

ORDER OF SHEETS

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

TOTAL SHEETS = 48



DESIGN DESIGNATION

A.A.D.T.	2020	=	4,400 - 5,900
A.A.D.T.	2040	=	5,600 - 7,300
D.H.V.		=	
D.D.		=	
T.		=	20.1%
DESIGN SPEED		=	60 MPH
ESALS		=	

CONVENTIONAL SYMBOLS

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WAUPACA - CLINTONVILLE

STH 110S-STH 54E/S BR LITTLE WOLF

STH 22

WAUPACA COUNTY

STATE PROJECT NUMBER

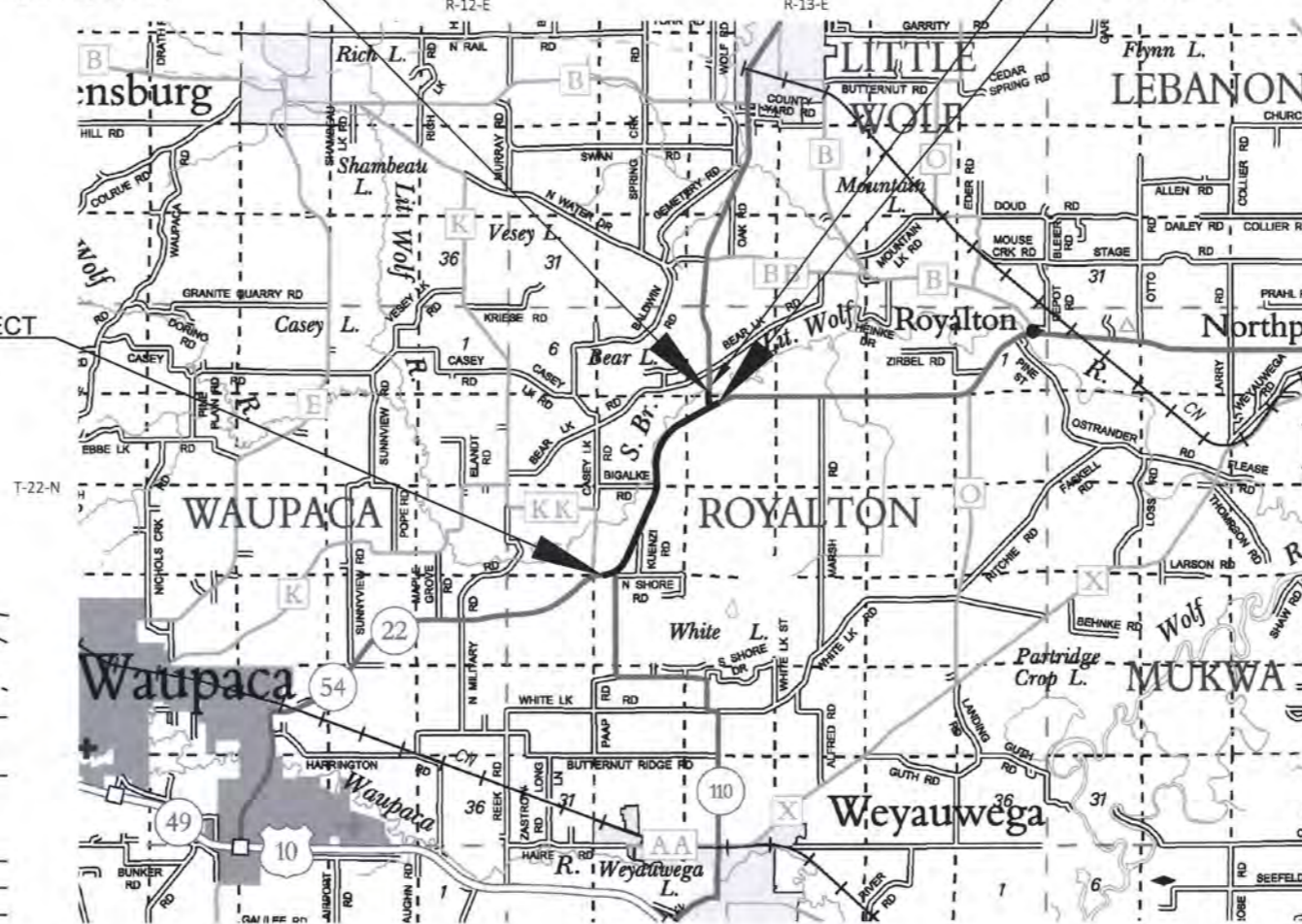
6220-00-72

END CONSTRUCTION
STA 19'W+19

BEGIN PROJECT
STA 331+00
X = 569,599.64
Y = 347,581.28

STRUCTURE B-68-30
STA 19'W+19 - STA 19'W+78

END PROJECT
STA 462+07



LAYOUT
SCALE 0 2 MI

TOTAL NET LENGTH OF CENTERLINE = 2.424

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, WAUPACA COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES. ELEVATION SHOWN ON THIS PLAN ARE REFERENCE TO THE NORTH AMERICAN VERTICAL DATUM OF 1988, NAVD (1991).

STATE PROJECT

6220-00-72

FEDERAL PROJECT

PROJECT

WISC 2020265

CONTRACT

1

ORIGINAL PLANS PREPARED BY:



DATE: 4/20/2020 *Ryan P. Murphy*
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY	OES
Surveyor	OES
Designer	WENDY ARNESON
Project Manager	CHERYL SIMON
Regional Examiner	MICHAEL KRETSCHMER
Regional Supervisor	

APPROVED FOR THE DEPARTMENT
DATE: 1/22/2020 *Wendy Arneson*
(Signature)

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GENERAL NOTES:

THERE UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH A CALL TO "DIGGERS HOTLINE" AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA. NOT ALL UTILITIES ARE MEMBERS OF DIGGERS HOTLINE.

THE LOCATION OF EXISTING UTILITY FACILITIES LOCATED WITHIN THE PROJECT ARE NOT SHOWN ON THE PLANS. IF THERE ARE UTILITY CONFLICTS WITH SIGNS OR OTHER WORK UNDER PROJECT, THE CONTRACTOR WILL WORK AROUND THE UTILITY FACILITIES.

DNR CONTACT:

CASEY JONES
473 GRIFFITH AVENUE
WISCONSIN RAPIDS, WI 54494
(715) 213-6571
CASEY.JONES@WISCONSIN.GOV

UTILITY CONTACTS:

CENTURYLINK - COMMUNICATION LINE
MATT GUNDERSON - OPS ENGINEER II
212 CHURCH AVENUE
CASCO, WI 54205
(920)837-2344 (OFFICE)
(920)896-2867 (CELL)
MATT.GUNDERSON@CENTURYLINK.COM

SOLARUS - COMMUNICATION LINE
DENNIS PIERCE
440 E GRAND AVENUE
PO BOX 8045
WISCONSIN RAPIDS, WI 54494-8045
(715)421-8172 (OFFICE)
(715)572-0152
PIERCE@SOLARUS .NET

WE ENERGIES - ELECTRICITY
ZACH DUGA
800 S LYNNDALE DRIVE
APPLETON, WI 54914
(920)380-3458 (OFFICE)
(920)450-9314 (CELL)

RUNOFF COEFFICIENT TABLE

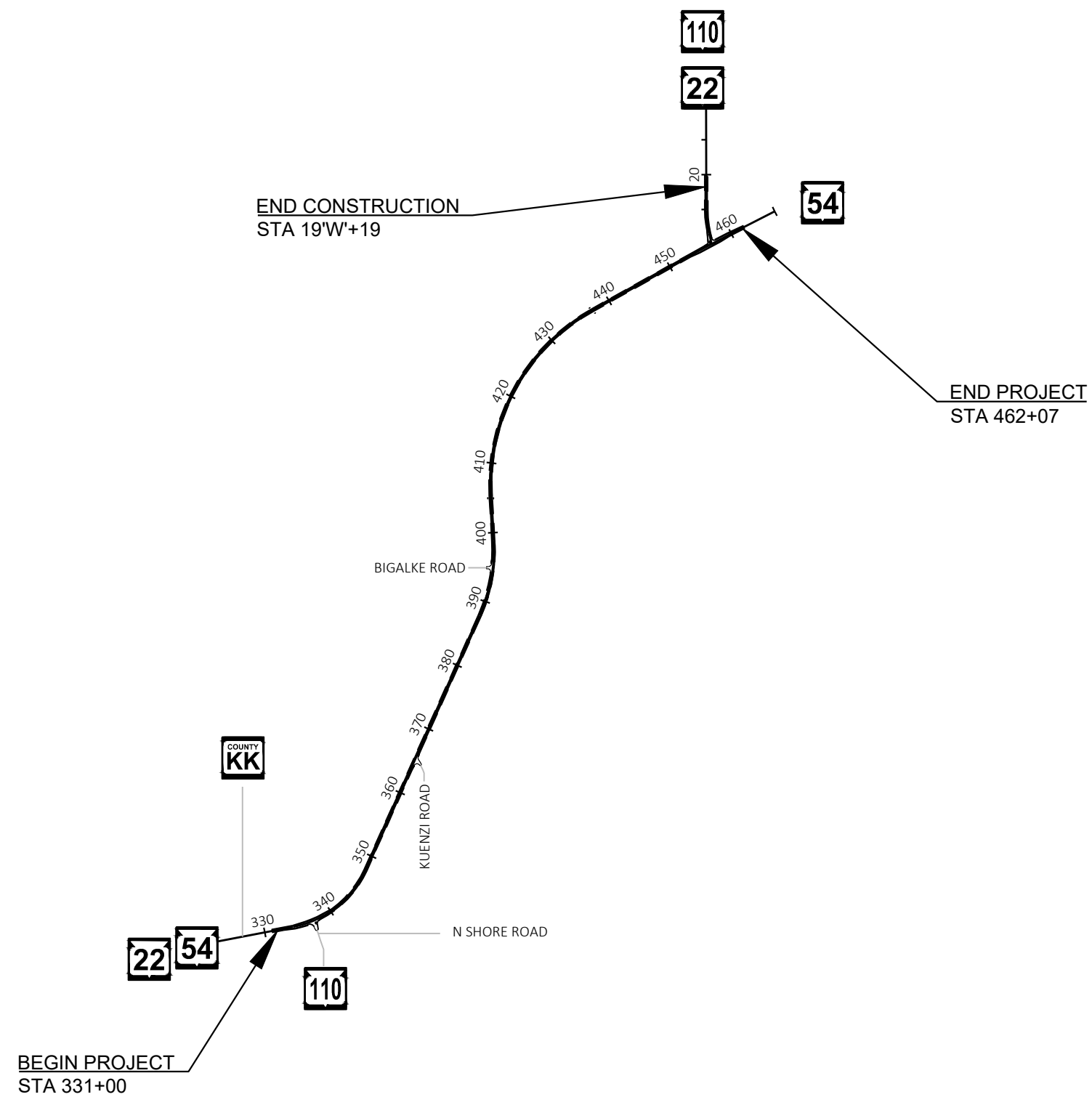
	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE:	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER	0 - 2	2 - 6	6 & OVER
ROW CROPS:	.08	.16	.22	.12	.20	.27	.15	.24	.33	.19	.28	.38
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

TOTAL PROJECT AREA = 12.9 ACRES
TOTAL AREA TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 12.9 ACRES

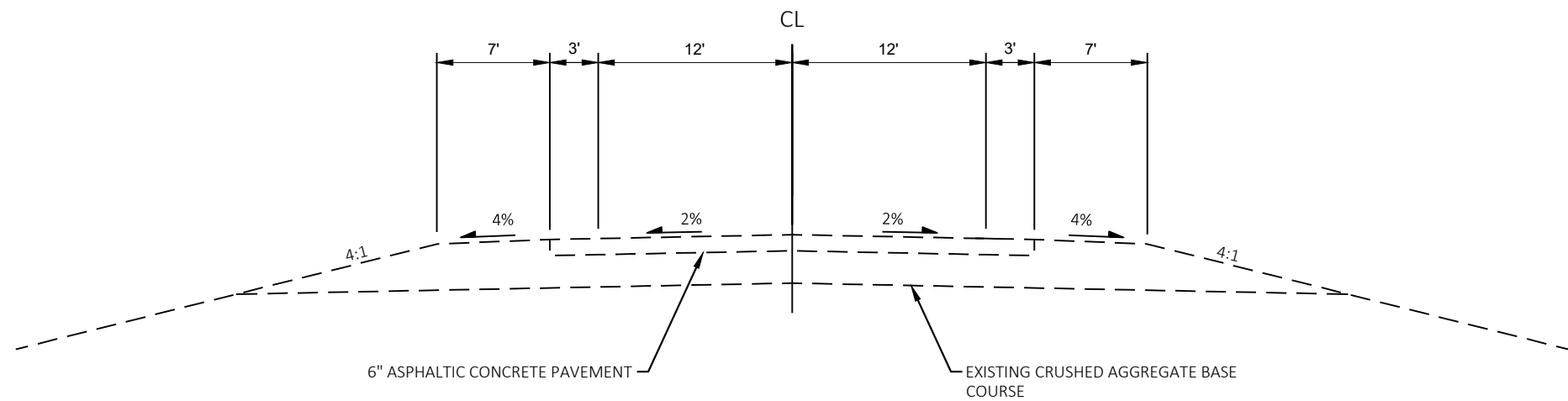
DIGGERSHOTLINE

Dial 811 or (800)242-8511

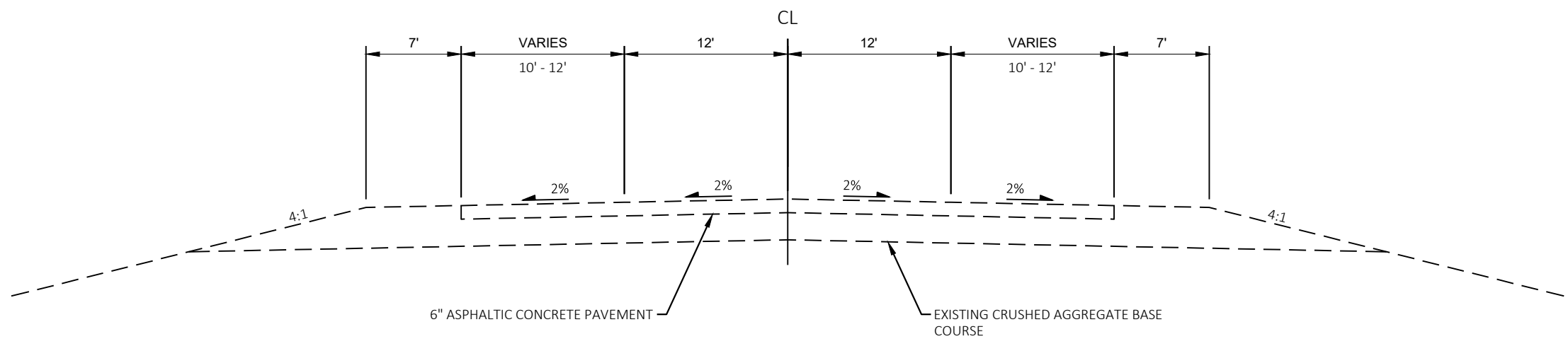
www.DiggersHotline.com



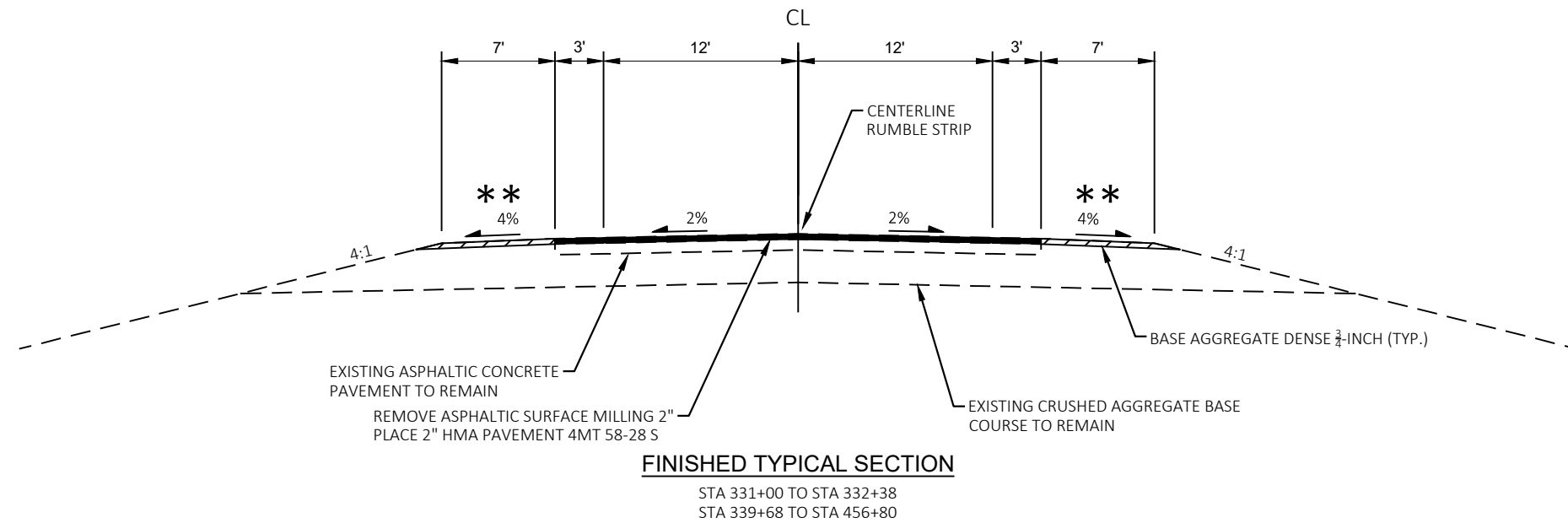
PROJECT NO: 6220-00-72	HWY: STH 22	COUNTY: WAUPACA	PROJECT OVERVIEW	SHEET	E
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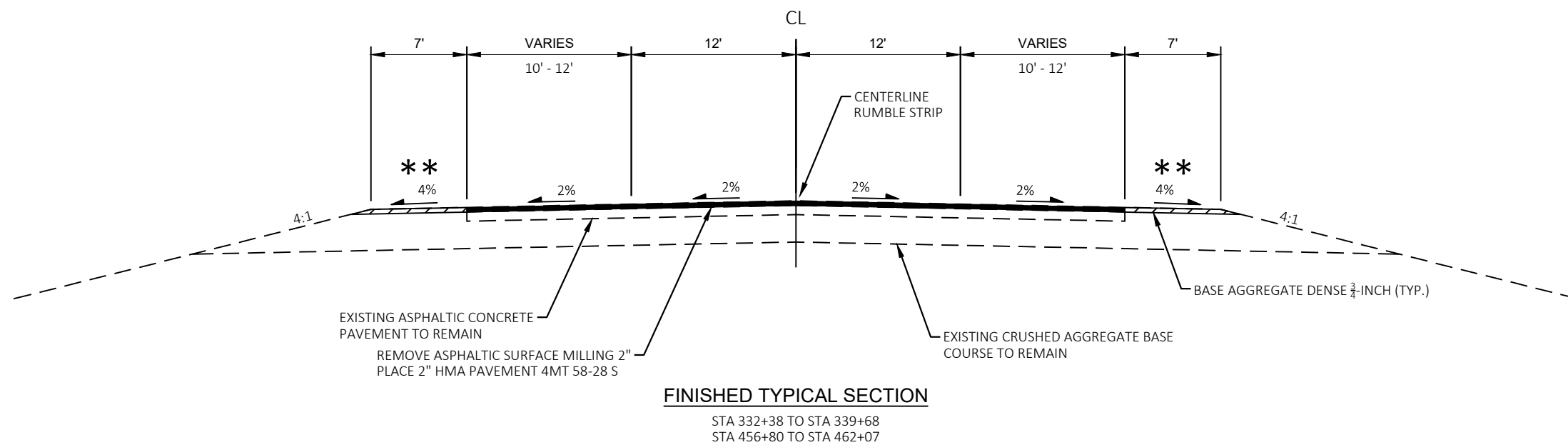
EXISTING TYPICAL SECTION
STA 331+00 TO STA 332+38
STA 339+68 TO STA 456+80

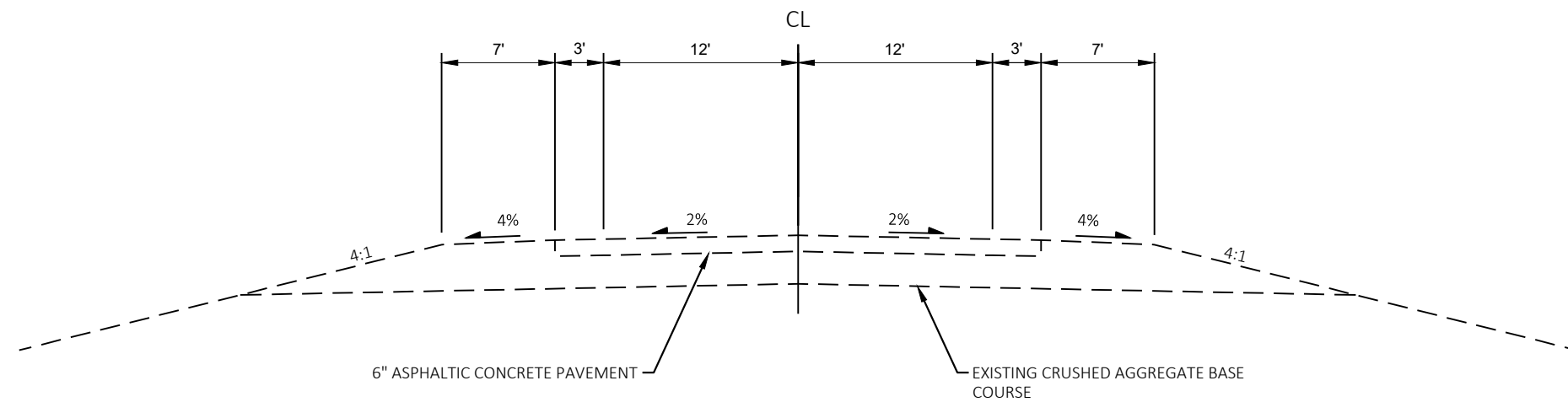


EXISTING TYPICAL SECTION
STA 332+38 TO STA 339+68
STA 456+80 TO STA 462+07

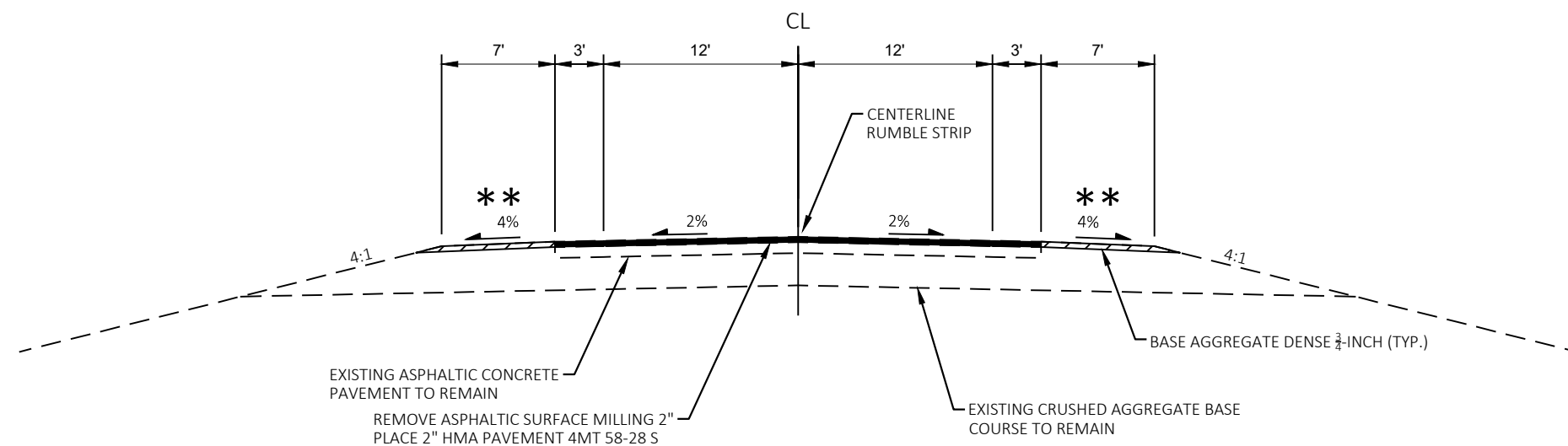


****** RESTORE SHOULDERS TO INDICATED SLOPE AND DIMENSION. SHOULDER RESTORATION WILL BE PAID UNDER BASE AGGREGATE DENSE $\frac{3}{4}$ -INCH AND FINISHING ROADWAY



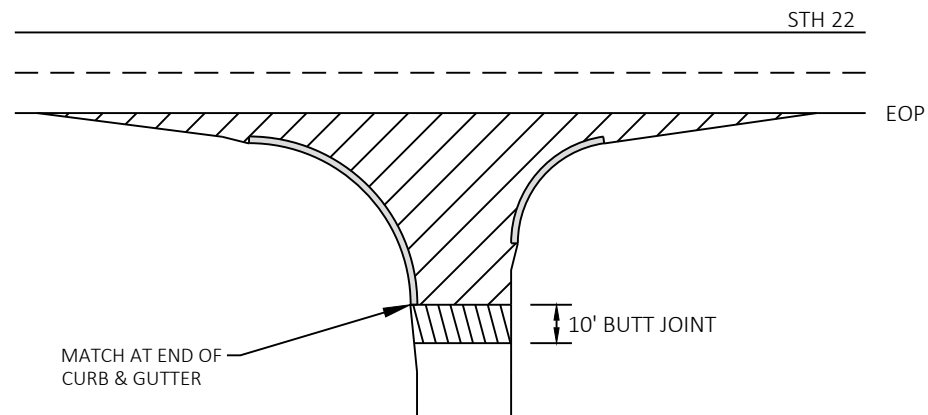
**EXISTING TYPICAL SECTION**



STA 10'W'+00 TO STA 19'W'+19
(STH 22 & STH 110)

**FINISHED TYPICAL SECTION**

STA 10'W'+00 TO STA 19'W'+19
(STH 22 & STH 110)

****** RESTORE SHOULDERS TO INDICATED SLOPE AND DIMENSION. SHOULDER RESTORATION WILL BE PAID UNDER BASE AGGREGATE DENSE $\frac{3}{4}$ -INCH AND FINISHING ROADWAY

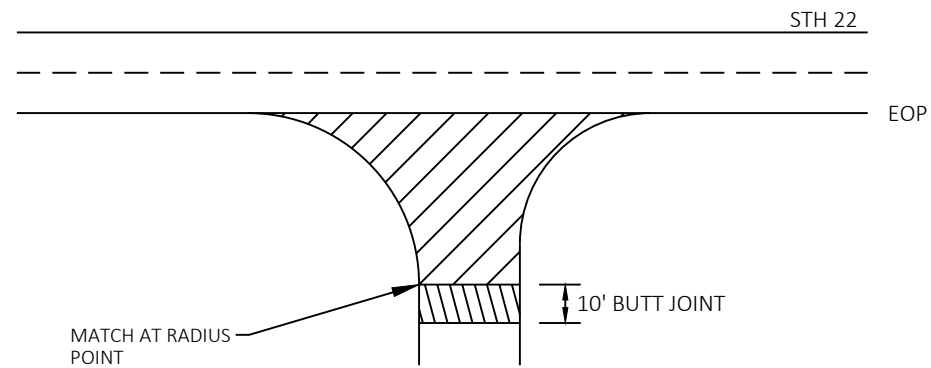




-  REMOVING ASPHALTIC SURFACE MILLING
-  REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE
BUTT JOINT IS NOT REQUIRED

SIDE ROADS

WITH CURB AND GUTTER

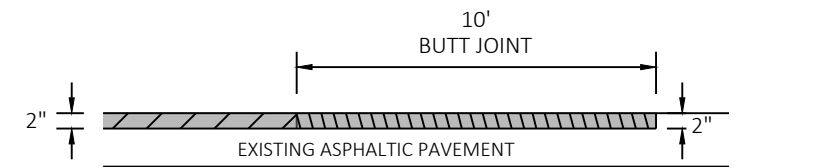





-  REMOVING ASPHALTIC SURFACE MILLING
-  REMOVING ASPHALTIC SURFACE BUTT JOINTS
SEE BUTT JOINT DETAIL

NOTE: WHEN MATCHING TO AN UNPAVED SURFACE
BUTT JOINT IS NOT REQUIRED

SIDE ROADS

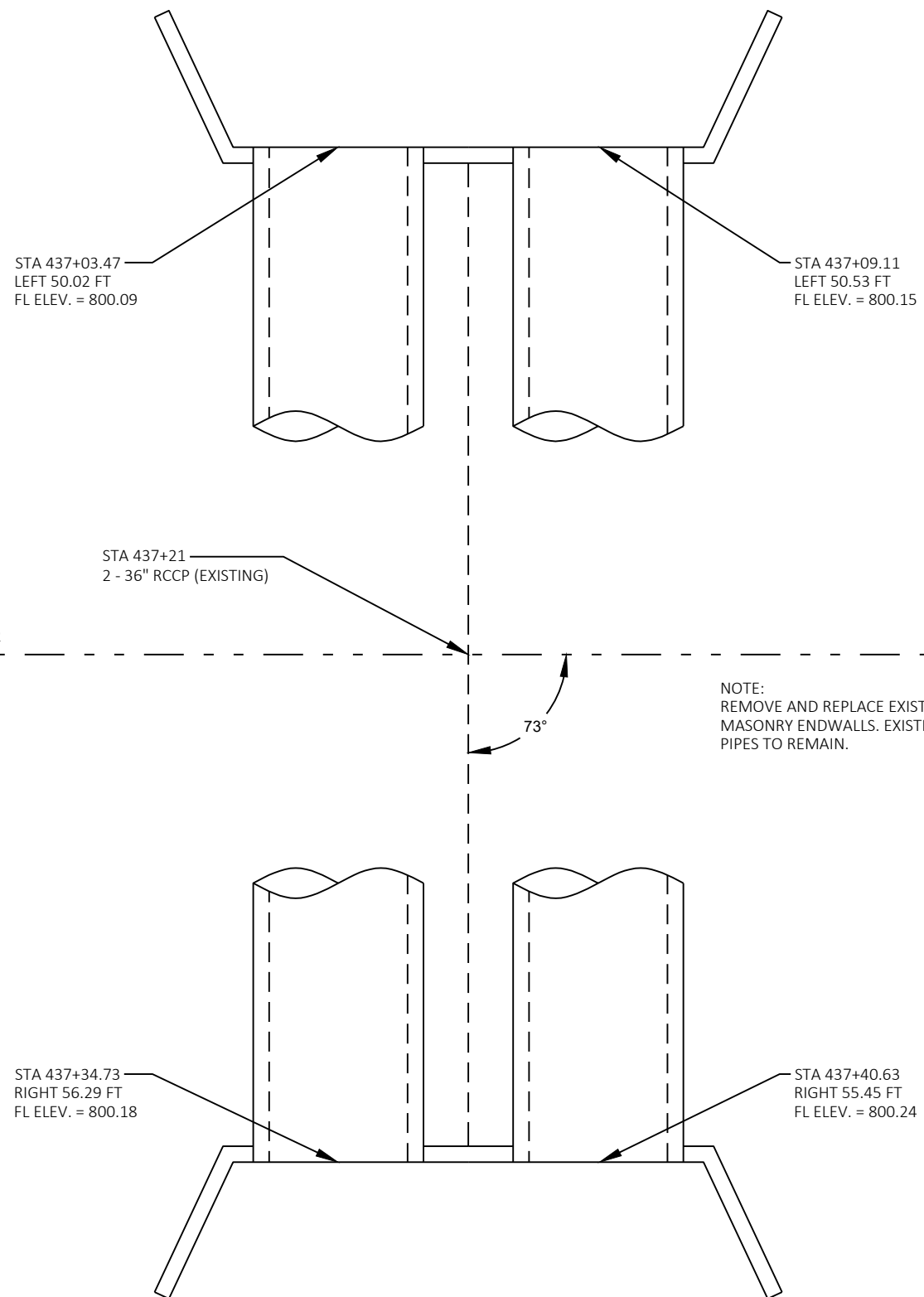
WITHOUT CURB AND GUTTER



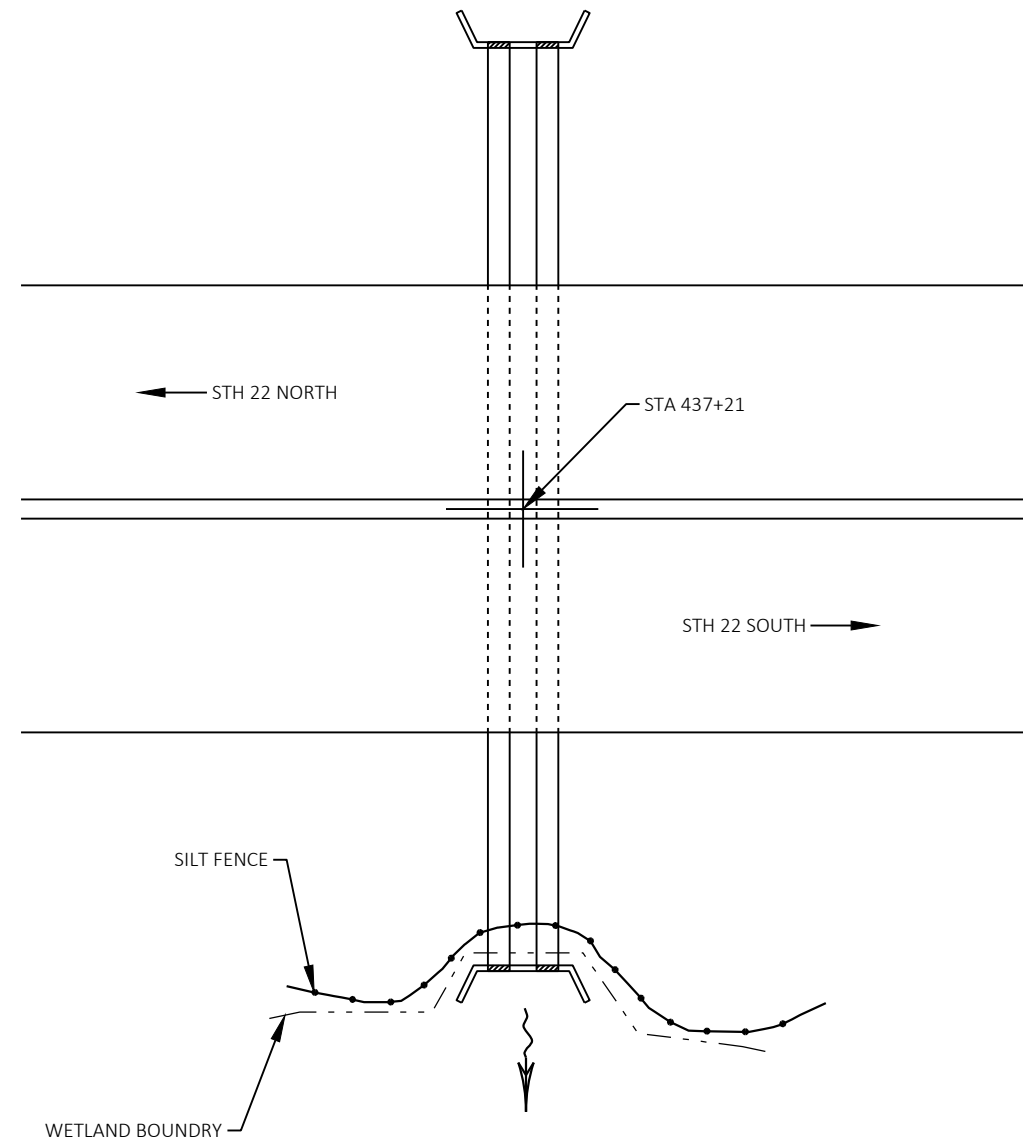
-  HMA PAVEMENT
-  REMOVING ASPHALTIC SURFACE MILLING
-  REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINT

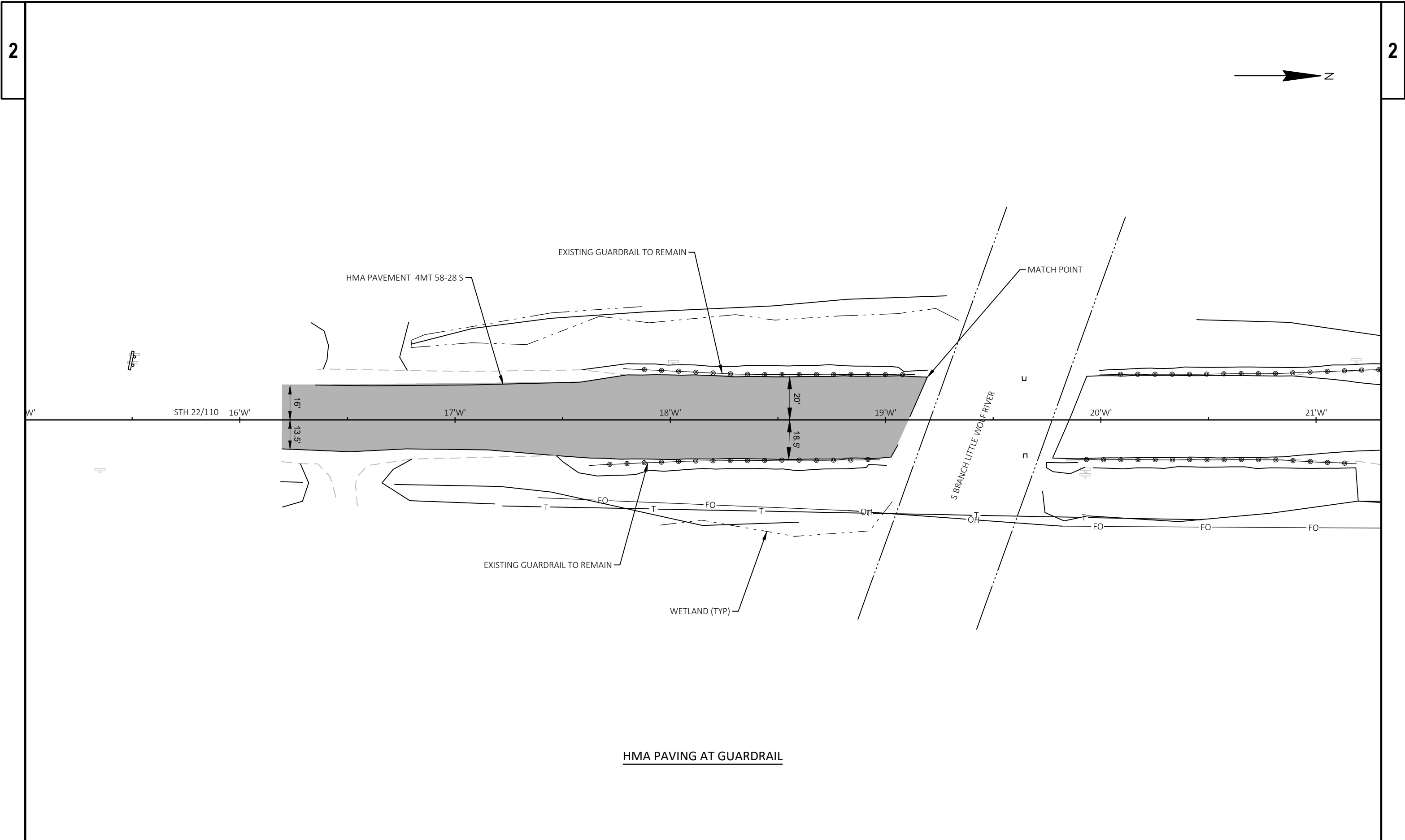
MAINLINE AND SIDE ROADS



CONCRETE MASONRY ENDWALLS
(SEE S.D.D. CONCRETE MASONRY ENDWALLS
FOR CULVERT PIPE AND PIPE ARCH)



EROSION CONTROL AT CONCRETE MASONRY ENDWALLS
NTS





-
- UNDIVIDED ROAD OPEN TO TRAFFIC
- COUNTY KK
- 22 54
- 330
- 340
- N SHORE ROAD
- 110
- 350 360 370 380 390 400 410 420 430 440 450 460
- BIGALKE ROAD
- KUENZI ROAD
- 22 110 54
- HWY 22 ROAD WORK BEGINS XX-YY
- G20-57 96"X48"
- 20
- 460
- HWY 22 ROAD WORK BEGINS XX-YY
- G20-57 96"X48"
- SIGN TO BE PLACED 7 DAYS BEFORE CONSTRUCTION BEGINS, AND REMOVED AT THE START OF CONSTRUCTION
- SIGN TO BE PLACED 7 DAYS BEFORE CONSTRUCTION BEGINS, AND REMOVED AT THE START OF CONSTRUCTION

Estimate Of Quantities

6220-00-72					
Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	208.000	208.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	54,079.000	54,079.000
0006	204.0185	Removing Masonry	CY	4.000	4.000
0008	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 6220-00-72	LS	1.000	1.000
0010	213.0100	Finishing Roadway (project) 01. 6220-00-72	EACH	1.000	1.000
0012	305.0110	Base Aggregate Dense 3/4-Inch	TON	2,500.000	2,500.000
0014	455.0605	Tack Coat	GAL	3,786.000	3,786.000
0016	460.2000	Incentive Density HMA Pavement	DOL	3,800.000	3,800.000
0018	460.6224	HMA Pavement 4 MT 58-28 S	TON	5,925.000	5,925.000
0020	465.0110	Asphaltic Surface Patching	TON	593.000	593.000
0022	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	11,551.000	11,551.000
0024	504.0900	Concrete Masonry Endwalls	CY	4.000	4.000
0026	618.0100	Maintenance And Repair of Haul Roads (project) 01. 6220-00-72	EACH	1.000	1.000
0028	619.1000	Mobilization	EACH	1.000	1.000
0030	624.0100	Water	MGAL	36.000	36.000
0032	625.0100	Topsoil	SY	114.000	114.000
0034	628.1504	Silt Fence	LF	150.000	150.000
0036	628.1520	Silt Fence Maintenance	LF	150.000	150.000
0038	628.2002	Erosion Mat Class I Type A	SY	114.000	114.000
0040	629.0210	Fertilizer Type B	CWT	0.100	0.100
0042	630.0160	Seeding Mixture No. 60	LB	3.000	3.000
0044	630.0500	Seed Water	MGAL	2.600	2.600
0046	643.0900	Traffic Control Signs	DAY	538.000	538.000
0048	643.5000	Traffic Control	EACH	1.000	1.000
0050	646.1020	Marking Line Epoxy 4-Inch	LF	24,399.000	24,399.000
0052	646.1040	Marking Line Grooved Wet Ref Epoxy 4-Inch	LF	27,363.000	27,363.000
0054	646.3020	Marking Line Epoxy 8-Inch	LF	469.000	469.000
0056	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	24,399.000	24,399.000
0058	646.6120	Marking Stop Line Epoxy 18-Inch	LF	72.000	72.000
0060	648.0100	Locating No-Passing Zones	MI	2.700	2.700
0062	649.0105	Temporary Marking Line Paint 4-Inch	LF	23,981.000	23,981.000
0064	650.8000	Construction Staking Resurfacing Reference	LF	14,026.000	14,026.000
0066	650.9910	Construction Staking Supplemental Control (project) 01. 6220-00-72	LS	1.000	1.000
0068	740.0440	Incentive IRI Ride	DOL	10,625.000	10,625.000
0070	SPV.0180	Special 01. Removing Distressed Pavement Milling	SY	3,740.000	3,740.000

204.0115
REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	LOCATION	SY
331+00	STH 22, BEGIN PROJECT	33
337+13	STH 110 SOUTH	44
364+77	KUENZI ROAD	27
394+88	BIGALKE ROAD	27
462+07	STH 54 EAST, END PROJECT	33
19'W'+19	STH 110 NORTH, END PROJECT	44
TOTAL:		208

211.0100
PREPARATION OF FOUNDATION FOR ASPHALTIC SURFACE

LOCATION	LS
STH 22 / PROJECT 01. 6220-00-72	1
TOTAL:	1

305.0110
BASE AGGREGATE DENSE 3/4-INCH

LOCATION	STATION	TO	STATION	TON	624.0100 WATER MGAL
STH 22 NORTHBOUND	331+00	-	462+07	1,133	17
STH 22 SOUTHBOUND	331+00	-	462+07	1,133	17
STH 22/110 NORTHBOUND	10'W'+50	-	19'W'+19	75	1
STH 22/110 SOUTHBOUND	10'W'+50	-	19'W'+19	75	1
UNDISTRIBUTED	-	-	-	84	-
TOTAL:				2,500	36

204.0120
REMOVING ASPHALTIC SURFACE MILLING

LOCATION	STATION	TO	STATION	SY
STH 22 NORTHBOUND	331+00	-	462+07	21,845
STH 22 SOUTHBOUND	331+00	-	462+07	21,845
STH 22 NORTHBOUND RIGHT TURN LANE	332+74	-	336+26	302
STH 110 SOUTH	336+26	-	338+43	1,039
STH 22 SOUTHBOUND BYPASS LANE	334+07	-	340+29	561
KUENZI ROAD	363+29	-	366+45	782
BIGALKE ROAD	393+66	-	396+84	536
STH 22 NORTHBOUND BYPASS LANE	453+30	-	459+53	641
STH 22/110/54	455+39	-	457+52	544
STH 54 SOUTHBOUND RIGHT TURN LANE	457+52	-	462+07	402
STH 22/110 NORTHBOUND	10'W'+72	-	19'W'+19	1,524
STH 22/110 SOUTHBOUND	10'W'+72	-	19'W'+19	1,729
3" SAFETY EDGE, STH 22 RT/LT	331+00	-	462+07	728
CENTERLINE JOINT, STH 22	331+00	-	462+07	1,456
3" SAFETY EDGE RT/LT, STH 22/110	10'W'+50	-	19'W'+19	48
CENTERLINE JOINT, STH 22/110	10'W'+50	-	19'W'+20	97
TOTAL:				54,079

HMA PAVEMENT ITEMS

455.0605 460.6224

LOCATION	STATION	TO	STATION	TACK COAT	4 MT 58-28 S
				GAL	TON
STH 22 NORTHBOUND	331+00	-	462+07	1,529	2,450
STH 22 SOUTHBOUND	331+00	-	462+07	1,529	2,450
STH 22 NORTHBOUND RIGHT TURN LANE	332+74	-	336+26	21	30
STH 110 SOUTH	336+26	-	338+43	73	120
STH 22 SOUTHBOUND BYPASS LANE	334+07	-	340+29	39	60
KUENZI ROAD	363+29	-	366+45	55	90
BIGALKE ROAD	393+66	-	396+84	38	60
STH 22 NORTHBOUND BYPASS LANE	453+30	-	459+53	45	70
STH 22/110/54	455+39	-	457+52	38	60
STH 54 SOUTHBOUND RIGHT TURN LANE	457+52	-	462+07	28	40
STH 22/110 NORTHBOUND	10'W'+72	-	19'W'+19	107	170
STH 22/110 SOUTHBOUND	10'W'+72	-	19'W'+19	121	190
3" SAFETY EDGE, STH 22 RT/LT	331+00	-	462+07	51	40
CENTERLINE JOINT, STH 22	331+00	-	462+07	102	80
3" SAFETY EDGE RT/LT, STH 22/110	10'W'+50	-	19'W'+19	3	5
CENTERLINE JOINT, STH 22/110	10'W'+50	-	19'W'+19	7	10
TOTAL:				3,786	5,925

465.0110 ASPHALTIC SURFACE PATCHING	
LOCATION	TON
MISCELLANEOUS, AS-NEEDED	593
	593

465.0475 ASPHALTIC SURFACE CENTERLINE RUMBLE STRIP 2-LANE RURAL				
STATION	TO	STATION	LOCATION	LF
331+00	-	462+07	STH 22	10,907
10'W'+50	-	19'W'+19	STH 22/110	644
TOTAL:				11,551

PAVEMENT MARKING ITEMS											
				646.1020	646.1040		646.3020	646.4520	646.6120	649.0105	
						GROOVED					
						GROOVED	WET REF				
				EPOXY	EPOXY	WET REF	EPOXY		SAME DAY	STOP LINE	TEMPORARY
				4-INCH	4-INCH	EPOXY	4-INCH	EPOXY	EPOXY	EPOXY	PAINT
				(YELLOW)	12.5' SKIPS	4-INCH	12.5' SKIPS	8-INCH	4-INCH	18-INCH	4-INCH
				(YELLOW)	(YELLOW)	(WHITE)	(WHITE)	(WHITE)	(YELLOW)	(WHITE)	(YELLOW)
STATION	TO	STATION	LOCATION	LF	LF	LF	LF	LF	LF	LF	LF
331+00	-	462+07	STH 22 CENTERLINE	19,285	1,160	-	-	-	20,445	-	20,027
331+00	-	462+07	STH 22 NB	-	-	12,870	84	216	-	36	-
331+00	-	462+07	STH 22 SB	-	-	12,621	70	203	-	-	-
10'W'+00	-	19'W'+19	STH 22/110 CENTERLINE	3,954	-	-	-	-	3,954	-	3,954
10'W'+00	-	19'W'+19	STH 22/110 NB	-	-	831	-	-	-	-	-
10'W'+00	-	19'W'+19	STH 22/110 SB	-	-	887	-	50	-	36	-
SUBTOTAL:				23,239	1,160	27,209	154	469	24,399	72	23,981
TOTAL:				24,399		27,363		469	24,399	72	23,981

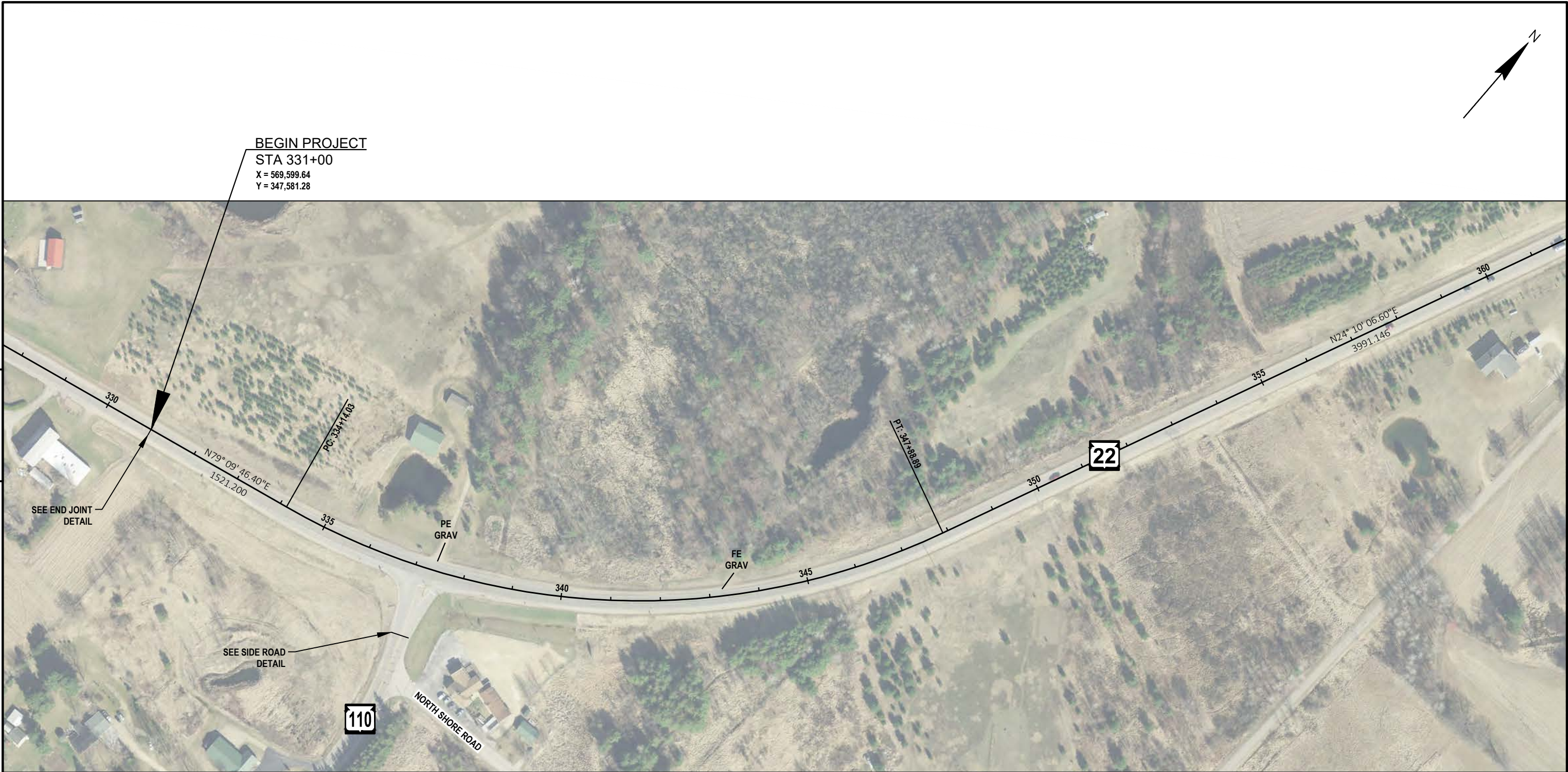
650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE				
STATION	TO	STATION	LOCATION	LF
331+00	-	462+07	STH 22	13,107
10'W'+00	-	19'W'+19	STH 22/110	919
TOTAL:				14,026

650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL		
CATEGORY	LOCATION	LS
0010	STH 22 - PROJECT	1
TOTAL:		1

SPV.0180.01 REMOVING DISTRESSED PAVEMENT MILLING				
STATION	TO	STATION	LOCATION	SY
331+00	-	462+07	STH 22, UNDISTRIBUTED/AS-NEEDED	3,495
10'W'+00	-	19'W'+19	STH 22/110, UNDISTRIBUTED/AS-NEEDED	245
TOTAL:				3,740

ENDWALL EROSION CONTROL			
		628.1504	628.1520
		SILT FENCE	SILT FENCE
		LF	LF
STATION	LOCATION		
437+21	STH 22, 50' LT, AS-NEEDED	150	150
437+21	STH 22, 55' RT, AS-NEEDED	-	-
TOTAL:		150	150

ENDWALL RESTORATION						
		625.0100	628.2002	629.0210	630.0160	630.0500
			EROSION MAT	FERTILIZER	SEEDING	
			CLASS I	TYPE A	MIXTURE	SEED
			TOPSOIL	TYPE B	NO. 60	WATER
			SY	CWT	LB	MGAL
STATION	LOCATION					
437+21	STH 22, 50' LT, AS-NEEDED	57	57	0.05	1.5	1.3
437+21	STH 22, 55' RT, AS-NEEDED	57	57	0.05	1.5	1.3
TOTAL:		114	114	0.10	3.0	2.6



PI STA = 341+59.60
Y = 347780.505
X = 570640.344
Δ = 54°59'40"
D = 4°00'00"
T = 745.57'
L = 1374.86'
R = 1432.39'
PC STA = 334+14.03
Y = 347640.325
X = 569908.075
PT STA = 347+88.89
Y = 348460.718
X = 570945.595

STATION	LT SLOPE	RT SLOPE	STATION
332+54.02	-2.0%	-2.0%	NORMAL CROWN
333+07.36	-2.0%	0.0%	LEVEL CROWN
333+60.69	-2.0%	+2.0%	REVERSE CROWN
334+67.36	-6.0%	+6.0%	BEGIN FULL SUPER
347+35.56	-6.0%	+6.0%	END FULL SUPER
348+42.22	-2.0%	+2.0%	REVERSE CROWN
348+95.56	-2.0%	0.0%	LEVEL CROWN
349+48.89	-2.0%	-2.0%	NORMAL CROWN

NOTE:
SEE SDD:
-PAVEMENT MARKING, MAINLINE AND TURN LANES,
LONGITUDINAL MARKING MAINLINE
-PAVEMENT MARKING INTERSECTIONS



5



5

NOTE:
SEE SDD:
-PAVEMENT MARKING, MAINLINE AND TURN LANES,
LONGITUDINAL MARKING MAINLINE
-PAVEMENT MARKING INTERSECTIONS

PROJECT NO: 6220-00-72	HWY: STH 22	COUNTY: WAUPACA	PLAN SHEETS	SHEET	E
------------------------	-------------	-----------------	-------------	-------	---



PI STA = 393+41.71
Y = 352614.466
X = 572809.619
Δ = 27°32'28"
D = 2°30'00"
T = 561.68'
L = 1101.64'
R = 2291.84'
PC STA = 387+80.03
Y = 352102.021
X = 572579.656
PT STA = 398+81.68
Y = 353175.172
X = 572776.577

STATION	LT SLOPE	RT SLOPE	STATION
386+36.03	-2.0%	-2.0%	NORMAL CROWN
386+89.36	-2.0%	0.0%	LEVEL CROWN
387+42.69	-2.0%	+2.0%	REVERSE CROWN
388+25.36	-5.1%	+5.1%	BEGIN FULL SUPER
398+36.35	-5.1%	+5.1%	END FULL SUPER
399+19.01	-2.0%	+2.0%	REVERSE CROWN
399+72.35	-2.0%	0.0%	LEVEL CROWN
400+25.68	-2.0%	-2.0%	NORMAL CROWN

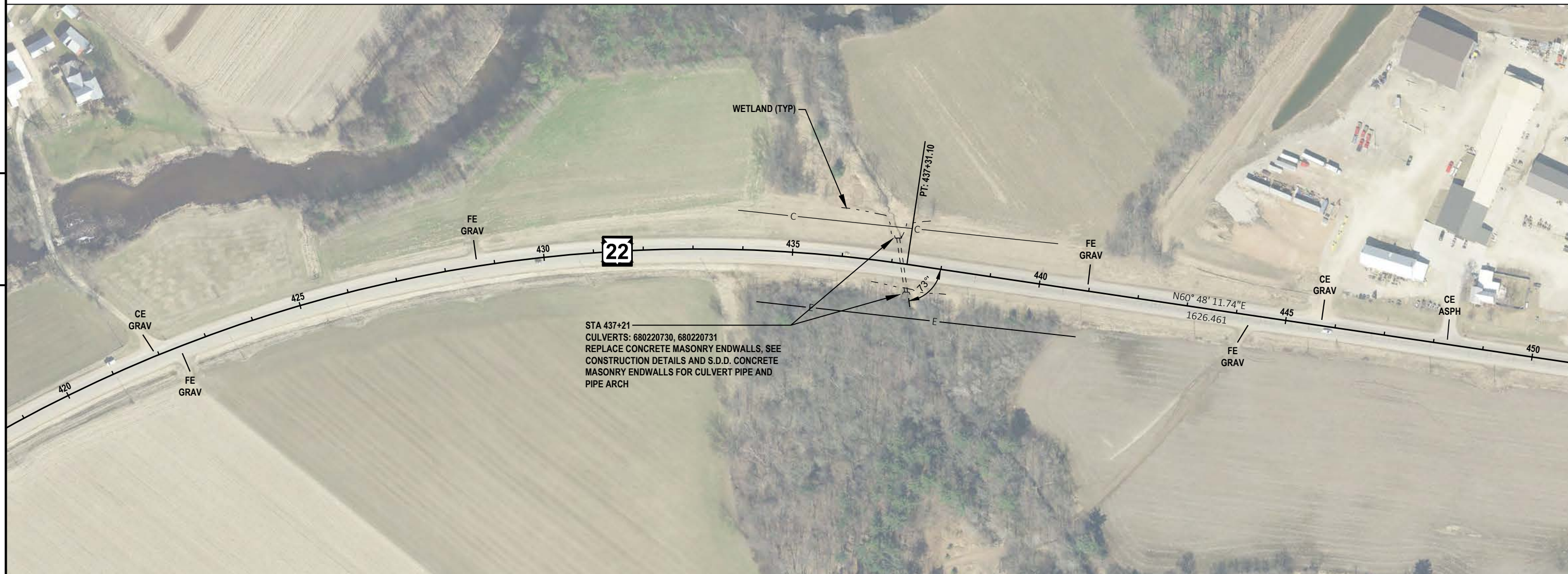
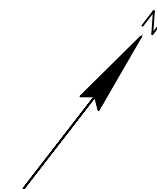
STATION	LT SLOPE	RT SLOPE	STATION
403+88.98	-2.0%	-2.0%	NORMAL CROWN
404+42.31	0.0%	-2.0%	LEVEL CROWN
404+95.65	+2.0%	-2.0%	REVERSE CROWN
405+62.31	+4.5%	-4.5%	BEGIN FULL SUPER
436+91.10	+4.5%	-4.5%	END FULL SUPER
427+57.77	+2.0%	-2.0%	REVERSE CROWN
438+11.10	0.0%	-2.0%	LEVEL CROWN
438+64.43	-2.0%	-2.0%	NORMAL CROWN

PI STA = 423+18.55
Y = 355607.824
X = 572633.223
Δ = 64°10'33"
D = 2°00'00"
T = 1796.23'
L = 3208.78'
R = 2864.78'
PC STA = 405+22.32
Y = 353814.706
X = 572738.890
PT STA = 437+31.10
Y = 356484.042
X = 574201.241

NOTE:
SEE SDD:
-PAVEMENT MARKING, MAINLINE AND TURN LANES,
LONGITUDINAL MARKING MAINLINE
-PAVEMENT MARKING INTERSECTIONS

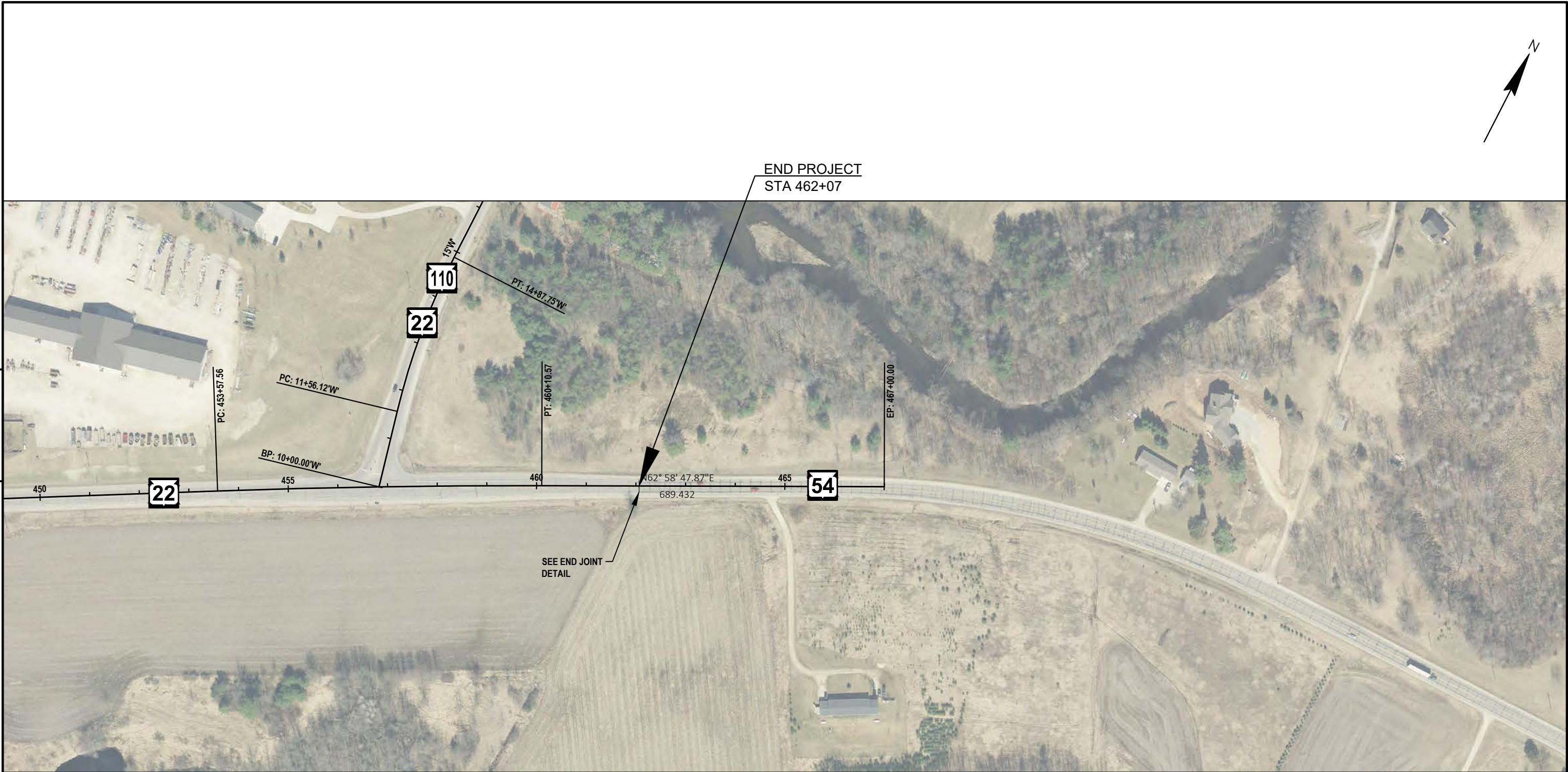
PI STA = 423+18.55
Y = 355607.824
X = 572633.223
Δ = 64°10'33"
D = 2°00'00"
T = 1796.23'
L = 3208.78'
R = 2864.78'
PC STA = 405+22.32
Y = 353814.706
X = 572738.890
PT STA = 437+31.10
Y = 356484.042
X = 574201.241

STATION	LT SLOPE	RT SLOPE	STATION
403+88.98	-2.0%	-2.0%	NORMAL CROWN
404+42.31	0.0%	-2.0%	LEVEL CROWN
404+95.65	+2.0%	-2.0%	REVERSE CROWN
405+62.31	+4.5%	-4.5%	BEGIN FULL SUPER
436+91.10	+4.5%	-4.5%	END FULL SUPER
427+57.77	+2.0%	-2.0%	REVERSE CROWN
438+11.10	0.0%	-2.0%	LEVEL CROWN
438+64.43	-2.0%	-2.0%	NORMAL CROWN



STA 437+21
CULVERTS: 680220730, 680220731
REPLACE CONCRETE MASONRY ENDWALLS, SEE
CONSTRUCTION DETAILS AND S.D.D. CONCRETE
MASONRY ENDWALLS FOR CULVERT PIPE AND
PIPE ARCH

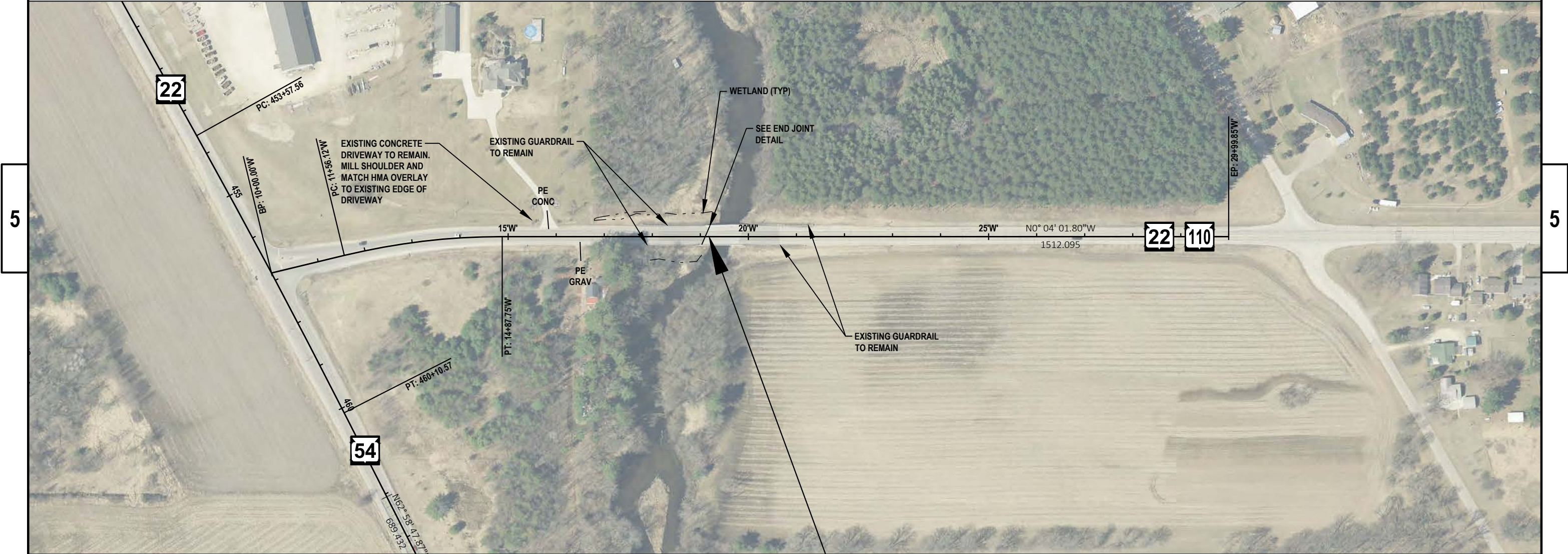
NOTE:
SEE SDD:
-PAVEMENT MARKING, MAINLINE AND TURN LANES,
LONGITUDINAL MARKING MAINLINE
-PAVEMENT MARKING INTERSECTIONS



PI STA = 456+84.10
Y = 357436.738
X = 575906.117
 $\Delta = 2^{\circ}10'36''$
D = $0^{\circ}20'00''$
T = 326.54'
L = 653.01'
R = 17188.73'
PC STA = 453+57.56
Y = 357277.446
X = 575621.060
PT STA = 460+10.57
Y = 357585.088
X = 576197.018

NOTE:
SEE SDD:
-PAVEMENT MARKING, MAINLINE AND TURN LANES,
LONGITUDINAL MARKING MAINLINE
-PAVEMENT MARKING INTERSECTIONS

PI STA = 13+22.72'W'
Y = 357747.056
X = 575830.427
Δ = 13°34'19"
D = 4°05'33"
T = 166.59'
L = 331.63'
R = 1400.00'
PC STA = 11+56.12'W'
Y = 357585.161
X = 575869.711
PT STA = 14+87.75'W'
Y = 357913.650
X = 575830.232



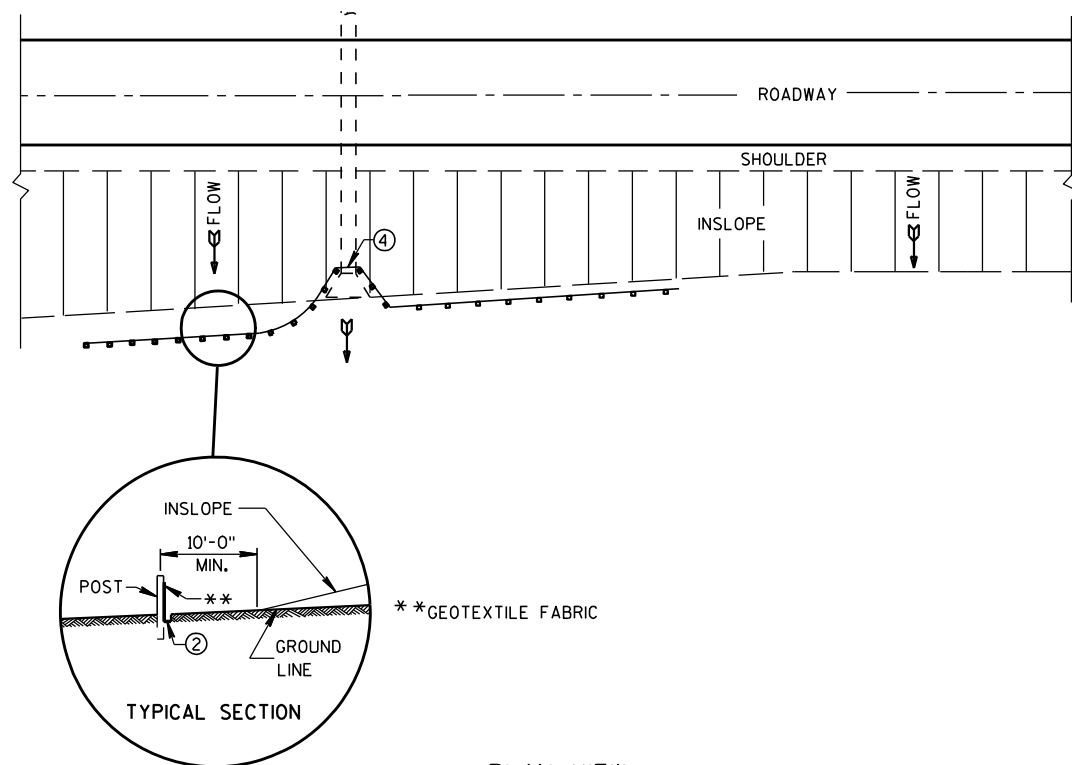
STATION	LT SLOPE	RT SLOPE	STATION
10'W'+84.24	-2.0%	-2.0%	NORMAL CROWN
11'W'+20.79	0.0%	-2.0%	LEVEL CROWN
11'W'+57.34	+2.0%	-2.0%	REVERSE CROWN
11'W'+73.79	+2.9%	-2.9%	BEGIN FULL SUPER
14'W'+70.09	+2.9%	-2.9%	END FULL SUPER
14'W'+86.53	+2.0%	-2.0%	REVERSE CROWN
15'W'+23.64	0.0%	-2.0%	LEVEL CROWN
15'W'+59.64	-2.0%	-2.0%	NORMAL CROWN

END CONSTRUCTION
STA 19'W'+19

NOTE:
SEE SDD:
-PAVEMENT MARKING, MAINLINE AND TURN LANES,
LONGITUDINAL MARKING MAINLINE
-PAVEMENT MARKING INTERSECTIONS

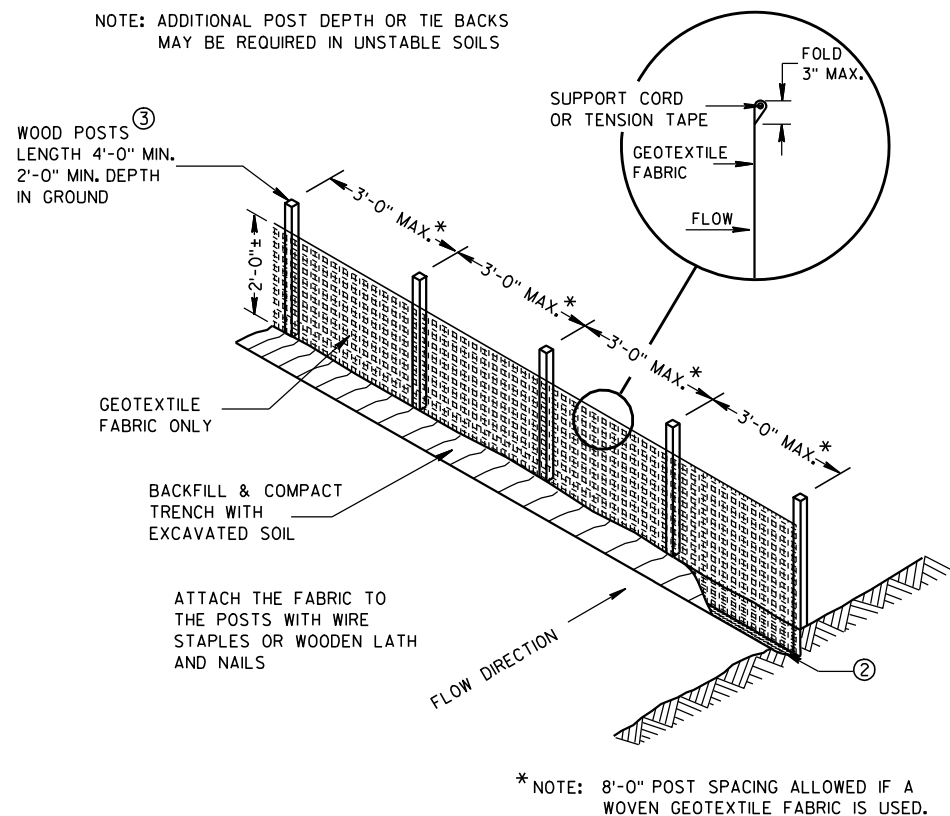
Standard Detail Drawing List

08E09-06	SILT FENCE
08F10-01	CONCRETE MASONRY ENDWALLS FOR CULVERT PIPE AND PIPE ARCH
13A11-03A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-03B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13C19-01	HMA LONGITUDINAL JOINTS
14B29-01	SAFETY EDGE
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C08-19A	LONGITUDINAL MARKING (MAINLINE)
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C19-06A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING
15D44-01	TRAFFIC CONTROL, SIGNING ON ROADWAYS WITH MILLED SURFACES

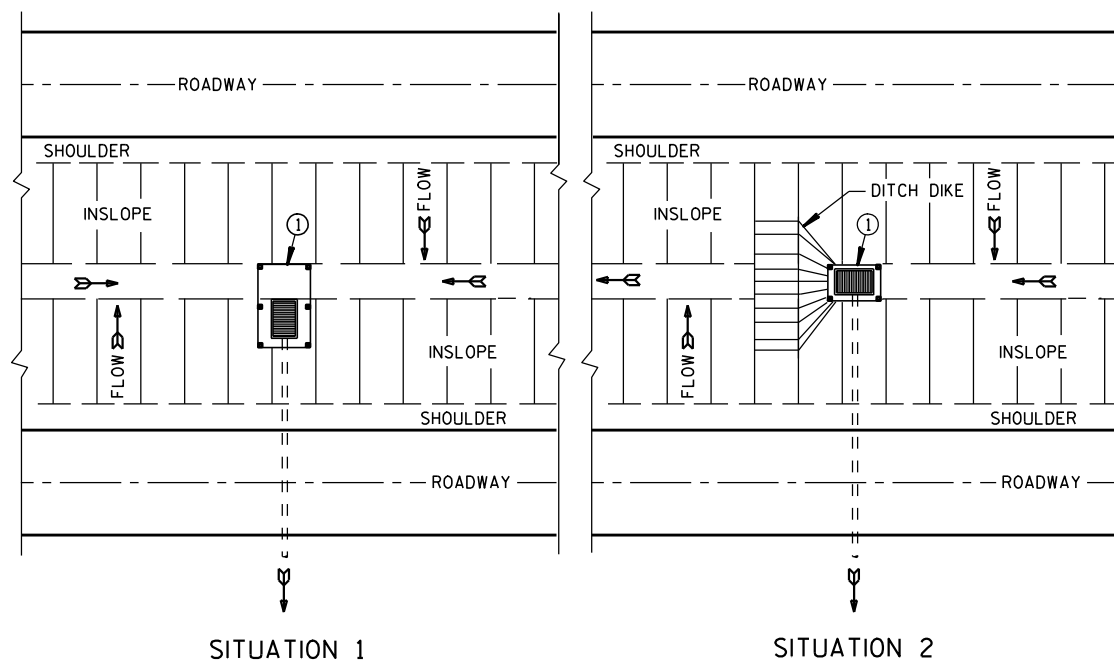


TYPICAL APPLICATION OF SILT FENCE

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

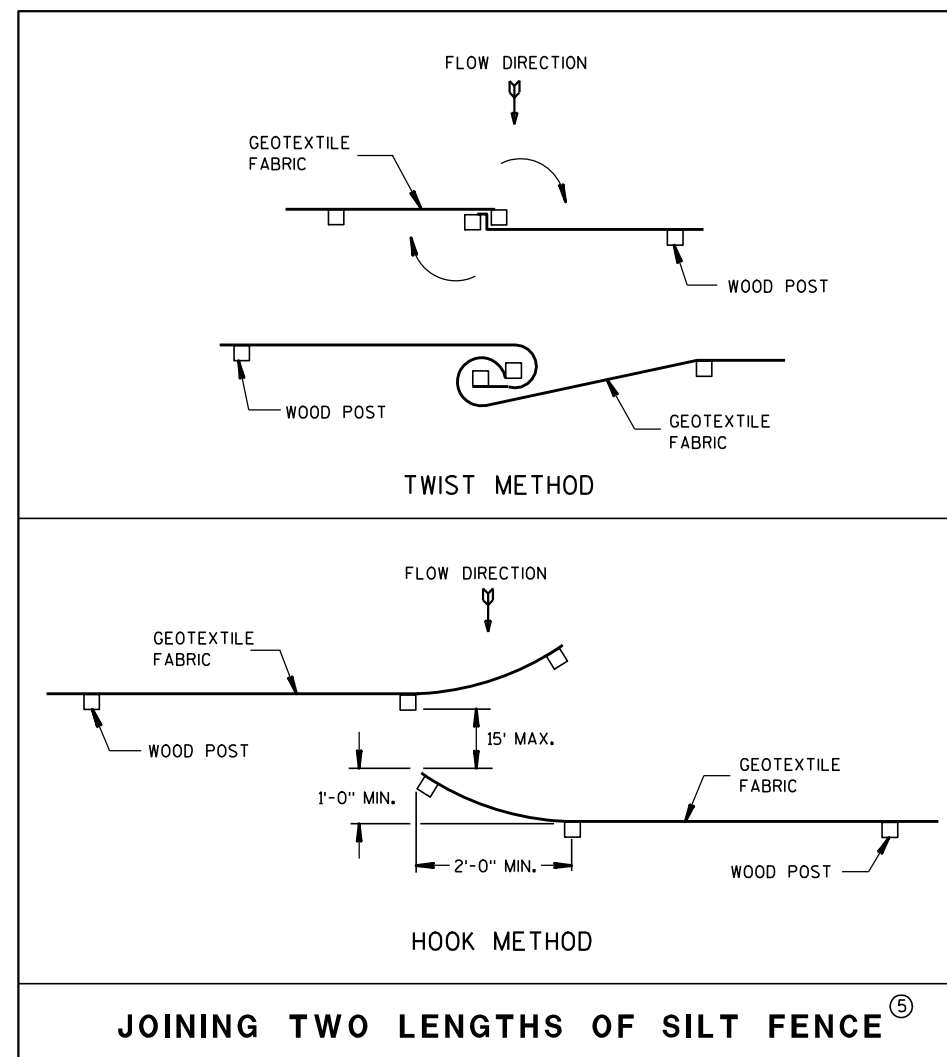


SILT FENCE



PLAN VIEW

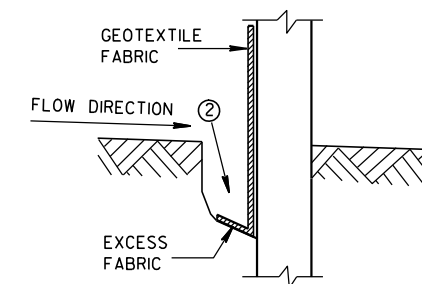
SILT FENCE AT MEDIAN SURFACE DRAINS



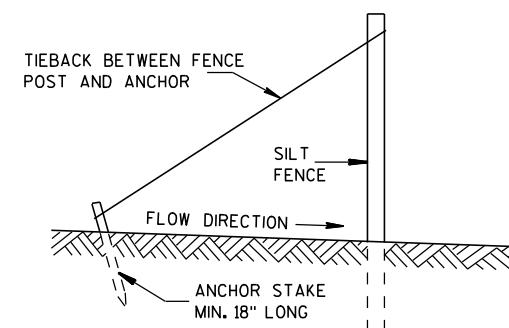
GENERAL NOTES

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

- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



TRENCH DETAIL



SILT FENCE TIE BACK (WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

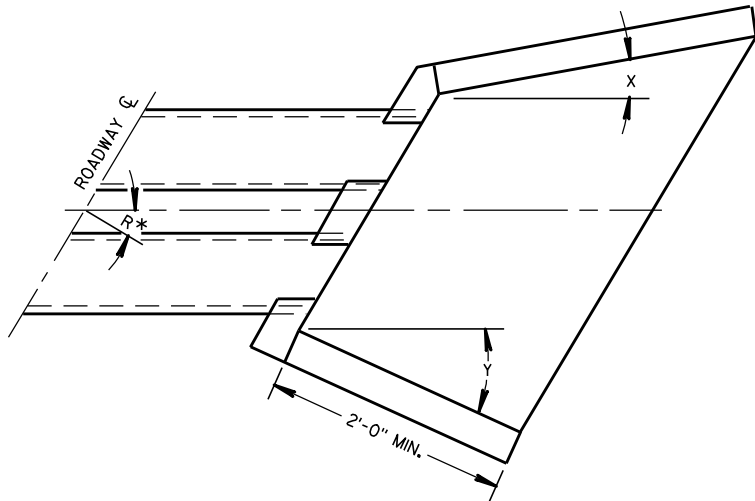
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

4-29-05
DATE

FHWA

/S/ Beth Canestra
CHIEF ROADWAY DEVELOPMENT ENGINEER



WINGWALL ANGLE DETAILS

INLET			OUTLET		
R*	X	Y	R*	X	Y
0 - 7°	30°	30°	0 - 15°	15°	15°
8 - 22°	25°	"	16 - 45°	10°	"
23 - 37°	20°	"	46 - 75°	5°	"
38 - 52°	15°	"	OVER 75°	0°	"
53 - 67°	10°	"			
68 - 82°	5°	"			
OVER 82°	0°	"			

*R = NUMBER OF DEGREES RIGHT OR LEFT HAND FORWARD

GENERAL NOTES

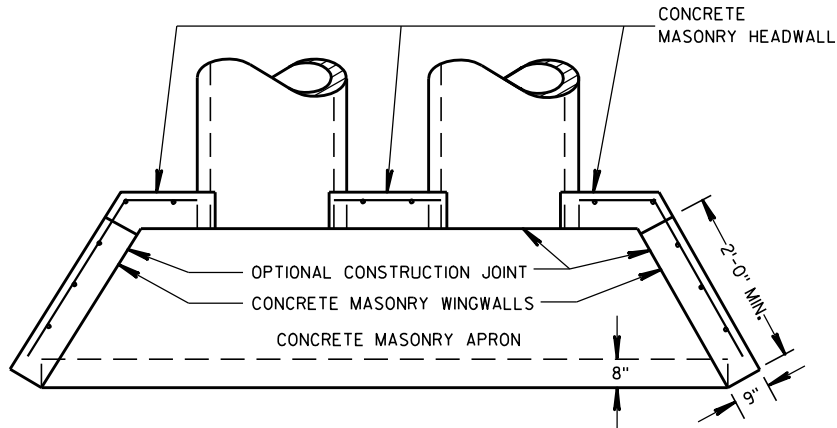
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

FILL SLOPES FLATTER THAN 2 1/2:1 SHALL BE WARPED TO MEET THE TOP OF THE WINGWALLS.

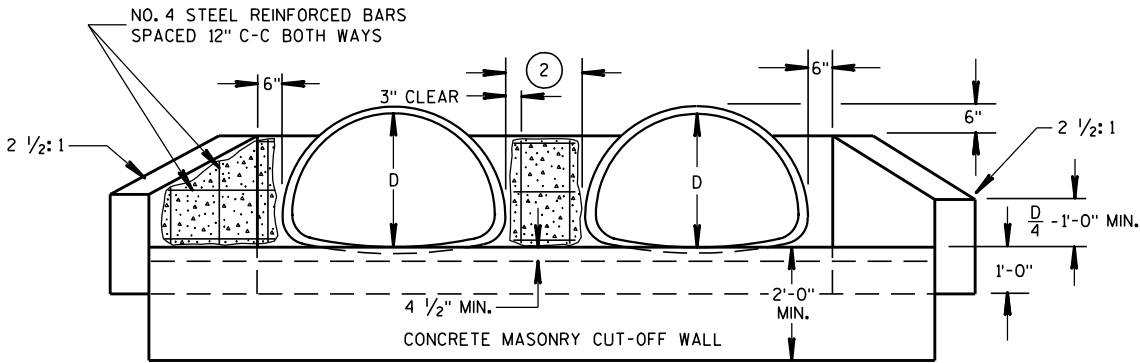
ALL STEEL REINFORCEMENT AND WELDED STEEL WIRE FABRIC SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE NOTED.

- 1 MINIMUM REINFORCEMENT SHALL BE 6" X 6" - W4.0 X W4.0 OR NO. 3 BARS SPACED 12" C-C IN BOTH DIRECTIONS.
- 2 THE SPACE BETWEEN PIPES SHALL BE AS FOLLOWS:

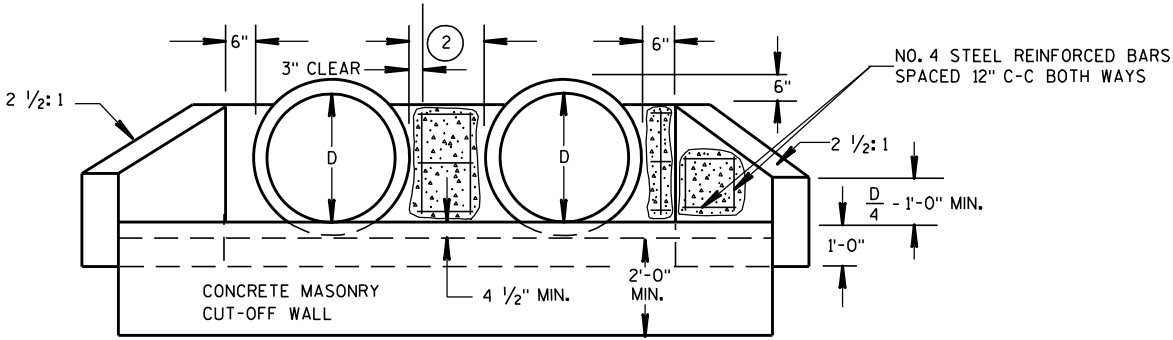
DIAMETER OR SPAN	SPACE
UP TO AND INCLUDING 48"	2'-0"
OVER 48" TO 72"	1/2 DIA. OR SPAN
OVER 72"	3'-0"



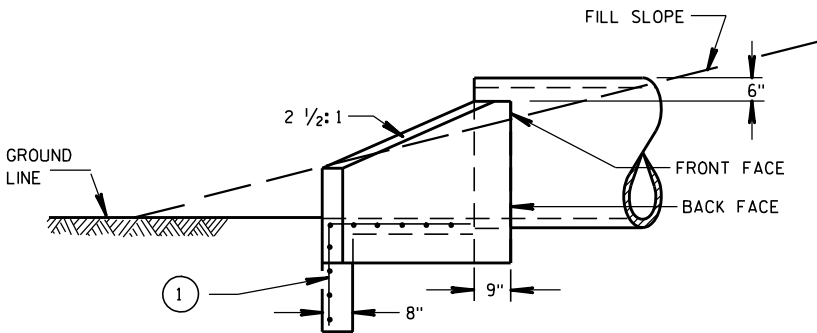
PLAN VIEW
CULVERT PIPE AND PIPE ARCH



END ELEVATION
PIPE ARCH



END ELEVATION
CULVERT PIPE

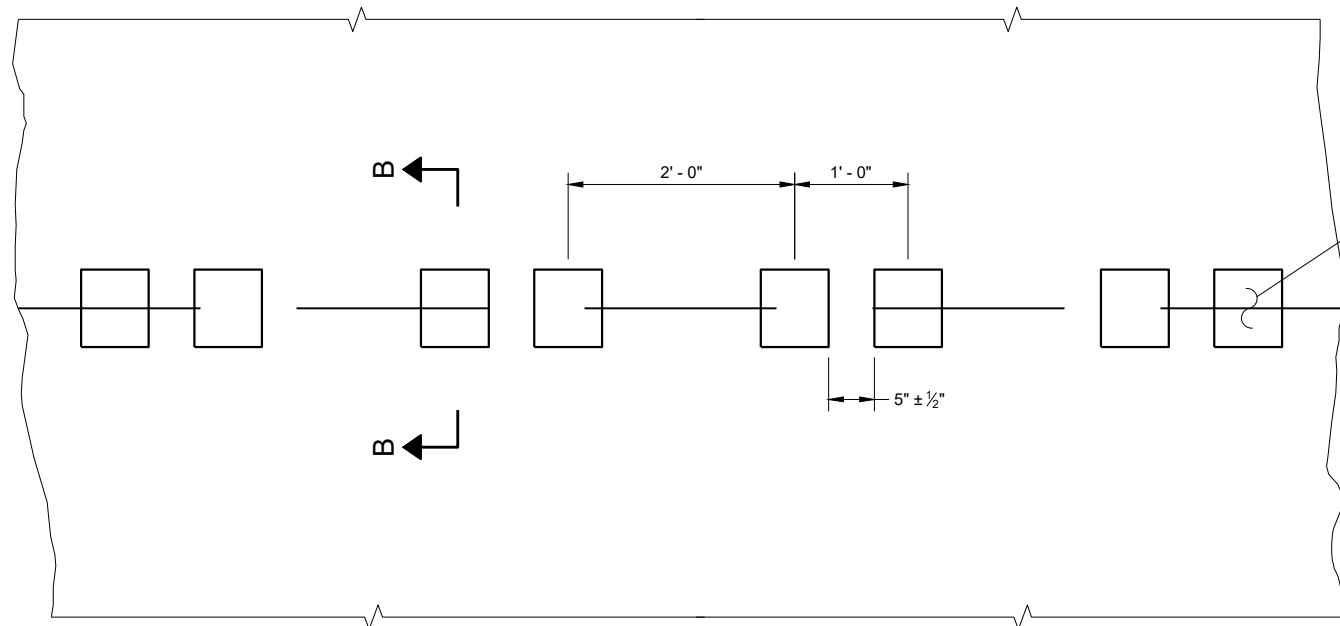


SIDE ELEVATION
CULVERT PIPE AND PIPE ARCH

CONCRETE MASONRY ENDWALLS
FOR CULVERT PIPE AND
PIPE ARCH

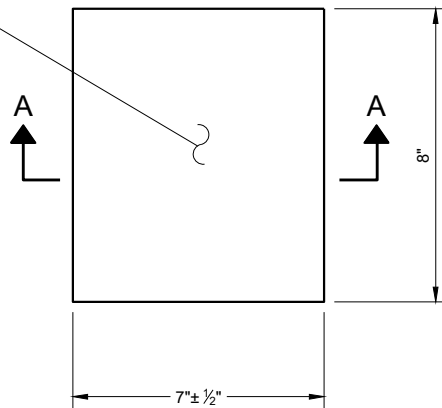
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
9/14/98 /S/ Rory L. Rhinesmith
DATE CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA



PLAN VIEW
SHOULDER WITH GROOVES

PLACEMENT DETAIL FOR TYPE 1 MILLED RUMBLE STRIP



PLAN VIEW
(SINGLE GROOVE)

GENERAL NOTES

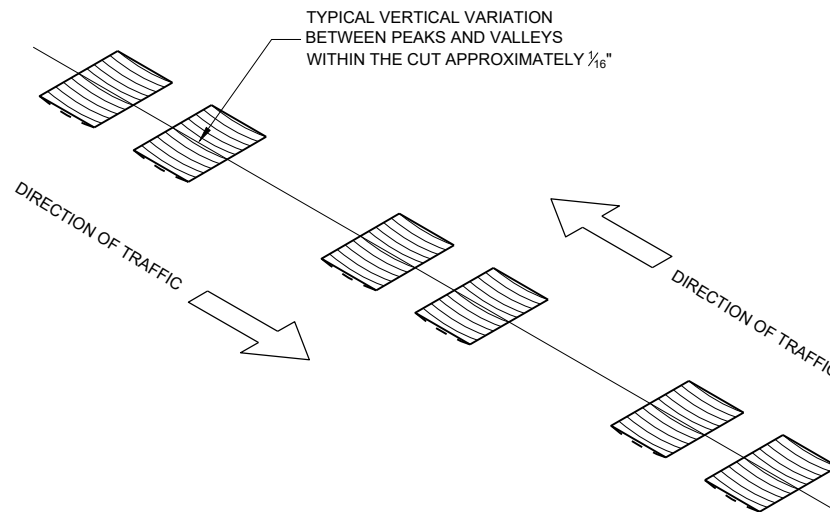
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

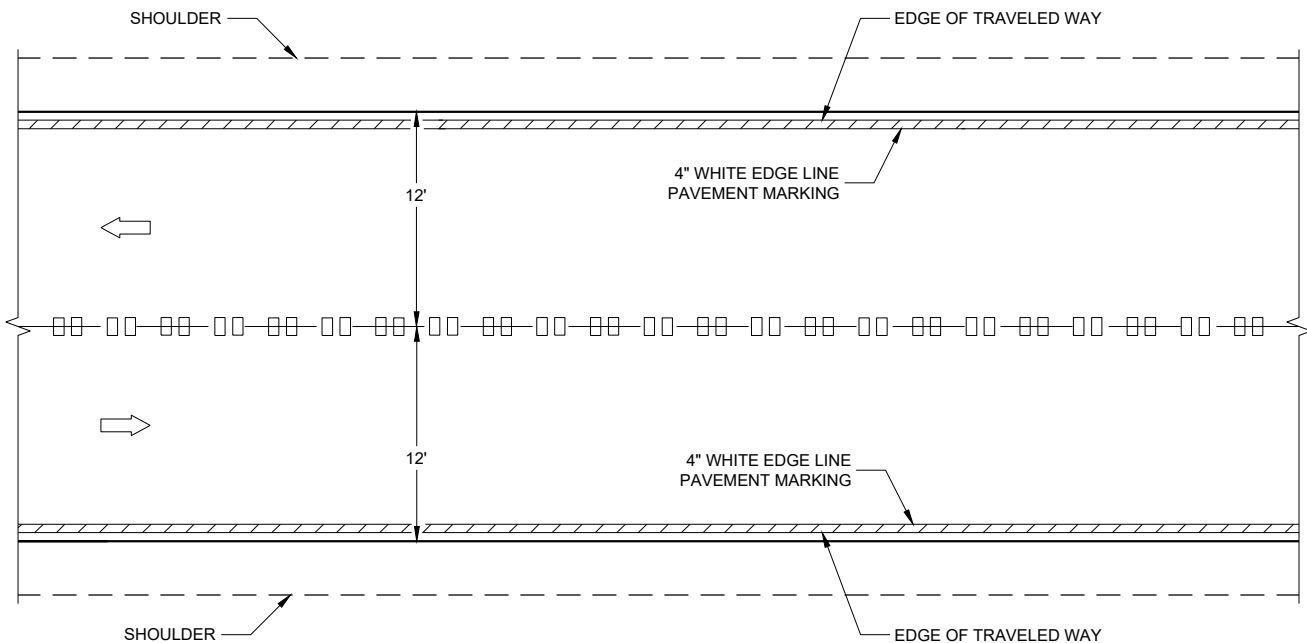
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

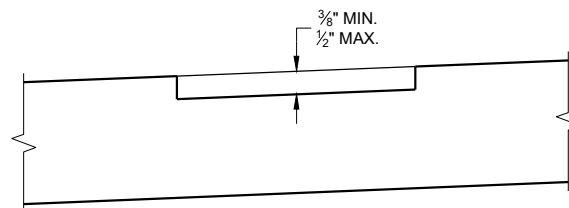
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS. WHEN DIRECTED BY THE ENGINEER.



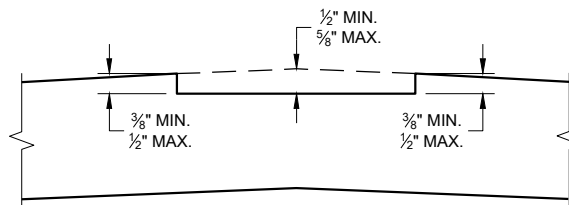
ISOMETRIC



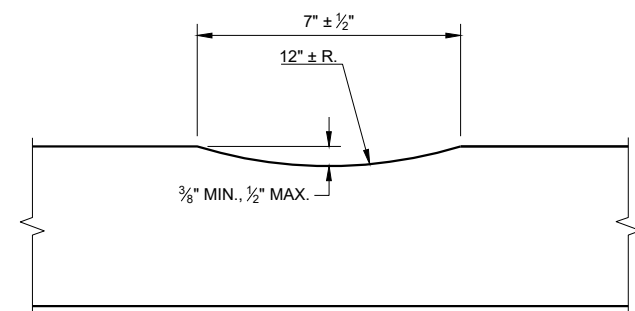
CENTERLINE GROOVES ON TWO-WAY ROADWAYS



SECTION B - B
SUPERELEVATED ROADWAY



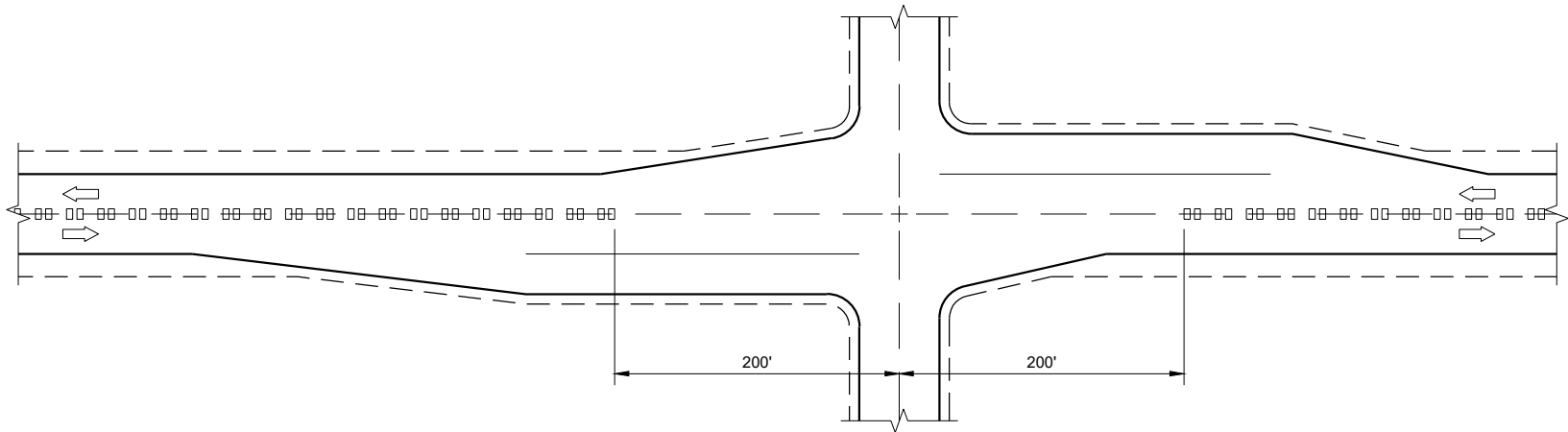
SECTION B - B
CROWNED ROADWAY



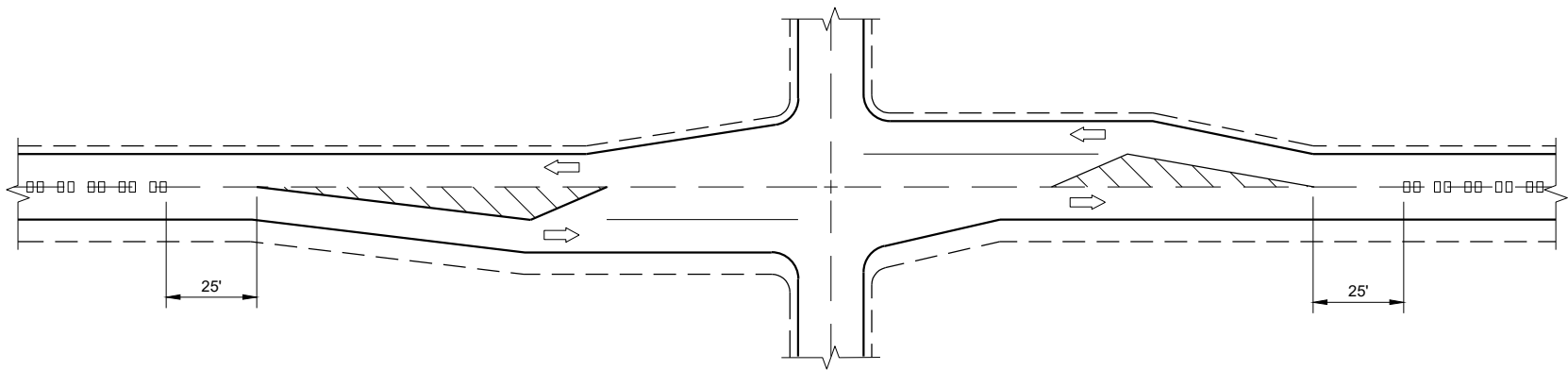
SECTION A - A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

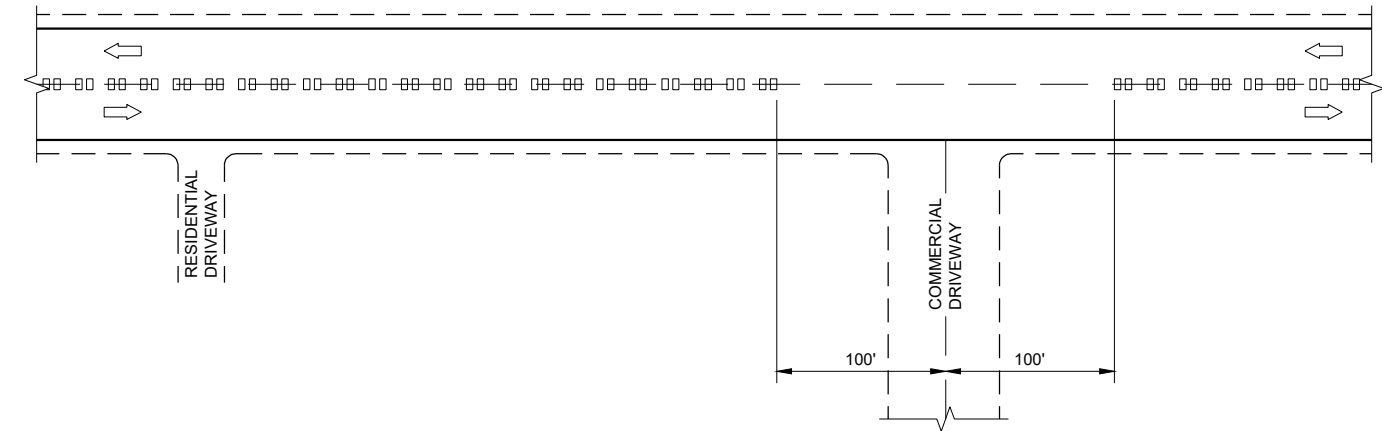
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTERLINE GROOVES AT INTERSECTIONS



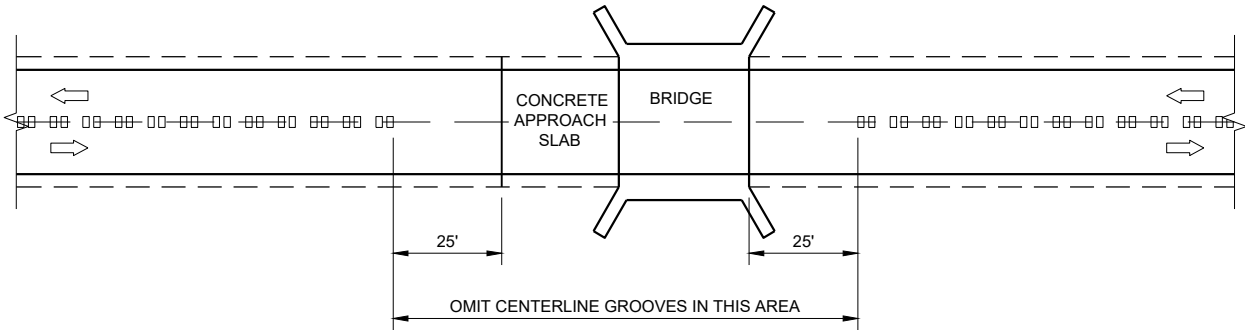
CENTERLINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)



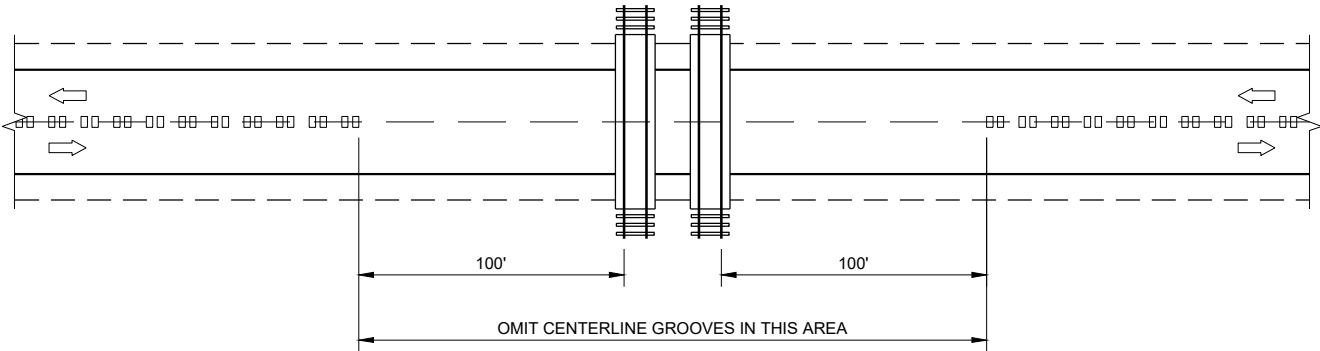
CENTERLINE GROOVES AT DRIVEWAYS^①

GENERAL NOTES

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



CENTERLINE GROOVES AT BRIDGES



CENTERLINE GROOVES AT RAILROADS

2-LANE RURAL
CENTERLINE RUMBLE STRIP,
MILLING

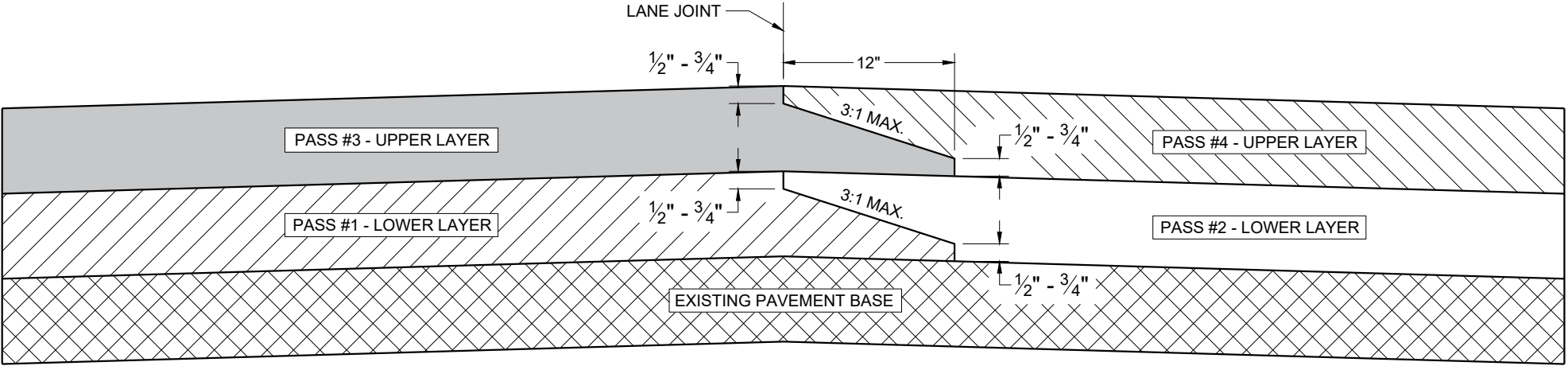
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

GENERAL NOTES

CONFORM TO STANDARD SPECIFICATION 450.3.2.8



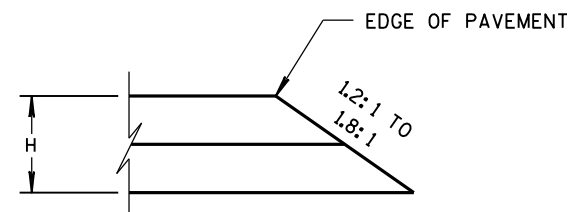
TYPICAL PAVEMENT CROSS SECTION
OF NOTCHED WEDGE LONGITUDINAL JOINTS

HMA LONGITUDINAL JOINTS

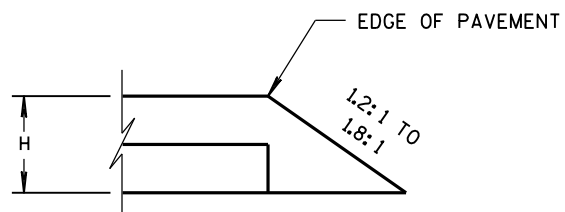
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019 /S/ Steven Hefel
DATE HMA PAVEMENT ENGINEER

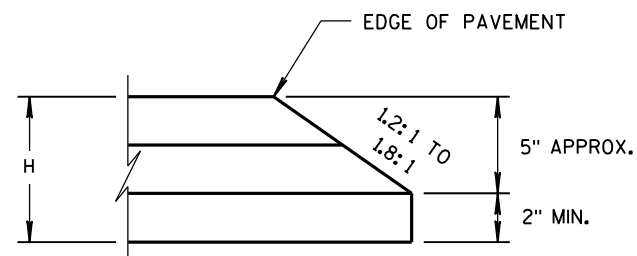
FHWA



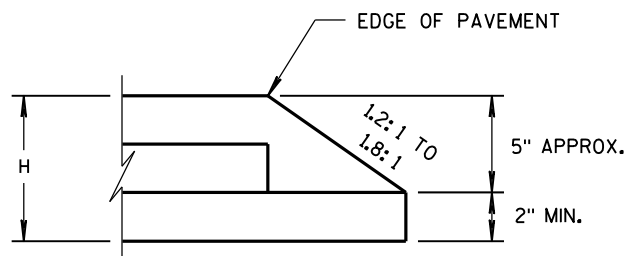
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

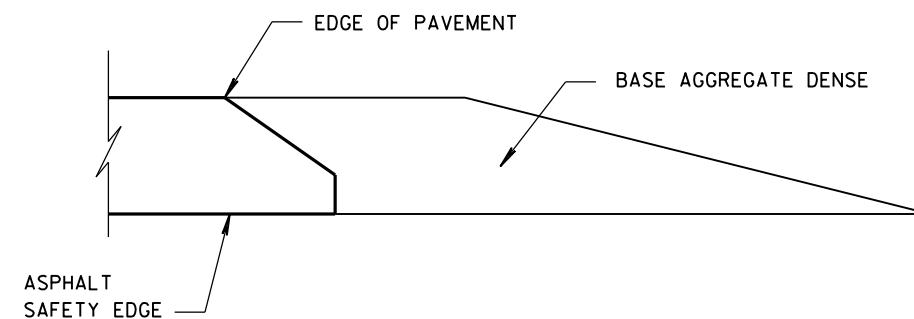


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/2012
DATE
FHWA

/s/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT
ENGINEER

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.

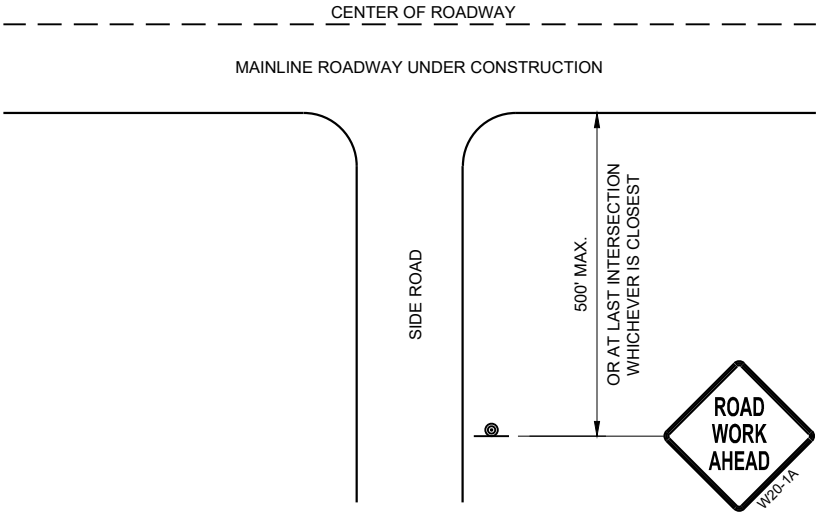
SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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.

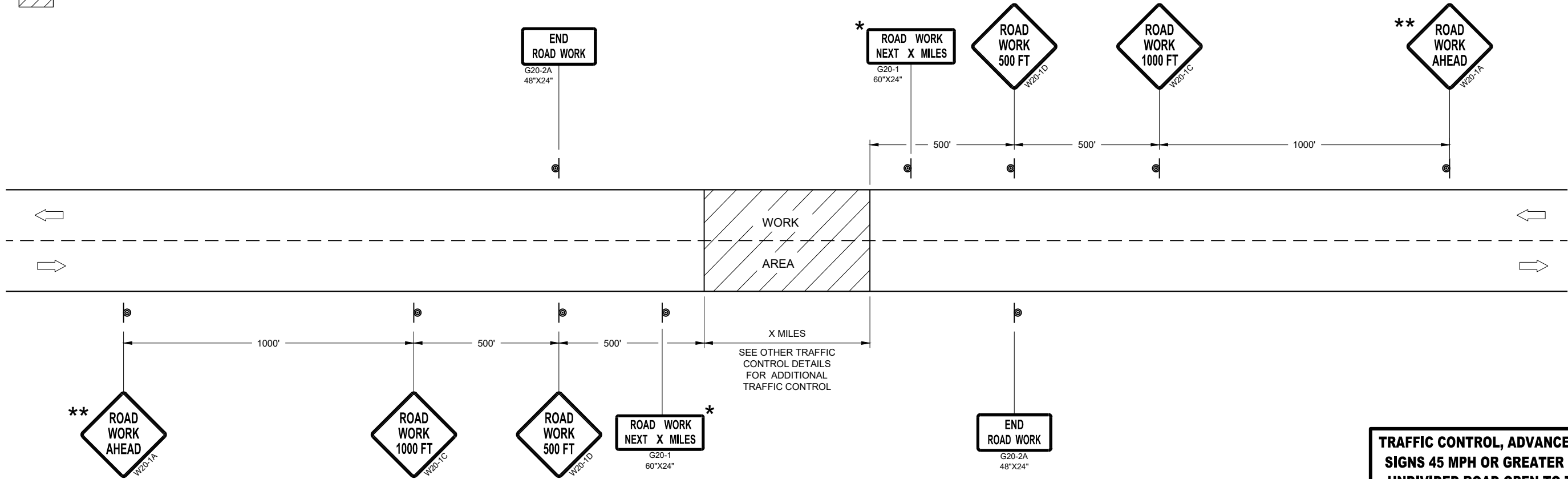
- * OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS
- ** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.

LEGEND

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



TYPICAL SIDE ROAD APPROACH
WARNING SIGN DETAIL



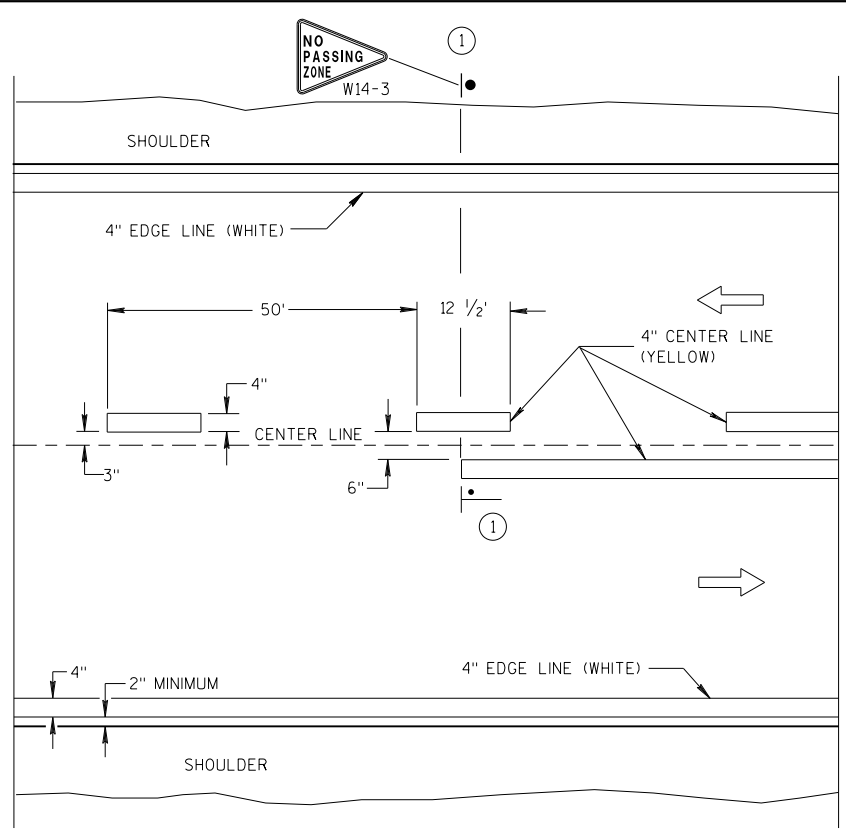
TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

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

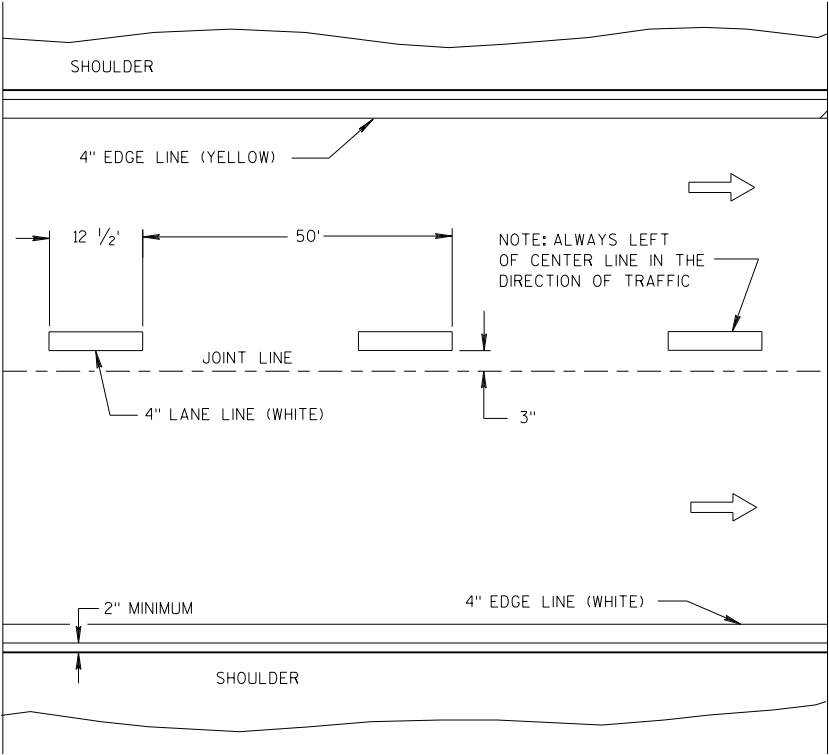
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

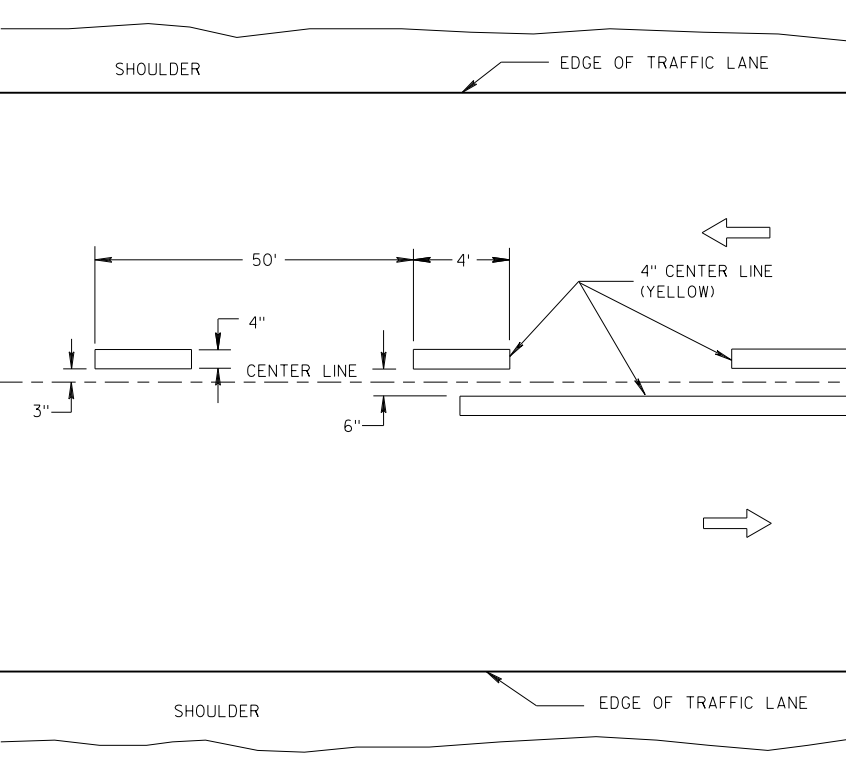


TWO WAY TRAFFIC

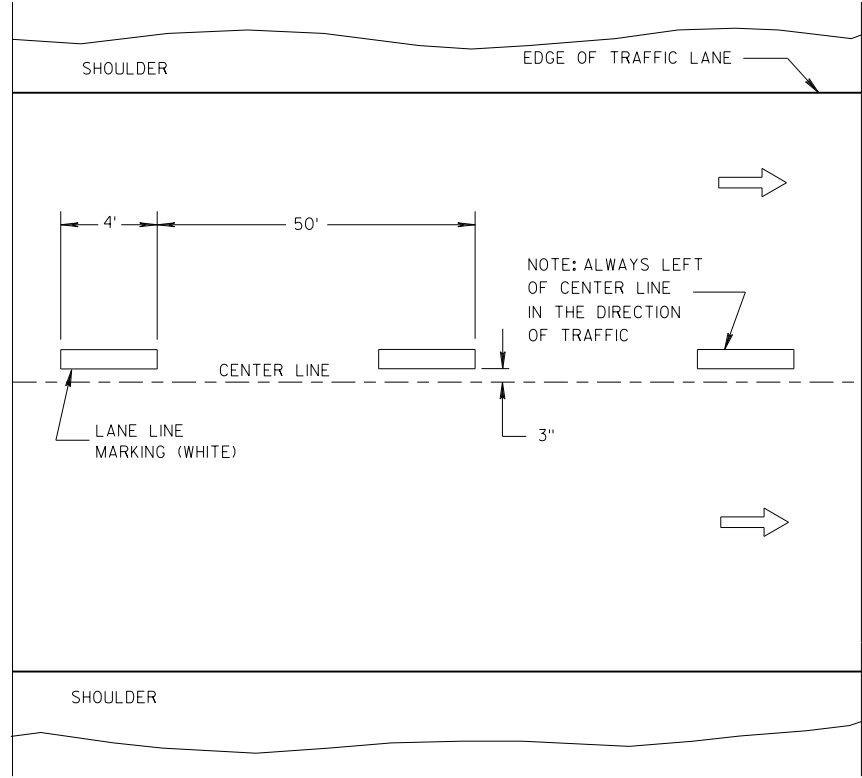


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

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

① LOCATE THE NO PASSING ZONE W14-3 SIGN WITHIN 50 FEET OF THE "T" MARKING.

NOTE






ARROW SYMBOL (➡) SHOWS DIRECTION OF TRAVEL

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

LONGITUDINAL MARKING (MAINLINE)	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 7/2018 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MARKING 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.

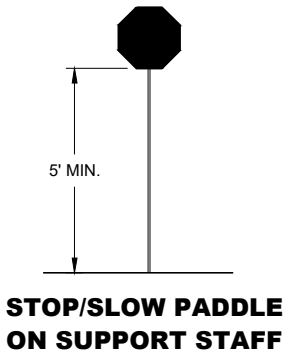
③ EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

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

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

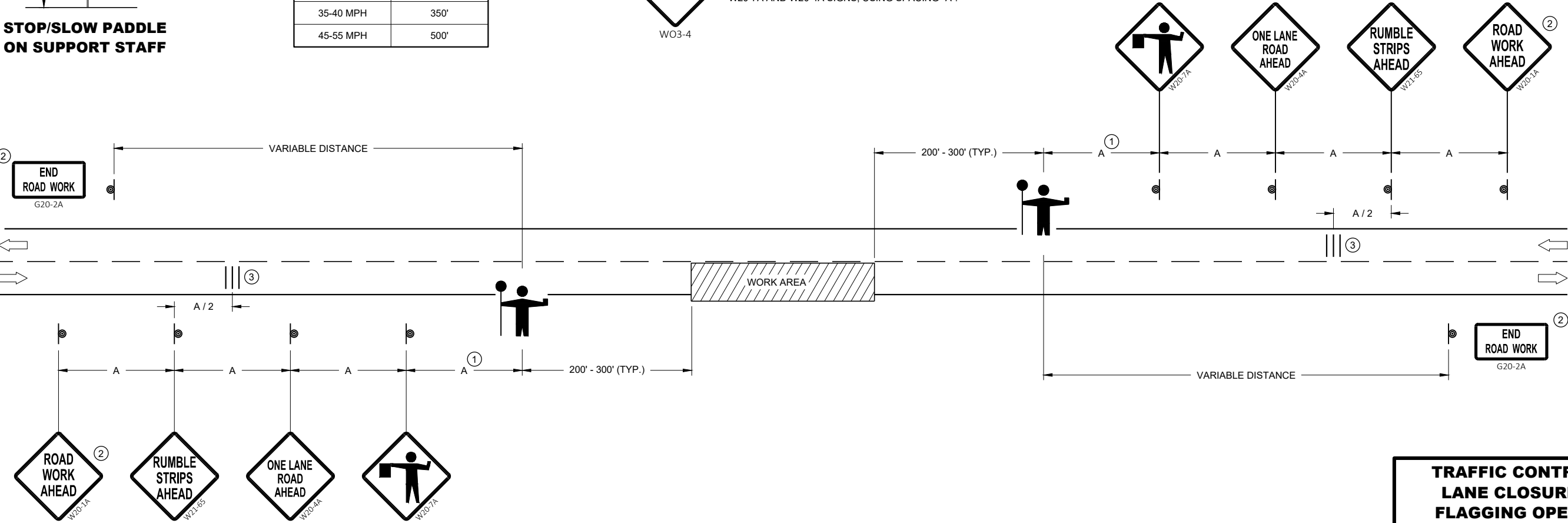


SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



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



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION





TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

LEGEND

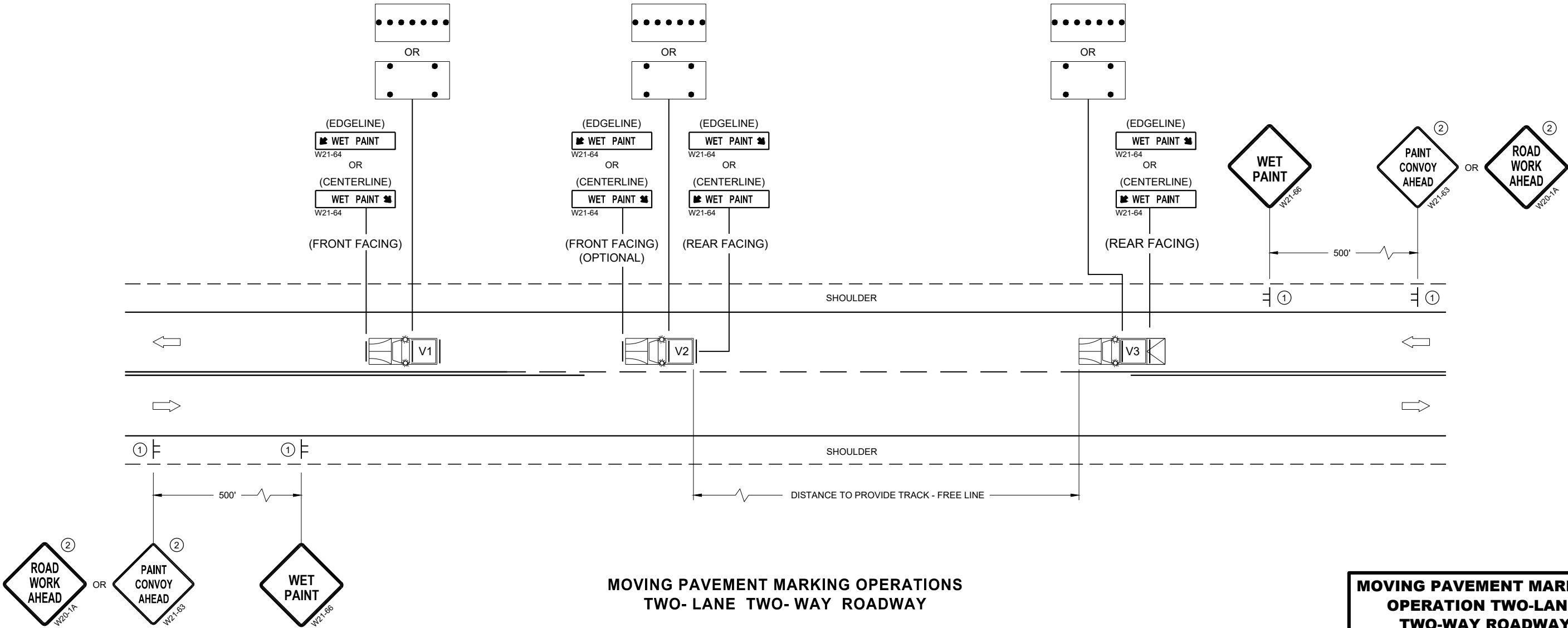
- V1 LEAD VEHICLE
- V2 MARKING VEHICLE
- V3 SHADOW VEHICLE
-  TRUCK MOUNTED ATTENUATOR (TMA)
-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC
-  FLASHING ARROW PANEL (CAUTION)

GENERAL NOTES

- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL OPERATING IN CAUTION MODE. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.
- DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

- WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC.
- CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- CONES SHALL BE A MINIMUM OF 18" FOR WET PAVEMENT MARKING .

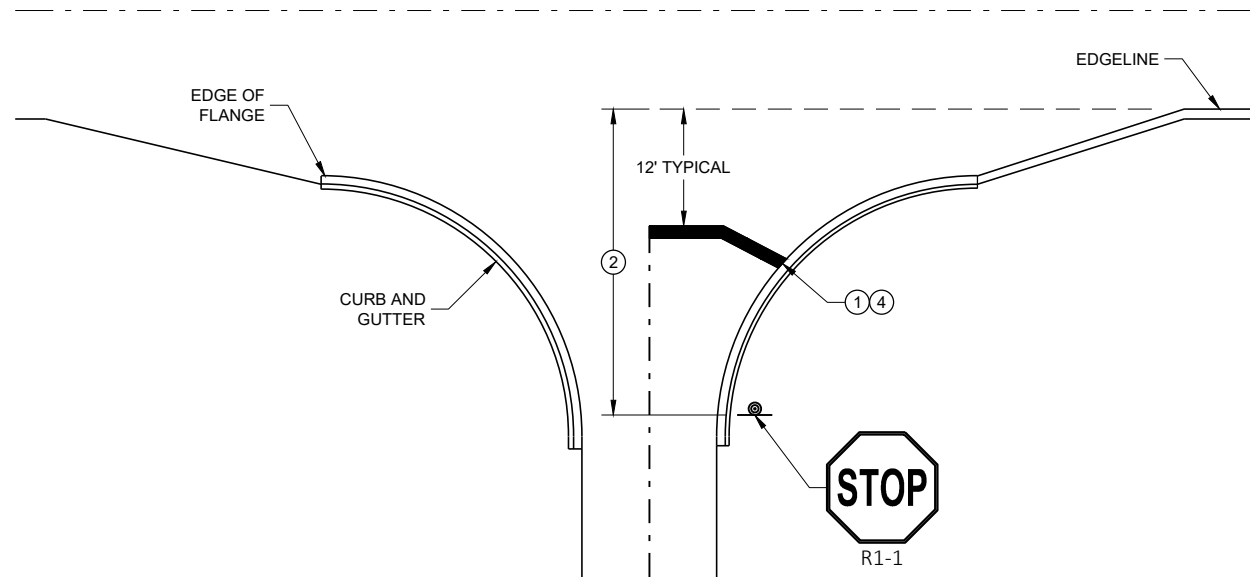
- ① SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.
- ② IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1A OR W21-63 ARE NOT REQUIRED.



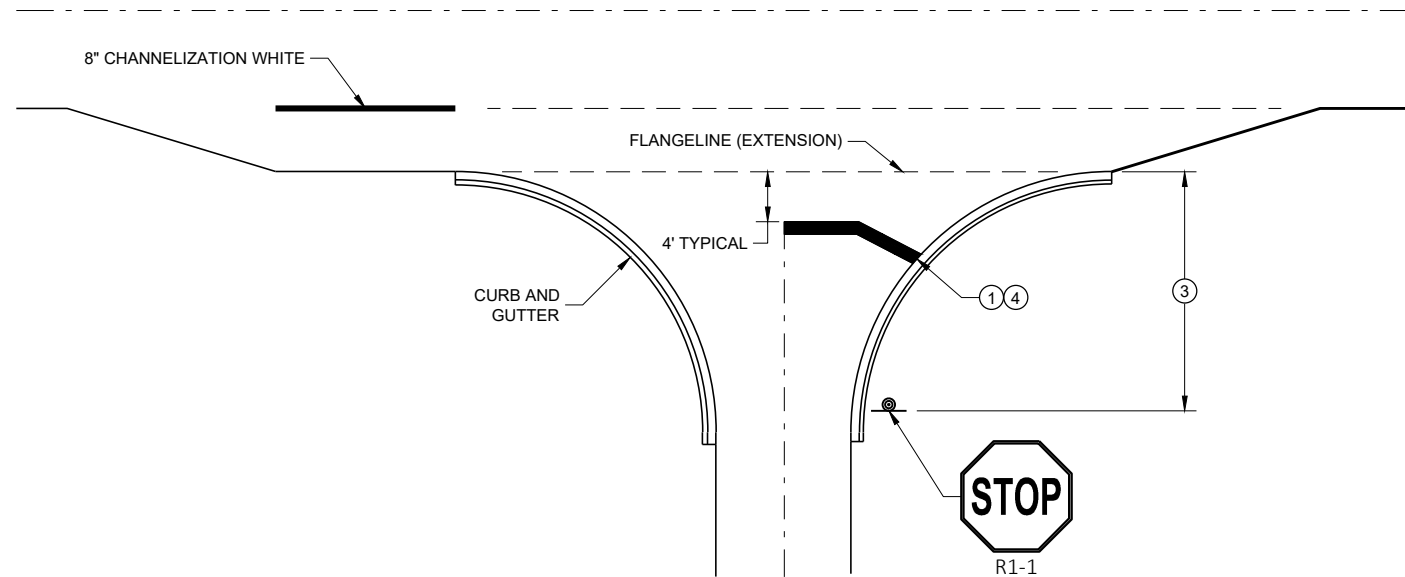
MOVING PAVEMENT MARKING
OPERATION TWO-LANE
TWO-WAY ROADWAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

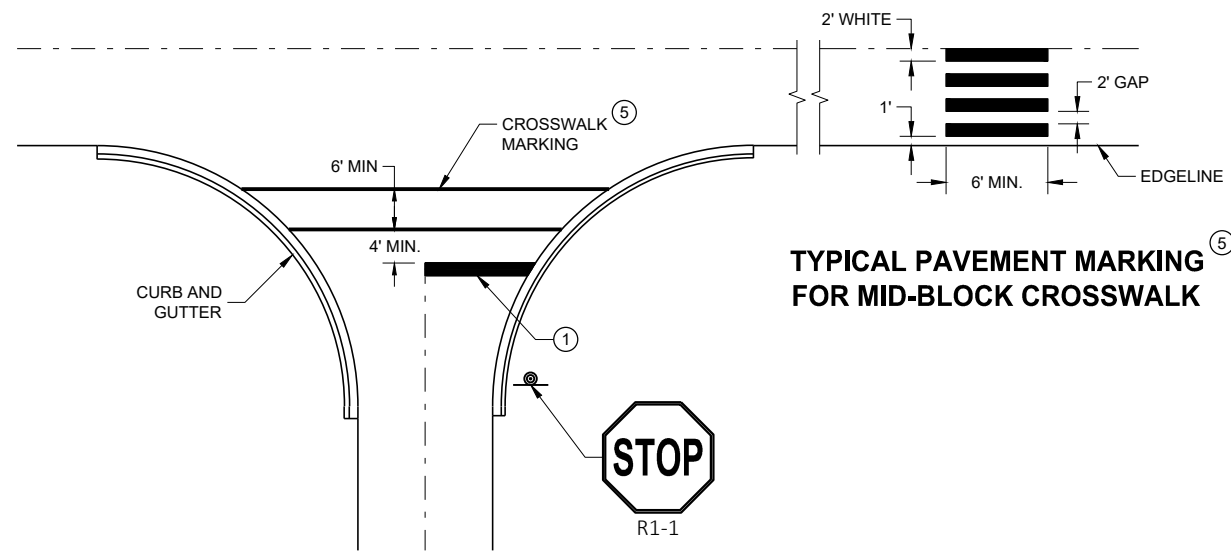
APPROVED
November 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER
FHWA



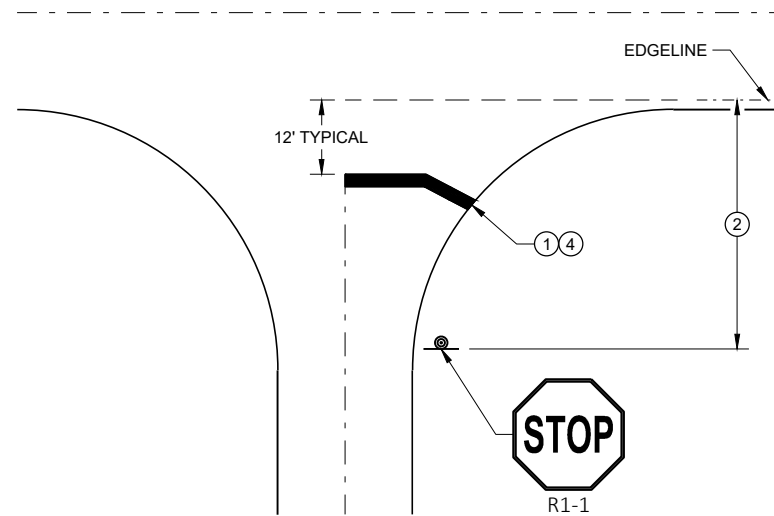
TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

GENERAL NOTES

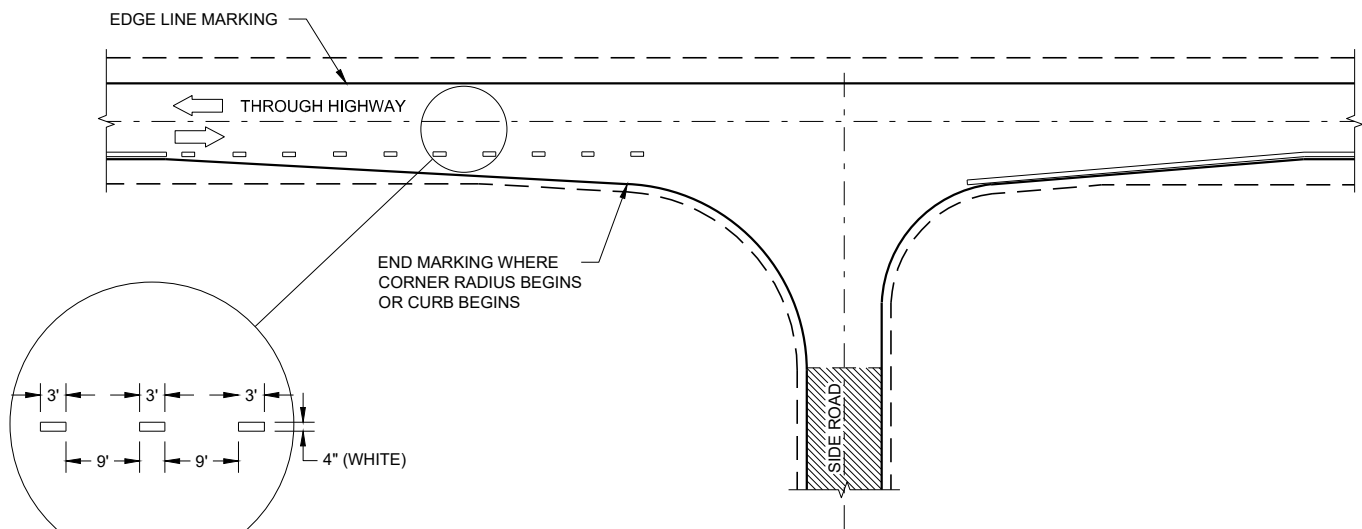
STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGE LINE LOCATION.

- 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE.
- NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
- MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
- LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.

STOP LINE AND CROSSWALK PAVEMENT MARKING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



MINOR INTERSECTION

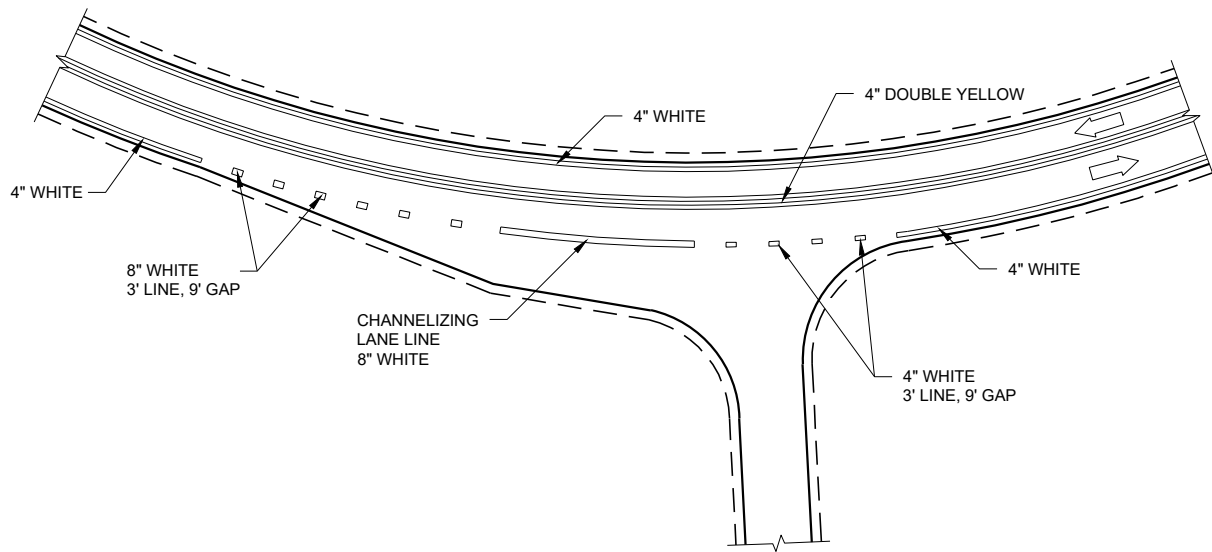
GENERAL NOTES

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

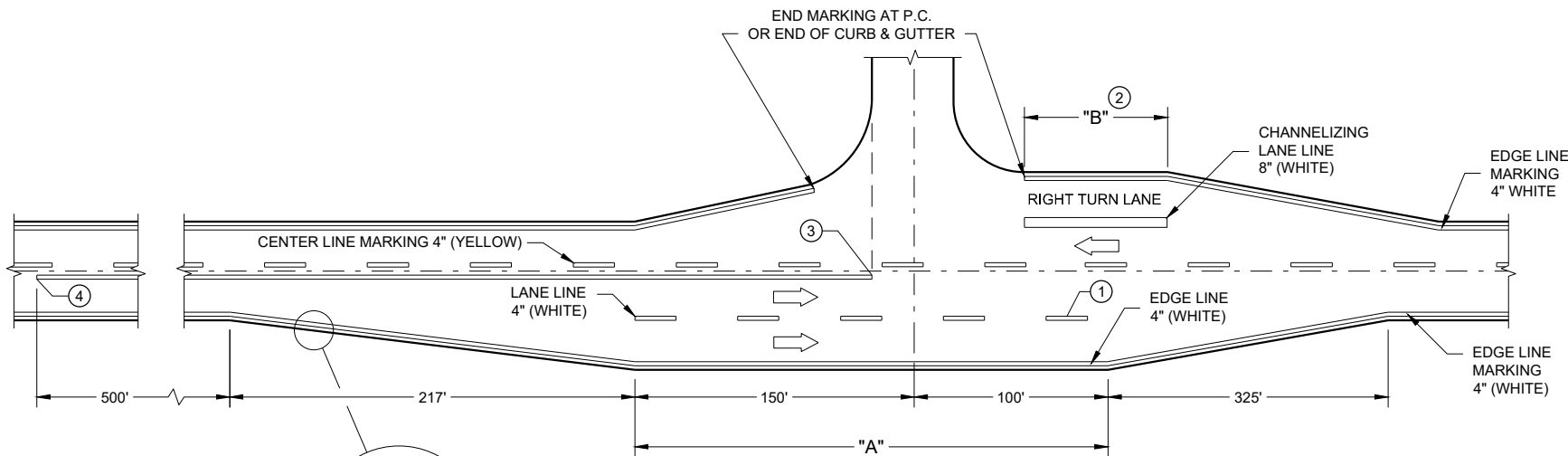
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
- ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
- ③ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
- ④ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

➡ DIRECTION OF TRAVEL



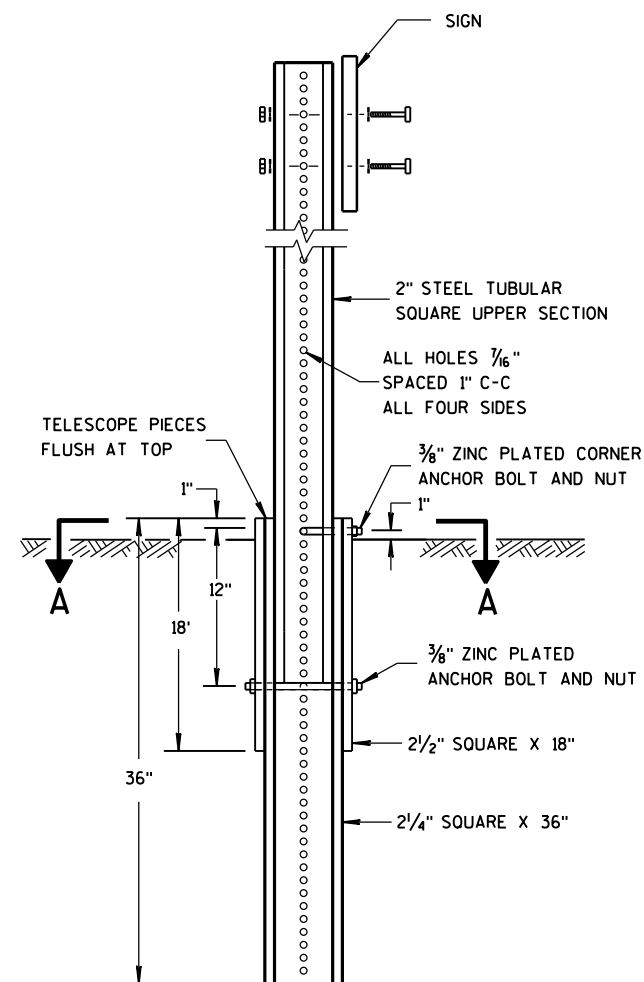
INTERSECTION ON OUTSIDE OF CURVE



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

PAVEMENT MARKING
(INTERSECTIONS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



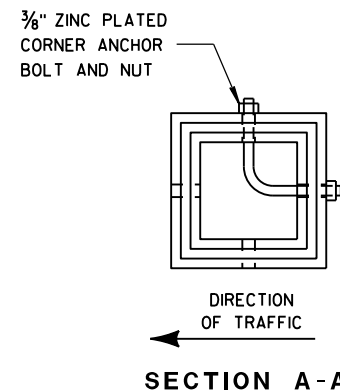
DETAIL OF TUBULAR
STEEL SIGN POST

TUBULAR STEEL POSTS

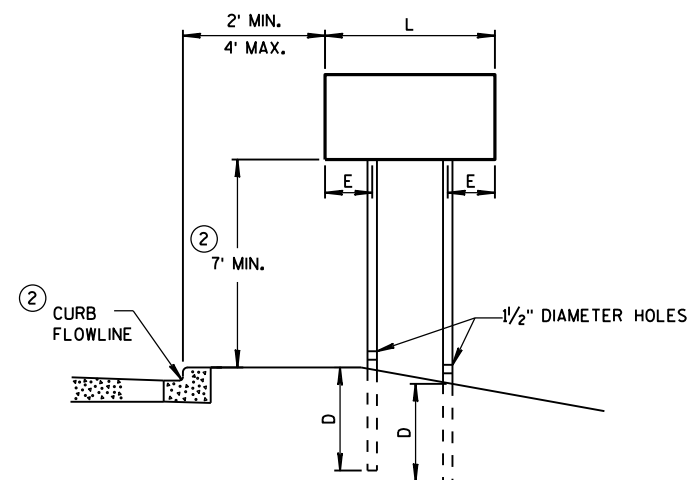
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL
BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED
ON TUBULAR STEEL POSTS.



SECTION A-A

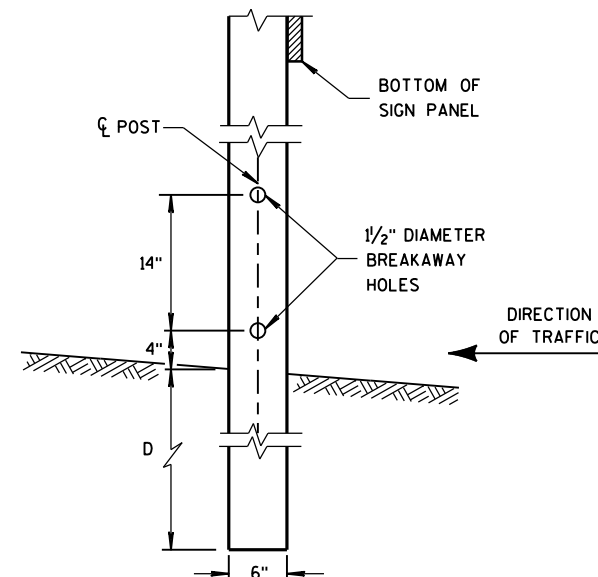


URBAN AREA

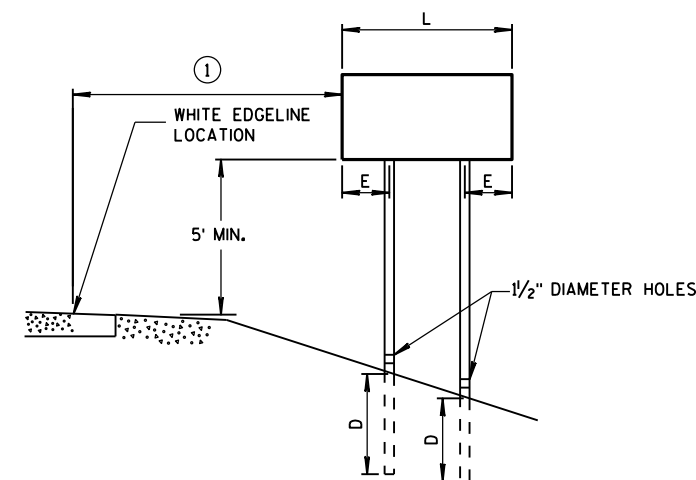
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

WOOD POST
EMBEDMENT DEPTH

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



4"X6" WOOD POST
MODIFICATION



RURAL AREA

4" X 6" WOOD POST

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

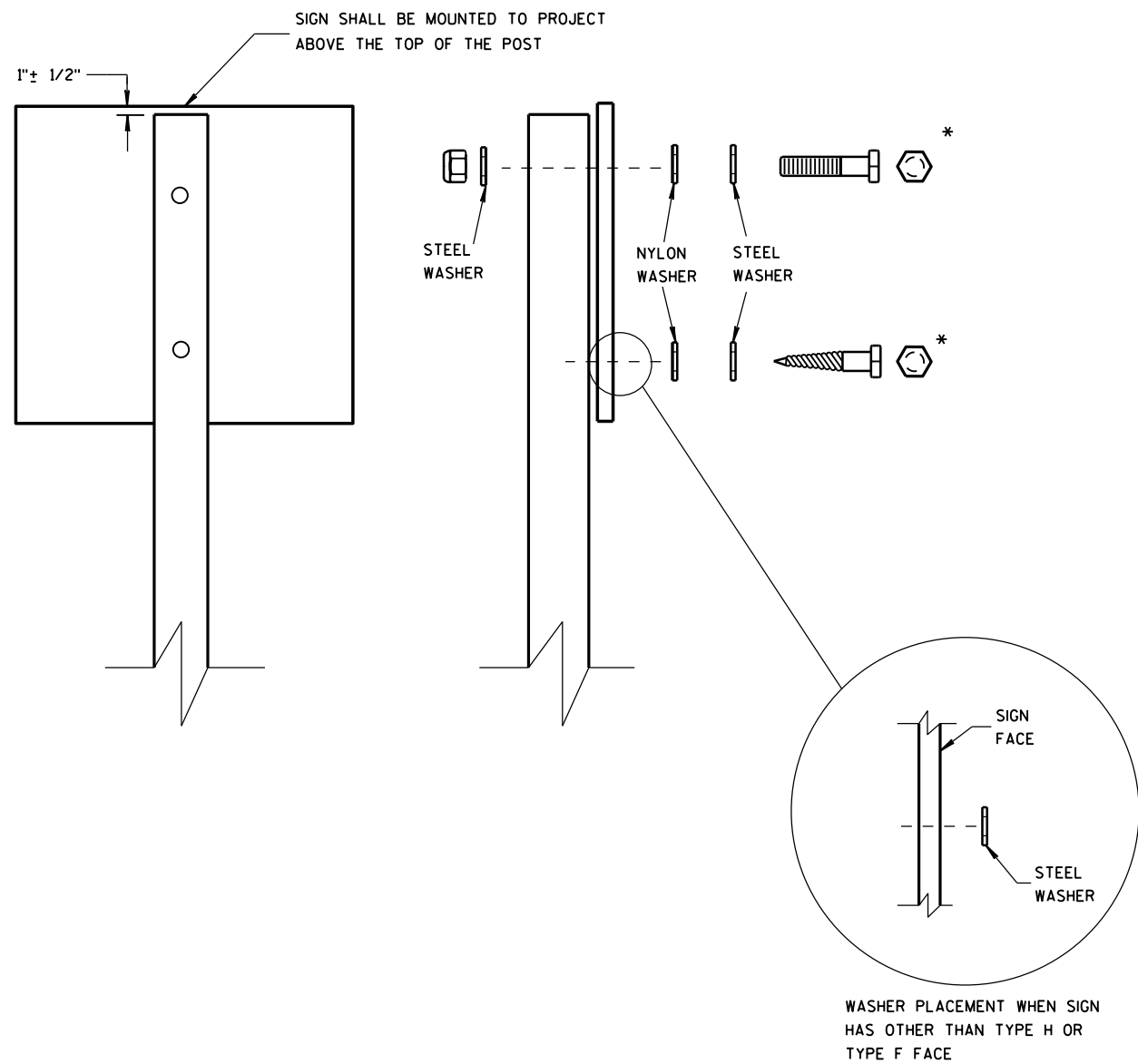
SEE NOTE ③

GENERAL NOTES

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

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

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

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

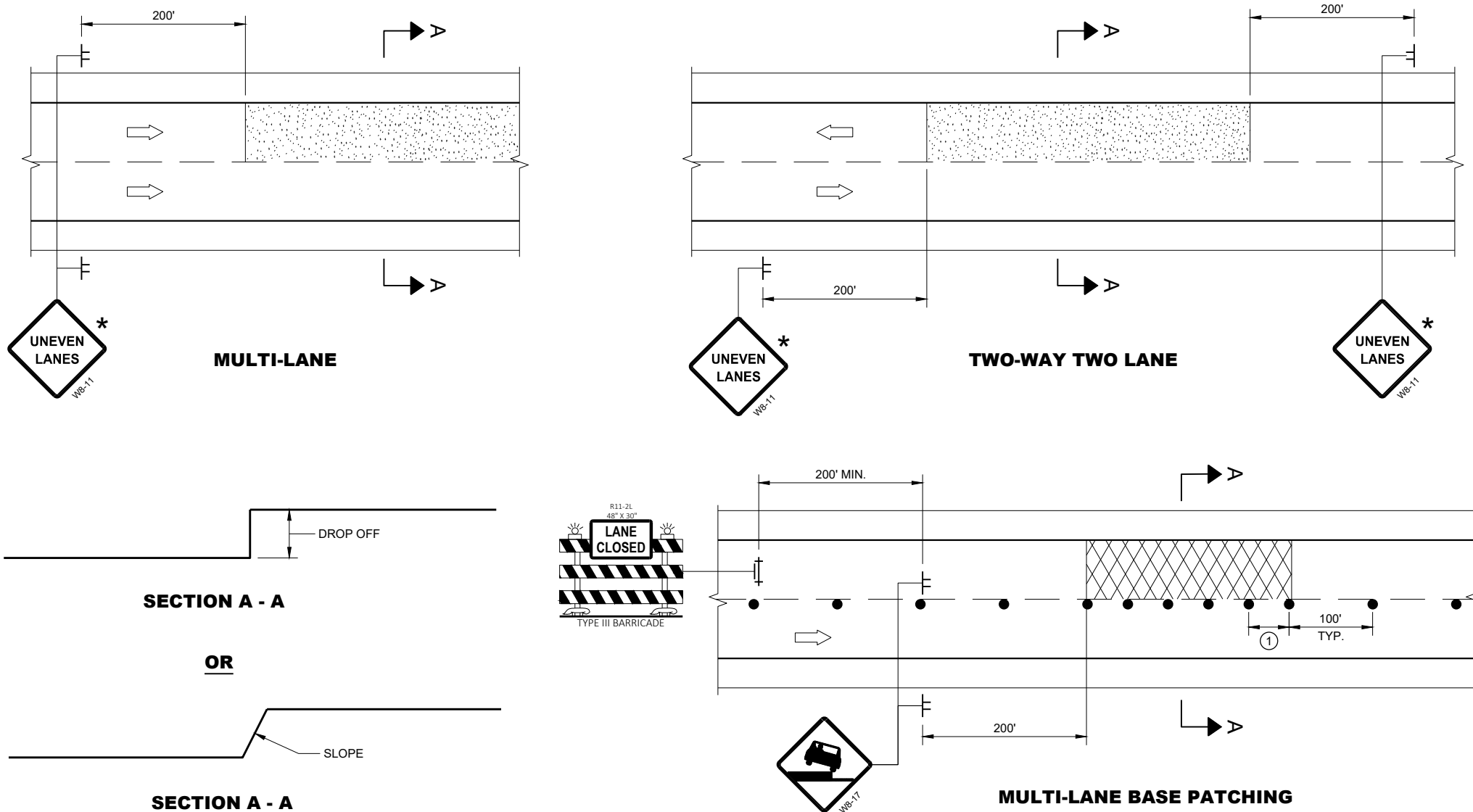
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
 - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" x 3-1/4" LENGTH W/ NUTS
 - RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH

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

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

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



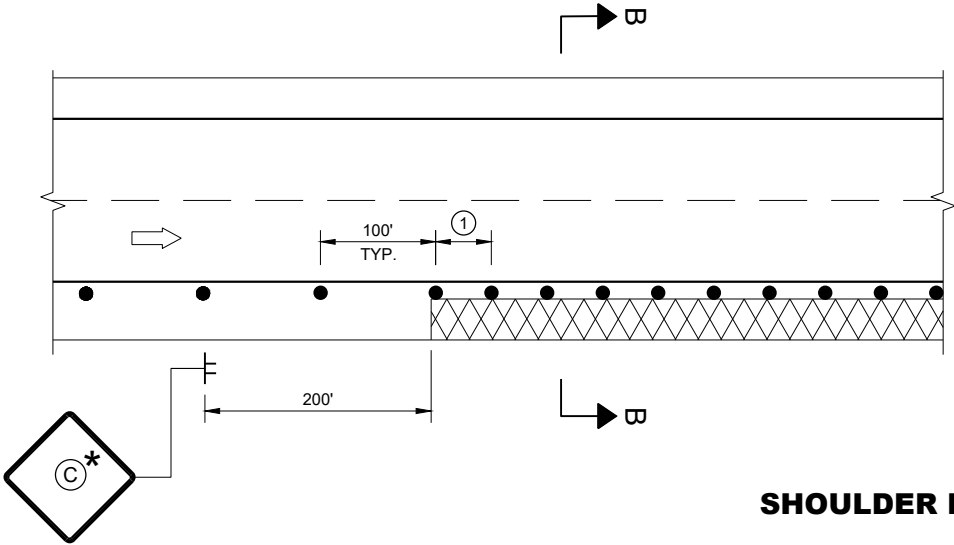
ADJACENT LANE DROP-OFFS

GENERAL NOTES

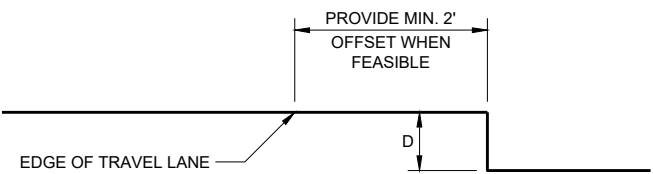
- FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.
- "WO" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.
- * IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.
- ① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

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



SHOULDER DROP-OFFS



SECTION B - B

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

TRAFFIC CONTROL,
DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE 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.

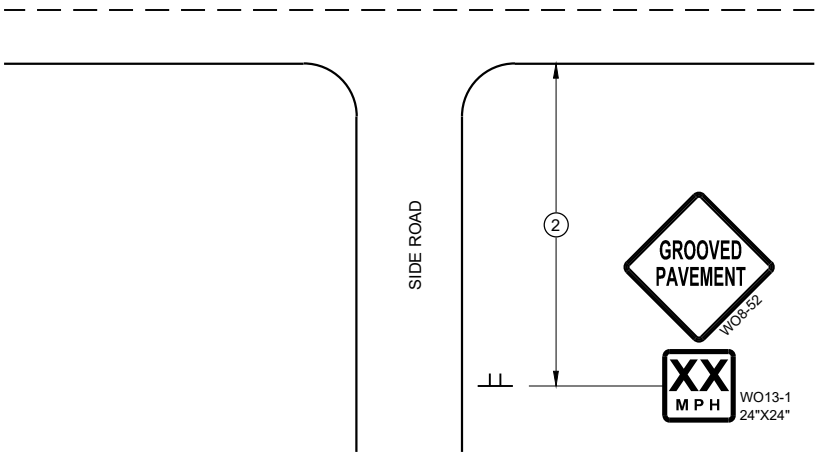
ALL SIGNS INAPPROPRIATE TO THE STATUS OF THE CONTROL ZONE, INCLUDING PRE-EXISTING SIGNS IN THE VICINITY, SHALL BE COVERED OR REMOVED AS DIRECTED BY THE ENGINEER.

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.

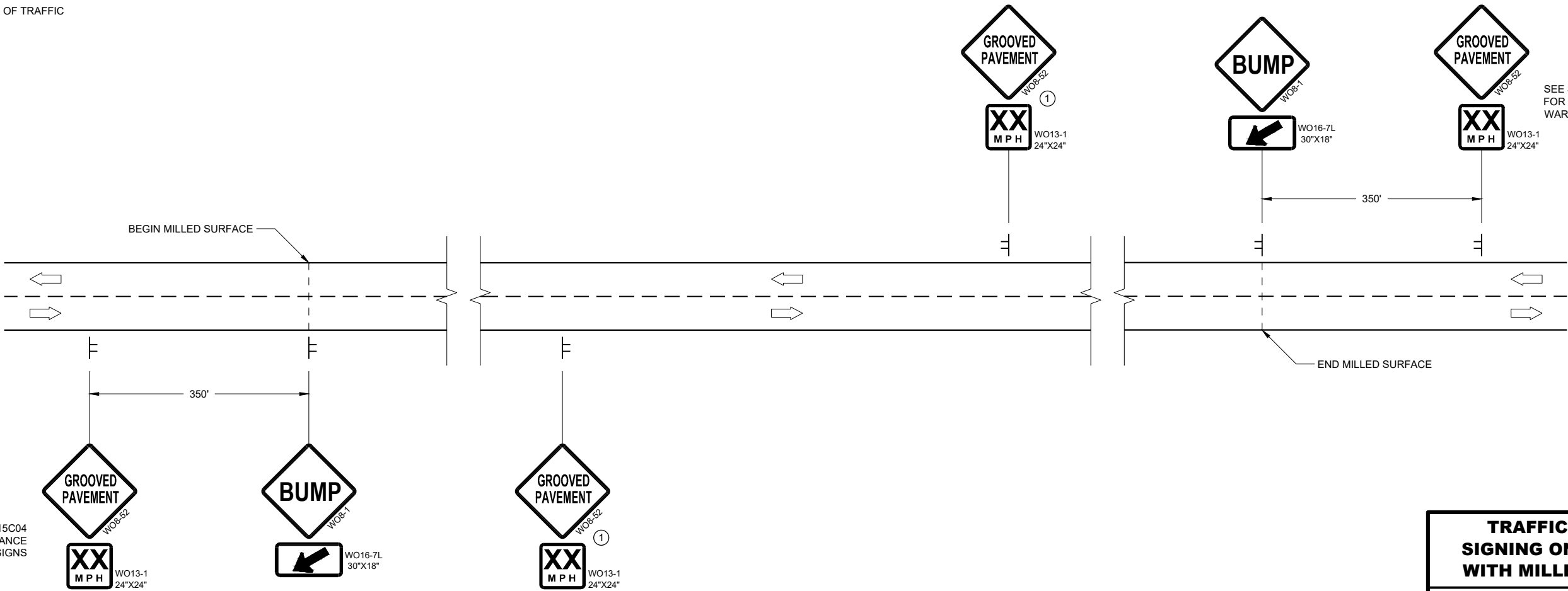
- ① PLACE SIGNS 350' IN ADVANCE OF MILLED SURFACES AND AT 1 MILE INTERVALS, OR AS DIRECTED BY THE ENGINEER.
- ② PLACE SIGN 200' MIN. FROM INTERSECTION AND 200' MIN. AFTER ADVANCE WARNING SIGN SHOWN IN SDD 15C04.

LEGEND

-  SIGN ON TEMPORARY SUPPORT
-  DIRECTION OF TRAFFIC



TYPICAL SIDE ROAD APPROACH
SIGN DETAIL



DETAIL FOR SIGNING ON MILLED SURFACES

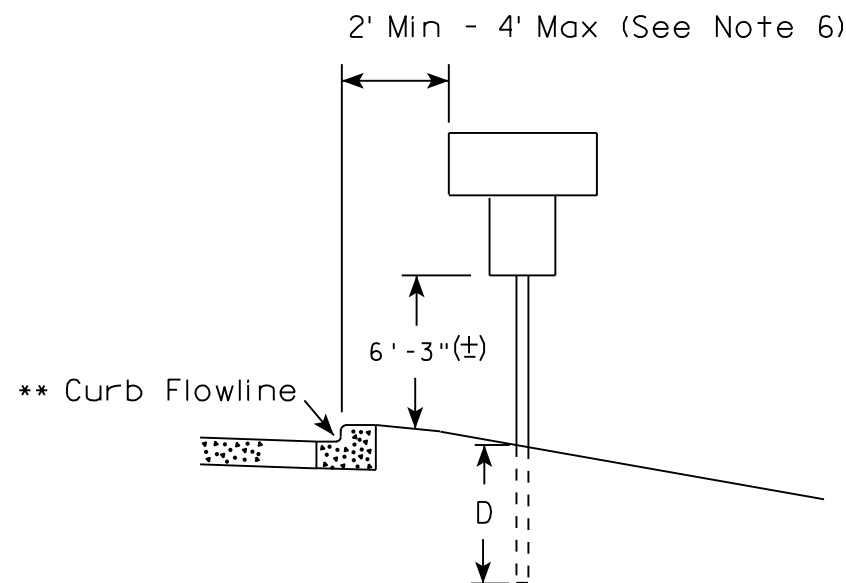
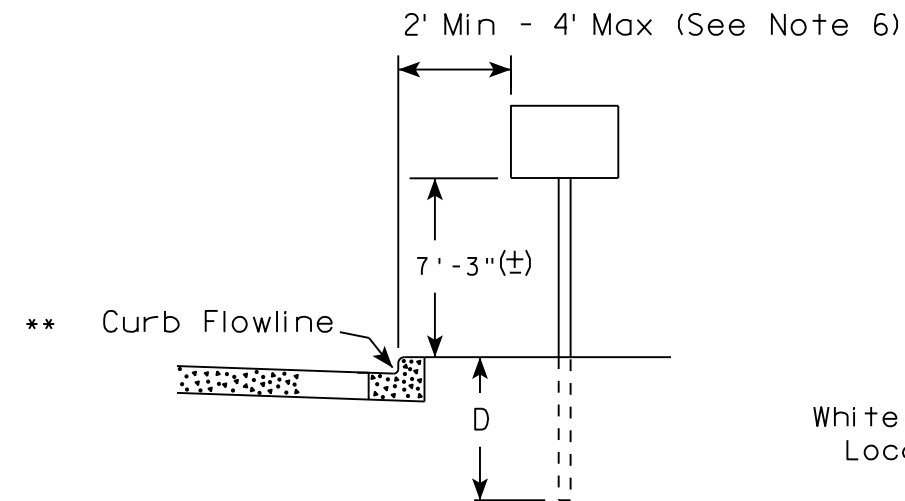
TRAFFIC CONTROL,
SIGNING ON ROADWAYS
WITH MILLED SURFACES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
August 2019 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

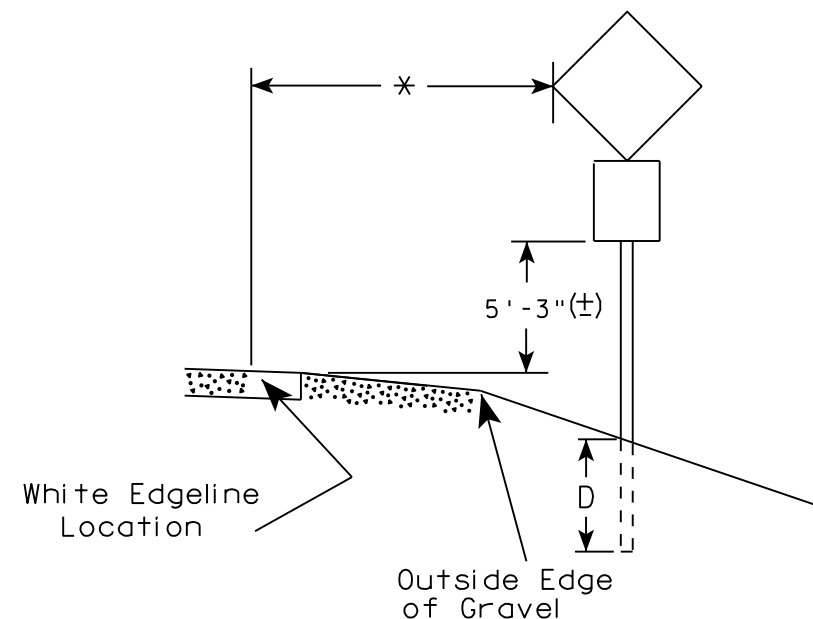
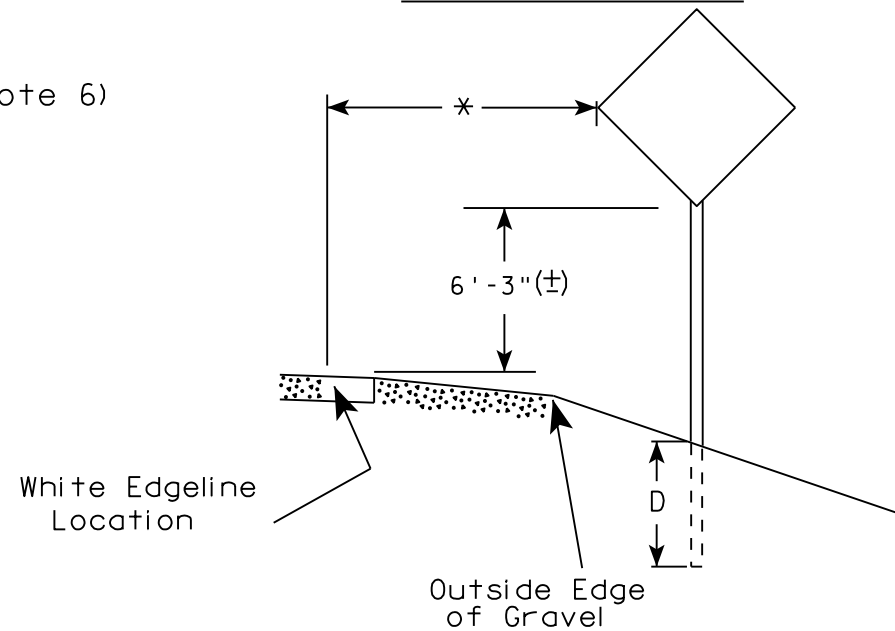
FHWA

URBAN AREA



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

RURAL AREA (See Note 2)



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

POST EMBEDMENT DEPTH

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

GENERAL NOTES

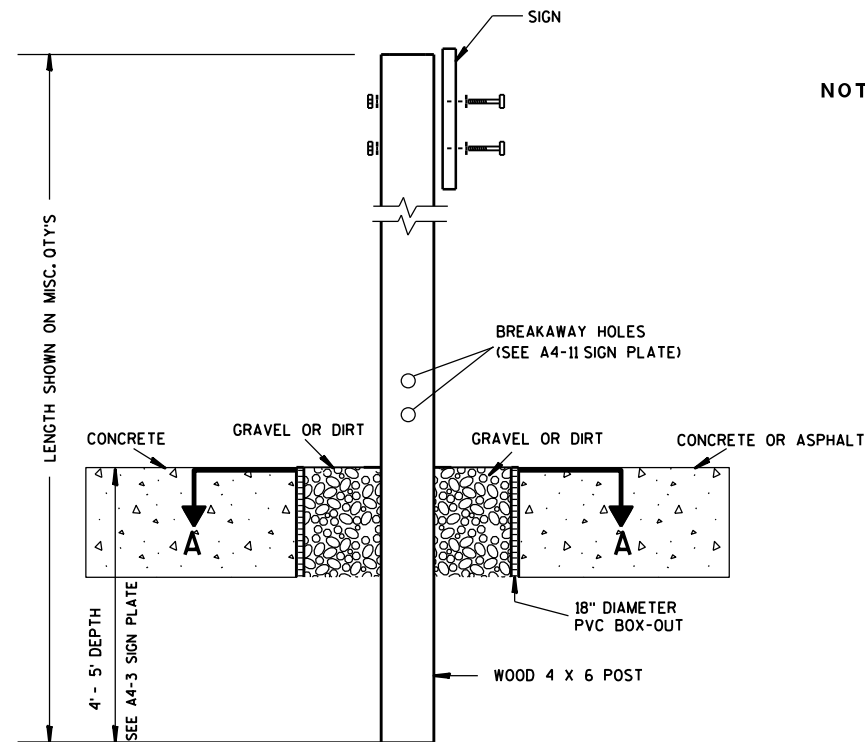
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. J-Assemblies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

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

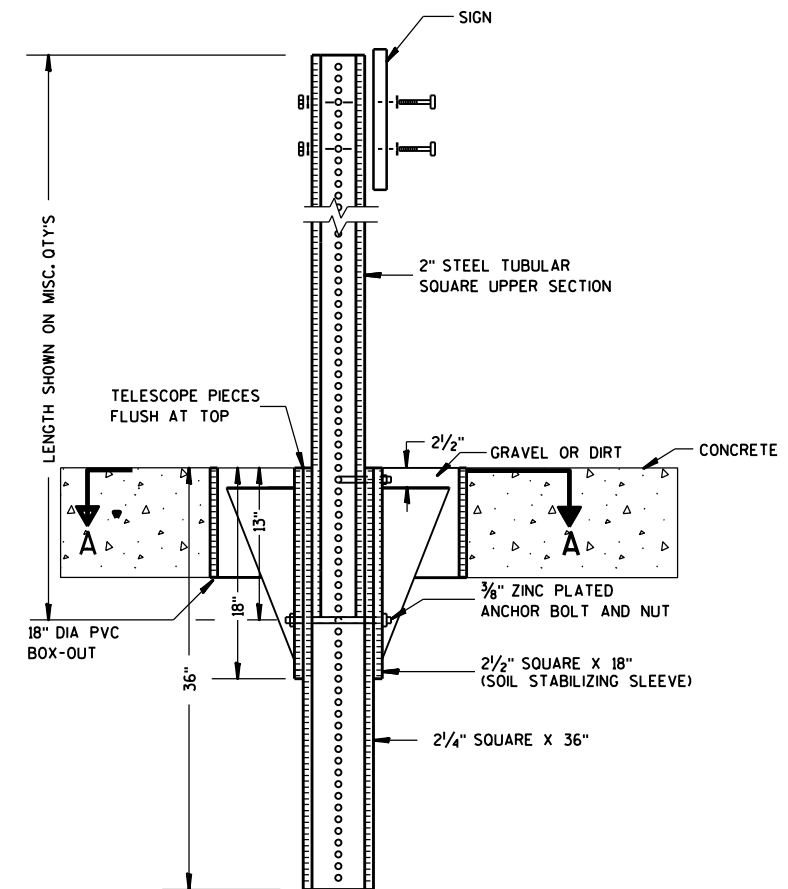
DATE 8/21/17 PLATE NO. A4-3.21



ELEVATION VIEW

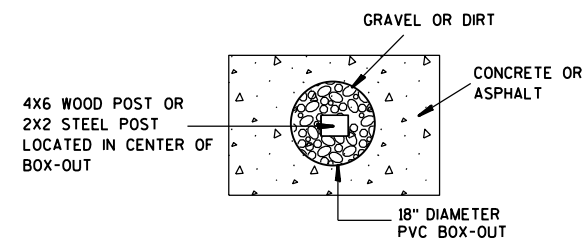
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST
BOX-OUTS
A4-3B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

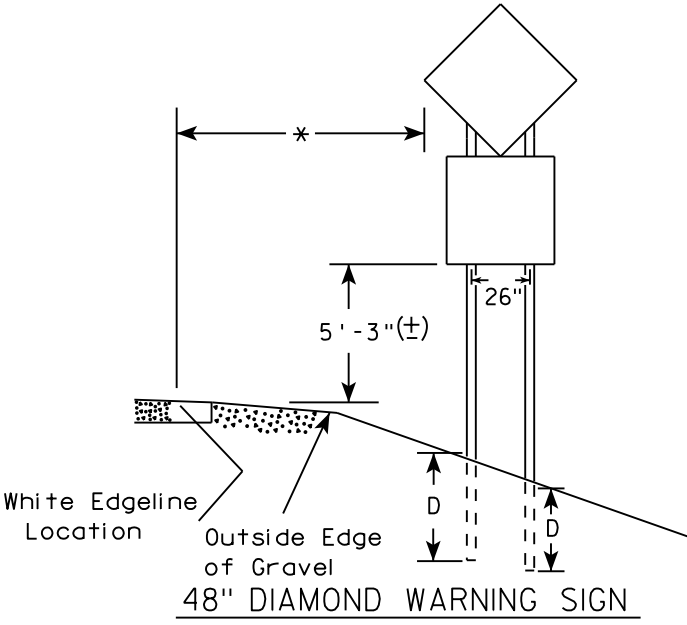
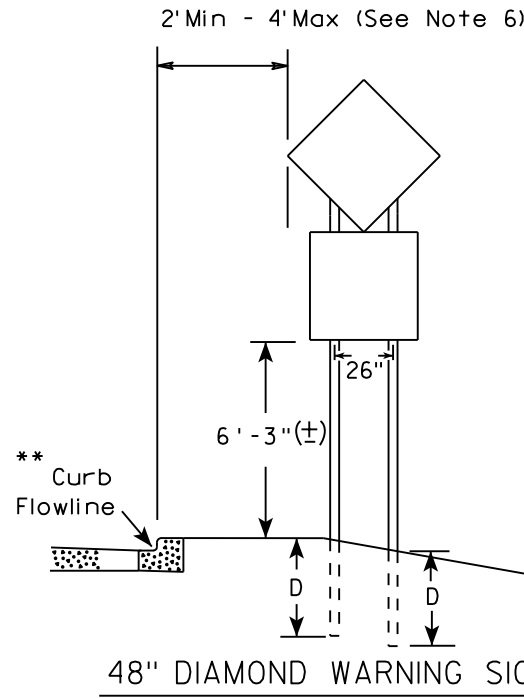
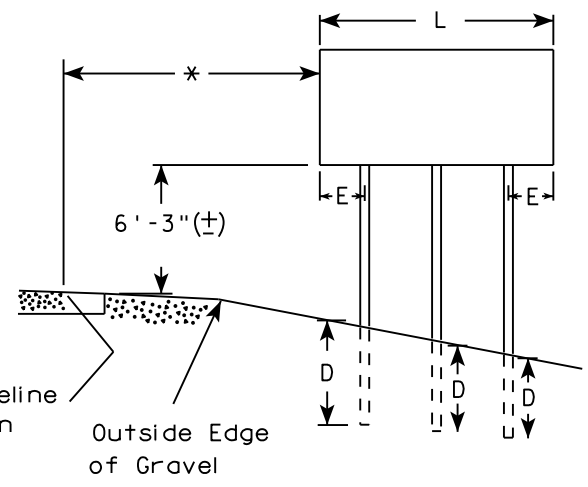
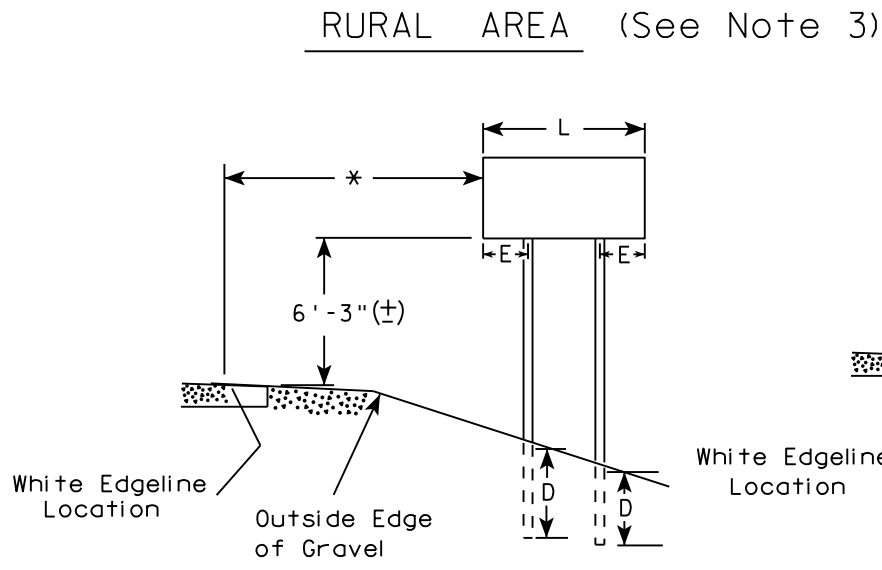
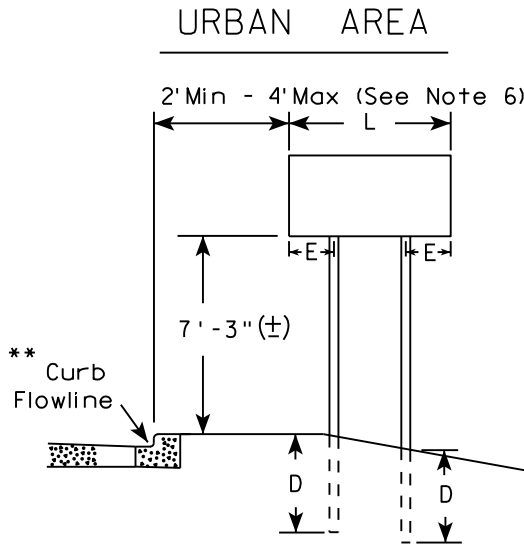
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



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

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

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

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

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

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

POST EMBEDMENT DEPTH

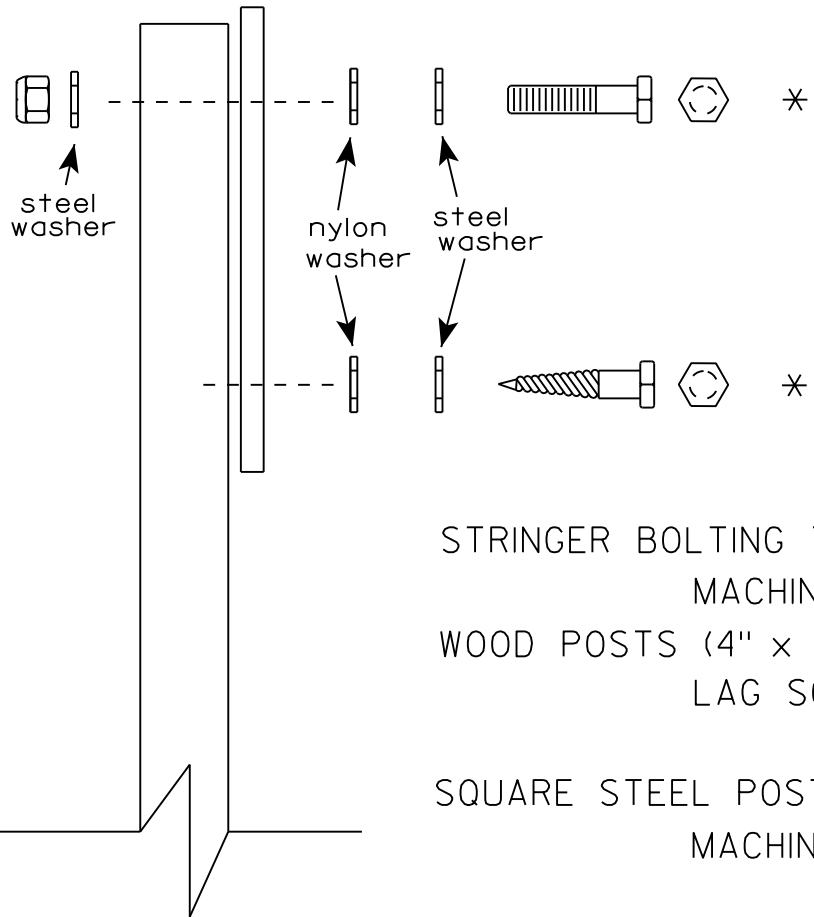
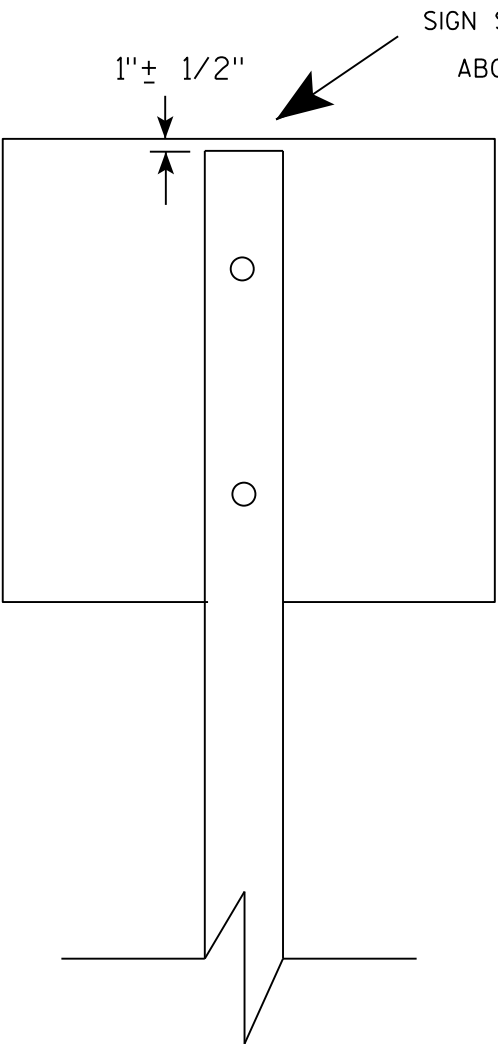
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



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

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

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

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

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

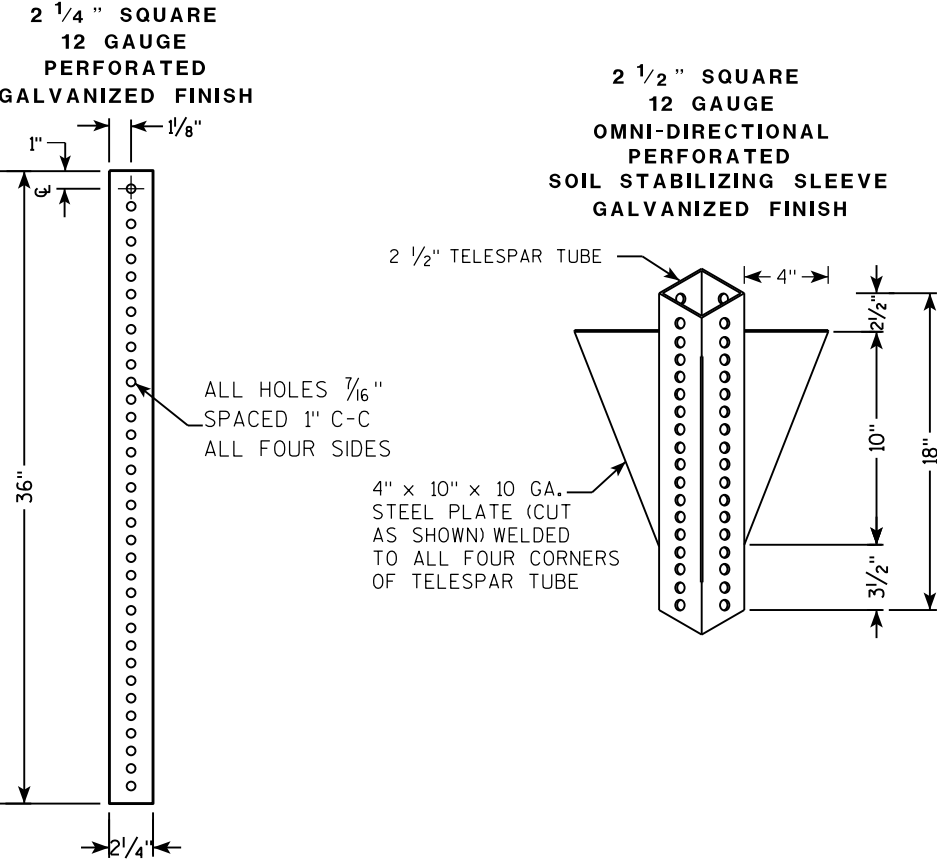
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

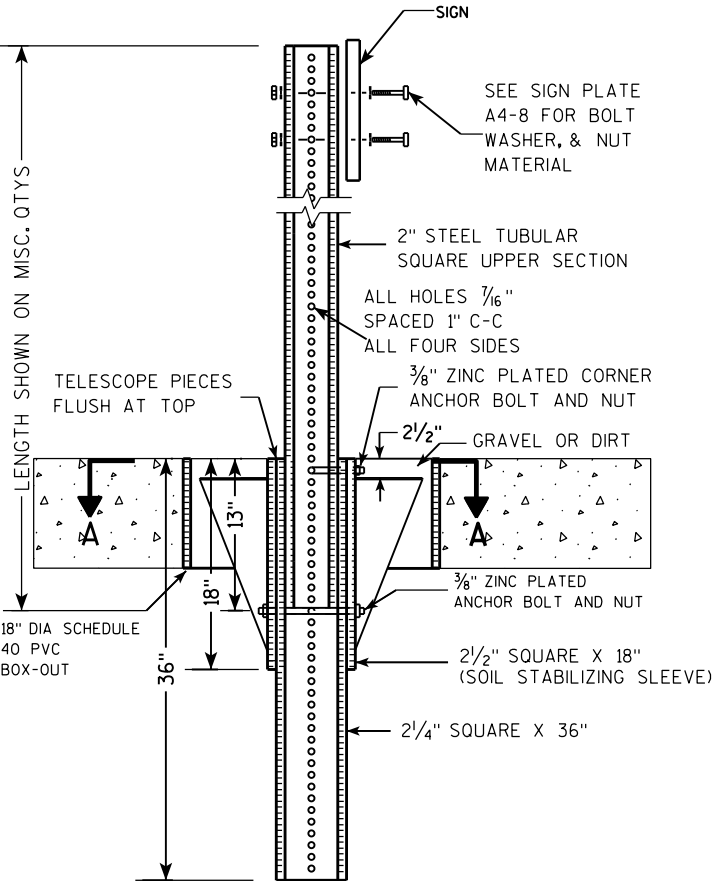
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8

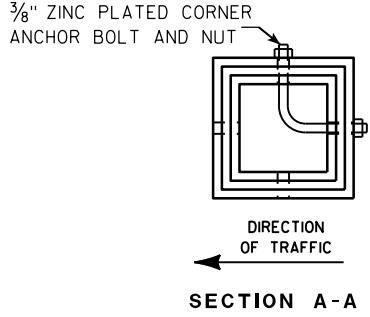
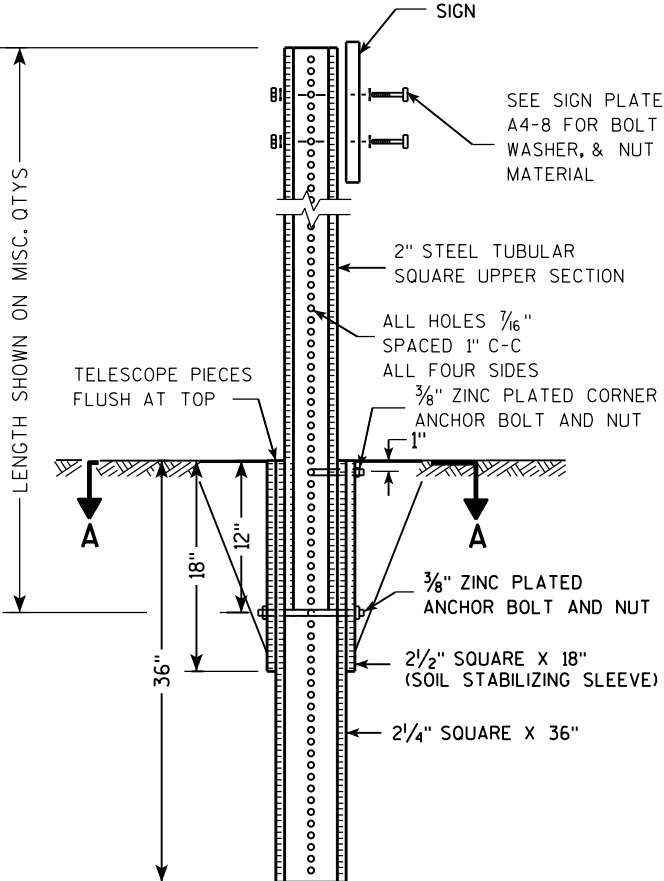
TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM



DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)



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

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

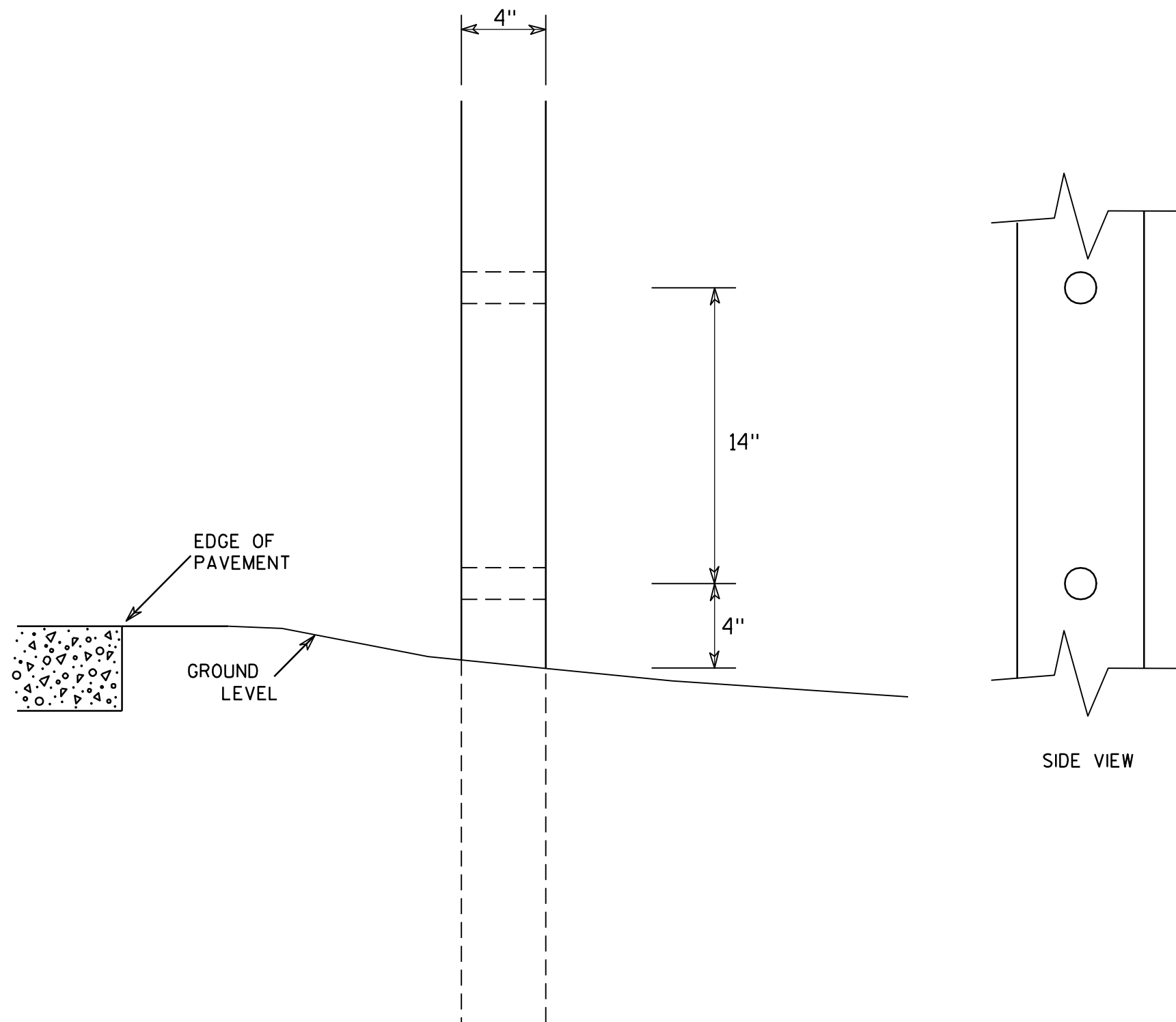
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

7



GENERAL NOTES

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

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

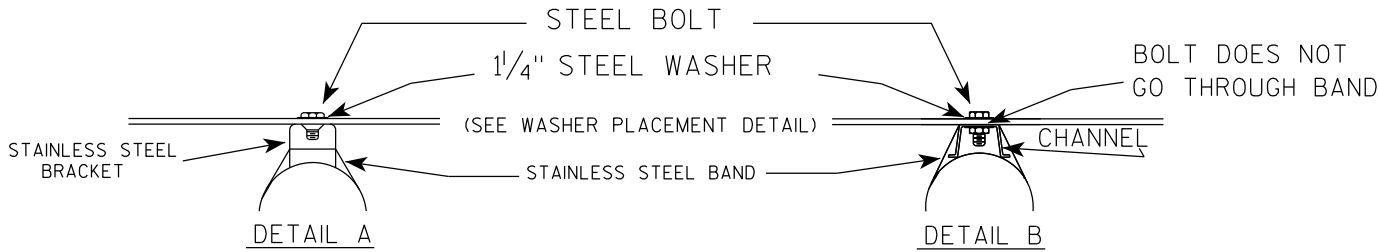
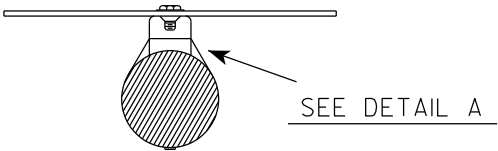
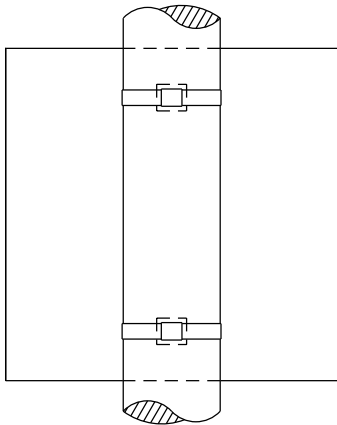
COUNTY:

SHEET NO:

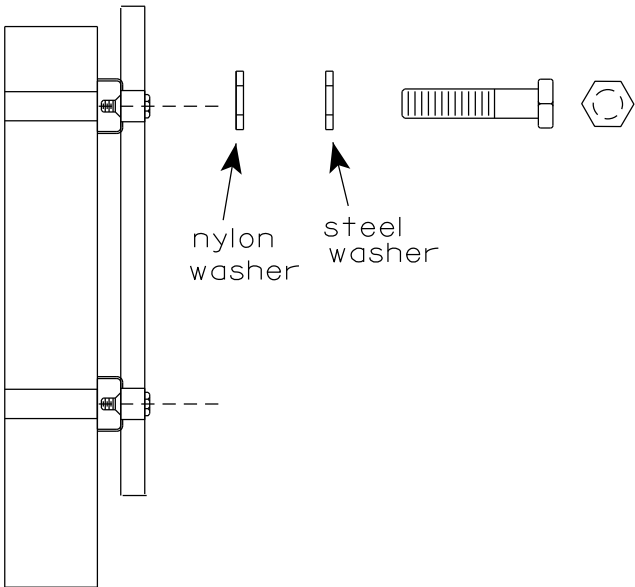
E

BANDING

SINGLE SIGN



WASHER PLACEMENT

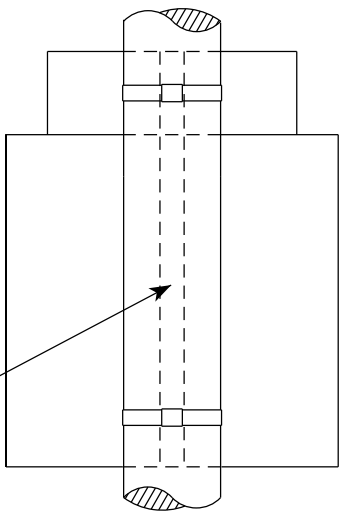


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

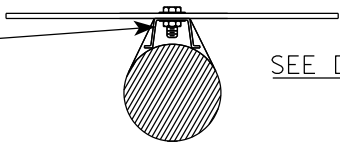
GENERAL NOTES

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

"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

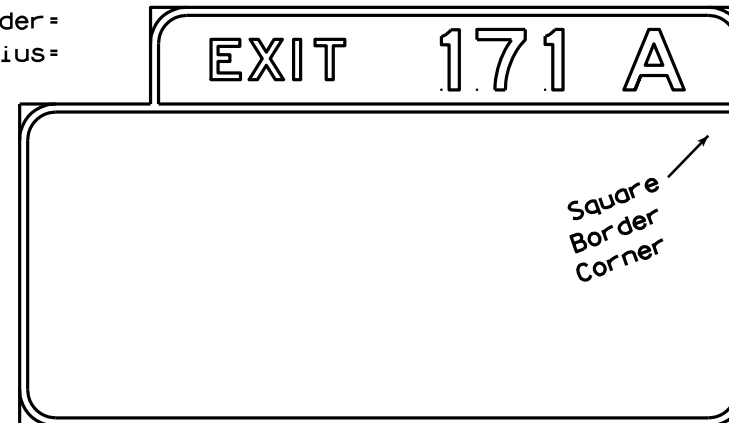
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/10/19 PLATE NO. A5-9.4

GENERAL RULES

1. The border and radius for each sign shall be determined from the table parameters.
2. Every sign detail sheet shall have notes. Refer to the sample for examples.
3. Every sign shall have a radius and border size designation. Signs with an exit number will require two as shown in the example.
4. Exit number panel shall go on right side or left side of sign depending upon a right or left exit situation.
5. Overall length of signs is in one foot increments.
6. Overall height of signs is in 6 inch increments.

SIGNS WITH EXIT NUMBERS & BORDER - RADIUS NOTES

Border =
Radius =



Border =
Radius =

BORDER-RADIUS TABLE

BORDER

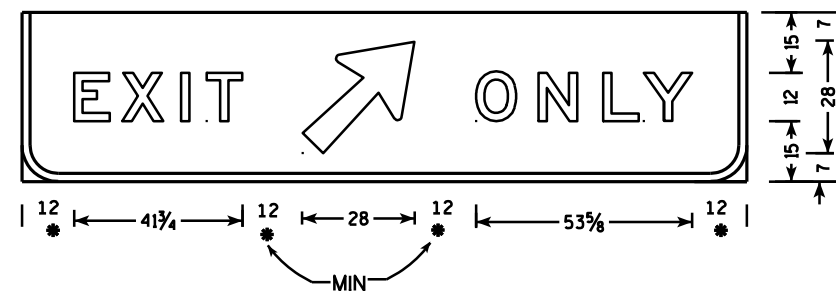
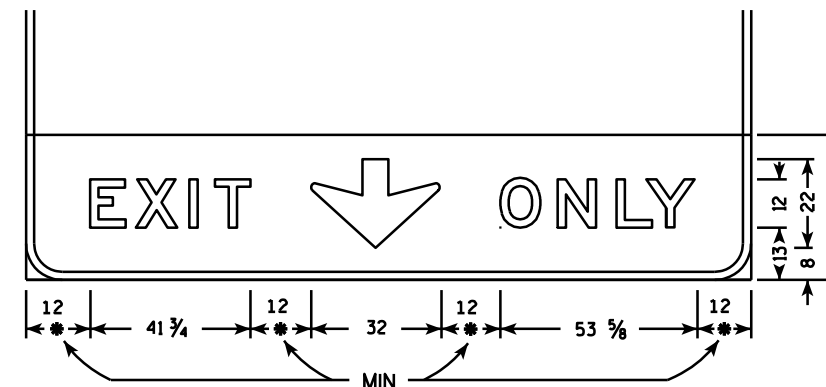
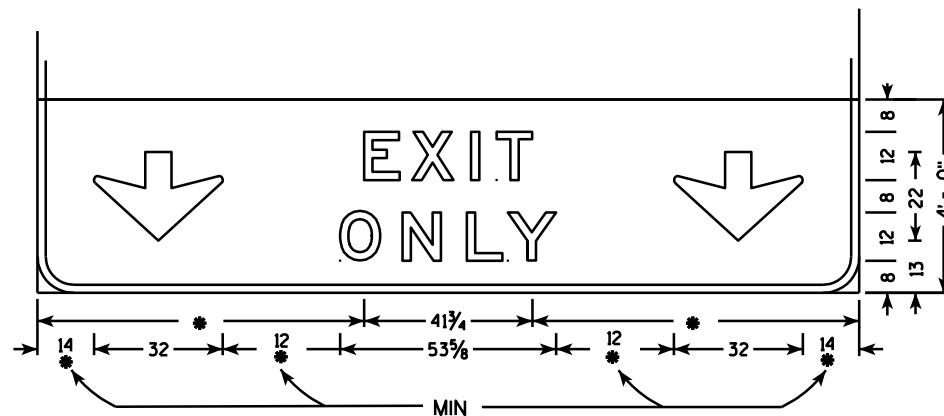
60 - 150 sq. ft. = 2" Border
Over 150 sq. ft. = 3" Border

CORNER RADIUS

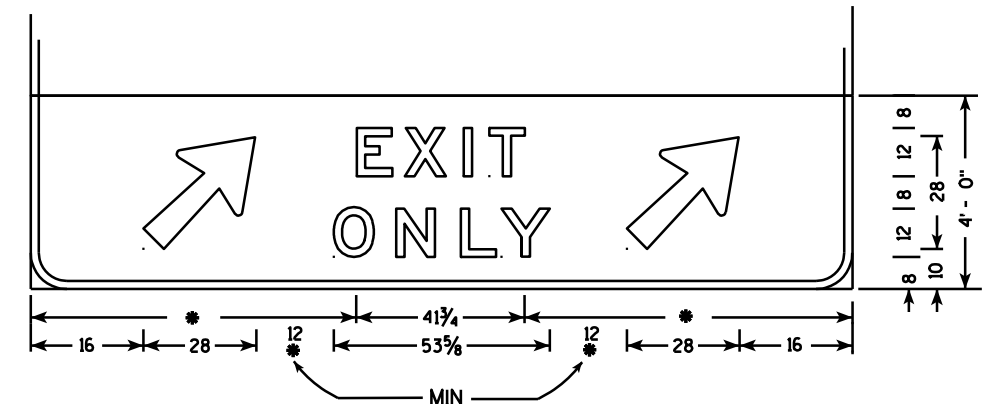
6' - 8' High = 9" Radius
Over 8' High = 12" Radius

NOTES

1. All Signs are Type I - Type SH Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White
3. Message Series - E
4. Exit Only panel is Black non-reflective message on a Type F Yellow reflective background.



* Adjust spacing to achieve proper balance



GENERAL GUIDANCE AND INFORMATION SHEET

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 8/23/10 PLATE NO. A11-1.7

PROJECT NO:

SHEET NO:

E

NOTES

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



G20-57

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

STANDARD SIGN
G20-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

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

PROJECT NO:

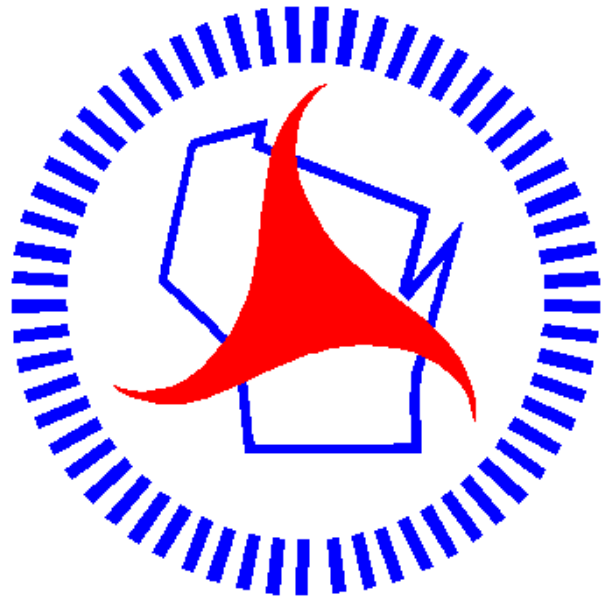
HWY:

COUNTY:

SHEET NO:

E

Notes



Wisconsin Department of Transportation

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