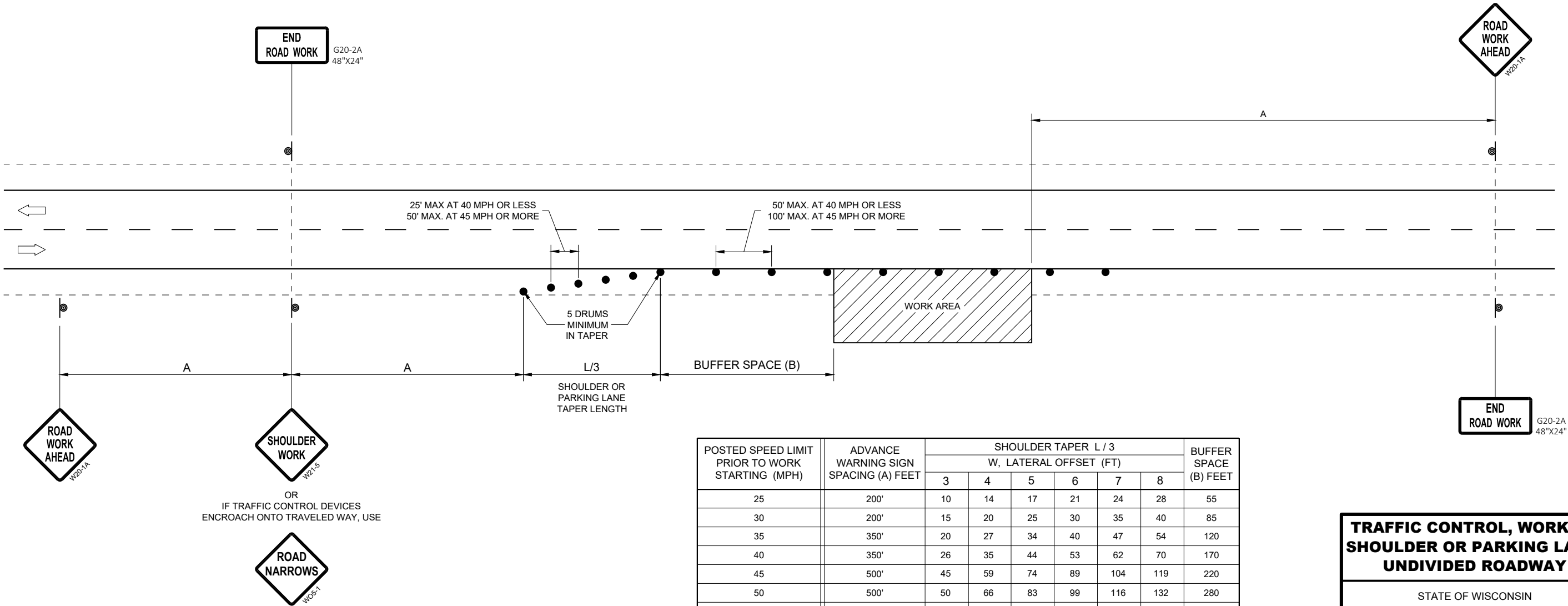
ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

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

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

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

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



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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2020
DATE

/S/ Andrew Heidtke
STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER

FHWA

GENERAL NOTES

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

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

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

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



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

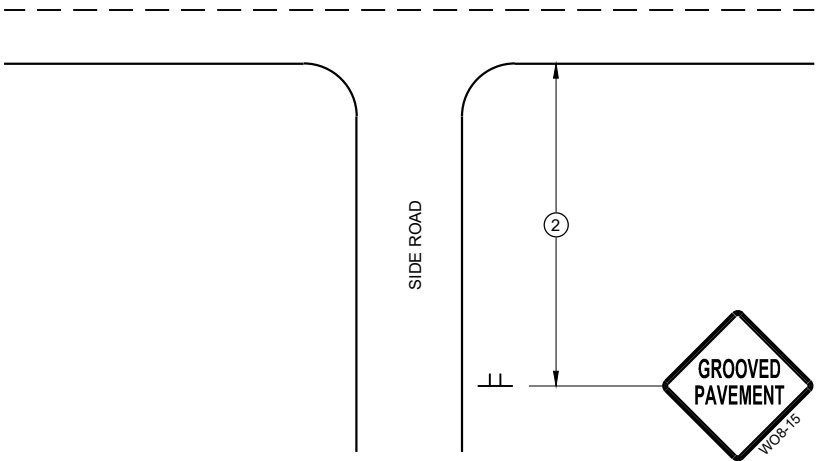
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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

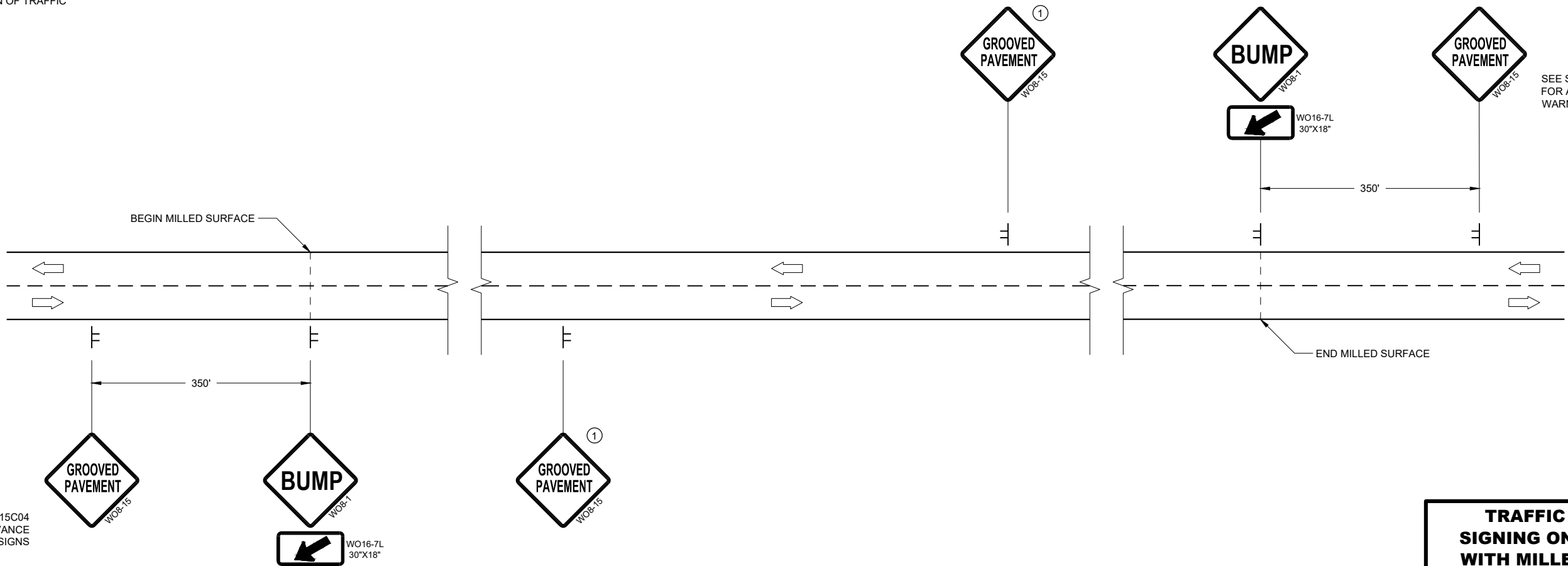
- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



SEE SDD15C04
FOR ADVANCE
WARNING SIGNS

SEE SDD15C04
FOR ADVANCE
WARNING SIGNS

DETAIL FOR SIGNING ON MILLED SURFACES

TRAFFIC CONTROL,
SIGNING ON ROADWAYS
WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

<http://www.dot.wisconsin.gov>