

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 = 102



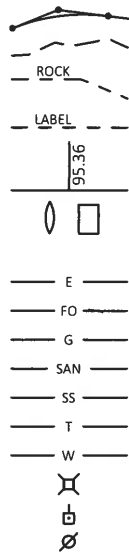
DESIGN DESIGNATION 1500-72-60

A.A.D.T.	2018	=	6,400
A.A.D.T.	2038	=	7,600
D.H.V.		=	800
D.D.		=	60/40
T.		=	18.6%
DESIGN SPEED		=	60 MPH
ESALS		=	2,800,000

CONVENTIONAL SYMBOLS

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

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



STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

MENASHA - REEDSVILLE

STH 32/57 - CTH W

USH 10

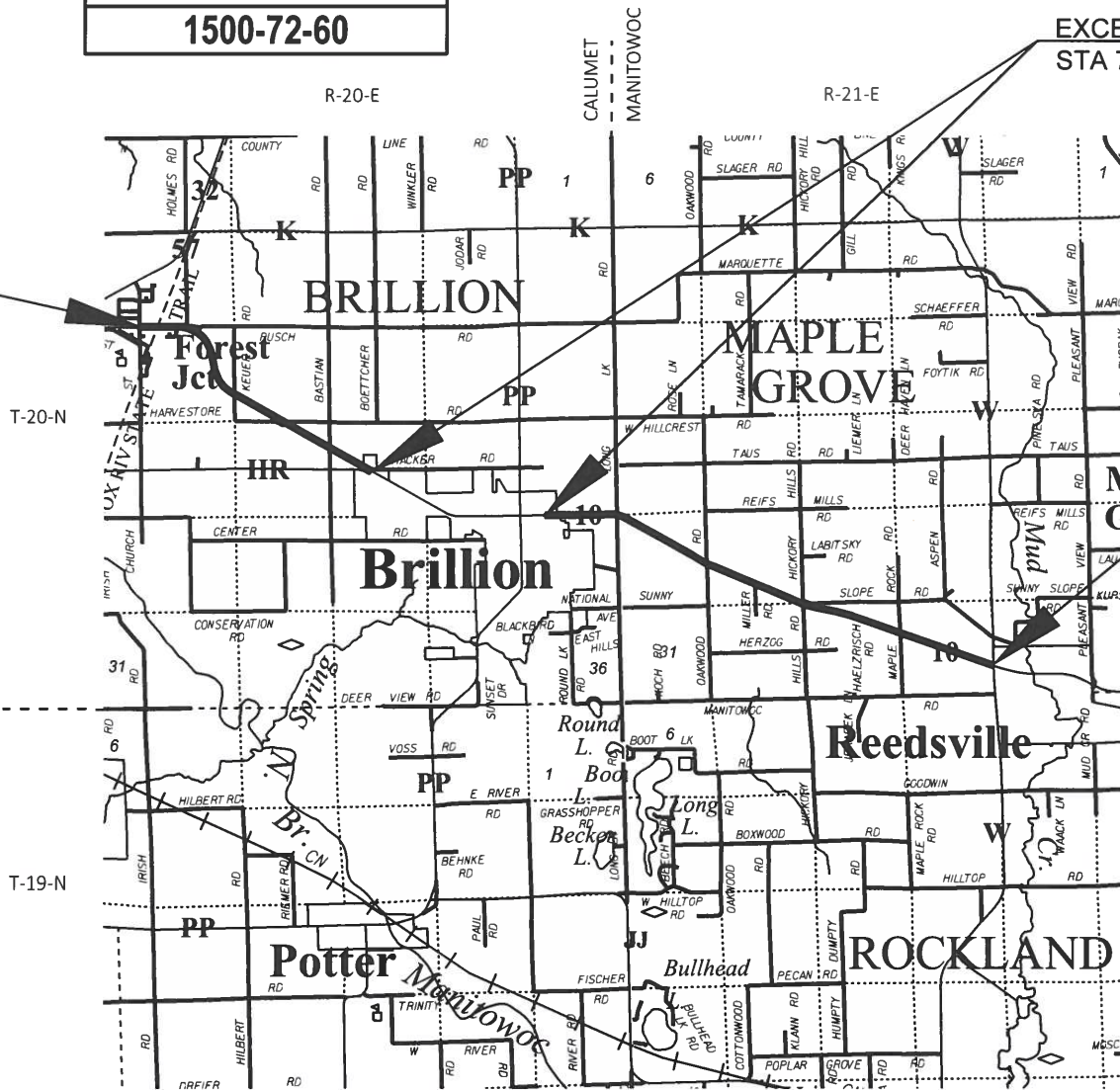
CALUMET COUNTY

STATE PROJECT NUMBER
1500-72-60

BEGIN PROJECT  
STA 577+25  
Y: 544397.920  
X: 894658.444

EXCEPTION TO NET CL LENGTH  
STA 759+18 TO STA 861+20

END PROJECT  
STA 1119+83



LAYOUT  
SCALE 0 2 MI  
TOTAL NET LENGTH OF CENTERLINE = 8.344 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, CALUMET 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.

STATE PROJECT

1500-72-60

FEDERAL PROJECT

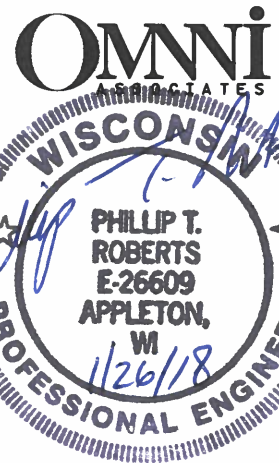
PROJECT

WISC 2018246

CONTRACT

1

ORIGINAL PLANS PREPARED BY



STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	OMNNI ASSOCIATES
Designer	OMNNI ASSOCIATES
Project Manager	T. VERHAGEN
Regional Examiner	
Regional Supervisor	C. DEGRAVE

APPROVED FOR THE DEPARTMENT

DATE: 1/30/2018 Timothy Verhagen (Signature)

E

2

UTILITIES

ELECTRIC TRANSMISSION

ATC  
TONY MARCINIAK  
W234 N2000 RIDGEVIEW PARKWAY COURT  
P.O. BOX 47  
WAUKESHA, WI 53187-0047  
TELEPHONE: (262) 506-6814  
TMARCINIAK@ATCLLC.COM

GAS

WISCONSIN PUBLIC SERVICE  
LORI BUTRY  
700 N ADAMS ST  
P.O. BOX 19001  
GREEN BAY, WI 54307-9001  
TELEPHONE: (920) 433-1703  
LABUTRY@INTEGRYSGROUP.COM

CABLE TV

CHARTER/TWC  
KURT LITTLE  
3520 EAST DESTINATION DRIVE  
APPLETON, WI 54915  
TELEPHONE: (920) 831-9227  
KURT.LITTLE@CHARTER.COM

ELECTRIC

WISCONSIN PUBLIC SERVICE  
LORI BUTRY  
700 N ADAMS ST  
P.O. BOX 19001  
GREEN BAY, WI 54307-9001  
TELEPHONE: (920) 433-1703  
LABUTRY@INTEGRYSGROUP.COM

COMMUNICATION

CHARTER COMMUNICATIONS  
BRUCE HENRY  
1623 BROADWAY AVENUE  
SHEBOYGAN, WI 53081  
TELEPHONE: (920) 907-7720  
BRUCE.HENRY@CHARTER.COM  
  
FRONTIER COMMUNICATIONS  
RUSS RYAN  
107 PLEASANTVIEW DR  
PLYMOUTH, WI 53073  
TELEPHONE: (920) 893-7212  
RUSSELL.W.RYAN@FTR.COM

DIGGERSHOTLINE

Dial 811 or (800) 242-8511

www.DiggersHotline.com

UTILITIES

GAS/PETROLEUM

WEST SHORE PIPELINE  
CASEY SCHWANDT  
2119 NORTH QUINCY ST  
GREEN BAY, WI 54302  
TELEPHONE: (920) 432-3223  
CSCHWANDT@BUCKEYE.COM  
  
ARIENS CO  
JESSE WILLEMS  
655 RYAN STREET  
PO BOX 157  
BRILLION, WI 54110-0157  
TELEPHONE: (920) 756-2141  
JWILLEMS@ARIENS.COM

OTHER CONTACTS

DNR LIAISON

MATTHEW SCHAEVE  
DNR NORTHEAST REGIONAL HQ  
2984 SHAWANO AVE  
GREEN BAY, WI 54313  
TELEPHONE: 920-366-1544  
EMAIL: MATTHEW.SCHAEVE@WISCONSIN.GOV

SURVEY CONTACT

NE REGION SURVEY CORRINATOR

CORMAC MCLNNIS  
WISDOT NORTHEAST REGION  
944 VANDERPERREN WAY  
GREEN BAY, WI 54304  
TELEPHONE: 920-492-5638  
EMAIL: CORMAC.MCLNNIS@DOT.WI.GOV

GENERAL NOTES

LOCATIONS OF EXISTING AND PROPOSED UTILITY FACILITIES AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY FACILITIES WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.UTILITY FACILITIES WILL BE RELOCATED AS DESCRIBED IN THE SPECIAL PROVISIONS.

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

THE EXACT LOCATIONS AND LIMITS OF PRIVATE ENTRANCES, FIELD ENTRANCES AND COMMERCIAL ENTRANCES SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.

MISCELLANEOUS REMOVAL ITEMS SHALL BE REMOVED TO AN EXISTING JOINT OR SAWCUT AS SHOWN ON THE PLANS

A BUTT JOINT SHALL BE PROVIDED AT ALL LOCATIONS WHERE NEW PAVEMENT MATCHES EXISTING PAVEMENT

BUTT JOINT LOCATIONS SHOWN ON THE PLANS ARE SUBJECT TO ADJUSTMENT BY THE ENGINEER IN THE FIELD

EROSION CONTROL NOTES

RUNOFF COEFFICIENT FOR THIS PROJECT:  
EXISTING PAVEMENT 0.95, EXISTING SLOPES 0.30,  
NEW PAVEMENT 0.95, NEW SLOPES 0.30.

TOTAL PROJECT AREA = 34.30 ACRES.  
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES =0.08 ACRES.

2

PROJECT NO: 1500 – 72 - 60

HWY: USH 10

COUNTY:CALUMET

GENERAL NOTES

SHEET:

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F:\TR\JOBS\E2285A17\Civil 3D 2016\SheetsPlan\1500-72-60

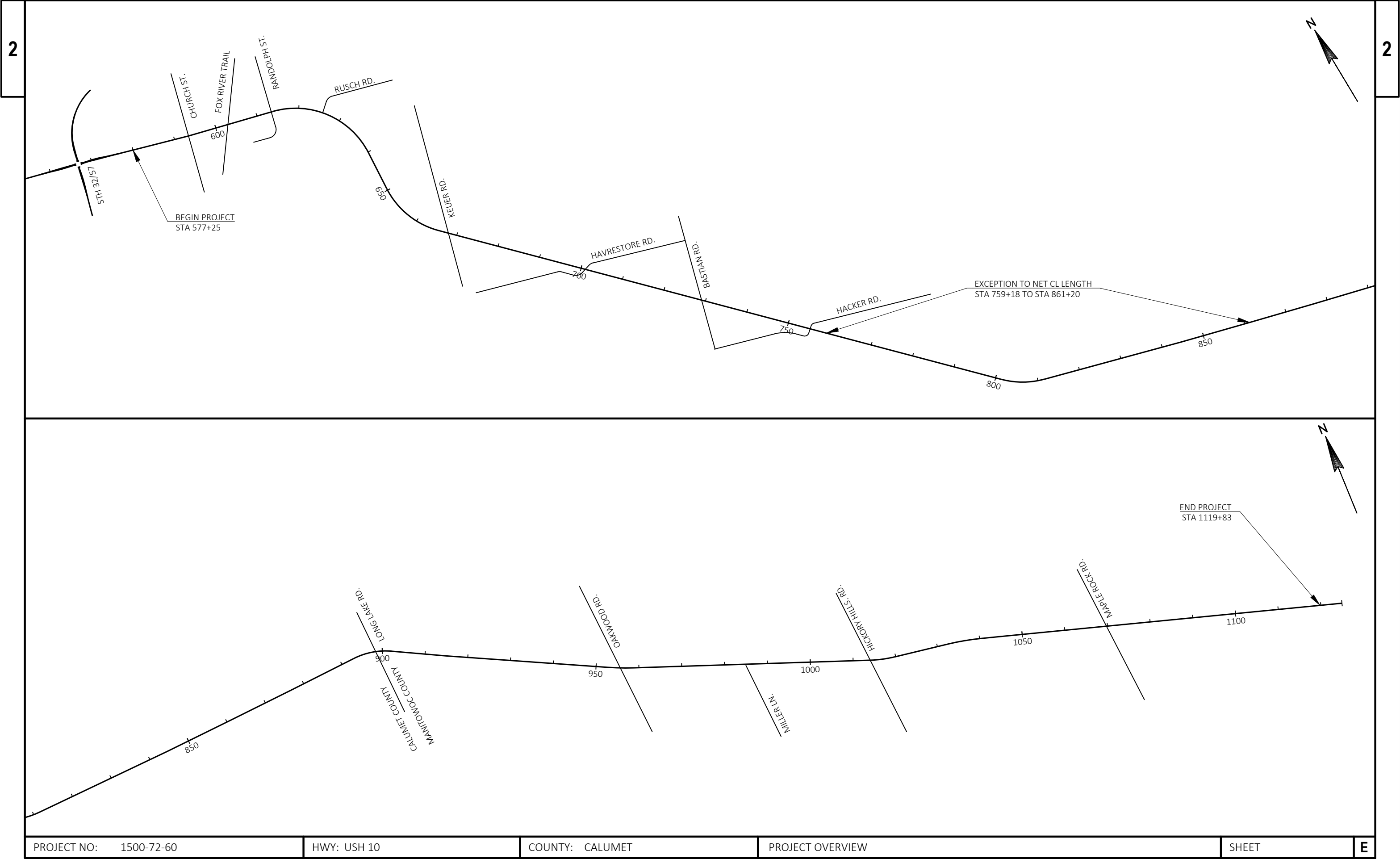
ORIGINATOR: OMNNI ASSOCIATES

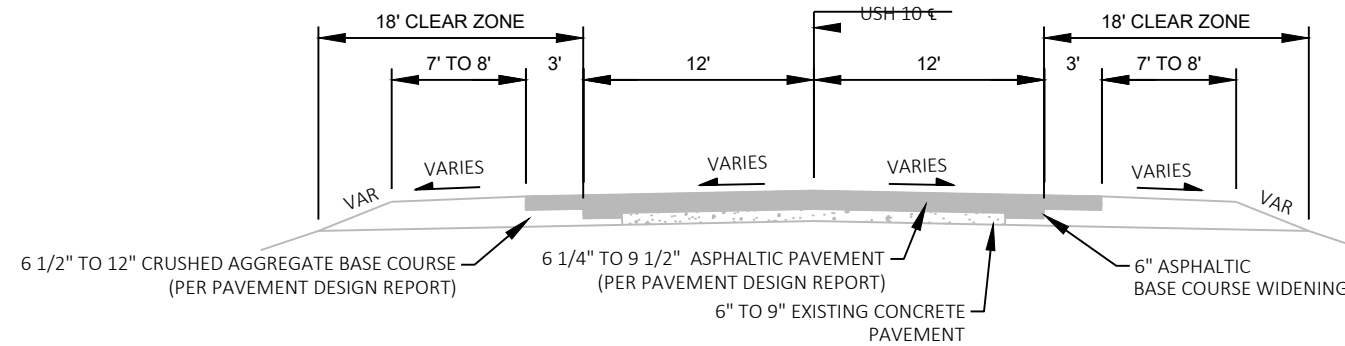
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REV. DATE: OCTOBER 24, 2017

PRINT DATE: February 12, 2018

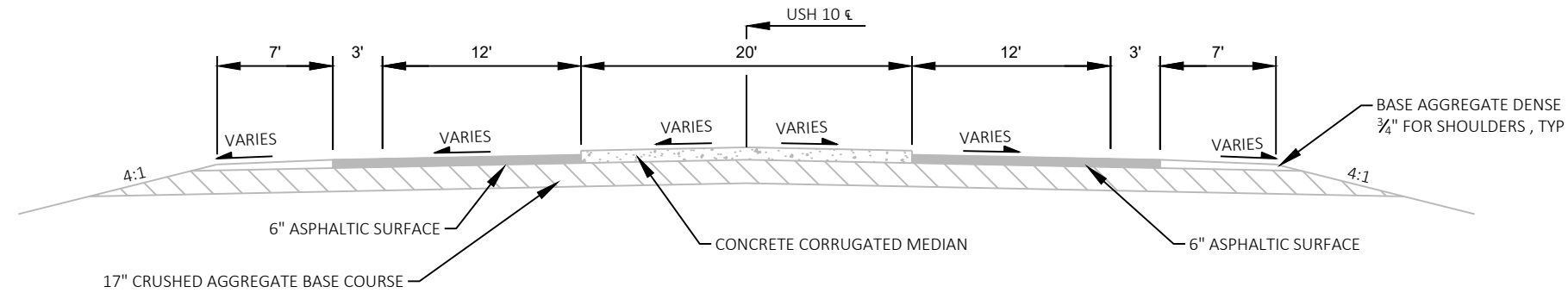






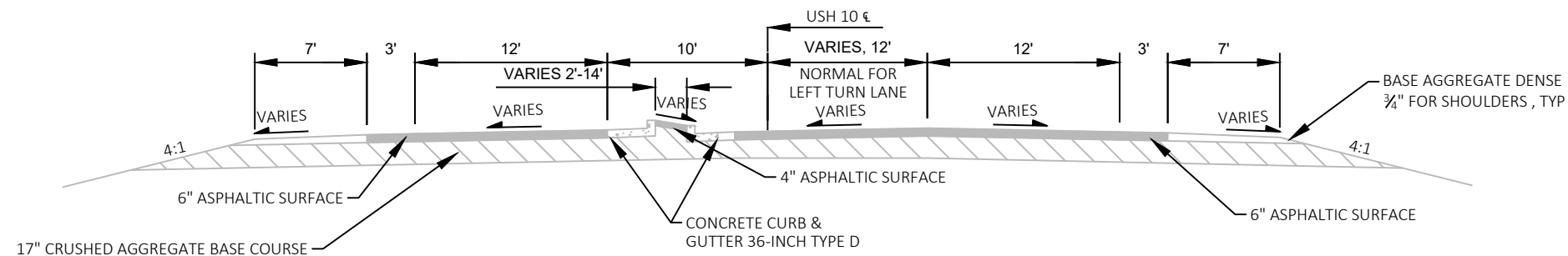
**TYPICAL EXISTING SECTION FOR USH 10**

STA 577+25 - STA 748+38  
STA 861+20 - STA 1119+83



**TYPICAL EXISTING SECTION FOR USH 10**

STA 748+38 - STA 752+38



**TYPICAL EXISTING SECTION FOR USH 10**

STA 752+38 - STA 759+18

PROJECT NO: 1500-72-60

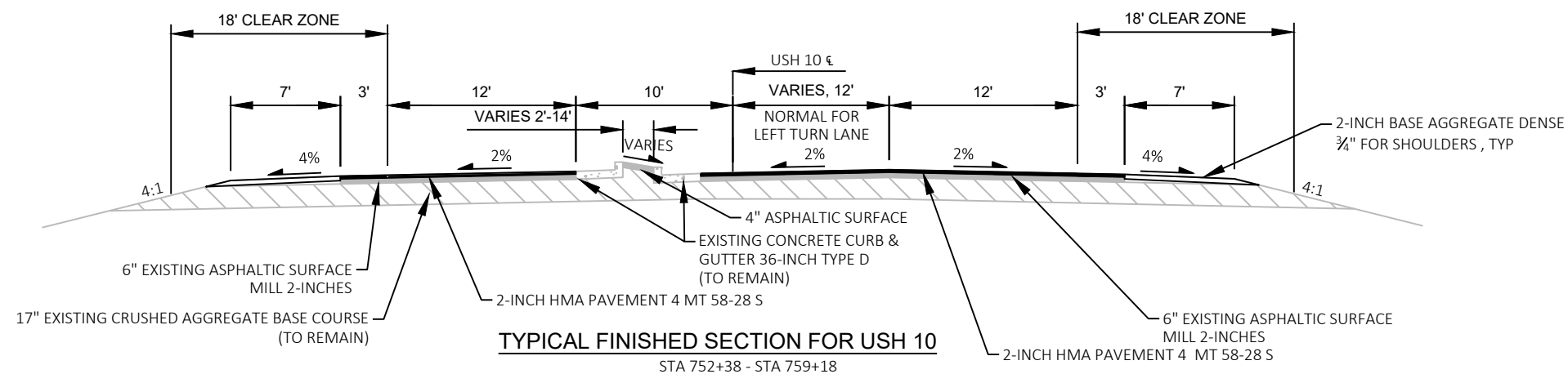
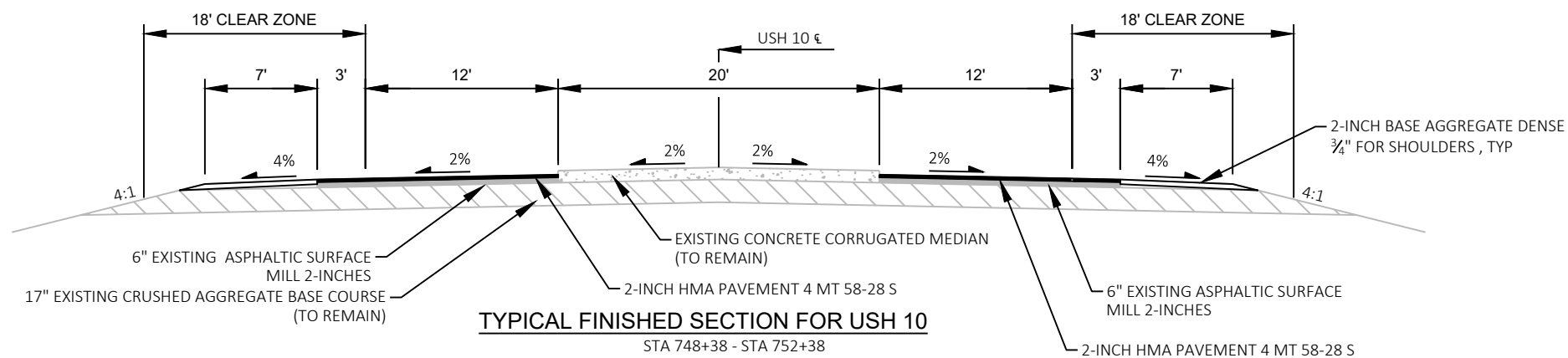
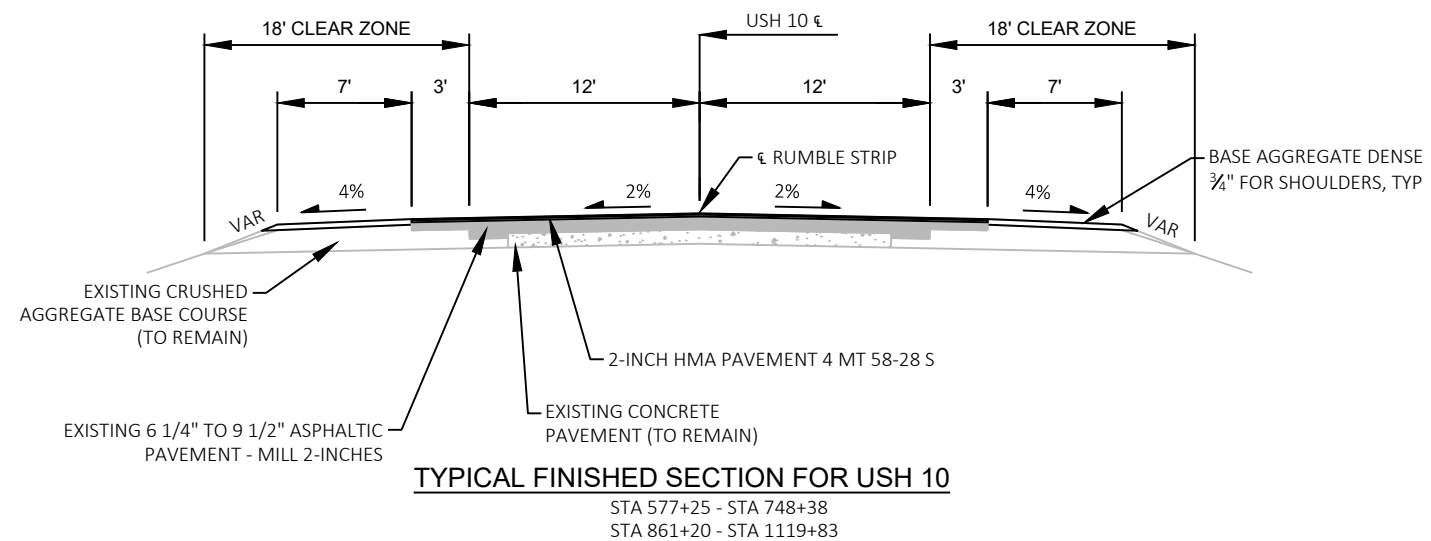
HWY: USH 10

COUNTY: CALUMET

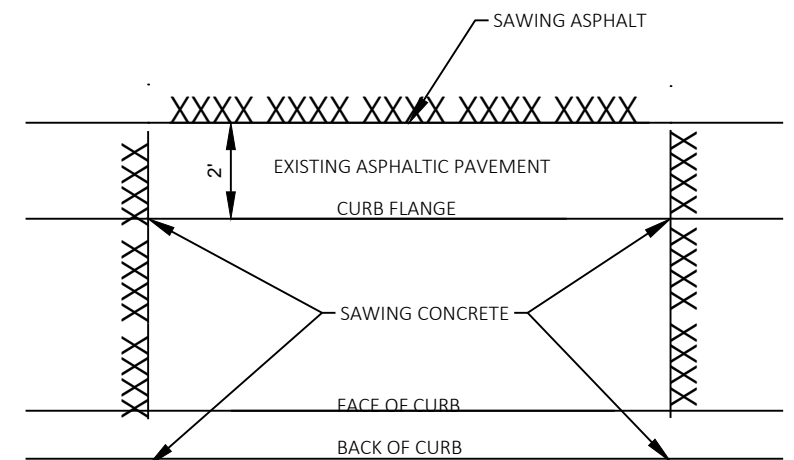
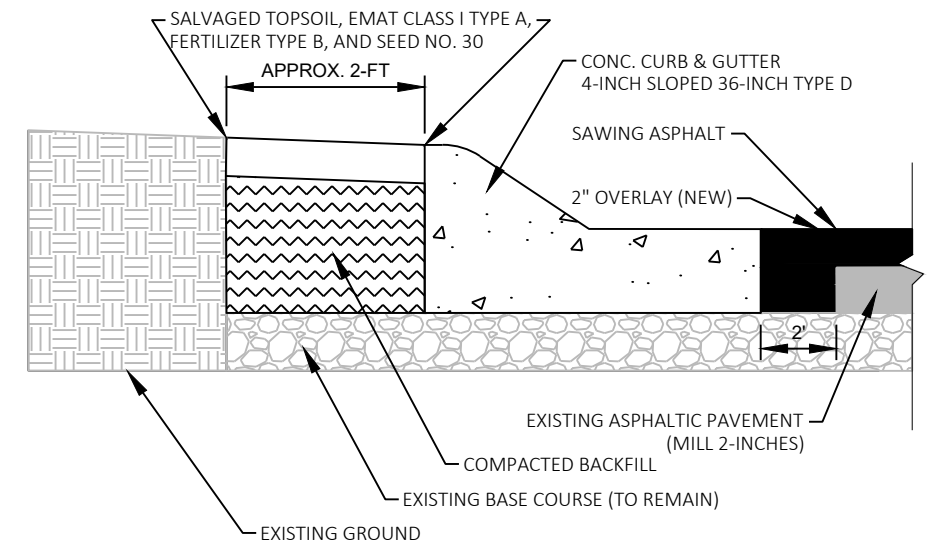
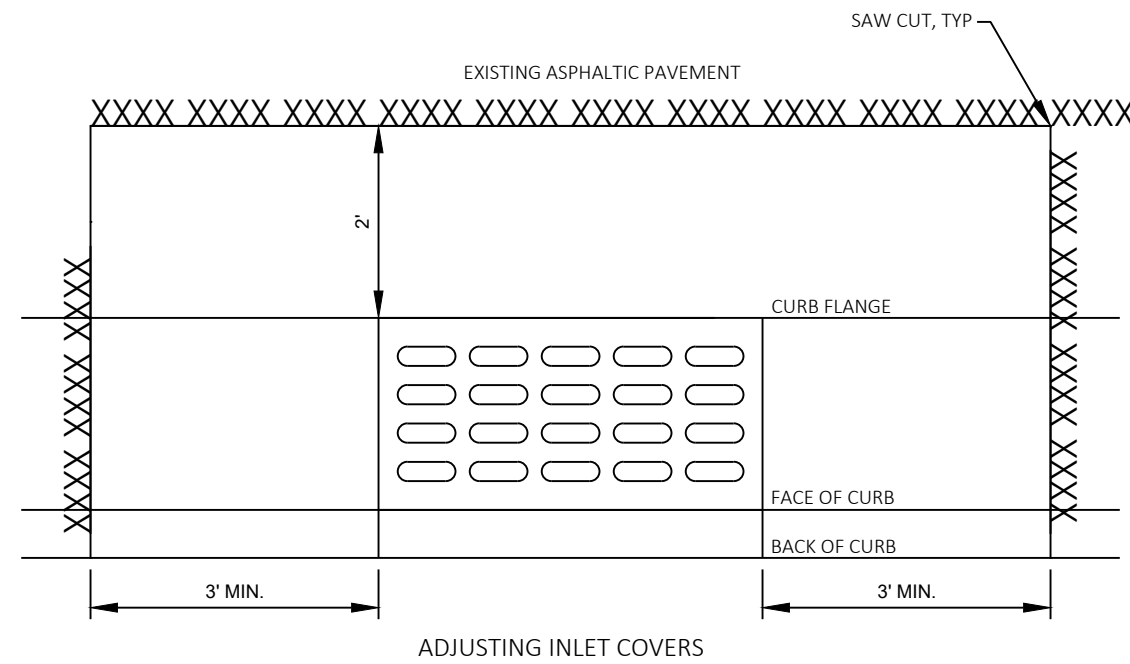
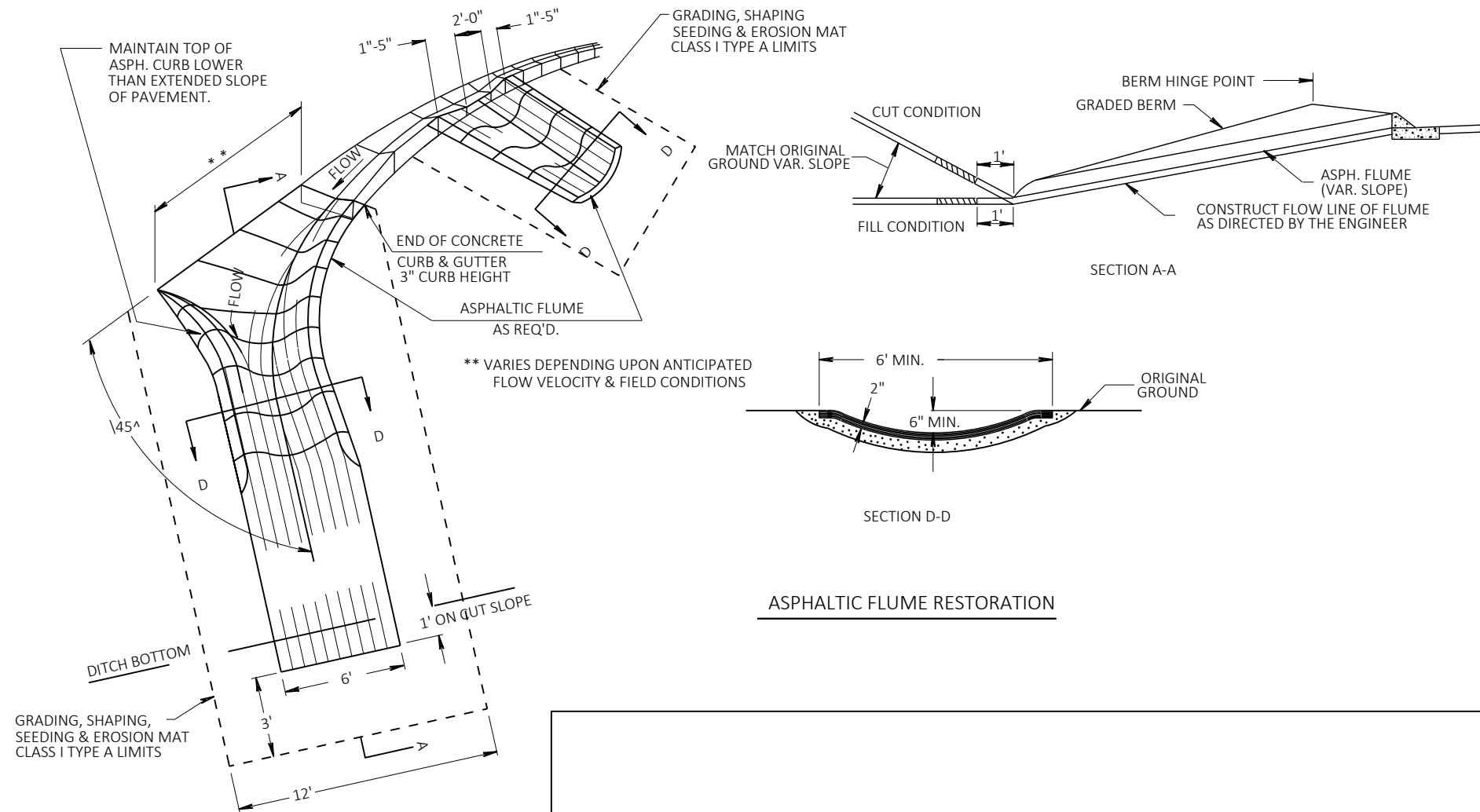
PLAN: TYPICAL CROSS SECTION

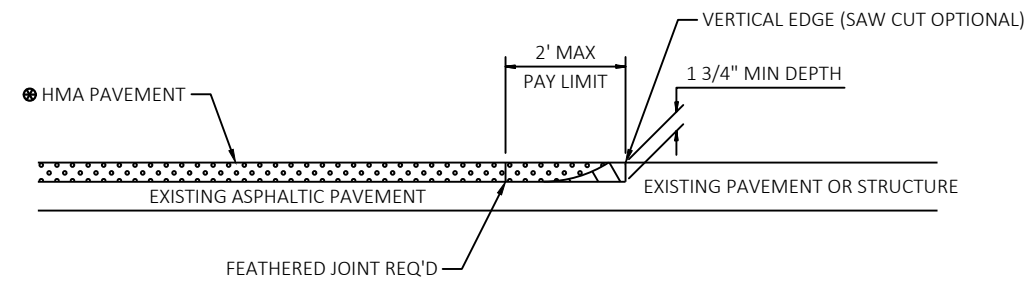
SHEET

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





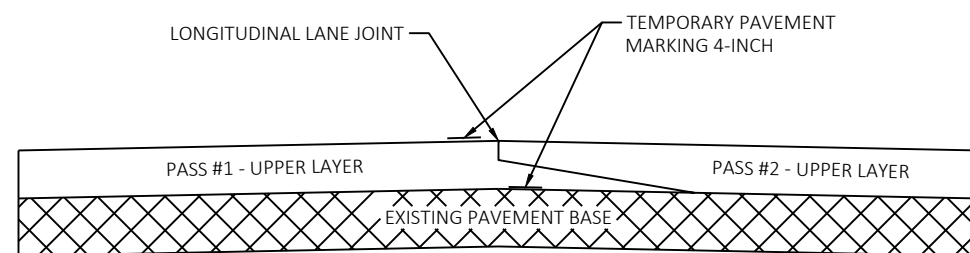




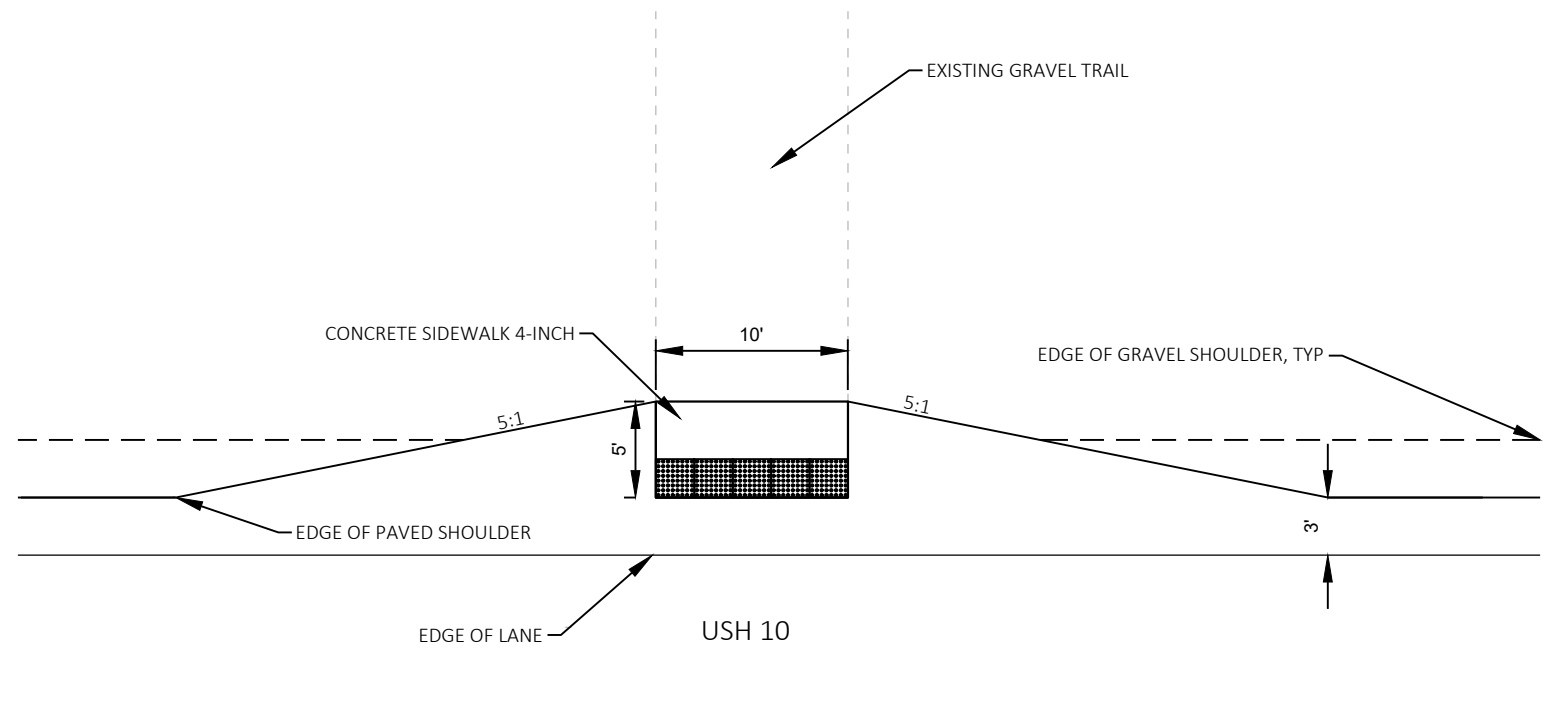
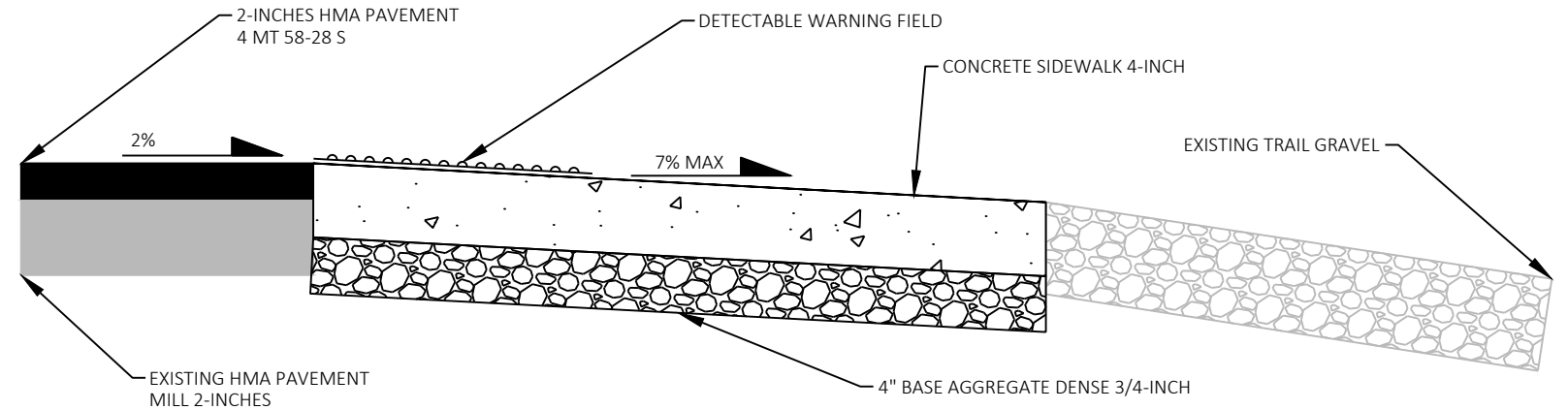
SEE TYPICAL CROSS SECTION FOR PAVEMENT TYPE AND THICKNESS OF INDIVIDUAL LAYERS

-  REMOVING ASPHALTIC SURFACE, MILLING
-  REMOVE ASPHALTIC SURFACE WEDGE AT BUTT JOINT TO CREATE VERTICAL EDGE

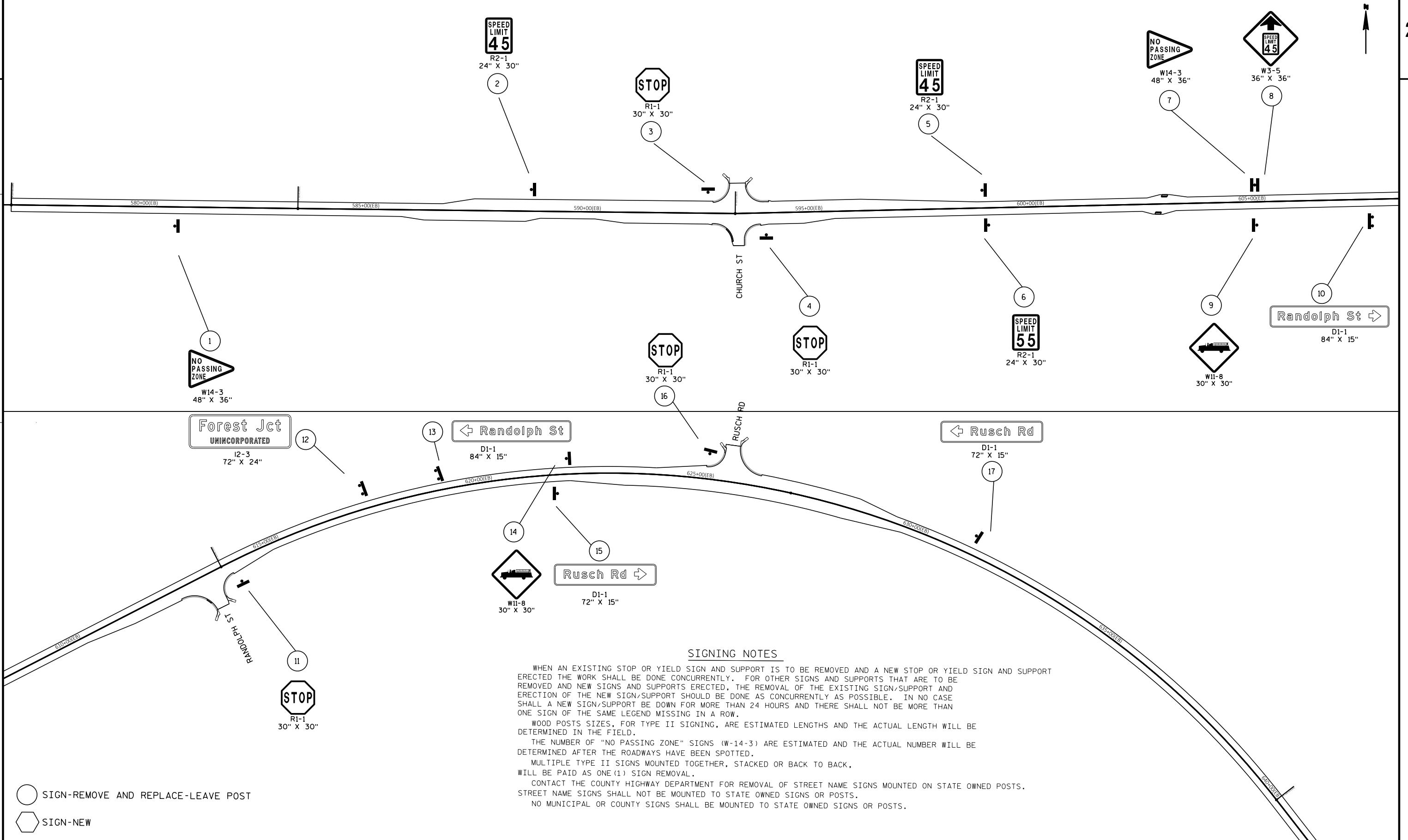
BUTT JOINT DETAIL FOR ASPHALTIC PAVEMENTS (NO PROFILE CHANGE)



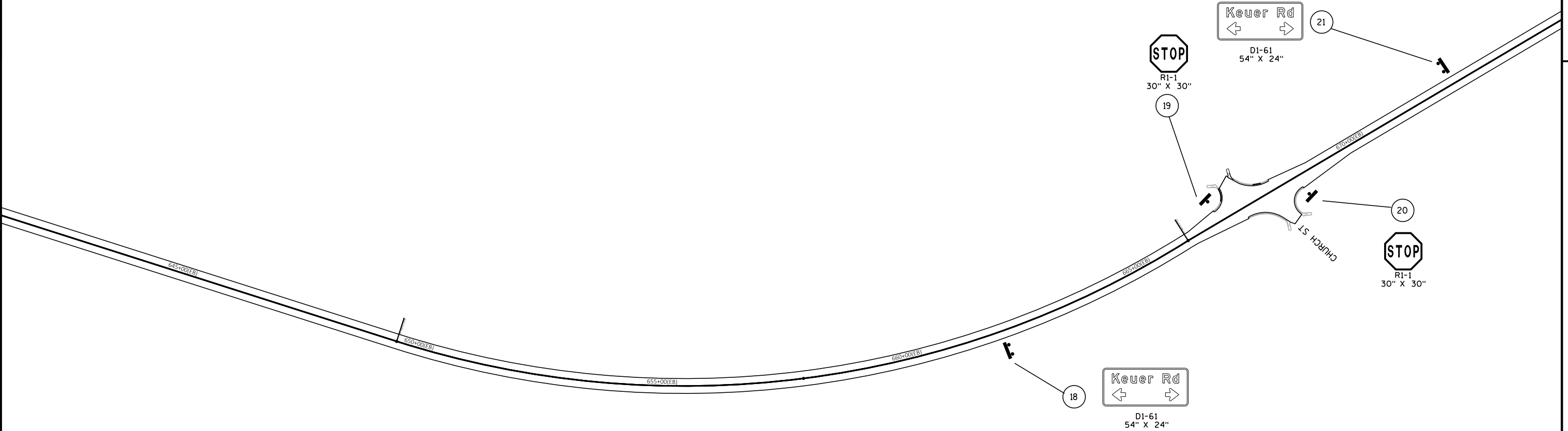
PAVEMENT MARKING DETAIL FOR TAPERED OVERLAPPING JOINTS IN HMA PAVEMENTS



FRIENDSHIP TRAIL RAMP DETAIL







SIGNING NOTES

WHEN AN EXISTING STOP OR YIELD SIGN AND SUPPORT IS TO BE REMOVED AND A NEW STOP OR YIELD SIGN AND SUPPORT ERECTED THE WORK SHALL BE DONE CONCURRENTLY. FOR OTHER SIGNS AND SUPPORTS THAT ARE TO BE REMOVED AND NEW SIGNS AND SUPPORTS ERECTED, THE REMOVAL OF THE EXISTING SIGN/SUPPORT AND ERECTION OF THE NEW SIGN/SUPPORT SHOULD BE DONE AS CONCURRENTLY AS POSSIBLE. IN NO CASE SHALL A NEW SIGN/SUPPORT BE DOWN FOR MORE THAN 24 HOURS AND THERE SHALL NOT BE MORE THAN ONE SIGN OF THE SAME LEGEND MISSING IN A ROW.

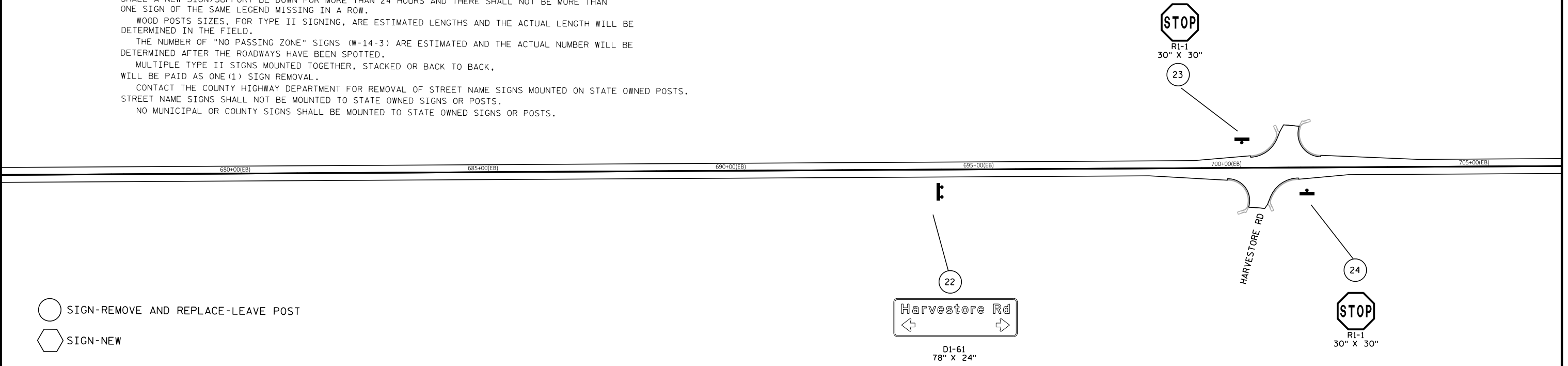
WOOD POSTS SIZES, FOR TYPE II SIGNING, ARE ESTIMATED LENGTHS AND THE ACTUAL LENGTH WILL BE DETERMINED IN THE FIELD.

THE NUMBER OF "NO PASSING ZONE" SIGNS (W-14-3) ARE ESTIMATED AND THE ACTUAL NUMBER WILL BE DETERMINED AFTER THE ROADWAYS HAVE BEEN SPOTTED.

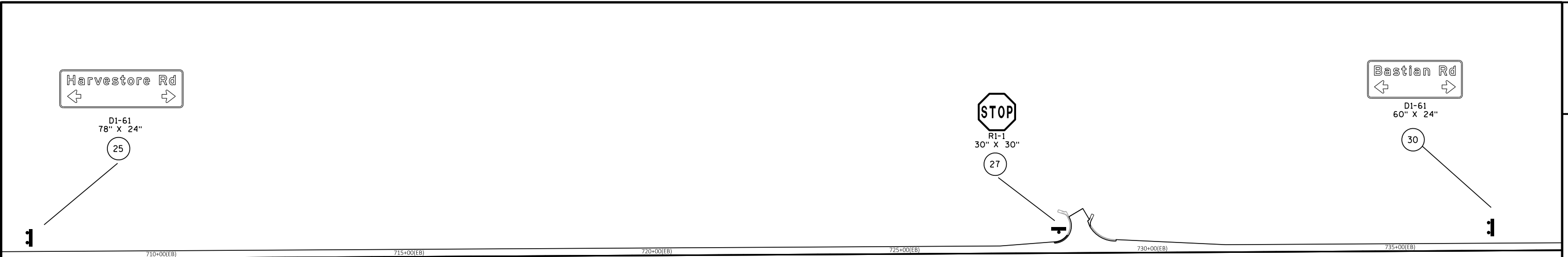
MULTIPLE TYPE II SIGNS MOUNTED TOGETHER, STACKED OR BACK TO BACK, WILL BE PAID AS ONE (1) SIGN REMOVAL.

CONTACT THE COUNTY HIGHWAY DEPARTMENT FOR REMOVAL OF STREET NAME SIGNS MOUNTED ON STATE OWNED POSTS. STREET NAME SIGNS SHALL NOT BE MOUNTED TO STATE OWNED SIGNS OR POSTS.

NO MUNICIPAL OR COUNTY SIGNS SHALL BE MOUNTED TO STATE OWNED SIGNS OR POSTS.



- SIGN-REMOVE AND REPLACE-LEAVE POST
- SIGN-NEW



SIGNING NOTES

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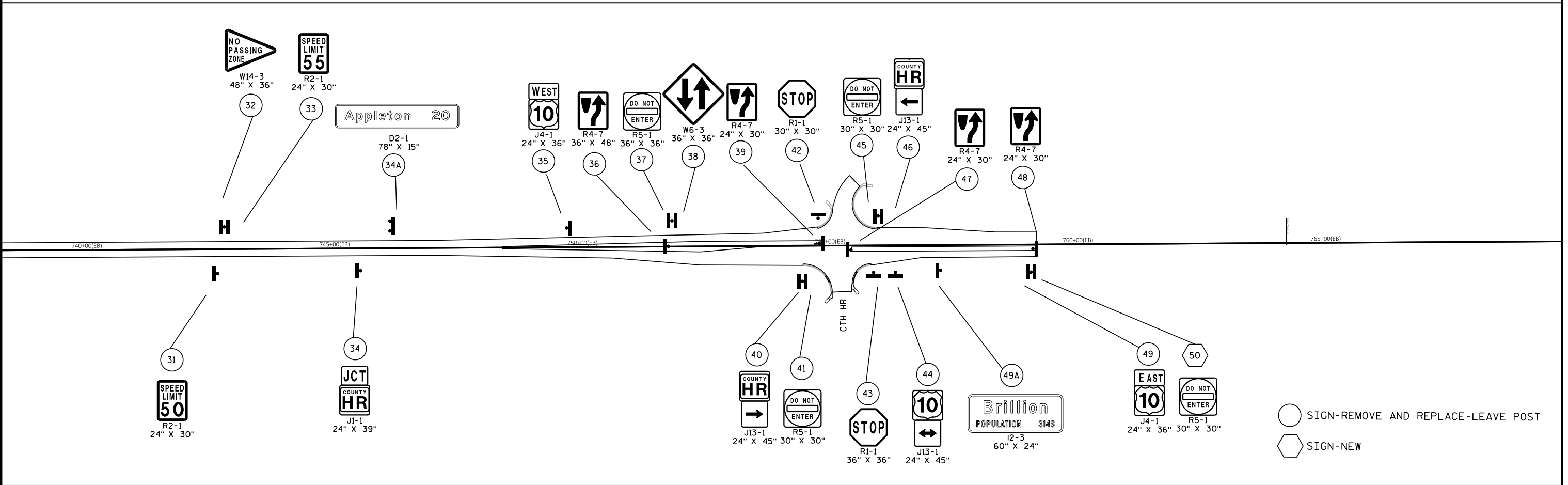
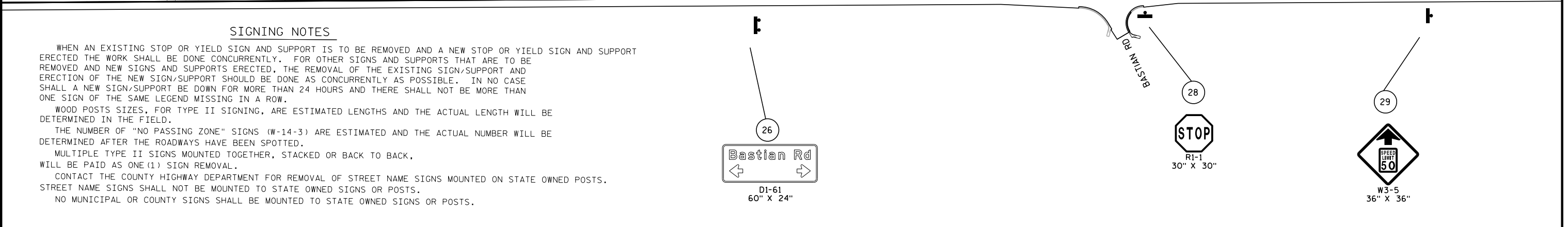
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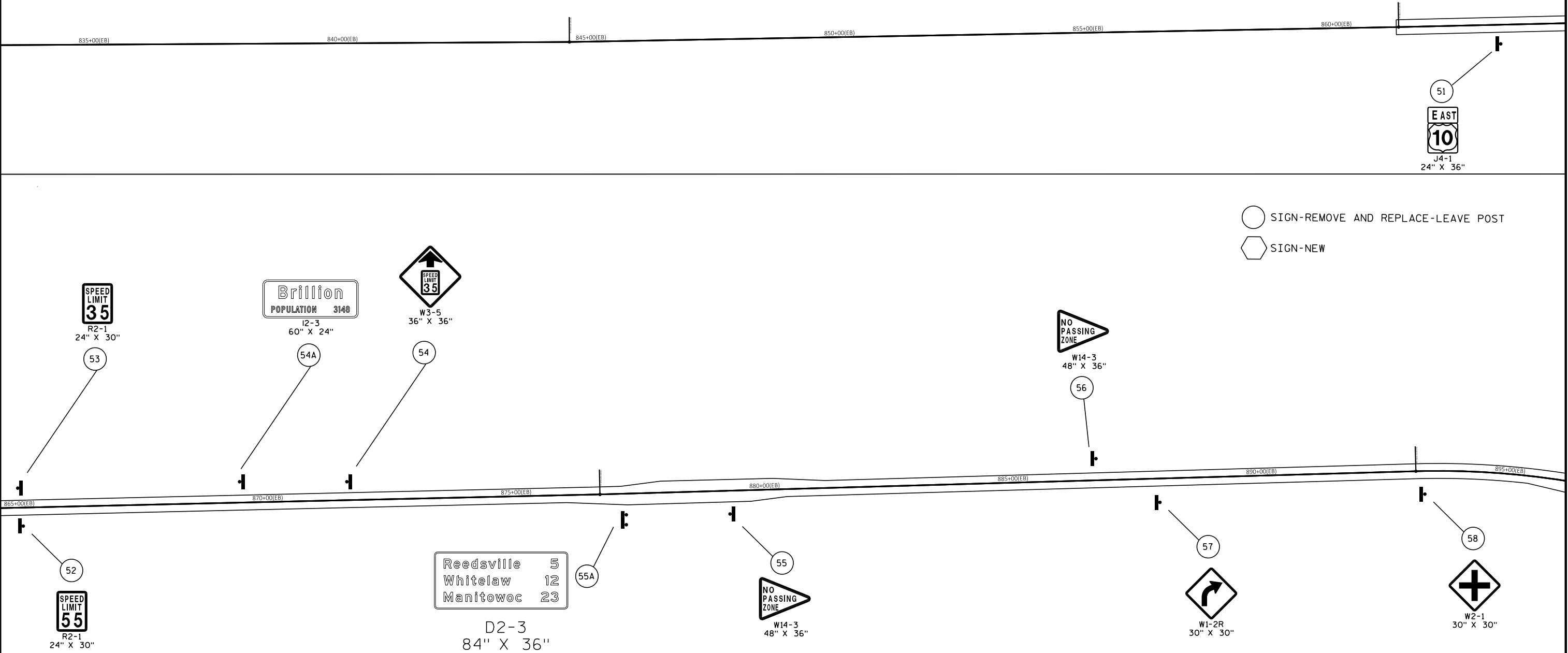
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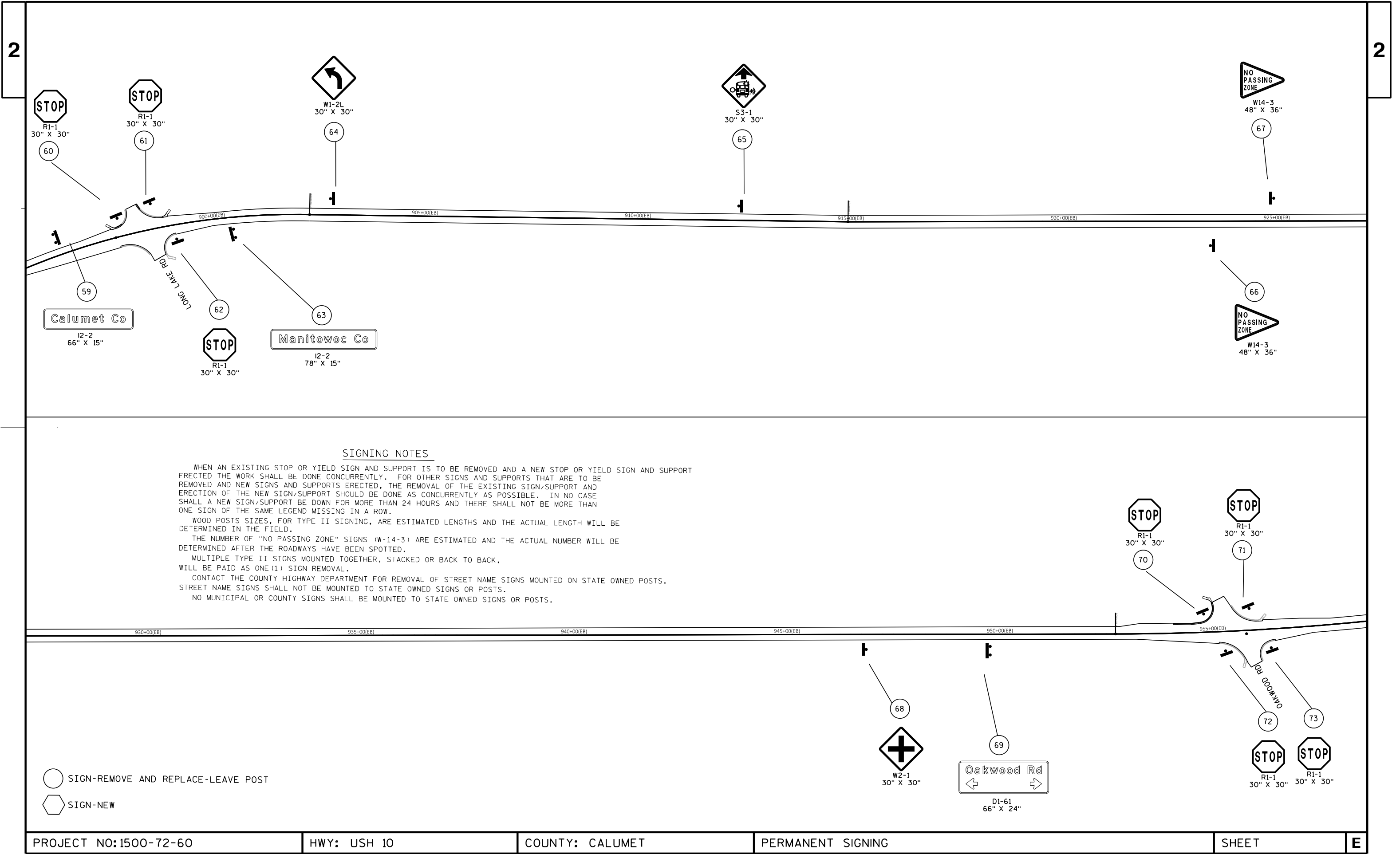
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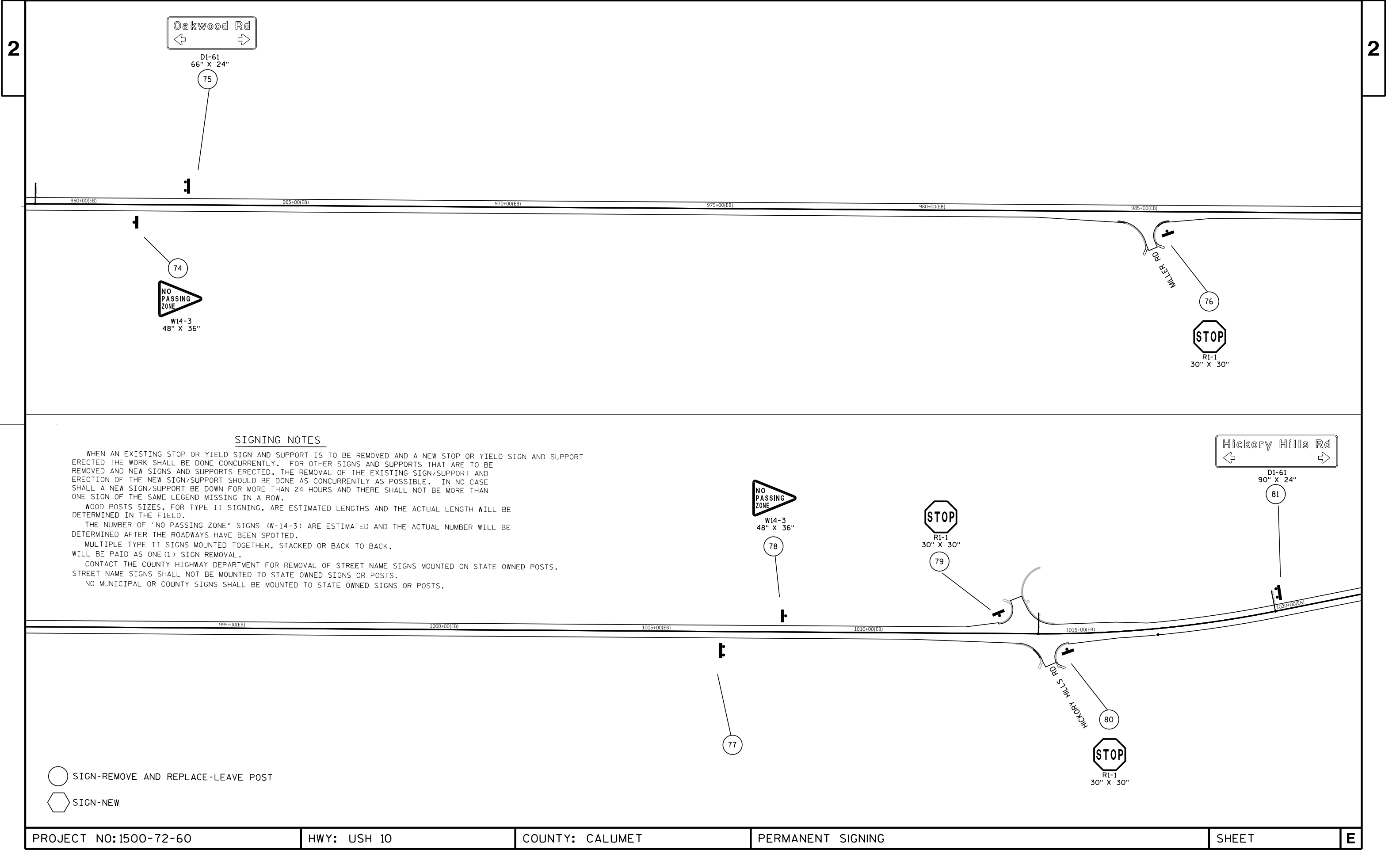
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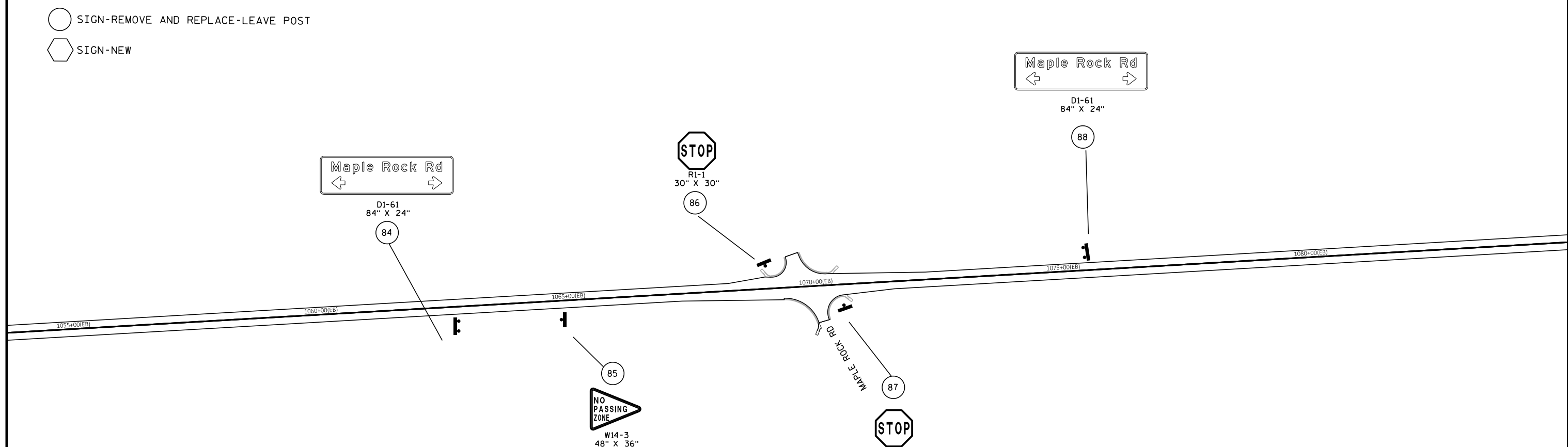








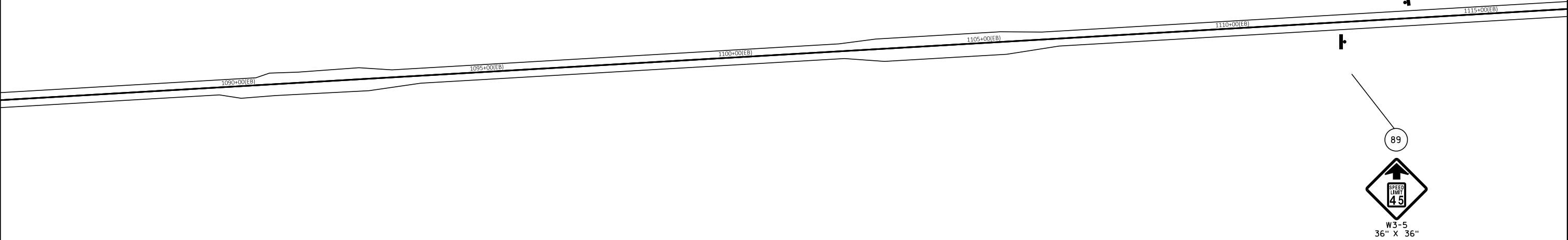
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2

2



## SIGNING NOTES

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☐ SIGN-REMOVE AND REPLACE-LEAVE POST

 SIGN-NEW

PROJECT NO:1500-72-60

HWY: USH 10

COUNTY: CALUMET

PERMANENT SIGNING
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SHEET

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Estimate Of Quantities

1500-72-60					
Line	Item	Item Description	Unit	Total	Qty
0002	204.0110	Removing Asphaltic Surface	SY	100.000	100.000
0004	204.0115	Removing Asphaltic Surface Butt Joints	SY	167.000	167.000
0006	204.0120	Removing Asphaltic Surface Milling	SY	164,720.000	164,720.000
0008	204.0150	Removing Curb & Gutter	LF	445.000	445.000
0010	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 1500-72-60	LS	1.000	1.000
0012	213.0100	Finishing Roadway (project) 01. 1500-72-60	EACH	1.000	1.000
0014	305.0110	Base Aggregate Dense 3/4-Inch	TON	7,950.000	7,950.000
0016	440.4410	Incentive IRI Ride	DOL	33,376.000	33,376.000
0018	455.0605	Tack Coat	GAL	11,520.000	11,520.000
0020	460.2005	Incentive Density PWL HMA Pavement	DOL	13,520.000	13,520.000
0022	460.2010	Incentive Air Voids HMA Pavement	DOL	17,020.000	17,020.000
0024	460.4110.S	Reheating HMA Pavement Longitudinal Joints	LF	44,083.000	44,083.000
0026	460.6224	HMA Pavement 4 MT 58-28 S	TON	18,950.000	18,950.000
0028	465.0110	Asphaltic Surface Patching	TON	400.000	400.000
0030	465.0315	Asphaltic Flumes	SY	133.000	133.000
0032	465.0475	Asphalt Centerline Rumble Strips 2-Lane Rural	LF	38,589.000	38,589.000
0034	601.0553	Concrete Curb & Gutter 4-Inch Sloped 36-Inch Type D	LF	445.000	445.000
0036	602.0405	Concrete Sidewalk 4-Inch	SF	100.000	100.000
0038	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	40.000	40.000
0040	611.8115	Adjusting Inlet Covers	EACH	1.000	1.000
0042	614.0400	Adjusting Steel Plate Beam Guard	LF	1,415.000	1,415.000
0044	614.0950	Replacing Guardrail Posts and Blocks	EACH	5.000	5.000
0046	614.0951	Replacing Guardrail Rail and Hardware	LF	50.000	50.000
0048	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1500-72-60	EACH	1.000	1.000
0050	619.1000	Mobilization	EACH	1.000	1.000
0052	624.0100	Water	MGAL	48.000	48.000
0054	633.5200	Markers Culvert End	EACH	8.000	8.000
0056	637.2210	Signs Type II Reflective H	SF	560.980	560.980
0058	637.2230	Signs Type II Reflective F	SF	167.220	167.220
0060	638.2602	Removing Signs Type II	EACH	85.000	85.000
0062	643.0300	Traffic Control Drums	DAY	1,270.000	1,270.000
0064	643.0310.S	Temporary Portable Rumble Strips	LS	1.000	1.000
0066	643.0900	Traffic Control Signs	DAY	3,560.000	3,560.000
0068	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0070	643.5000	Traffic Control	EACH	1.000	1.000
0072	646.1020	Marking Line Epoxy 4-Inch	LF	130,036.000	130,036.000
0074	646.3020	Marking Line Epoxy 8-Inch	LF	1,275.000	1,275.000
0076	646.4520	Marking Line Same Day Epoxy 4-Inch	LF	41,870.000	41,870.000

Estimate Of Quantities

1500-72-60					
Line	Item	Item Description	Unit	Total	Qty
0078	646.5020	Marking Arrow Epoxy	EACH	4.000	4.000
0080	646.5120	Marking Word Epoxy	EACH	2.000	2.000
0082	646.8020	Marking Corrugated Median Epoxy	SF	1,840.000	1,840.000
0084	646.8120	Marking Curb Epoxy	LF	20.000	20.000
0086	646.8220	Marking Island Nose Epoxy	EACH	2.000	2.000
0088	648.0100	Locating No-Passing Zones	MI	8.350	8.350
0090	649.0120	Temporary Marking Line Epoxy 4-Inch	LF	41,870.000	41,870.000
0092	650.5500	Construction Staking Curb Gutter and Curb & Gutter	LF	125.000	125.000
0094	650.8000	Construction Staking Resurfacing Reference	LF	44,083.000	44,083.000
0096	650.9910	Construction Staking Supplemental Control (project) 01. 1500-72-60	LS	1.000	1.000
0098	690.0150	Sawing Asphalt	LF	1,165.000	1,165.000
0100	690.0250	Sawing Concrete	LF	90.000	90.000
0102	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	1,200.000	1,200.000
0104	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000
0106	SPV.0060	Special 01. Asphaltic Flumes Maintenance	EACH	18.000	18.000
0108	SPV.0060	Special 02. Asphaltic Flume Restoration	EACH	20.000	20.000
0110	SPV.0060	Special 03. HMA Percent Within Limits (PWL) Test Strip Volumetric	EACH	1.000	1.000
0112	SPV.0060	Special 04. HMA Percent Withing Limits (PWL) Test Strip Density	EACH	1.000	1.000
0114	SPV.0090	Special 01. Curb & Gutter Maintenance	LF	2,700.000	2,700.000
0116	SPV.0090	Special 02. Curb & Gutter Restoration	LF	445.000	445.000

BASE COURSE

		305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	624.0100 WATER MGAL
STATION TO STATION	LOCATION		
PROJECT 1500-72-60			
577+00 - 595+00	USH 10	330	2
595+00 - 610+00	USH 10	270	2
610+00 - 625+00	USH 10	270	2
625+00 - 640+00	USH 10	270	2
640+00 - 655+00	USH 10	270	2
655+00 - 670+00	USH 10	270	2
670+00 - 685+00	USH 10	270	2
685+00 - 700+00	USH 10	270	2
700+00 - 715+00	USH 10	270	2
715+00 - 730+00	USH 10	270	2
730+00 - 745+00	USH 10	270	2
745+00 - 759+19	USH 10	260	2
861+19 - 880+00	USH 10	340	2
880+00 - 895+00	USH 10	270	2
895+00 - 910+00	USH 10	270	2
910+00 - 925+00	USH 10	270	2
925+00 - 940+00	USH 10	270	2
940+00 - 955+00	USH 10	270	2
955+00 - 970+00	USH 10	270	2
970+00 - 985+00	USH 10	270	2
985+00 - 1000+00	USH 10	270	2
1000+00 - 1015+00	USH 10	270	2
1015+00 - 1030+00	USH 10	270	2
1030+00 - 1045+00	USH 10	270	2
1045+00 - 1060+00	USH 10	270	2
1060+00 - 1075+00	USH 10	270	2
1075+00 - 1090+00	USH 10	270	2
1090+00 - 1105+00	USH 10	270	2
1105+00 - 1119+83	USH 10	270	2
PROJECT TOTAL		7,950	48

ADJUSTING STEEL PLATE BEAM GUARD

					614.0400 ADJUSTING STEEL PLATE BEAM GUARD LF	614.0950 REPLACING GUARDRAIL POSTS & BLOCKS EACH	614.0951 REPLACING GUARDRAIL RAIL & HARDWARE LF
STATION	TO	STATION	DIR	LOCATION			
PROJECT 1500-72-60							
877+20	-	879+75	RT	USH 10	250	---	---
877+88	-	880+18	LT	USH 10	225	---	---
956+17	-	956+76	RT	USH 10	90	---	---
1090+55	-	1092+60	RT	USH 10	200	---	---
1091+01	-	1092+53	LT	USH 10	150	---	---
1102+82	-	1105+36	LT	USH 10	250	---	---
1102+91	-	1105+45	RT	USH 10	250	---	---
UNDISTRIBUTED				USH 10	---	5	50
PROJECT TOTALS					1,415	5	50

CONCRETE CURB AND GUTTER

			204.0110 REMOVING ASPHALTIC SURFACE SY	204.0150 REMOVING CURB & GUTTER LF	601.0553 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D LF	650.5500 CONSTRUCTION STAKING CURB GUTTER AND CURB & GUTTER LF	690.0150 * SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
STATION TO STATION	DIR	LOCATION						
PROJECT 1500-72-60								
593+14 - 593+30	RT	USH 10	7	32	32	---	36	6
613+23 - 613+28	RT	USH 10	3	12	12	---	16	6
667+14 - 667+22	LT	USH 10	6	26	26	---	30	6
667+87 - 668+01	LT	USH 10	3	15	15	---	19	6
728+02 - 728+28	LT	USH 10	7	30	30	---	34	6
729+48 - 729+56	RT	USH 10	10	43	43	---	47	6
754+68 - 754+88	R/L	USH 10	4	20	20	---	24	6
754+90 - 754+97	RT	USH 10	3	15	15	---	19	6
755+47 - 755+54	RT	USH 10	6	25	25	---	29	6
897+75 - 897+90	LT	USH 10	3	15	15	---	19	6
898+33 - 898+38	LT	USH 10	3	15	15	---	19	6
954+07 - 955+00	LT	USH 10	28	125	125	125	129	6
984+38 - 984+55	RT	USH 10	4	17	17	---	21	6
985+32 - 985+58	RT	USH 10	7	30	30	---	34	6
1013+89 - 1014+05	RT	USH 10	6	25	25	---	29	6
PROJECT TOTALS			100	445	445	125	505	90

\* ADDITIONAL QUANTITIES SHOWN IN SAWING TABLE

CONCRETE SIDEWALK

			602.0405 CONCRETE SIDEWALK 4-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
STATION TO STATION	DIR	LOCATION		
PROJECT 1500-72-60				
602+80 - 602+95	RT	USH 10	50	20
602+95 - 603+10	LT	USH 10	50	20
PROJECT TOTALS			100	40

PREPARE FOUNDATION FOR ASPHALTIC PAVING  
1500-72-60

			211.0100 PREPARE FOUNDATION FOR ASPHALTIC PAVING 1500-72-60 LS
STATION TO STATION		LOCATION	
CATEGORY 0010			
577+25	-	1119+83	STH 13
PROJECT TOTALS			1

ADJUSTING INLET COVERS

			611.8115 ADJUSTING INLET COVERS EACH
STATION	DIR	LOCATION	
PROJECT 1500-72-60			
593+25	LT	USH 10 EB	1
PROJECT TOTALS			1

MARKERS CULVERT ENDS

			633.5200 MARKERS CULVERT ENDS EACH
STATION	DIR	LOCATION	
PROJECT 1500-72-60			
603+00	RT	USH 10	1
603+25	LT	USH 10	1
667+25	LT	USH 10	1
1038+75	RT	USH 10	1
1069+25	LT	USH 10	1
1069+50	RT	USH 10	1
1070+25	LT	USH 10	1
1070+50	RT	USH 10	1
PROJECT TOTALS			8

ASPHALTIC ITEMS

STATION	TO	STATION	LOCATION	204.0115	204.0120	455.0605	HMA			460.4110.S	465.0110	465.0315	465.0475
				REMOVING ASPHALTIC SURFACE BUTT JOINTS	REMOVING ASPHALTIC SURFACE MILLING		PAVEMENT 4 MT 58-28 S			REHEATING HMA  PAVEMENT	ASPHALTIC SURFACE PATCHING	ASPHALTIC FLUMES	ASPHALTIC CENTERLINE RUMBLE STRIPS 2-LANE RURAL
				SY	SY		460.6224	PWL  DENSITY INCENTIVE	PWL  AIR VOIDS	LONGITUDINAL  JOINTS	TON	SY	LF
				SY	SY	TACK COAT GAL	TON	TON *	TON **	LF			
577+00	-	595+00	USH 10	20	8,190	570	940	550	690	1,800	---	---	1,400
595+00	-	610+00	USH 10	---	5,440	380	630	460	580	1,500	---	---	1,500
610+00	-	625+00	USH 10	7	6,110	430	700	460	580	1,500	---	---	1,100
625+00	-	640+00	USH 10	7	6,390	450	730	460	580	1,500	---	---	1,100
640+00	-	655+00	USH 10	---	5,000	350	580	460	580	1,500	---	---	1,500
655+00	-	670+00	USH 10	13	5,950	420	680	460	580	1,500	---	20	1,100
670+00	-	685+00	USH 10	---	5,000	350	580	460	580	1,500	---	---	1,500
685+00	-	700+00	USH 10	---	5,100	360	590	460	580	1,500	---	27	1,500
700+00	-	715+00	USH 10	13	6,170	430	710	460	580	1,500	---	---	1,100
715+00	-	730+00	USH 10	13	6,030	420	690	460	580	1,500	---	13	1,100
730+00	-	745+00	USH 10	---	5,080	360	580	460	580	1,500	---	---	1,500
745+00	-	759+19	USH 10	20	7,500	520	860	440	540	1,419	---	13	325
861+19	-	880+00	USH 10	7	6,760	470	780	580	720	1,881	---	---	1,881
880+00	-	895+00	USH 10	---	5,070	350	580	460	580	1,500	---	---	1,500
895+00	-	910+00	USH 10	13	6,000	420	690	460	580	1,500	---	7	1,100
910+00	-	925+00	USH 10	---	5,000	350	580	460	580	1,500	---	---	1,500
925+00	-	940+00	USH 10	---	5,000	350	580	460	580	1,500	---	---	1,500
940+00	-	955+00	USH 10	---	5,250	370	600	460	580	1,500	---	---	1,500
955+00	-	970+00	USH 10	13	6,040	420	690	460	580	1,500	---	13	1,100
970+00	-	985+00	USH 10	---	5,250	370	600	460	580	1,500	---	---	1,300
985+00	-	1000+00	USH 10	7	5,290	370	610	460	580	1,500	---	---	1,300
1000+00	-	1015+00	USH 10	13	6,020	420	690	460	580	1,500	---	---	1,100
1015+00	-	1030+00	USH 10	---	5,140	360	590	460	580	1,500	---	20	1,500
1030+00	-	1045+00	USH 10	---	5,000	350	580	460	580	1,500	---	---	1,500
1045+00	-	1060+00	USH 10	---	5,000	350	580	460	580	1,500	---	---	1,500
1060+00	-	1075+00	USH 10	13	5,910	410	680	460	580	1,500	---	20	1,100
1075+00	-	1090+00	USH 10	---	5,020	350	580	460	580	1,500	---	---	1,500
1090+00	-	1105+00	USH 10	---	5,910	410	680	460	580	1,500	---	---	1,500
1105+00	-	1119+83	USH 10	7	5,100	360	590	450	570	1,483	---	---	1,483
UNDISTRIBUTED				---	---	---	---	---	---	---	400	---	---
PROJECT TOTAL				167	164,720	11,520	18,950	13,520	17,020	44,083	400	133	38,589

\* Tonnage is eligible for Incentive Density PWL 460.2005 and Incentive Air Voids 460.2010.  
\*\* Tonage is eligible for Incentive Air Voids 460.2010 and density is tested for acceptance in those areas.

MAINTENANCE & REPAIR OF HAUL ROADS  
1500-72-60

				618.0100 MAINTENANCE & REPAIR OF HAUL ROADS EACH
STATION TO STATION			LOCATION	
PROJECT 1500-72-60				
577+00	-	1119+83	USH 10	1

MOBILIZATION

				619.0100
				MOBILIZATION
STATION TO STATION			LOCATION	EACH
PROJECT 1500-72-60				
577+00	-	1119+83	USH 10	1

PROJECT TOTALS 1

TRAFFIC CONTROL

LOCATION	ROADWAY	TRAFFIC CONTROL DRUMS APPROX. SERVICE PERIOD	643.0300 TRAFFIC CONTROL DRUMS		TRAFFIC CONTROL SIGNS PCMS SERVICE PERIOD	643.1050 TRAFFIC CONTROL SIGNS PCMS		TRAFFIC CONTROL SIGNS APPROX. SERVICE PERIOD	643.0900 TRAFFIC CONTROL SIGNS		REMARKS
		DAYS	NO.	DAYS	DAYS	NO.	DAYS	DAYS	NO.	DAYS	
PROJECT 1500-72-60											
BEGIN PROJECT	USH 10	0	0	0	7	1	7	40	7	280	SEE SDD 15C4-4 & SDD 15D39-1 TWO-WAY TWO LANE
CHURCH ST.	USH 10	10	10	100	0	0	0	40	5	200	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
RANHDOLPH ST.	USH 10	10	10	100	0	0	0	40	3	120	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
RUSCH RD.	USH 10	10	10	100	0	0	0	40	2	80	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
KEUER RD.	USH 10	10	10	100	0	0	0	40	6	240	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
HARVESTORE RD.	USH 10	10	10	100	0	0	0	40	4	160	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
BASTAIN RD.	USH 10	10	10	100	0	0	0	40	6	240	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
HACKER RD.	USH 10	10	10	100	0	0	0	40	6	240	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
END CONSTRUCTION	USH 10	0	0	0	0	0	0	40	7	280	SEE SDD 15C4-4 & SDD 15D39-1 TWO-WAY TWO LANE
BEGIN CONSTRUCTION	USH 10	0	0	0	0	0	0	40	7	280	SEE SDD 15C4-4 & SDD 15D39-1 TWO-WAY TWO LANE
LONG LAKE RD.	USH 10	10	10	100	0	0	0	40	5	200	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
OAKWOOD RD.	USH 10	10	10	100	0	0	0	40	5	200	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
MILLER RD.	USH 10	10	10	100	0	0	0	40	3	120	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
HICKORY HILLS RD.	USH 10	10	10	100	0	0	0	40	5	200	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
MAPLE ROCK RD.	USH 10	10	10	100	0	0	0	40	4	160	SEE SDD 15C4-4, TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL & SDD 15D28-3
END PROJECT	USH 10	0	0	0	7	1	7	40	7	280	SEE SDD 15C4-4 & SDD 15D39-1 TWO-WAY TWO LANE
BEAM GUARD AREAS	USH 10	7	10	70	0	0	0	40	7	280	SEE SDD 15D28-3
PROJECT TOTALS			1270			14			3,560		

TRAFFIC CONTROL

PROJECT	643.5000 TRAFFIC CONTROL EA
CATEGORY 0010	
1500-72-60	1

PAVEMENT MARKING

STATION TO STATION	LOCATION	646.4520	646.1020		646.3020	646.5020	646.5120	646.8120	646.8220	646.8020	648.0100	649.0105
		MARKING LINE SAME DAY EPOXY 4-INCH	MARKING LINE EPOXY 4-INCH		MARKING LINE EPOXY 8-INCH	MARKING ARROW EPOXY	MARKING WORD EPOXY	MARKING CURB EPOXY	MARKING ISLAND NOSE EPOXY	MARKING CORRUGATED MEDIAN EPOXY	LOCATING NO-PASSING ZONES	TEMPORARY MARKING LINE PAINT 4-INCH
			(WHITE)	(YELLOW)								
		(YELLOW)	(WHITE)	(YELLOW)	(WHITE)	(WHITE)	(WHITE)	(YELLOW)	(YELLOW)	(YELLOW)		(YELLOW)
		LF	LF	LF	LF	EACH	EACH	LF	EACH	SF	MI	LF
PROJECT 1500-72-60												
577+00 - 595+00	USH 10	1,930	3,600	1,930	350	---	---	---	---	---	0.34	1,930
595+00 - 610+00	USH 10	1,560	3,000	1,560	---	---	---	---	---	---	0.28	1,560
610+00 - 625+00	USH 10	2,360	3,000	2,360	100	---	---	---	---	---	0.28	2,360
625+00 - 640+00	USH 10	3,000	3,000	3,000	200	---	---	---	---	---	0.28	3,000
640+00 - 655+00	USH 10	3,000	3,000	3,000	---	---	---	---	---	---	0.28	3,000
655+00 - 670+00	USH 10	2,360	3,000	2,360	---	---	---	---	---	---	0.28	2,360
670+00 - 685+00	USH 10	600	3,000	600	---	---	---	---	---	---	0.28	600
685+00 - 700+00	USH 10	380	3,000	380	---	---	---	---	---	---	0.28	380
700+00 - 715+00	USH 10	380	3,000	380	---	---	---	---	---	---	0.28	380
715+00 - 730+00	USH 10	380	3,000	380	---	---	---	---	---	---	0.28	380
730+00 - 745+00	USH 10	580	3,000	580	---	---	---	---	---	---	0.28	580
745+00 - 759+19	USH 10	480	2,838	480	625	4	2	20	2	1,840	0.27	480
861+19 - 880+00	USH 10	2,720	3,762	2,720	---	---	---	---	---	---	0.36	2,720
880+00 - 895+00	USH 10	1,350	3,000	1,350	---	---	---	---	---	---	0.28	1,350
895+00 - 910+00	USH 10	3,000	3,000	3,000	---	---	---	---	---	---	0.28	3,000
910+00 - 925+00	USH 10	1,840	3,000	1,840	---	---	---	---	---	---	0.28	1,840
925+00 - 940+00	USH 10	1,950	3,000	1,950	---	---	---	---	---	---	0.28	1,950
940+00 - 955+00	USH 10	2,930	3,000	2,930	---	---	---	---	---	---	0.28	2,930
955+00 - 970+00	USH 10	1,190	3,000	1,190	---	---	---	---	---	---	0.28	1,190
970+00 - 985+00	USH 10	380	3,000	380	---	---	---	---	---	---	0.28	380
985+00 - 1000+00	USH 10	380	3,000	380	---	---	---	---	---	---	0.28	380
1000+00 - 1015+00	USH 10	1,180	3,000	1,180	---	---	---	---	---	---	0.28	1,180
1015+00 - 1030+00	USH 10	2,850	3,000	2,850	---	---	---	---	---	---	0.28	2,850
1030+00 - 1045+00	USH 10	2,000	3,000	2,000	---	---	---	---	---	---	0.28	2,000
1045+00 - 1060+00	USH 10	1,080	3,000	1,080	---	---	---	---	---	---	0.28	1,080
1060+00 - 1075+00	USH 10	880	3,000	880	---	---	---	---	---	---	0.28	880
1075+00 - 1090+00	USH 10	380	3,000	380	---	---	---	---	---	---	0.28	380
1090+00 - 1105+00	USH 10	380	3,000	380	---	---	---	---	---	---	0.28	380
1105+00 - 1119+83	USH 10	370	2,966	370	---	---	---	---	---	---	0.28	370
PROJECT TOTALS		41,870	130,036		1,275	4	2	20	2	1,840	8.35	41,870

NOTE: TEMPORARY PAVEMENT MARKING PAINT APPLIED TO MILLED SURFACE

NOTE: PAVEMENT MARKING SAME DAY EPOXY FOR APPLICATION BEFORE CENTER LINE RUMBLE STRIP PLACED

NOTE: PAVEMENT MARKING EPOXY 4-INCH (YELLOW) FOR APPLICATION AFTER CENTER LINE RUMBLE STRIP PLACED

CONSTRUCTION STAKING

		650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE
STATION TO STATION	LOCATION	LF
PROJECT 1500-72-60		
577+00 - 595+00	USH 10	1800
595+00 - 610+00	USH 10	1500
610+00 - 625+00	USH 10	1500
625+00 - 640+00	USH 10	1500
640+00 - 655+00	USH 10	1500
655+00 - 670+00	USH 10	1500
670+00 - 685+00	USH 10	1500
685+00 - 700+00	USH 10	1500
700+00 - 715+00	USH 10	1500
715+00 - 730+00	USH 10	1500
730+00 - 745+00	USH 10	1500
745+00 - 759+19	USH 10	1419
861+19 - 880+00	USH 10	1881
880+00 - 895+00	USH 10	1500
895+00 - 910+00	USH 10	1500
910+00 - 925+00	USH 10	1500
925+00 - 940+00	USH 10	1500
940+00 - 955+00	USH 10	1500
955+00 - 970+00	USH 10	1500
970+00 - 985+00	USH 10	1500
985+00 - 1000+00	USH 10	1500
1000+00 - 1015+00	USH 10	1500
1015+00 - 1030+00	USH 10	1500
1030+00 - 1045+00	USH 10	1500
1045+00 - 1060+00	USH 10	1500
1060+00 - 1075+00	USH 10	1500
1075+00 - 1090+00	USH 10	1500
1090+00 - 1105+00	USH 10	1500
1105+00 - 1119+83	USH 10	1483

TEMPORARY PORTABLE RUMBLE STRIPS

PROJECT	643.0310.S
	TEMPORARY PORTABLE RUMBLE STRIPS
	LS
1500-72-60	1

PROJECT TOTAL 1

CONSTRUCTION STAKING SUPPLEMENTAL  
CONTROL 1500-72-60

PROJECT	650.9910
	CONSTRUCTION STAKING SUPPLEMENTAL CONTROL
	1500-72-60 LS
1500-72-60	1

PROJECT TOTAL 1

MAINTENANCE

			SPV.0060.01 ASPHALTIC FLUME MAINTENANCE	SPV.0090.01 CURB AND GUTTER MAINTENANCE
STATION TO STATION	DIR	LOCATION	EACH	LF
PROJECT 1500-72-60				
577+00 - 595+00		USH 10	2	225
595+00 - 610+00		USH 10	---	---
610+00 - 625+00		USH 10	2	140
625+00 - 640+00		USH 10	2	150
640+00 - 655+00		USH 10	---	---
655+00 - 670+00		USH 10	1	220
670+00 - 685+00		USH 10	---	---
685+00 - 700+00		USH 10	---	---
700+00 - 715+00		USH 10	---	310
715+00 - 730+00		USH 10	2	200
730+00 - 745+00		USH 10	2	---
745+00 - 759+19		USH 10	---	265
861+19 - 880+00		USH 10	---	---
880+00 - 895+00		USH 10	---	---
895+00 - 910+00		USH 10	2	230
910+00 - 925+00		USH 10	---	---
925+00 - 940+00		USH 10	---	---
940+00 - 955+00		USH 10	---	---
955+00 - 970+00		USH 10	1	215
970+00 - 985+00		USH 10	---	75
985+00 - 1000+00		USH 10	2	40
1000+00 - 1015+00		USH 10	1	345
1015+00 - 1030+00		USH 10	---	---
1030+00 - 1045+00		USH 10	---	---
1045+00 - 1060+00		USH 10	---	---
1060+00 - 1075+00		USH 10	1	285
1075+00 - 1090+00		USH 10	---	---
1090+00 - 1105+00		USH 10	---	---
1105+00 - 1119+83		USH 10	---	---
PROJECT TOTAL			18	2,700

ASPHALTIC FLUME RESTORATION

		SPV.0060.02 ASPHALTIC FLUME RESTORATION	* TOPSOIL	* FERTILIZER TYPE B	* SEEDING MIXTURE NO. 30 LB	* EROSION MAT CLASS I TYPE A SY
STATION TO STATION	LOCATION	EACH	SY	CWT	LB	SY
PROJECT 1500-72-60						
655+00 - 670+00	USH 10	3	40	0.03	1	40
685+00 - 700+00	USH 10	4	53	0.03	1	53
715+00 - 730+00	USH 10	2	27	0.02	1	27
745+00 - 759+19	USH 10	2	27	0.02	1	27
895+00 - 910+00	USH 10	1	13	0.01	1	13
955+00 - 970+00	USH 10	2	27	0.02	1	27
1015+00 - 1030+00	USH 10	3	40	0.03	1	40
1060+00 - 1075+00	USH 10	3	40	0.03	1	40
PROJECT TOTALS		20	267	0.17	8	267

\* QUANTITIES ARE FOR INFORMATION ONLY

SAW CUTTING

		690.0150 * SAWING ASPHALT LF
STATION TO STATION	LOCATION	
PROJECT 1500-72-60		
577+25 - 595+00	USH 10	80
610+00 - 625+00	USH 10	30
625+00 - 640+00	USH 10	30
655+00 - 670+00	USH 10	50
700+00 - 715+00	USH 10	50
715+00 - 730+00	USH 10	50
745+00 - 759+19	USH 10	80
861+19 - 880+00	USH 10	30
895+00 - 910+00	USH 10	50
955+00 - 970+00	USH 10	50
985+00 - 1000+00	USH 10	30
1000+00 - 1015+00	USH 10	50
1060+00 - 1075+00	USH 10	50
1105+00 - 1119+83	USH 10	30
PROJECT TOTAL		660

\* ADDITIONAL QUANTITIES SHOWN IN CURB & GUTTER TABLE

HMA PAVEMENT PWL

		SPV.0060.03 HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP VOLUMETRICS EACH	SPV.0060.04 HMA PERCENT WITHIN LIMITS (PWL) TEST STRIP DENSITY EACH
STATION TO STATION	LOCATION		
PROJECT 1500-72-60			
577+25 - 1119+83	USH 10	1	1
PROJECT TOTAL		1	1

CURB & GUTTER RESTORATION

			SPV.0090.02 CURB AND GUTTER RESTORATION LF	* SALVAGED TOPSOIL SY	* FERTILIZER TYPE B CWT	* SEEDING MIXTURE NO. 30 LB	* EROSION MAT CLASS I TYPE A SY
STATION TO STATION	DIR	LOCATION					
PROJECT 1500-72-60							
593+14 - 593+30	RT	USH 10	32	7	0.01	0.2	7
613+23 - 613+28	RT	USH 10	12	3	0.01	0.1	3
667+14 - 667+22	LT	USH 10	26	6	0.01	0.2	6
667+87 - 668+01	LT	USH 10	15	3	0.01	0.1	3
728+02 - 728+28	LT	USH 10	30	7	0.01	0.2	7
729+48 - 729+56	RT	USH 10	43	10	0.01	0.3	10
754+68 - 754+88	R/L	USH 10	20	4	0.01	0.1	4
754+90 - 754+97	RT	USH 10	15	3	0.01	0.1	3
755+47 - 755+54	RT	USH 10	25	6	0.01	0.2	6
897+75 - 897+90	LT	USH 10	15	3	0.01	0.1	3
898+33 - 898+38	LT	USH 10	15	3	0.01	0.1	3
954+07 - 955+00	LT	USH 10	125	28	0.02	0.8	28
984+38 - 984+55	RT	USH 10	17	4	0.01	0.1	4
985+32 - 985+58	RT	USH 10	30	7	0.01	0.2	7
1013+89 - 1014+05	RT	USH 10	25	6	0.01	0.2	6
PROJECT TOTALS			445	99	0.16	3	99

\* QUANTITIES ARE FOR INFORMATION ONLY



ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637. 2210 SIGNS TYPE II REFLECTIVE TYPE H S. F.	637. 2230 SIGNS TYPE II REFLECTIVE TYPE F S. F.	638. 2602 REMOVING SIGNS TYPE II EACH	REMARKS
1	USH 10, W. OF CHURCH ST	W14- 3	48" X 36"	---	5. 56	1	
2	"	R2- 1	24" X 30"	5. 00	---	1	45 MPH
3	CHURCH ST	R1- 1	30" X 30"	5. 18	---	1	
4	"	R1- 1	30" X 30"	5. 18	---	1	
5	USH 10, E. OF CHURCH ST	R2- 1	24" X 30"	5. 00	---	1	45 MPH
6	"	R2- 1	24" X 30"	5. 00	---	1	55 MPH
7	"	W14- 3	48" X 36"	---	5. 56	1	
8	"	W3- 5	36" X 36"	---	9. 00	---	45 MPH, MOUNT TO BACK OF SIGN 7
9	"	W11- 8	30" X 30"	---	6. 25	1	
10	"	D1- 1	84" X 15"	8. 75	---	1	SEE SIGN DETAILS
11	RANDOLPH ST	R1- 1	30" X 30"	5. 18	---	1	
12	USH 10, E. OF RANDOLPH ST	I2- 3	72" X 24"	12. 00	---	1	SEE SIGN DETAILS
13	"	D1- 1	84" X 15"	8. 75	---	1	SEE SIGN DETAILS
14	"	W11- 8	30" X 30"	---	6. 25	1	
15	"	D1- 1	72" X 15"	7. 50	---	1	SEE SIGN DETAILS
16	RUSCH RD	R1- 1	30" X 30"	5. 18	---	1	
17	USH 10, E. OF RUSCH RD	D1- 1	72" X 15"	7. 50	---	1	SEE SIGN DETAILS
18	USH 10, W. OF KEUER RD	D1- 61	54" X 24"	9. 00	---	1	SEE SIGN DETAILS
19	KEUER RD	R1- 1	30" X 30"	5. 18	---	1	
20	"	R1- 1	30" X 30"	5. 18	---	1	
21	USH 10, E. OF KEUER RD	D1- 61	54" X 24"	9. 00	---	1	SEE SIGN DETAILS
22	"	D1- 61	78" X 24"	13. 00	---	1	SEE SIGN DETAILS
23	HARVESTORE RD	R1- 1	30" X 30"	5. 18	---	1	
24	"	R1- 1	30" X 30"	5. 18	---	1	
25	USH 10, E. OF HARVESTORE RD	D1- 61	78" X 24"	13. 00	---	1	SEE SIGN DETAILS
26	"	D1- 61	60" X 24"	10. 00	---	1	SEE SIGN DETAILS
27	BASTIAN RD	R1- 1	30" X 30"	5. 18	---	1	
28	"	R1- 1	30" X 30"	5. 18	---	1	
29	USH 10, E. OF BASTIAN RD	W3- 5	36" X 36"	---	9. 00	---	50 MPH
30	"	D1- 61	60" X 24"	10. 00	---	1	SEE SIGN DETAILS
31	"	R2- 1	24" X 30"	5. 00	---	1	50 MPH
32	"	W14- 3	48" X 36"	---	5. 56	1	
33	"	W3- 5	36" X 36"	---	9. 00	---	55 MPH, MOUNT TO BACK OF SIGN 32
34	"	J1- 1	24" X 39"	6. 50	---	1	SEE PLAN SHEET
34A	"	D2- 1	78" X 15"	8. 13	---	1	SEE SIGN DETAILS
35	"	J4- 1	24" X 36"	6. 00	---	1	SEE PLAN SHEET

PAGE SUBTOTALS

200. 93

56. 18

33

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637. 2210 SIGNS TYPE II REFLECTIVE TYPE H S. F.	637. 2230 SIGNS TYPE II REFLECTIVE TYPE F S. F.	638. 2602 REMOVING SIGNS TYPE II EACH	REMARKS
36	USH 10, W. OF CTH HR	R4- 7	36" X 48"	12. 00	---	1	
37	"	R5- 1	36" X 36"	9. 00	---	1	
38	"	W6- 3	36" X 36"	---	9. 00	---	MOUNT TO BACK OF SIGN 37
39	"	R4- 7	24" X 30"	5. 00	---	---	
40	"	J13- 1	24" X 45"	7. 50	---	1	SEE PLAN SHEET
41	"	R5- 1	30" X 30"	6. 25	---	---	MOUNT TO BACK OF SIGN 40
42	HACKER RD	R1- 1	30" X 30"	5. 18	---	1	
43	CTH HR	R1- 1	36" X 36"	7. 46	---	---	
44	"	J13- 1	24" X 45"	7. 50	---	1	SEE PLAN SHEET
45	USH 10, E. OF CTH HR	R5- 1	30" X 30"	6. 25	---	1	
46	"	J13- 1	24" X 45"	7. 50	---	---	MOUNT TO BACK OF SIGN 45
47	"	R4- 7	24" X 30"	5. 00	---	1	
48	"	R4- 7	24" X 30"	5. 00	---	1	
49A	"	I 2- 3	60" X 24"	10. 00	---	1	SEE SIGN DETAILS
49	"	J4- 1	24" X 36"	6. 00	---	1	
50	"	R5- 1	30" X 30"	6. 25	---	---	MOUNT TO BACK OF SIGN 49
51	USH 10, W. OF LONG LAKE RD	J4- 1	24" X 36"	6. 00	---	1	SEE PLAN SHEET
52	"	R2- 1	24" X 30"	5. 00	---	1	55 MPH
53	"	R2- 1	24" X 30"	5. 00	---	1	35 MPH
54A	"	I 2- 3	60" X 24"	10. 00	---	1	SEE SIGN DETAILS
54	"	W3- 5	36" X 36"	---	9. 00	1	35 MPH
55A	"	D2- 3	84" X 36"	21. 00	---	1	SEE SIGN DETAILS
55	"	W14- 3	48" X 36"	---	5. 56	1	
56	"	W14- 3	48" X 36"	---	5. 56	1	
57	"	W1- 2R	30" X 30"	---	6. 25	1	
58	"	W2- 1	30" X 30"	---	6. 25	1	
59	"	I 2- 2	66" X 15"	6. 88	---	1	SEE SIGN DETAILS
60	LONG LAKE RD	R1- 1	30" X 30"	5. 18	---	1	
61	"	R1- 1	30" X 30"	5. 18	---	1	
62	"	R1- 1	30" X 30"	5. 18	---	1	
63	USH 10, E. OF LONG LAKE RD	I 2- 2	78" X 15"	8. 13	---	1	SEE SIGN DETAILS
64	"	W1- 2L	30" X 30"	---	6. 25	1	
65	"	S3- 1	36" X 36"	---	9. 00	1	
66	"	W14- 3	48" X 36"	---	5. 56	1	
67	"	W14- 3	48" X 36"	---	5. 56	1	
68	"	W2- 1	30" X 30"	---	6. 25	1	
69	"	D1- 61	66" X 24"	11. 00	---	1	SEE SIGN DETAILS
70	OAKWOOD RD	R1- 1	30" X 30"	5. 18	---	1	
PAGE SUBTOTALS				199. 61	74. 24	32	

ERECTION & REMOVAL OF PERMANENT SIGNING, TYPE II

SIGN NO.	LOCATION	SIGN CODE	W X H	637. 2210 SIGNS TYPE II REFLECTIVE TYPE H S. F.	637. 2230 SIGNS TYPE II REFLECTIVE TYPE F S. F.	638. 2602 REMOVING SIGNS TYPE II EACH	REMARKS
71	OAKWOOD RD	R1- 1	30" X 30"	5. 18	---	1	
72	"	R1- 1	30" X 30"	5. 18	---	1	
73	"	R1- 1	30" X 30"	5. 18	---	1	
74	USH 10, E. OF OAKWOOD RD	W14- 3	48" X 36"	---	5. 56	1	
75	"	D1- 61	66" X 24"	11. 00	---	1	SEE SIGN DETAILS
76	MILLER RD	R1- 1	30" X 30"	5. 18	---	1	
77	USH 10, W. OF HICKORY HILLS RD	D1- 61	90" X 24"	15. 00	---	1	SEE SIGN DETAILS
78	"	W14- 3	48" X 36"	---	5. 56	1	
79	HICKORY HILLS RD	R1- 1	30" X 30"	5. 18	---	1	
80	"	R1- 1	30" X 30"	5. 18	---	1	
81	USH 10, E. OF HICKORY HILLS RD	D1- 61	90" X 24"	15. 00	---	1	SEE SIGN DETAILS
82	"	W14- 3	48" X 36"	---	5. 56	1	
83	"	W14- 3	48" X 36"	---	5. 56	1	
84	"	D1- 61	84" X 24"	14. 00	---	1	SEE SIGN DETAILS
85	"	W14- 3	48" X 36"	---	5. 56	1	
86	MAPLE ROCK RD	R1- 1	30" X 30"	5. 18	---	1	
87	"	R1- 1	30" X 30"	5. 18	---	1	
88	USH 10, E. OF MAPLE ROCK RD	D1- 61	84" X 24"	14. 00	---	1	SEE SIGN DETAILS
89	"	W3- 5	36" X 36"	---	9. 00	1	45 MPH
90	"	D2- 2	78" X 24"	13. 00	---	1	SEE SIGN DETAILS

PAGE SUBTOTALS

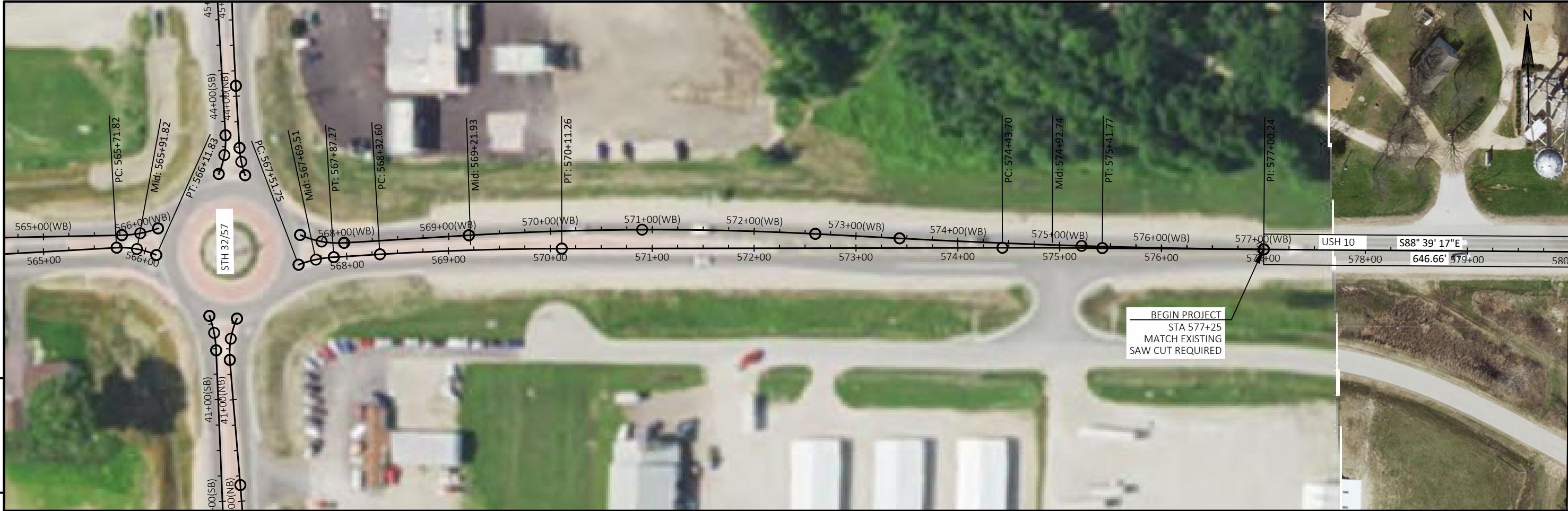
123. 44      36. 80      20

PROJECT TOTALS

523. 98      167. 22      85



5



MATCH LINE STA 580+00

5

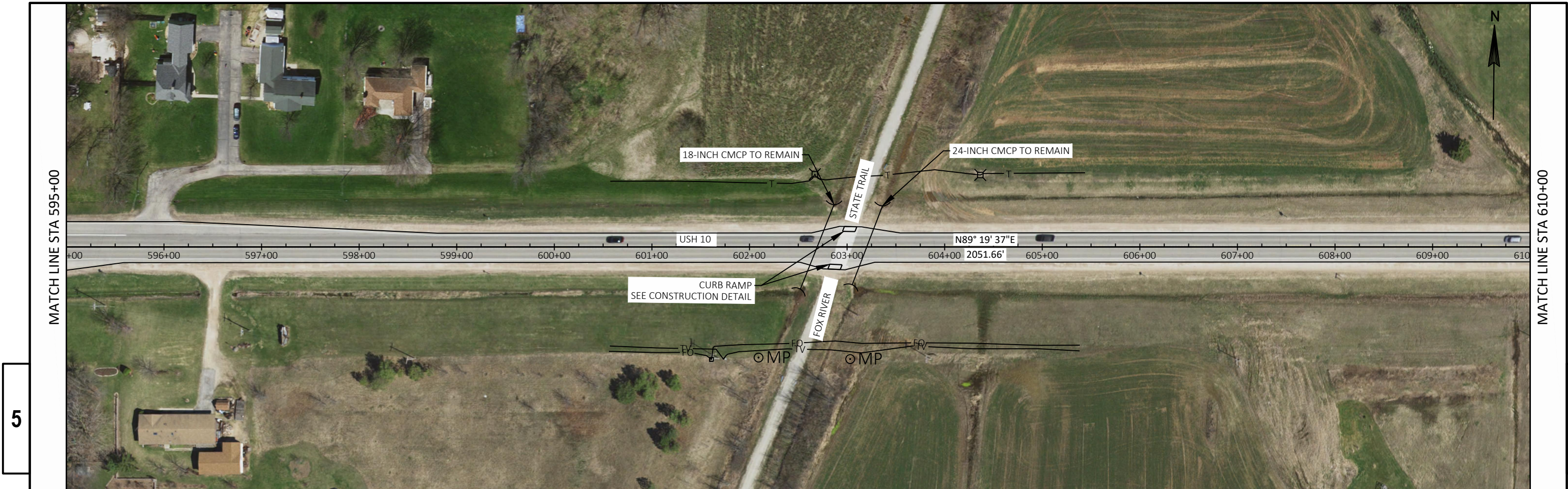
MATCH LINE STA 580+00



MATCH LINE STA 595+00

PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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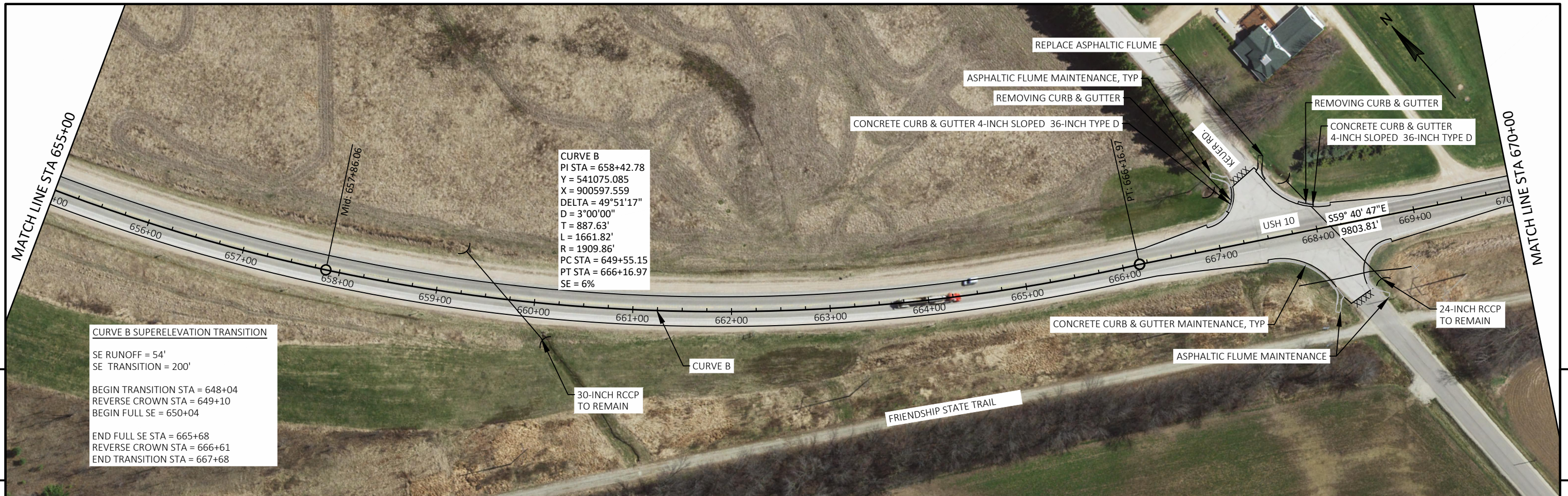






PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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5

MATCH LINE STA 865+00



5

MATCH LINE STA 880+00

MATCH LINE STA 880+00



PROJECT NO: 1500-72-60

HWY: USH 10

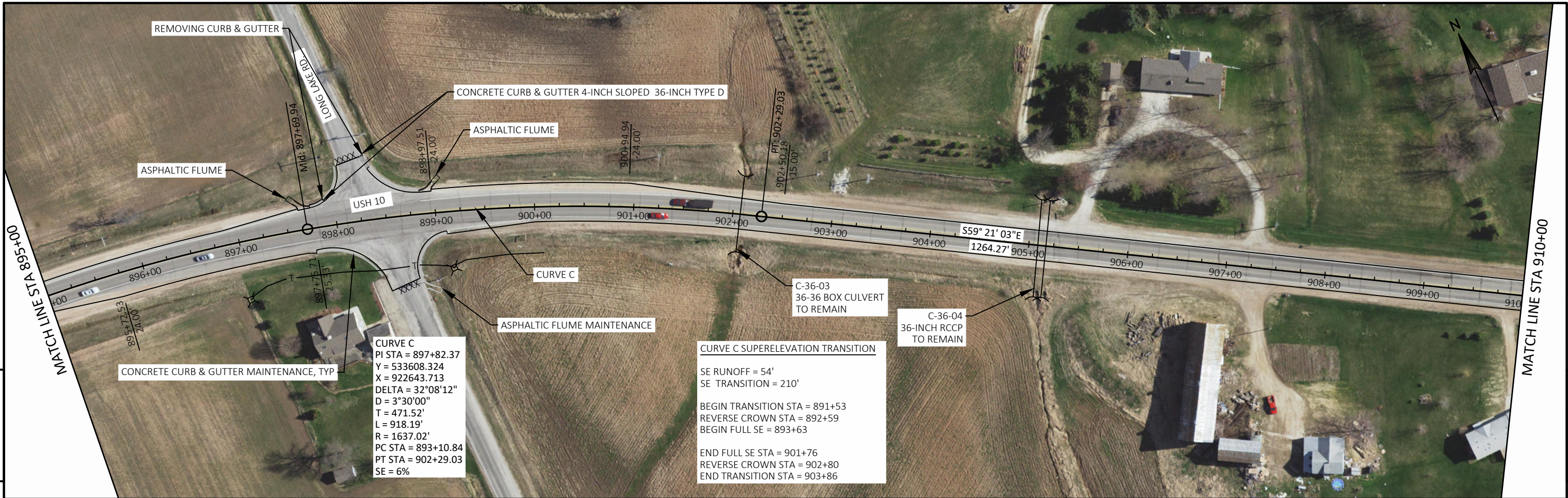
COUNTY: CALUMET

PLAN AND PROFILE: USH 10

SHEET

E





PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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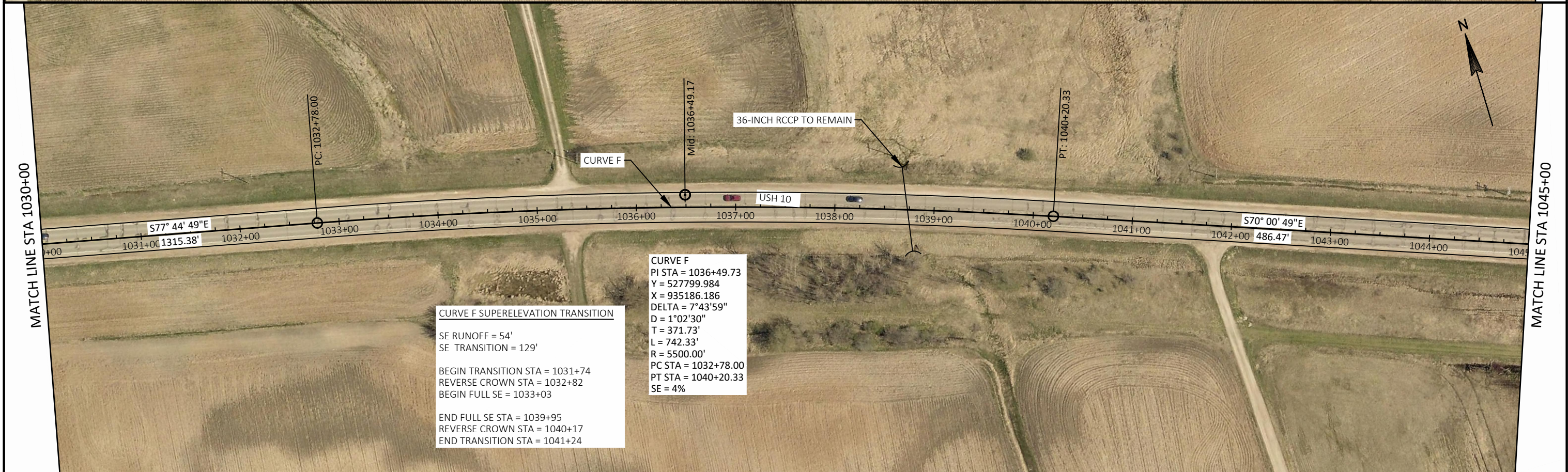






PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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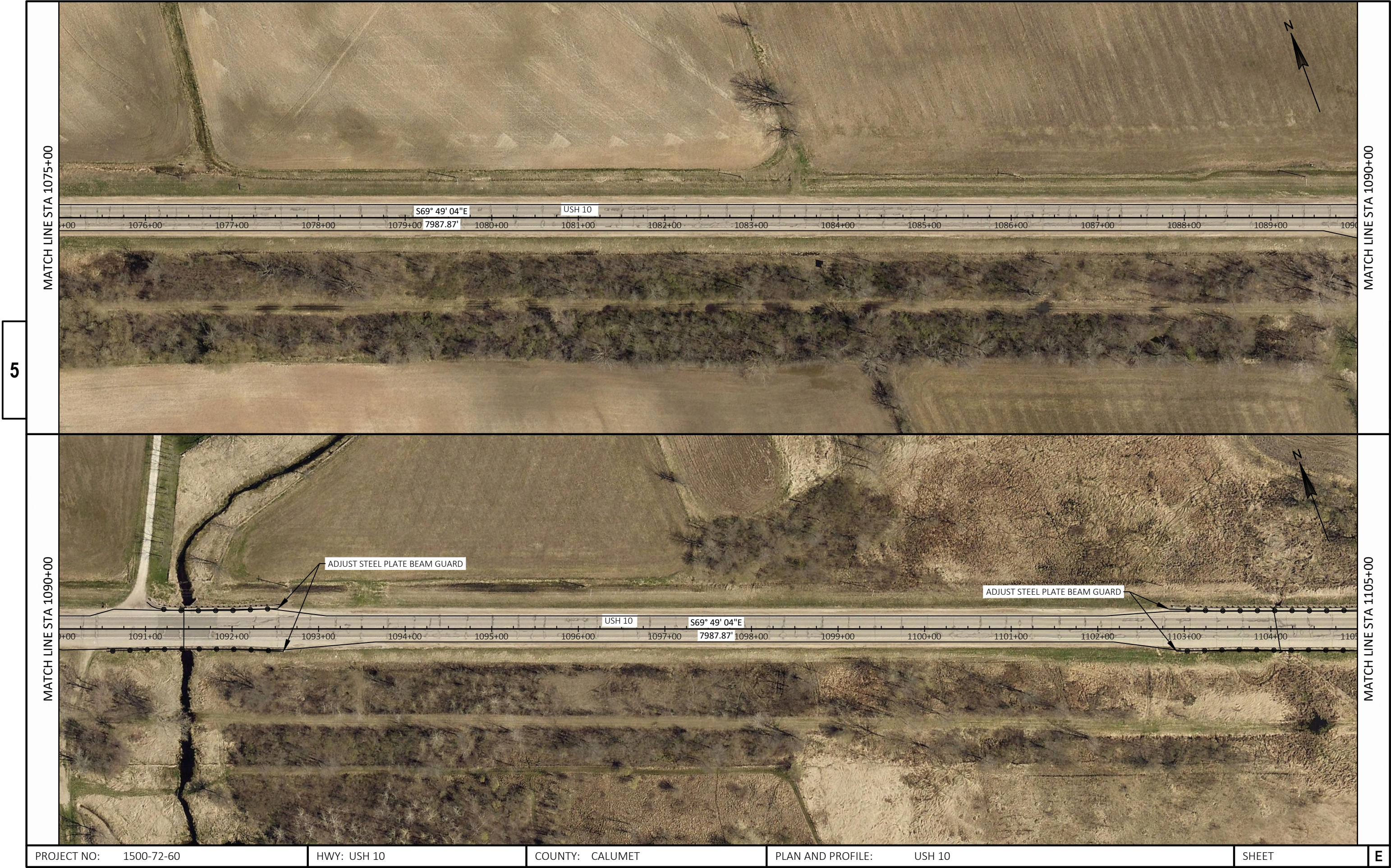
PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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PROJECT NO:	1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE:	USH 10	SHEET	E
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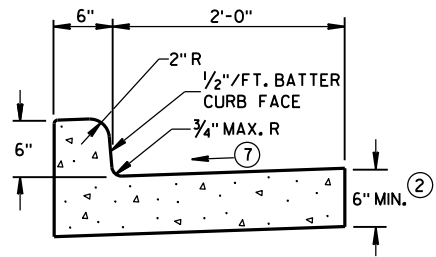


PROJECT NO: 1500-72-60	HWY: USH 10	COUNTY: CALUMET	PLAN AND PROFILE: USH 10	SHEET	E
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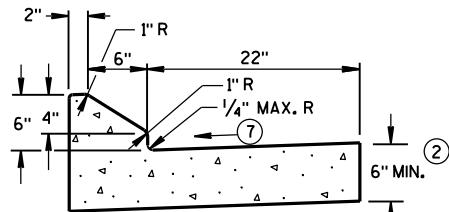


Standard Detail Drawing List

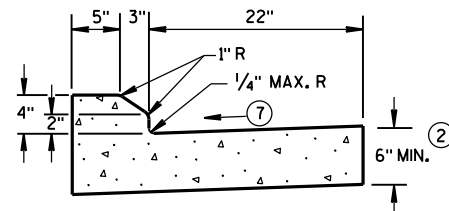
08D01-20A	CONCRETE CURB & GUTTER
08D01-20B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-19A	CURB RAMPS TYPES 1 AND 1-A
08D05-19B	CURB RAMPS TYPES 2 AND 3
08D05-19C	CURB RAMPS TYPES 4A AND 4A1
08D05-19D	CURB RAMPS TYPE 4B AND 4B1
08D05-19E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-19F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-19G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B15-10A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-10B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-10C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B29-01	SAFETY EDGE
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C04-04	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M. P. H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-14B	PAVEMENT MARKING WORDS
15C07-14C	PAVEMENT MARKING ARROWS
15C08-18A	LONGITUDINAL MARKING (MAINLINE)
15C08-18B	PAVEMENT MARKING (TURN LANES)
15C09-11B	TRUCK STOPPING LANE PAVEMENT MARKINGS
15C12-06	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04	MEDIAN ISLAND MARKING
15C19-05A	MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-01	TRAFFIC CONTROL, DROP-OFF SIGNING



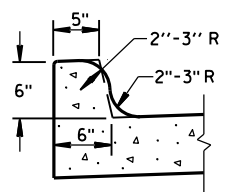
TYPES A<sup>①</sup> & D



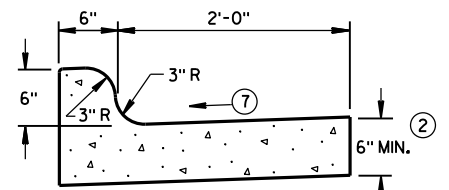
6" SLOPED CURB TYPES G<sup>①</sup> & J



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

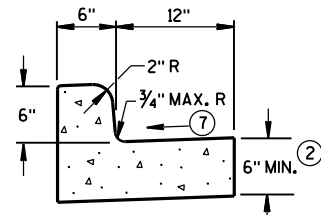


TYPES K<sup>①</sup> & L  
(OPTIONAL CURB SHAPE)



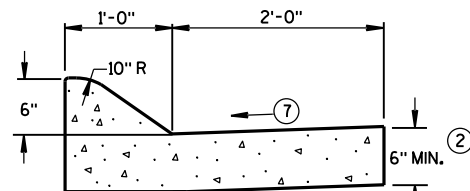
TYPES K<sup>①</sup> & L

CONCRETE CURB & GUTTER 30"

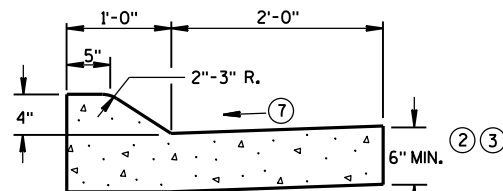


TYPES A<sup>①</sup> & D

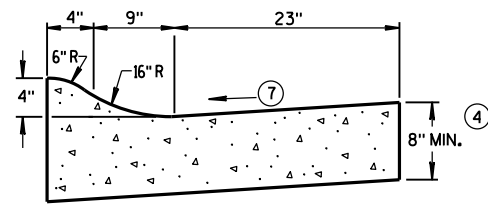
CONCRETE CURB & GUTTER 18"



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

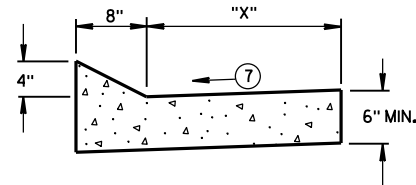


4" SLOPED CURB TYPES A<sup>①</sup> & D



4" SLOPED CURB TYPES R<sup>①</sup> & T<sup>⑤</sup>

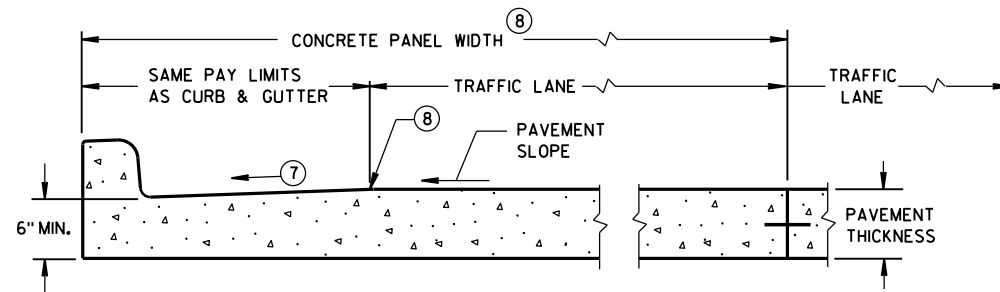
CONCRETE CURB & GUTTER 36"



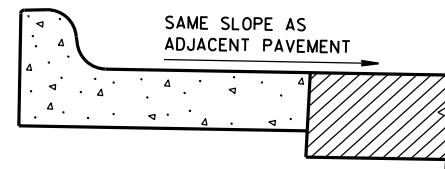
TYPES TBT & TBTT<sup>①</sup>

CONCRETE CURB & GUTTER

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



PARTIAL SECTION OF PAVEMENT  
WITH INTEGRAL CURB & GUTTER



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

## GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS 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 & GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB & GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

WHERE THE TRANSVERSE JOINTS IN THE PAVEMENT ARE REQUIRED TO BE SEALED, THE JOINTS IN THE INTEGRAL CURB AND GUTTER SHALL BE SEALED TO THE FACE OF CURB WITH THE SAME TYPE OF SEALANT. THE COST OF FURNISHING AND INSTALLING THIS SEALANT SHALL BE INCIDENTAL TO THE ITEM CONCRETE CURB AND GUTTER.

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 GUTTER 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 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.

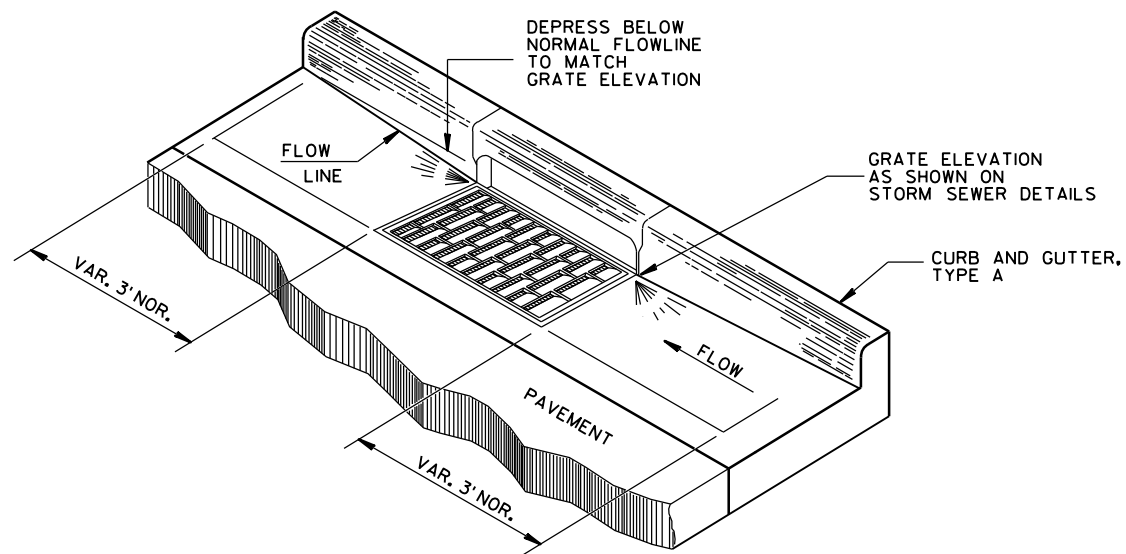
## PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

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

\* BIKE LANE IS NOT SHOWN.

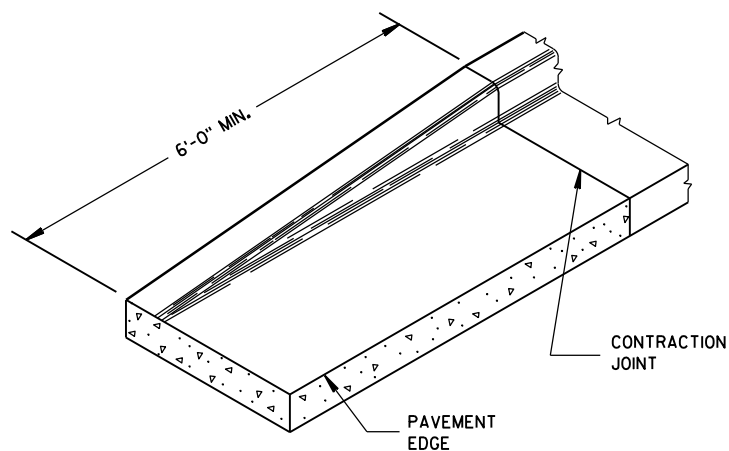
CONCRETE CURB & GUTTER

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

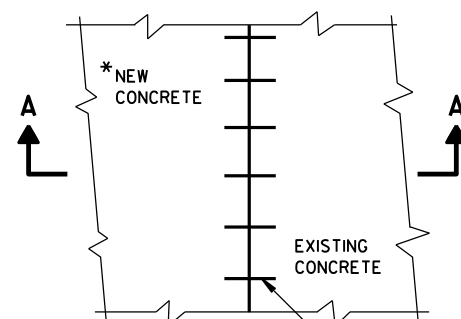


### DETAIL OF CURB AND GUTTER AT INLETS

(TYPE H INLET COVER SHOWN)

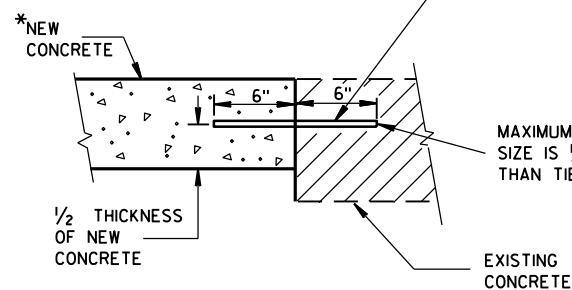


### END SECTION CURB & GUTTER



#### PLAN VIEW

\*NEW CURB & GUTTER, SURFACE DRAINS, CONCRETE PAVEMENT OR OTHER NEW CONCRETE.



### TIE BARS DRILLED INTO EXISTING PAVEMENT

NO. 6 TIE BARS SPACED 2'-6" C-C, INSTALLED PERPENDICULAR TO THE LONGITUDINAL JOINT.

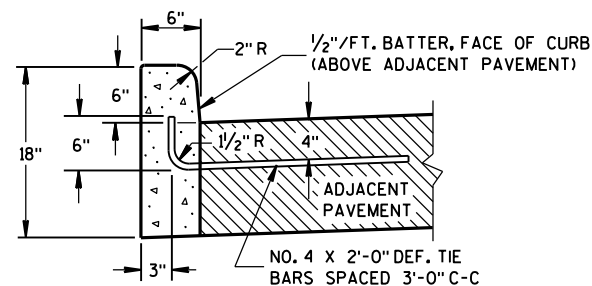
### GENERAL NOTES

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

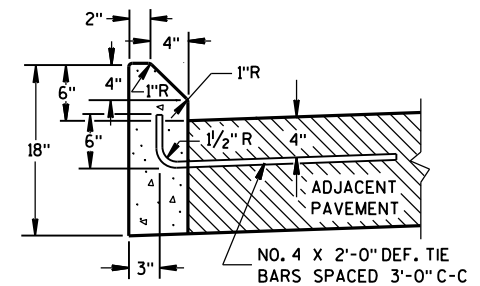
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

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 GUTTER TYPES A, G, K, R AND TBTT.
- ② THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
- ⑨ REFER TO SDD 8D18 AND SDD 8D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.

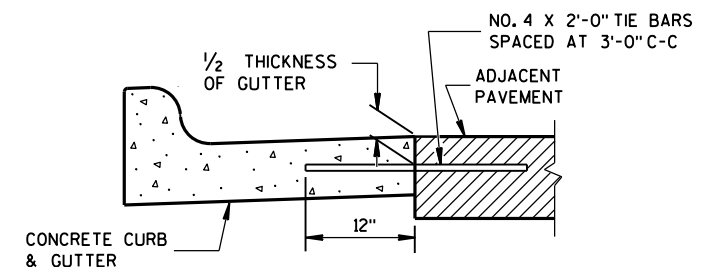


### TYPES A<sup>①</sup> & D

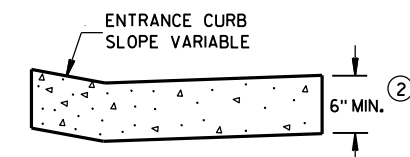


### TYPES G<sup>①</sup> & J

### CONCRETE CURB



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



### DRIVEWAY ENTRANCE CURB<sup>⑨</sup>

(WHEN DIRECTED BY THE ENGINEER)

### CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

June, 2017

DATE

FHWA

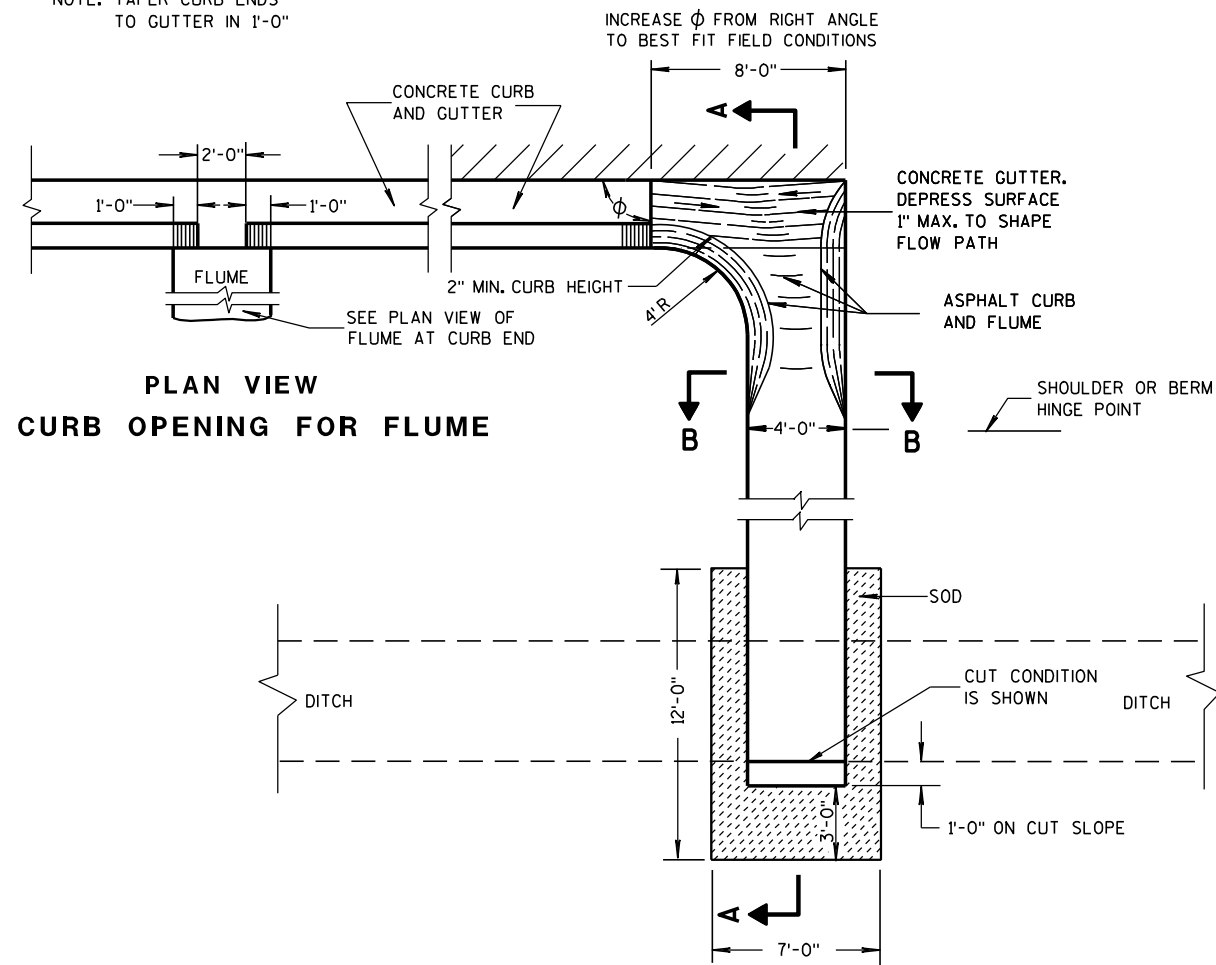
/S/ Rodney Taylor

ROADWAY STANDARDS DEVELOPMENT

UNIT SUPERVISOR

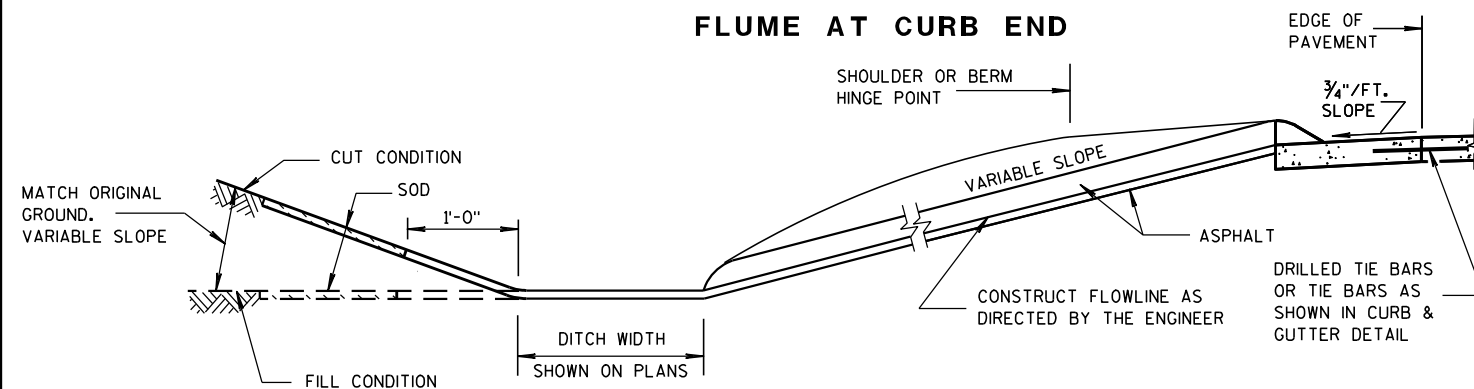
## ASPHALTIC FLUME

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

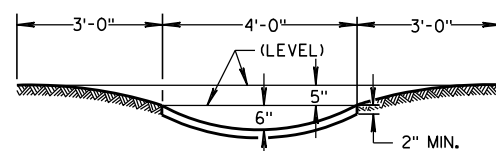


PLAN VIEW  
CURB OPENING FOR FLUME

PLAN VIEW  
FLUME AT CURB END



SECTION A-A



SECTION B-B

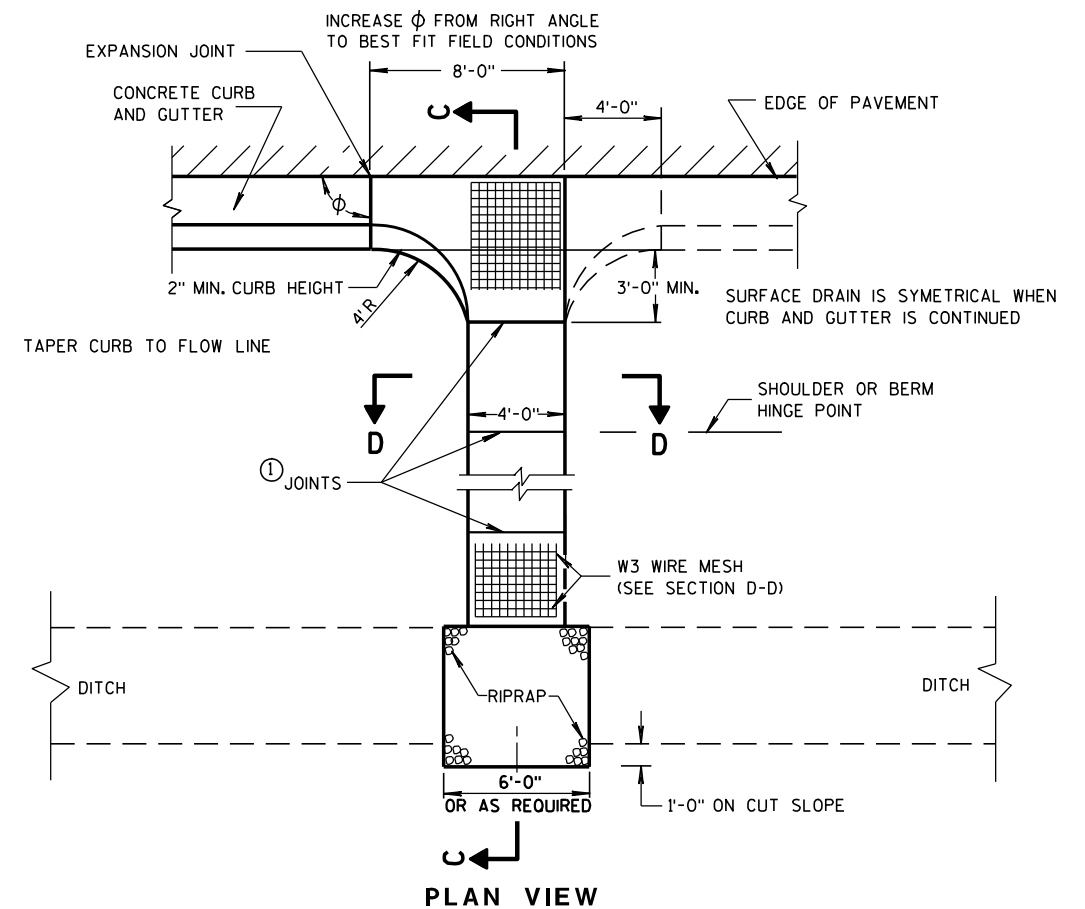
## GENERAL NOTES

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

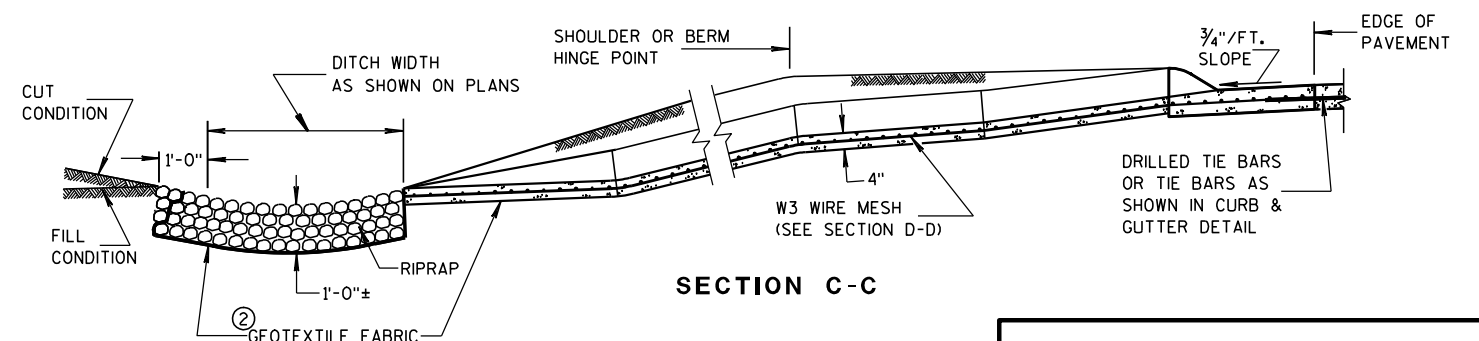
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

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

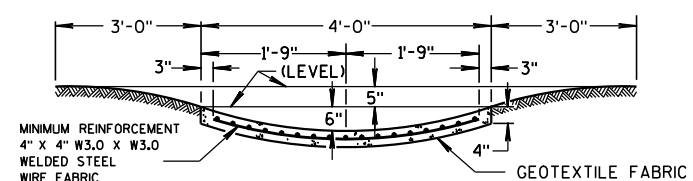
## ③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

## CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

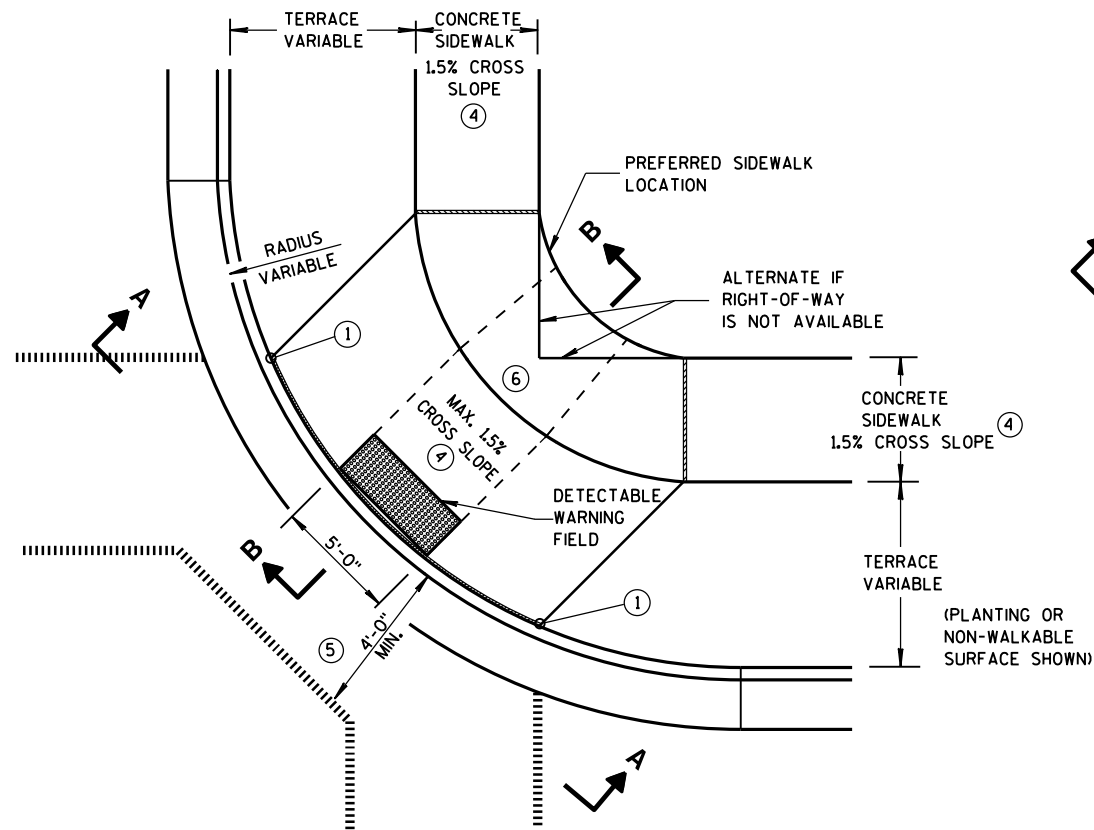
APPROVED

9-4-08

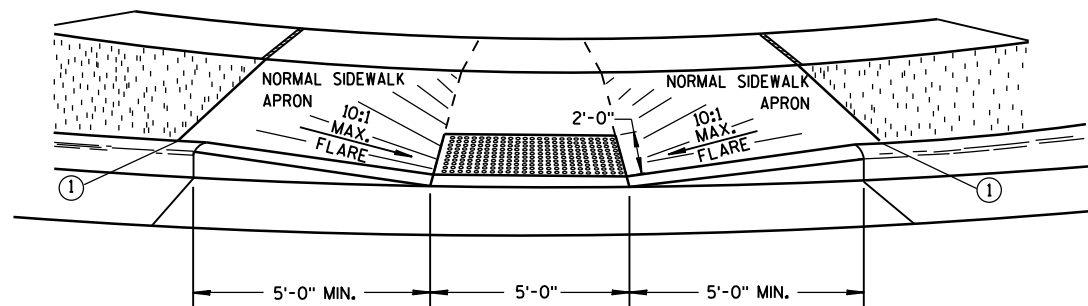
DATE

FHWA

/S/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER

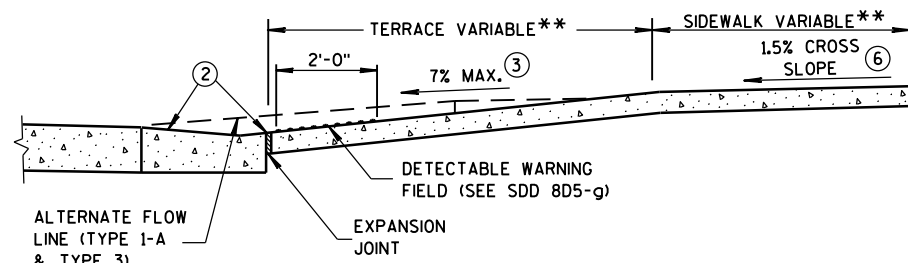


**PLAN VIEW  
TYPE 1 RAMP**  
(CENTER OF CORNER RADIUS)

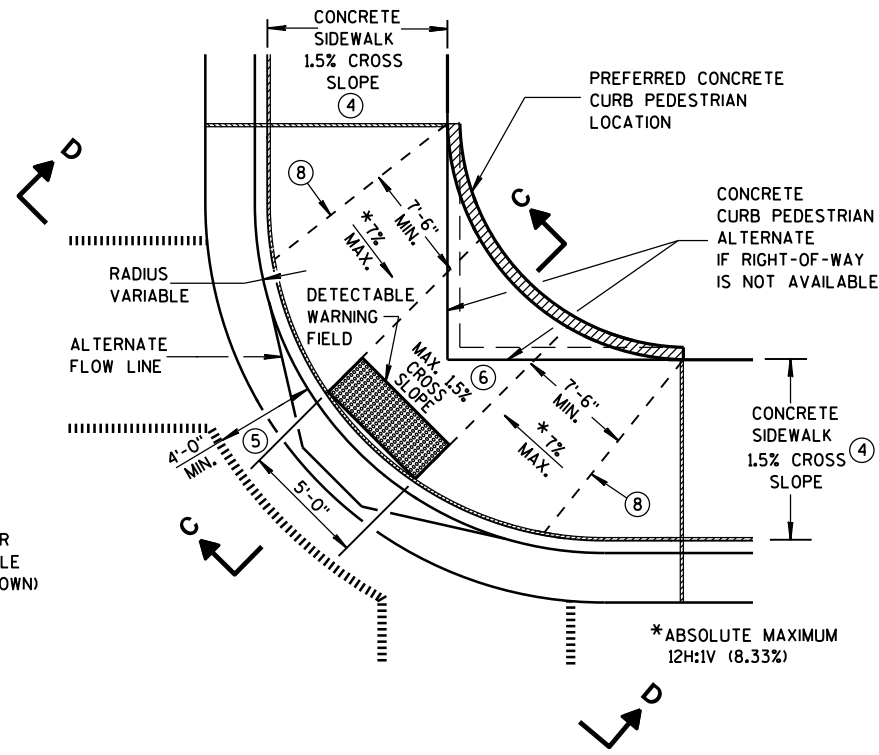


**VIEW A-A**

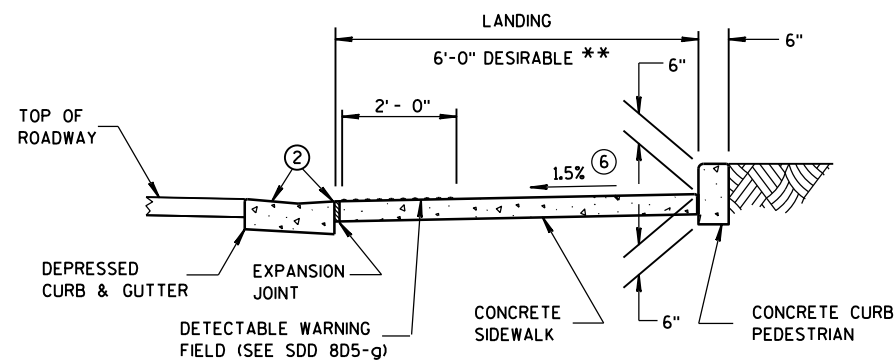
\*\* WIDTH SHOWN ELSEWHERE  
IN THE PLANS



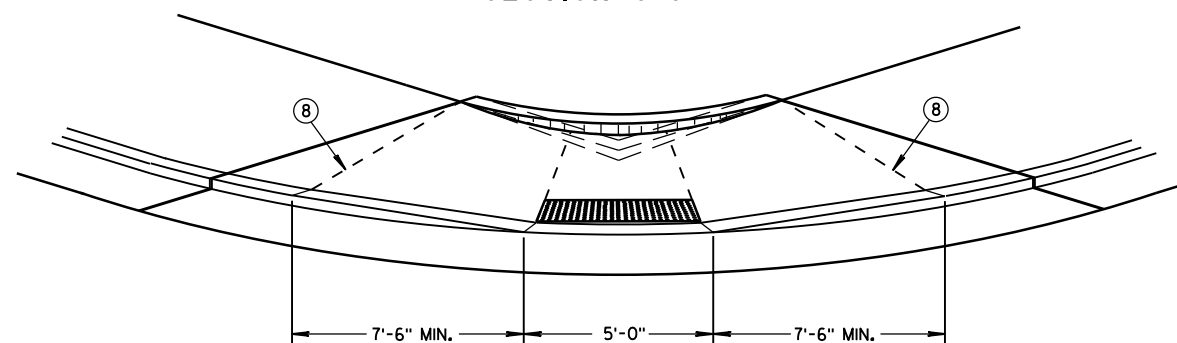
**SECTION B-B**



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



**SECTION C-C**



**VIEW D-D**

## GENERAL NOTES

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

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

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FIELD SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAL FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD".

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

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

- ① THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.
- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑤ PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA. (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

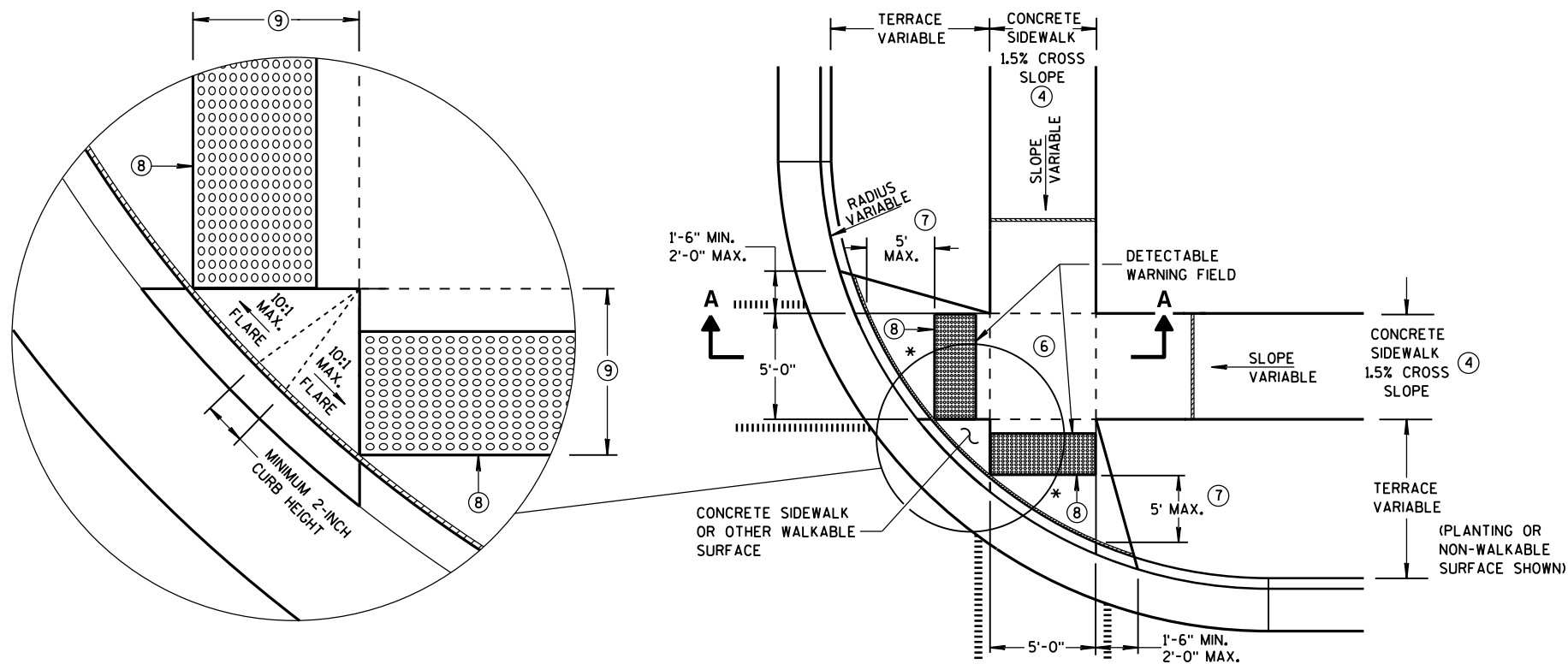
## LEGEND

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

**CURB RAMPS  
TYPES 1 AND 1-A**

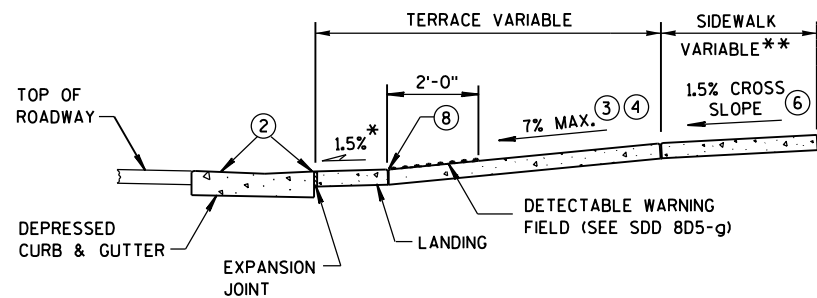
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION





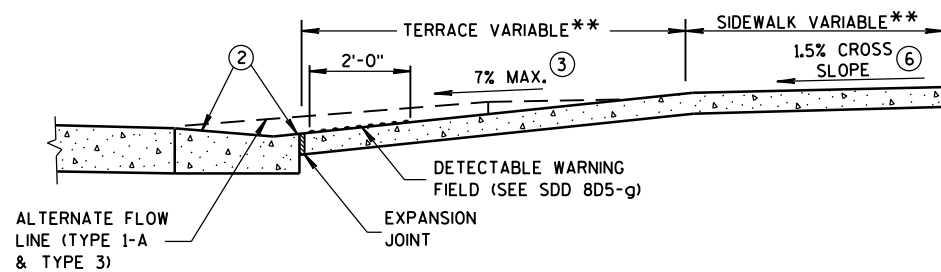
**PLAN VIEW  
TYPE 2 RAMP**  
(ON LINE WITH SIDEWALK)

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



**SECTION A-A**

\*\* WIDTH SHOWN ELSEWHERE  
IN THE PLANS



**SECTION B-B**

## GENERAL NOTES

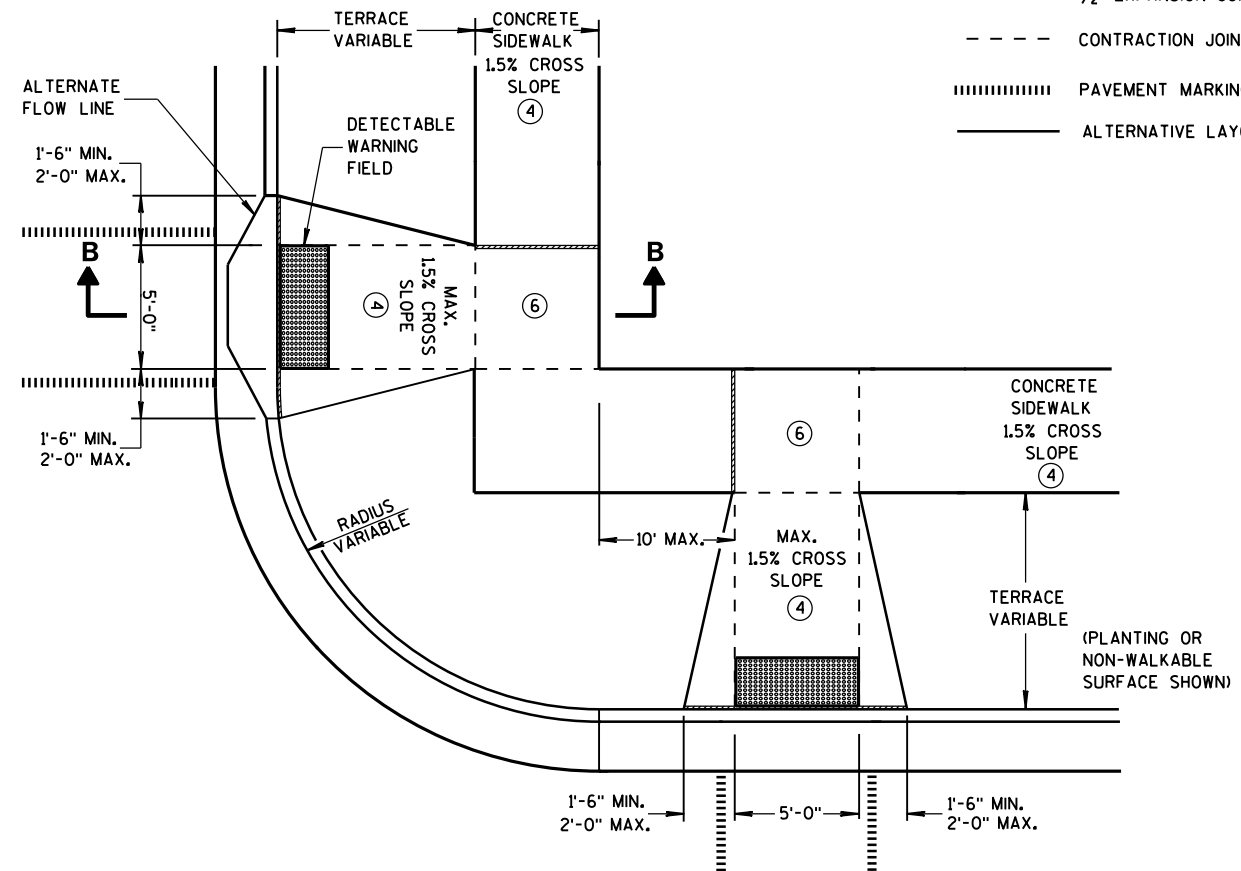
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑨ WHEN THIS DISTANCE IS LESS THAN 6'-0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.

## LEGEND

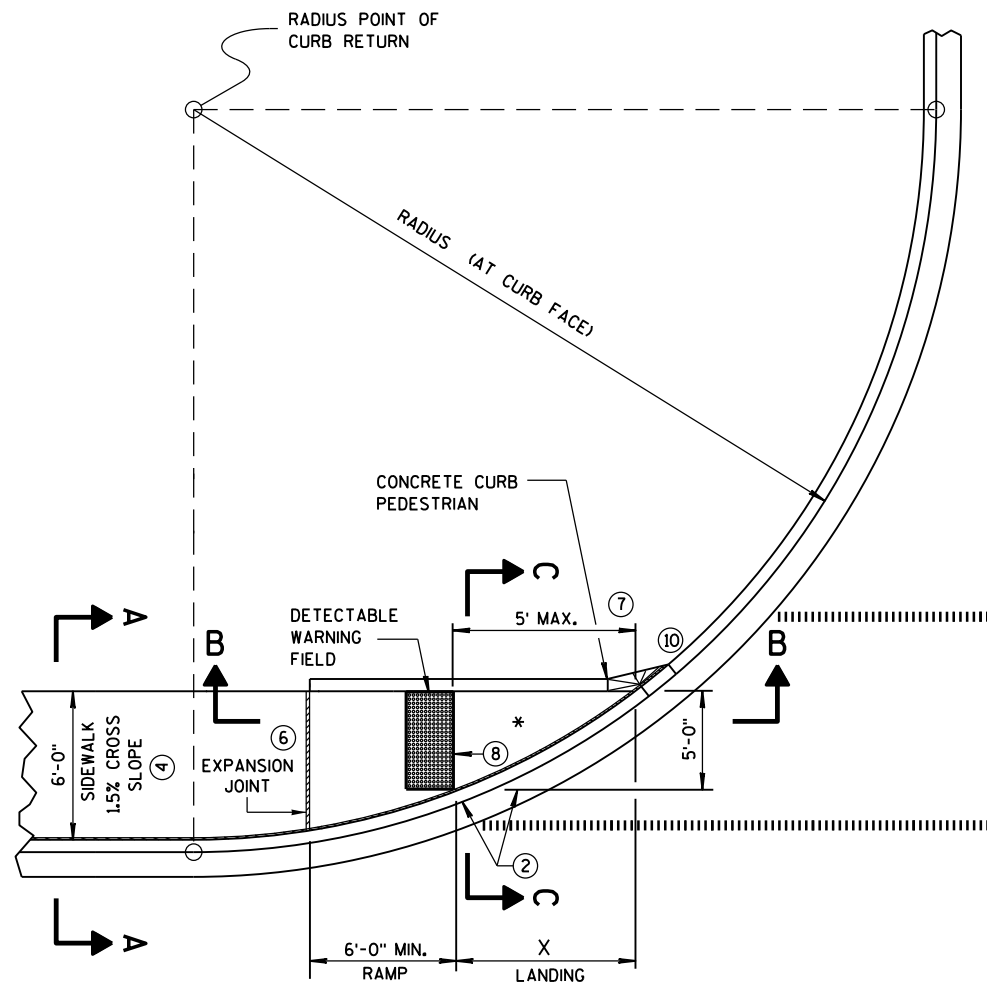
- 1/2" EXPANSION JOINT-SIDEWALK
- - - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)
- ALTERNATIVE LAYOUT



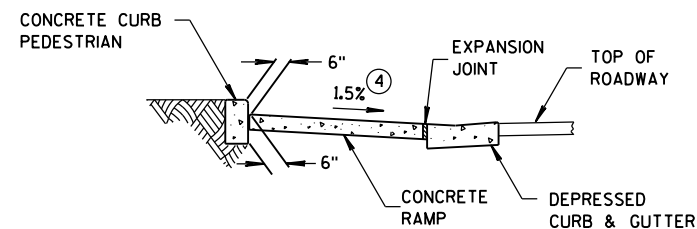
**PLAN VIEW  
TYPE 3 RAMP**  
(OUTSIDE OF CROSSWALK AREA)

**CURB RAMPS  
TYPES 2 AND 3**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

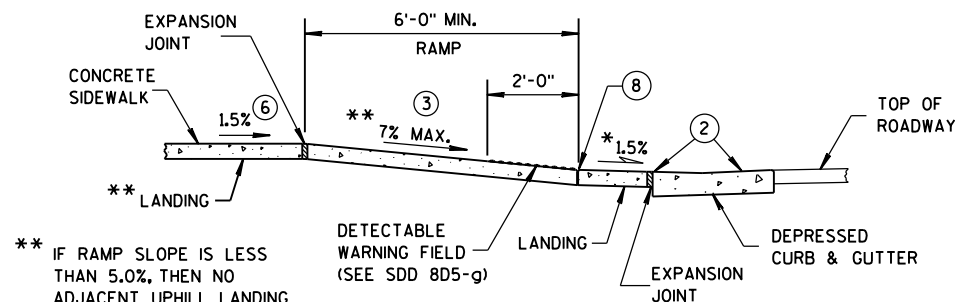


**CURB RAMP TYPE 4A**  
PLAN VIEW



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

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

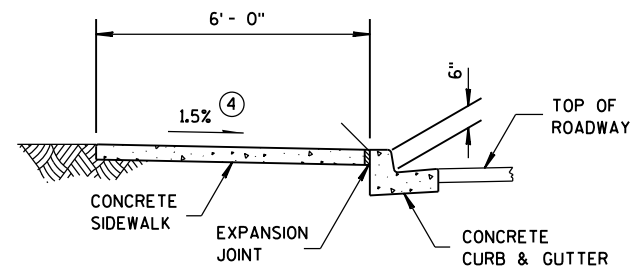


**SECTION B-B FOR TYPE 4A**

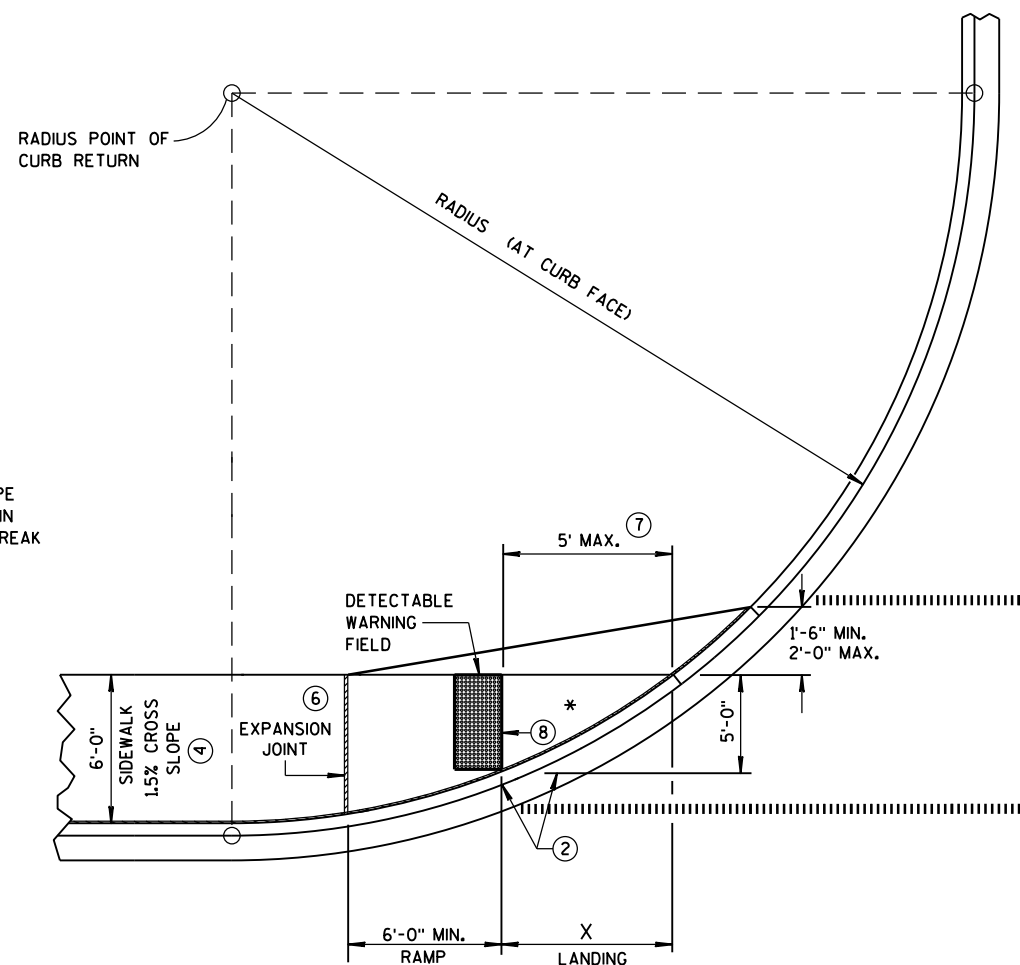
\*\* IF RAMP SLOPE IS LESS  
THAN 5.0%, THEN NO  
ADJACENT UPHILL LANDING  
IS REQUIRED

RADIUS (AT CURB FACE)	X
10 FEET	4'-7"
15 FEET	6'-5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



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



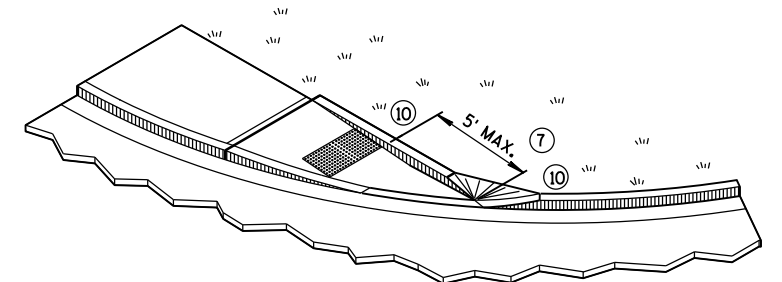
**CURB RAMP TYPE 4A1**  
PLAN VIEW

## GENERAL NOTES

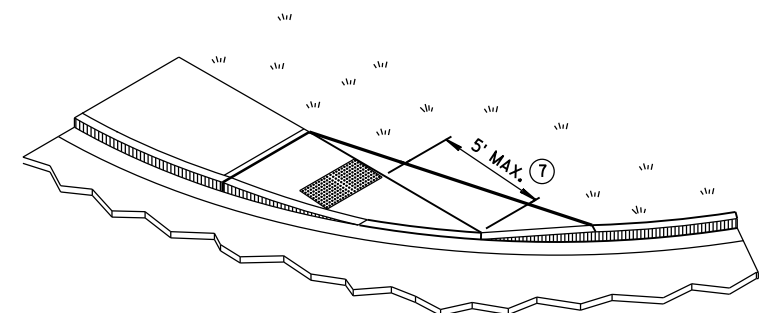
AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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

- ② GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ③ ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ④ ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- ⑥ PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- ⑦ WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- ⑧ PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- ⑩ INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



**ISOMETRIC VIEW FOR TYPE 4A**



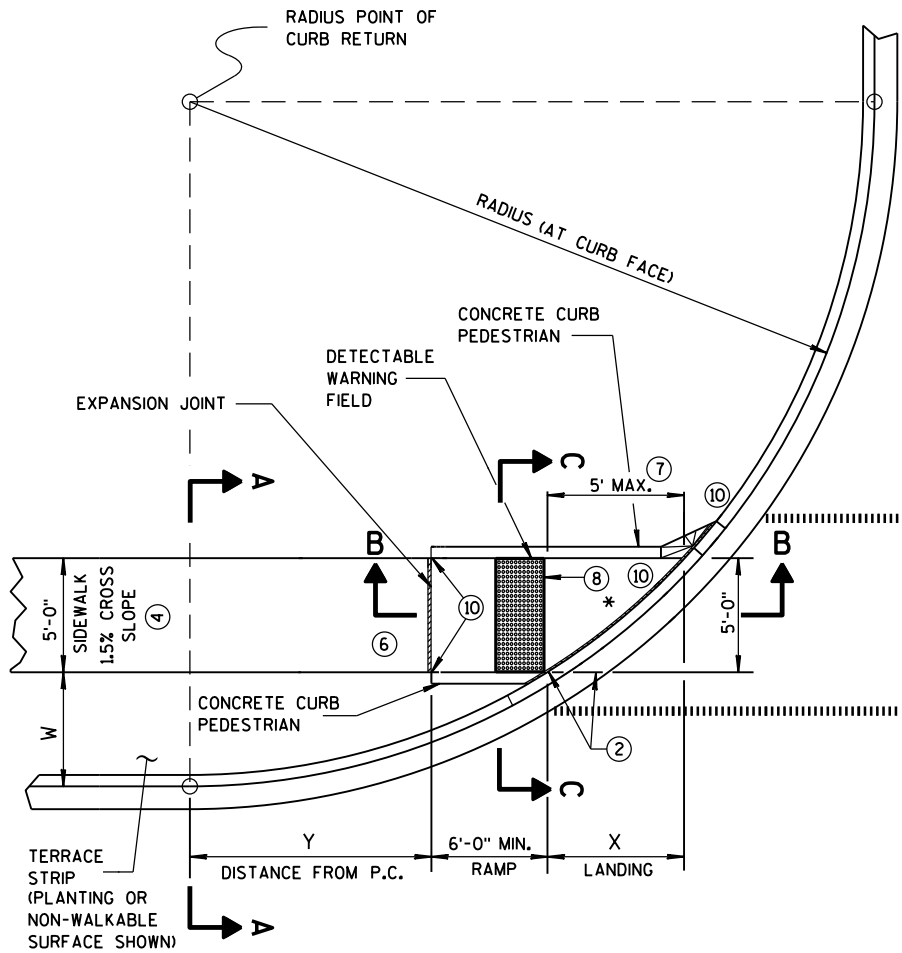
**ISOMETRIC VIEW FOR TYPE 4A1**

## LEGEND

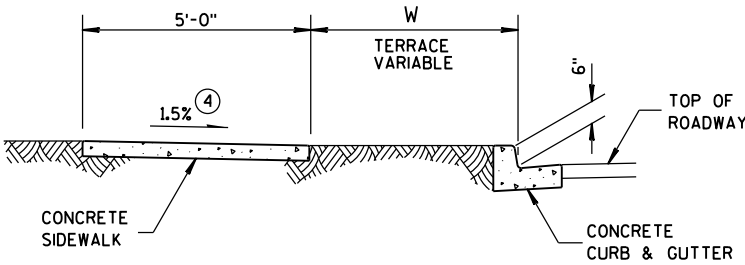
- ½" EXPANSION JOINT-SIDEWALK
- - - CONTRACTION JOINT FIELD LOCATED
- ||||| PAVEMENT MARKING CROSSWALK (WHITE)

**CURB RAMPS**  
**TYPES 4A AND 4A1**

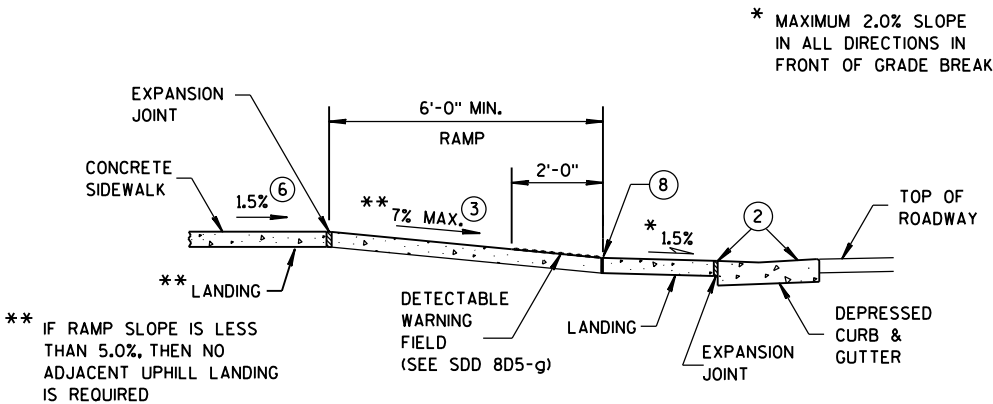
STATE OF WISCONSIN  
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**CURB RAMP TYPE 4B  
PLAN VIEW**



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



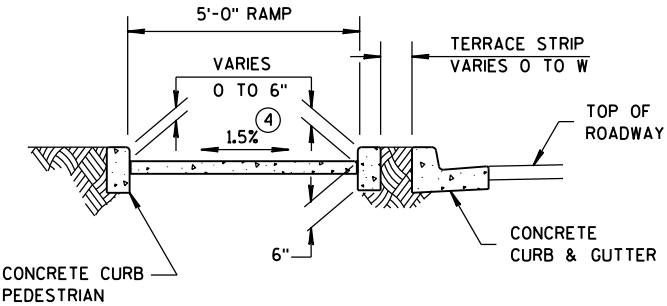
**SECTION B-B FOR TYPE 4B**

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

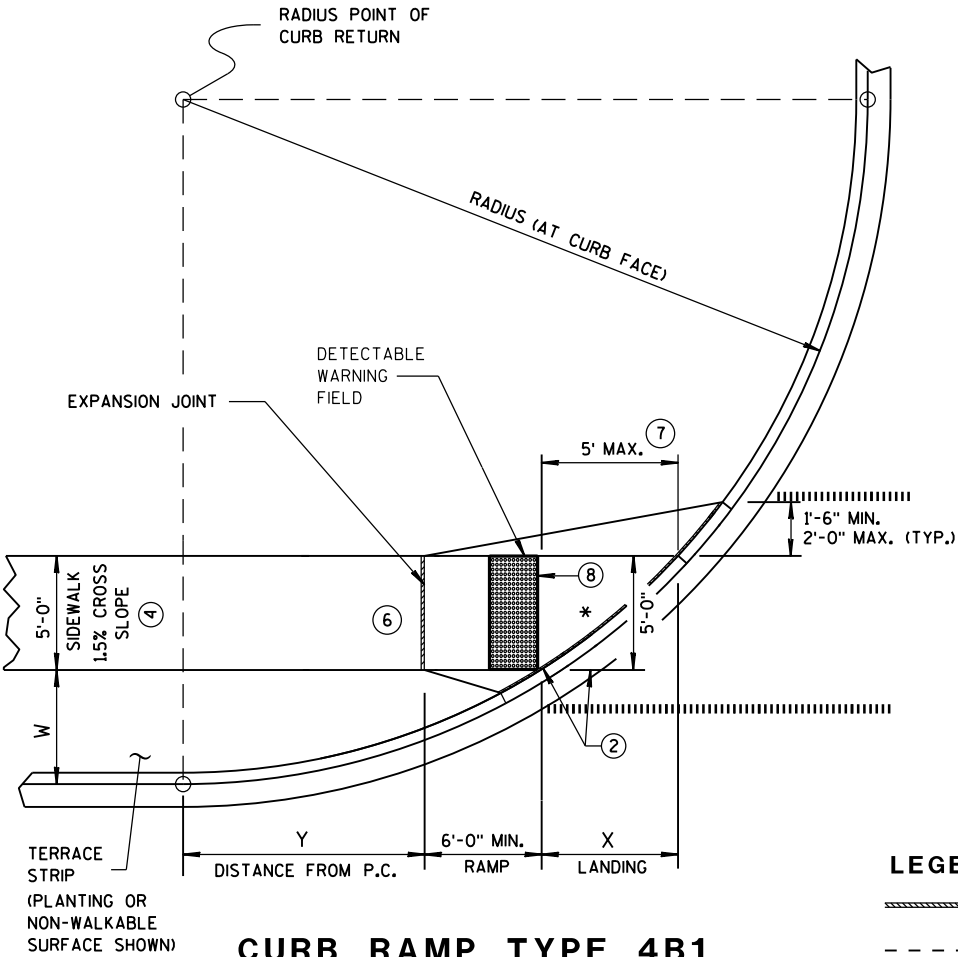
INTERMEDIATE RADII CAN BE INTERPOLATED  
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH  
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

### GENERAL NOTES

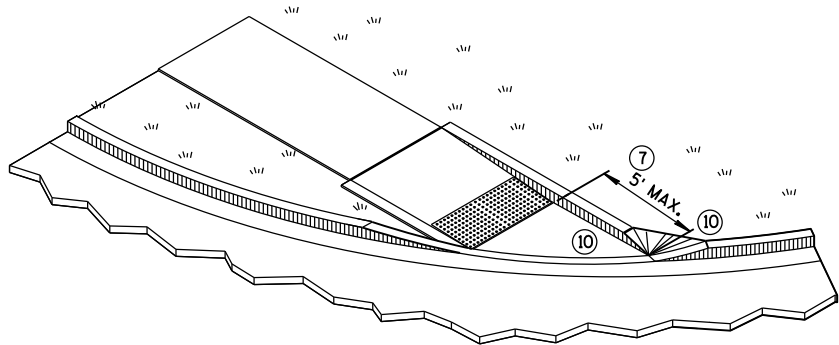
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
- DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
- GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
- ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
- ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
- PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
- WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.
- PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
- INSTALL TRANSITION NOSE. (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



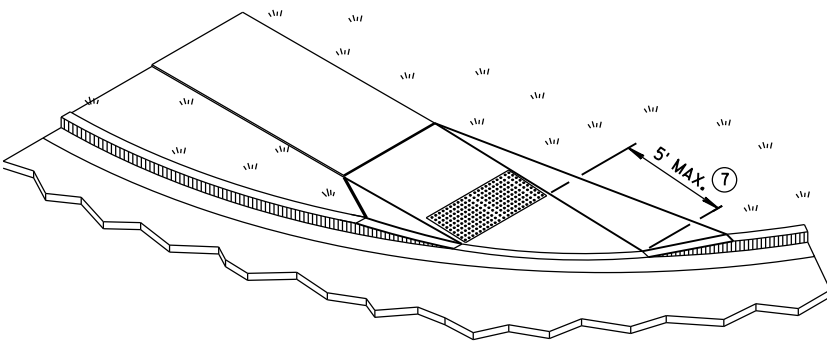
**SECTION C-C FOR TYPE 4B**



**CURB RAMP TYPE 4B1  
PLAN VIEW**



**ISOMETRIC VIEW FOR TYPE 4B**



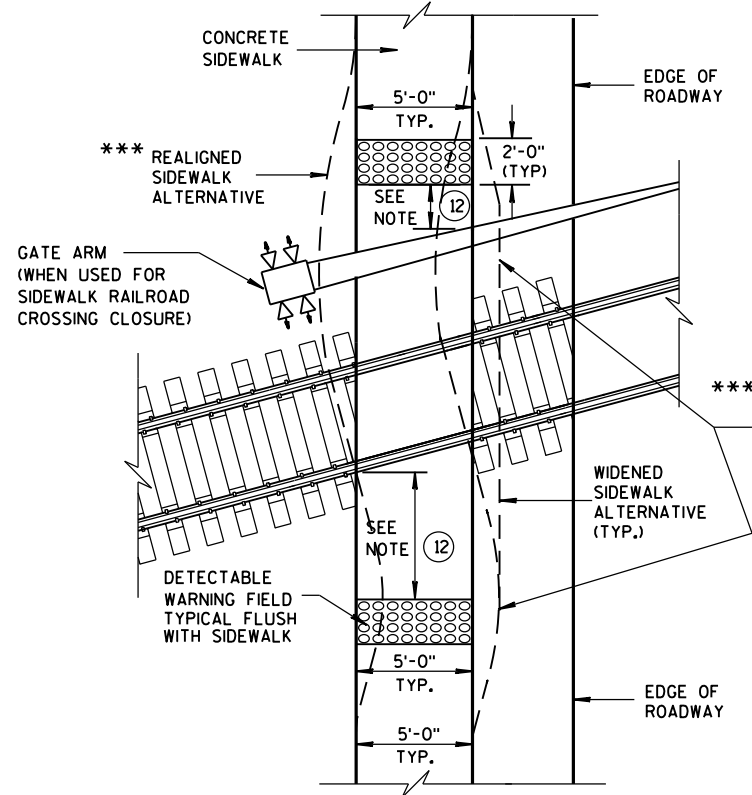
**ISOMETRIC VIEW FOR TYPE 4B1**

### LEGEND

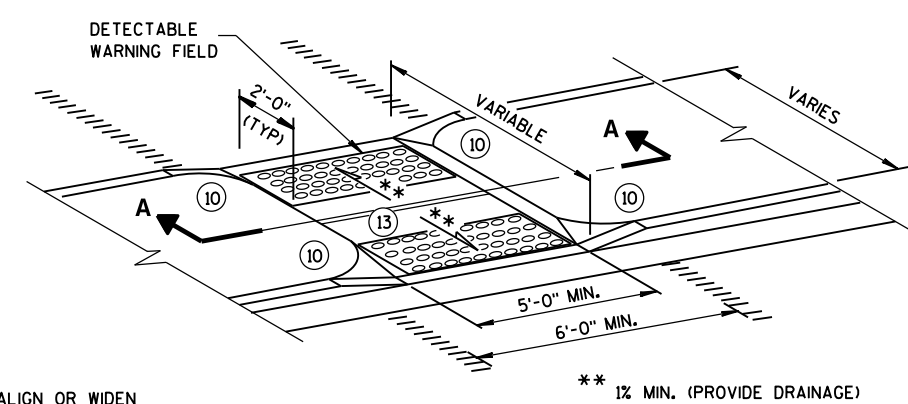
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

### CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



**TYPE 8**  
**DETECTABLE WARNINGS**  
**AT RAILROAD CROSSING**

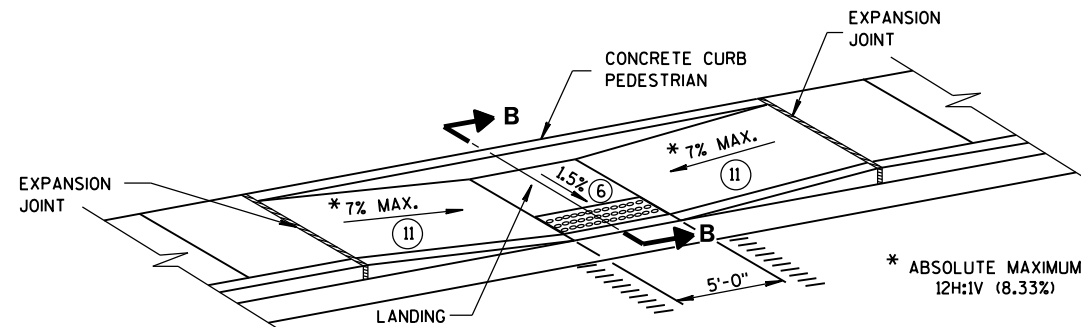


**MEDIAN ISLAND**  
**NON-ELEVATED PEDESTRIAN CROSSING**  
**TYPE 5**

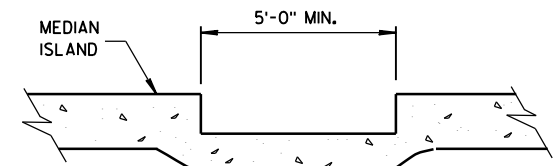
\*\*\* DETAILS TO BE DETERMINED BY DESIGNER

**GENERAL NOTES**

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

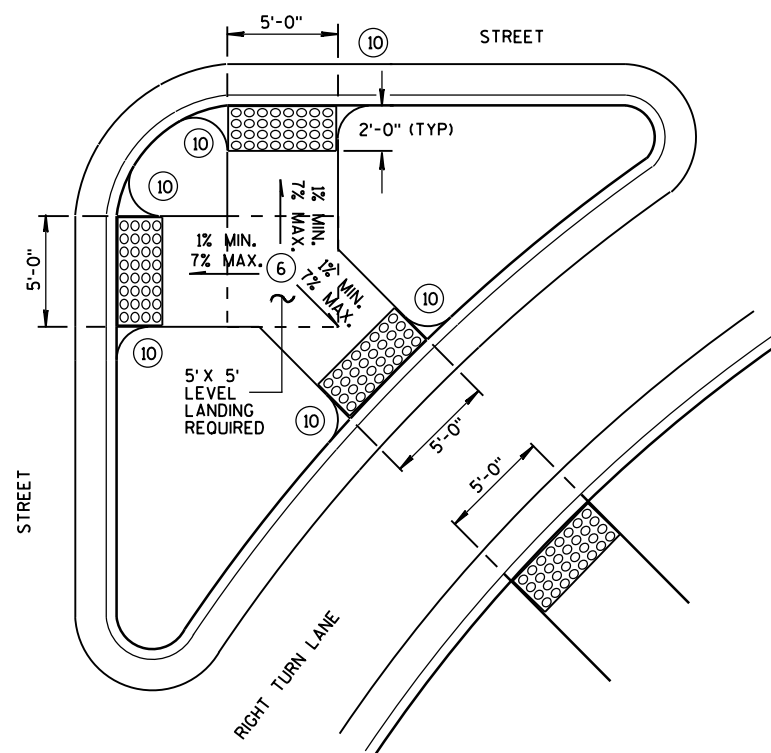


**MID-BLOCK CROSSING**  
**TYPE 7A**

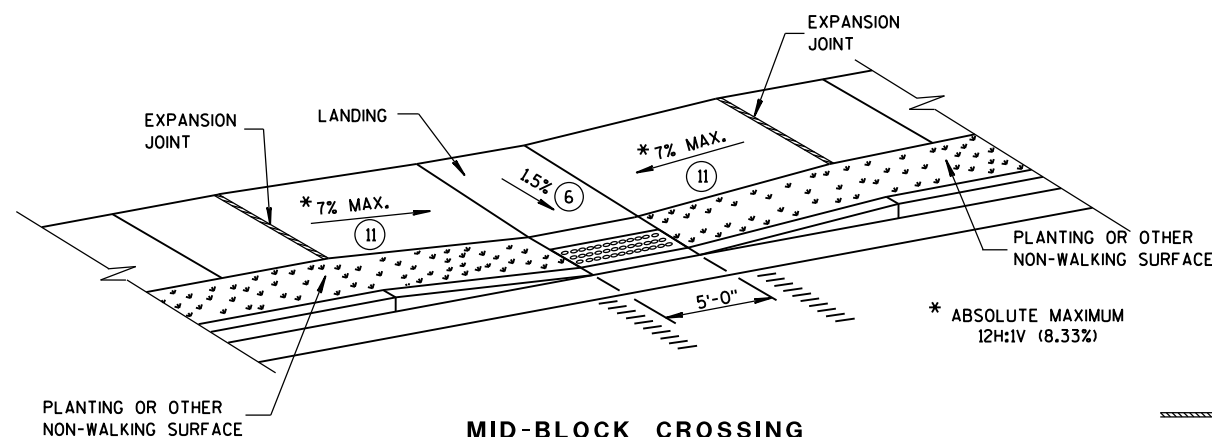


**SECTION A-A**

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

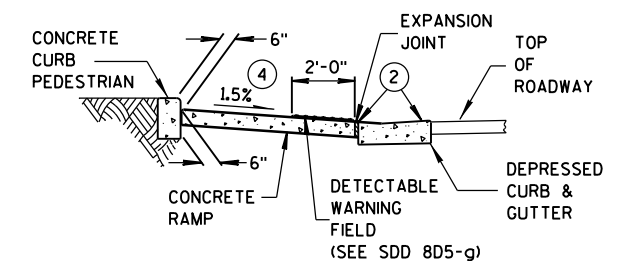


**TYPE 6**  
**DETECTABLE WARNING AT ISLANDS**



**MID-BLOCK CROSSING**  
**TYPE 7B**

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



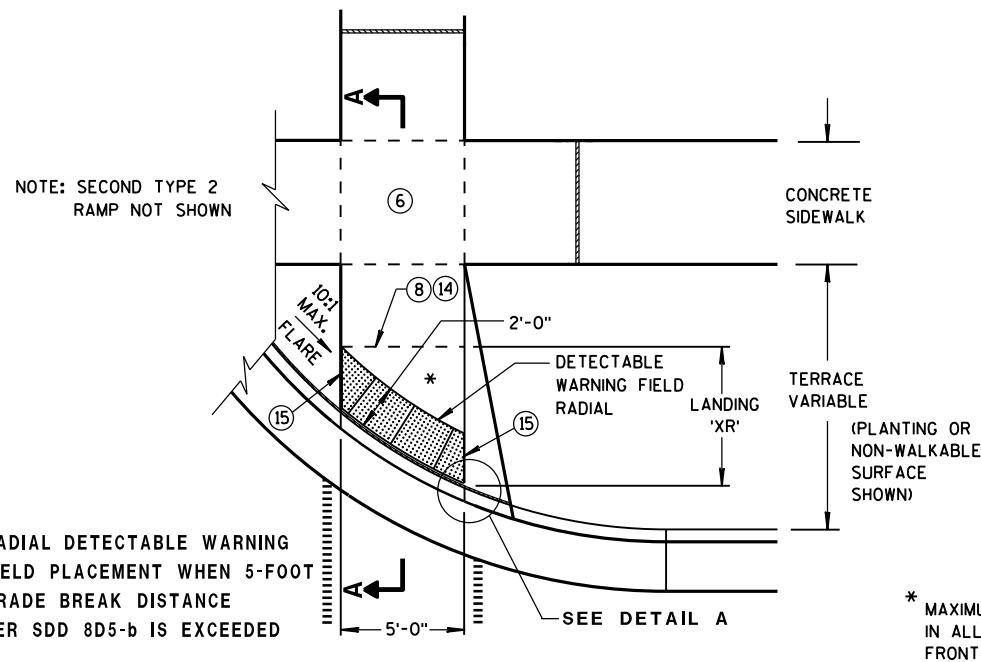
**SECTION B-B**

**LEGEND**

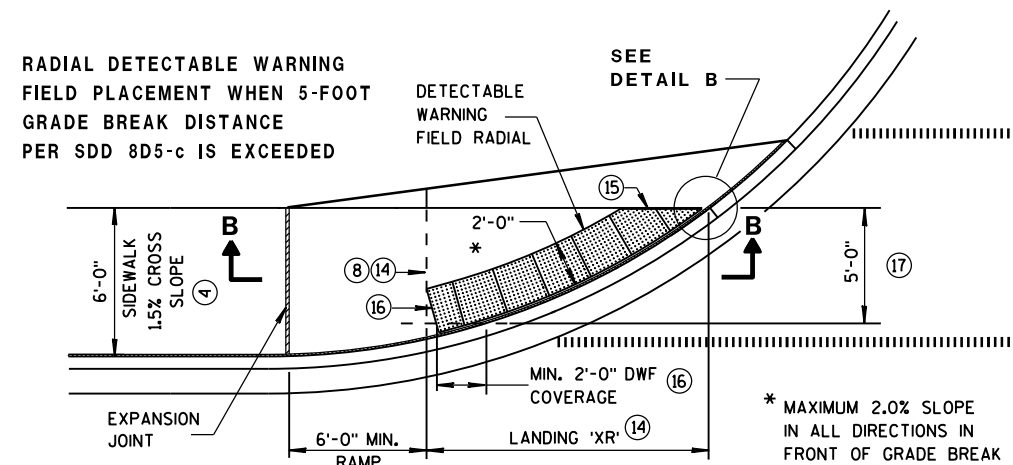
- 1/2" EXPANSION JOINT-SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

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

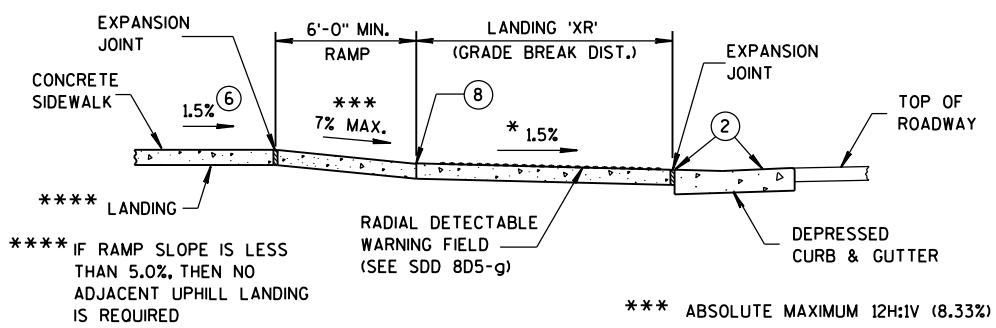
**STATE OF WISCONSIN**  
**DEPARTMENT OF TRANSPORTATION**



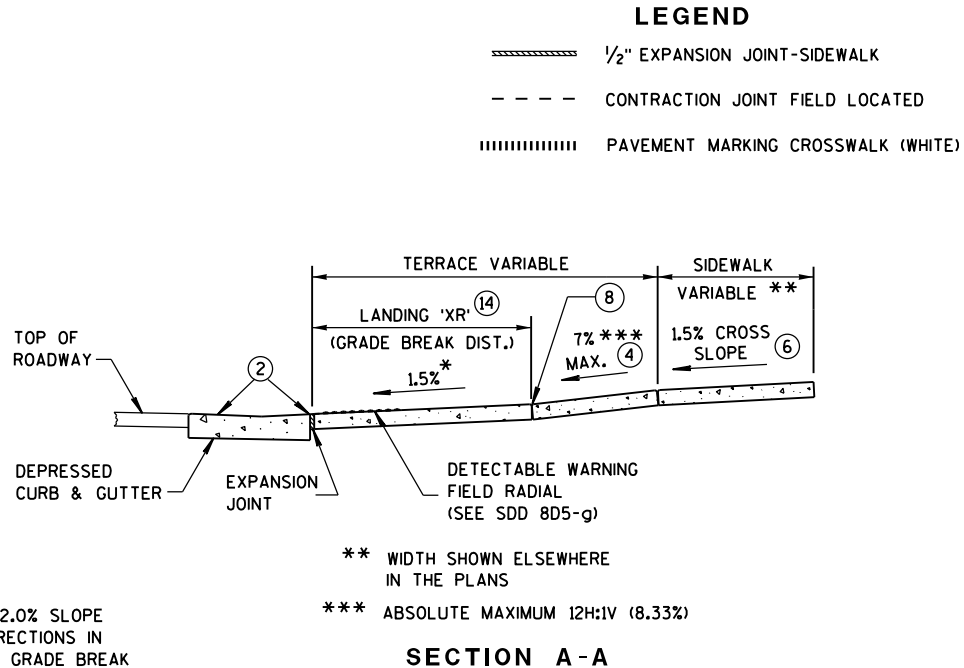
**TYPE 2 RAMP  
PLAN VIEW**  
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)  
(ON LINE WITH SIDEWALK)



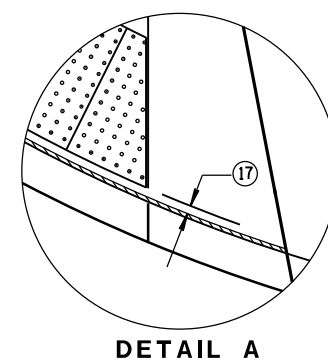
**CURB RAMP TYPE 4A1  
PLAN VIEW**  
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



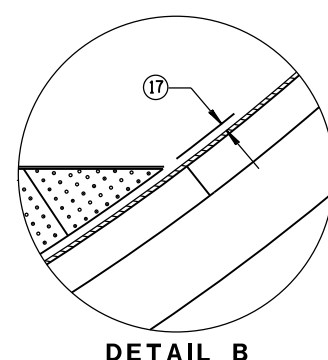
**SECTION B-B FOR TYPE 4A1**



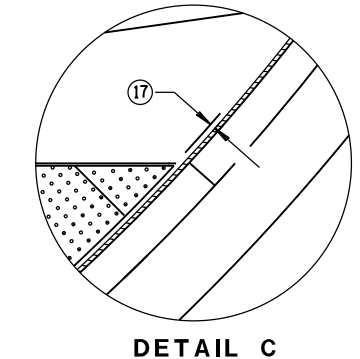
**SECTION A-A**



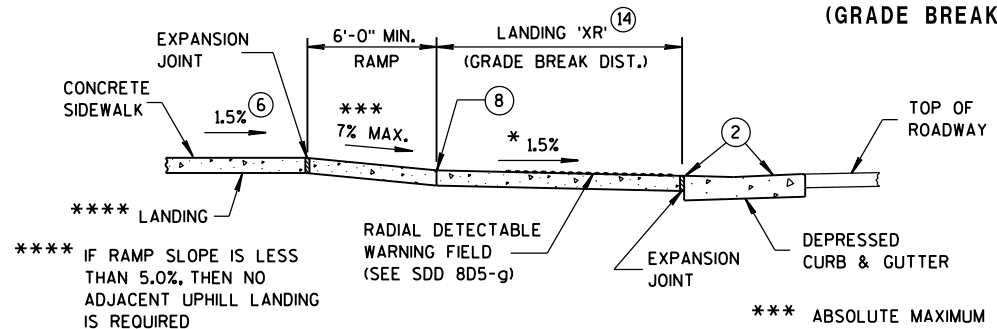
**DETAIL A**



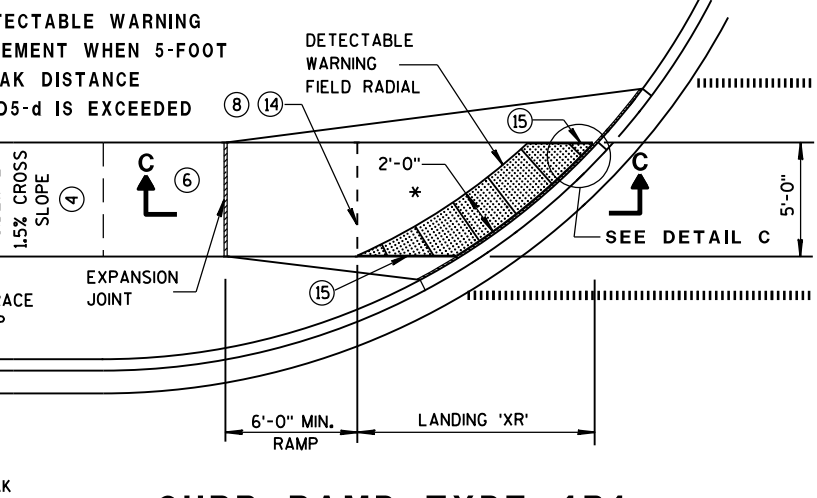
**DETAIL B**



**DETAIL C**



**SECTION C-C FOR TYPE 4B1**

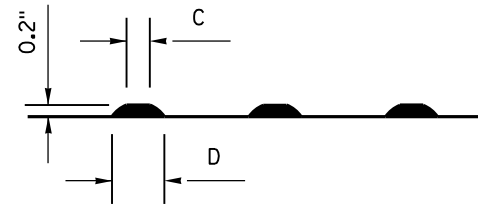
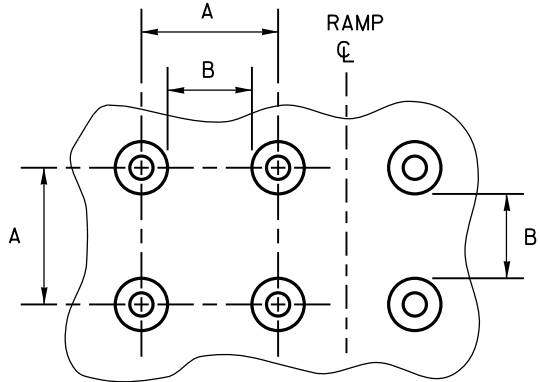


**CURB RAMP TYPE 4B1  
PLAN VIEW**  
(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

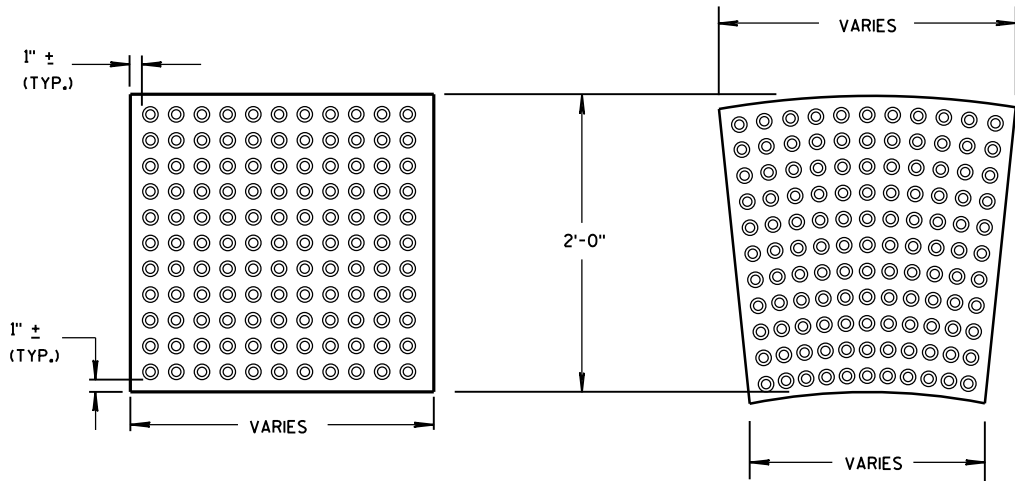
- LEGEND**
- 1/2" EXPANSION JOINT-SIDEWALK
  - CONTRACTION JOINT FIELD LOCATED
  - PAVEMENT MARKING CROSSWALK (WHITE)
- GENERAL NOTES**
- AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.
  - DETECTABLE WARNING FIELDS (DWFs) THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.
  - APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.
  - REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.
  - FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.
  - DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.
  - GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN 1/4-INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.
  - ABSOLUTE MAXIMUM 12H:1V (8.33%) CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.
  - ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.
  - PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET X 5 FEET.
  - PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.
  - CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION 'XR') REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.
  - FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.
  - USE 1'X 2' RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2'-0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.
  - A MAXIMUM 3-INCH CONCRETE BORDER WIDTH IS ALLOWABLE IN FRONT OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

\* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.



TRUNCATED DOMES  
DETECTABLE WARNING PATTERN DETAIL



DETECTABLE WARNING FIELDS (TYPICAL)

PLAN VIEW

GENERAL NOTES

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

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FIELD ARE PROHIBITED.

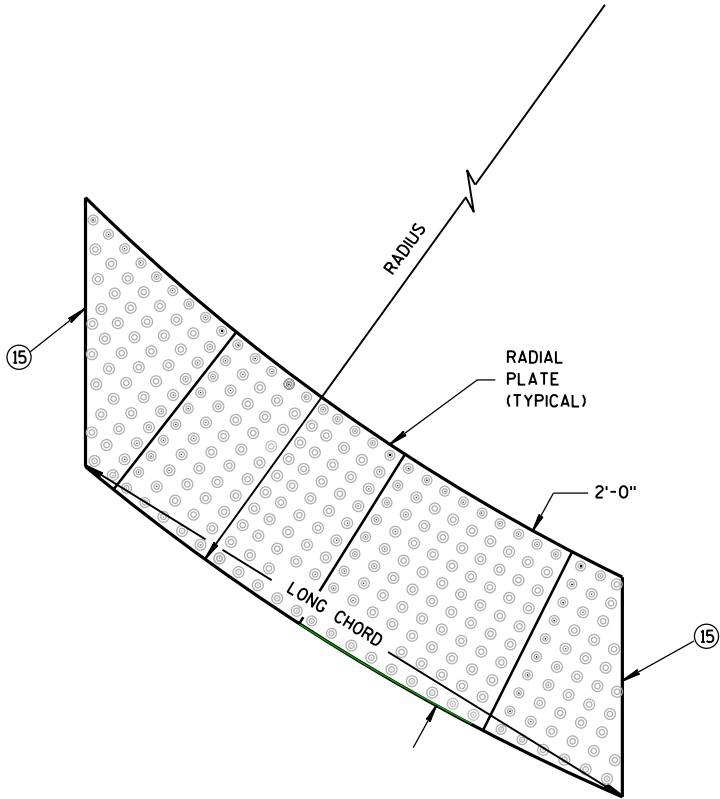
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGES IN COMBINATION WITH SQUARE PANELS ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

15 FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN 1/8" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



RADIAL DETECTABLE  
WARNING FIELD ATTRIBUTES

CURB RAMPS  
RECTANGULAR AND RADIAL  
DETECTABLE WARNING PLATES

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

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

GENERAL NOTES

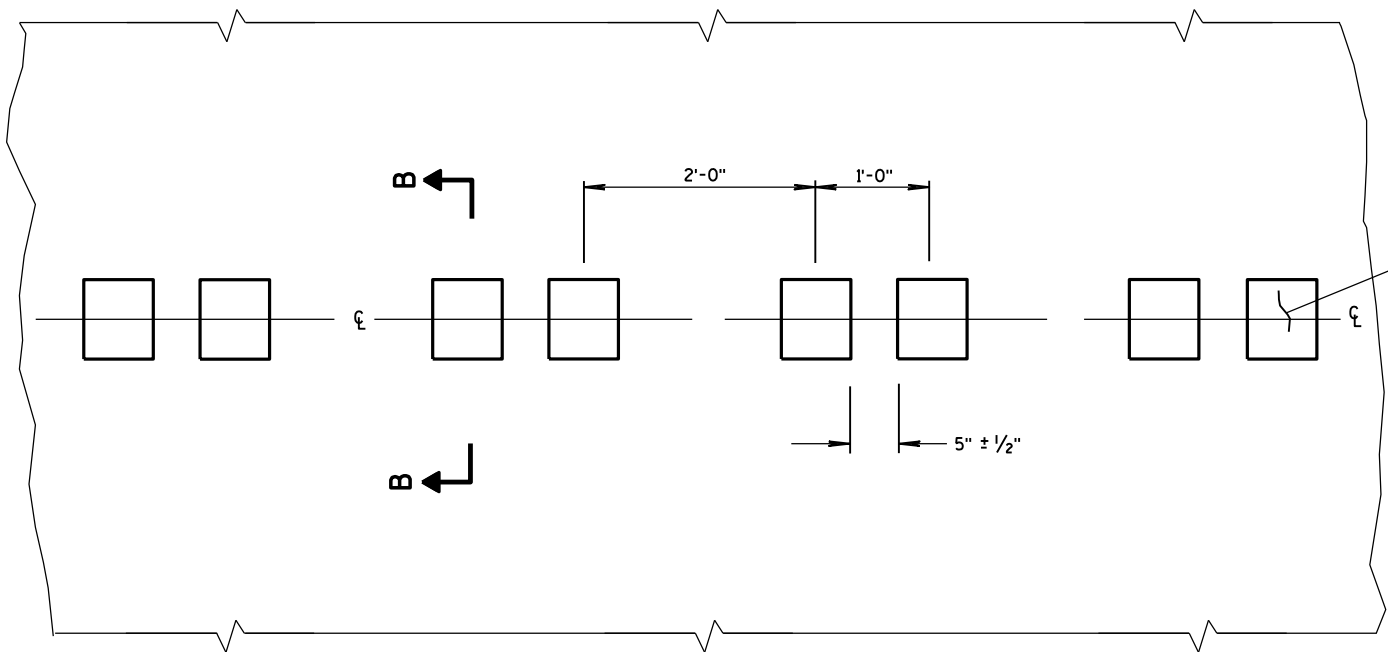
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

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

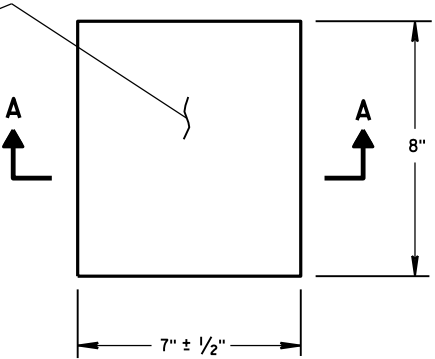
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

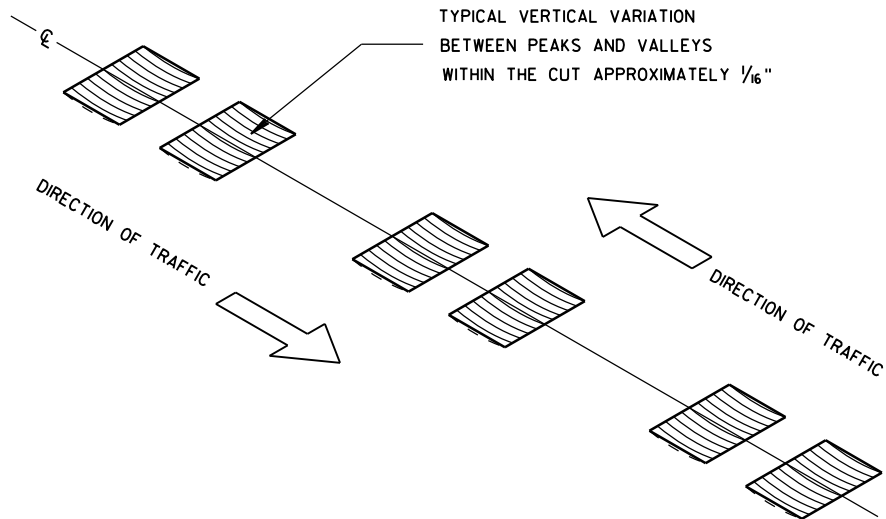
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



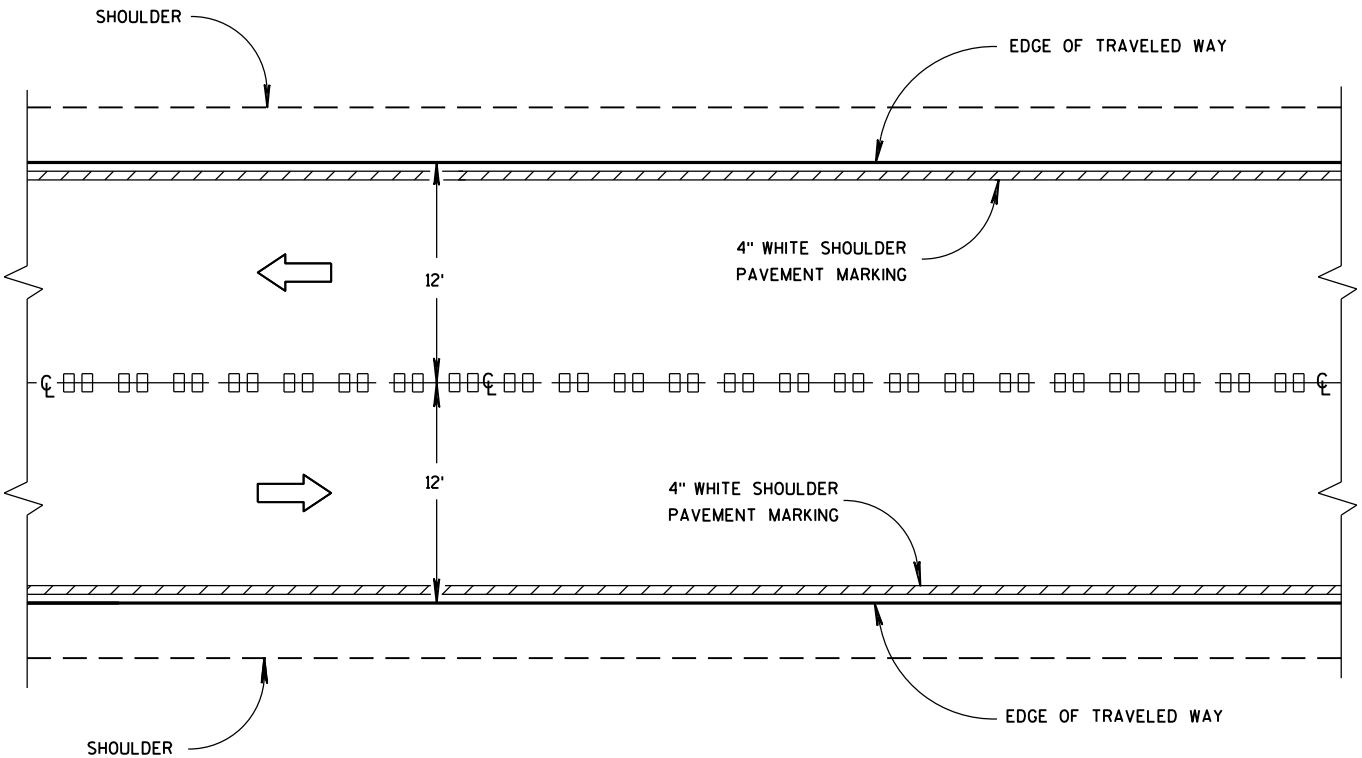
PLAN VIEW  
CENTER LINE WITH GROOVES



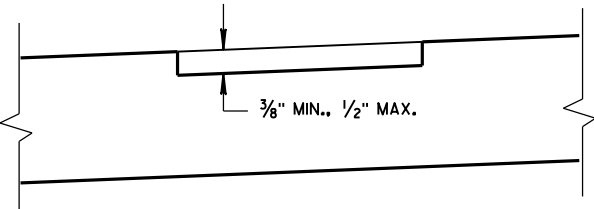
PLAN VIEW  
(SINGLE GROOVE)



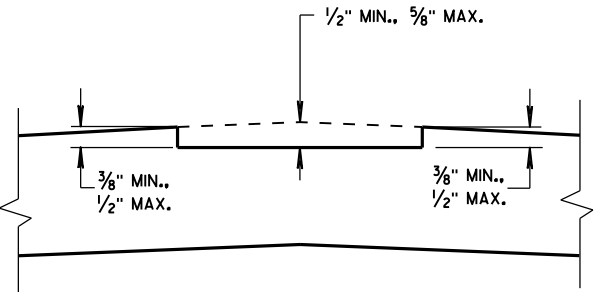
ISOMETRIC



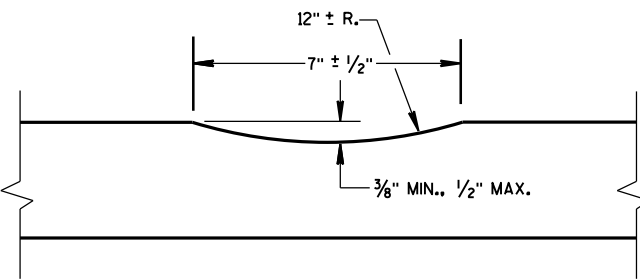
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B  
SUPERELEVATED ROADWAY



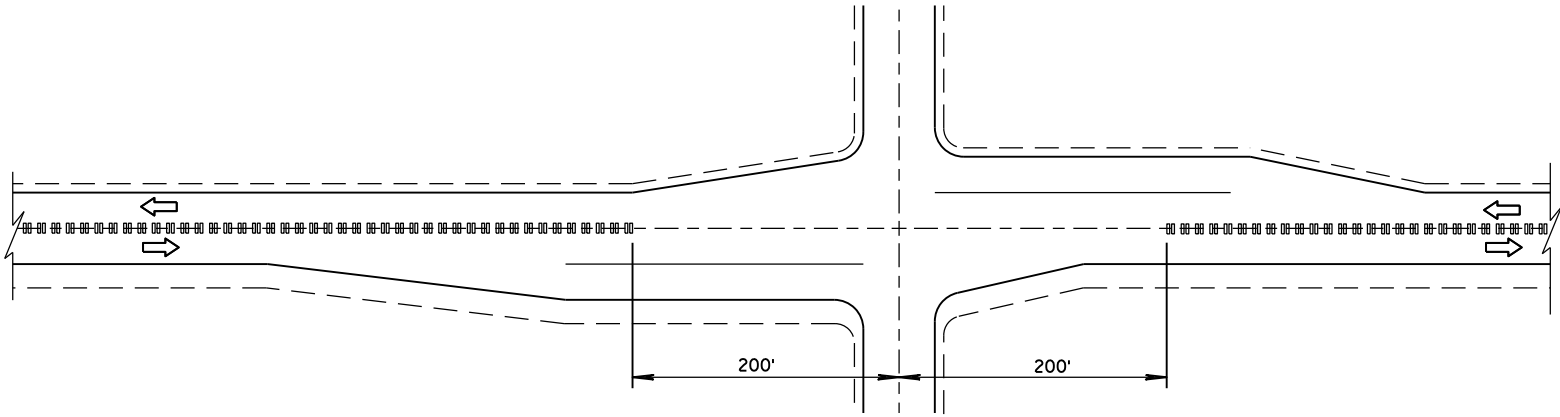
SECTION B-B  
CROWNED ROADWAY



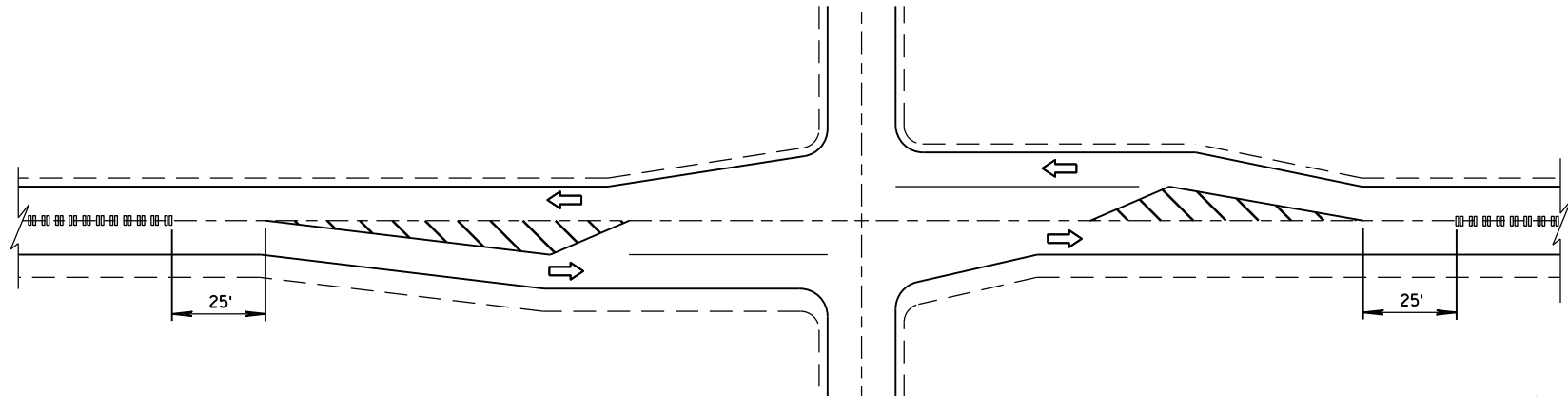
SECTION A-A

2-LANE RURAL  
CENTER LINE RUMBLE STRIP,  
MILLING

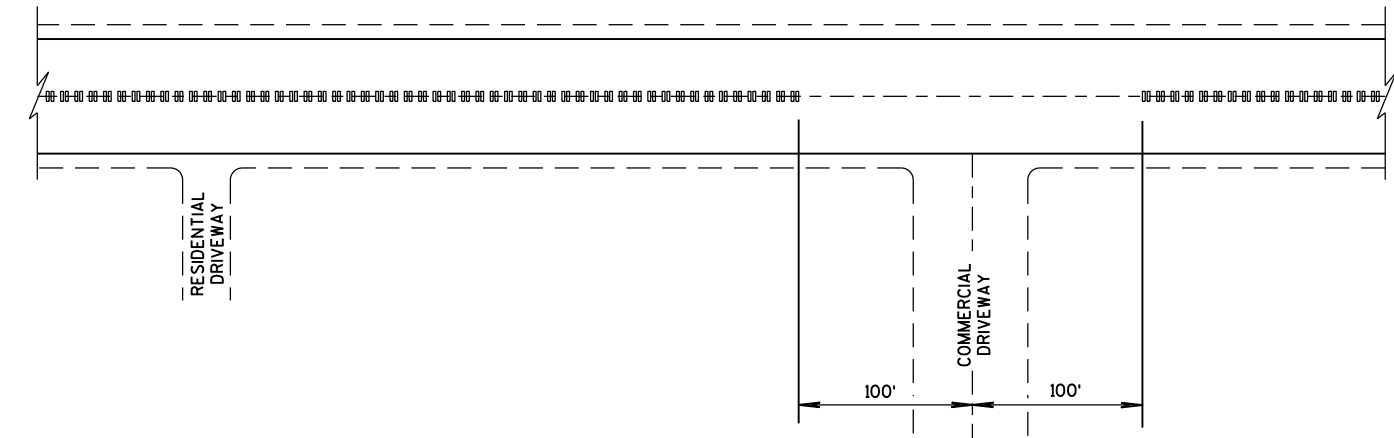
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

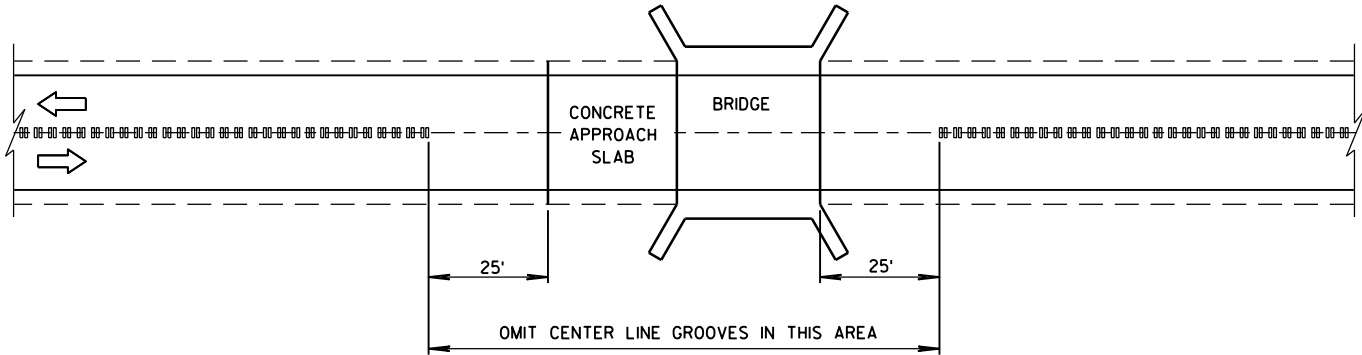


CENTER LINE GROOVES AT INTERSECTIONS  
(WITH LEFT TURN LANES)

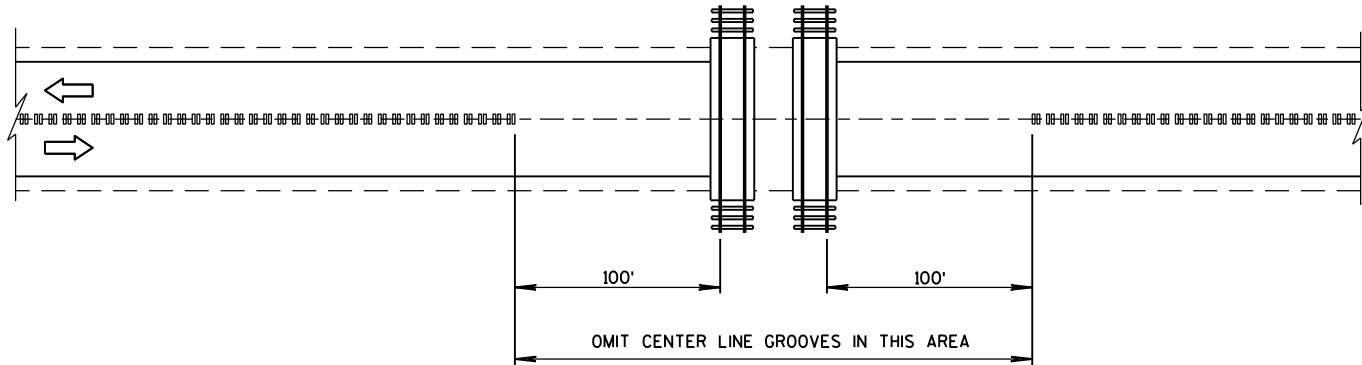


CENTER LINE GROOVES AT DRIVEWAYS<sup>①</sup>

<sup>①</sup> CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 5/15/2013 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



## 6

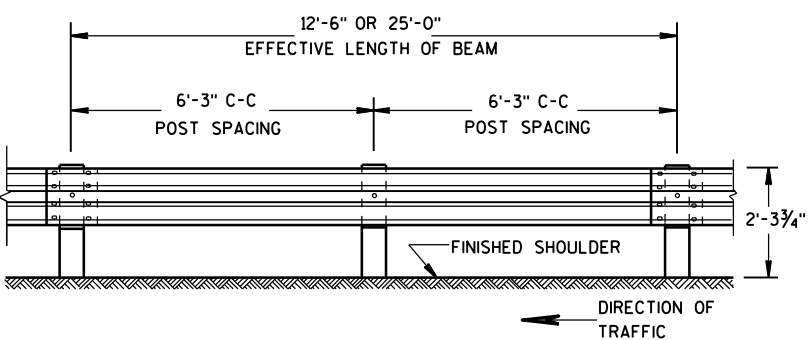
- S.D.D. 14 B 15-10a



### TYPICAL INSTALLATION OF STEEL PLATE BEAM GUARD

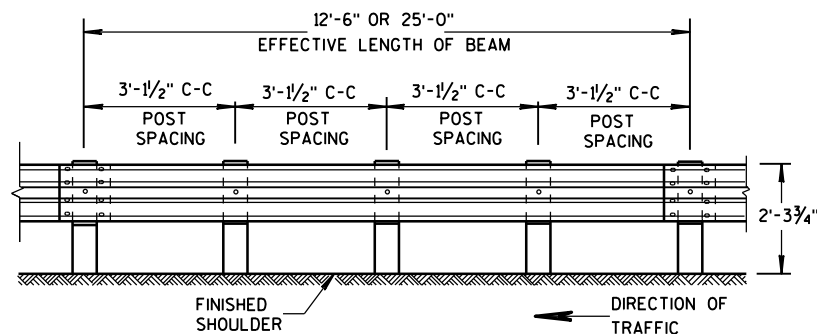


STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



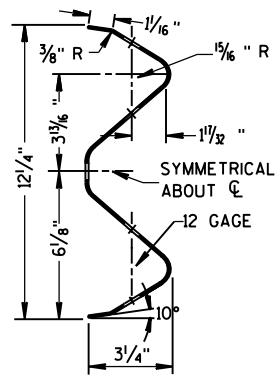
FRONT VIEW

### POST SPACING STANDARD INSTALLATION

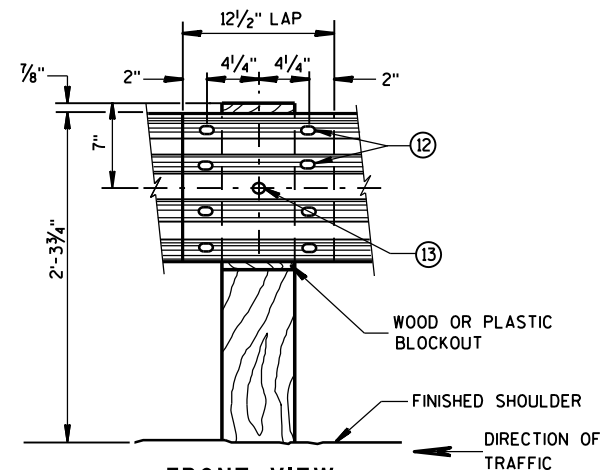


FRONT VIEW

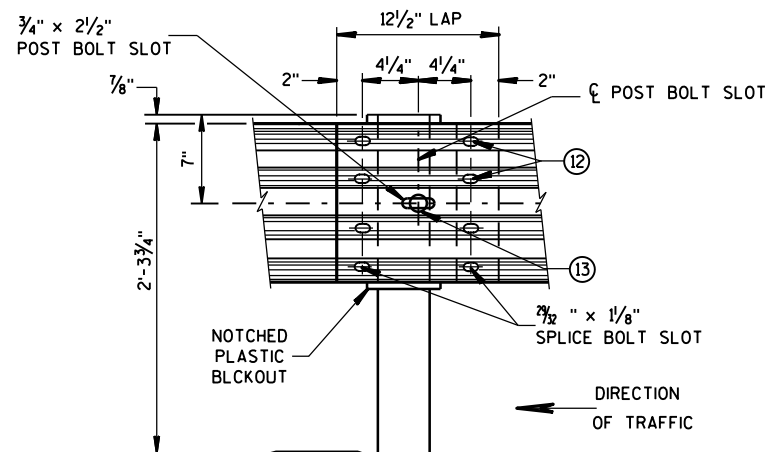
### POST SPACING FOR LONGER POST AT HALF POST SPACING W BEAM (LHW)



SECTION THRU W BEAM



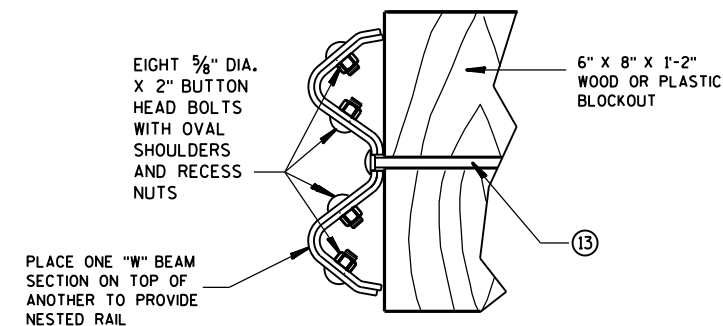
FRONT VIEW  
BEAM SPLICE AT WOOD POST  
AND POST MOUNTING DETAIL



FRONT VIEW  
BEAM SPLICE AT STEEL POST  
TYPICAL SPLICING DETAILS  
OF STEEL PLATE BEAM GUARD

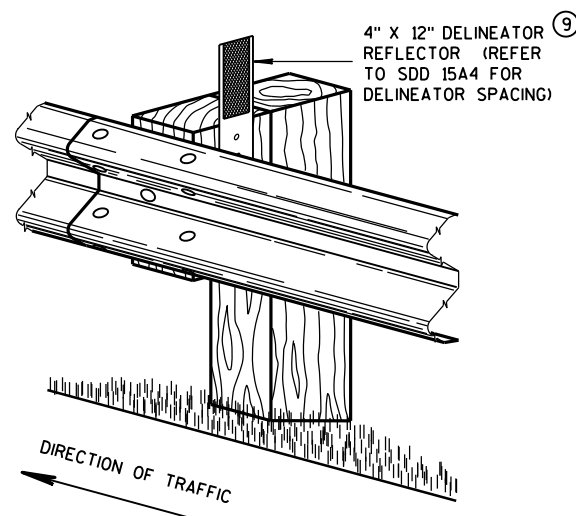
### GENERAL NOTES

- ⑨ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
- ⑫ 8 - 5/8"  $\phi$  X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
- ⑬ 5/8" DIA. BUTTON HEAD BOLT AND RECESS NUT WITH 5/8" DIA. F844 FLAT WASHER UNDER NUT.



NESTED W BEAM (NW)

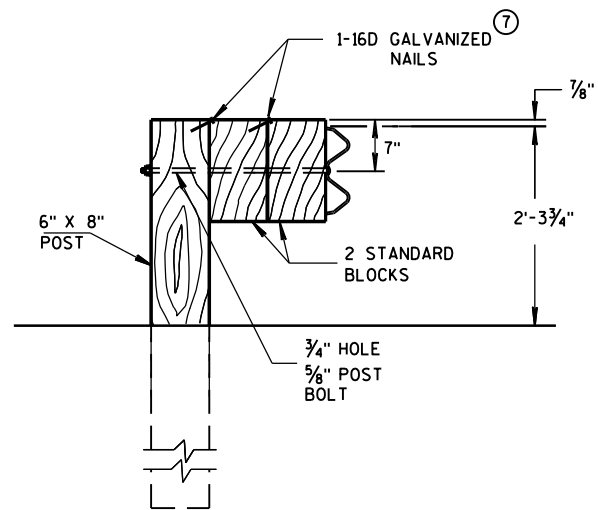
USE ALL OTHER STANDARD BEAM GUARD DETAILS FOR CONSTRUCTING NESTED W BEAM (NW)



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

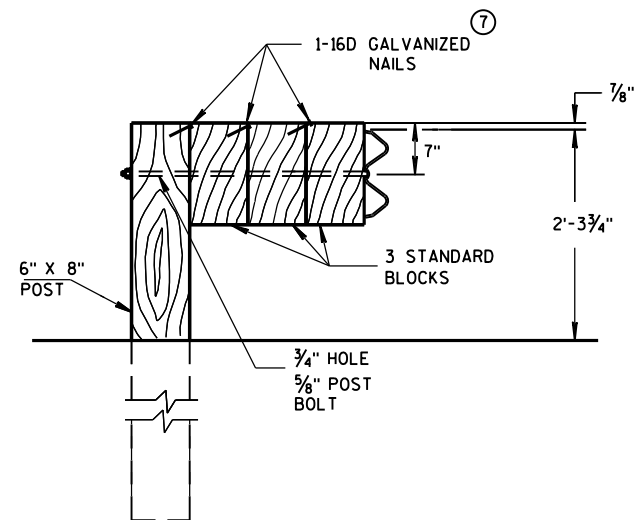
STEEL PLATE BEAM GUARD,  
CLASS "A",  
INSTALLATION & ELEMENTS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION



#### DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS  
WITHIN A BARRIER RUN IS UNLIMITED

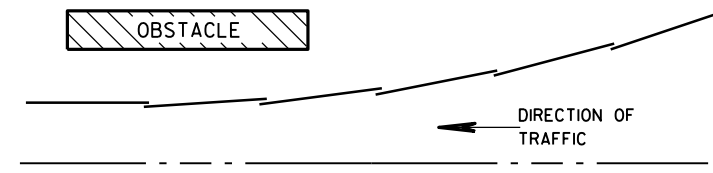


#### DETAIL FOR TRIPLE BLOCKS

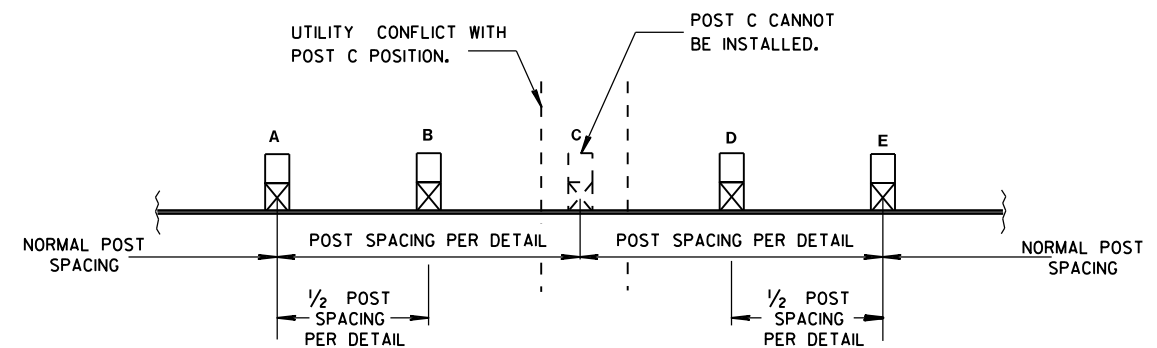
TRIPLE BLOCK DETAIL IS LIMITED TO ONE  
LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES  
PREVENT THE POST FROM BEING INSTALLED.

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



#### PLAN VIEW BEAM LAPPING DETAIL



#### POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

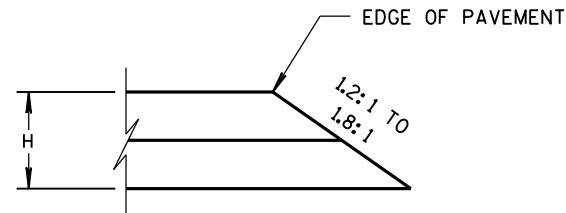
STEEL PLATE BEAM GUARD,  
CLASS "A",  
INSTALLATION & ELEMENTS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

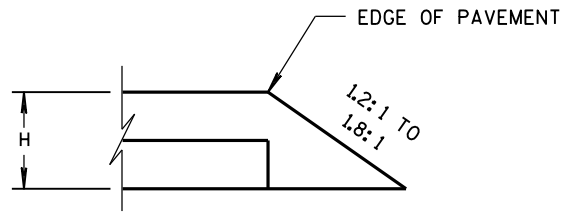
APPROVED  
June 2017  
DATE

/S/ Rodney Taylor  
ROADWAY STANDARDS DEVELOPMENT  
UNIT SUPERVISOR

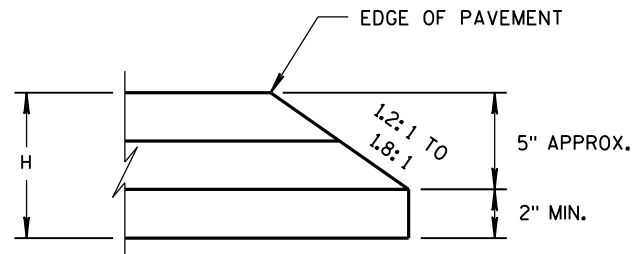
FHWA



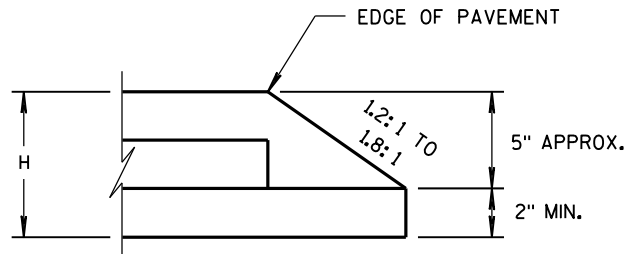
CONSTRUCTED WITH FINAL TWO LAYERS  
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER  
FOR H 5" OR LESS

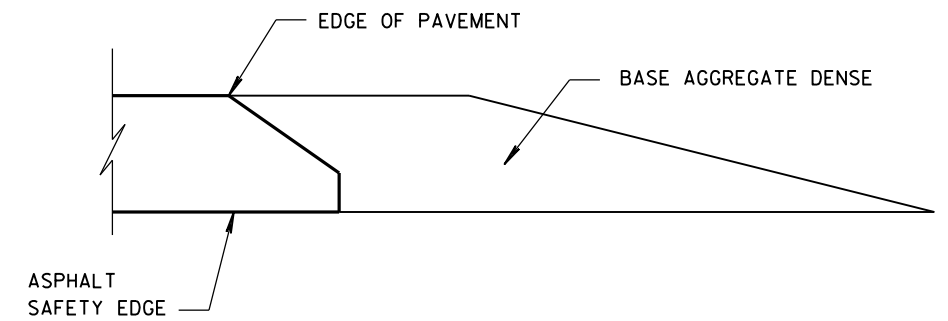


CONSTRUCTED WITH FINAL TWO LAYERS  
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER  
FOR H GREATER THAN 5"

## HMA PAVEMENT AND HMA OVERLAYS



## FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE<sub>SM</sub>

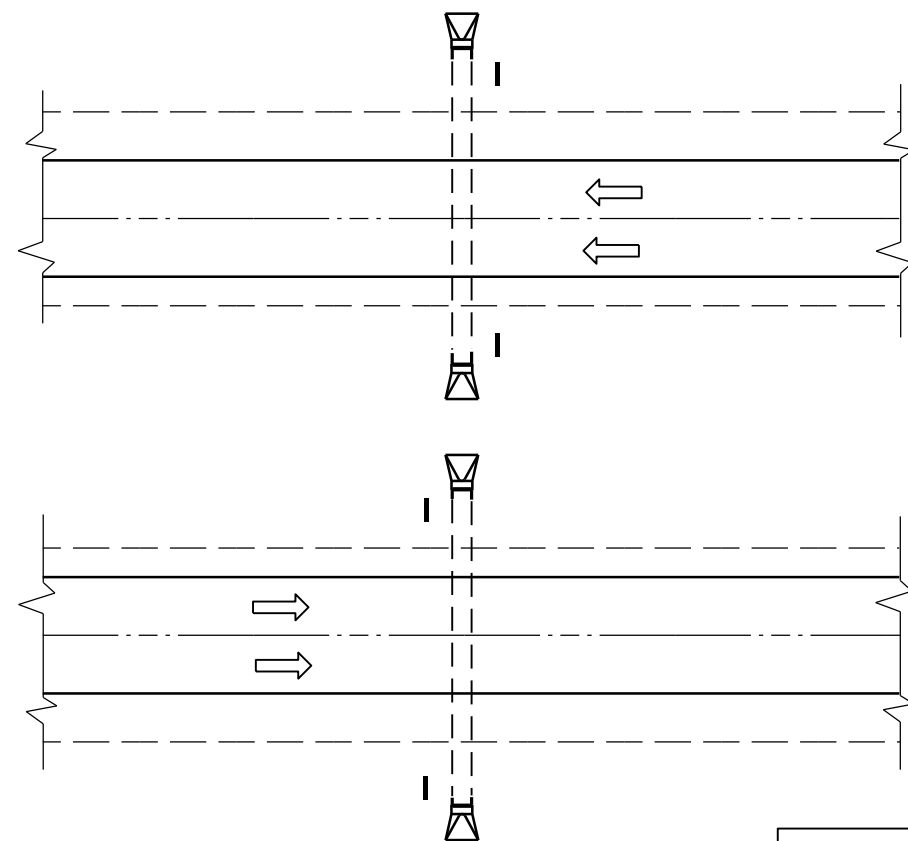
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

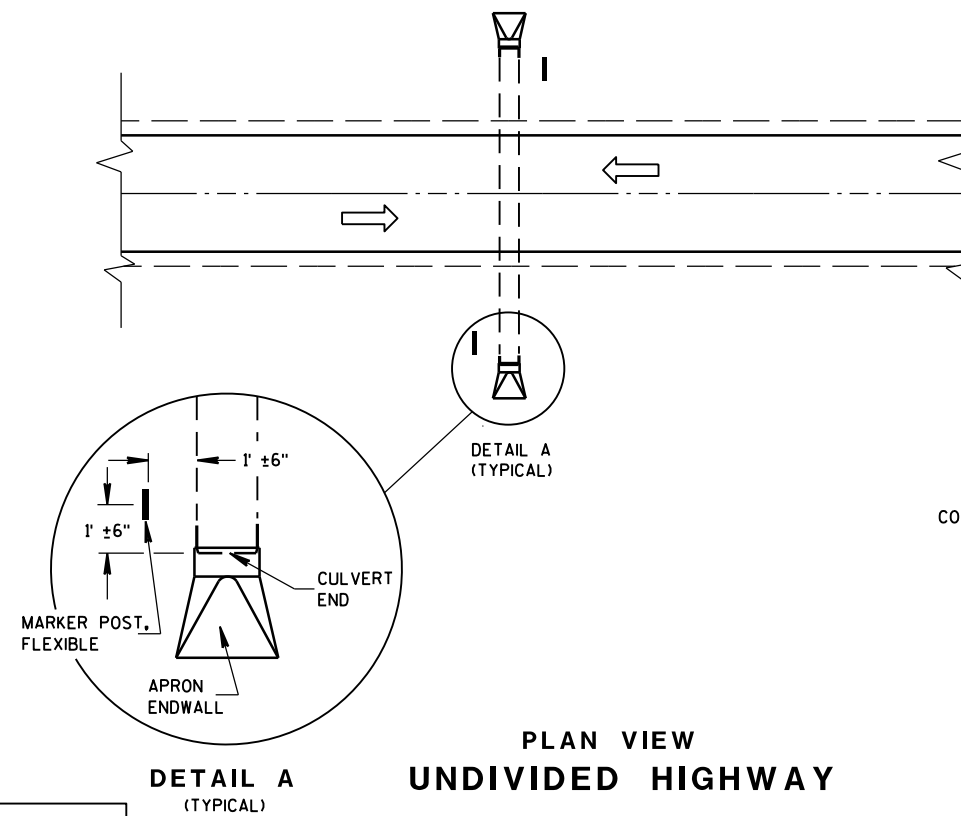
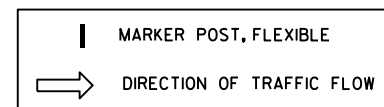
11/30/2012  
DATE

FHWA

/s/ Jerry H. Zogg  
ROADWAY STANDARDS DEVELOPMENT  
ENGINEER



PLAN VIEW  
DIVIDED HIGHWAY

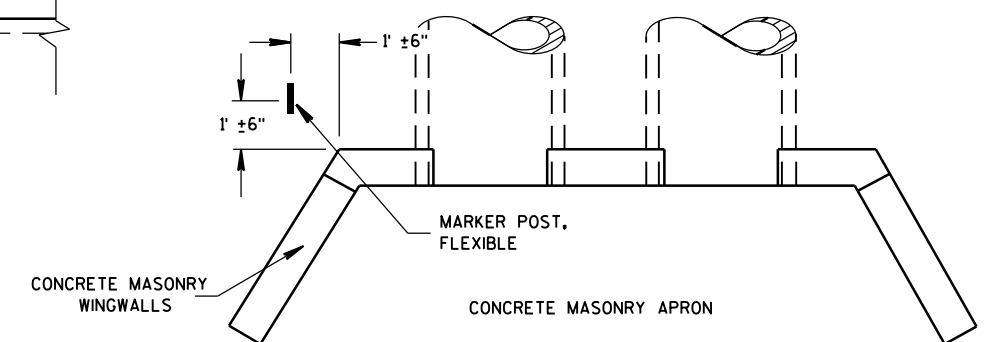


PLAN VIEW  
UNDIVIDED HIGHWAY

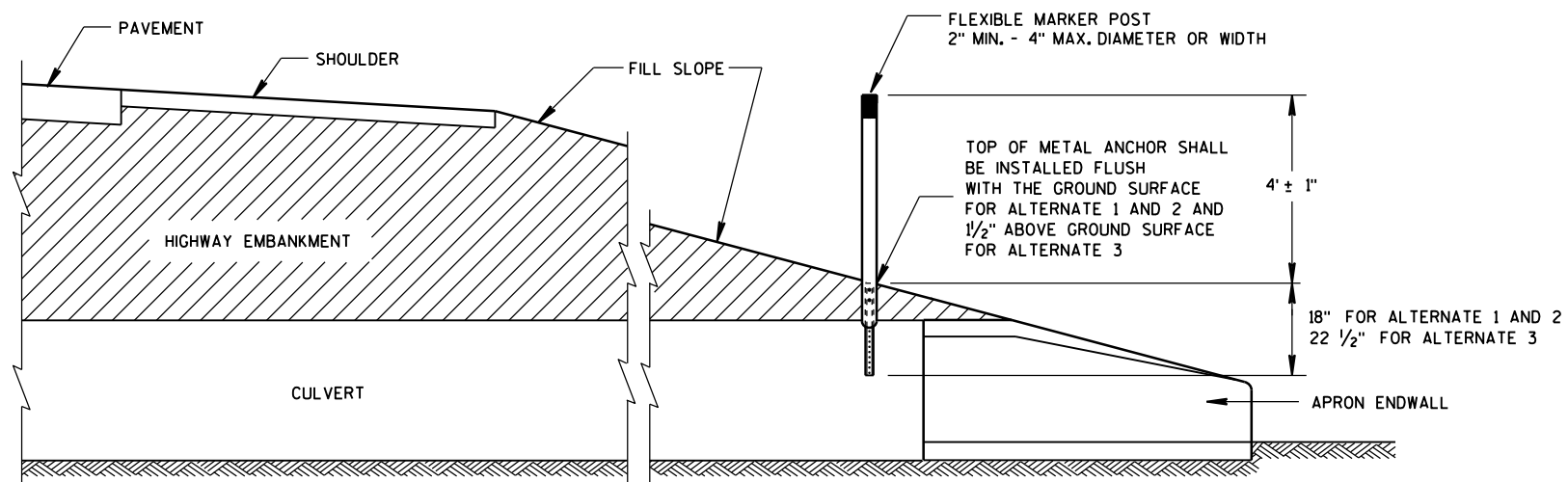
### FLEXIBLE MARKER POST LOCATION

### GENERAL NOTES

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



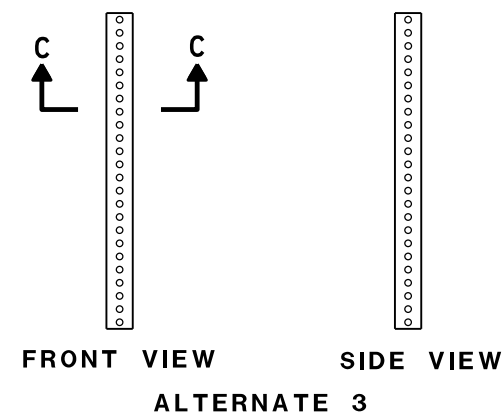
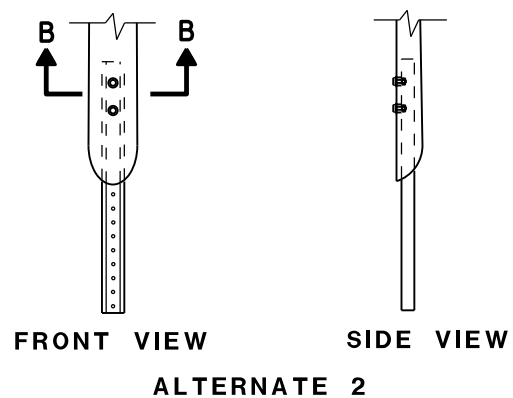
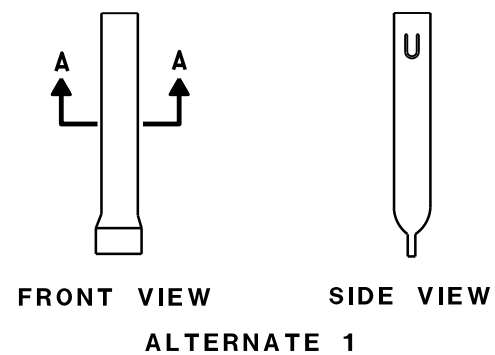
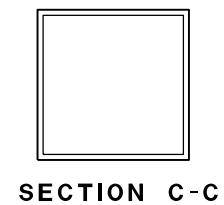
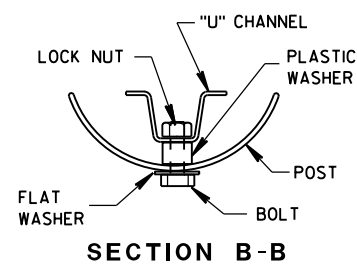
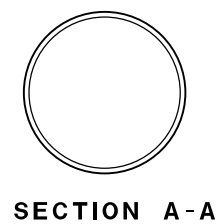
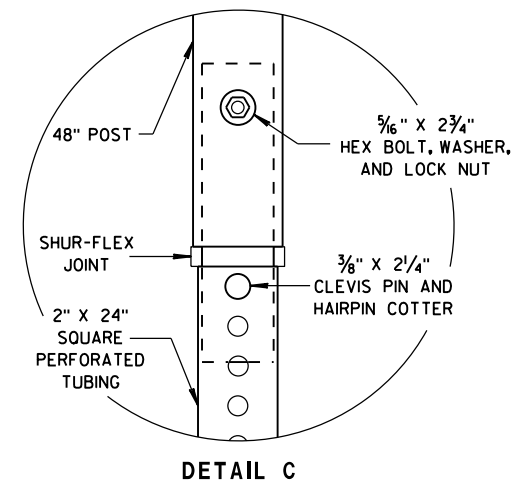
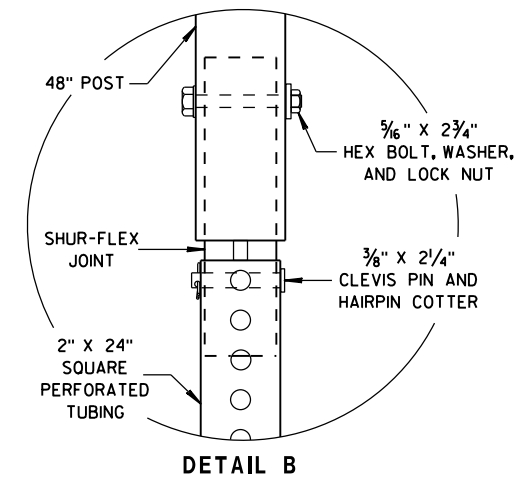
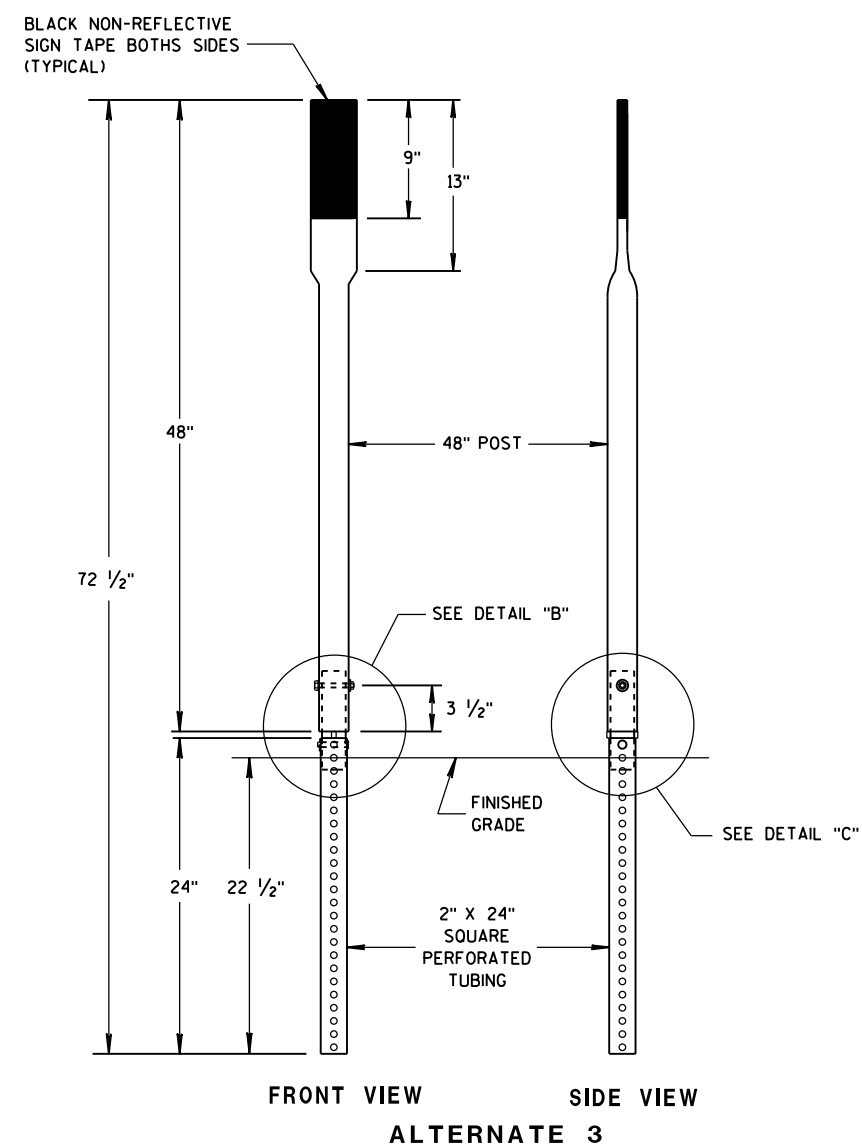
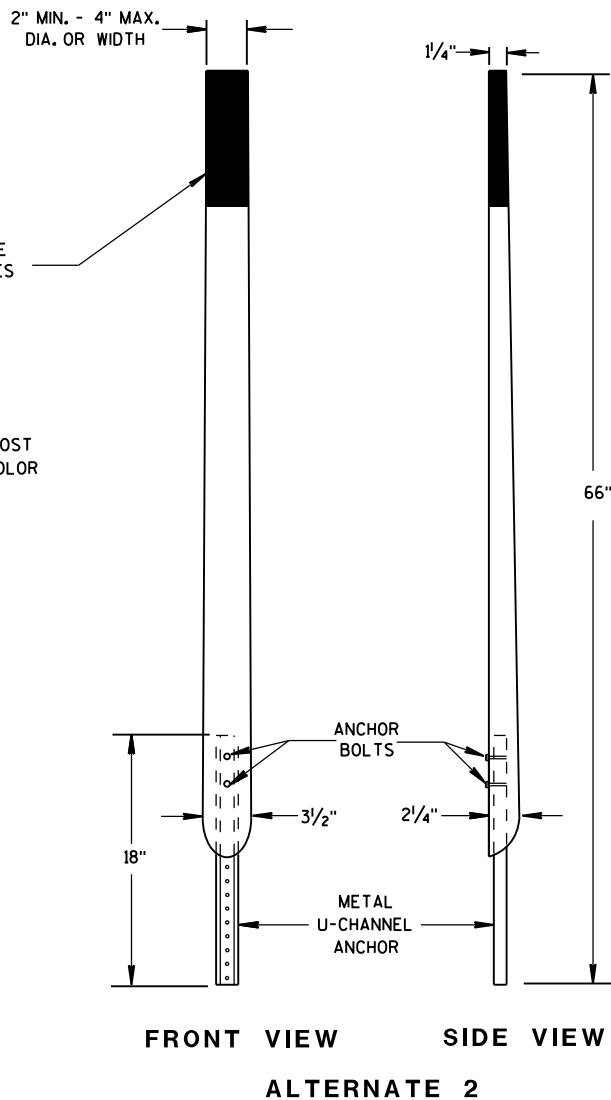
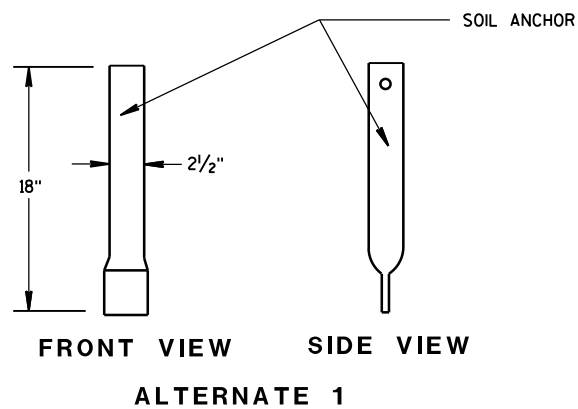
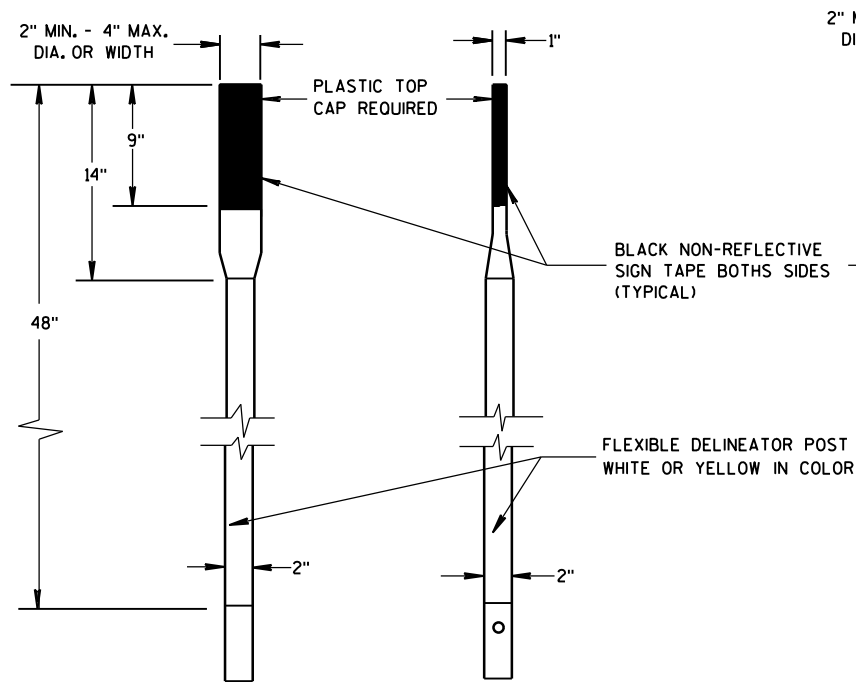
PLAN VIEW  
CONCRETE MASONRY ENDWALLS FOR  
CULVERT PIPE AND PIPE ARCH



CROSS SECTION  
FLEXIBLE MARKER POST

FLEXIBLE MARKER POST  
FOR CULVERT END

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

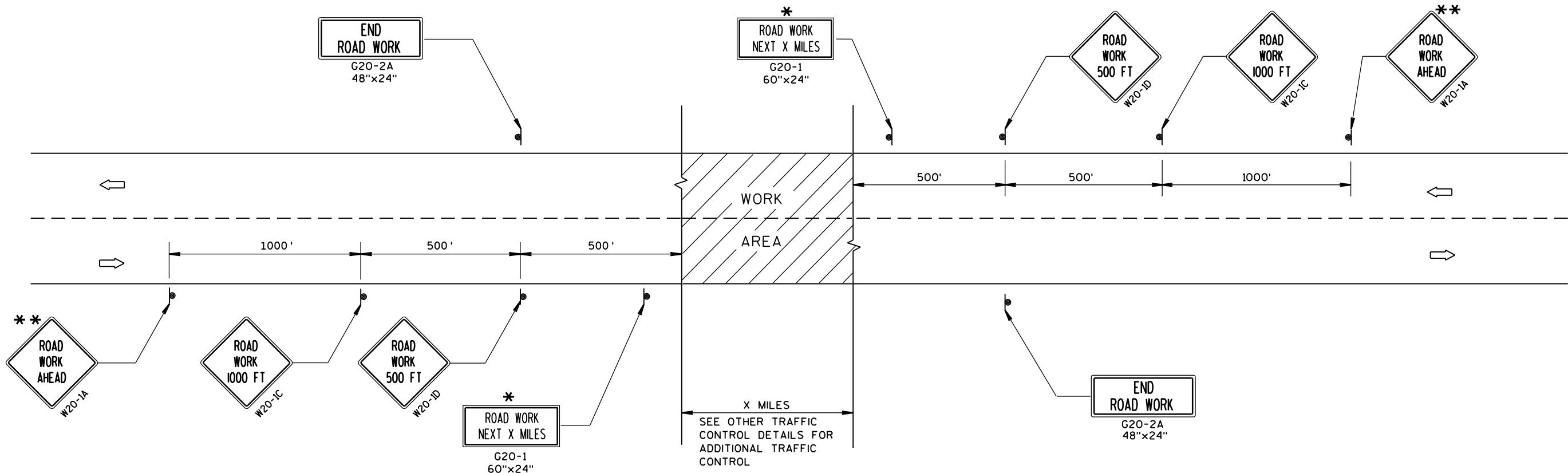


# FLEXIBLE MARKER POST FOR CULVERT END

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
10/1/2012  
DATE  
FHWA

/S/ Travis Feltes  
STATE TRAFFIC ENGINEER OF DESIGN



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

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.

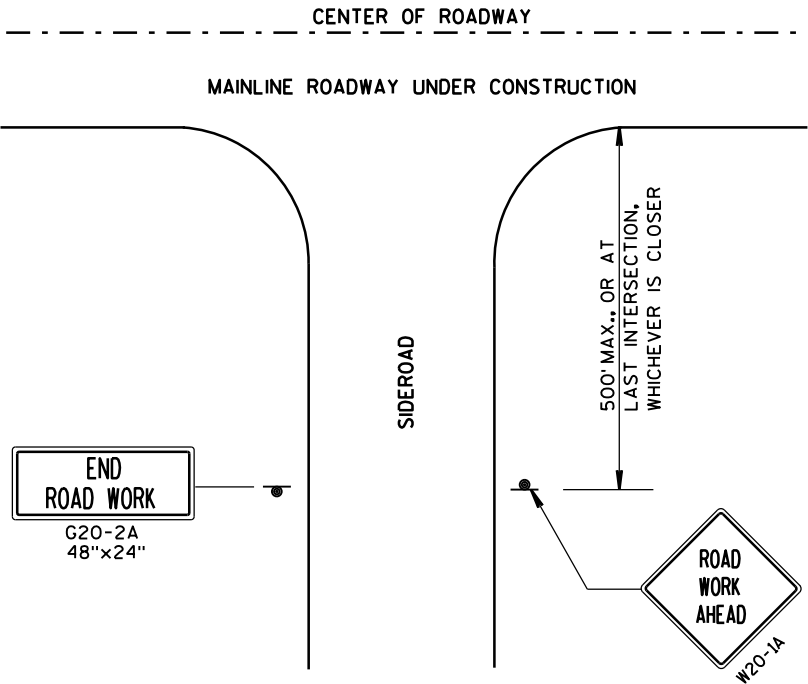
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 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 RE-ESTABLISHED.

\* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

\*\* PLACE 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

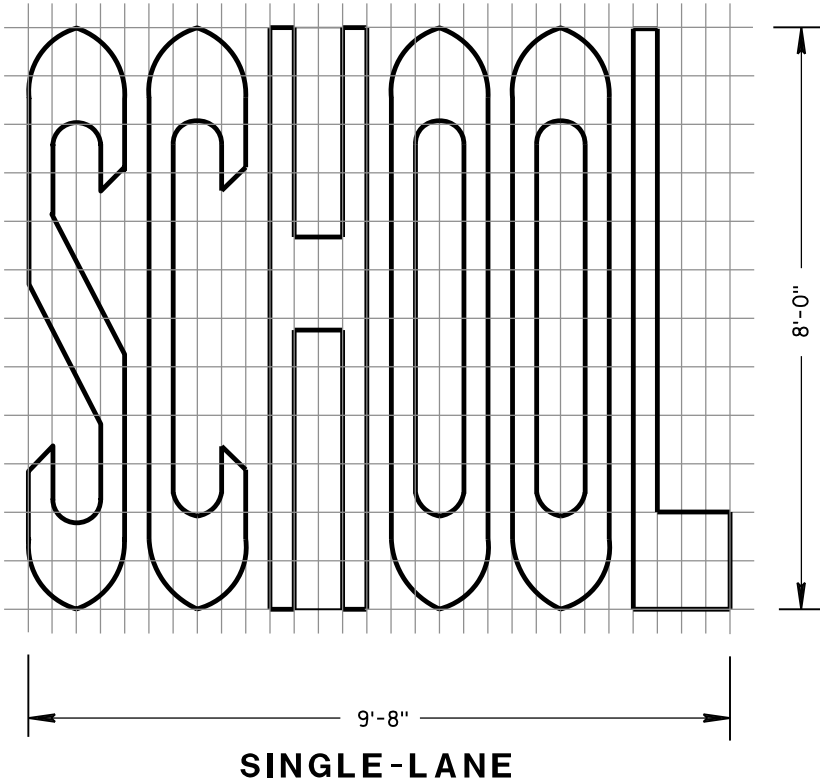
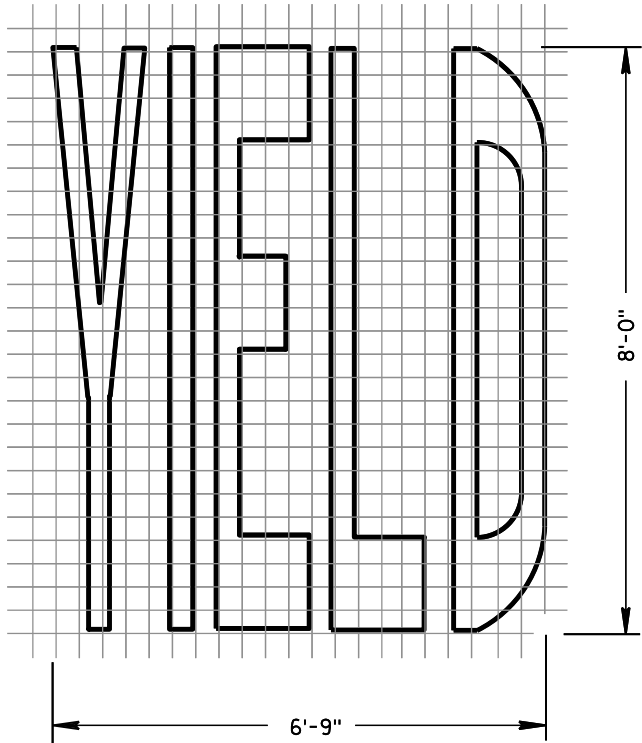
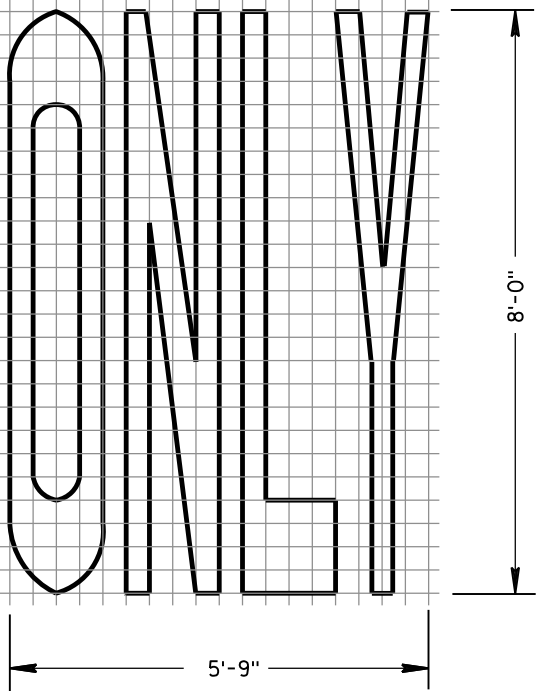
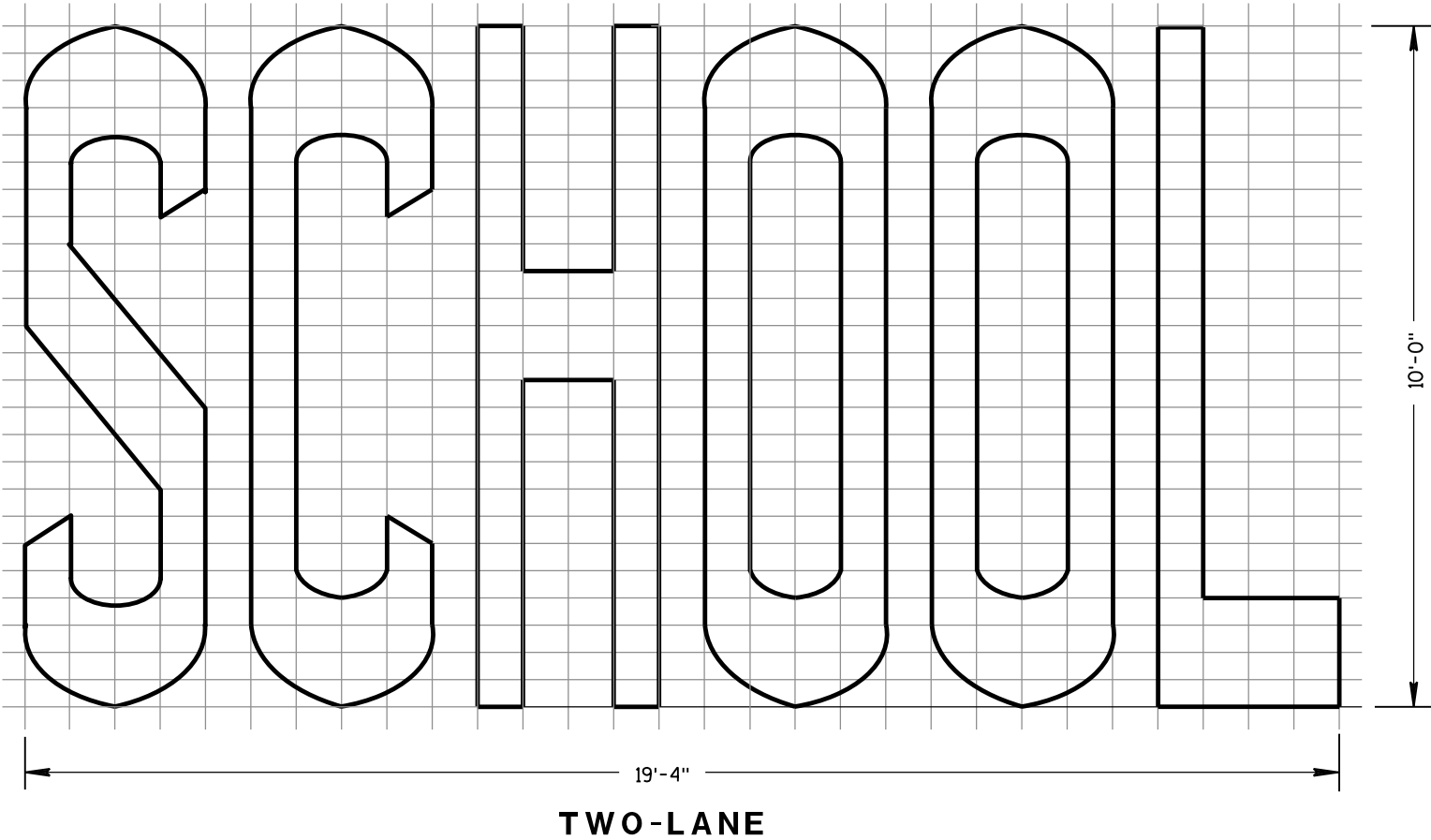
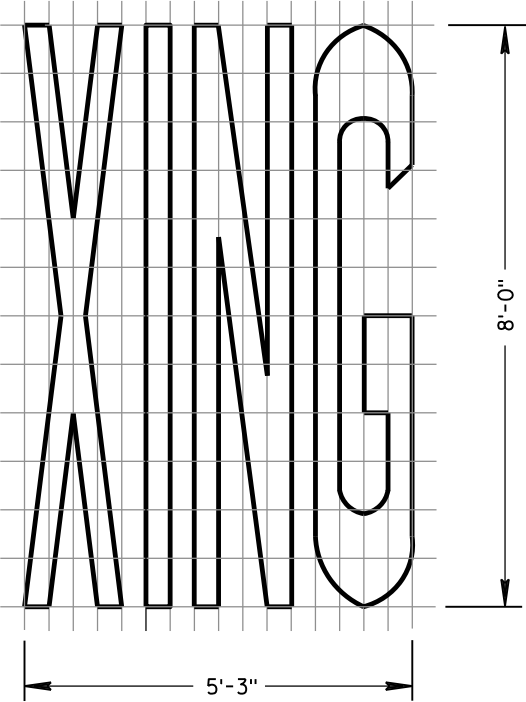
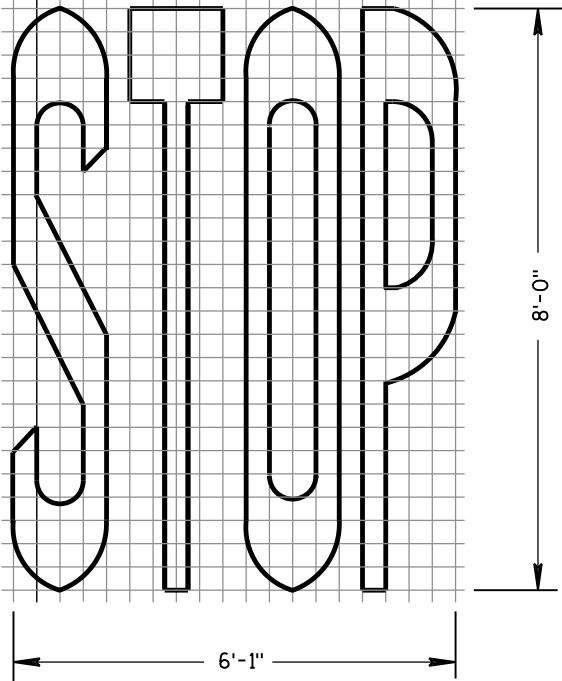
TRAFFIC CONTROL, ADVANCE  
WARNING SIGNS 45 M.P.H.  
OR GREATER TWO-WAY  
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
Sept. 2017 /S/ Andrew Heidtke  
DATE WORK ZONE ENGINEER  
FHWA

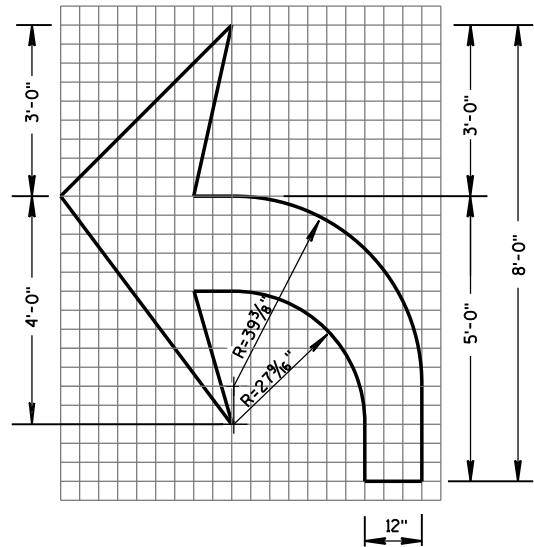
GENERAL NOTES

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.

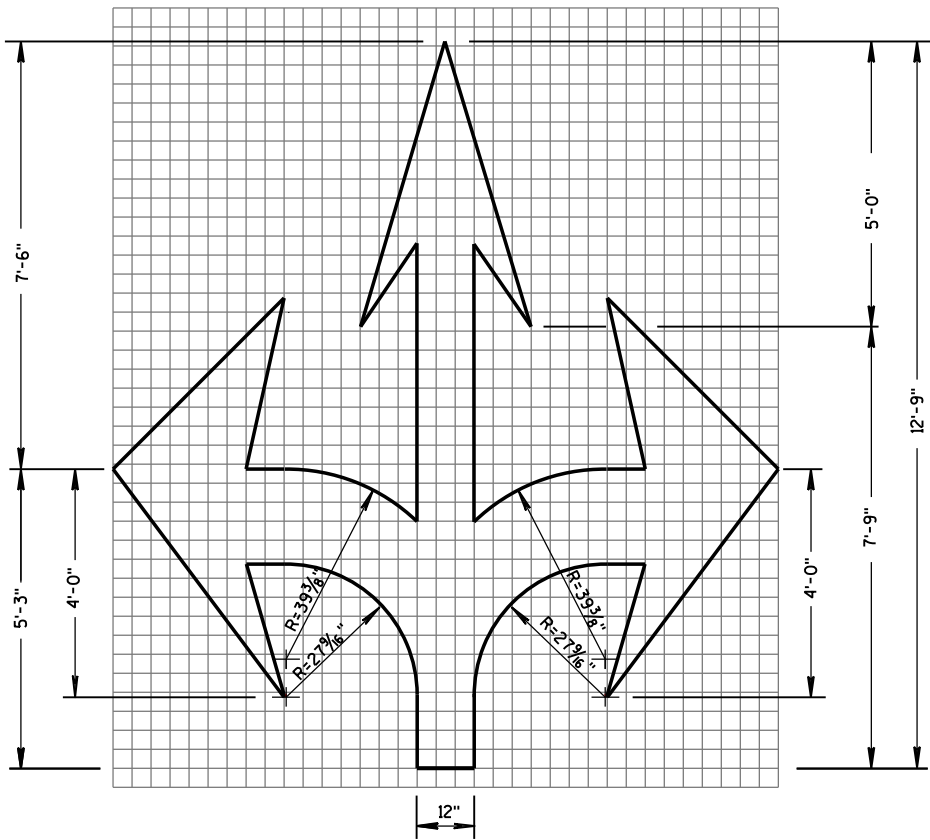


PAVEMENT MARKING WORDS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Matthew R. Rauch STATE SIGNING AND MARKING ENGINEER
FHWA	

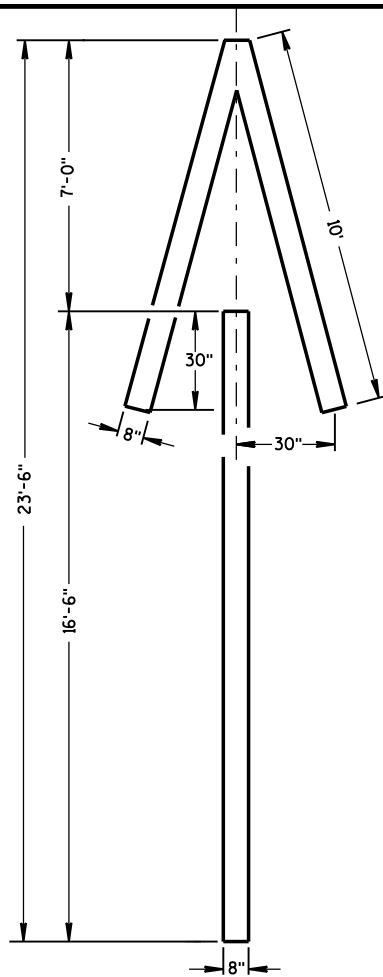




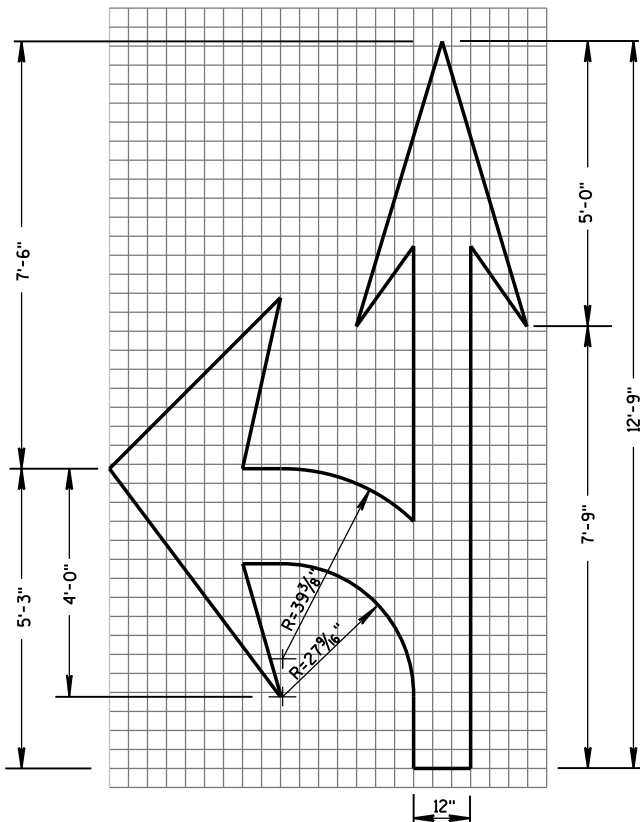
TYPE 2



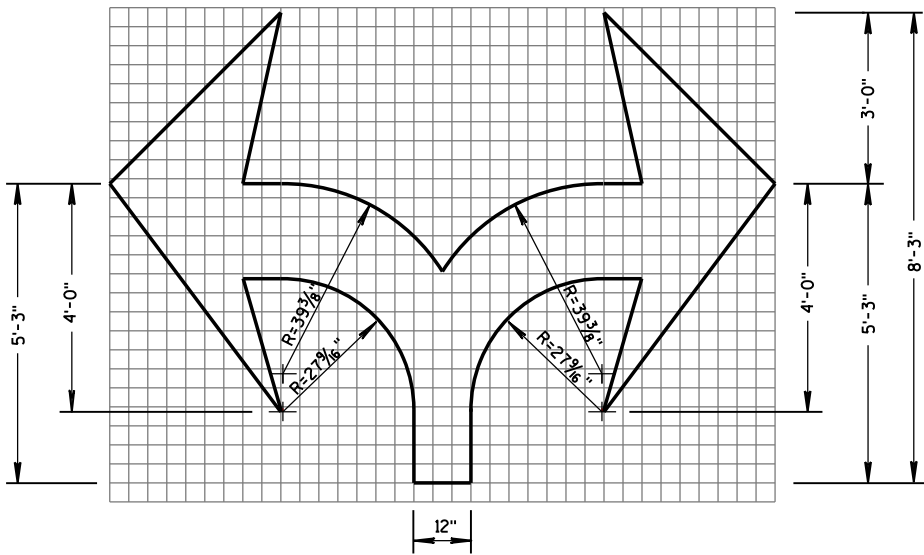
TYPE 6



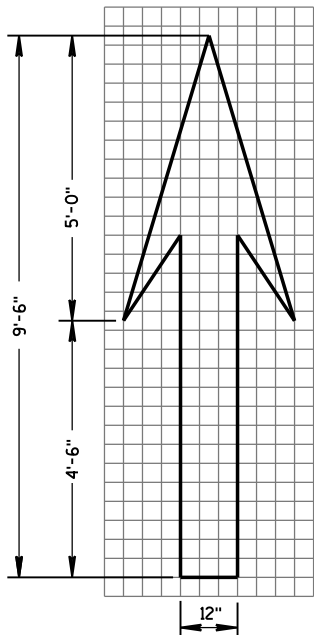
TYPE 4



TYPE 3



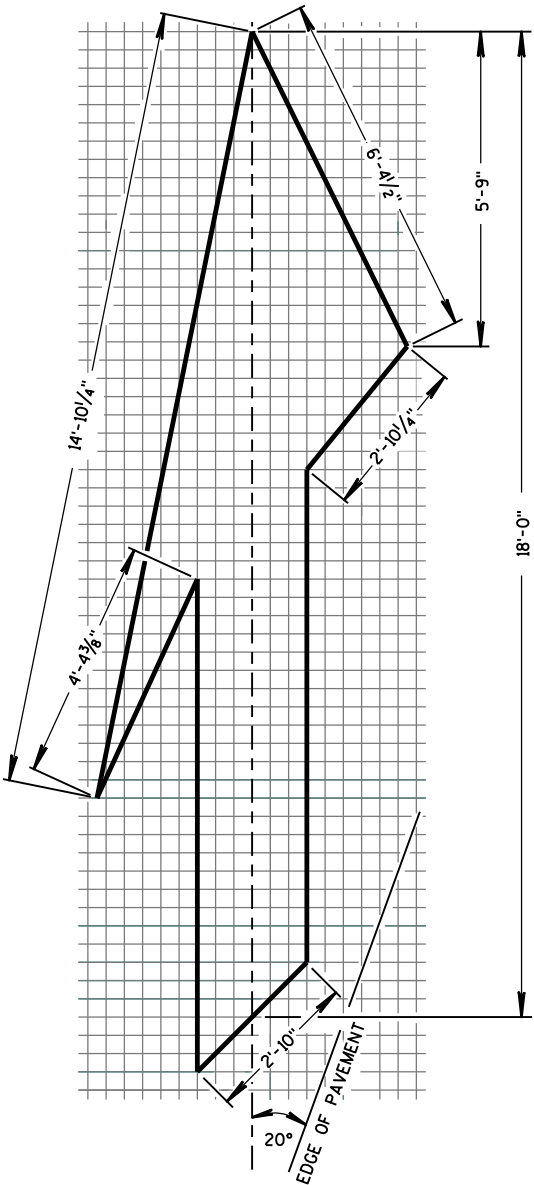
TYPE 7



TYPE 1

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.

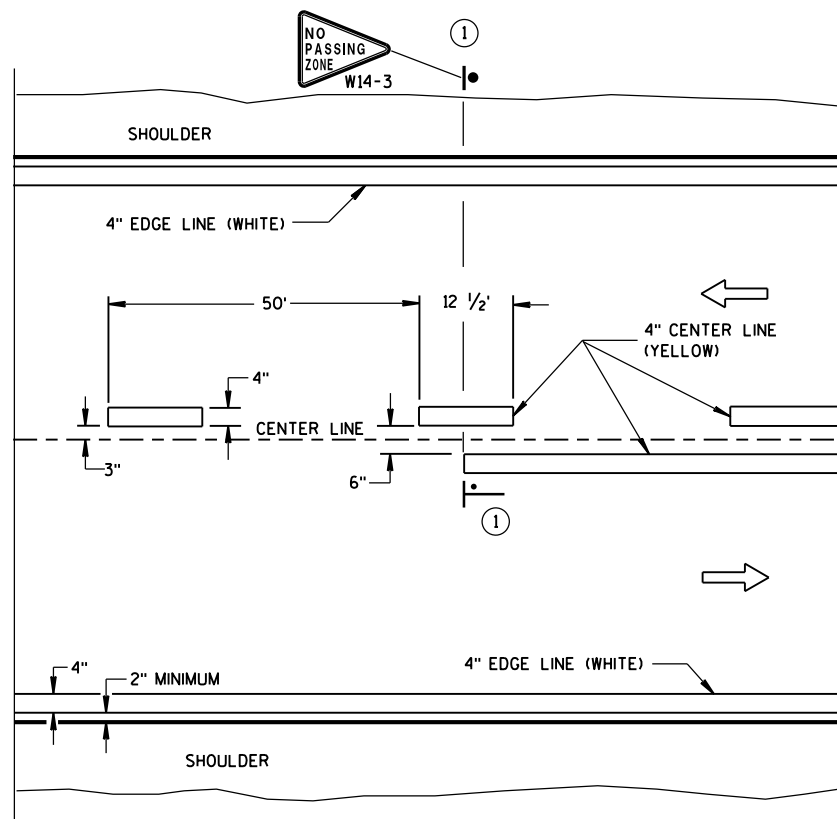


TYPE 5 LANE DROP ARROW

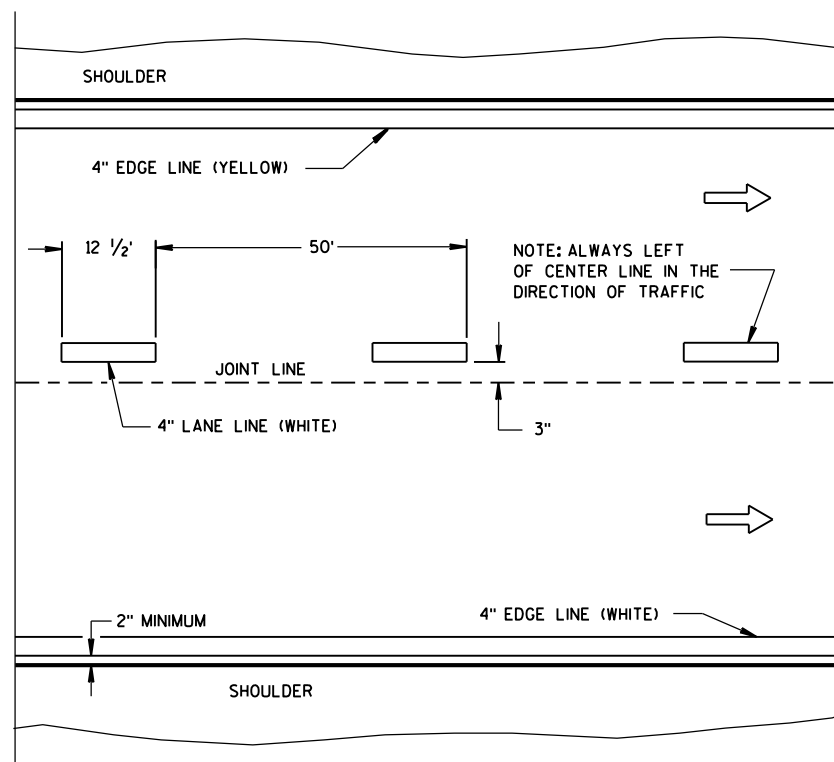
PAVEMENT MARKING ARROWS

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2017 /S/ Matthew R. Rauch  
DATE STATE SIGNING AND MARKING ENGINEER  
FHWA

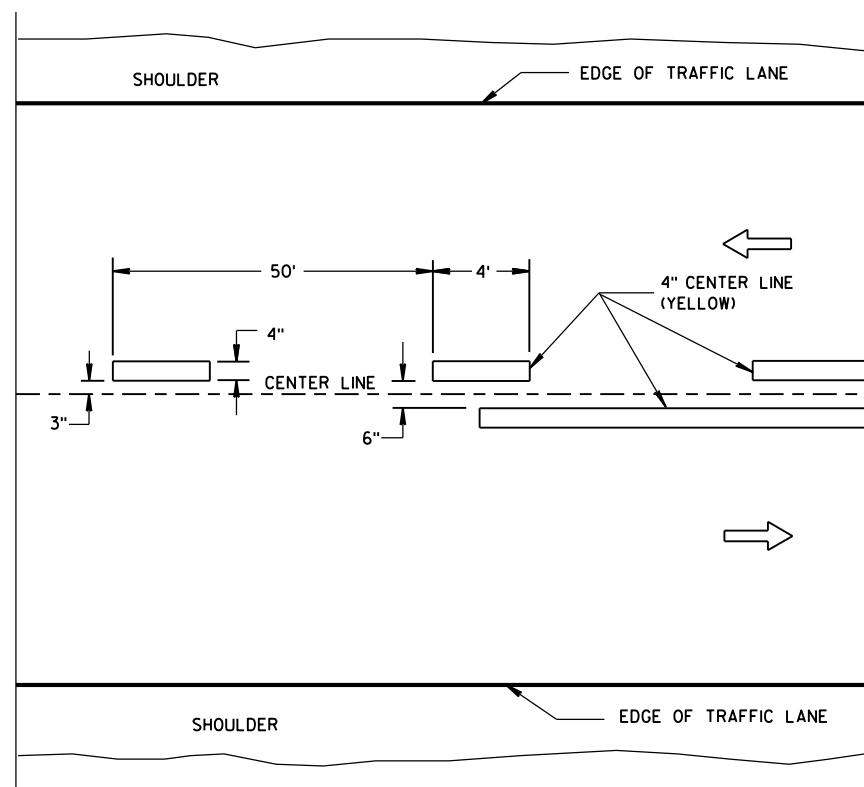


**TWO WAY TRAFFIC**

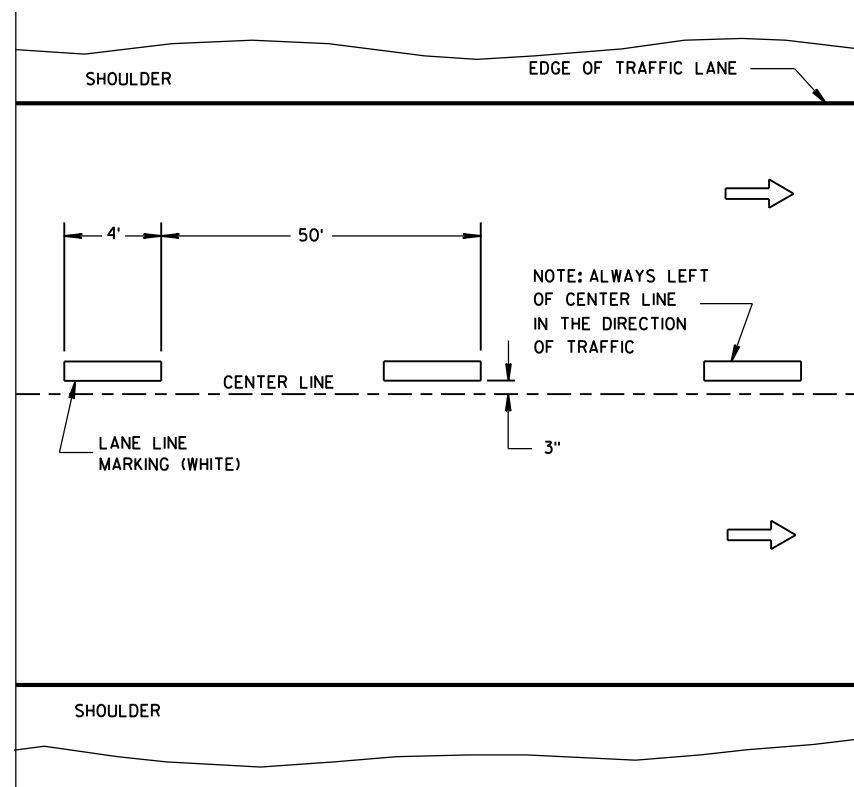


## ONE WAY TRAFFIC

## 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

6

6

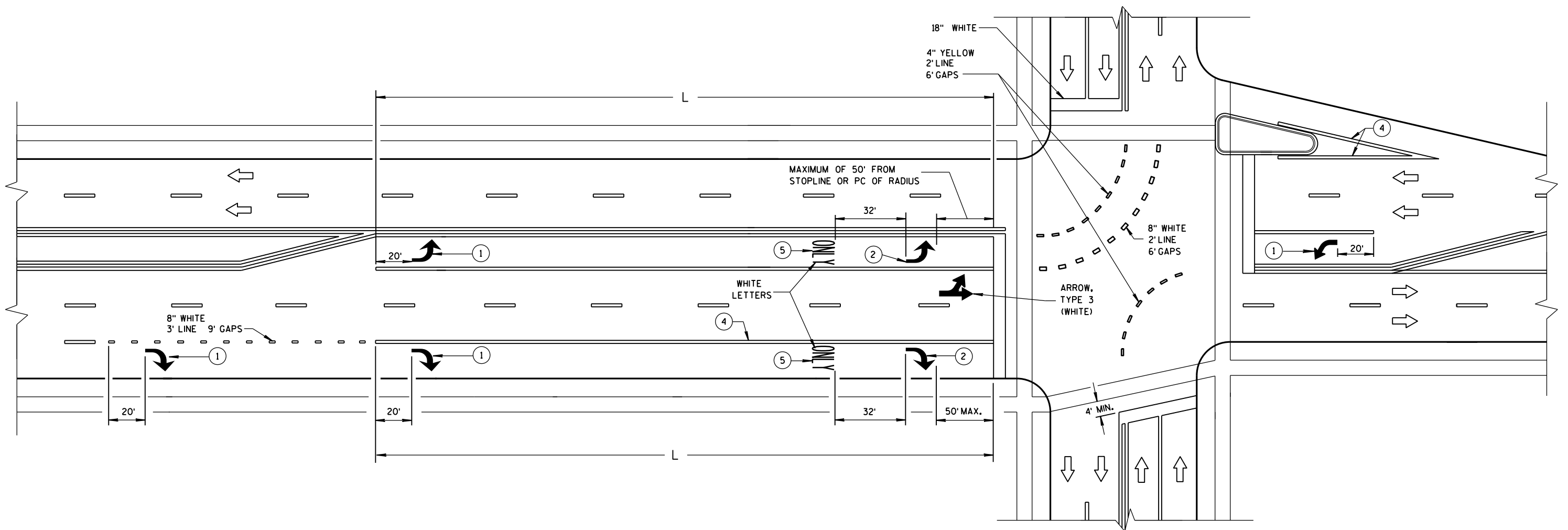
**S.D.D. 15 C 8-18a**

**S.D.D. 15 C 8-18a**

### LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2017 /S/ Matthew R. Rauch  
DATE STATE SIGNING AND MARKING ENGINEER  
FHWA



### GENERAL NOTES

- ① REQUIRED ARROW, TYPE 2 (WHITE).
- ② REQUIRED ARROW, TYPE 2 (WHITE) WHEN L IS GREATER THAN 78 FEET AND LESS THAN OR EQUAL TO 166 FEET.
- ③ A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
- ④ 8" WHITE
- ⑤ REQUIRED WORD ONLY WHEN L IS GREATER THAN 166 FEET.

### TWO WAY LEFT TURN LANE

NOTE:  
ARROW SYMBOL (→)  
SHOWS DIRECTION OF TRAVEL

L = LENGTH OF TURN BAY

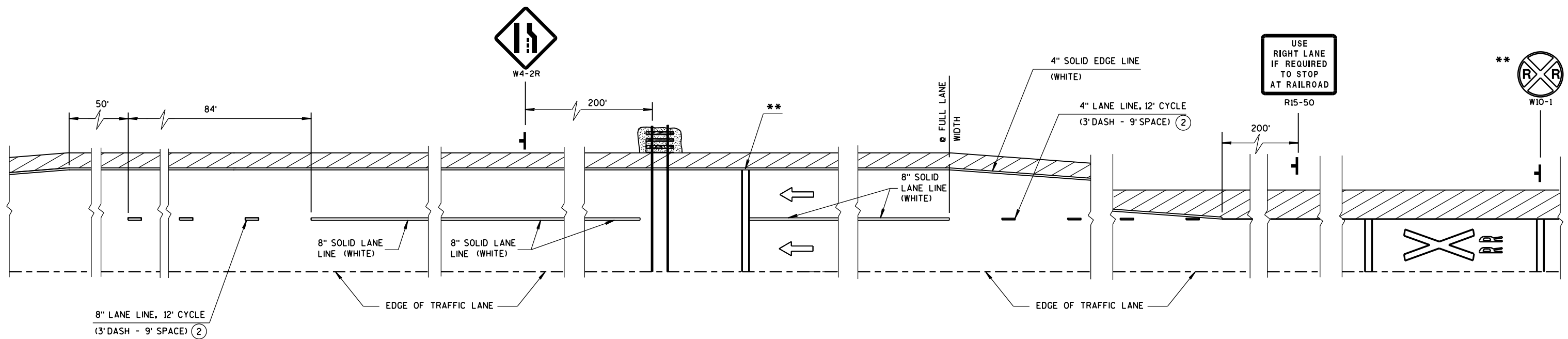
PAVEMENT MARKING  
(TURN LANES)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

SIGNING AND MARKING IS SHOWN AS TYPICAL PLACEMENT, FIELD CONDITIONS MAY DICTATE CHANGES IN SIGNING AND MARKING PLACEMENT.

- ① INSTALLED FOR EXPRESSWAYS.
- ② 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.



DETAIL FOR TRUCK STOPPING LANE PAVEMENT MARKINGS

LEGEND

- DIRECTION OF TRAFFIC FLOW
- \*\*** SEE "SIGNING AND PAVEMENT MARKING DETAILS FOR RAILROAD - HIGHWAY GRADE CROSSING" FOR LOCATION OF ADVANCE MARKINGS.
- POST MOUNTED SIGN

TRUCK STOPPING LANE PAVEMENT MARKINGS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept., 2017 /S/ Matthew R. Rauch DATE STATE SIGNING AND MARKING ENGINEER	
FHWA	



LEGEND

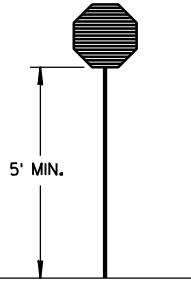
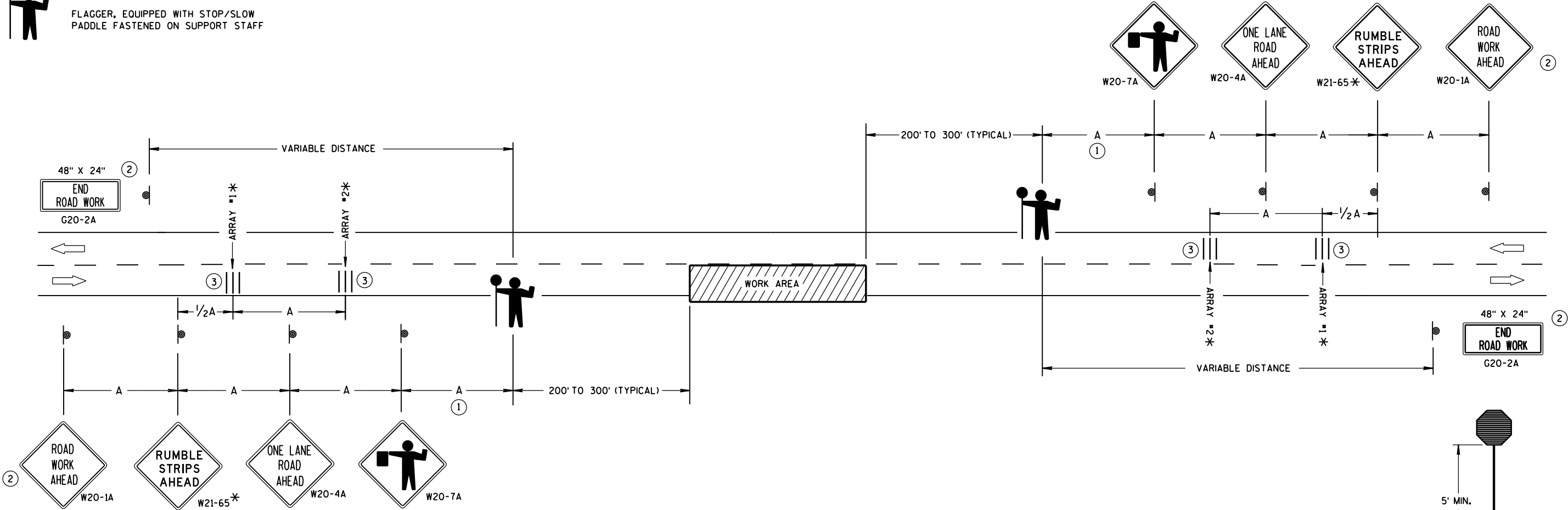
- SIGN ON PORTABLE OR PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA
- FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

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



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



STOP/SLOW PADDLE ON SUPPORT STAFF

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

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.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE 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.

"W0" SIGNS ARE THE SAME AS "W" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS. PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

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

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 RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

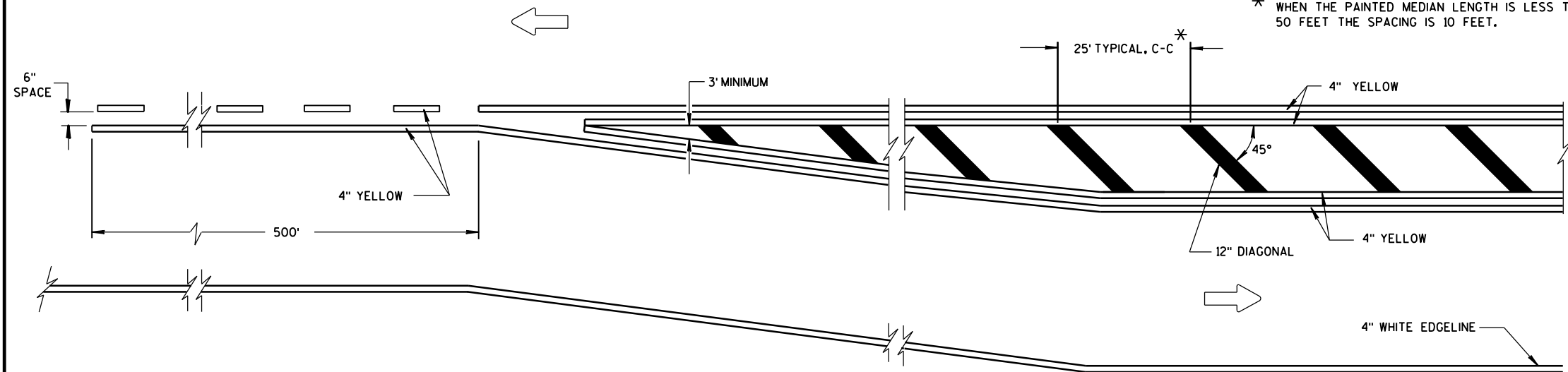
\* UTILIZE TEMPORARY RUMBLE STRIPS WHEN FLAGGING OPERATION IS ANTICIPATED TO BE STATIONARY IN EXCESS OF TWO HOURS.

- FOR A MOVING WORK OPERATION, SIGNING AND TEMPORARY RUMBLE STRIPS (IF USED) SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3,500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.
- EACH TEMPORARY RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2017 /S/ Andrew Heldtke  
DATE WORK ZONE ENGINEER  
FHWA

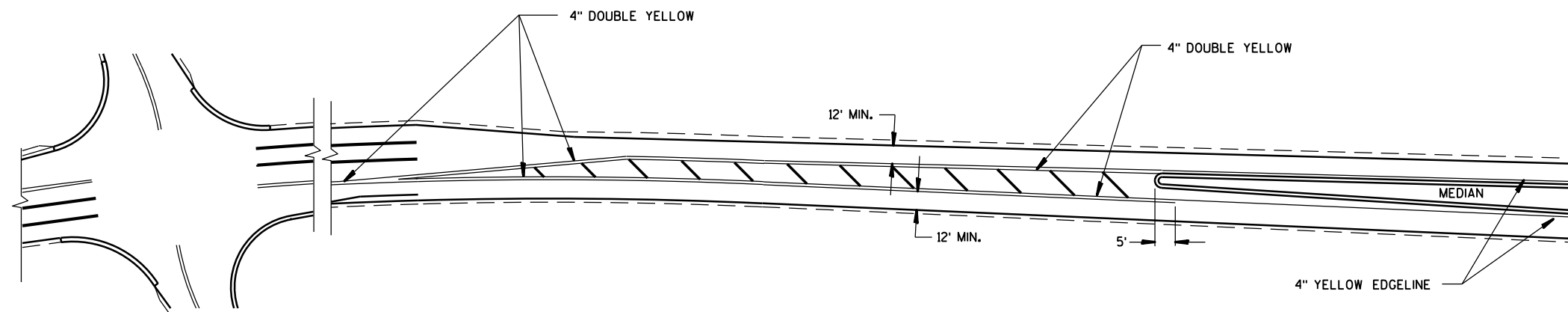


**MEDIAN ISLAND DETAIL**

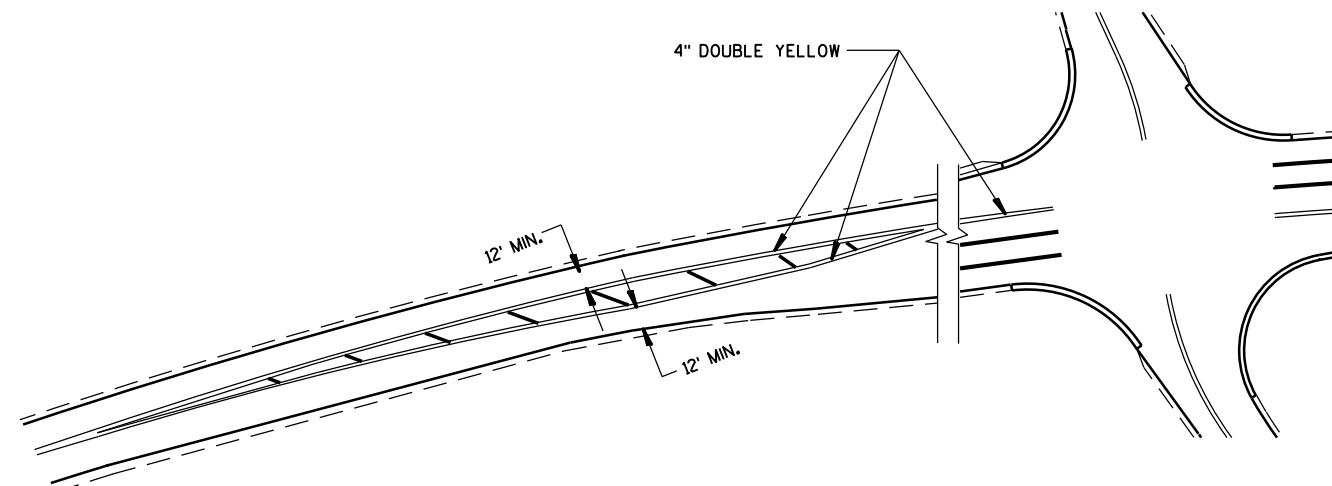
**GENERAL NOTE**

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

➡ DIRECTION OF TRAVEL



**APPROACH MARKINGS FOR OTHER MEDIAN TYPES**



**NON APPROACH MARKINGS**

**MEDIAN ISLAND MARKING**

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2017 /S/ Matthew Rauch  
DATE STATE SIGNING AND MARKING ENGINEER  
FHWA

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

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.

IF SPEED LIMIT IS 40 MPH OR LESS STATIONARY SIGNS MAY BE OMITTED IF CONES ARE USED.

ALTERNATE SIGN MESSAGES, SUCH AS "PAINT CREW AHEAD" OR "ROAD PAINTING AHEAD" MAY BE USED.

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 OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

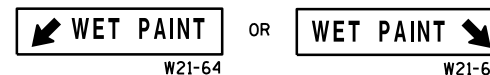
THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS.

THIS DRAWING SHALL BE USED FOR CENTERLINE OR EDGELINE MARKING.

WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR TURN THE STATIONARY WARNING SIGNS AWAY FROM TRAFFIC.

- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.

- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.



- ③ OPTIONAL TRUCK-MOUNTED ATTENUATOR.

- ④ SIGNS SHALL BE REPEATED APPROXIMATELY EVERY THREE MILES.

- ⑤ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.

**V1** LEAD VEHICLE

**V2** SHADOW VEHICLE

**V3** TRAIL VEHICLE WITH TMA

**TMA** TRUCK-MOUNTED ATTENUATOR



SIGN ON TEMPORARY SUPPORT

 DIRECTION OF TRAFFIC

- CONES



FLASHING ARROW PANEL (CAUTION)

# MOVING PAVEMENT MARKING OPERATION TWO-LANE TWO-WAY ROADWAY

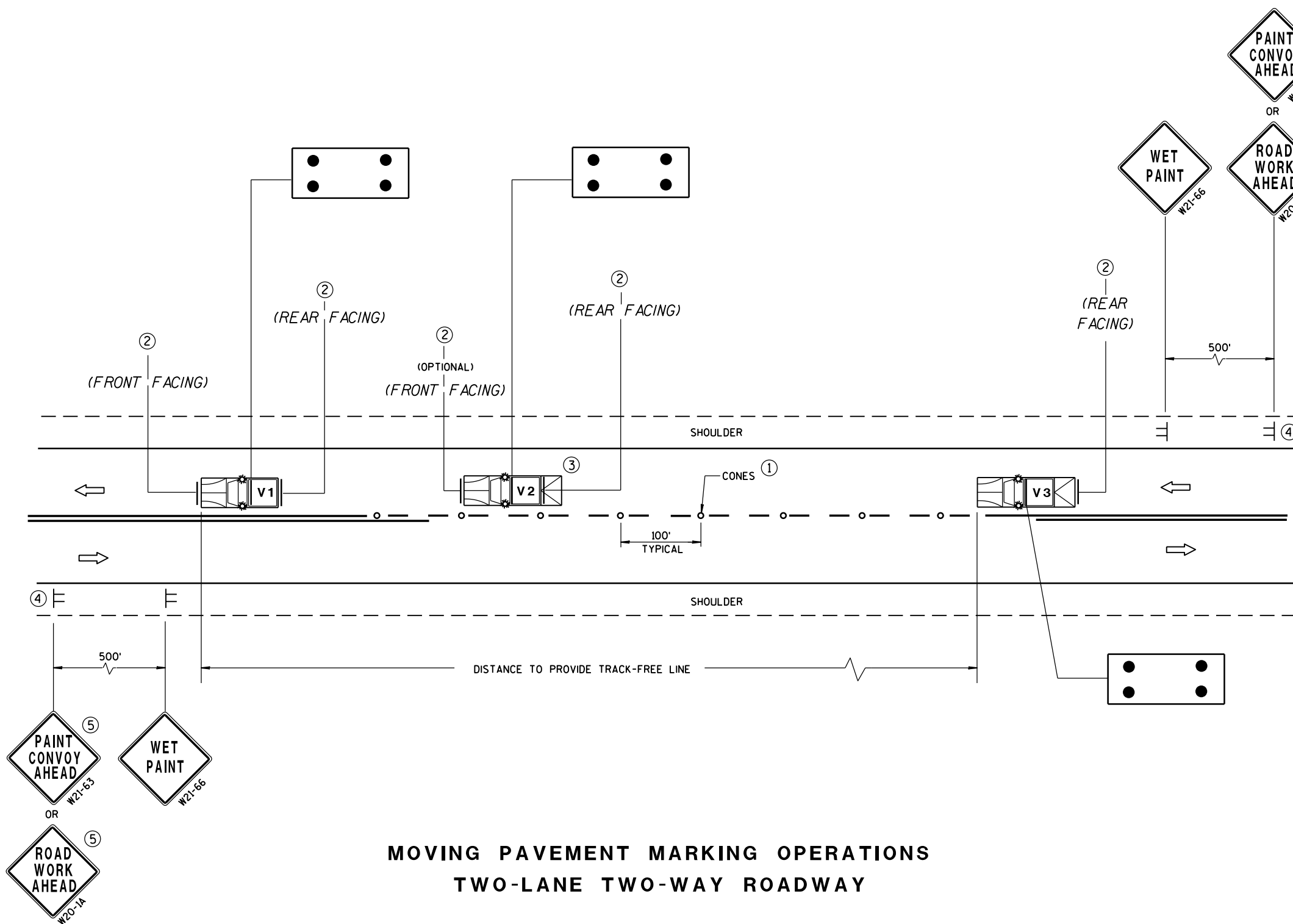
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

**APPROVED**

Sept., 2017  
DATE

/S/ Andrew Heidtk  
WORK ZONE ENGINEER

FHWA



GENERAL NOTES

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

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

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

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

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.

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.

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

TABLE A

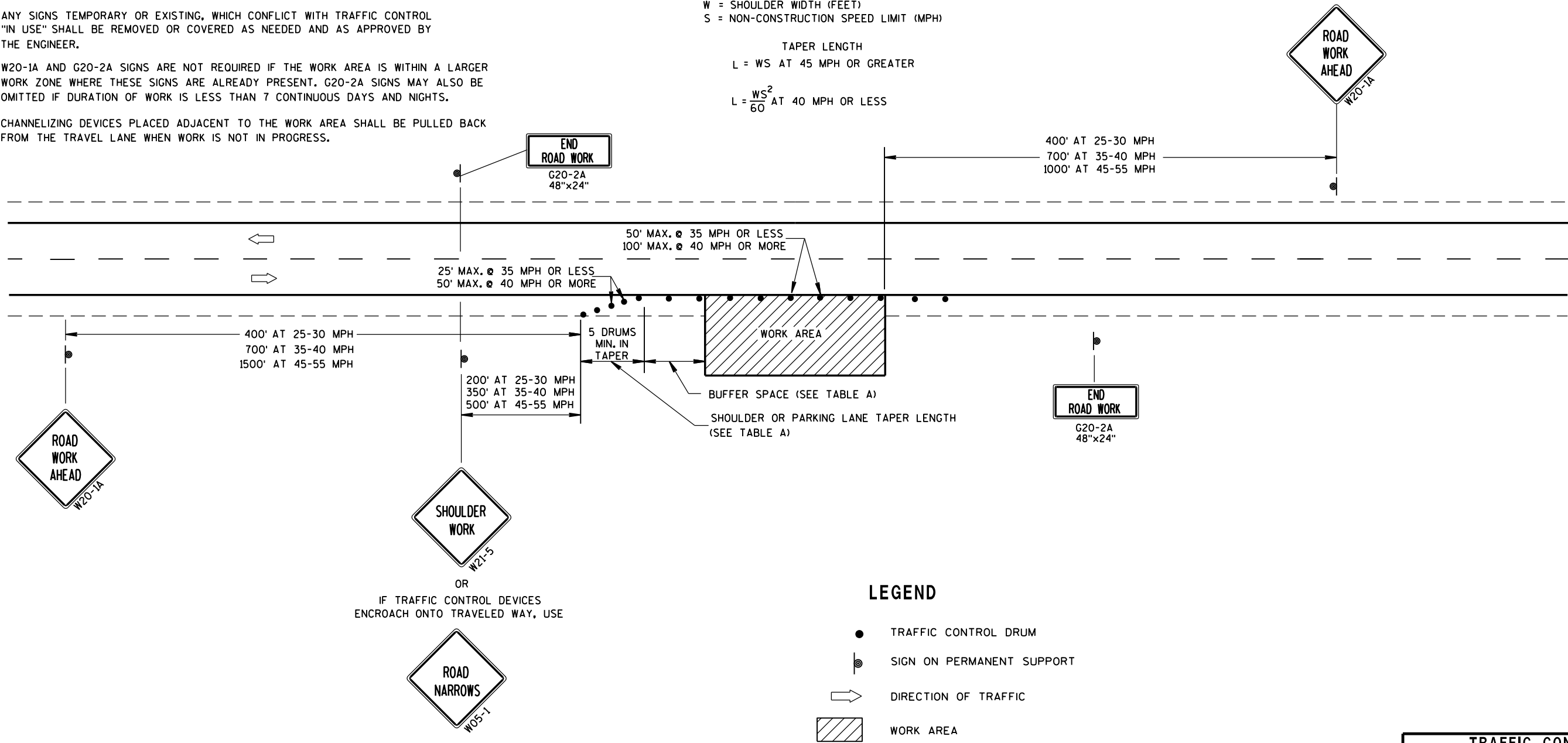
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

W = SHOULDER WIDTH (FEET)  
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

TAPER LENGTH  
L = WS AT 45 MPH OR GREATER

$L = \frac{WS^2}{60}$  AT 40 MPH OR LESS

SHOULDER TAPER LENGTH =  $\frac{1}{3}L$



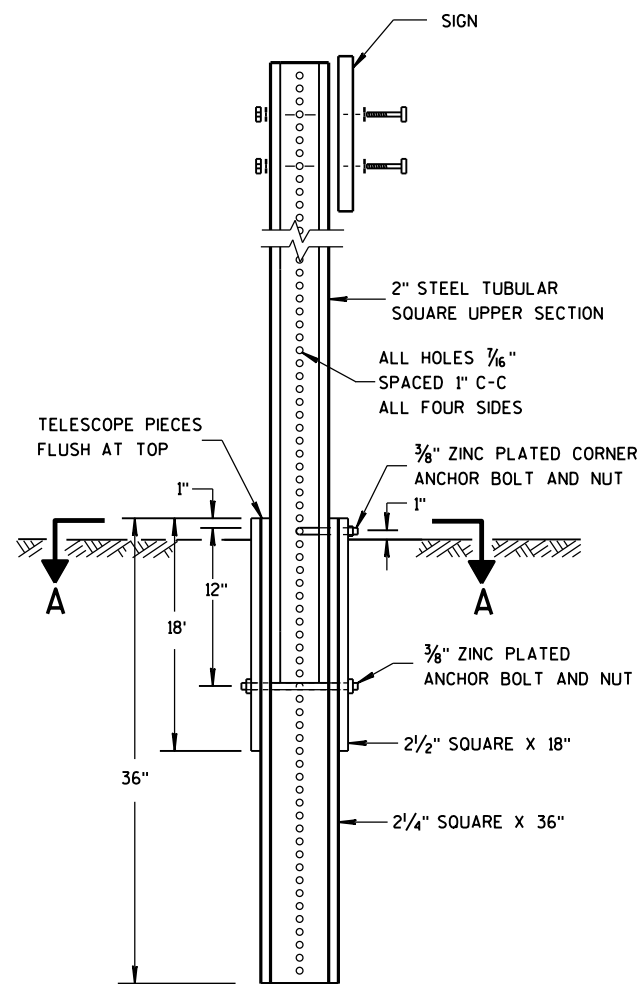
LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA

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

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
July 14, 2015 /S/ Peter Amakobe Atepe  
DATE STATEWIDE WORK ZONE TRAFFIC  
SAFETY ENGINEER  
FHWA



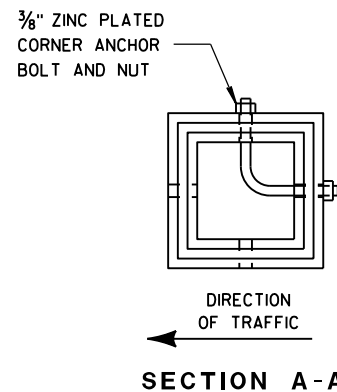
DETAIL OF TUBULAR  
STEEL SIGN POST

TUBULAR STEEL POSTS

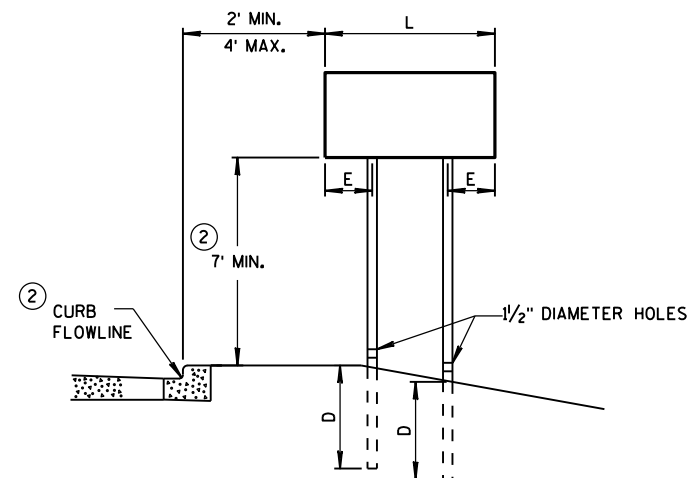
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

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

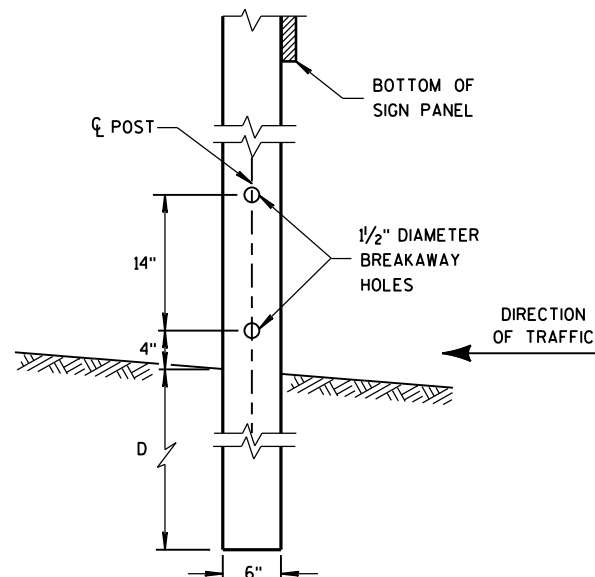


URBAN AREA

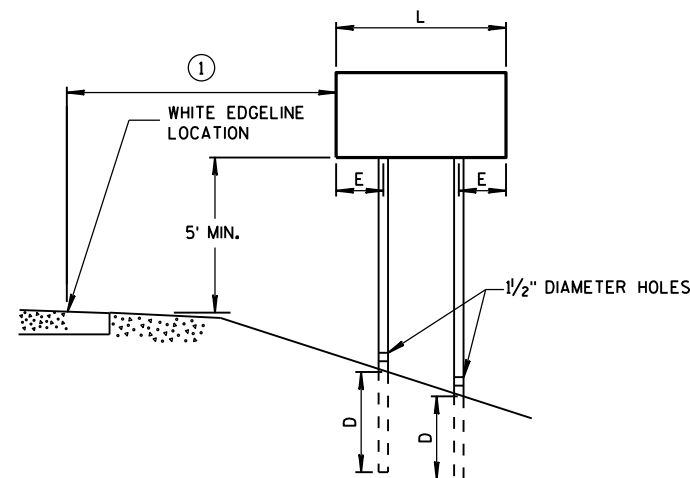
POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

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.

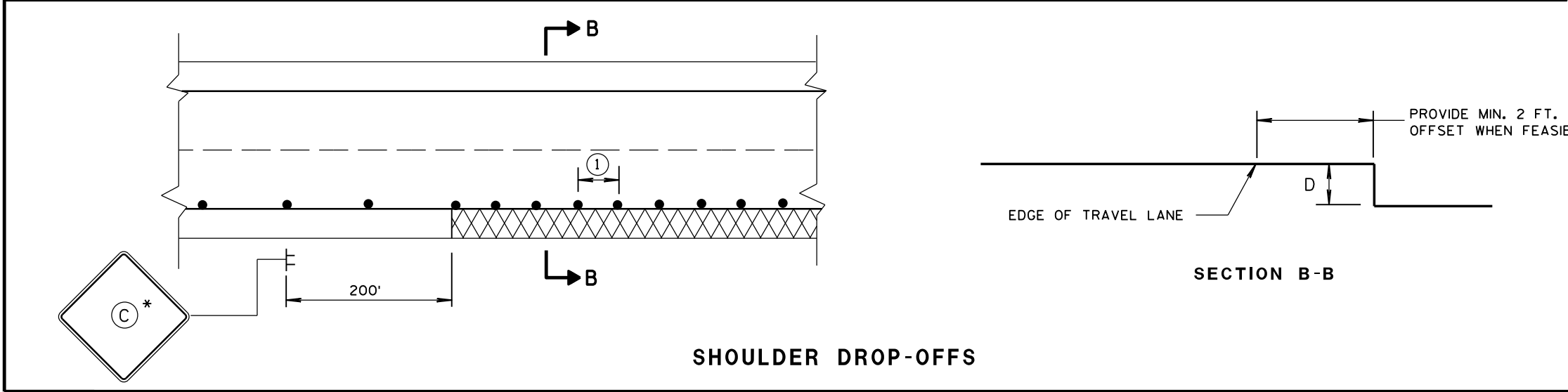
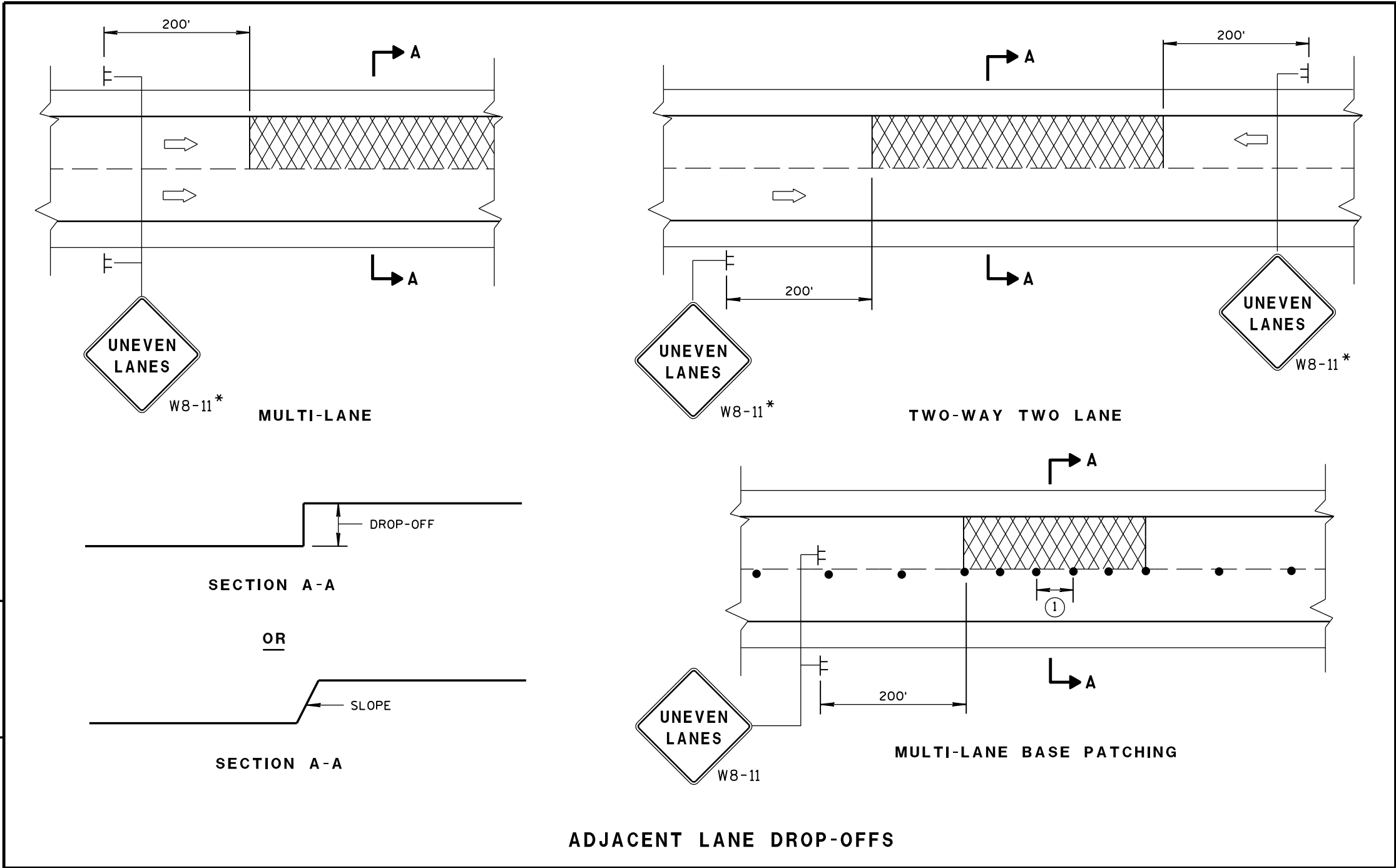
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
  - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

- 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	



**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.

\* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1/2 MILE.

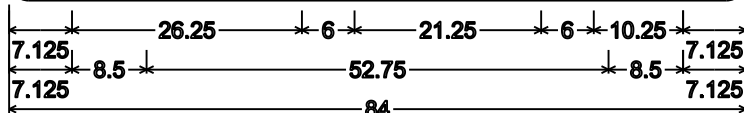
① USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

**LEGEND**

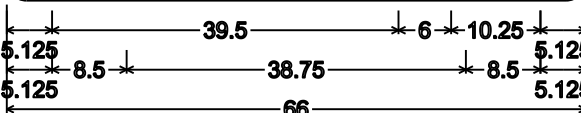
- ┌ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA WITH DROP-OFF

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	<div>LOW SHOULDER</div> W08-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	<div>SHOULDER DROP-OFF</div> W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

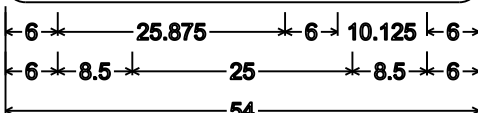
TRAFFIC CONTROL, DROP-OFF SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March, 2017 DATE	/S/ Andrew Heldtke WORK ZONE ENGINEER
FHWA	



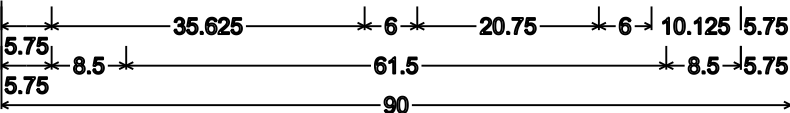
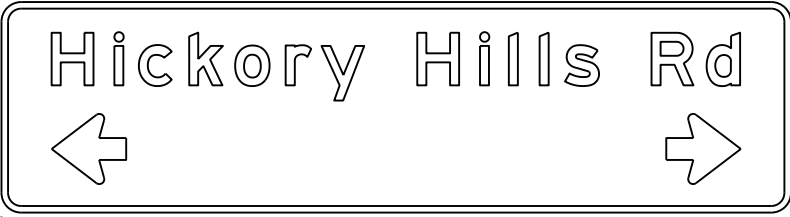
D1-61; 2.250" Radius, 0.750" Border



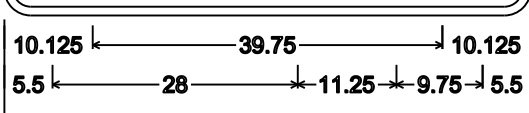
D1-61; 2.250" Radius, 0.750" Border



D1-61; 2.250" Radius, 0.750" Border



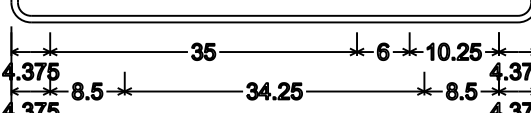
D1-61; 2.250" Radius, 0.750" Border



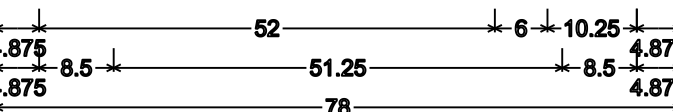
I2-3;  
3.000" Radius, 1.000" Border,  
"Brillion" D; "POPULATION" C; "3148" C



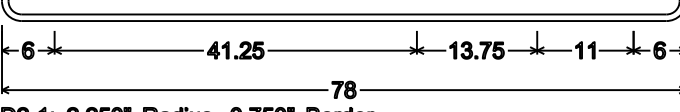
I2-3; 3.000" Radius, 1.000" Border,  
"Forest" D; "Jct" D; "UNINCORPORATED" C



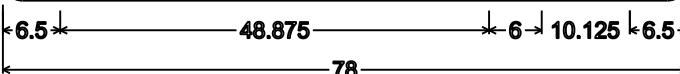
D1-61;  
2.250" Radius, 0.750" Border



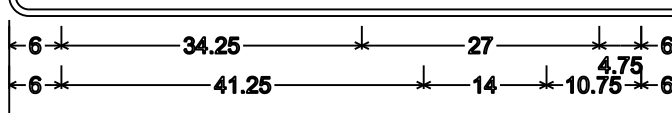
D1-61; 2.250" Radius, 0.750" Border



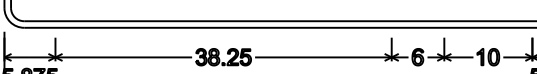
D2-1; 2.250" Radius, 0.750" Border



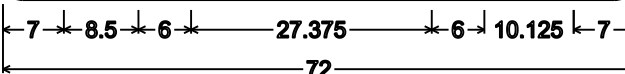
I2-2; 2.250" Radius, 0.750" Border



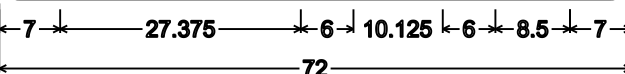
D2-2; 2.250" Radius, 0.750" Border



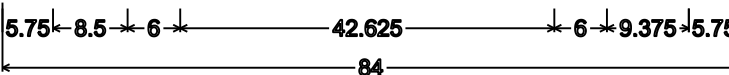
I2-2; 2.250" Radius, 0.750" Border



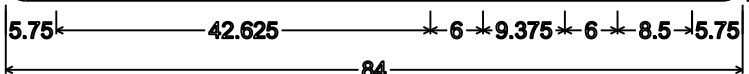
D1-1; 2.250" Radius, 0.750" Border



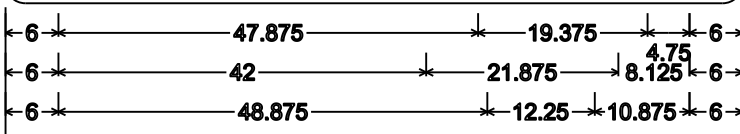
D1-1; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border



D1-1; 2.250" Radius, 0.750" Border

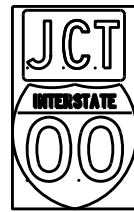


D2-3; 2.250" Radius, 0.750" Border

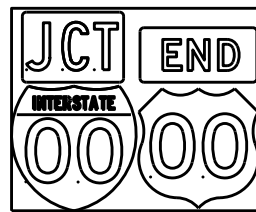
NOTES

1. All Signs Type II - Type H Reflective
2. Color:  
Background - Green  
Message - White
3. Message Series - E except as noted

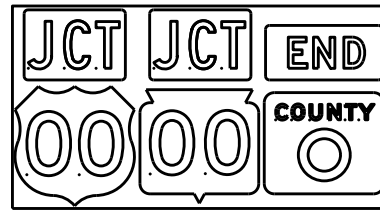
TYPICAL ASSEMBLIES



J1-1



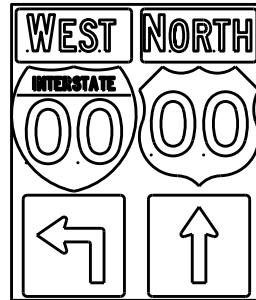
J1-2



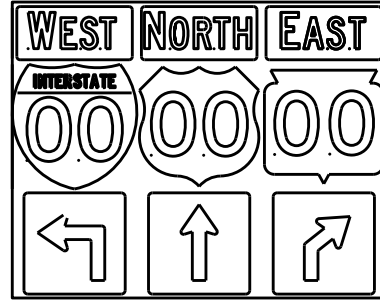
J1-3



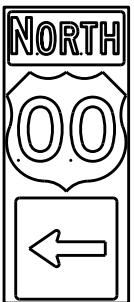
J2-1



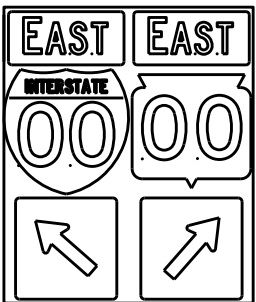
J2-2



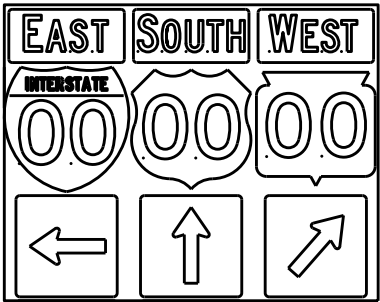
J2-3



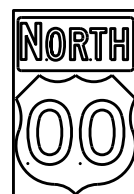
J3-1



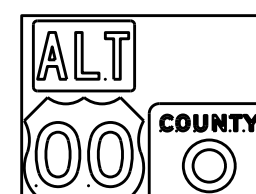
J3-2



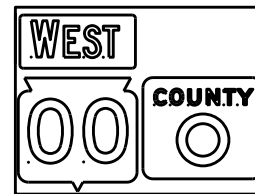
J3-3



J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

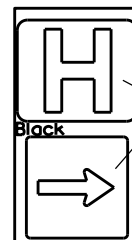


J22-1



JV

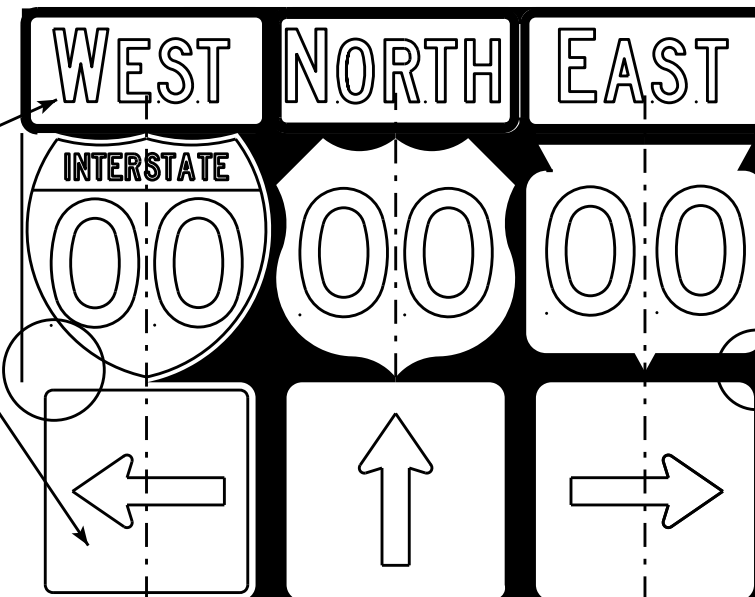
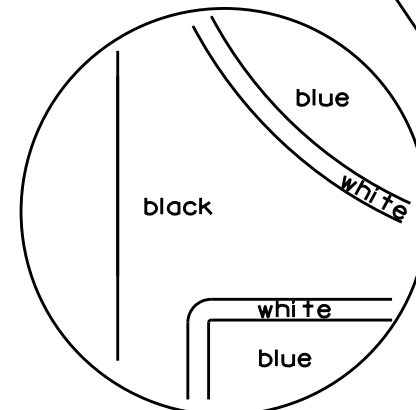
( Typical Vertical J-Assembly  
See Note 10 and 11)



JH-1

Blue Background

[blue background  
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS  
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
For State Traffic Engineer

DATE 2/06/14 PLATE NO. A2-1S.8

NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Black Non-reflective  
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

PROJECT NO:

FILE NAME : C:\CAEFiles\Projects\tr\_stdplate\A21S.DGN

PLOT DATE : 06-FEB-2014 14:10

PLOT BY : mscs.ja

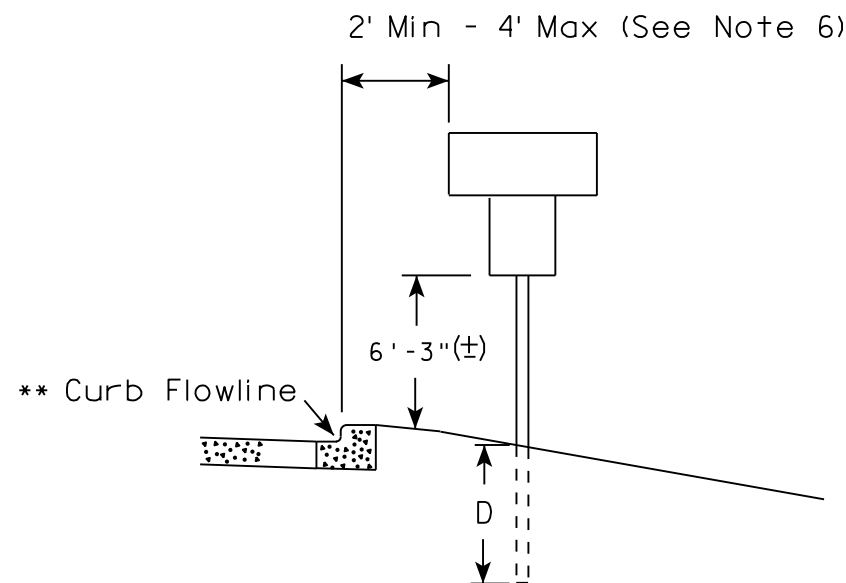
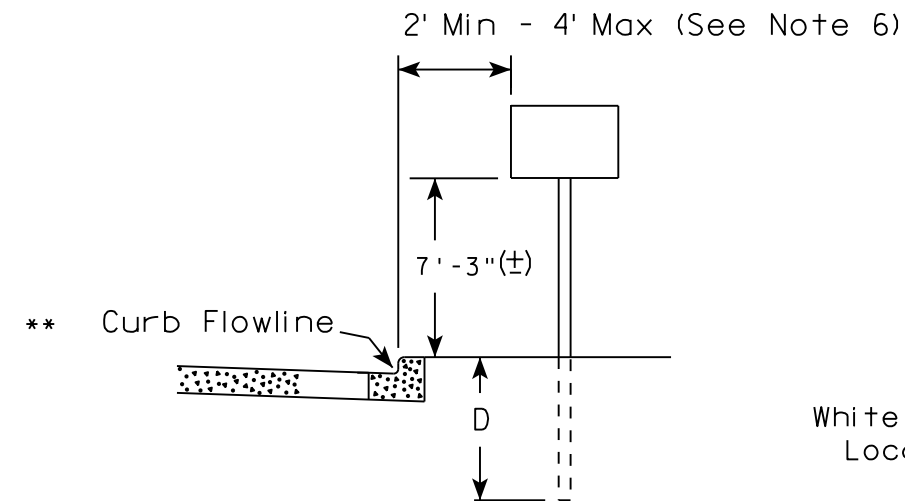
PLOT NAME :

SHEET NO:

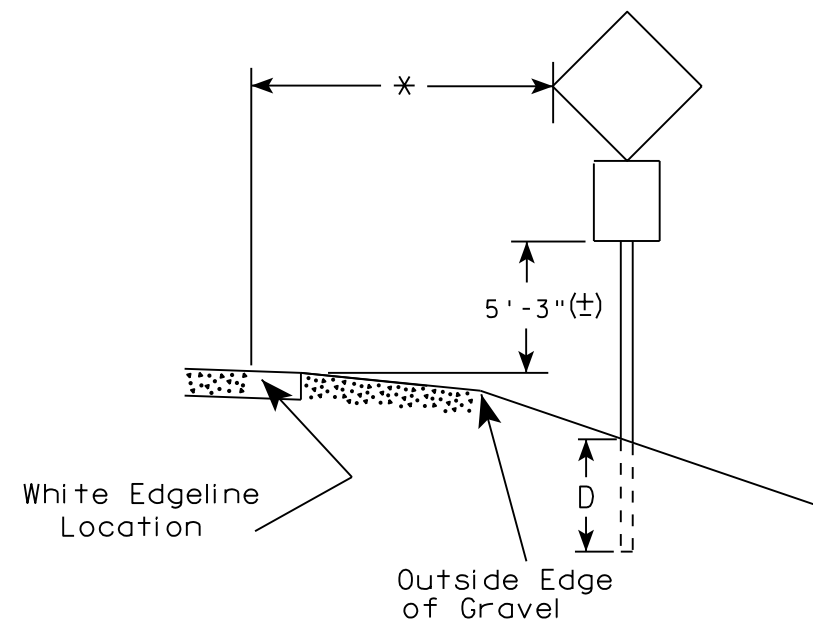
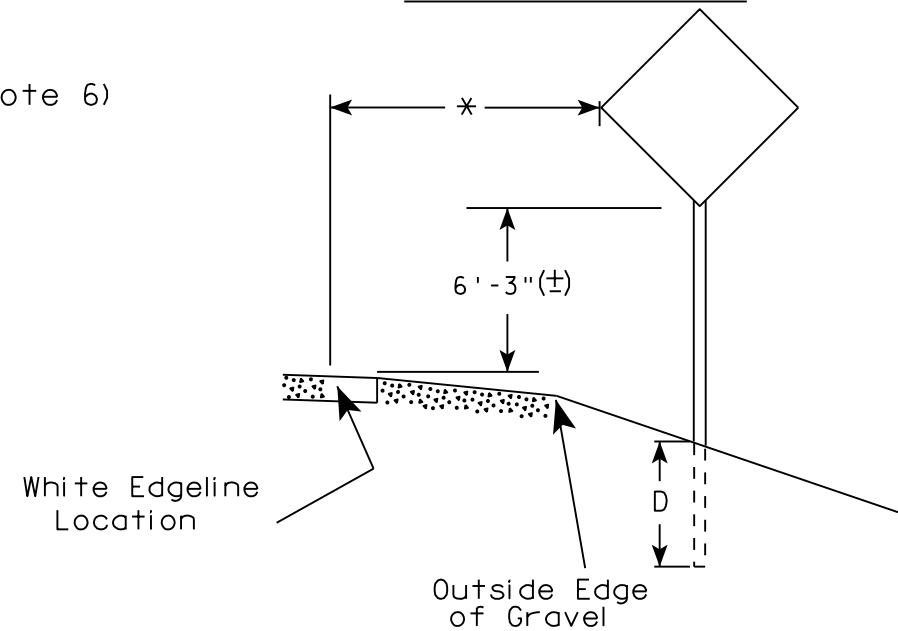
E

WISDOT/CADDs SHEET 42

## URBAN AREA



## RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

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

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" (±).

✱✱ 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.

\* 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.

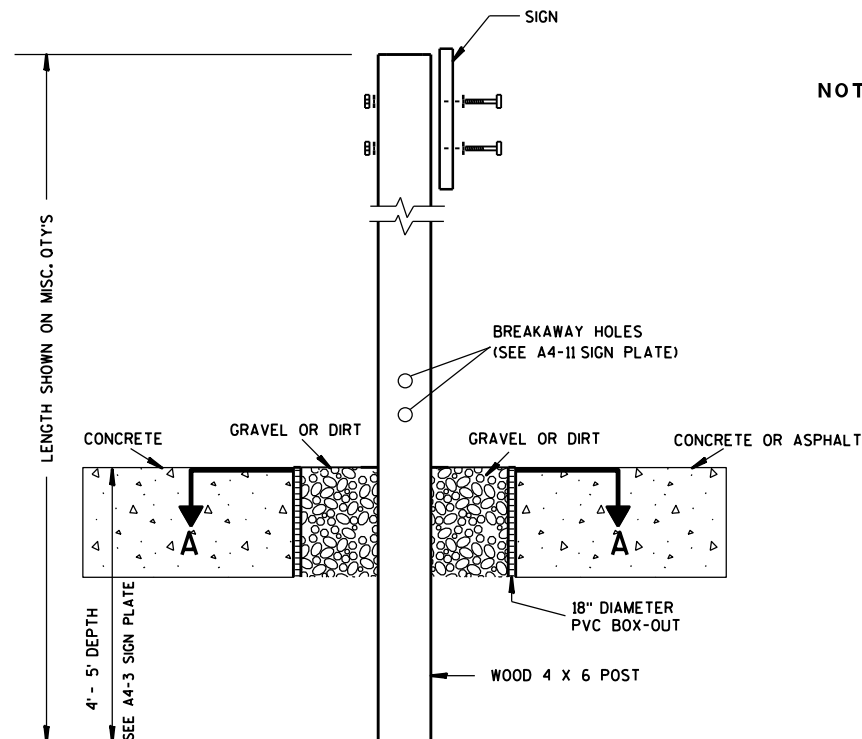
TYPICAL INSTALLATION  
OF PERMANENT TYPE II  
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

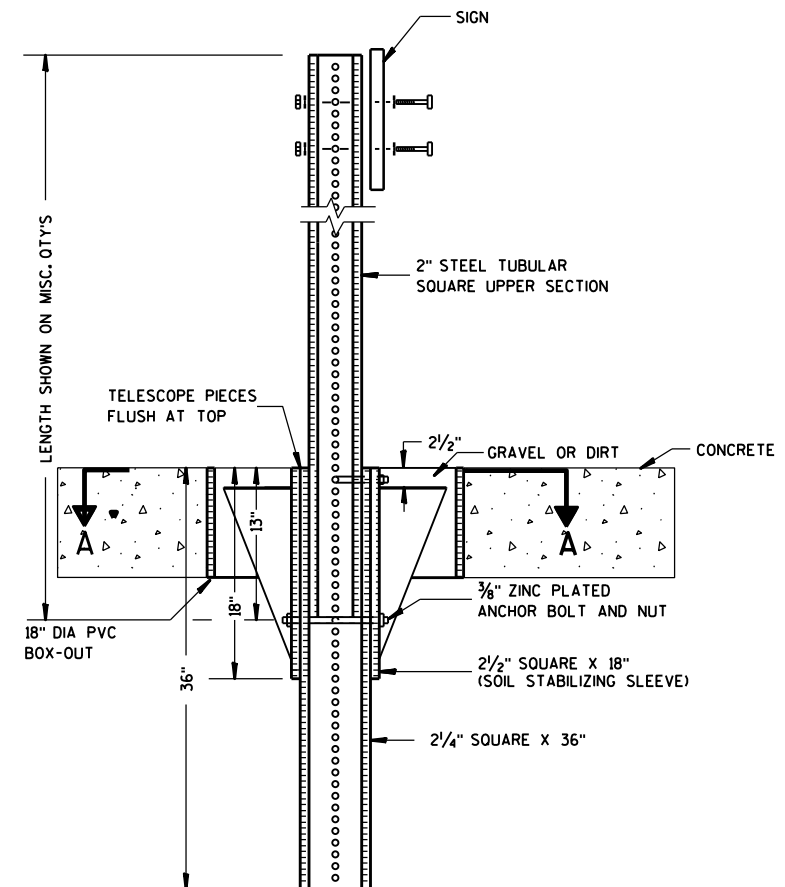




### ELEVATION VIEW

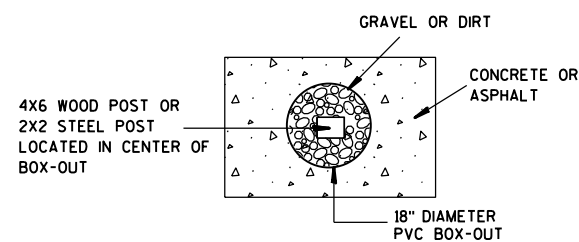
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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

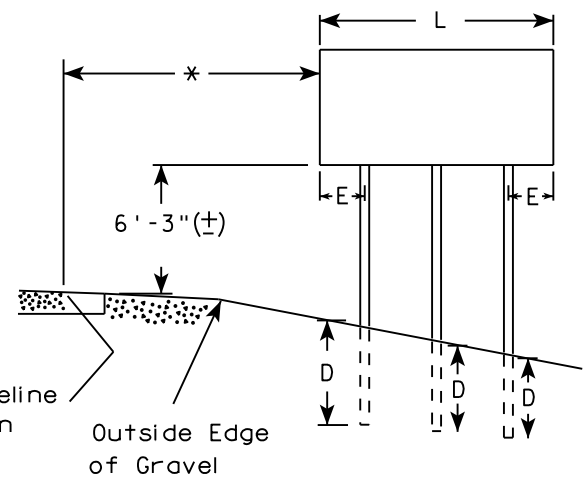
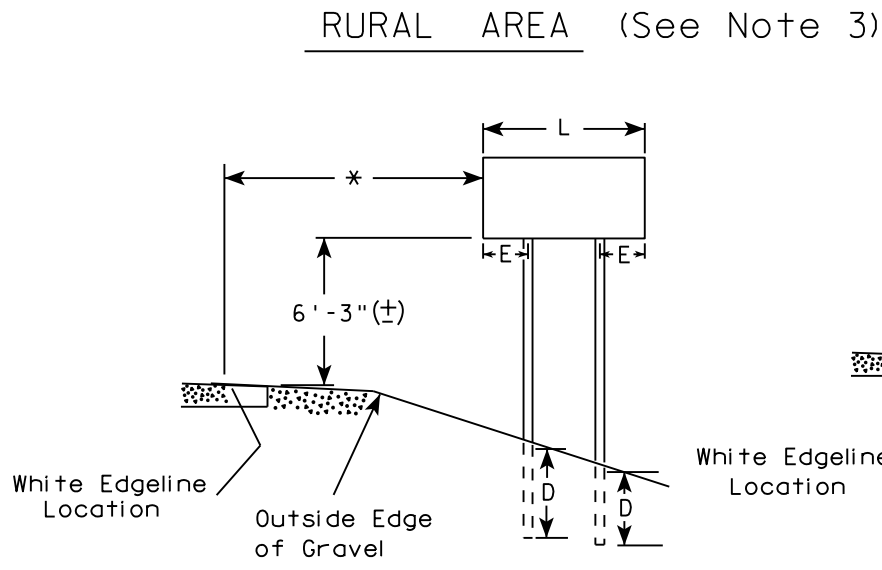
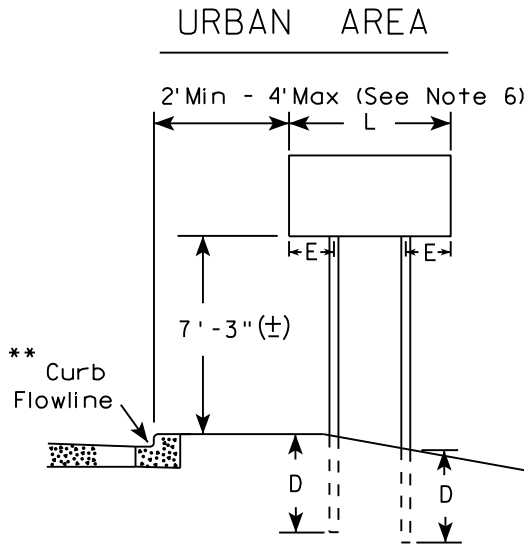
FOR NEW CONCRETE/ASPHALT INSTALLATIONS

SIGN POST  
BOX-OUTS  
A4-3B

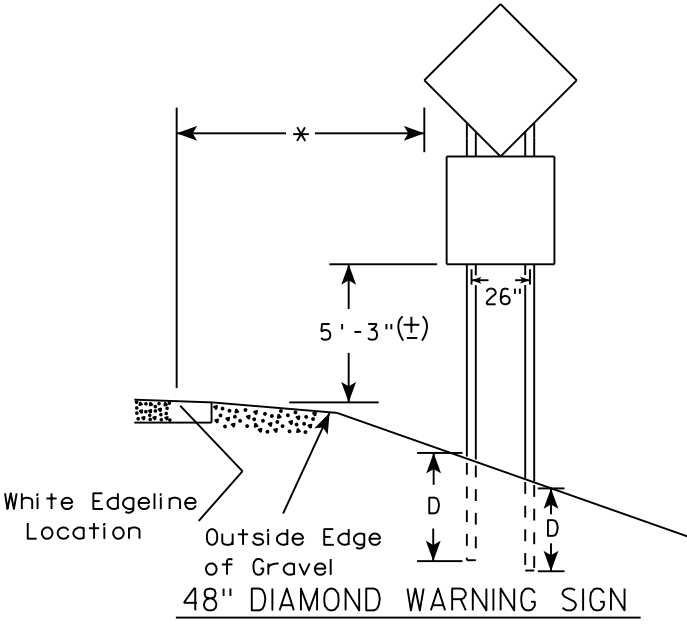
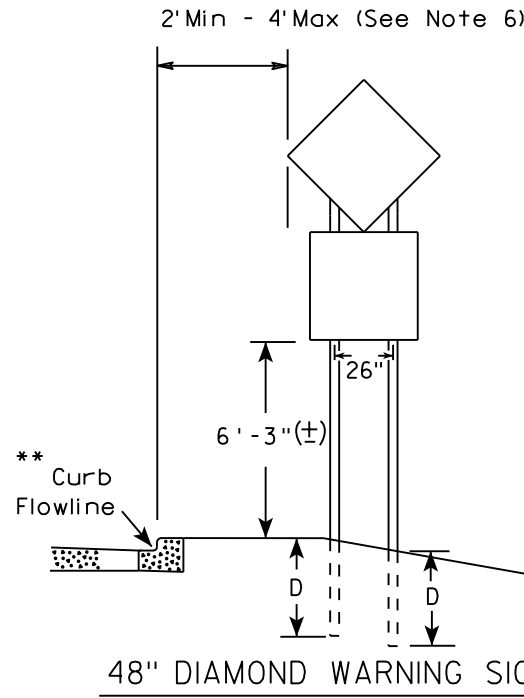
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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



- 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.

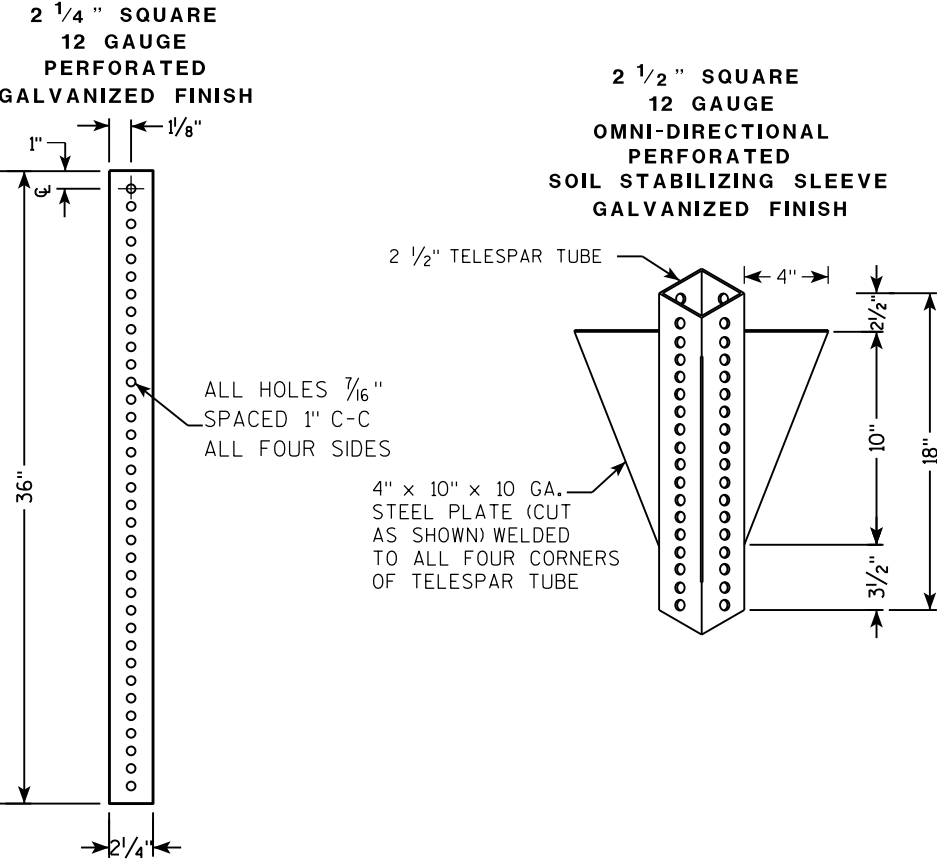
Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - 5/16" X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
  - 3/8" X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
  - 3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- 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

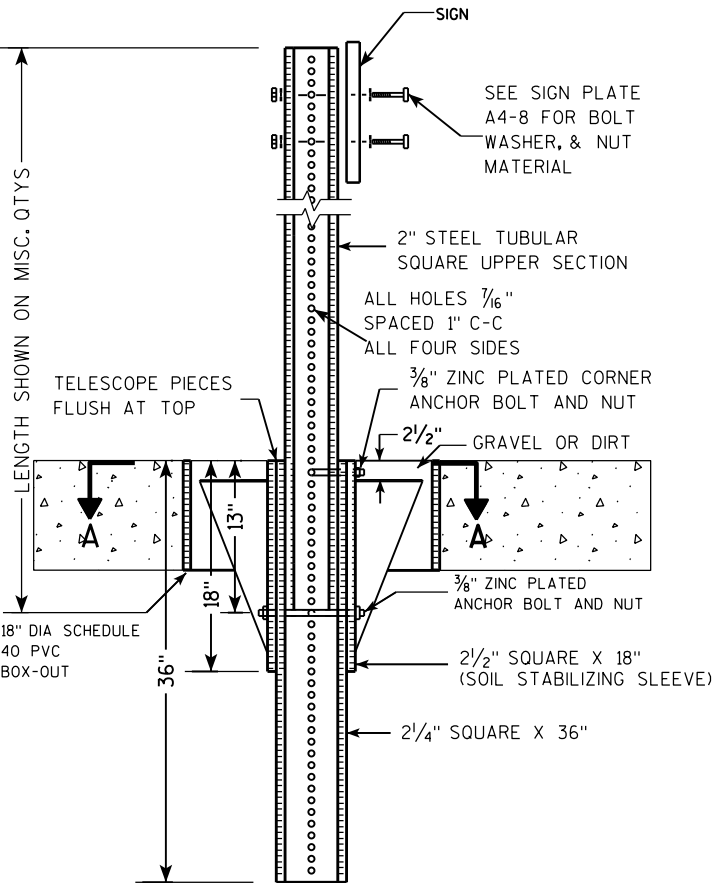
\* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require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

ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 8/11/16	PLATE NO. A4-8.8

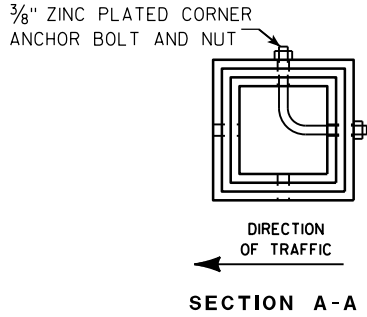
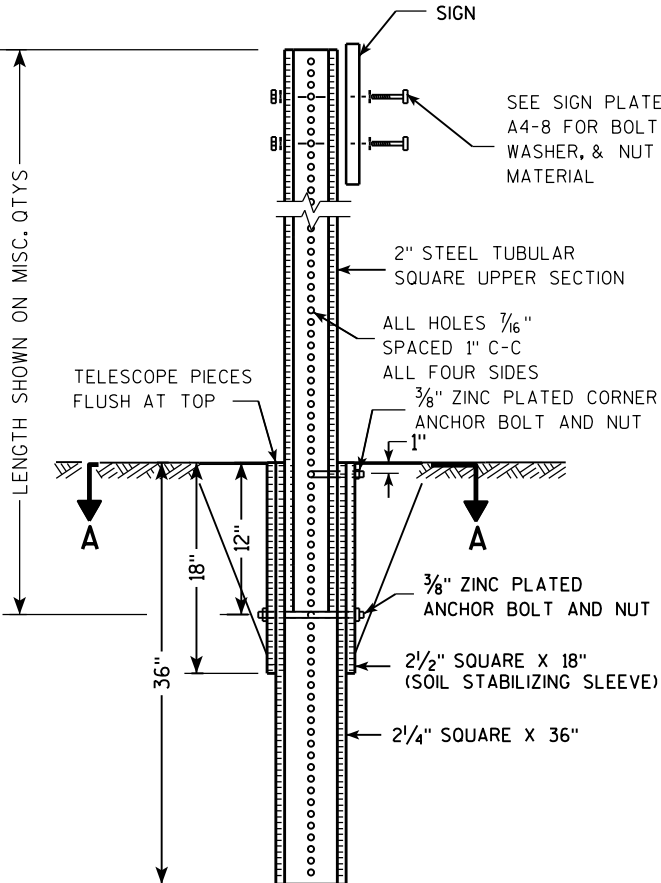
TELESCOPIC TUBING ANCHORS  
TWO PIECE SYSTEM



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

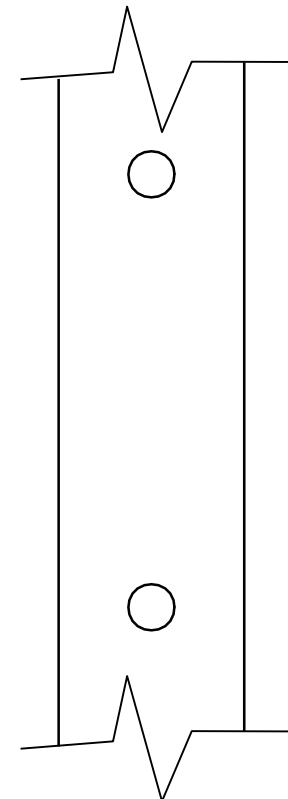
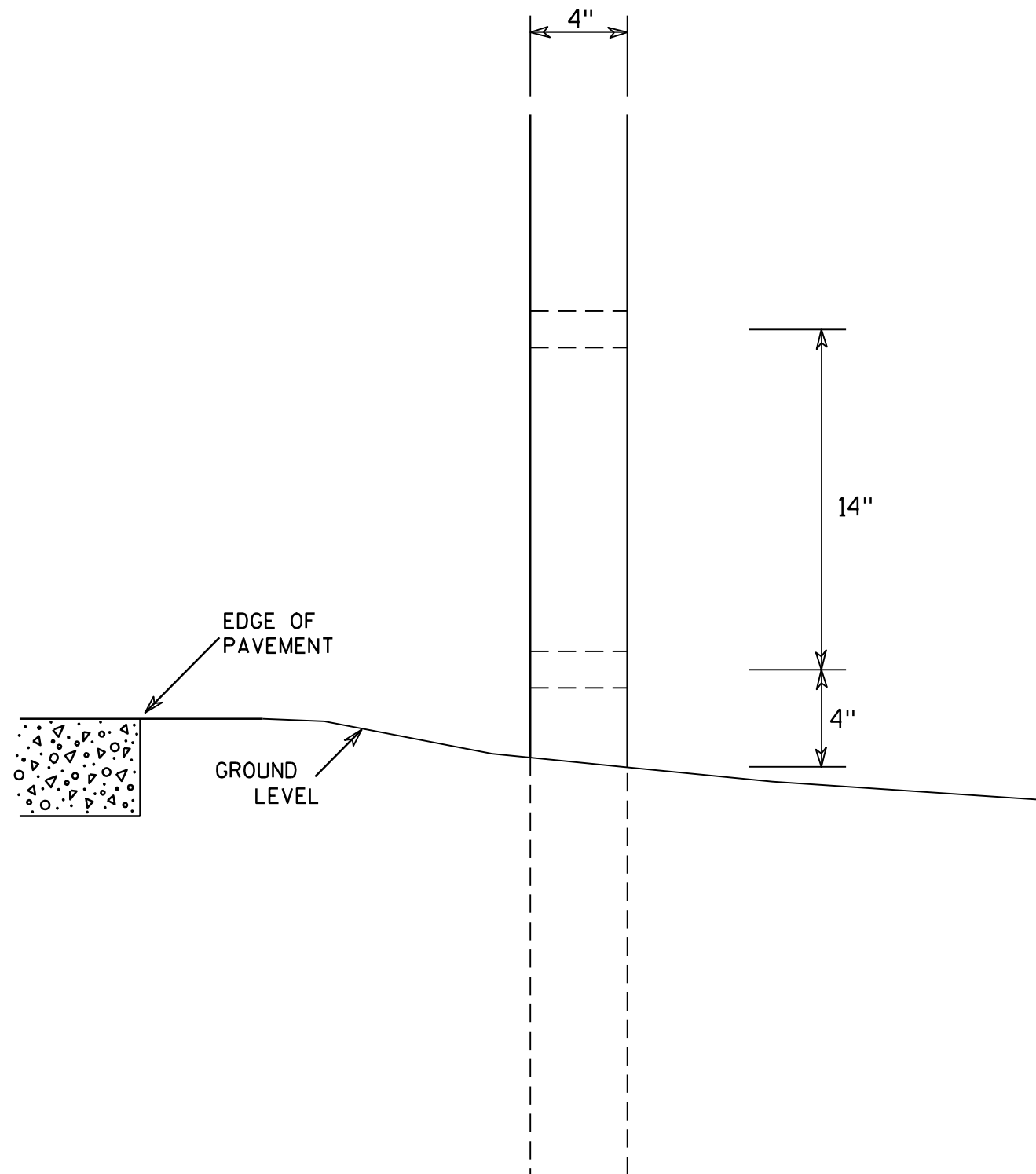
Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

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



SIDE VIEW

# GENERAL NOTES

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

## 4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

*Chester J. Spang*  
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

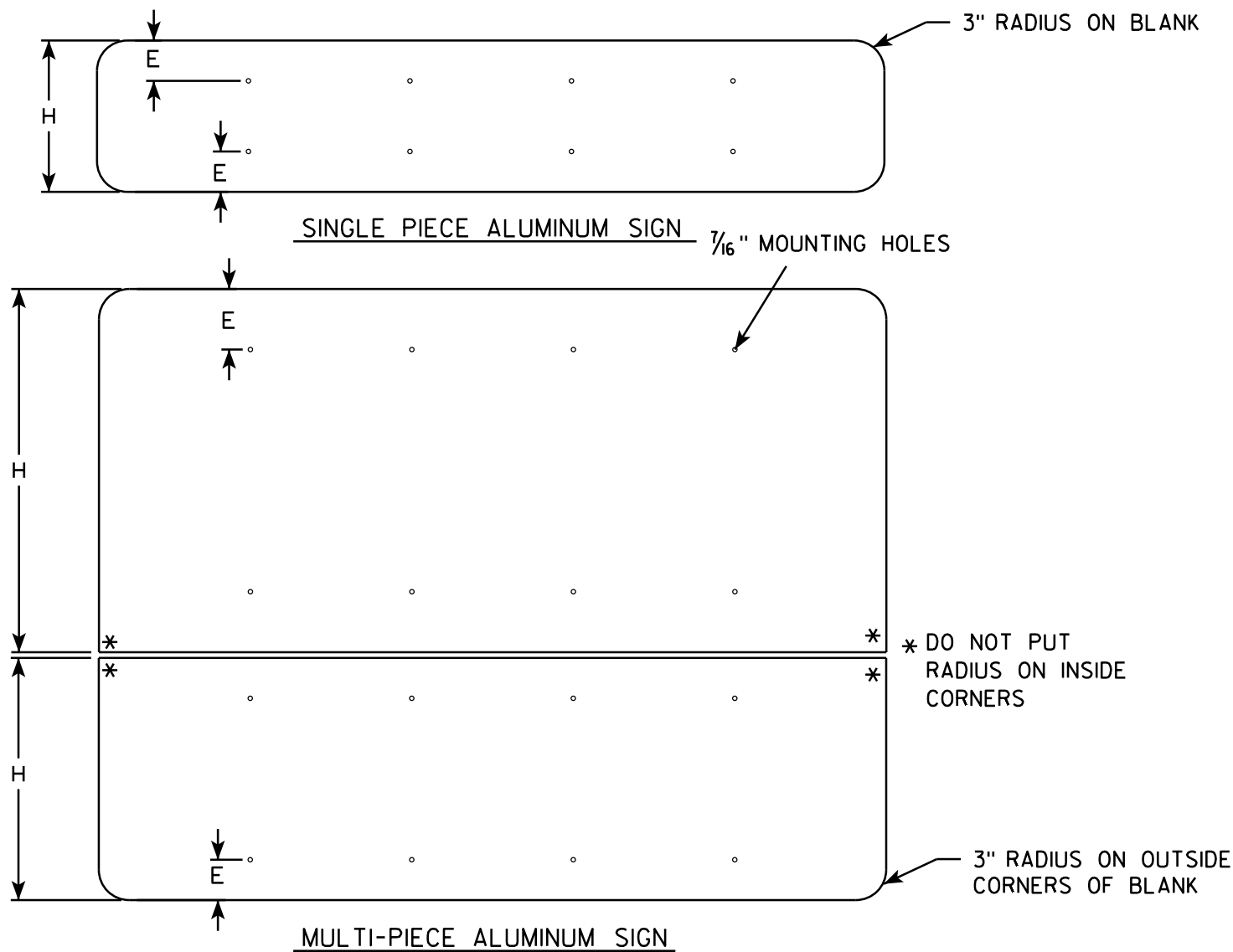
HWY:

COUNTY:

SHEET NO:

E

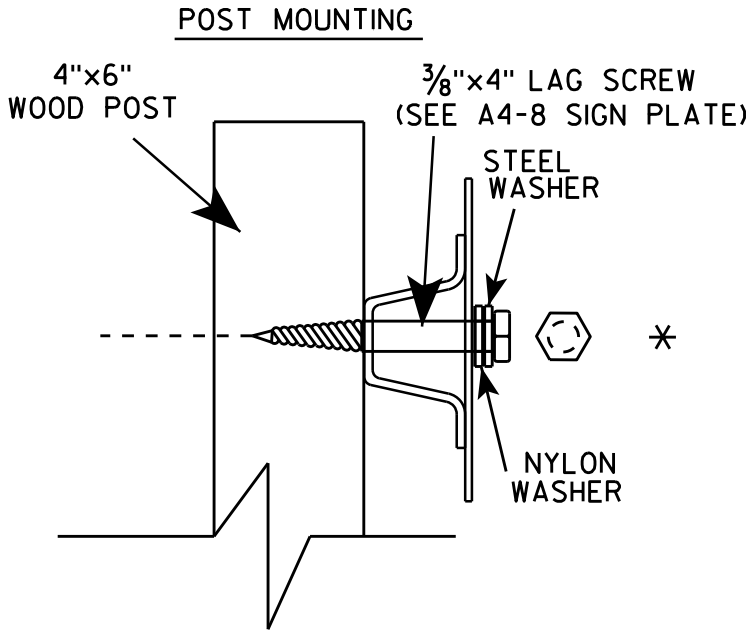
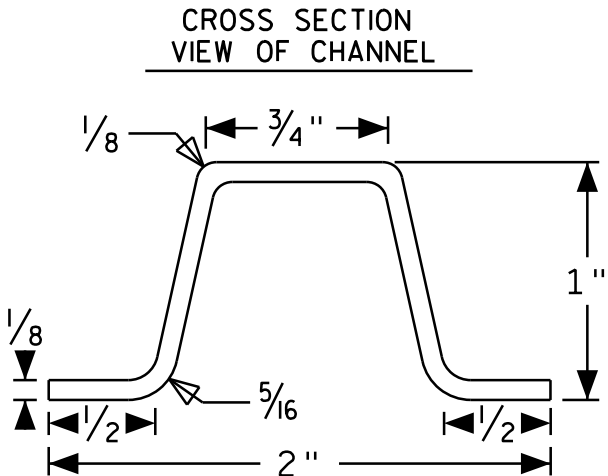
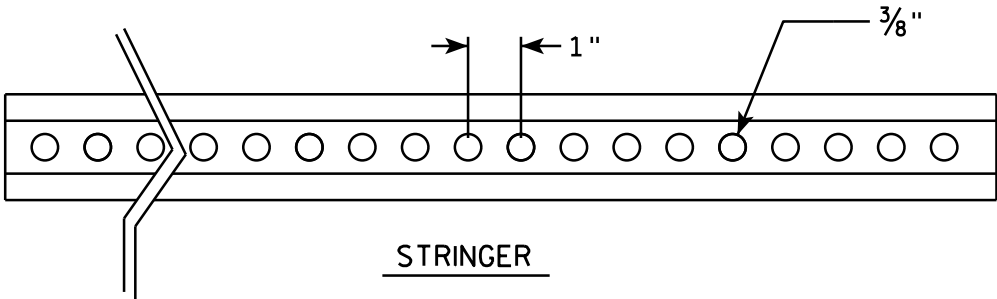




GENERAL NOTES

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

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



SIGN STRINGER MOUNTING REQUIREMENTS

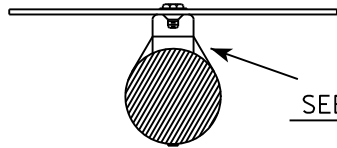
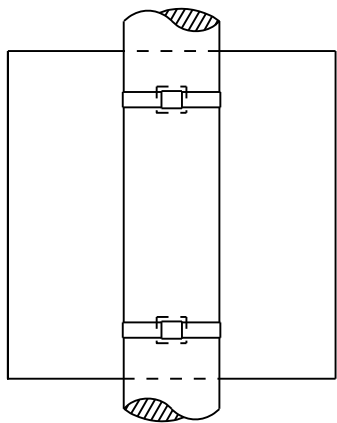
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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

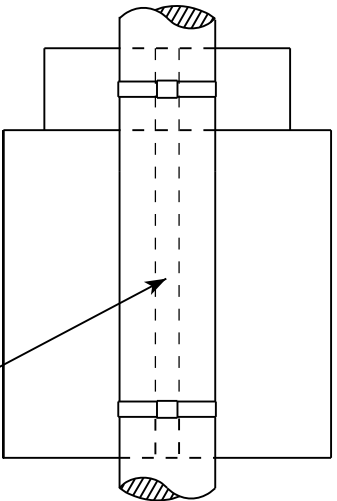
BANDING

SINGLE SIGN

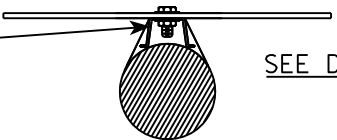


SEE DETAIL A

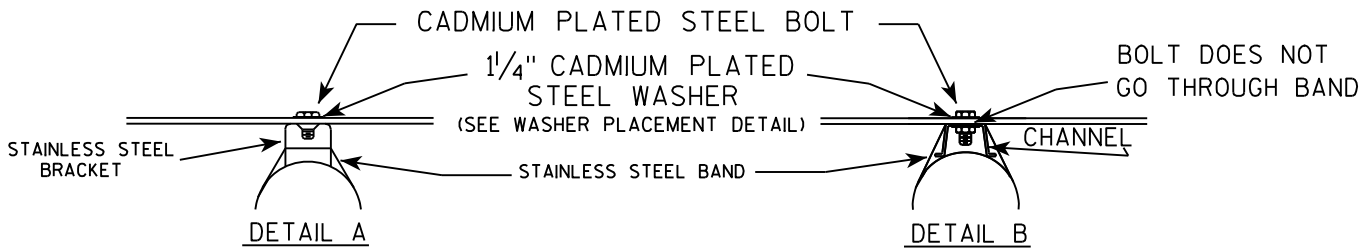
"J" ASSEMBLY



CHANNEL  
SEE TYPICAL PANEL  
INSTALLATION SHEET



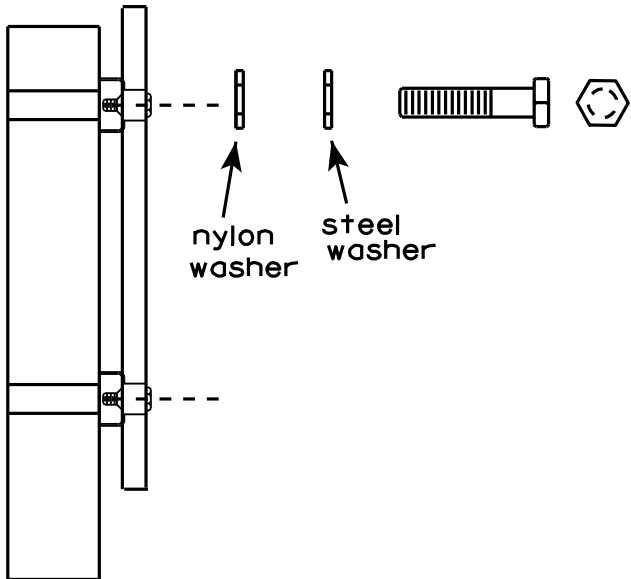
SEE DETAIL B



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  $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



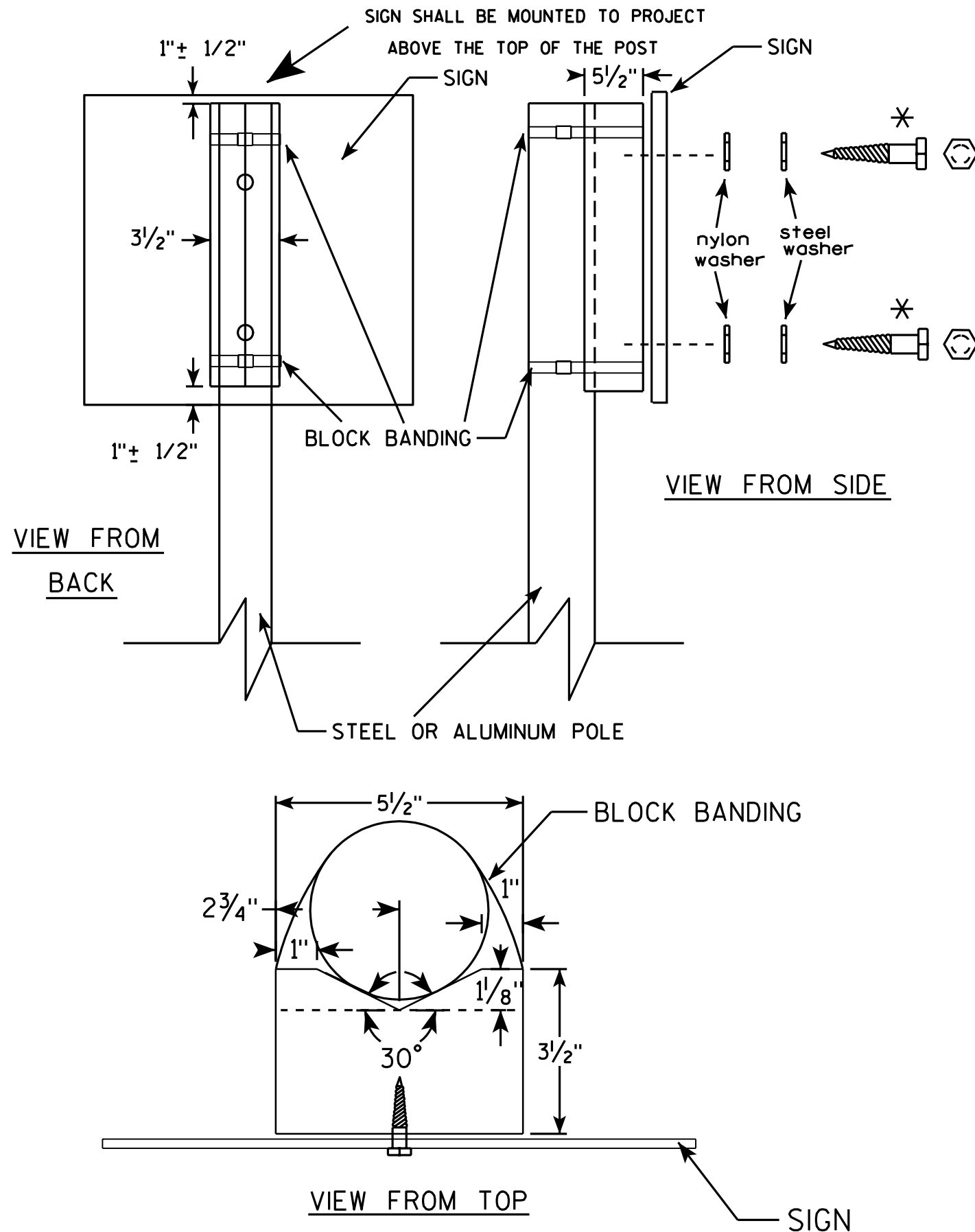
WASHERS (ALL POSTS) -  
1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X  $\frac{1}{16}$ " STEEL  
1-1/4" O.D. X  $\frac{3}{8}$ " I.D. X .080 NYLON  
FOR ALL TYPE H SIGNS

STANDARD SIGN  
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 8/16/13 PLATE NO. A5-9.3



## GENERAL NOTES

1. WOOD 4"x6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WISDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, 3/4" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORMALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
  - a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D, or
  - b. Cadmium plated in accordance with ASTM Designation : B 766 TYPE 3, Class 12, or
  - c. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1 1/4" O.D. X 3/8" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✱ LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL  
( V-BLOCK OPTION )

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 7/12/07 PLATE NO. A5-10.1

PROJECT NO:

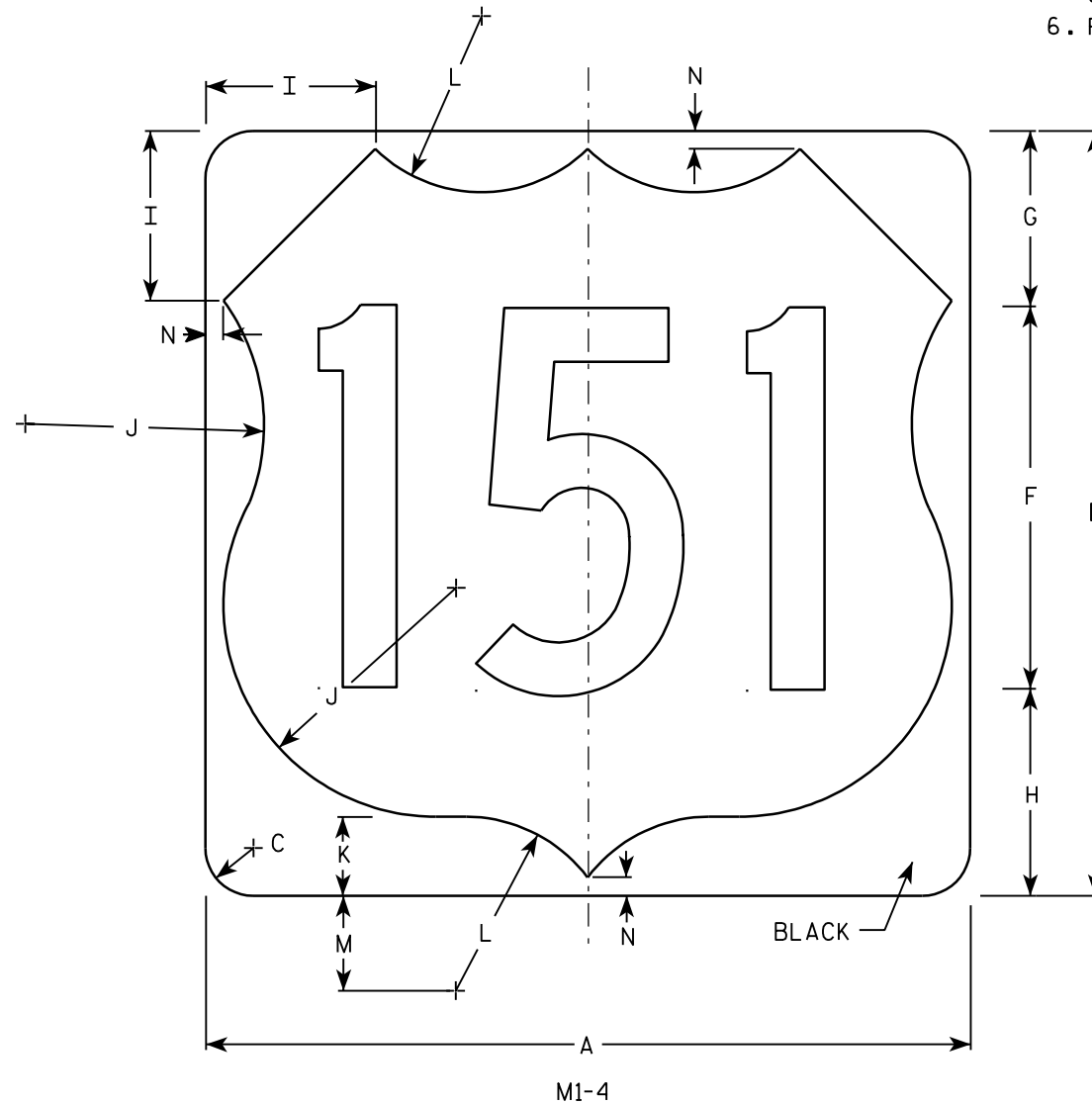
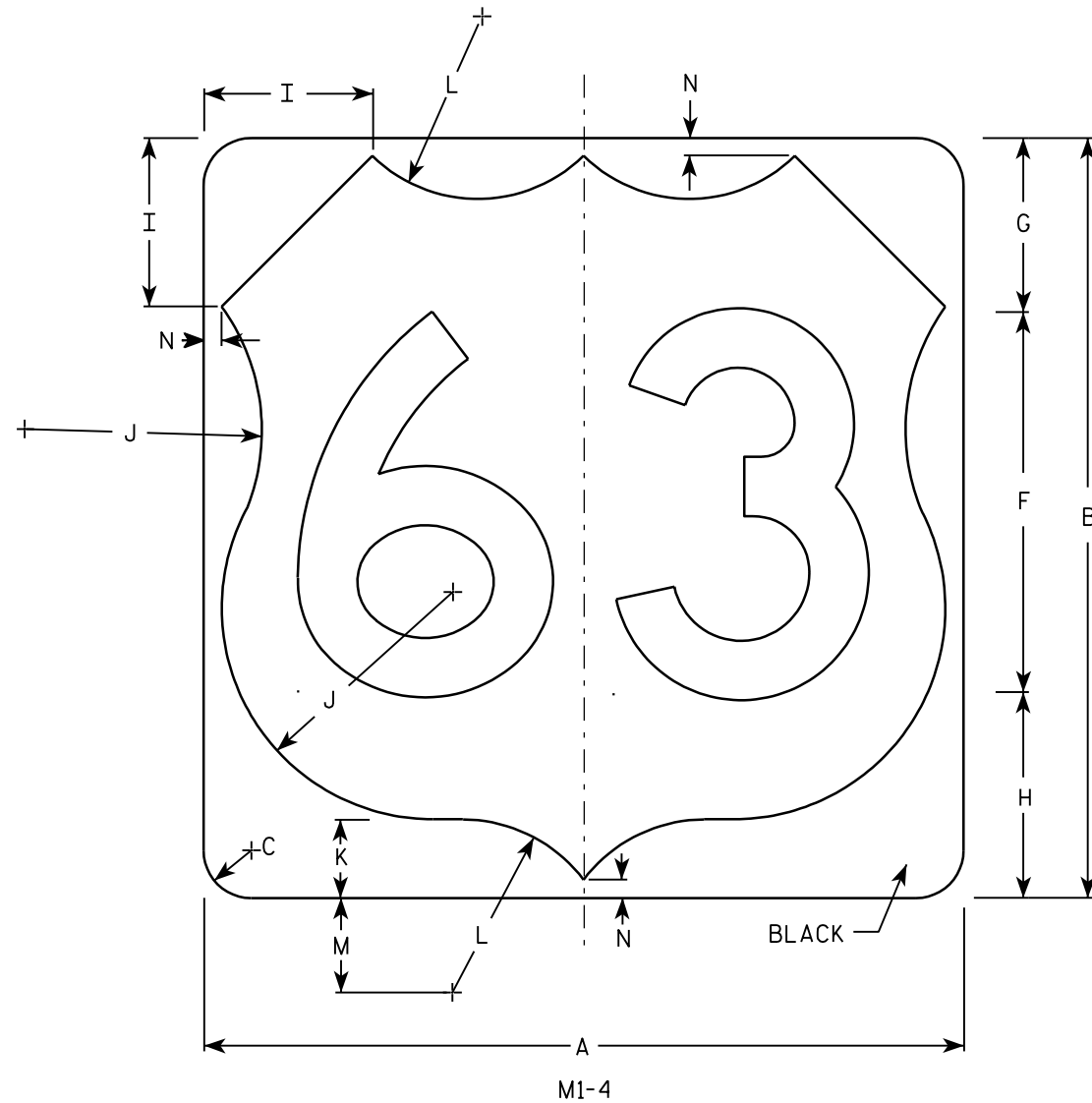
SHEET NO:

E



NOTES

1. Sign is Type II - See Note 6 - reference  
WIS DOT Standard Specification for HIGHWAY  
and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White & Black - See Note 6  
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base  
material is plywood but borders shall be rounded  
as shown. When base material is metal, the  
corners and borders shall be rounded.
5. Substitute appropriate numerals and adjust  
spacing as per Plate A10-1.
6. Permanent Signs  
Background - Type H Reflective  
Detour or other temporary signs  
Background - Reflective



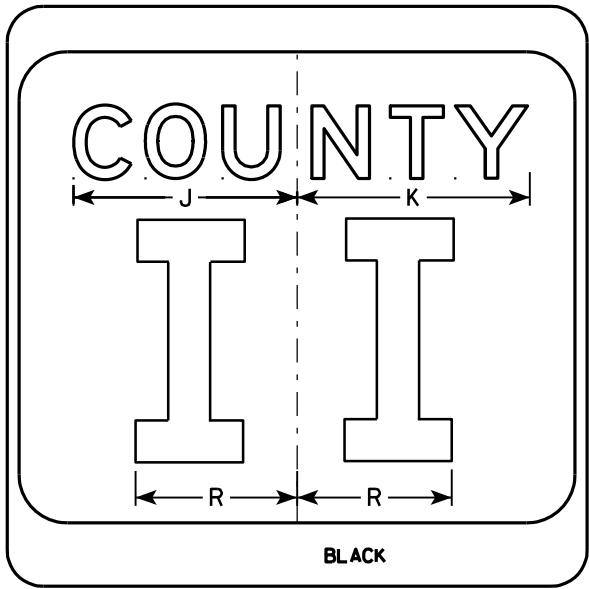
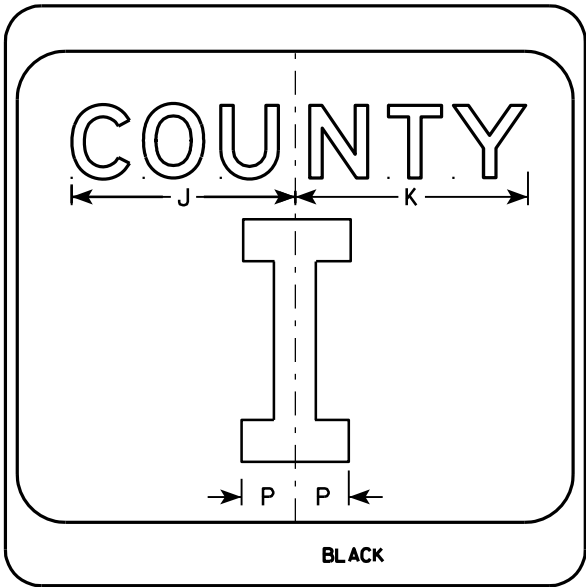
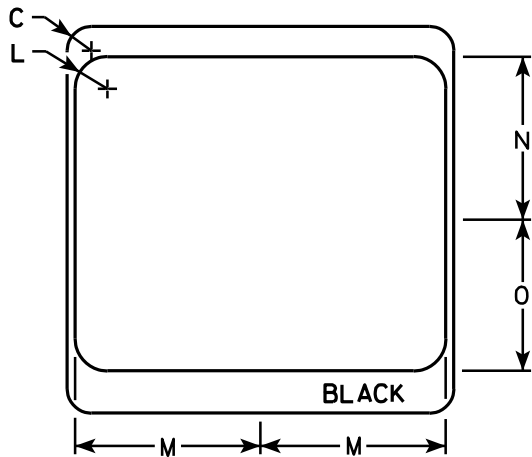
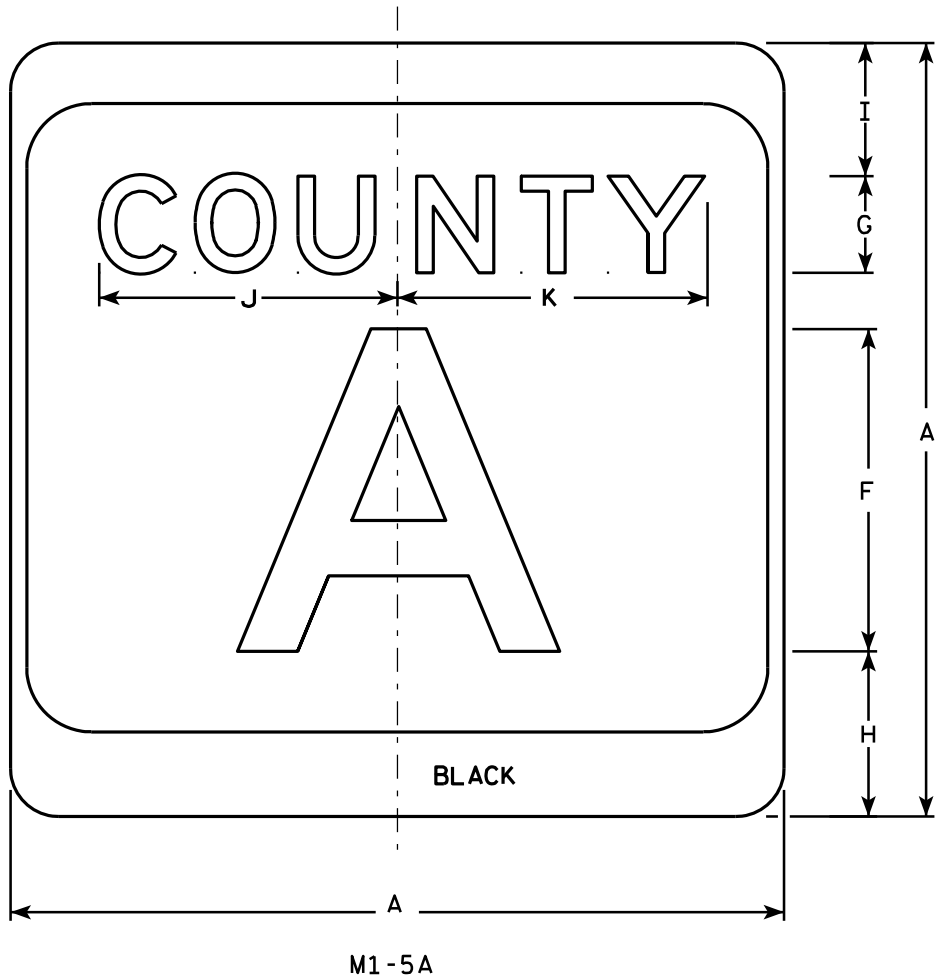
Metric equivalent  
for this sign is:

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Areq sq. ft.	Area m <sup>2</sup>
1																												
2	24	24	1 1/2			12	5 1/2	6 1/2	5	7 1/2	2 1/2	5 1/2	3	1/2													4.0	.36
3	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
4	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81
5	36	36	2 1/4			18	8 1/4	9 1/4	7 1/4	11 1/4	3 3/4	8 1/4	4 1/2	3/4													9.0	.81

PROJECT NO: HWY: COUNTY: SHEET NO: E

7



NOTES

- 1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - White & Black - See Note 7  
Message - Black
- 3. Message Series - see Note 5
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. Message Series E for 1 letter.  
Message Series D for 2 letters unless message is too big then Series C.  
Message Series C for 3 letters unless message is too big then Series B.
- 6. Substitute appropriate letters & optically center to achieve proper balance.
- 7. Permanent Signs  
Background - Type H Reflective  
Detour or temporary Signs  
Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

CTH MARKER

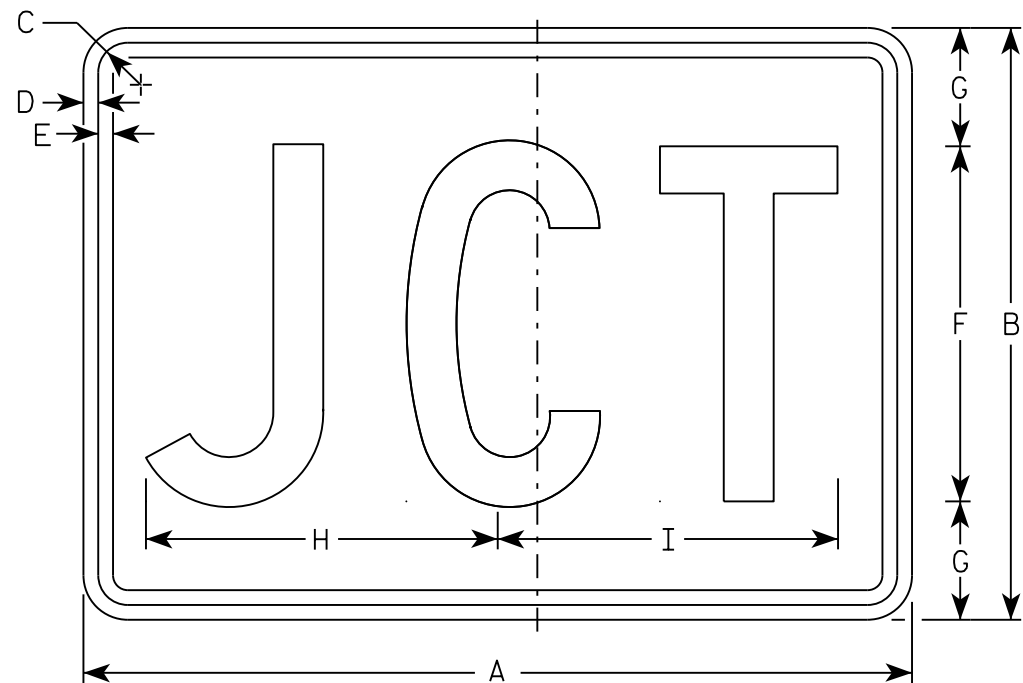
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

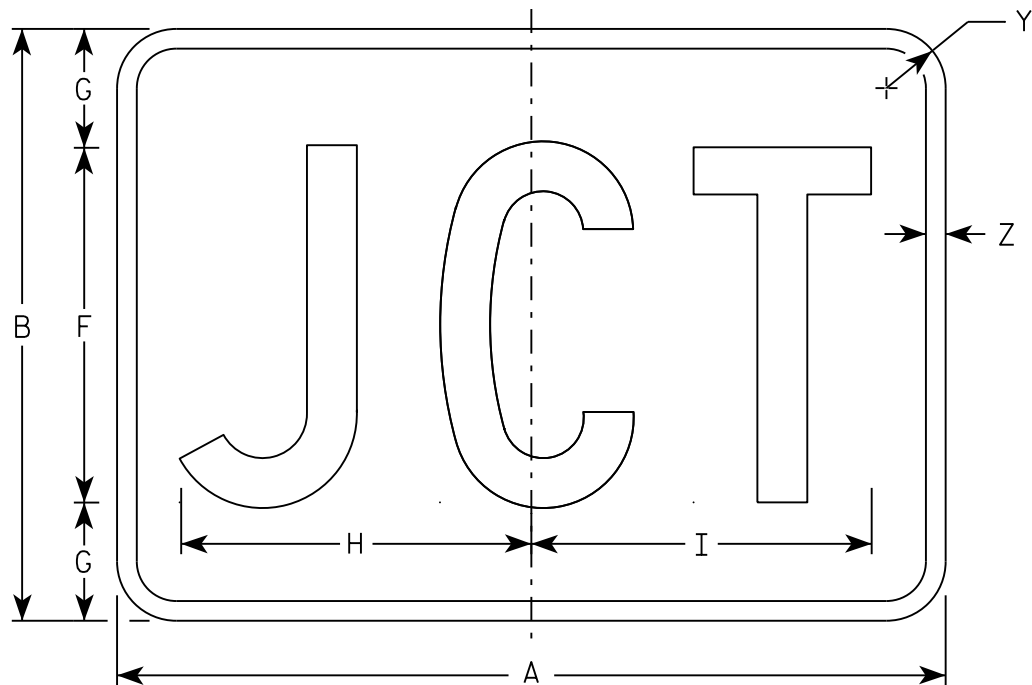
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8





M2-1  
MM2-1  
MP2-1



MB2-1  
MK2-1  
MN2-1  
MR2-1

NOTES

- 1. Sign is Type II - Type H
- 2. Color:
  - Background - See note 5
  - Message - See note 5
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M2-1 Background - White  
    Message - Black  
    MB2-1 Background - Blue  
    Message - White  
    MK2-1 Background - Green  
    Message - White  
    MM2-1 Background - White  
    Message - Green  
    MN2-1 Background - Brown  
    Message - White  
    MP2-1 Background - White  
    Message - Blue  
    MR2-1 Background - Brown  
    Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

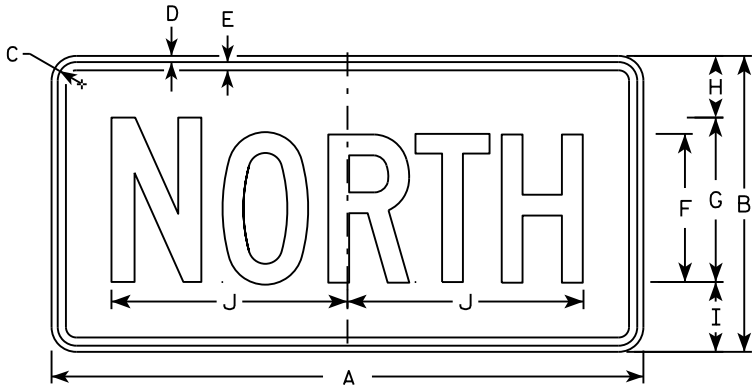
APPROVED

Matthew R. Rauch

For State Traffic Engineer

DATE 10/15/15

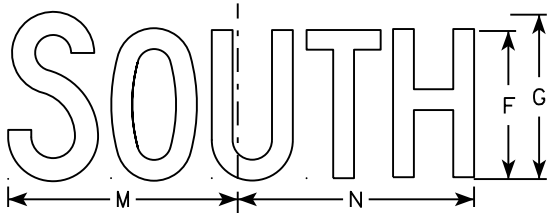
PLATE NO. M2-1.12



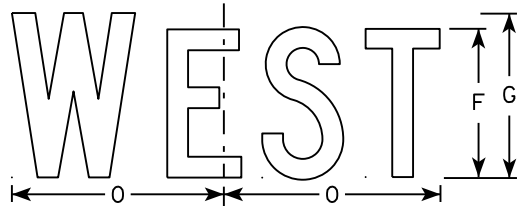
M3-1  
MM3-1  
MP3-1



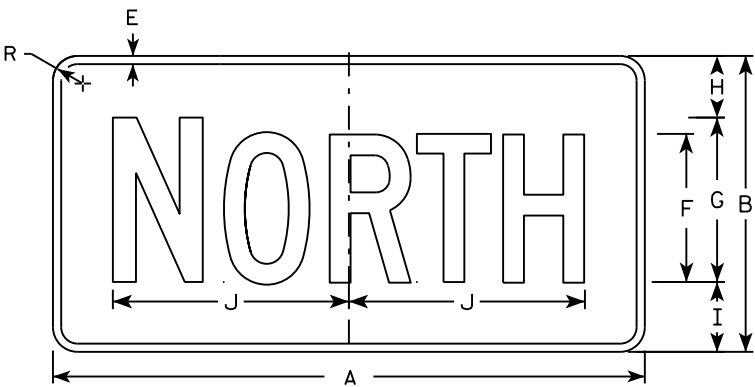
M3-2  
MM3-2  
MP3-2



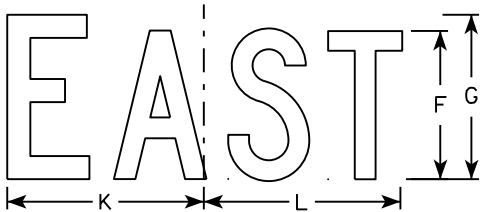
M3-3  
MM3-3  
MP3-3



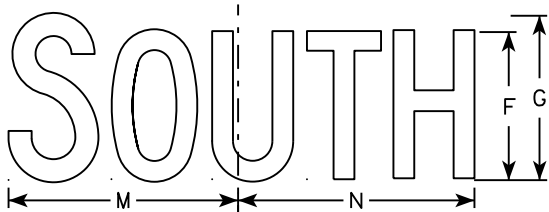
M3-4  
MM3-4  
MP3-4



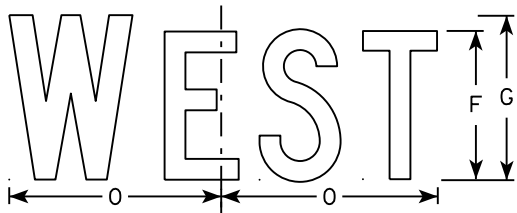
MB3-1  
MK3-1  
MN3-1



MB3-2  
MK3-2  
MN3-2



MB3-3  
MK3-3  
MN3-3



MB3-4  
MK3-4  
MN3-4

NOTES

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

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

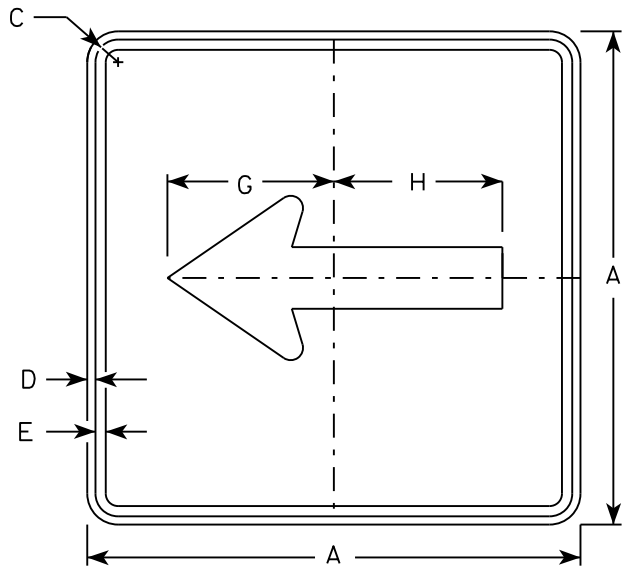
STANDARD SIGNS  
M3-1 thru M3-4  
SERIES

WISCONSIN DEPT OF TRANSPORTATION

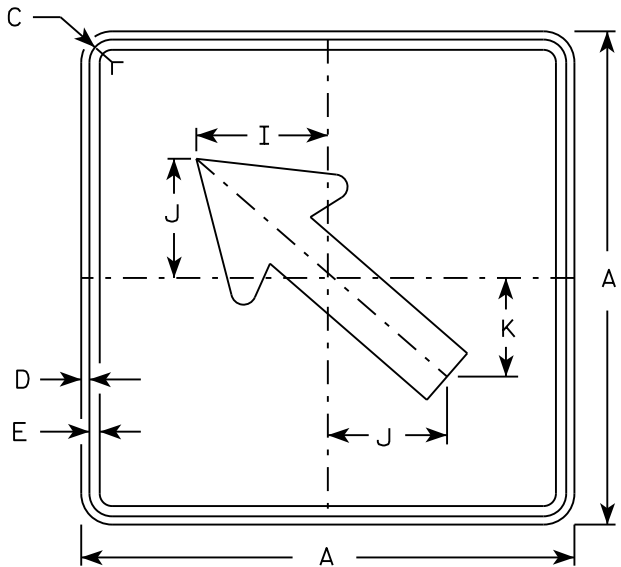
APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

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

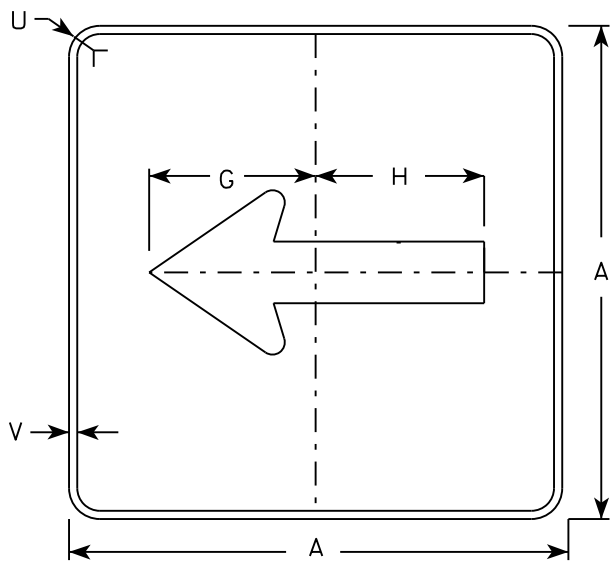




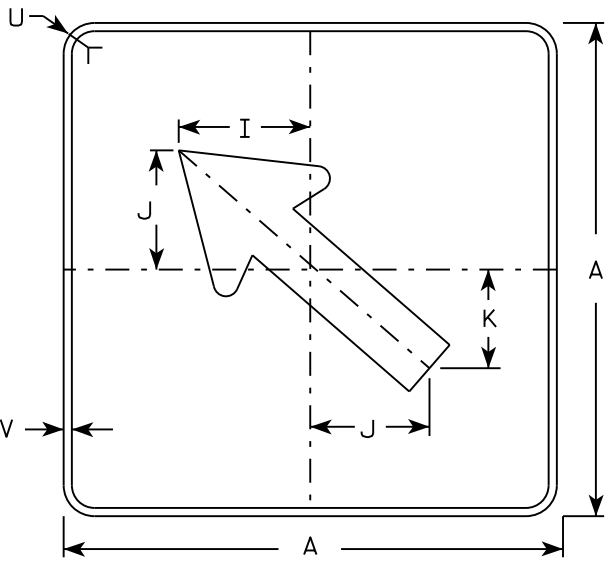
M6 - 1  
MM6 - 1  
M06 - 1  
MP6 - 1



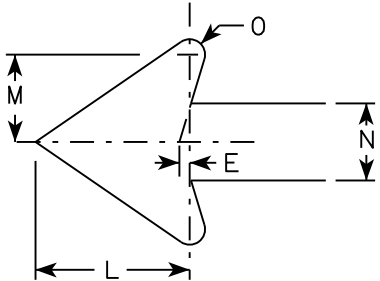
M6 - 2  
MM6 - 2  
M06 - 2  
MP6 - 2



MB6 - 1  
MK6 - 1  
MN6 - 1  
MR6 - 1



MB6 - 2  
MK6 - 2  
MN6 - 2  
MR6 - 2



NOTES

- 1. Signs are Type II - Type H except as Shown
- 2. Color:  
Background - See note 4  
Message - See note 4
- 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 4. M6-1 and M6-2 Background - White  
Message - Black  
MB6-1 and MB6-2 Background - Blue  
Message - White  
MK6-1 and MK6-2 Background - Green  
Message - White  
MM6-1 and MM6-2 Background - White  
Message - Green  
MN6-1 and MN6-2 Background - Brown  
Message - White  
M06-1 and M06-2 Background - Orange - Type F Reflective  
Message - Black  
MP6-1 and MP6-2 Background - White  
Message - Blue  
MR6-1 and MR6-2 Background - Brown  
Message - Yellow

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

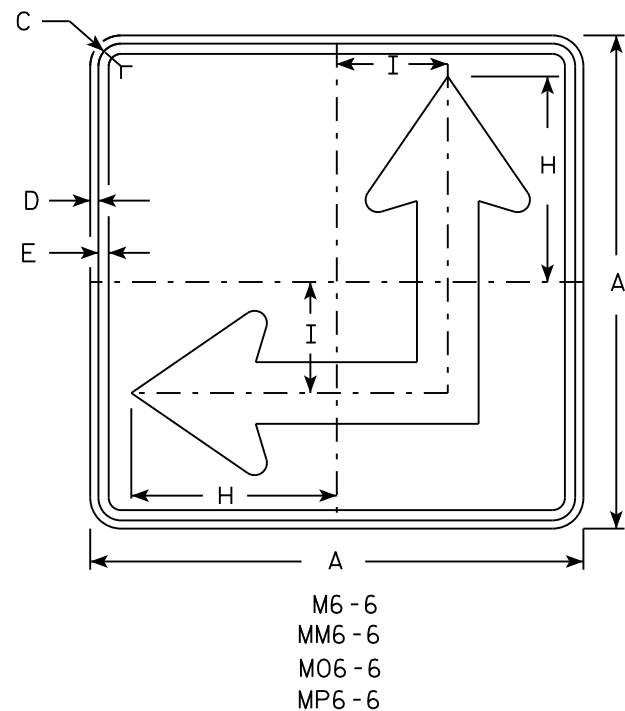
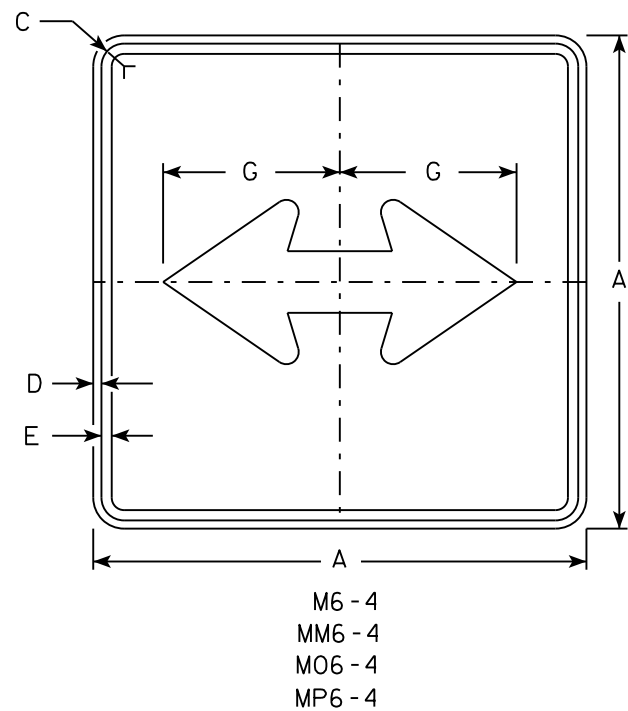
E

STANDARD SIGN  
M6 - 1 & M6 - 2  
SERIES

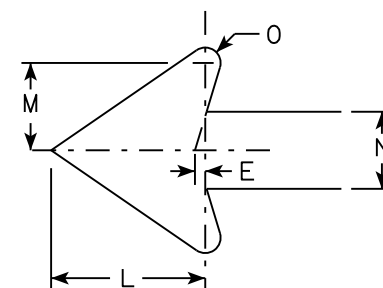
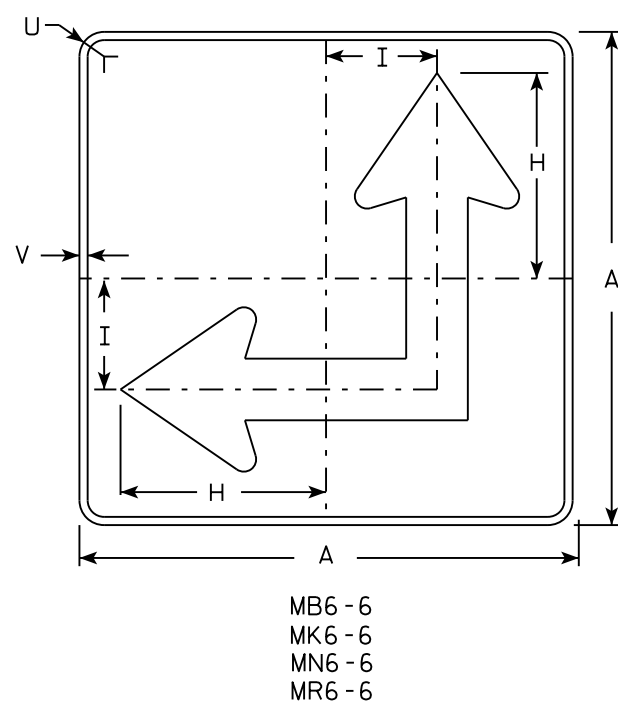
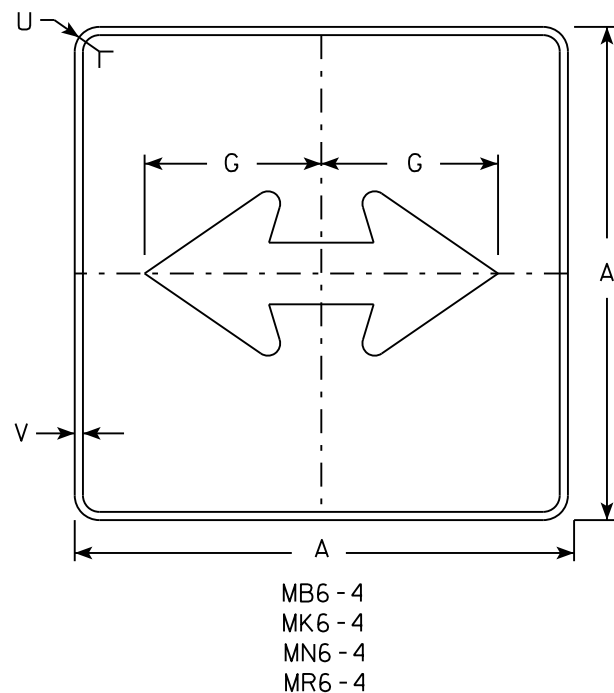
WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15 PLATE NO. M6-1.15



- NOTES
- Signs are Type II - Type H except as Shown
  - Color:  
Background - See Note 4  
Message - See Note 4
  - Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
  - M6-4 and M6-6 Background - White  
Message - Black  
MB6-4 and MB6-6 Background - Blue  
Message - White  
MK6-4 and MK6-6 Background - Green  
Message - White  
MM6-4 and MM6-6 Background - White  
Message - Green  
MN6-4 and MN6-6 Background - Brown  
Message - White  
M06-4 and M06-6 Background - Orange - Type F Reflective  
Message - Black  
MP6-4 and MP6-6 Background - White  
Message - Blue  
MR6-4 and MR6-6 Background - Brown  
Message - Yellow
  - M6-6R same as M6-6L except arrow points ahead and right.



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

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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STANDARD SIGN  
M6 - 4 & M6 - 6  
SERIES

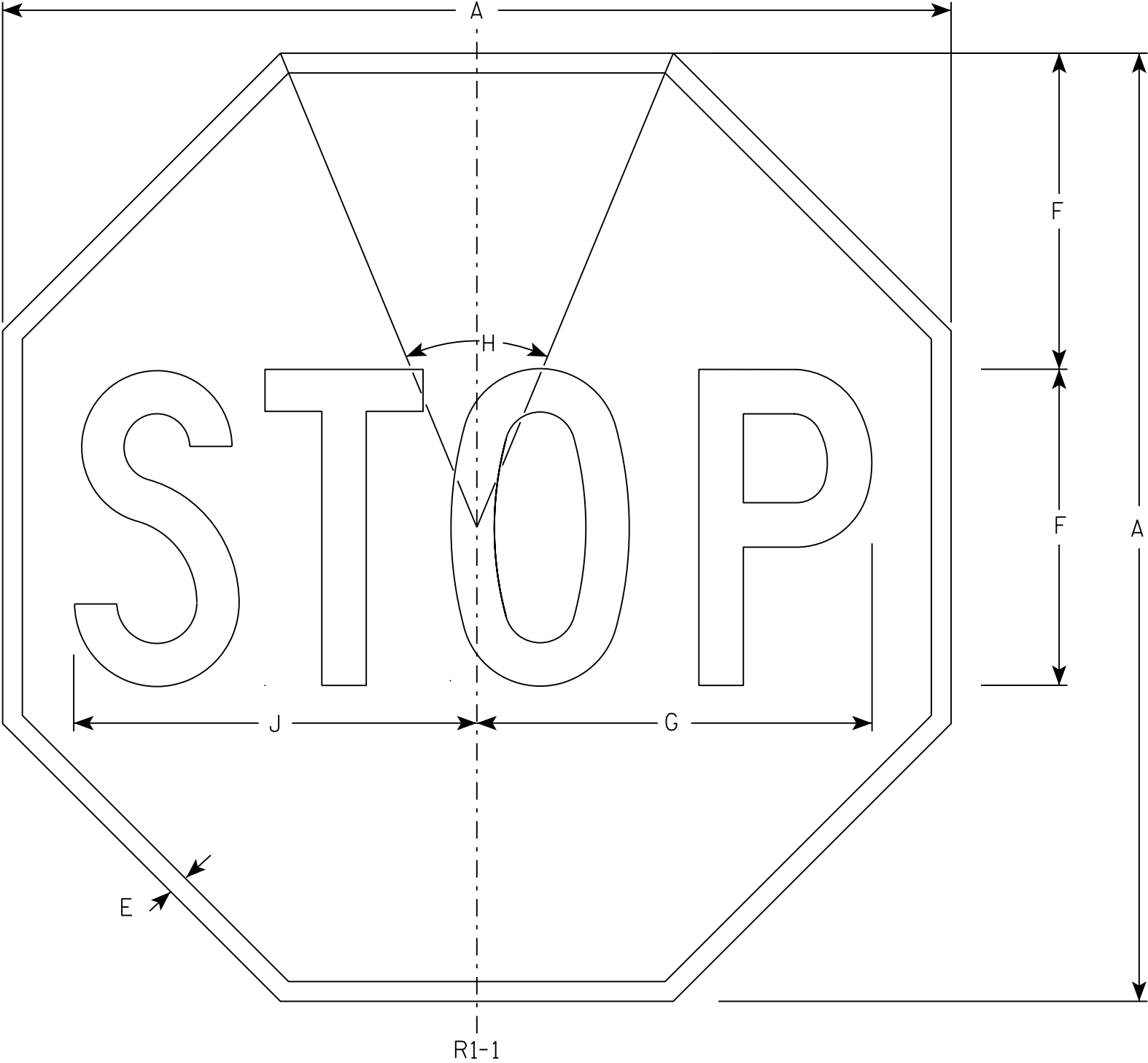
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 10/15/15      PLATE NO. M6-4.10



7



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:  
Background - Red  
Message - White
- 3. Message Series - C

7

R1-1

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	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

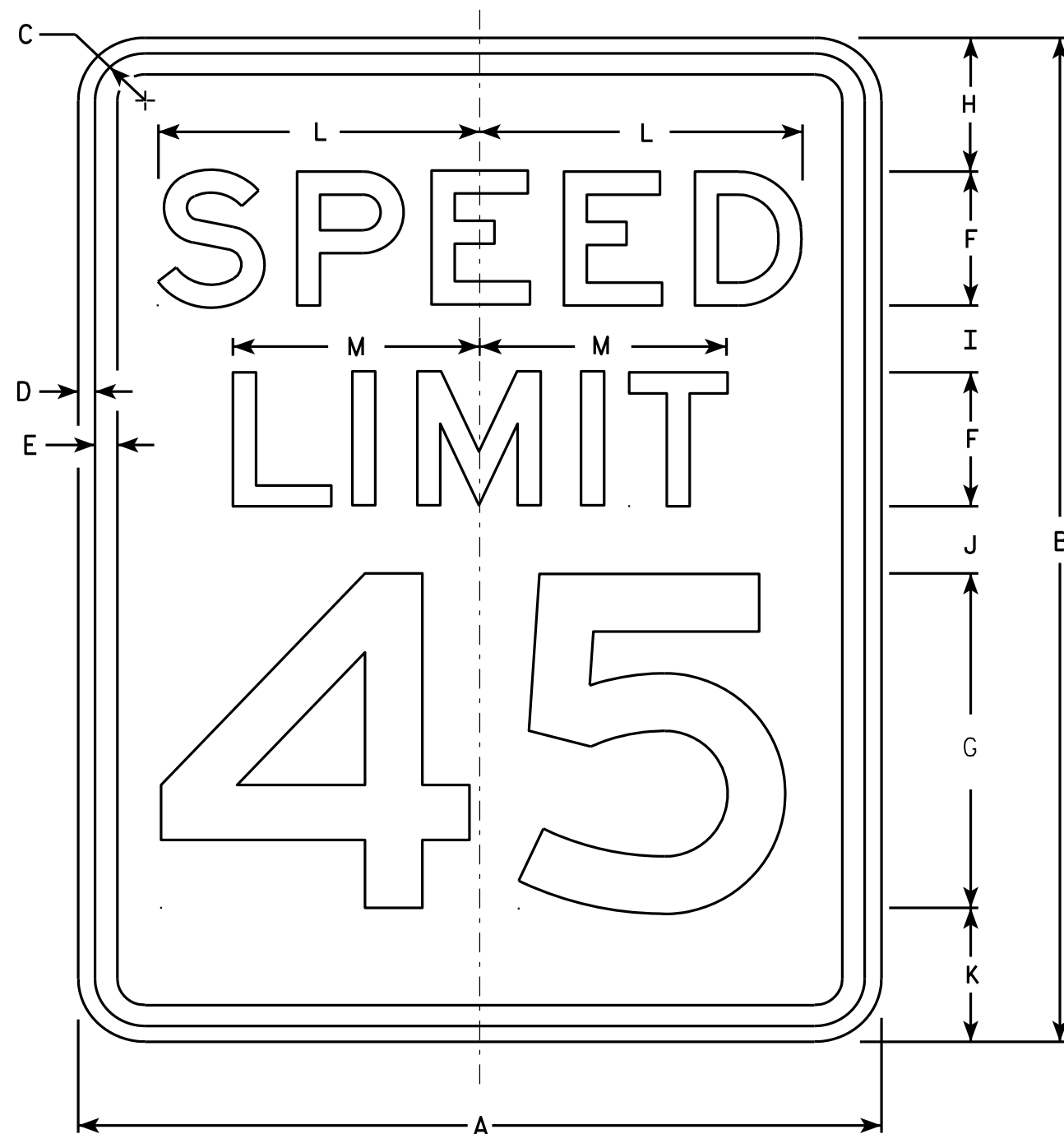
STANDARD SIGN

R1 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13



### NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - White  
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

R2-1

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	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

### STANDARD SIGN R2-1

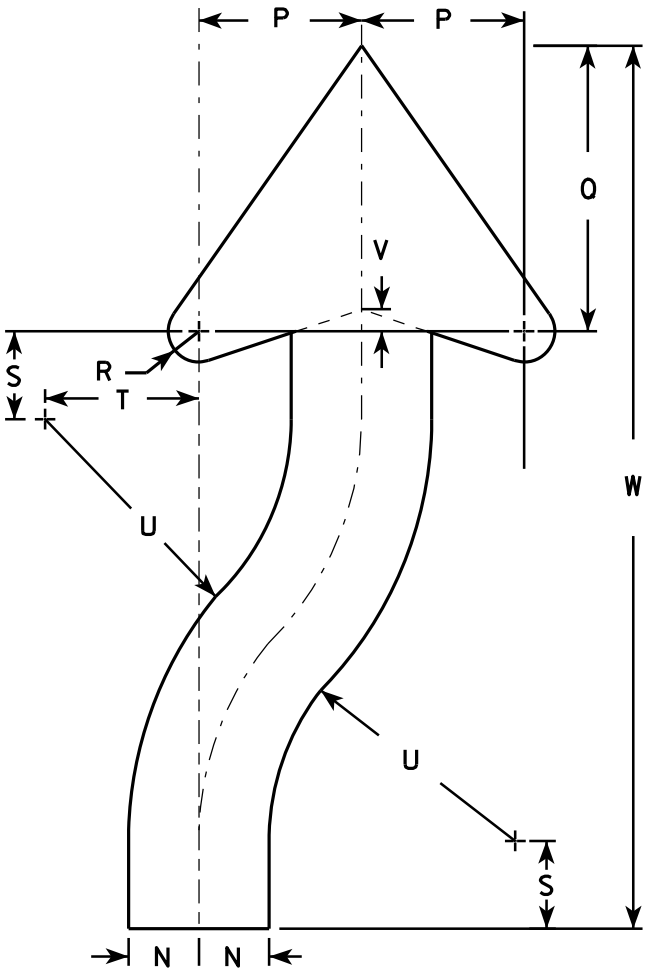
WISCONSIN DEPT OF TRANSPORTATION  
APPROVED *Matthew R. Rauch*  
For State Traffic Engineer  
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: E

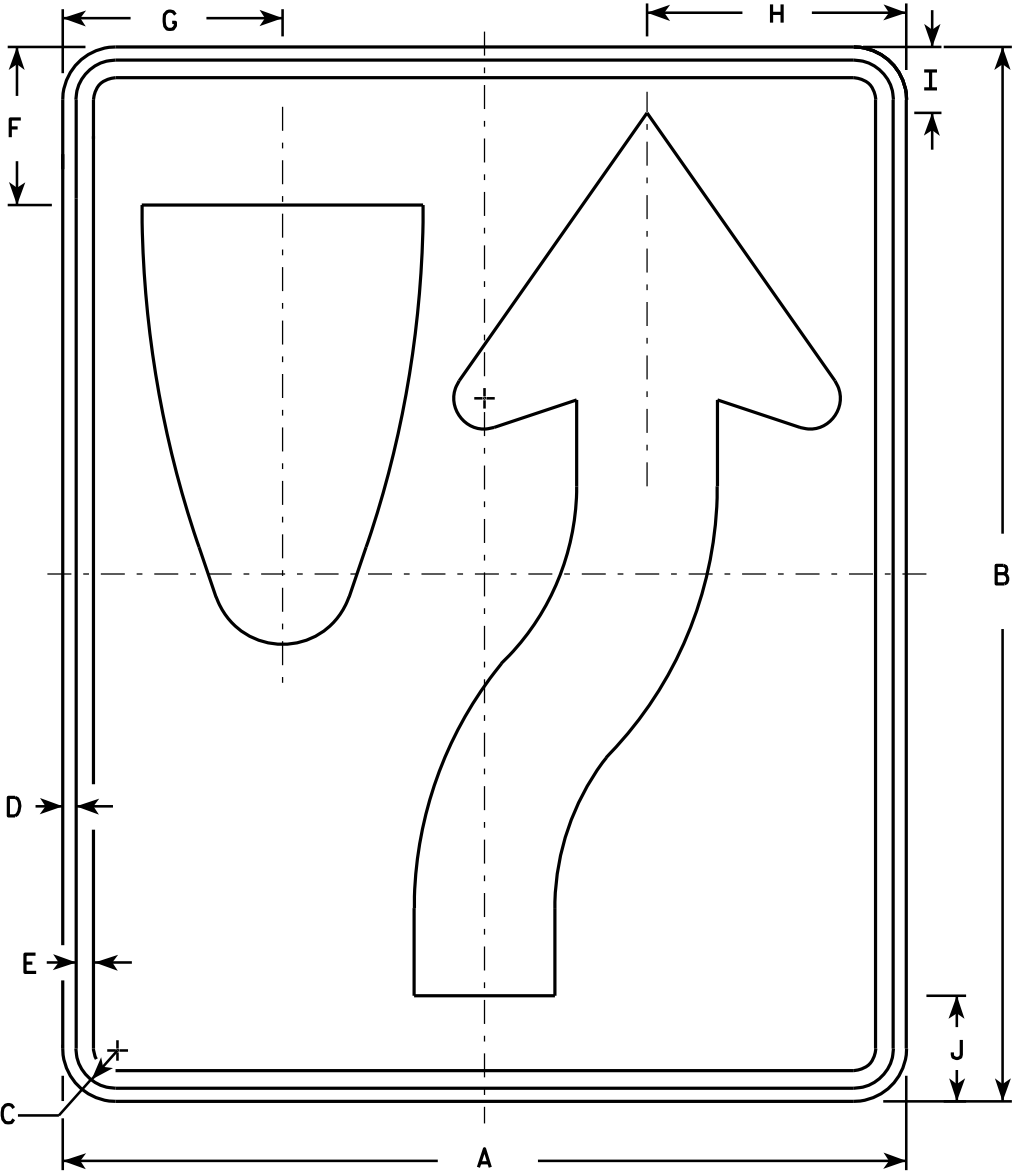


NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:  
Background - White  
Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL



R4-7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

STANDARD SIGN  
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

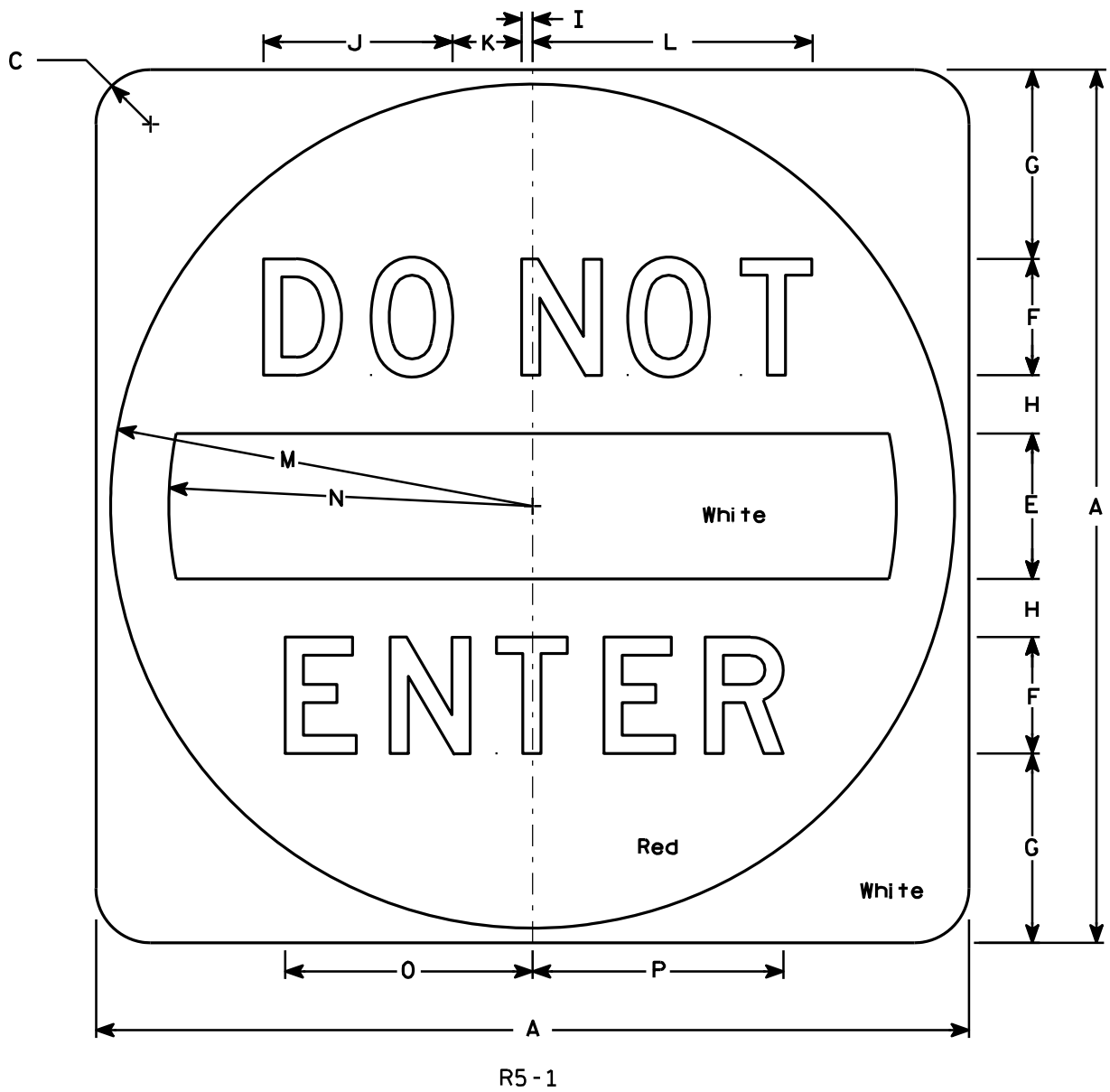
E

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:

Background - See detail

Message - White - Type H Reflective
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but when base material is metal, the corners shall be rounded.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7⁄8		5	4	6 1⁄2	2	3⁄8	6 1⁄2	2 3⁄8	9 5⁄8	14 1⁄2	12 1⁄2	8 1⁄2	8 5⁄8											6.26
2M	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
3	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
4	36		2 1⁄4		6	5	7 1⁄2	2 1⁄2	1⁄2	8 1⁄8	3	12 1⁄8	17 1⁄2	15	10 5⁄8	10 3⁄4											9.0
5	48		3		8	6	11	3	5⁄8	9 3⁄4	3 5⁄8	14 1⁄2	23 1⁄2	20	12 3⁄4	12 7⁄8											16.0

STANDARD SIGN

R5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch

for State Traffic Engineer

DATE 12/17/10PLATE NO. R5-1.15

PROJECT NO:

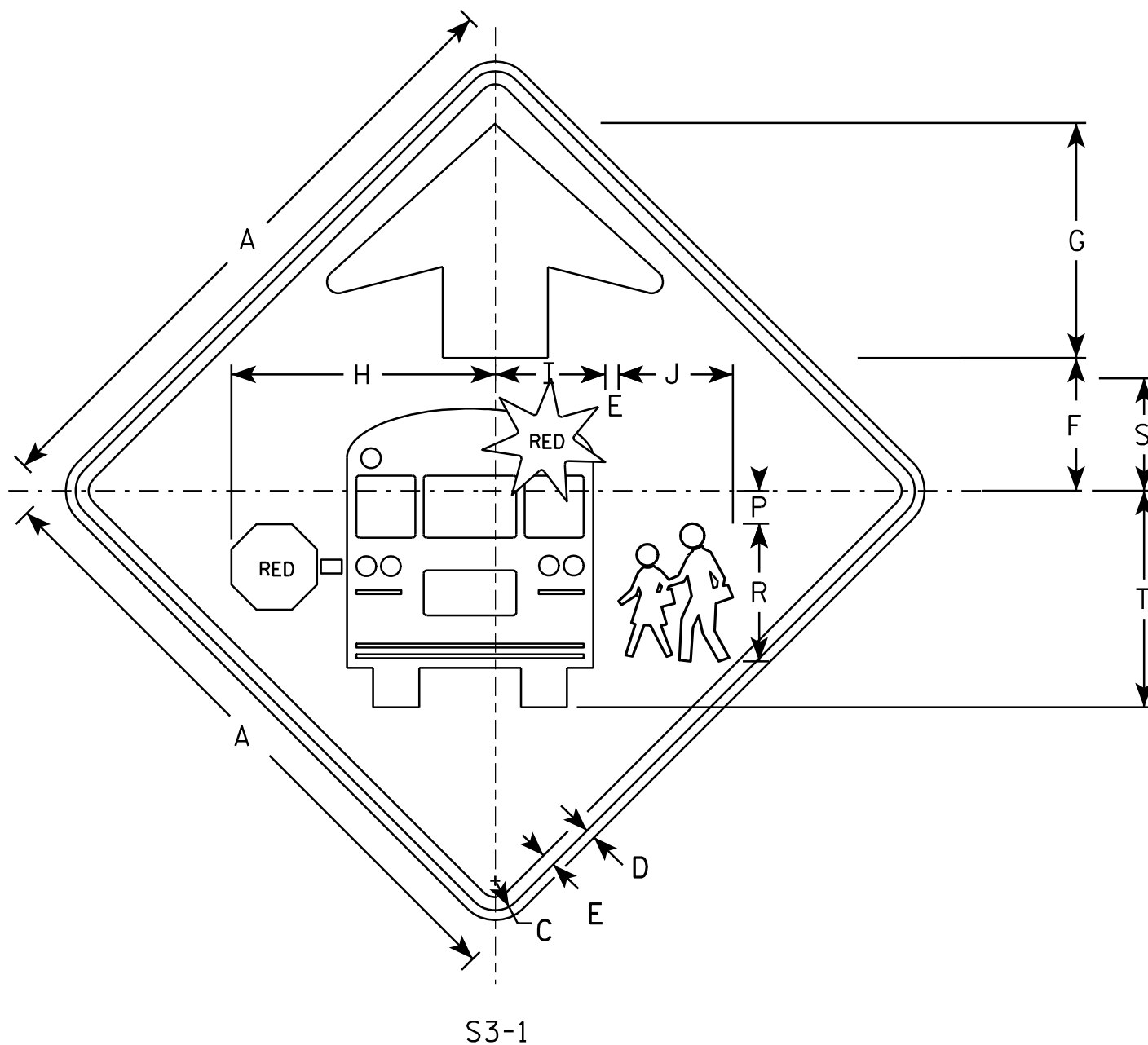
HWY:

COUNTY:

SHEET NO:

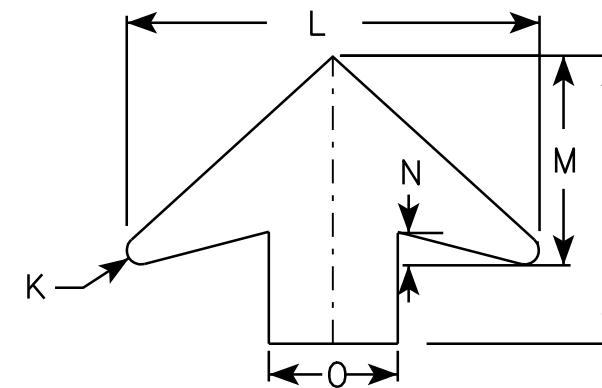
E





## NOTES

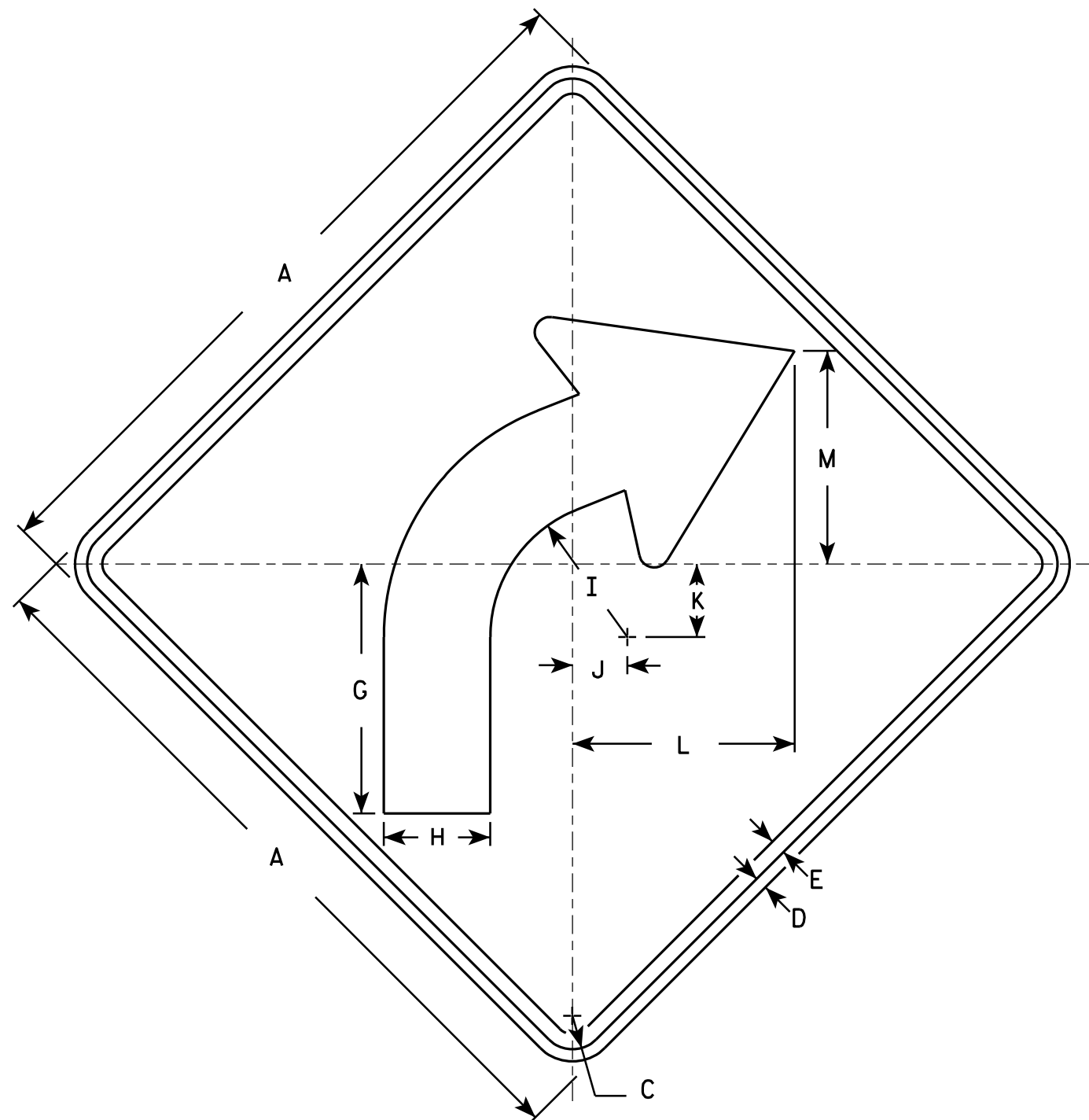
1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
  - Background - YELLOW-GREEN
  - Message - BLACK except as noted
  - Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

[illegible]

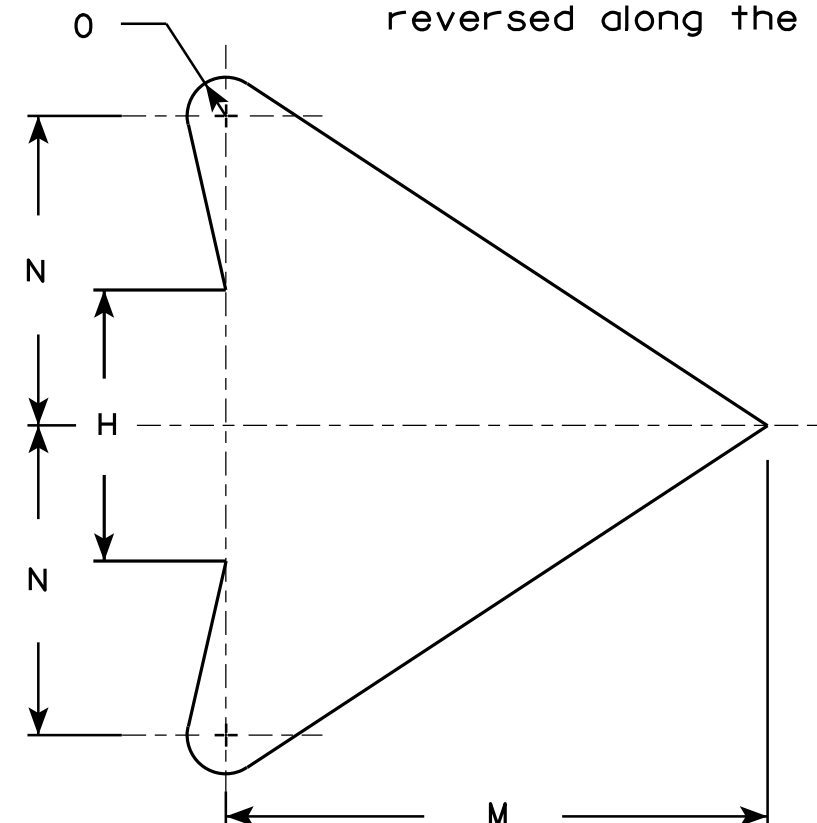
STANDARD SIGN	
S3-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<u>Matthew R. Rauch</u> for State Traffic Engineer
DATE <u>6/8/10</u>	PLATE NO. <u>S3-16</u>

# NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:  
Background - Yellow  
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

## STANDARD SIGN W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:

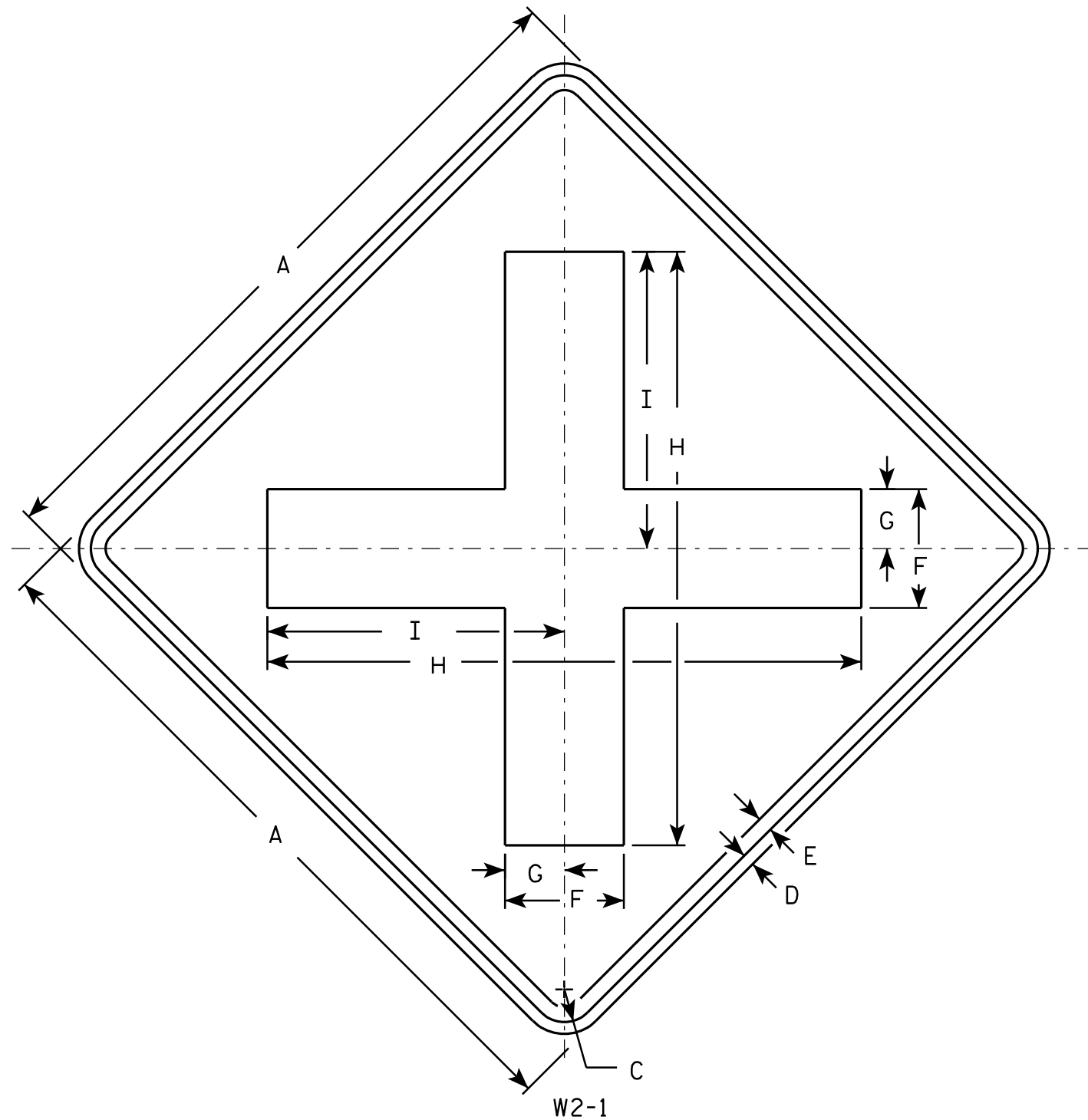
HWY:

COUNTY:

SHEET NO:

E





# NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	4	2	20	10																		4.0
2S	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
2M	30		1 3/8	1/2	5/8	5	2 1/2	25	12 1/2																		6.25
3	36		1 5/8	5/8	3/4	6	3	30	15																		9.0
4	48		2 1/4	3/4	1	8	4	40	20																		16.0
5																											

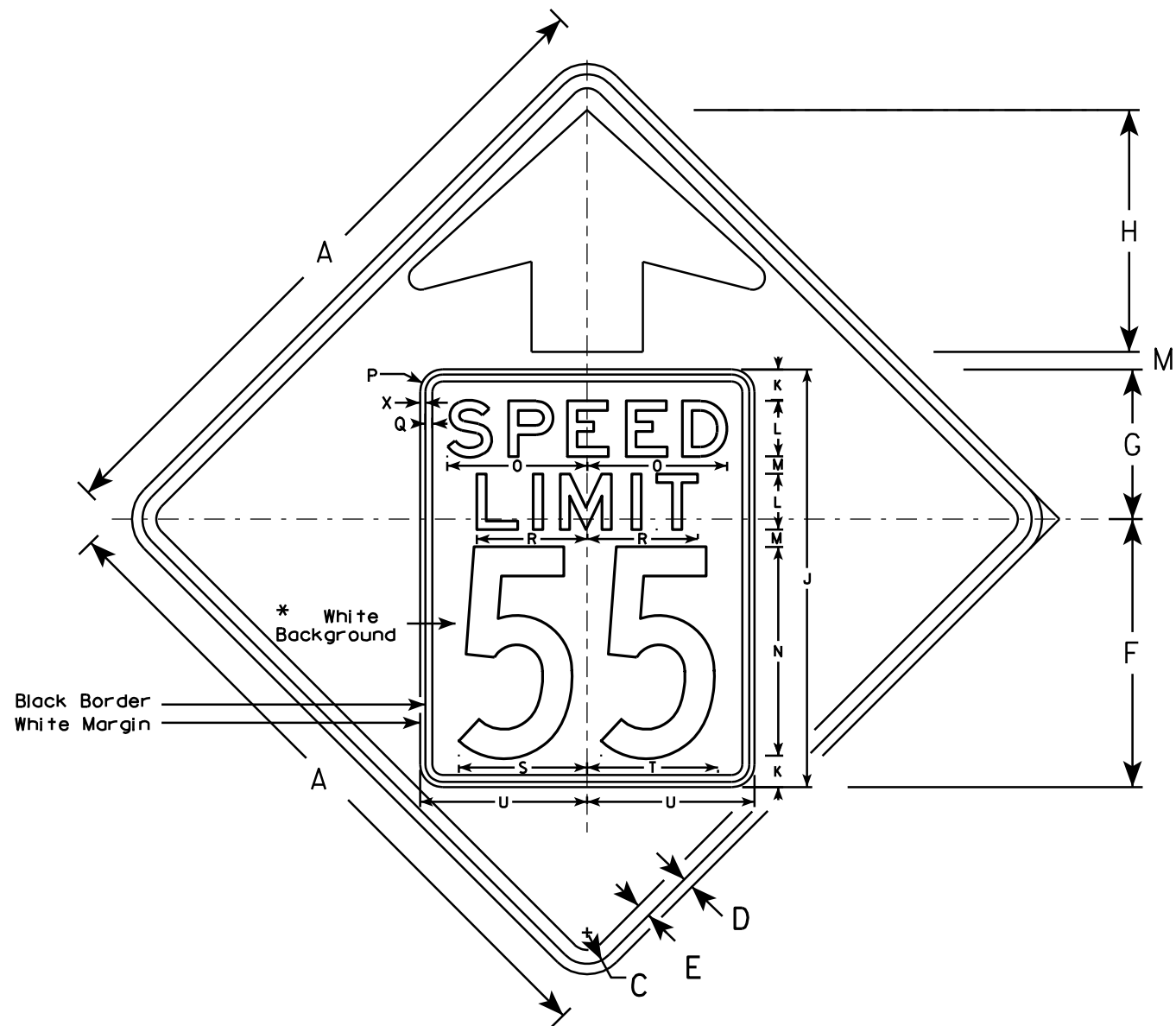
## STANDARD SIGN W2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-1.9

PROJECT NO: HWY: COUNTY: SHEET NO: E

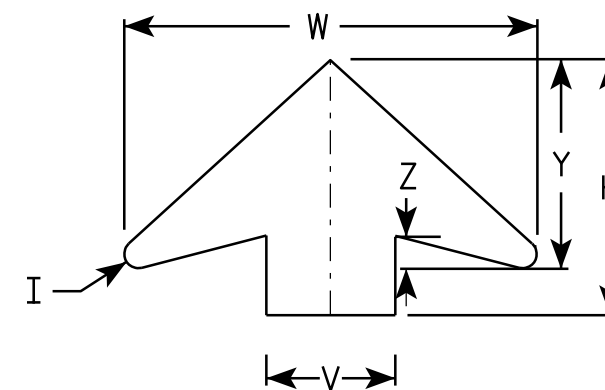


W3-5

### NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: \*  
Background - YELLOW\*  
Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

\*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
2M	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
3	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
4	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0
5	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0

### STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

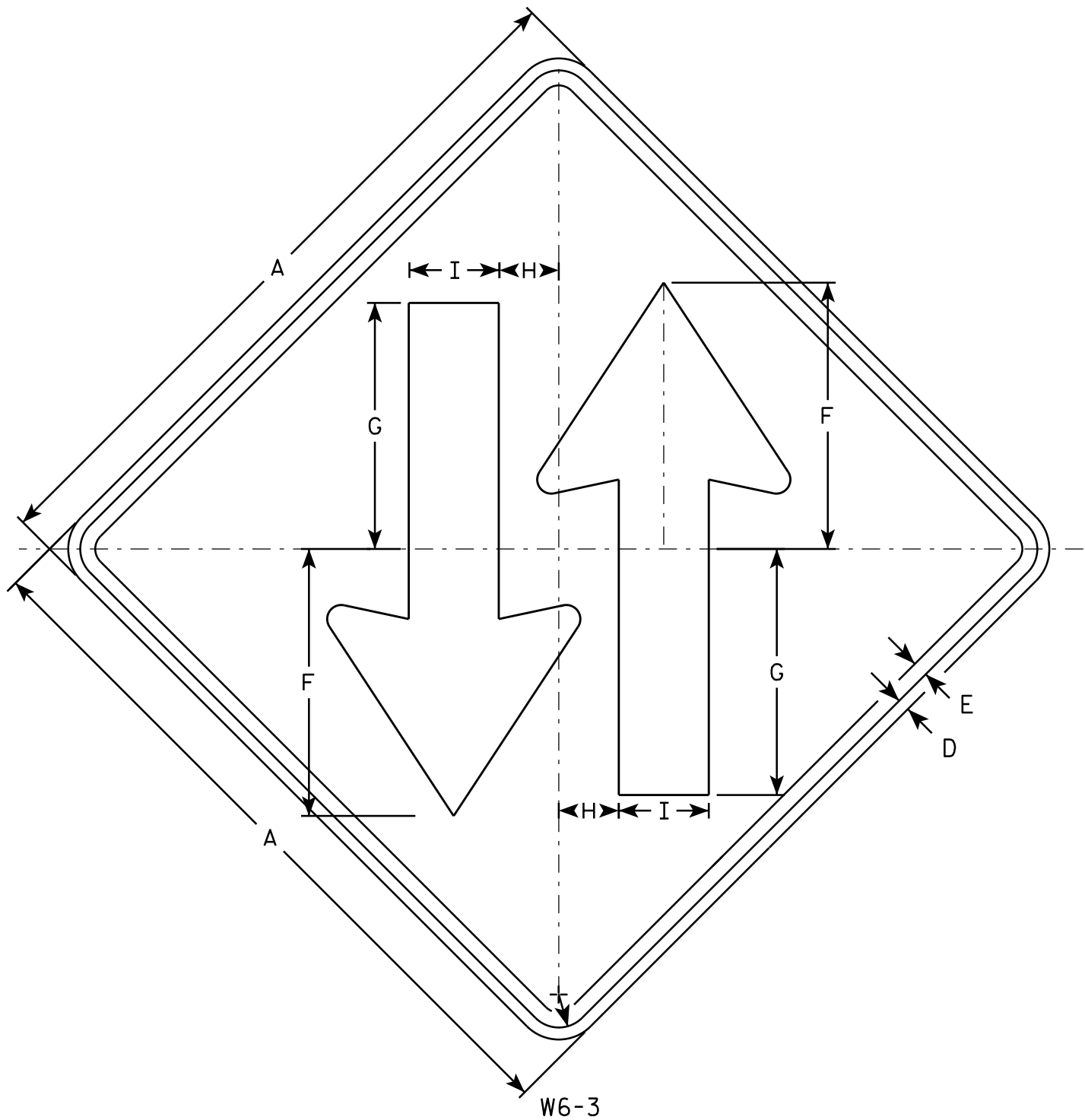
DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO:

E

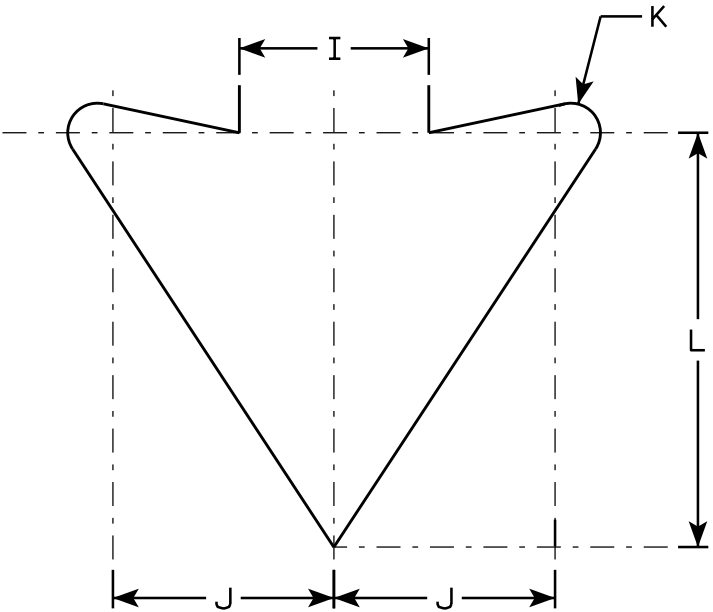




W6-3

NOTES

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



ARROW DETAIL

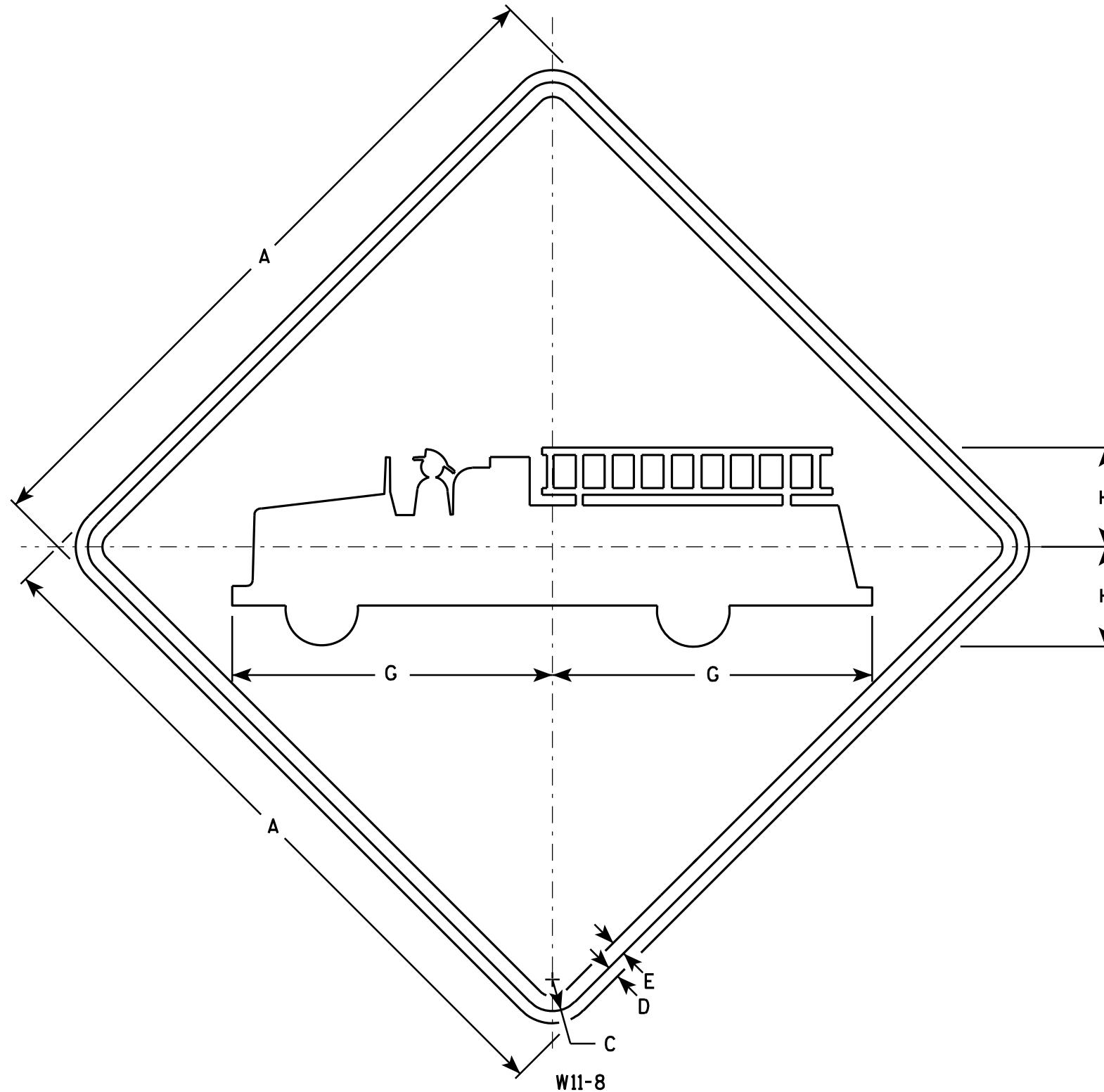
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8	11 1/8	10 1/4	2 1/2	3 3/4	4 3/8	5/8	8 1/4															6.25
2S	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
2M	36		1 5/8	5/8	3/4	13 3/8	12 1/4	3	4 1/2	5 1/4	3/4	9 7/8															9.0
3																											
4	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0
5	48		2 1/4	3/4	1	17 3/4	16 3/8	4	6	7	1	13 1/8															16.0

STANDARD SIGN  
W6-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED  
*Matthew R. Rauch*  
for State Traffic Engineer

DATE 3/10/16 PLATE NO. W6-3.11



# NOTES

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

W11-8

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	24		1 1/8	3/8	1/2		11	3 3/8																			4.0
2S	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
2M	30		1 3/8	1/2	5/8		13 3/4	4 3/8																			6.25
3	36		1 5/8	5/8	3/4		16 1/2	5 1/4																			9.0
4	48		2 1/4	3/4	1		22	7																			16.0
5																											

## STANDARD SIGN W11-8

WISCONSIN DEPT OF TRANSPORTATION  
APPROVED *Matthew R. Rauch*  
for State Traffic Engineer  
DATE 3/13/13 PLATE NO. W11-8.7

PROJECT NO:

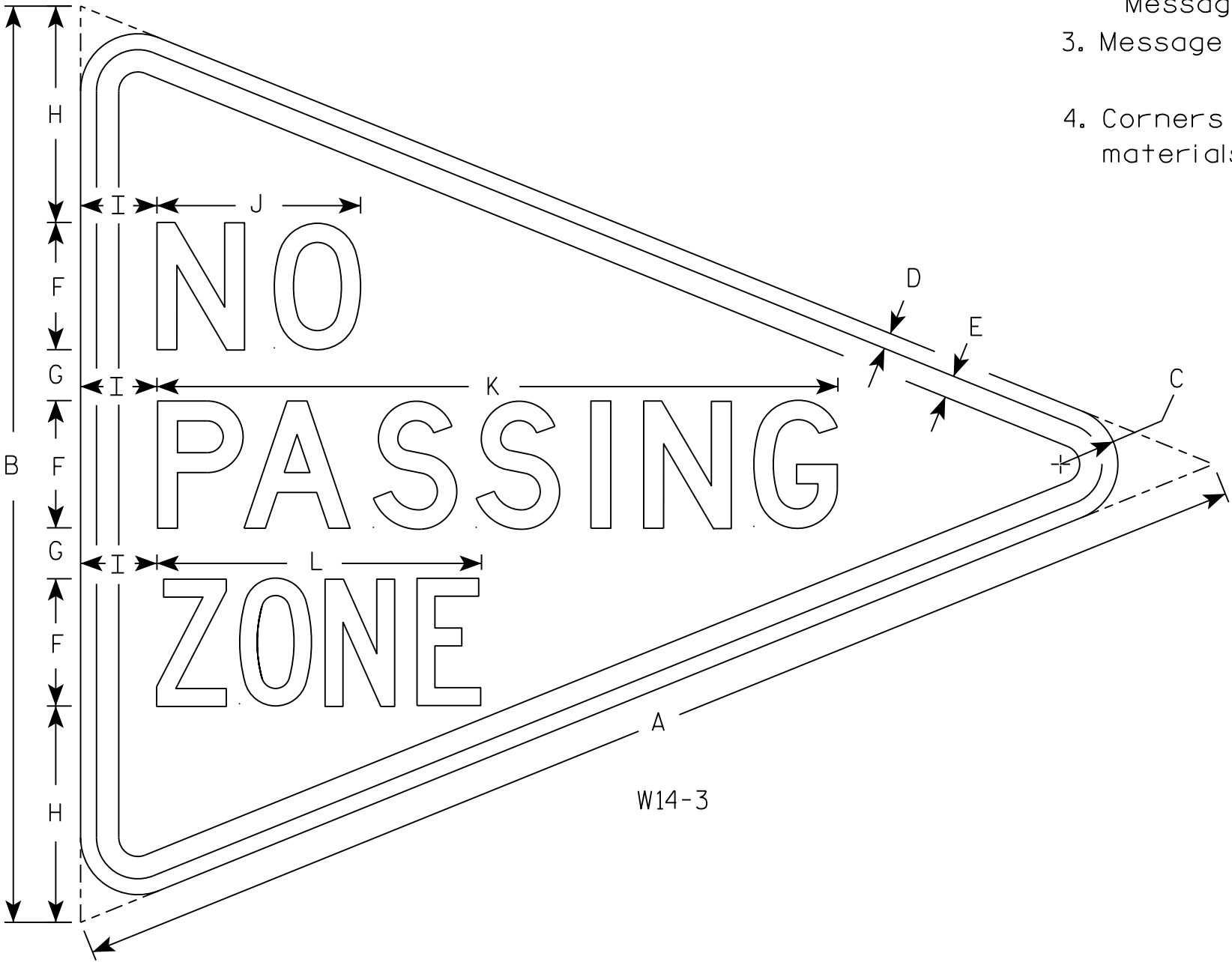
SHEET NO:

E



NOTES

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



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN  
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*  
for State Traffic Engineer

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



## ***Wisconsin Department of Transportation***

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