

MAD APR 2017

PROJECT ID: 1161-00-64

COUNTY: COLUMBIA

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 = 106



DESIGN DESIGNATION

A.A.D.T. 2015	=	16,200
A.A.D.T. 2025	=	18,000
D.H.V.	=	57/43
D.D.	=	
T.	=	16.6
DESIGN SPEED	=	70 MPH
ESALS	=	20,065,174

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	CAUTION
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	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	SS
TELEPHONE	T
WATER	W
UTILITY PEDESTAL	---
POWER POLE	---
TELEPHONE POLE	---

BEGIN PROJECT
SB STA 104+85

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

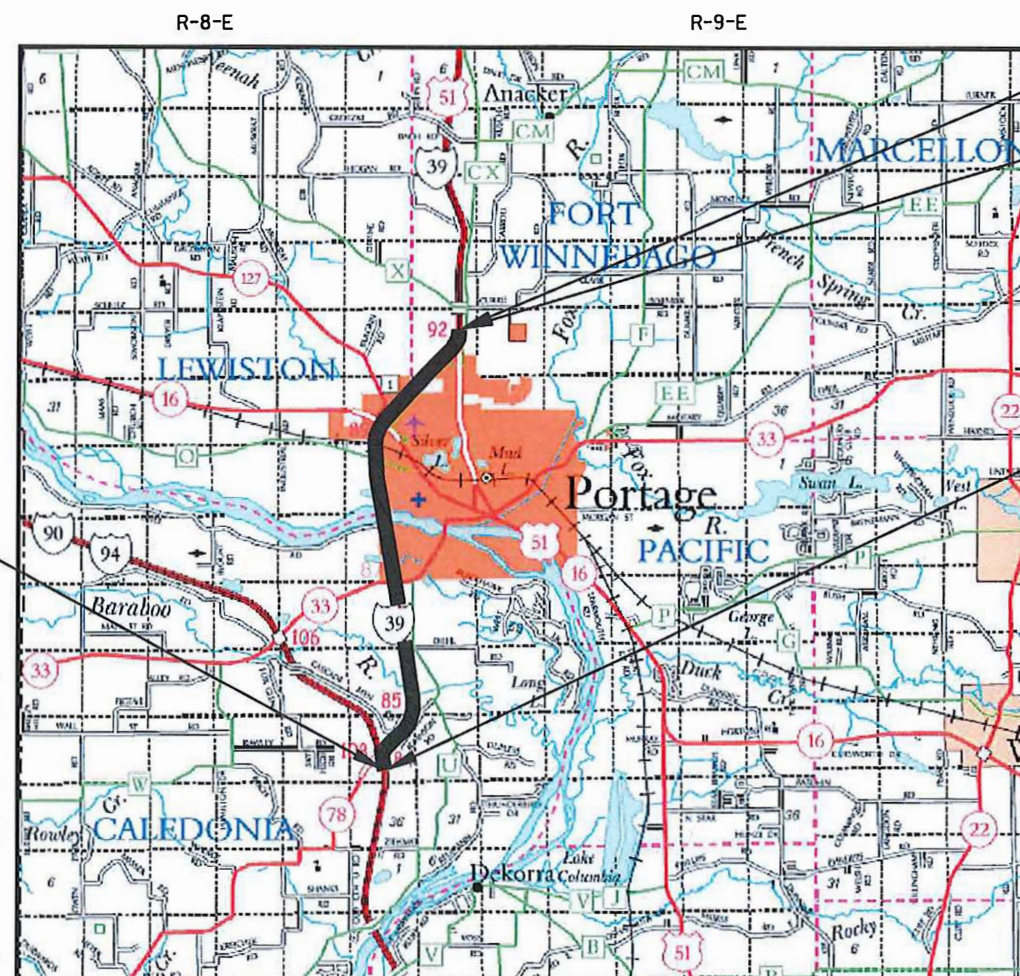
PORTAGE - PACKWAUKEE

IH 90/94 TO N COUNTY LINE

IH 39

COLUMBIA COUNTY

STATE PROJECT NUMBER
1161-00-64



END PROJECT
SB STA 450+90

END PROJECT
NB STA 450+80

BEGIN PROJECT
NB STA 112+50

LAYOUT
SCALE 0 2 MI.

TOTAL NET LENGTH OF CENTERLINE = 7.737 MILES

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS) COLUMBIA COUNTY. ALIGNMENTS ON THIS PLAN ARE FOR REFERENCE PURPOSES ONLY.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1161-00-64	WISC 2017158	1

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

PREPARED BY

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Designer	LORRAINE BETZEL
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Regional Examiner	
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APPROVED FOR THE DEPARTMENT

DATE: 11/11/16



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ABBREVIATIONS

AEW	APRON ENDWALL
AGG	AGGREGATE
BAD	BASE AGGREGATE DENSE
BM	BENCH MARK
C&G	CURB AND GUTTER
C/L	CENTER OR CONSTRUCTION LINE
CMCP	CULVERT PIPE CORRUGATED METAL DESIGN CONC CONCRETE
CP	CULVERT PIPE
CPRC	CULVERT PIPE REINFORCED CONCRETE
CSD	CONCRETE SURFACE DRAIN
CY	CUBIC YARD
D	DEGREE OF CURVE
Δ	DELTA
DISCH	DISCHARGE
EAT	ENERGY ABSORBING TERMINAL
FE	FIELD ENTRANCE
HMA	HOT MIX ASPHALT
INV	INVERT
L	LENGTH OF CURVE
LHF	LEFT HAND FORWARD
LT	LEFT
MIN	MINIMUM
M/L	MATCHLINE
NB	NORTHBOUND
NC	NORMAL CROWN
PAVT	PAVEMENT
PC	POINT OF CURVE
PCC	POINT OF COMPOUND CURVE
PE	PRIVATE ENTRANCE
PI	POINT OF INTERSECTION
PLE	PERMANENT LIMITED EASEMENT
PT	POINT OF TANGENT
R	RADIUS OF CURVE
R/L	REFERENCE LINE
RC	REVERSE CROWN
RCAEW	APRON ENDWAL FOR CULVERT PIPE REINFORCED CONCRETE
RHF	RIGHT HAND FORWARD
RO	RUN OFF LENGTH
RRSP	RAILROAD SPIKE
RT	RT
SALV	SALVAGED
SAPBC	SALVAGED ASPHALTIC PAVEMENT BASE COURSE
SB	SOUTHBOUND
SDD	STANDARD DETAIL DRAWINGS
SE	SUPER ELEVATION
SF	SQUARE FOOT
SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
STA	STATION
SY	SQUARE YARD
T	TANGENT LENGTH
TLE	TEMPORARY LIMITED EASEMENT
VCL	VERTICAL CURVE LENGTH
VPC	POINT OF VERTICAL CURVE
VPI	POINT OF VERTICAL INTERSECTION
VPT	POINT OF VERTICAL TANGENT

GENERAL NOTES

WHEN THE QUANTITY OF THE ITEMS OF BASE AGGREGATE, OR HMA IS MEASURED FOR PAYMENT BY THE TON OR CUBIC YARD, THE DEPTH OR THICKNESS OF THE LAYERS SHOWN ON THE PLAN IS APPROXIMATE AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.

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

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.

PLAN REMOVAL AREAS ARE APPROXIMATE. EXACT LIMITS SHALL BE DETERMINED IN THE FIELD.

DO NOT DRIVE EQUIPMENT OR STORE EQUIPMENT OR MATERIAL IN WETLANDS, WATERWAYS OR ENVIRONMENTALLY SENSITIVE AREAS ADJACENT TO THE PROJECT.

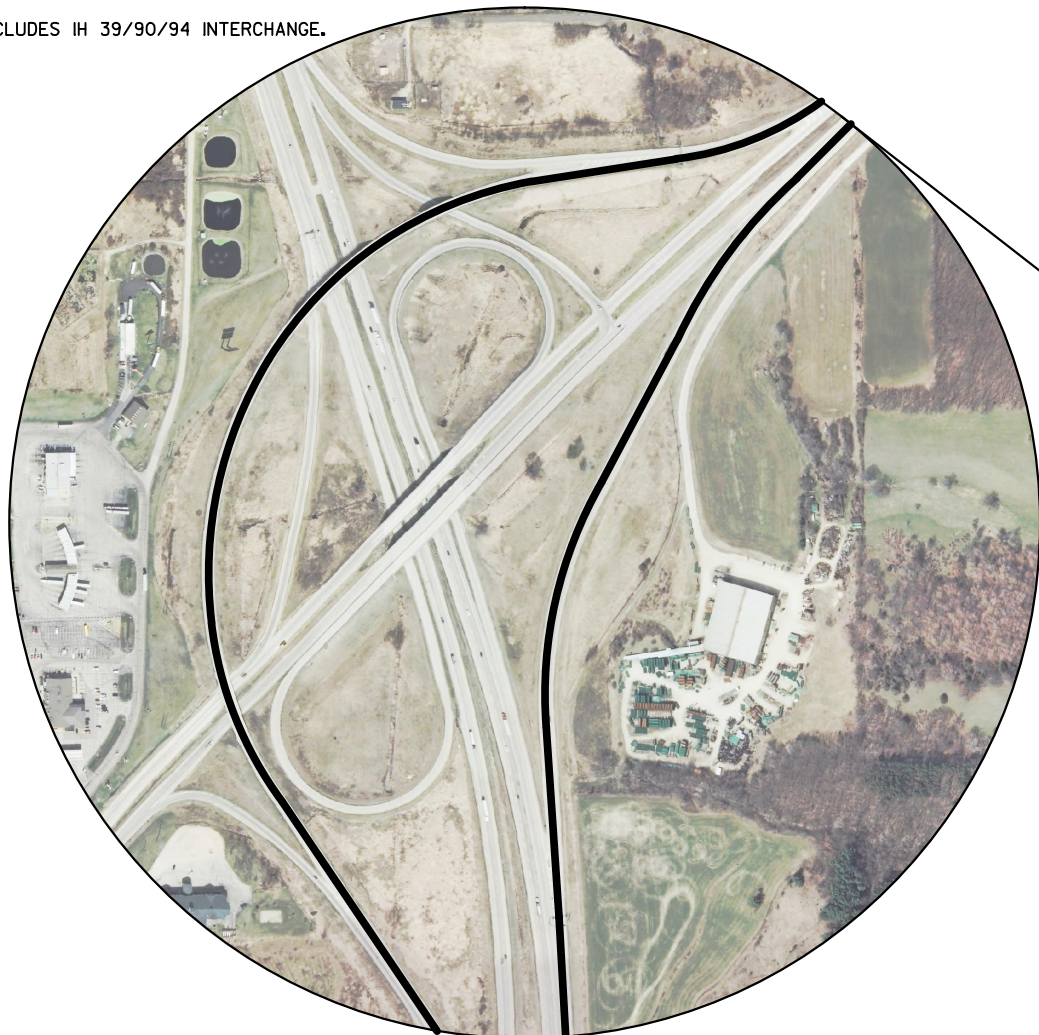
DO NOT STORE EQUIPMENT IN THE CLEAR ZONE WHEN NOT IN USE.

DETAILS OF CONSTRUCTION NOT SHOWN SHALL BE IN ACCORDANCE WITH THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS.

3.5" HMA PAVEMENT FOR PAVED SHOULDERS SHALL BE PLACED IN ONE LAYER. APPLY TACK COAT TO MILLED SURFACES. THE APPLICATION RATE IS 0.07 GALLONS PER SQUARE YARD OR AS DIRECTED BY THE ENGINEER.

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

PROJECT INCLUDES IH 39/90/94 INTERCHANGE.

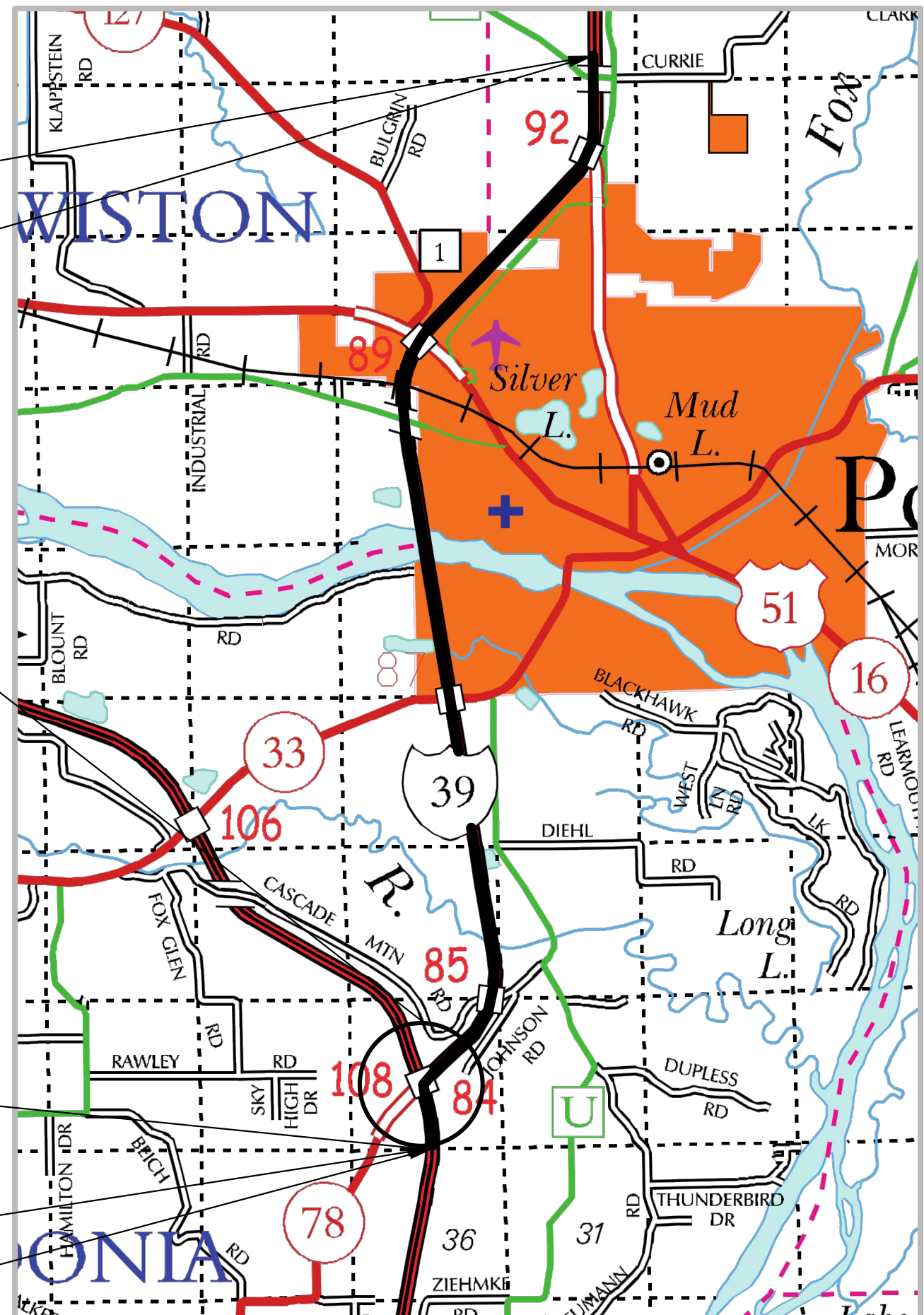


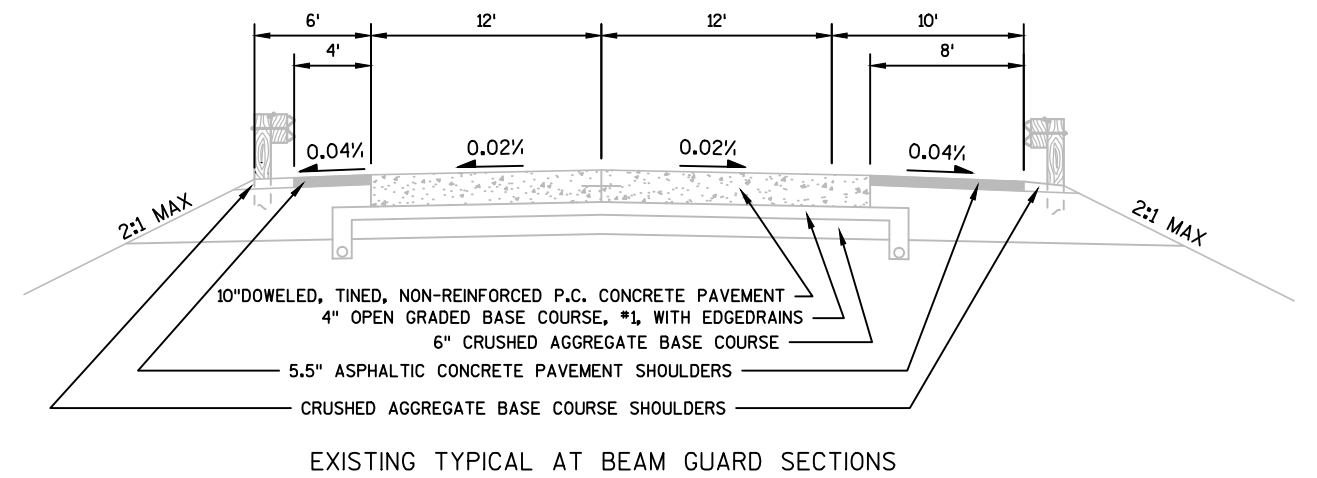
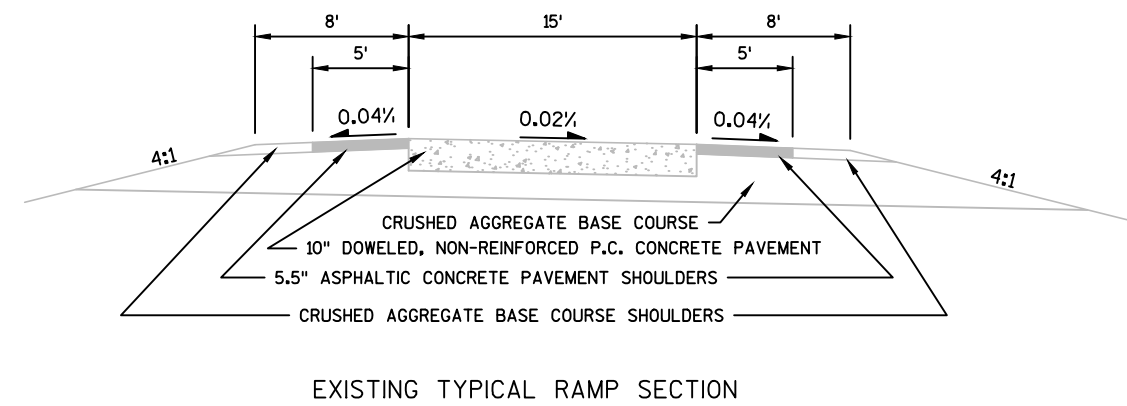
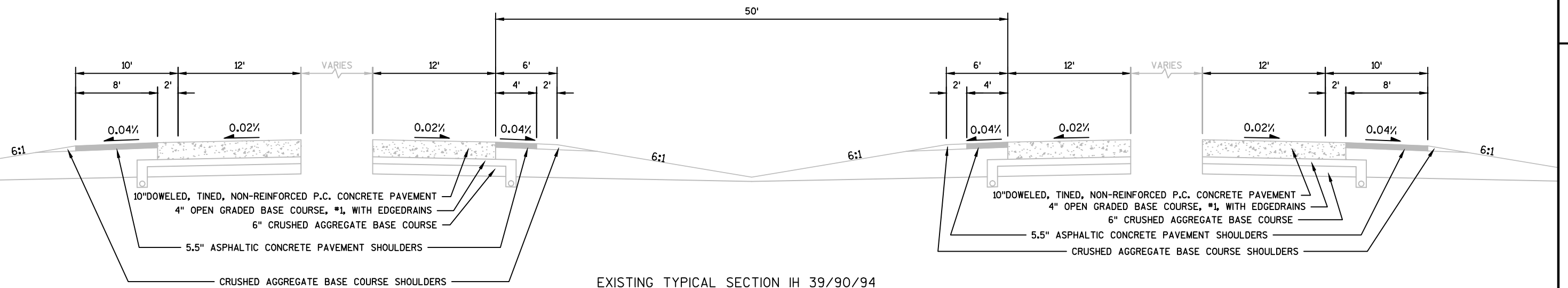
END PROJECT
SB STA 450+90

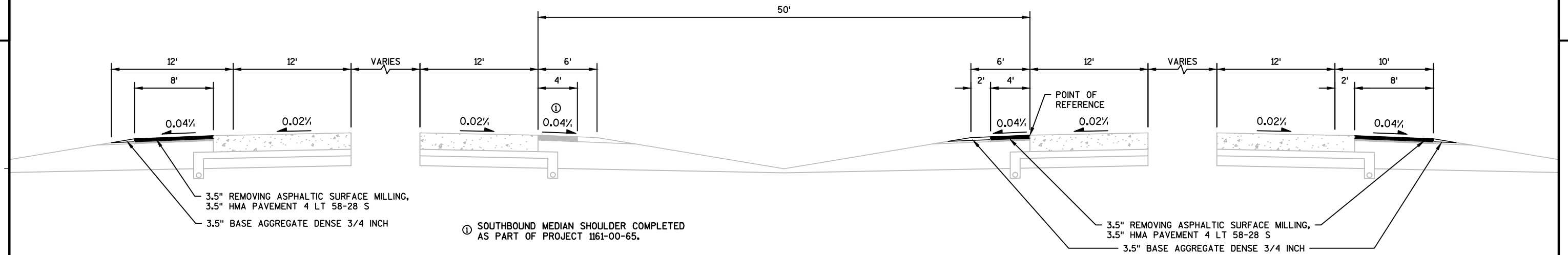
END PROJECT
NB STA 450+80

BEGIN PROJECT
SB STA 104+50

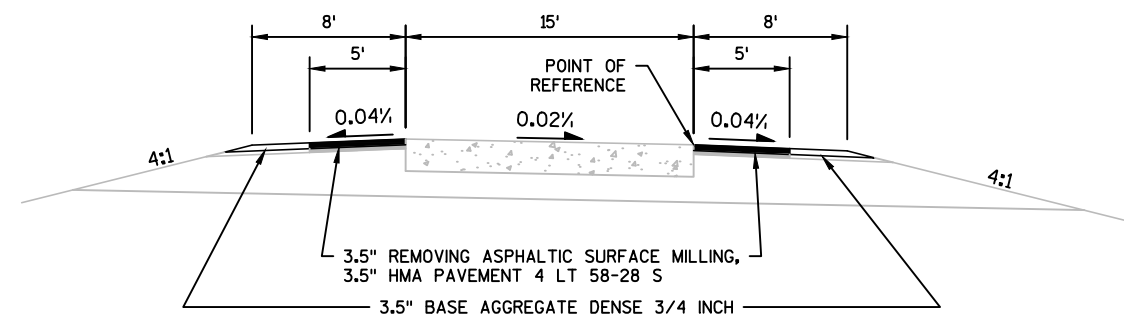
BEGIN PROJECT
NB STA 112+50





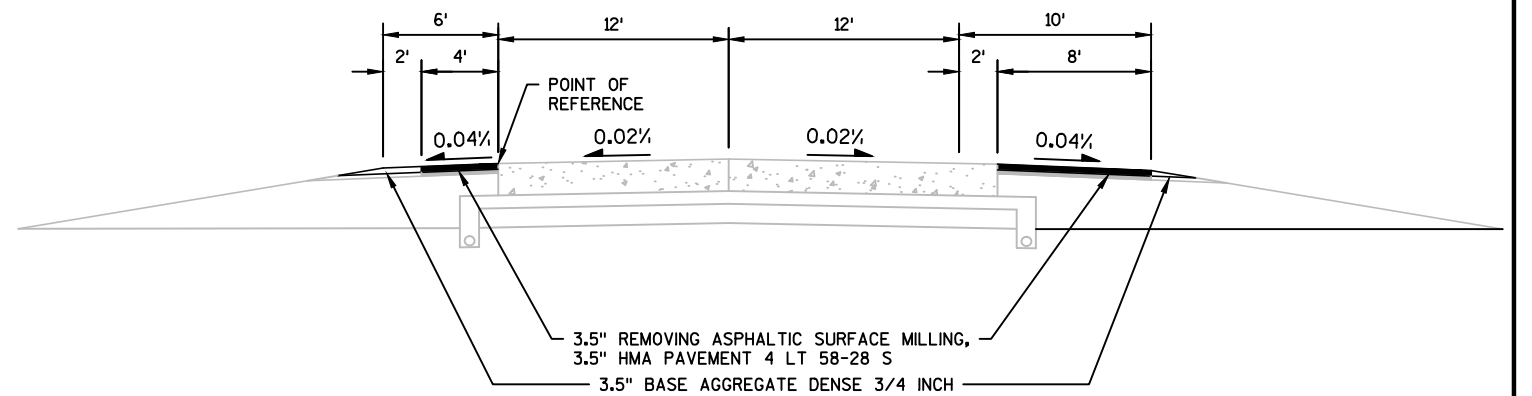


FINISHED TYPICAL SECTION IH 39/90/94

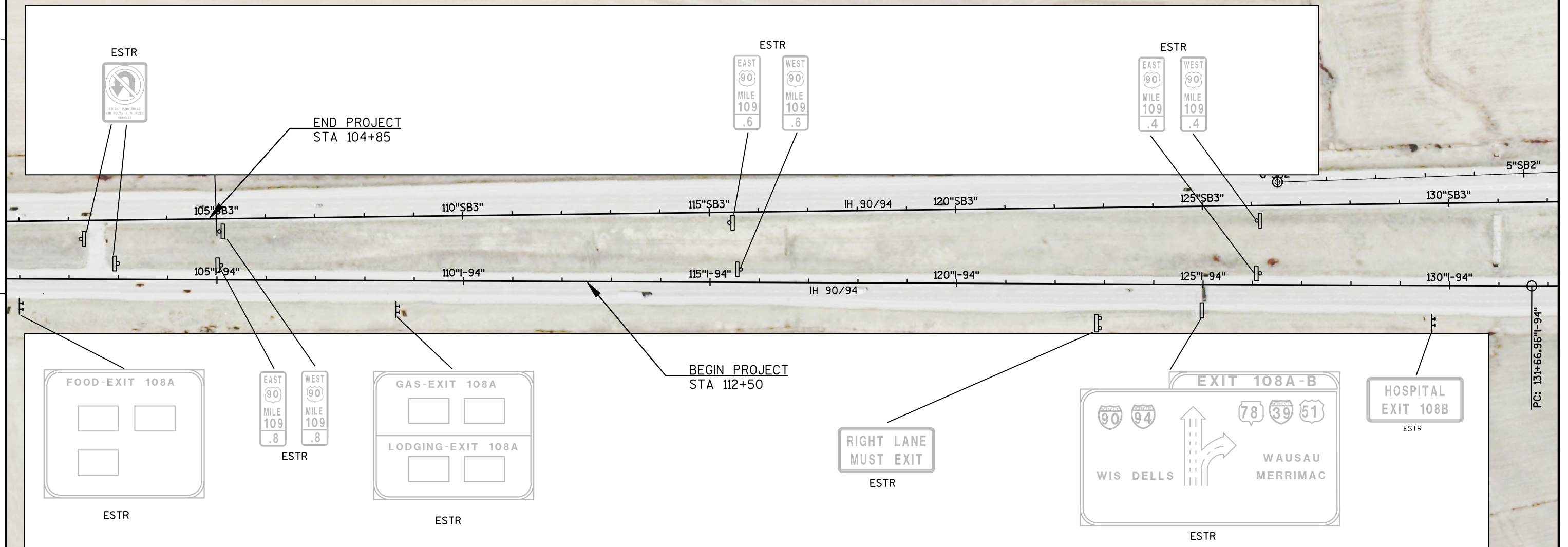


FINISHED TYPICAL RAMP SECTION

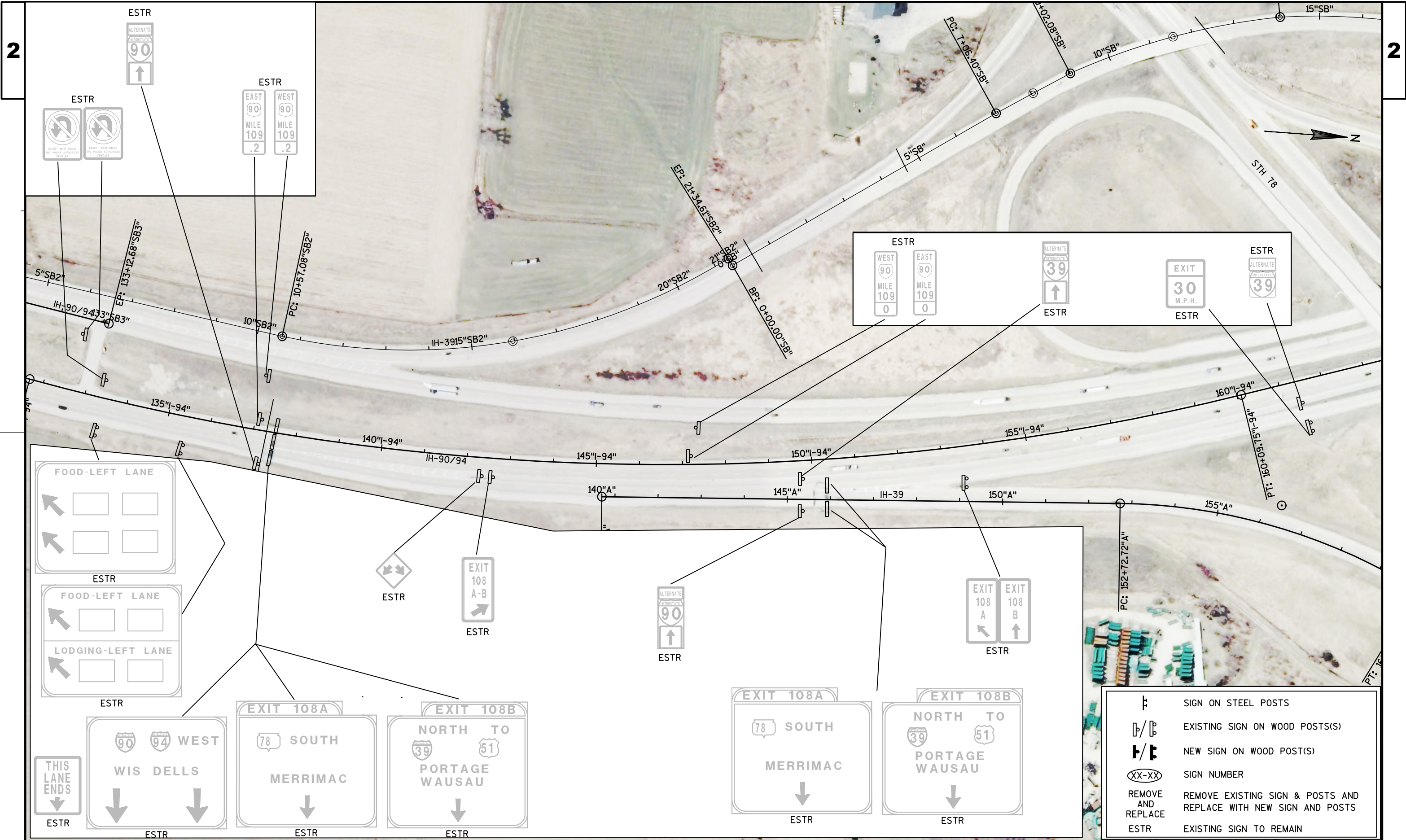
RAMP H: STA 118+00 TO STA 120+00
 RAMP I: STA 127+50 TO STA 129+00
 RAMP J: STA 133+00 TO STA 135+00
 RAMP K: STA 137+00 TO STA 138+95
 RAMP L: STA 225+15 TO STA 227+00
 RAMP M: STA 232+00 TO STA 233+76
 RAMP N: STA 236+00 TO STA 237+27
 RAMP O: STA 247+92 TO STA 250+00
 RAMP P: STA 353+92 TO STA 355+89
 RAMP Q: STA 366+61 TO STA 368+08
 RAMP R: STA 374+00 TO STA 375+31
 RAMP S: STA 349+00 TO STA 350+82
 RAMP U: STA 442+70 TO STA 444+00
 RAMP V: STA 440+00 TO STA 442+49



FINISHED TYPICAL SECTION RAMP A

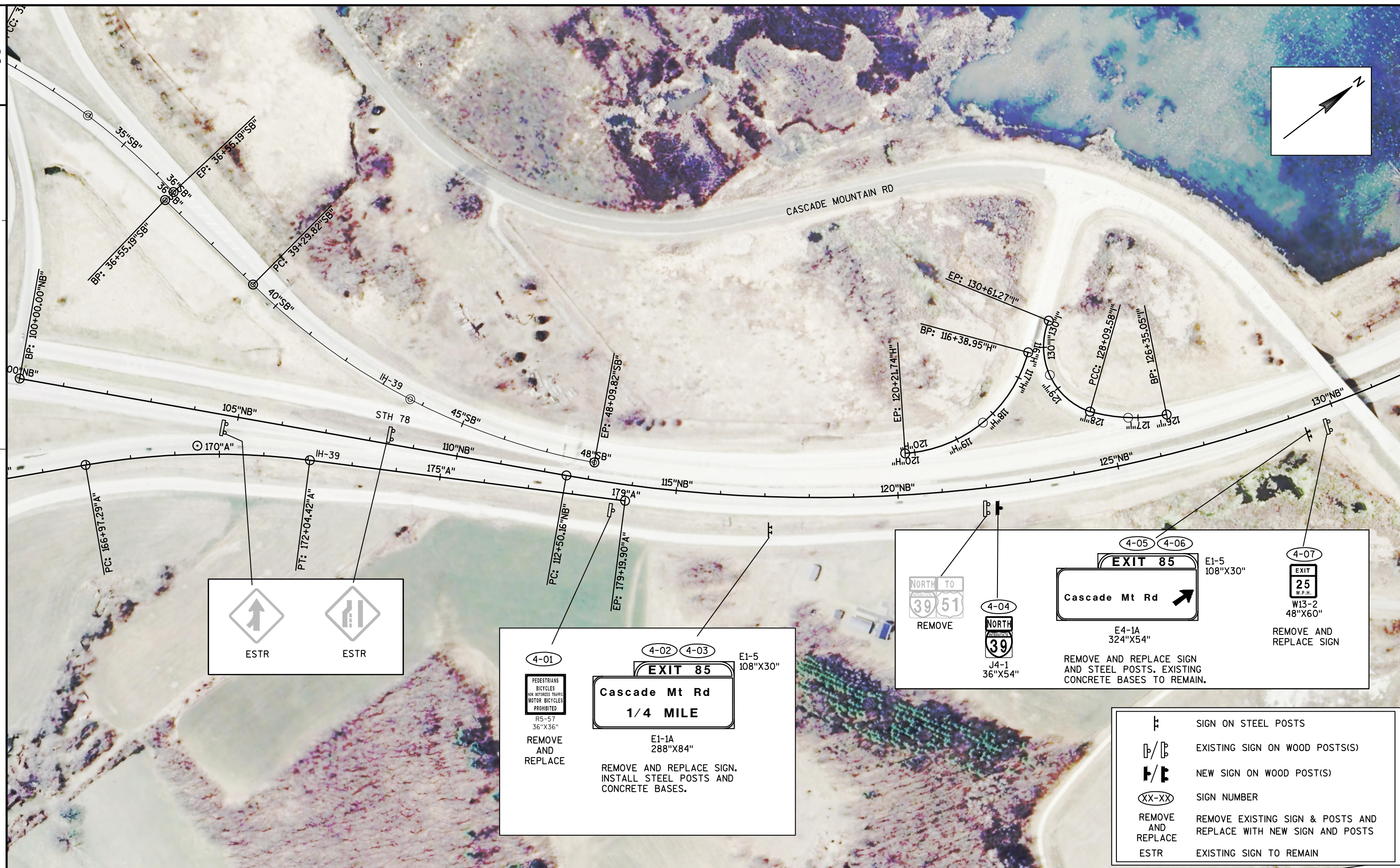


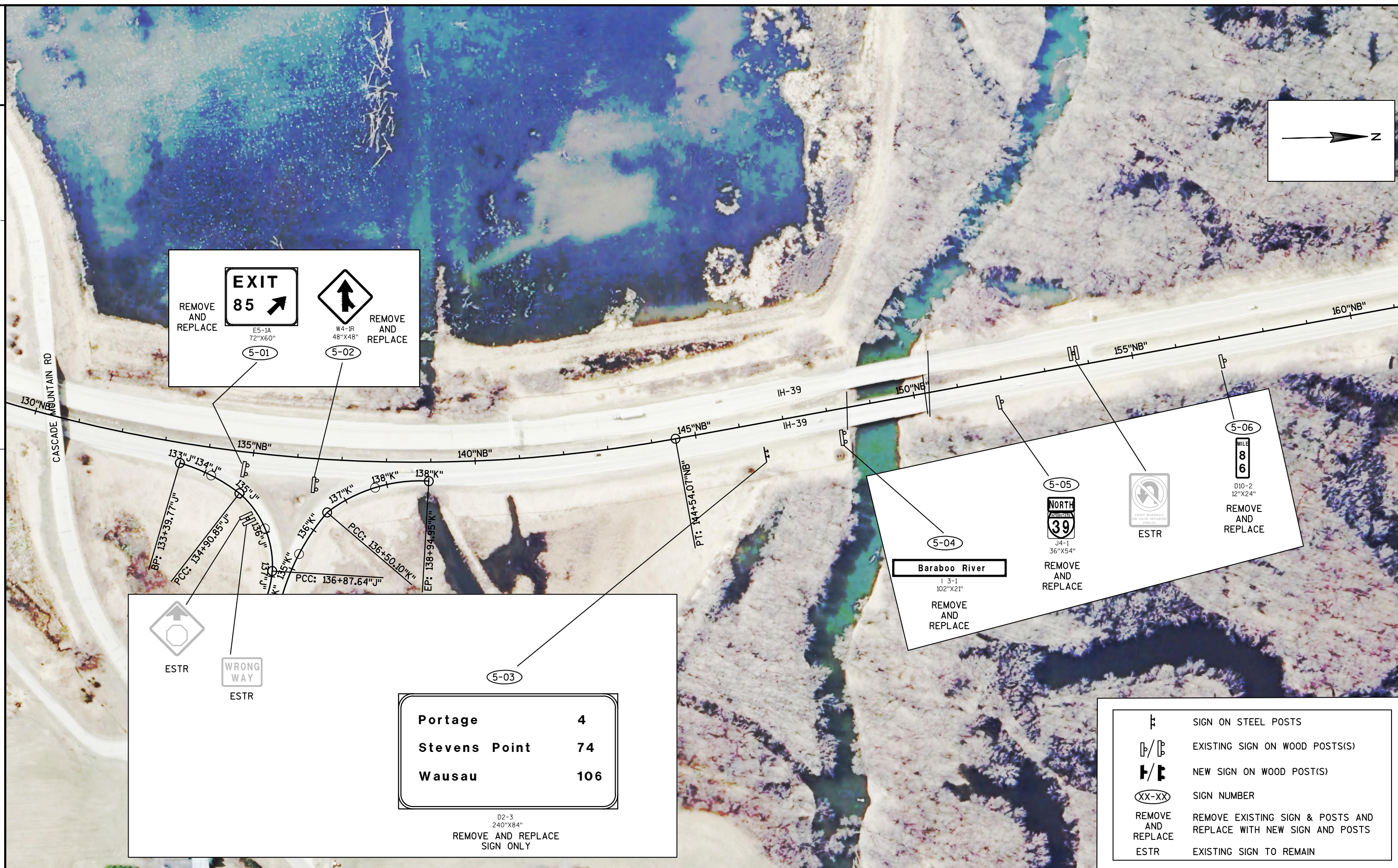
	SIGN ON STEEL POSTS
	EXISTING SIGN ON WOOD POST(S)
	NEW SIGN ON WOOD POST(S)
	SIGN NUMBER
	REMOVE EXISTING SIGN & POSTS AND REPLACE WITH NEW SIGN AND POSTS
	EXISTING SIGN TO REMAIN

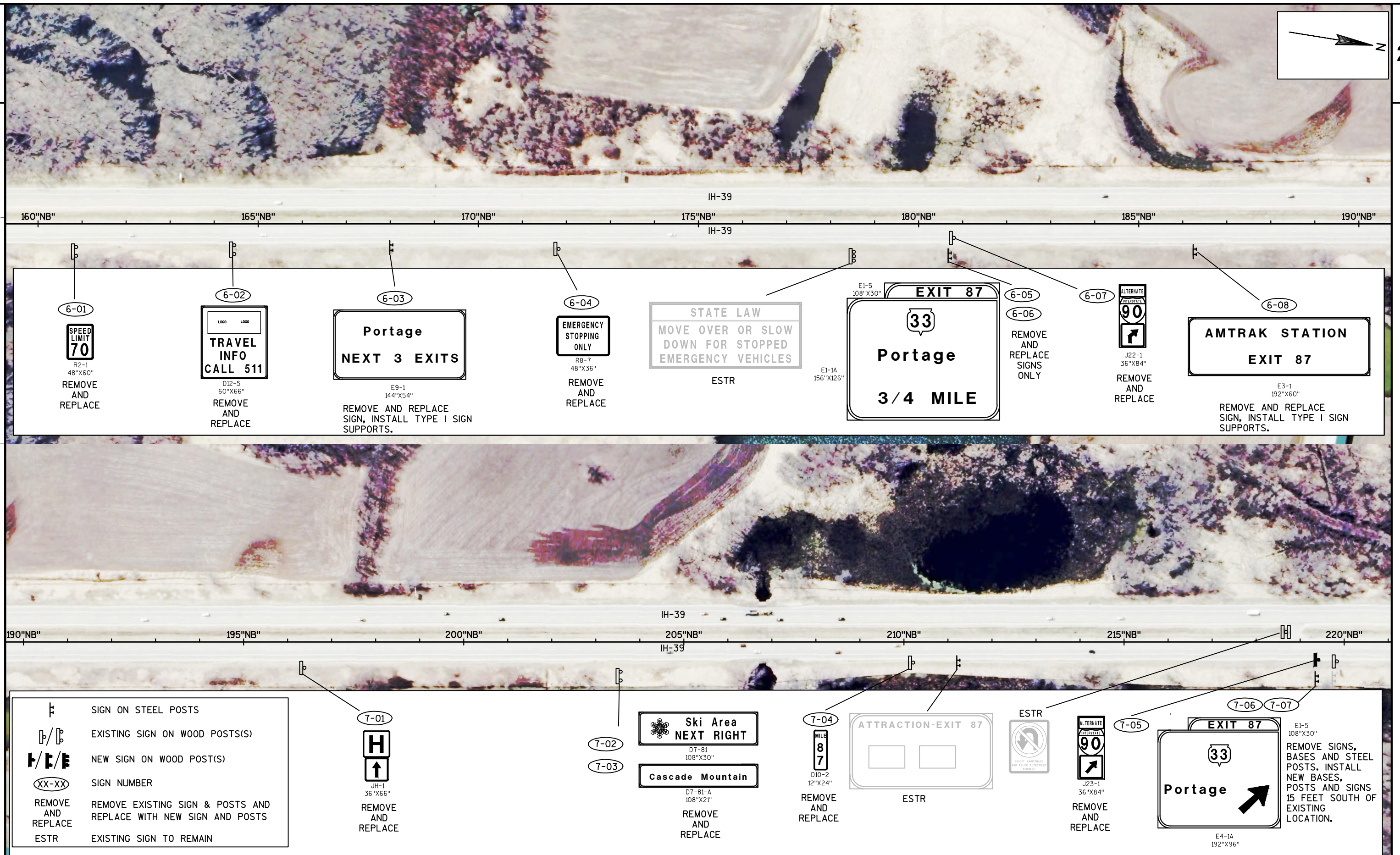




	SIGN ON STEEL POSTS
	EXISTING SIGN ON WOOD POSTS(S)
	NEW SIGN ON WOOD POST(S)
	SIGN NUMBER
	REMOVE EXISTING SIGN & POSTS AND REPLACE WITH NEW SIGN AND POSTS
	EXISTING SIGN TO REMAIN







REMOVE AND REPLACE

EXIT 35
M.P.H.
W13-2
48"X60"

8-01

REMOVE AND REPLACE

EXIT 87
E5-1A
72"X60"

8-02

REMOVE AND REPLACE

W4-1R
48"X48"

8-03



8-04

NORTH
39
J4-1
36"X54"

REMOVE AND REPLACE

⌵ SIGN ON STEEL POSTS

⌵/⌵ EXISTING SIGN ON WOOD POST(S)

⌵/⌵ NEW SIGN ON WOOD POST(S)

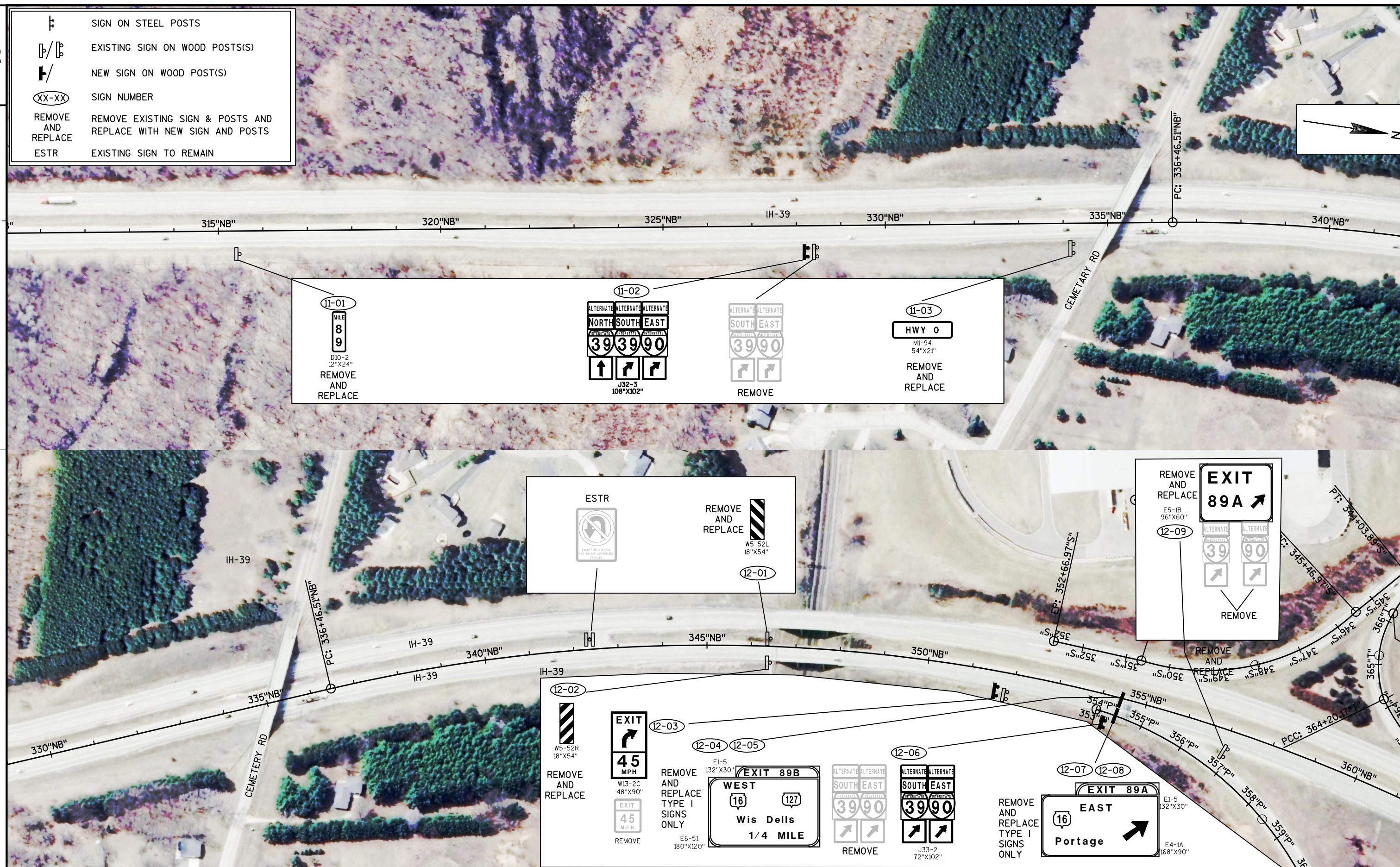
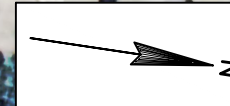
(XX-XX) SIGN NUMBER

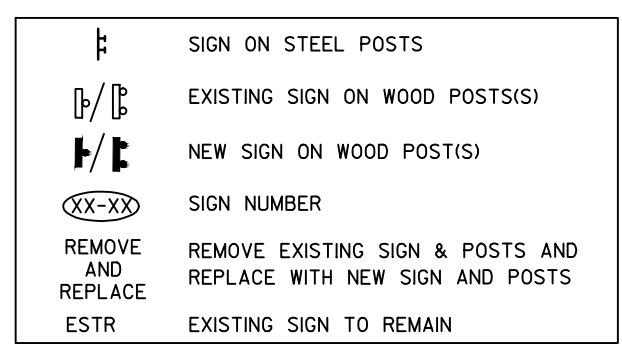
REMOVE AND REPLACE REMOVE EXISTING SIGN & POSTS AND REPLACE WITH NEW SIGN AND POSTS

ESTR EXISTING SIGN TO REMAIN



-  SIGN ON STEEL POSTS
 EXISTING SIGN ON WOOD POST(S)
 NEW SIGN ON WOOD POST(S)
 SIGN NUMBER
 REMOVE AND REPLACE
 REMOVE EXISTING SIGN & POSTS AND REPLACE WITH NEW SIGN AND POSTS
 ESTR
 EXISTING SIGN TO REMAIN





- ⌚ SIGN ON STEEL POSTS
- ⌚/⌚ EXISTING SIGN ON WOOD POST(S)
- ⌚/⌚ NEW SIGN ON WOOD POST(S)
- XX-XX SIGN NUMBER
- REMOVE AND REPLACE
- REMOVE EXISTING SIGN & POSTS AND REPLACE WITH NEW SIGN AND POSTS
- ESTR EXISTING SIGN TO REMAIN



380"NB" 385"NB" 390"NB" 395"NB" 400"NB" 405"NB" 410"NB"

IH-39

IH-39

SIZE



REMOVE AND REPLACE



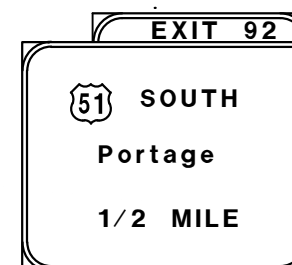
REMOVE

HOSPITAL
EXIT 92

REMOVE EXISTING STEEL POST AND BASE CLOSEST TO MAINLINE. INSTALL EXISTING SIGN, NEW STEEL SUPPORT AND CONCRETE BASE ON FAR SIDE OF EXISTING BASE.



REMOVE AND REPLACE



REMOVE AND REPLACE EXISTING SIGN, SUPPORTS AND BASES. INSTALL 15 FEET SOUTH OF EXISTING LOCATION.



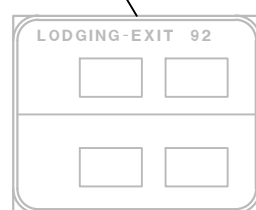
REMOVE AND REPLACE SIGN ONLY

410"NB" 415"NB" 420"NB" 425"NB" 430"NB" 435"NB" 440"NB"

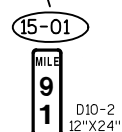
IH-39

IH-39

COUNTY CX



ESTR



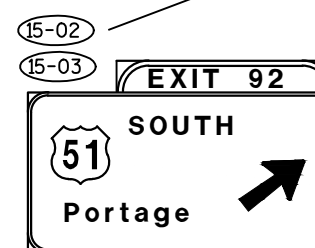
REMOVE AND REPLACE



ESTR



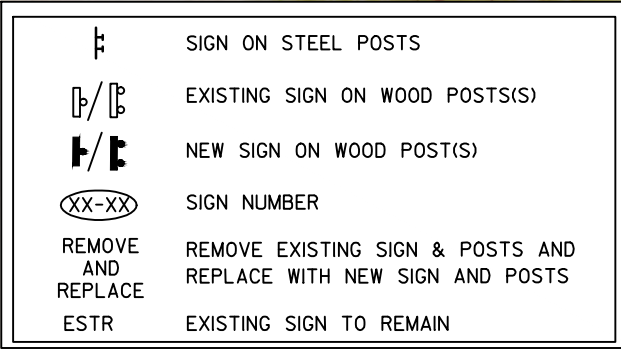
ESTR

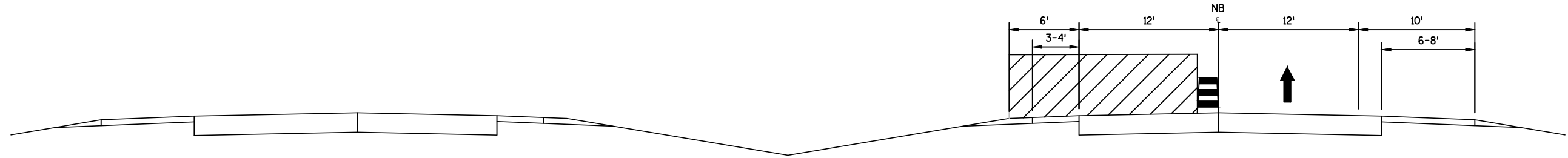


REMOVE AND REPLACE EXISTING SIGN, SUPPORTS AND BASES. INSTALL 15 FEET SOUTH OF EXISTING LOCATION.

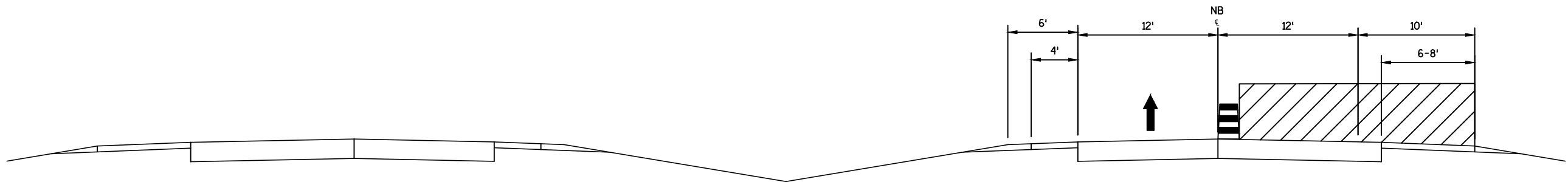


REMOVE

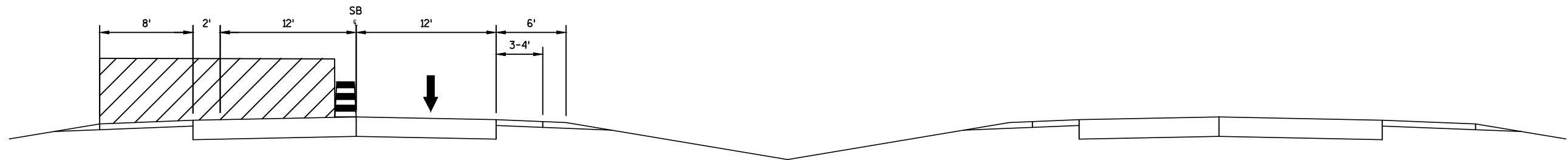




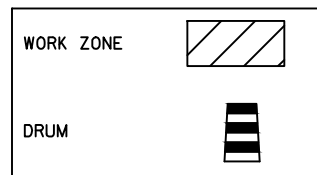
STAGE 1 - MILL AND OVERLAY MEDIAN SHOULDER NORTHBOUND 1-39

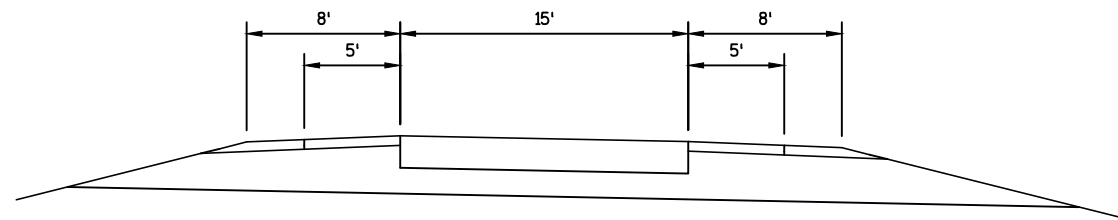


STAGE 2 - MILL AND OVERLAY OUTSIDE SHOULDER NORTHBOUND 1-39

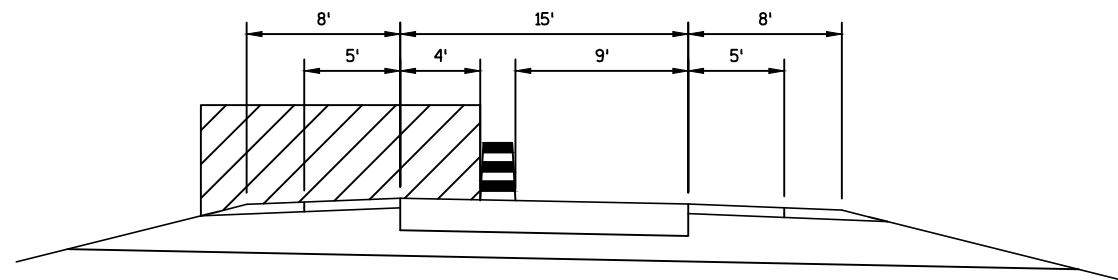


STAGE 3 - MILL AND OVERLAY OUTSIDE SHOULDER SOUTHBOUND 1-39

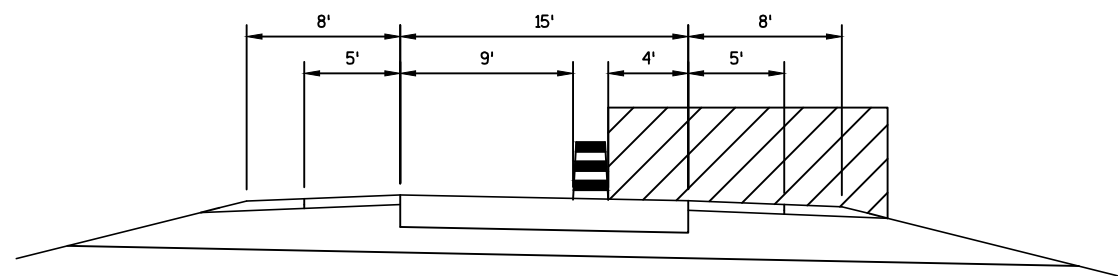




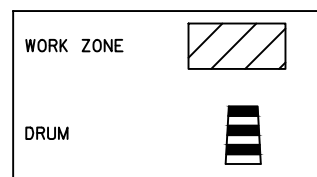
INITIAL RAMP TYPICAL



RAMP - CONSTRUCTION ON SHOULDER LEFT



RAMP - CONSTRUCTION ON SHOULDER RIGHT

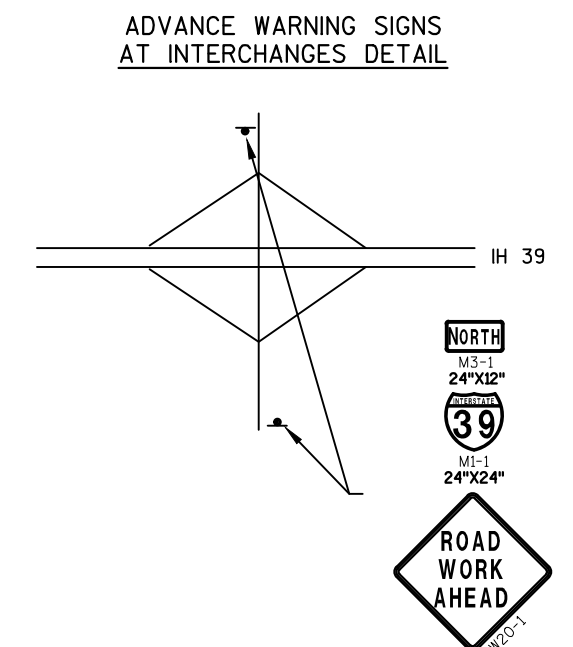
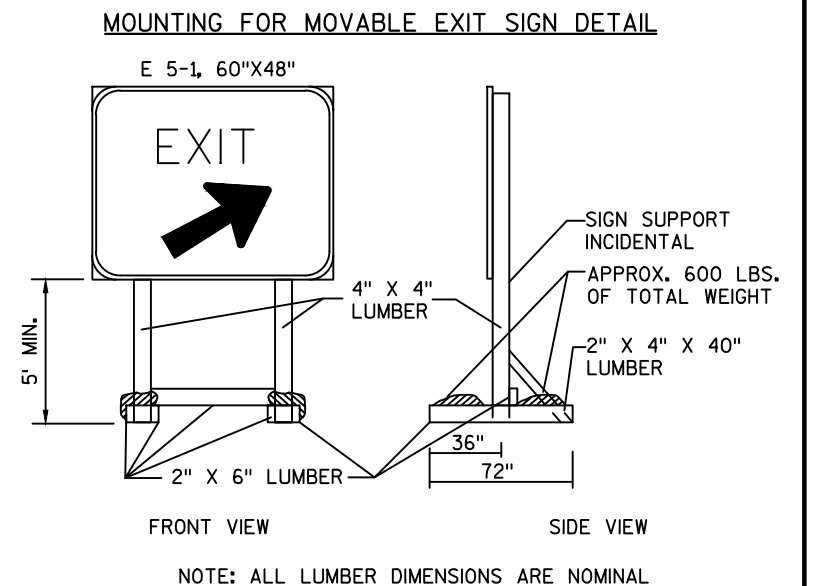


LEGEND



 FLAGS, 16"X16" MIN., ORANGE, INCIDENTAL

 DIRECTION OF TRAFFIC FLOW



GENERAL NOTES

THE INSTALLATIONS SHOWN ON THIS SHEET ARE TYPICAL EXAMPLES AND ARE NOT INTENDED TO REPRESENT ANY PARTICULAR RAMP, AT SPECIFIC FIELD LOCATIONS. SIMILAR INSTALLATIONS SHALL BE USED AND ADJUSTED TO THE GEOMETRICS OF THE RAMP AS COORDINATED WITH THE ENGINEER.

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

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.

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

SEE SEPARATE LANE CLOSURE DETAIL FOR TYPICAL SPACING OF TYPE III BARRICADES AND R11-2 (MOD.) "LANE CLOSED" SIGNS.

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

YIELD SIGNS AND WARNING SIGNS ON ENTRANCE RAMP ARE ALSO APPROPRIATE FOR CLOSURE OF THE MAINLINE MEDIAN LANE. OMIT THE YIELD SIGN IF MORE THAN ONE LANE REMAINS OPEN ON THE MAINLINE AND THE RAMP TAPER IS AT LEAST AS LONG AS THE NORMAL ENTRANCE RAMP TAPER AT THE SITE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS. USE SUPPORTS THAT PROVIDE A MINIMUM OF 5 FEET FROM THE BOTTOM OF THE SIGN TO THE PAVEMENT.

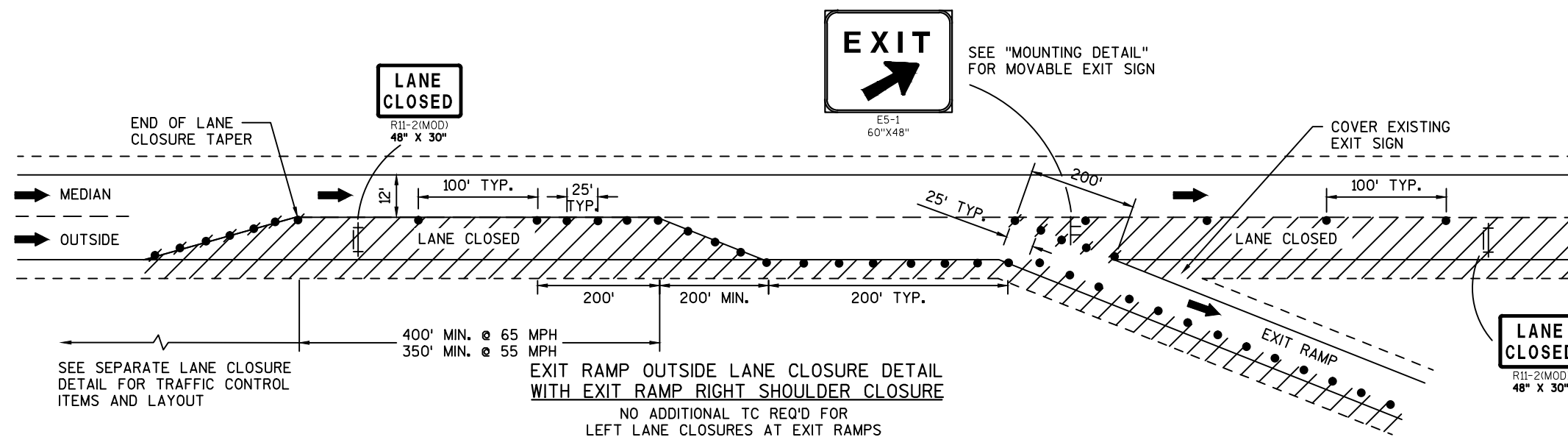
IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE RAMP AND MAINLINE TRAFFIC.

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

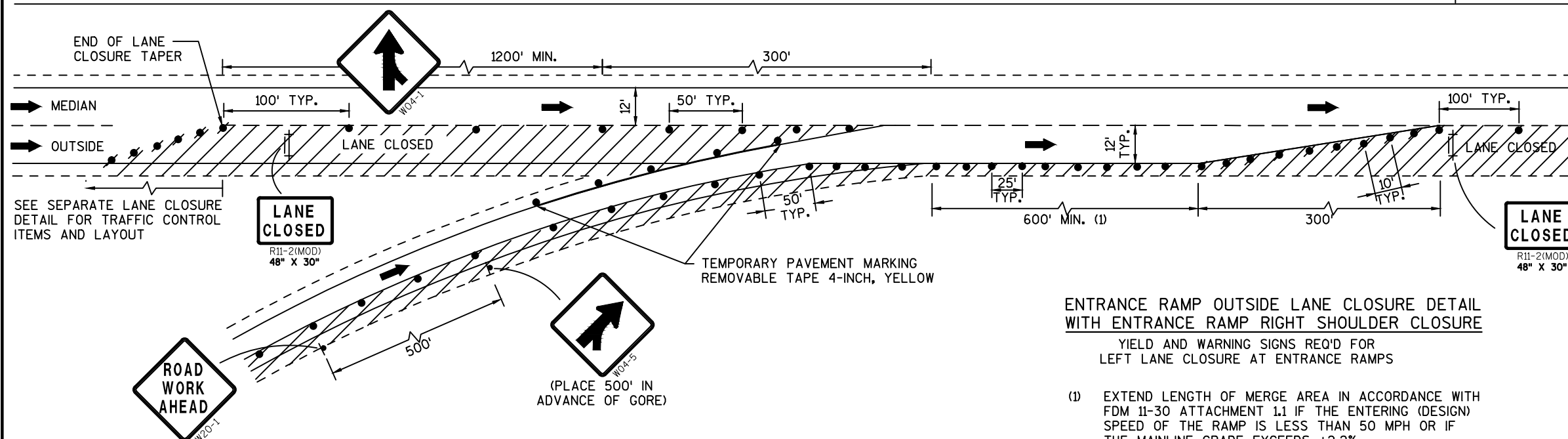
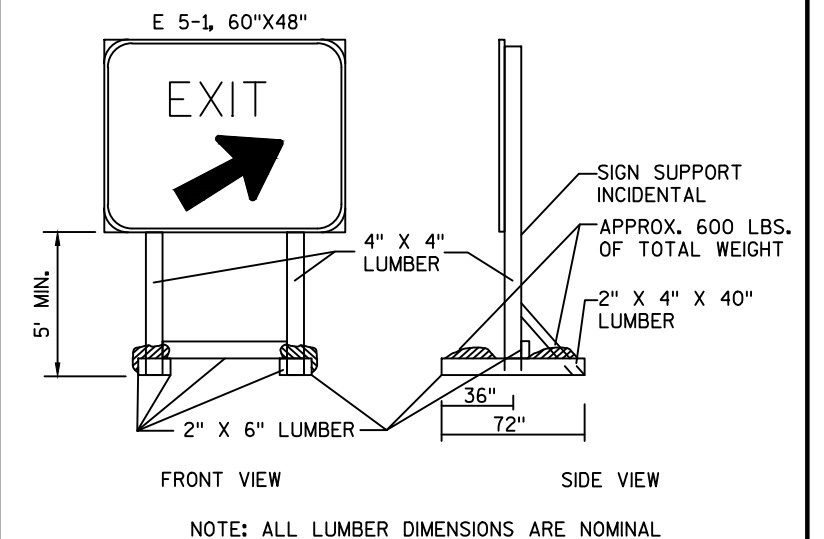
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

LEGEND

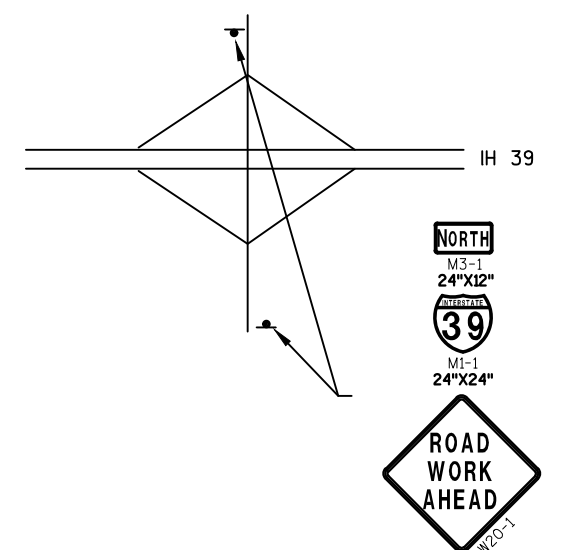
- POST(S) MOUNTED SIGN
- SIGN ON PORTABLE SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH WARNING LIGHT TYPE C
- TRAFFIC CONTROL BARRICADE TYPE III WITH SIGN
- FLAGS, 16"X16" MIN., ORANGE, INCIDENTAL
- DIRECTION OF TRAFFIC FLOW

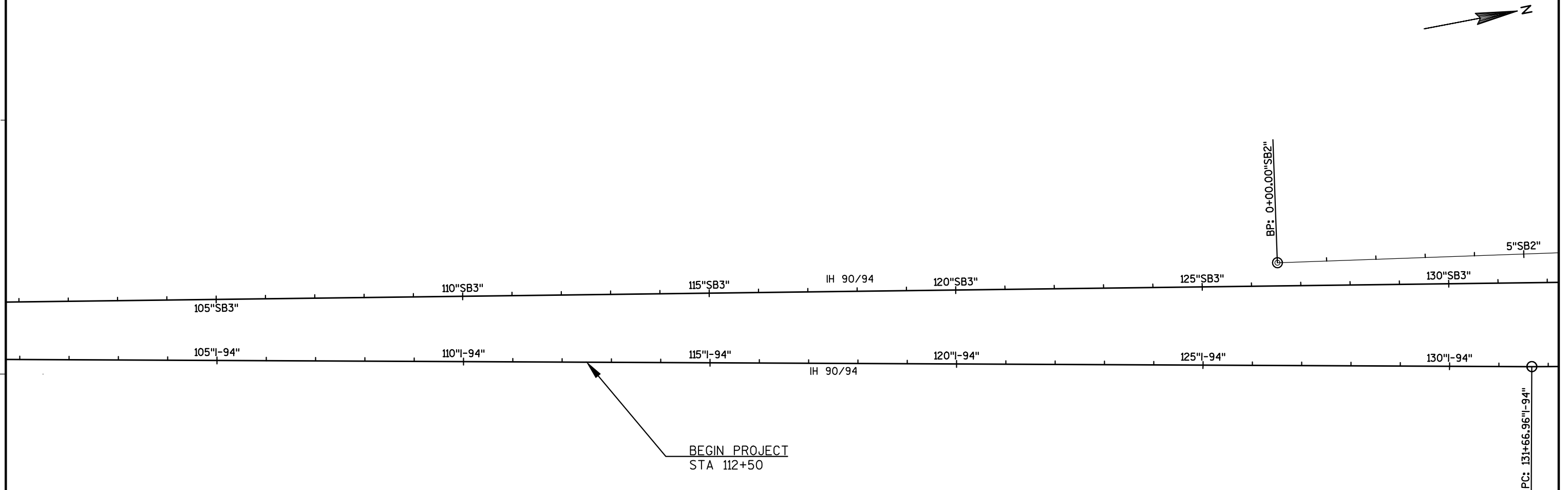


MOUNTING FOR MOVABLE EXIT SIGN DETAIL



ADVANCE WARNING SIGNS AT INTERCHANGES DETAIL



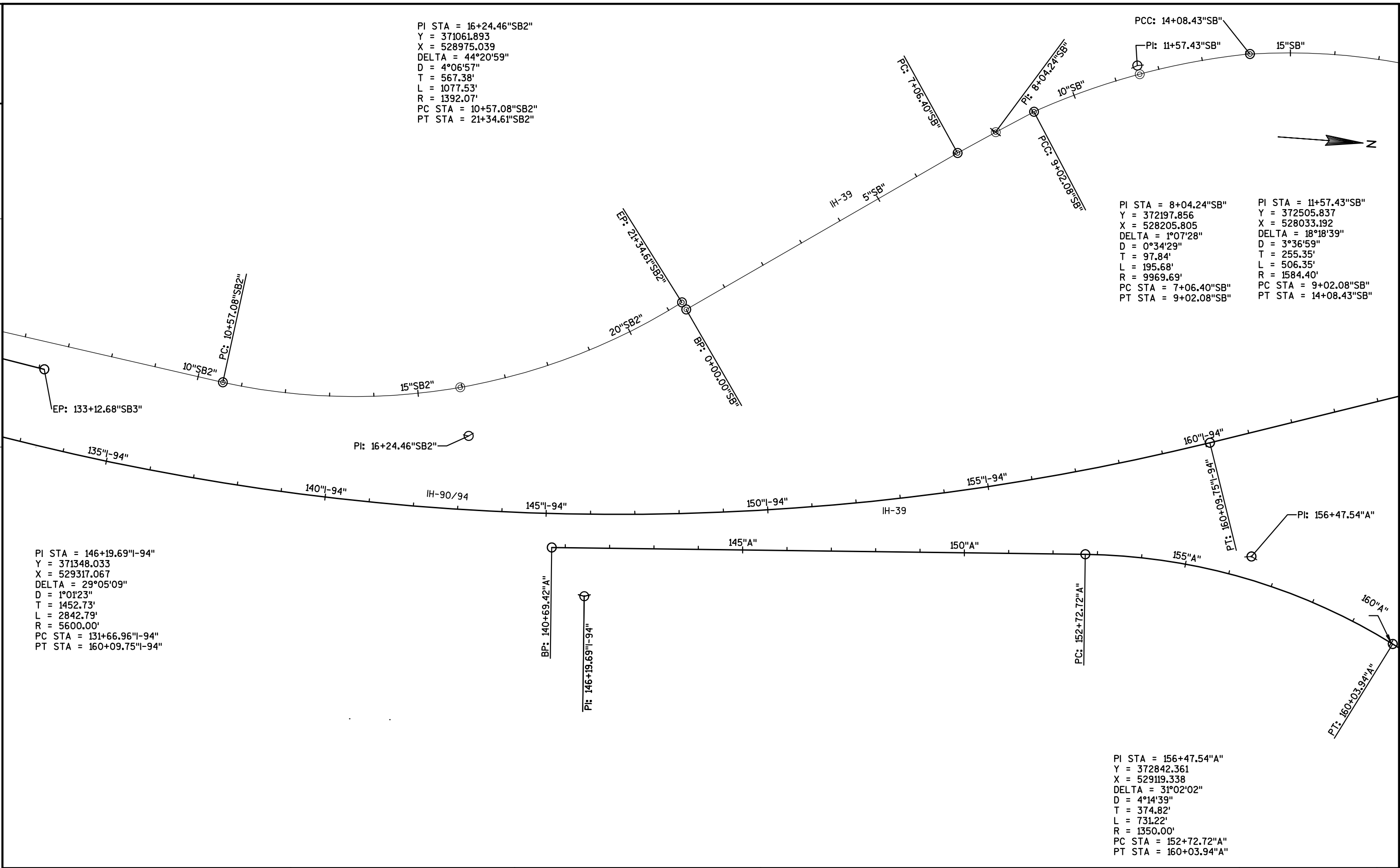


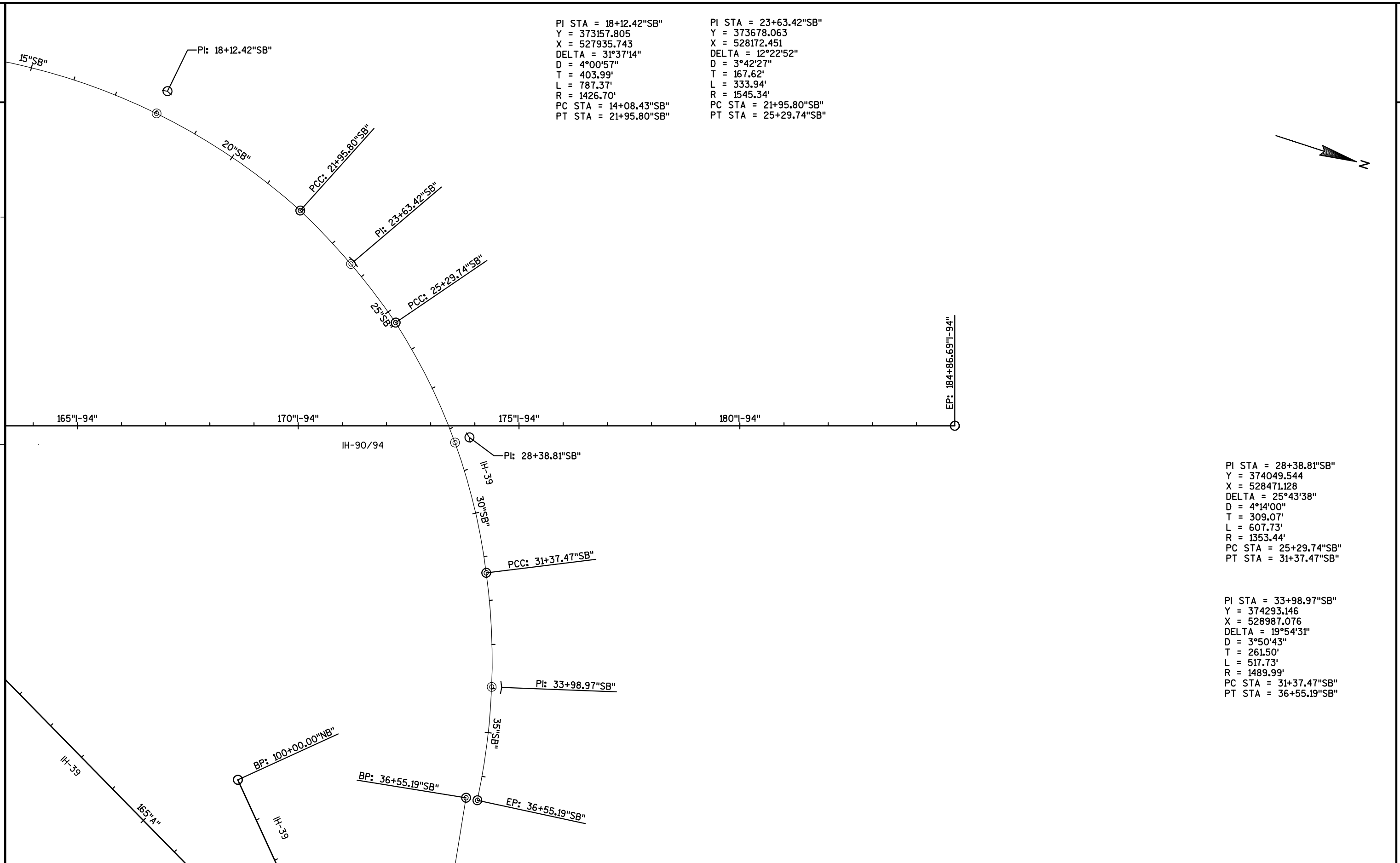
PI STA = 16+24.46"SB2"
Y = 371061.893
X = 528975.039
DELTA = 44°20'59"
D = 4°06'57"
T = 567.38'
L = 1077.53'
R = 1392.07'
PC STA = 10+57.08"SB2"
PT STA = 21+34.61"SB2"

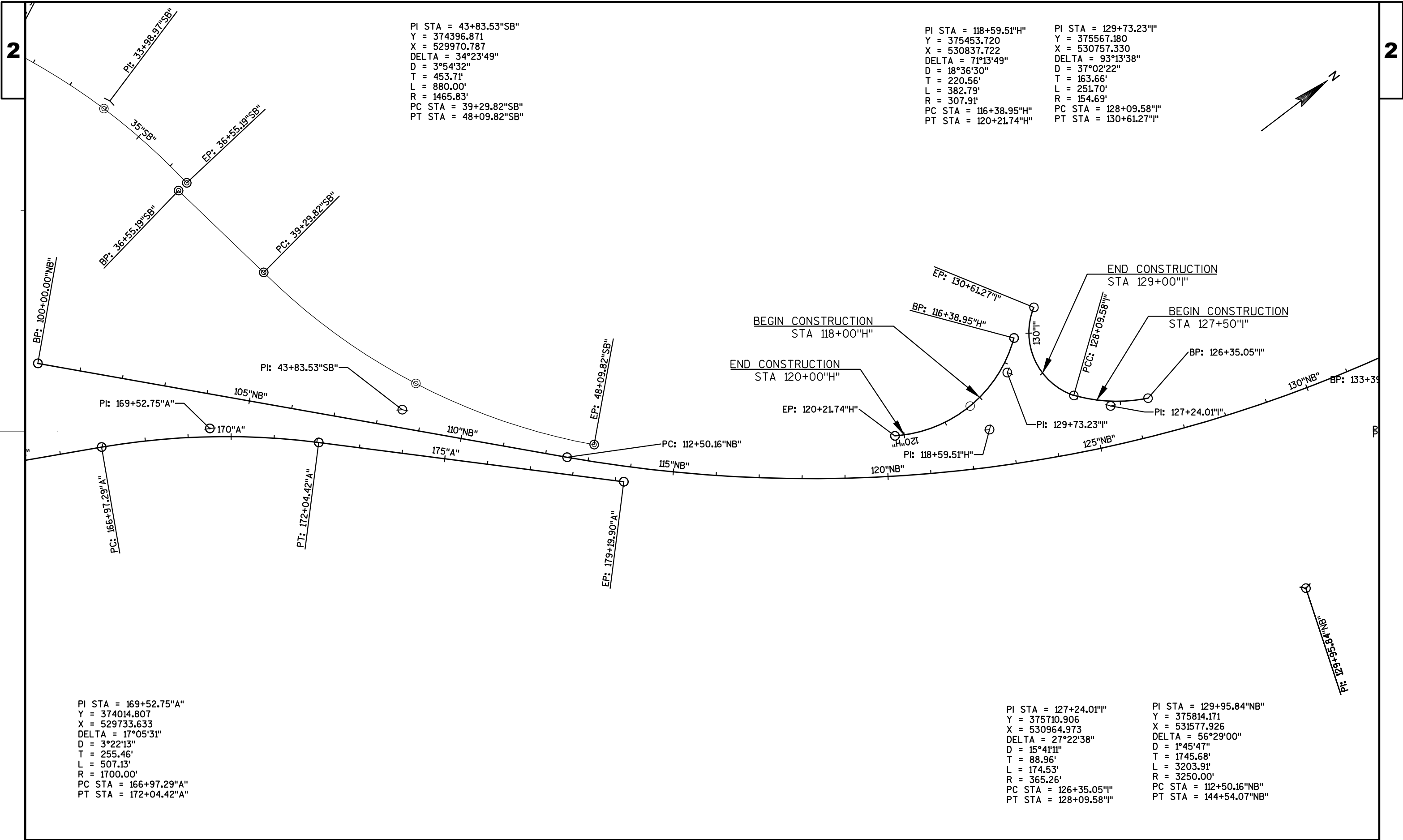
PCC: 14+08.43"SB"
PI: 11+57.43"SB"
15"SB"
PI STA = 8+04.24"SB"
Y = 372197.856
X = 528205.805
DELTA = 1°07'28"
D = 0°34'29"
T = 97.84'
L = 195.68'
R = 9969.69'
PC STA = 7+06.40"SB"
PT STA = 9+02.08"SB"
PI STA = 11+57.43"SB"
Y = 372505.837
X = 528033.192
DELTA = 18°18'39"
D = 3°36'59"
T = 255.35'
L = 506.35'
R = 1584.40'
PC STA = 9+02.08"SB"
PT STA = 14+08.43"SB"

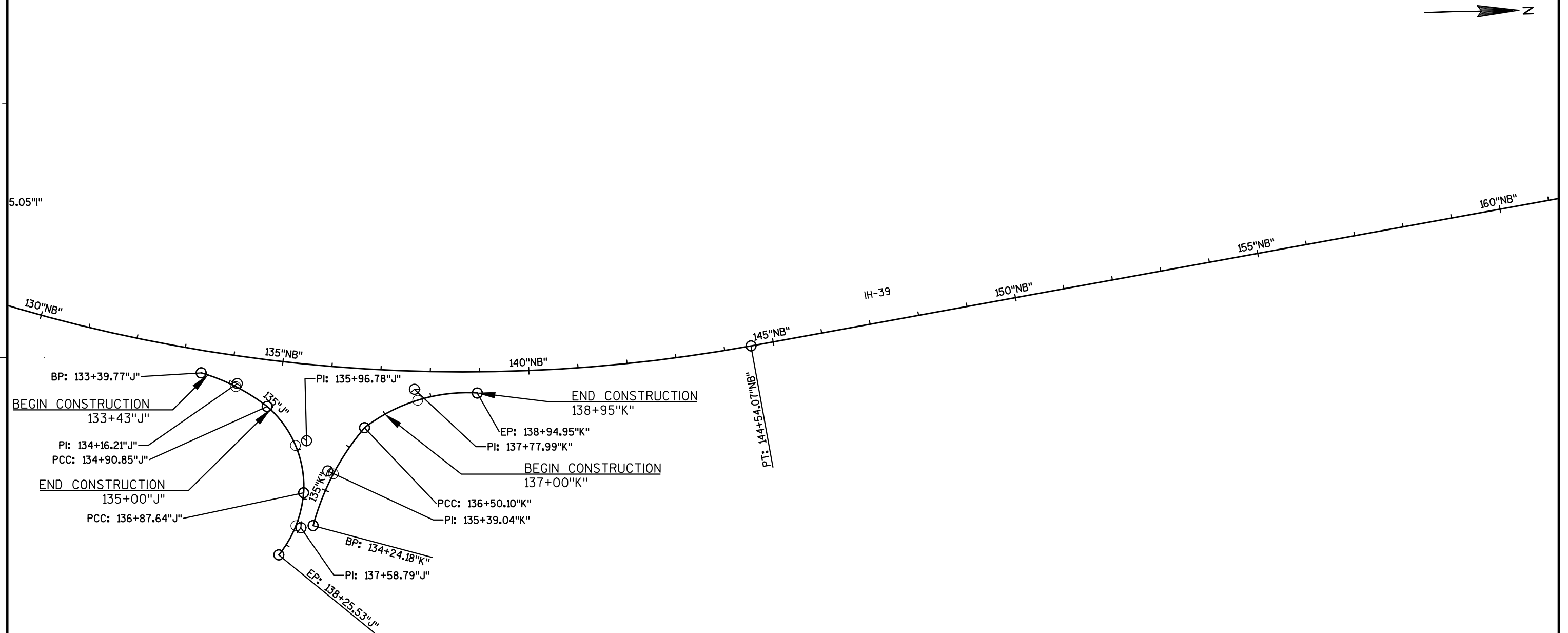
PI STA = 146+19.69"l-94"
Y = 371348.033
X = 529317.067
DELTA = 29°05'09"
D = 1°01'23"
T = 1452.73'
L = 2842.79'
R = 5600.00'
PC STA = 131+66.96"l-94"
PT STA = 160+09.75"l-94"

PI STA = 156+47.54"A"
Y = 372842.361
X = 529119.338
DELTA = 31°02'02"
D = 4°14'39"
T = 374.82'
L = 731.22'
R = 1350.00'
PC STA = 152+72.72"A"
PT STA = 160+03.94"A"









PI STA = 134+16.21"J"
Y = 376494.014
X = 531356.675
DELTA = 21°27'23"
D = 14°12'07"
T = 76.44'
L = 151.08'
R = 403.44'
PC STA = 133+39.77"J"
PT STA = 134+90.85"J"

PI STA = 135+96.78"J"
Y = 376631.959
X = 531475.868
DELTA = 52°34'31"
D = 26°43'01"
T = 105.93'
L = 196.79'
R = 214.46'
PC STA = 134+90.85"J"
PT STA = 136+87.64"J"

PI STA = 137+58.79"J"
Y = 376616.340
X = 531652.252
DELTA = 34°47'10"
D = 25°13'35"
T = 71.15'
L = 137.90'
R = 227.13'
PC STA = 136+87.64"J"
PT STA = 138+25.53"J"

PI STA = 135+39.04"K"
Y = 376673.537
X = 531538.209
DELTA = 25°27'39"
D = 11°16'13"
T = 114.85'
L = 225.91'
R = 508.38'
PC STA = 134+24.18"K"
PT STA = 136+50.10"K"

PI STA = 137+77.99"K"
Y = 376853.171
X = 531376.918
DELTA = 40°51'39"
D = 16°41'16"
T = 127.89'
L = 244.85'
R = 343.34'
PC STA = 136+50.10"K"
PT STA = 138+94.95"K"



160"NB" 165"NB" 170"NB" 175"NB" 180"NB" 185"NB" 190"NB"

IH-39

190"NB" 195"NB" 200"NB" 205"NB" 210"NB" 215"NB" 220"NB"

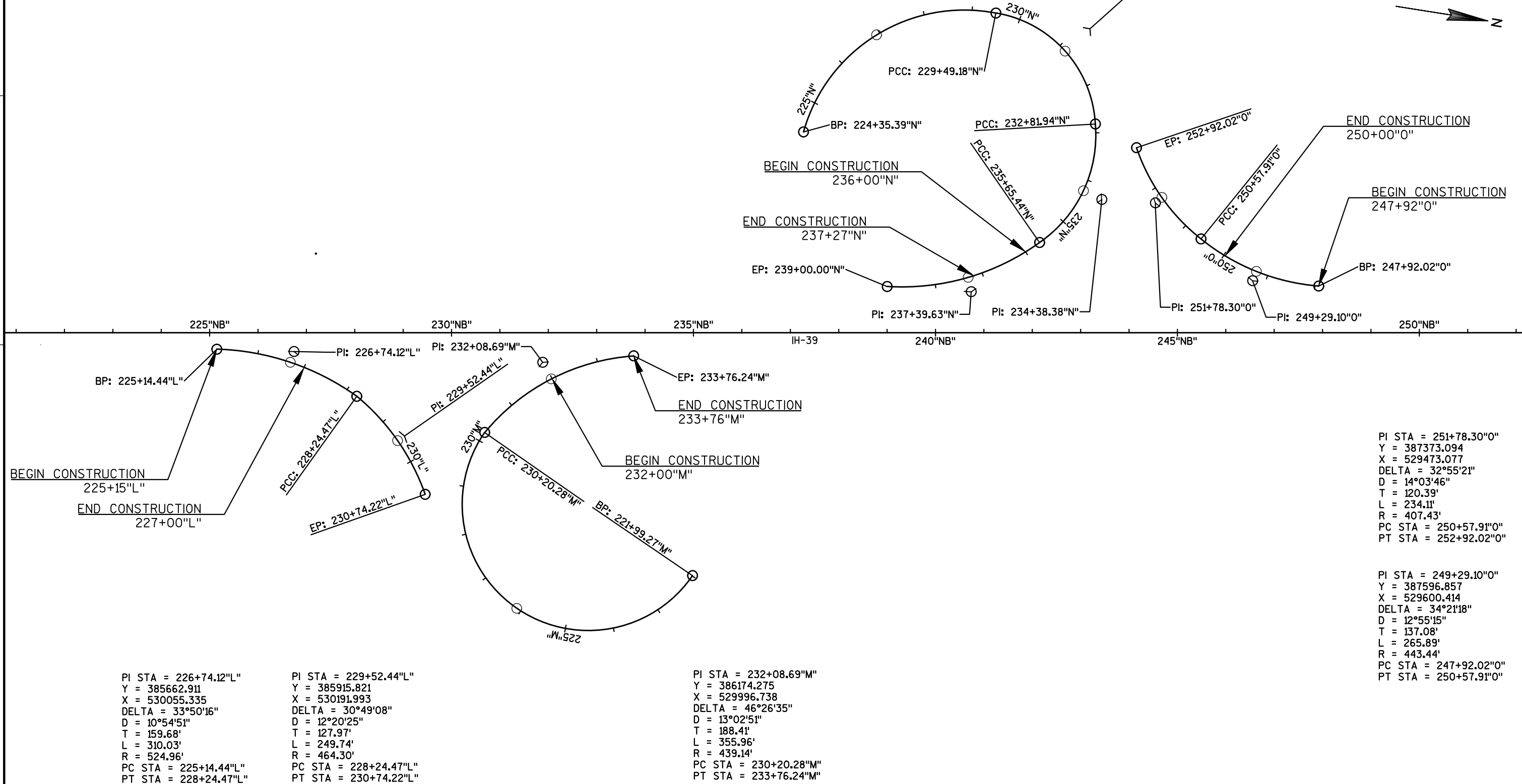
IH-39

PI STA = 227+53.22"N"
Y = 386668.651
X = 529126.452
DELTA = 85°15'44"
D = 16°35'41"
T = 317.83'
L = 513.79'
R = 345.26'
PC STA = 224+35.39"N"
PT STA = 229+49.18"N"

PI STA = 231+46.53"N"
Y = 387183.652
X = 529138.614
DELTA = 77°24'19"
D = 23°15'41"
T = 197.35'
L = 332.76'
R = 246.31'
PC STA = 229+49.18"N"
PT STA = 232+81.94"N"

PI STA = 234+38.38"N"
Y = 387262.847
X = 529483.380
DELTA = 60°14'48"
D = 21°15'03"
T = 156.44'
L = 283.50'
R = 269.62'
PC STA = 232+81.94"N"
PT STA = 235+65.44"N"

PI STA = 237+39.63"N"
Y = 387026.072
X = 529714.118
DELTA = 39°21'46"
D = 11°45'56"
T = 174.19'
L = 334.56'
R = 486.98'
PC STA = 235+65.44"N"
PT STA = 239+00.00"N"

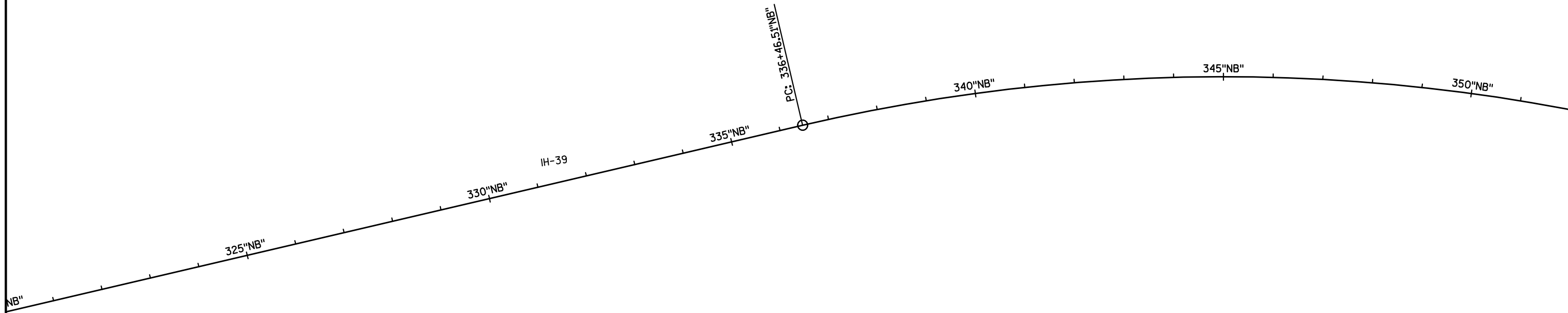
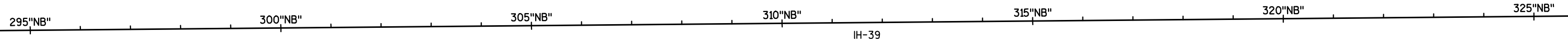


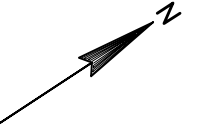
247+92.02"0"

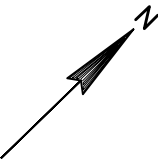


250"NB" 255"NB" 260"NB" IH-39 265"NB" 270"NB" 275"NB" 280"NB"

270"NB" 275"NB" 280"NB" 285"NB" 290"NB" IH-39 295"NB" 300"NB"







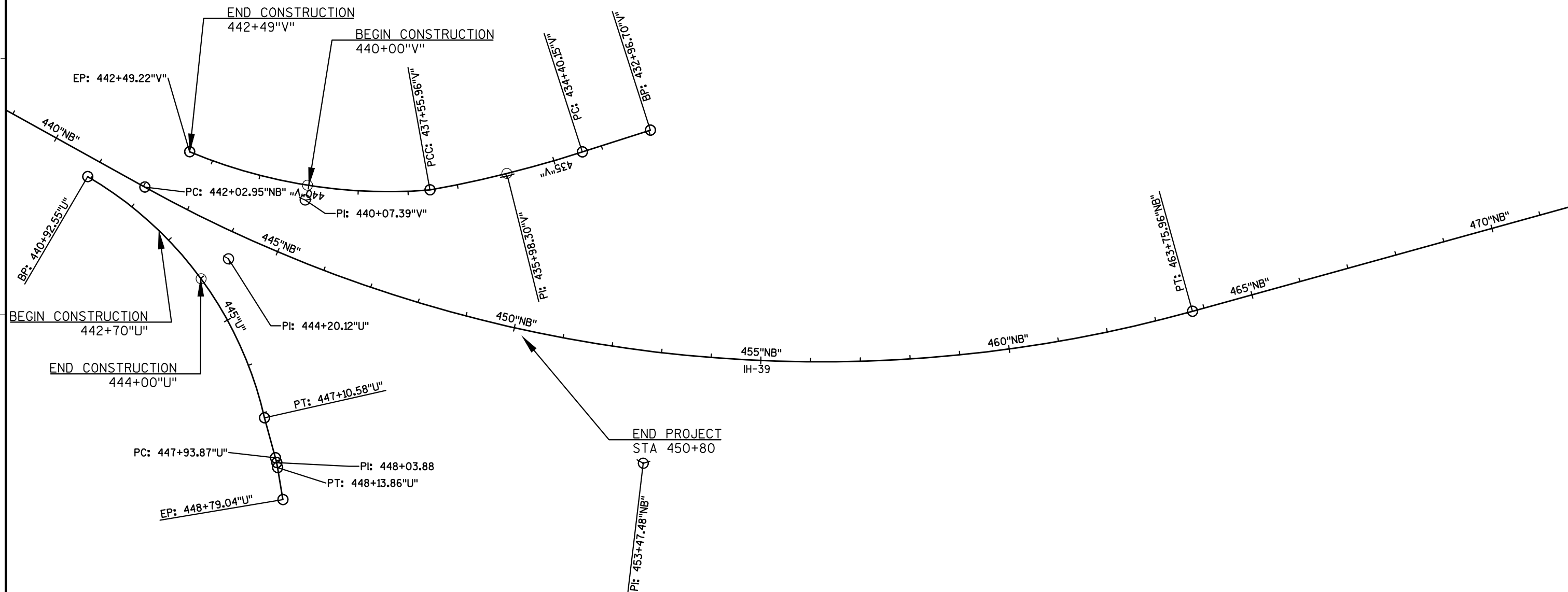
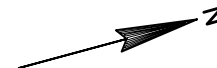
380"NB" 385"NB" 390"NB" 395"NB" IH-39 400"NB" 405"NB" 410"NB"

'R"

EP: 442+49

410"NB" 415"NB" 420"NB" 425"NB" IH-39 430"NB" 435"NB" 440"NB"

PI STA = 440+07.39"V"	PI STA = 435+98.30"V"
Y = 405055.668	Y = 405460.272
X = 534379.039	X = 534439.649
DELTA = 27°21'29"	DELTA = 7°44'37"
D = 5°32'47"	D = 2°27'07"
T = 251.42'	T = 158.15'
L = 493.26'	L = 315.81'
R = 1033.02'	R = 2336.74'
PC STA = 437+55.96"V"	PC STA = 434+40.15"V"
PT STA = 442+49.22"V"	PT STA = 437+55.96"V"



PI STA = 444+20.12"U"
Y = 404876.095
X = 534452.423
DELTA = 46°58'22"
D = 7°36'02"
T = 327.57'
L = 618.03'
R = 753.85'
PC STA = 440+92.55"U"
PT STA = 447+10.58"U"

PI STA = 448+03.88"U"
Y = 404861.567
X = 534872.969
DELTA = 5°43'32"
D = 28°38'52"
T = 10.00'
L = 19.99'
R = 200.00'
PC STA = 447+93.87"U"
PT STA = 448+13.86"U"

PI STA = 453+47.48"NB"
Y = 405571.301
X = 535067.913
DELTA = 44°27'57"
D = 2°02'47"
T = 1144.54'
L = 2173.01'
R = 2800.00'
PC STA = 442+02.95"NB"
PT STA = 463+75.96"NB"

Estimate Of Quantities

1161-00-64					
Line	Item	Item Description	Unit	Total	Qty
0010	204.0120	Removing Asphaltic Surface Milling	SY	85,509.000	85,509.000
0020	213.0100	Finishing Roadway (project) 01. 1161-00-64	EACH	1.000	1.000
0030	305.0110	Base Aggregate Dense 3/4-Inch	TON	4,543.000	4,543.000
0040	415.6000.S	Rout and Seal	LF	114,188.000	114,188.000
0050	455.0605	Tack Coat	GAL	5,986.000	5,986.000
0060	460.2000	Incentive Density HMA Pavement	DOL	10,650.000	10,650.000
0070	460.5224	HMA Pavement 4 LT 58-28 S	TON	16,501.000	16,501.000
0080	465.0400	Asphaltic Shoulder Rumble Strips	LF	114,188.000	114,188.000
0090	619.1000	Mobilization	EACH	1.000	1.000
0100	624.0100	Water	MGAL	25.000	25.000
0110	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	17.000	17.000
0120	634.0618	Posts Wood 4x6-Inch X 18-FT	EACH	28.000	28.000
0130	634.0620	Posts Wood 4x6-Inch X 20-FT	EACH	24.000	24.000
0140	634.0622	Posts Wood 4x6-Inch X 22-FT	EACH	15.000	15.000
0150	635.0200	Sign Supports Structural Steel HS	LB	6,386.060	6,386.060
0160	636.0100	Sign Supports Concrete Masonry	CY	11.000	11.000
0170	636.0500	Sign Supports Steel Reinforcement	LB	660.000	660.000
0180	637.1220	Signs Type I Reflective SH	SF	2,101.500	2,101.500
0190	637.2210	Signs Type II Reflective H	SF	1,023.100	1,023.100
0200	638.2101	Moving Signs Type I	EACH	1.000	1.000
0210	638.2601	Removing Signs Type I	EACH	24.000	24.000
0220	638.2602	Removing Signs Type II	EACH	59.000	59.000
0230	638.3000	Removing Small Sign Supports	EACH	59.000	59.000
0240	638.3100	Removing Structural Steel Sign Supports	EACH	9.000	9.000
0250	642.5001	Field Office Type B	EACH	1.000	1.000
0260	643.0100	Traffic Control (project) 01. 1161-00-64	EACH	1.000	1.000
0270	643.0300	Traffic Control Drums	DAY	8,505.000	8,505.000
0280	643.0420	Traffic Control Barricades Type III	DAY	418.000	418.000
0290	643.0705	Traffic Control Warning Lights Type A	DAY	1,080.000	1,080.000
0300	643.0715	Traffic Control Warning Lights Type C	DAY	1,215.000	1,215.000
0310	643.0800	Traffic Control Arrow Boards	DAY	54.000	54.000
0320	643.0900	Traffic Control Signs	DAY	1,399.000	1,399.000
0330	643.0920	Traffic Control Covering Signs Type II	EACH	74.000	74.000
0340	643.1050	Traffic Control Signs PCMS	DAY	54.000	54.000
0350	643.1055.S	Truck or Trailer Mounted Attenuator	DAY	8.000	8.000
0360	646.0106	Pavement Marking Epoxy 4-Inch	LF	99,375.000	99,375.000
0370	646.0126	Pavement Marking Epoxy 8-Inch	LF	7,950.000	7,950.000
0380	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	120.000	120.000
0390	647.0726	Pavement Marking Diagonal Epoxy 12-Inch	LF	150.000	150.000
0400	647.0746	Pavement Marking Diagonal Epoxy 24-Inch	LF	132.000	132.000

Estimate Of Quantities

1161-00-64					
Line	Item	Item Description	Unit	Total	Qty
0410	650.8000	Construction Staking Resurfacing Reference	LF	51,728.000	51,728.000
0420	650.9910	Construction Staking Supplemental Control (project) 01. 1161-00-64	LS	1.000	1.000
0430	690.0150	Sawing Asphalt	LF	204.000	204.000

BASE AGGREGATE DENSE 3/4-INCH

(305.0110) BASE AGGREGATE DENSE 3/4-INCH					
CATEGORY	STATION	-	STATION	LOCATION	REMARKS
0010	146+10	-	174+37	"A" LT	STAGE 1
	105+00	-	148+47	"NB" LT NB	
	150+25	-	153+75	"NB" LT NB	
	154+15	-	188+88	"NB" LT NB	
	194+43	-	218+70	"NB" LT NB	
	219+00	-	261+20	"NB" LT NB	
	267+75	-	280+33	"NB" LT NB	
	281+34	-	284+84	"NB" LT NB	
	295+20	-	298+90	"NB" LT NB	
	299+35	-	342+40	"NB" LT NB	
	342+90	-	346+55	"NB" LT NB	
	348+18	-	363+17	"NB" LT NB	
	365+45	-	385+85	"NB" LT NB	
	386+15	-	416+40	"NB" LT NB	
	426+00	-	446+65	"NB" LT NB	
	433+58	-	446+65	"NB" LT NB	
STAGE 1 TOTAL:				2458	
0010	116+50	-	145+17	"94" RT	STAGE 2
	140+00	-	179+00	"A" RT	
	113+90	-	133+31	"NB" RT NB	
	133+63	-	138+43	"NB" RT NB	
	138+94	-	148+50	"NB" RT NB	
	150+25	-	225+16	"NB" RT NB	
	226+77	-	232+76	"NB" RT NB	
	233+66	-	280+18	"NB" RT NB	
	281+36	-	284+90	"NB" RT NB	
	296+23	-	346+55	"NB" RT NB	
	348+18	-	353+92	"NB" RT NB	
	354+84	-	363+17	"NB" RT NB	
	365+45	-	366+61	"NB" RT NB	
	368+11	-	375+31	"NB" RT NB	
	375+31	-	442+70	"NB" RT NB	
	442+70	-	446+65	"NB" RT NB	
	133+00	-	135+00	"J" RT	
	133+43	-	135+00	"J" LT	
	137+00	-	138+95	"K" RT	
	137+00	-	138+43	"K" LT	
	225+15	-	227+00	"L" RT	
	225+80	-	227+00	"L" LT	
	232+00	-	233+76	"M" RT	
	232+00	-	232+75	"M" LT	
	353+92	-	355+89	"P" RT	
	354+79	-	355+89	"P" LT	
	366+61	-	368+08	"Q" RT	
	367+06	-	368+08	"Q" LT	
	374+00	-	375+31	"R" RT	
	374+00	-	374+48	"R" LT	
	442+70	-	444+00	"U" RT	
	442+70	-	444+00	"U" LT	
STAGE 2 TOTAL:				1034	

(CONTINUED)

(305.0110)
BASE
AGGREGATE
DENSE 3/4-INCH

CATEGORY	STATION	-	STATION	LOCATION	REMARKS
0010	112+50	-	120+00	"NB" LT SB	STAGE 3
	120+00	-	125+08	"NB" LT SB	
	125+08	-	148+47	"NB" LT SB	
	150+35	-	240+53	"NB" LT SB	
	240+53	-	247+92	"NB" LT SB	
	247+92	-	281+75	"NB" LT SB	
	281+75	-	284+83	"NB" LT SB	
	296+23	-	346+58	"NB" LT SB	
	348+18	-	354+42	"NB" LT SB	
	354+42	-	362+07	"NB" LT SB	
	365+55	-	441+69	"NB" LT SB	
	118+00	-	120+00	"H" RT	
	118+00	-	119+45	"H" LT	
	127+50	-	129+00	"I" RT	
	127+50	-	129+00	"I" LT	
	236+00	-	237+27	"N" RT	
	236+00	-	237+27	"N" LT	
	247+92	-	250+00	"O" RT	
	247+92	-	250+00	"O" LT	
	349+00	-	350+82	"S" RT	
	349+00	-	349+45	"S" LT	
	440+00	-	442+49	"V" RT	
	440+00	-	441+69	"V" LT	
	36+55	-	48+09	"SB" LT	
	32+31	-	36+55	"SB" LT	
	29+90	-	31+00	"SB" LT	
	12+32	-	25+24	"SB" LT	
	0+52	-	10+68	"SB" LT	
	0+00	-	0+52	"SB" LT	
	0+00	-	21+31	"SB 2" LT	
	105+00	-	126+60	"SB 3" LT	
STAGE 3 TOTAL:				1051	
PROJECT TOTAL:				4543	

(204.0120)	(415.6000.S)	(455.0605)	(460.5224)	(465.0400)
REMOVING				ASPHALTIC
ASPHALTIC	ROUT		HMA	SHOULDER
SURFACE	AND	TACK	PAVEMENT	RUMBLE
MILLING	SEAL	COAT	TYPE 4 LT 58-28 S	STRIPS

CATEGORY	STATION	-	STATION	LOCATION	(SY)	(LF)	(GAL)	(TON)	(LF)	REMARKS	
0010	146+10	-	174+37	"A" LT	1275	2867	89	246	2867	STAGE 1	
	105+00	-	148+47	"NB" LT NB	1932	4347	135	372	4347		
	150+25	-	153+75	"NB" LT NB	156	350	11	31	350		
	154+15	-	188+88	"NB" LT NB	1544	3473	108	298	3473		
	194+43	-	218+70	"NB" LT NB	1079	2427	76	208	2427		
	219+00	-	261+20	"NB" LT NB	1876	4220	131	362	4220		
	267+75	-	280+33	"NB" LT NB	560	1258	39	108	1258		
	281+34	-	284+84	"NB" LT NB	156	350	11	31	350		
	295+20	-	298+90	"NB" LT NB	165	370	12	32	370		
	299+35	-	342+40	"NB" LT NB	1914	4305	134	369	4305		
342+90	-	346+55	"NB" LT NB	163	365	11	32	365			
348+18	-	363+17	"NB" LT NB	667	1499	47	129	1499			
365+45	-	385+85	"NB" LT NB	907	2040	63	175	2040			
386+15	-	416+40	"NB" LT NB	1345	3025	94	259	3025			
426+00		433+08	"NB" LT NB	315	708	22	61	708			
433+58	-	446+65	"NB" LT NB	581	1307	41	112	1307			
STAGE 1 TOTAL:				14635	32911	1024	2825	32911			
0010	116+50	-	145+17	"94" RT	2549	2867	178	491		2867	STAGE 2
	140+00	-	179+00	"A" RT	3467	3900	243	668		3900	
	113+00	-	133+31	"NB" RT NB	1726	1941	121	333		1941	
	133+63	-	138+43	"NB" RT NB	427	480	30	83		480	
	138+94	-	148+50	"NB" RT NB	850	956	60	164	956		
	150+25	-	225+16	"NB" RT NB	6659	7491	466	1282	7491		
	226+77	-	232+76	"NB" RT NB	533	599	37	103	599		
	233+66	-	280+18	"NB" RT NB	4136	4652	290	797	4652		
	281+36	-	284+90	"NB" RT NB	315	354	22	61	354		
	296+23	-	346+55	"NB" RT NB	4473	5032	313	862	5032		
348+18	-	353+92	"NB" RT NB	511	574	36	99	574			
354+84	-	363+17	"NB" RT NB	741	833	52	143	833			
365+45	-	366+61	"NB" RT NB	104	116	7	21	116			
368+11	-	375+31	"NB" RT NB	640	720	45	124	720			
375+31	-	442+70	"NB" RT NB	5991	6739	419	1154	6739			
442+70	-	446+65	"NB" RT NB	352	395	25	68	395			
133+00	-	135+00	"J" RT	112	200	8	22	200			
133+43	-	135+00	"J" LT	88	157	6	17	157			
137+00	-	138+95	"K" RT	109	195	8	21	195			
137+00	-	138+43	"K" LT	80	143	6	16	143			
225+15	-	227+00	"L" RT	103	185	7	20	185			
225+80	-	227+00	"L" LT	67	120	5	13	120			
232+00	-	233+76	"M" RT	98	176	7	19	176			
232+00	-	232+75	"M" LT	42	75	3	9	75			
353+92	-	355+89	"P" RT	110	197	8	22	197			
354+79	-	355+89	"P" LT	62	110	4	12	110			
366+61	-	368+08	"Q" RT	82	147	6	16	147			
367+06	-	368+08	"Q" LT	57	102	4	11	102			
374+00	-	375+31	"R" RT	73	131	5	15	131			
374+00	-	374+48	"R" LT	27	48	2	6	48			
442+70	-	444+00	"U" RT	73	130	5	15	130			
442+70	-	444+00	"U" LT	73	130	5	15	130			
STAGE 2 TOTAL:				34730	39895	2431	6702	39895			

(CONTINUED)

ASPHALT ITEMS (CONTINUED)										
					(204.0120)	(415.6000.S)	(455.0605)	(460.5224)	(465.0400)	
					REMOVING				ASPHALTIC	
					ASPHALTIC	ROUT		HMA	SHOULDER	
					SURFACE	AND	TACK	PAVEMENT	RUMBLE	
					MILLING	SEAL	COAT	TYPE 4 LT 58-28 S	STRIPS	
CATEGORY	STATION -	STATION	LOCATION		(SY)	(LF)	(GAL)	(TON)	(LF)	REMARKS
0010	112+50 -	120+00	"NB" LT SB		667	750	47	129	750	STAGE 3
	120+00 -	125+08	"NB" LT SB		452	508	32	88	508	
	125+08 -	148+47	"NB" LT SB		2080	2339	146	401	2339	
	150+35 -	240+53	"NB" LT SB		8016	9018	561	1544	9018	
	240+53 -	247+92	"NB" LT SB		657	739	46	127	739	
	247+92 -	281+75	"NB" LT SB		3008	3383	211	580	3383	
	281+75 -	284+83	"NB" LT SB		274	308	19	53	308	
	296+23 -	346+58	"NB" LT SB		4476	5035	313	862	5035	
	348+18 -	354+42	"NB" LT SB		555	624	39	107	624	
	354+42 -	362+07	"NB" LT SB		680	765	48	131	765	
	365+55 -	441+69	"NB" LT SB		6768	7614	474	1303	7614	
	118+00 -	120+00	"H" RT		112	200	8	22	200	
	118+00 -	119+45	"H" LT		81	145	6	16	145	
	127+50 -	129+00	"I" RT		84	150	6	17	150	
	127+50 -	129+00	"I" LT		84	150	6	17	150	
	236+00 -	237+27	"N" RT		71	127	5	14	127	
	236+00 -	237+27	"N" LT		71	127	5	14	127	
	247+92 -	250+00	"O" RT		116	208	8	23	208	
	247+92 -	250+00	"O" LT		116	208	8	23	208	
	349+00 -	350+82	"S" RT		102	182	7	20	182	
	349+00 -	349+45	"S" LT		25	45	2	5	45	
	440+00 -	442+49	"V" RT		139	249	10	27	249	
	440+00 -	441+69	"V" LT		94	169	7	19	169	
	36+55 -	48+09	"SB" LT		1026	1154	72	198	1154	
	32+31 -	36+55	"SB" LT		377	424	26	73	424	
	29+90 -	31+00	"SB" LT		98	110	7	19	110	
	12+32 -	25+24	"SB" LT		1149	1292	80	222	1292	
	0+52 -	10+68	"SB" LT		904	1016	63	175	1016	
	0+00 -	0+52	"SB" LT		47	52	3	10	52	
	0+00 -	21+31	"SB 2" LT		1895	2131	133	365	2131	
	105+00 -	126+60	"SB 3" LT		1920	2160	134	370	2160	
STAGE 3 TOTAL:					36144	41382	2530	6974	41382	
PROJECT TOTAL:					85509	114188	5986	16501	114188	

WATER

(624.0100)				
WATER				
CATEGORY	STATION	-	STATION	LOCATION (MGAL)
0010	117+50	-	450+80	"NB" 25
PROJECT TOTAL :				25

TYPE I SIGNS

					(635.0200)	(636.0100)	(636.0500)	(637.1220)	(638.2101)	(638.2601)	(638.3100)		
					SIGN	SIGN	SIGN	SIGNS			REMOVING		
					SUPPORTS	SUPPORTS	SUPPORTS	TYPE I	MOVING	REMOVING	STRUCTURAL		
					STRUCTURAL	CONCRETE	STEEL	REFLECTIVE	SIGNS	SIGNS	STEEL SIGN		
					STEEL HS	MASONRY	REINFORCEMENT	SH	TYPE I	TYPE I	SUPPORTS		
CATEGORY	SIGN NO.	STATION	LOCATION	SIGN CODE	SIZE (IN)	(LB)	(CY)	(LB)	(SF)	(EACH)	(EACH)	(EACH)	SIGN MESSAGE
REMARKS													
0010	4-02	117+00	"NB" RT	E1-5	108 X 30	601	2	98	22.5	-	1	1	EXIT 85
	4-03	117+00	"NB" RT	E1-1A	288 X 84	-	-	-	168.0	-	1	-	CASCADE MT RD 1/4 MILE
	4-05	129+75	"NB" RT	E1-5	108 X 30	479	-	-	22.5	-	1	1	EXIT 85
	4-06	129+75	"NB" RT	E4-1A	324 X 54	-	-	-	121.5	-	1	-	CASCADE MT RD
	5-03	146+50	"NB" RT	D2-3	240 X 84	-	-	-	140.0	-	1	-	PORTAGE 4/STEVENS POINT 74/WAUSAU 106
	6-03	168+00	"NB" RT	E9-1	144 X 54	500	1	68	54.0	-	1	1	PORTAGE NEXT 3 EXITS
	6-05	180+75	"NB" RT	E1-5	108 X 30	-	-	-	22.5	-	1	-	EXIT 87
	6-06	180+75	"NB" RT	E1-1A	156 X 126	-	-	-	136.5	-	1	-	HWY 33 PORTAGE 3/4 MILE
	6-08	186+25	"NB" RT	E3-1	192 X 60	520	1	68	80.0	-	1	1	AMTRAK STATION EXIT 87
	7-06	219+30	"NB" RT	E1-5	108 X 30	928	2	98	22.5	-	1	1	EXIT 87
	7-07	219+30	"NB" RT	E4-1A	192 X 96	-	-	-	128.0	-	1	-	HWY 33 PORTAGE
	10-04	301+25	"NB" RT	E1-5	168 X 30	1171	2	98	35.0	-	1	1	EXIT 89A-B
	10-05	301+25	"NB" RT	E1-1A	180 X 162	-	-	-	202.5	-	1	-	HWY 16 TO HWY 127 PORTAGE WIS DELLS 1 MILE
	12-04	354+50	"NB" RT	E1-5	132 X 30	-	-	-	27.5	-	1	-	EXIT 89B
	12-05	354+50	"NB" RT	E6-51	180 X 120	-	-	-	150.0	-	1	-	WEST HWY 16 TO HWY 127 WIS DELLS 1/4 MILE
	12-07	354+50	"NB" RT	E1-5	132 X 30	-	-	-	27.5	-	1	-	EXIT 89A
	12-08	354+50	"NB" RT	E4-1A	168 X 90	-	-	-	105.0	-	1	-	EAST HWY 16 PORTAGE
	13-05	365+90	"NB" RT	E1-5	132 X 30	-	-	-	27.5	-	1	-	EXIT 89B
	13-06	365+90	"NB" RT	E6-51	204 X 90	-	-	-	127.5	-	1	-	WEST HWY 16 TO HWY 127 WIS DELLS
	-	395+25	"NB" RT	-	-	292	1	34	-	1	-	1	HOSPITAL EXIT 92
	14-03	404+80	"NB" RT	E1-5	108 X 30	1012	2	98	22.5	-	1	1	EXIT 92
	14-04	404+80	"NB" RT	E1-1A	168 X 126	-	-	-	147.0	-	1	-	HWY 51 SOUTH PORTAGE 1/2 MILE
	14-05	409+80	"NB" RT	E3-1	204 X 108	-	-	-	153.0	-	1	-	AMERICAN LEGION STATE HDQRS AND MUSEUM EXIT 92
	15-02	435+05	"NB" RT	E1-5	108 X 30	-	-	-	22.5	-	1	-	EXIT 92
	15-03	435+05	"NB" RT	E4-1A	204 X 96	884	2	98	136.0	-	1	1	HWY 51 SOUTH PORTAGE
PROJECT TOTAL :						6386	11	660	2101.5	1	24	9	

3

3

TYPE II SIGNS

(CONTINUED)

3

3

TYPE II SIGNS (CONTINUED)														
						(634.0616)	(634.0618)	(634.0620)	(634.0622)	(637.2210)	(638.2602)	(638.3000)		
						POSTS WOOD	POSTS WOOD	POSTS WOOD	POSTS WOOD	SIGNS	REMOVING	REMOVING		
						4X6-INCH X	4X6-INCH X	4X6-INCH X	4X6-INCH X	TYPE II	SIGNS	SMALL SIGN		
				SIZE		16-FT	18-FT	20-FT	22-FT	H	TYPE II	SUPPORTS		
CATEGORY	SIGN NO.	STATION	LOCATION	SIGN CODE	(IN)	(EACH)	(EACH)	(EACH)	(EACH)	(SF)	(EACH)	(EACH)	SIGN MESSAGE	REMARKS
0010	15-04	439+00	"NB" RT	W13-2C	48 X 90	-	-	-	1	30.0	1	1	EXIT 30 M.P.H.	
	16-01	442+80	"U" RT	W3-1	36 X 36	-	1	-	-	9.0	1	1	STOP AHEAD	
	16-02	443+30	"U" LT	E5-1A	72 X 60	-	-	2	-	30.0	1	1	EXIT 92	
	16-03	450+80	"NB" RT	W5-52R	18 X 54	-	1	-	-	6.8	1	1	BRIDGE HASH MARKS RIGHT	
	16-04	450+80	"NB" LT	W5-52L	18 X 54	-	1	-	-	6.8	1	1	BRIDGE HASH MARKS LEFT	
	16-05	456+15	"NB" RT	W4-1R	48 X 48	-	2	-	-	16.0	1	1	THRU TRAFFIC MERGE LEFT	
	16-06	444+50	"U" RT	J2-1	24 X 57	-	1	-	-	9.5	-	1	SOUTH 51	
	16-07	447+00	"U" RT	D1-3	102 X 36	-	2	-	-	25.5	1	1	AMERICAN LEGION STATE HDQRS AND MUSEUM	
	16-08	448+50	"U" RT	R5-1A	36 X 24	1	-	-	-	6.0	-	1	WRONG WAY	
	16-09	448+80	"U" LT	R5-1	30 X 30	1	-	-	-	6.3	-	1	DO NOT ENTER	
	16-10	448+80	"U" LT	R3-1	24 X 24	-	-	-	-	4.0	-	1	NO RIGHT TURN	
	16-11	448+80	"U" LT	R1-1	36 X 36	1	-	-	-	9.0	2	1	STOP	
	16-12	448+80	"U" RT	R6-1-R	54 X 18	-	1	-	-	6.8	1	1	ONE WAY	
	16-13	448+80	"U" RT	R1-1	36 X 36	-	-	-	-	9.0	1	-	STOP	
	16-14	448+80	"U" RT	R6-3-A	30 X 24	-	-	-	-	5.0	-	-	DIVIDED HIGHWAY	
	16-15	448+80	"U" RT	J2-1	24 X 57	-	-	-	-	9.5	1	-	SOUTH 51	
	16-16	448+80	"U" RT	JH-1	36 X 66	-	-	2	-	16.5	-	1	HOSPITAL	
PROJECT TOTAL:						17	28	24	13	993.1	58	58		

TRAFFIC CONTROL													
		(643.0300)		(643.0420)	(643.0705)	(643.0715)	(643.0800)	(643.0900)	(643.0920)	643.1055.S			
		TRAFFIC		TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC	TRAFFIC	TRUCK OR			
		CONTROL		CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	TRAILER			
		DRUMS		BARRICADES	WARNING LIGHTS	WARNING LIGHTS	ARROW	SIGNS	COVERING	MOUNTED			
CATEGORY	STATION	-	STATION	LOCATION	(DAY)	(DAY)	(DAY)	(DAY)	(DAY)	ATTENUATOR	(DAY)		
0010	117+50	-	450+80	"NB"	1890	84	240	270	12	186	12	-	Stage 1
	117+50	-	450+80	"NB"	2205	112	280	315	14	357	14	-	Stage 2
	117+50	-	450+80	"NB"	2835	144	360	405	18	459	36	8	Stage 3
PROJECT TOTAL:					6930	340	880	990	44	1002	62	8	

3

3

PAVEMENT MARKING												
				(646.0106)				(646.0126)	(647.1566)	(647.0726)	(647.0746)	
				EPOXY 4-INCH								
				LANE LINE		LANE LINE		EPOXY	STOP LINE		DIAGONAL	DIAGONAL
				12.5' LINE/37.5' GAP		3' LINE/9' GAP		4-INCH	EPOXY 8-INCH	EPOXY	EPOXY 12-INCH	EPOXY 24-INCH
CATEGORY	STATION -	STATION	LOCATION	(WHITE)	(WHITE)	(WHITE)	(YELLOW)	(WHITE)	(WHITE)	18-INCH	(YELLOW)	(WHITE)
				(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)	(LF)
0010	RAMP A											
	149+00 -	173+00	"A" RT/LT	2400	600	-	2400	-	-	-	-	-
	173+00 -	179+00	"A" GORE	-	-	-	-	1200	-	-	-	132
	173+00 -	179+00	"A" RT/LT	600	150	-	600	-	-	-	-	-
	SUBTOTAL:			6750				1200	0	0	132	
	RAMP A to RAMP J/K											
	114+00 -	119+00	RT/LT	500	250	-	500	-	-	-	-	-
	119+00 -	128+00	RT/LT	900	225	-	900	-	-	-	-	-
	128+00 -	133+00	RT/LT	500	125	125	500	-	-	-	-	-
	133+00 -	144+00	RT/LT	300	275	-	1100	800	-	-	-	-
	133+00 -	142+00	RAMP J	1100	-	-	800	230	40	-	-	-
	129+00 -	144+00	RAMP K	1500	-	-	800	700	-	-	-	-
	SUBTOTAL:			10400				1730	40	0	0	
	RAMP J/K to RAMP L/M											
	144+00 -	219+00	RT/LT	7500	1875	-	7500	-	-	-	-	-
	219+00 -	225+00	RT/LT	600	150	150	600	-	-	-	-	-
	225+00 -	239+00	RT/LT	600	350	-	1400	800	-	-	-	-
	225+00 -	238+00	RAMP L	1600	-	-	1600	400	30	150	-	-
	220+00 -	239+00	RAMP M	1500	-	-	1500	1100	-	-	-	-
	SUBTOTAL:			26925				2300	30	150	0	
	RAMP L/M to RAMP P/Q/R											
	239+00 -	345+00	RT/LT	10600	2650	-	10600	-	-	-	-	-
	345+00 -	354+00	RT/LT	900	225	225	900	-	-	-	-	-
	354+00 -	360+00	RT/LT	300	150	-	600	300	-	-	-	-
	360+00 -	367+00	RT/LT	700	175	175	700	-	-	-	-	-
	367+00 -	380+00	RT/LT	500	325	-	1300	800	-	-	-	-
	354+00 -	367+50	RAMP P	1350	-	-	1050	300	-	-	-	-
	367+00 -	380+00	RAMP Q	1300	-	-	1100	200	-	-	-	-
	363+00 -	380+00	RAMP R	2500	-	-	1000	920	-	-	-	-
	SUBTOTAL:			39325				2520	0	0	0	
	RAMP P/Q/R to RAMP U											
	380+00 -	443+00	RT/LT	6300	1575	-	6300	-	-	-	-	-
	443+00 -	449+00	RAMP U	600	-	-	500	100	50	-	-	-
	SUBTOTAL:			15275				100	50	0	0	
	RAMP U to PROJECT END											
	443+00 -	446+65	RT/LT	400	-	-	300	100	-	-	-	-
	SUBTOTAL:			700				100	0	0	0	
PROJECT TOTAL:				99375				7950	120	150	132	

CONSTRUCTION STAKING RESURFACING REFERENCE

(650.8000)					
CONSTRUCTION STAKING RESURFACING REFERENCE					
CATEGORY	STATION	-	STATION	LOCATION	(LF)
0010	112+50	-	146+00	"I-94"	3350
	140+00	-	179+20	"A"	3920
	100+00	-	450+80	"NB"	35080
	0+00	-	21+34	"SB2"	2134
	0+00	-	48+10	"SB"	4810
	118+00	-	120+00	"H"	200
	127+50	-	129+00	"I"	150
	133+43	-	135+00	"J"	157
	137+00	-	138+95	"K"	195
	225+15	-	227+00	"L"	185
	232+00	-	233+76	"M"	176
	236+00	-	237+27	"N"	127
	247+92	-	250+00	"O"	208
	353+92	-	355+89	"P"	197
	366+61	-	368+08	"Q"	147
	374+00	-	375+31	"R"	131
	349+00	-	350+82	"S"	182
	442+70	-	444+00	"U"	130
	440+00	-	442+49	"V"	249
PROJECT TOTAL:					51728

CONSTRUCTION STAKING SUPPLEMENTAL CONTROL

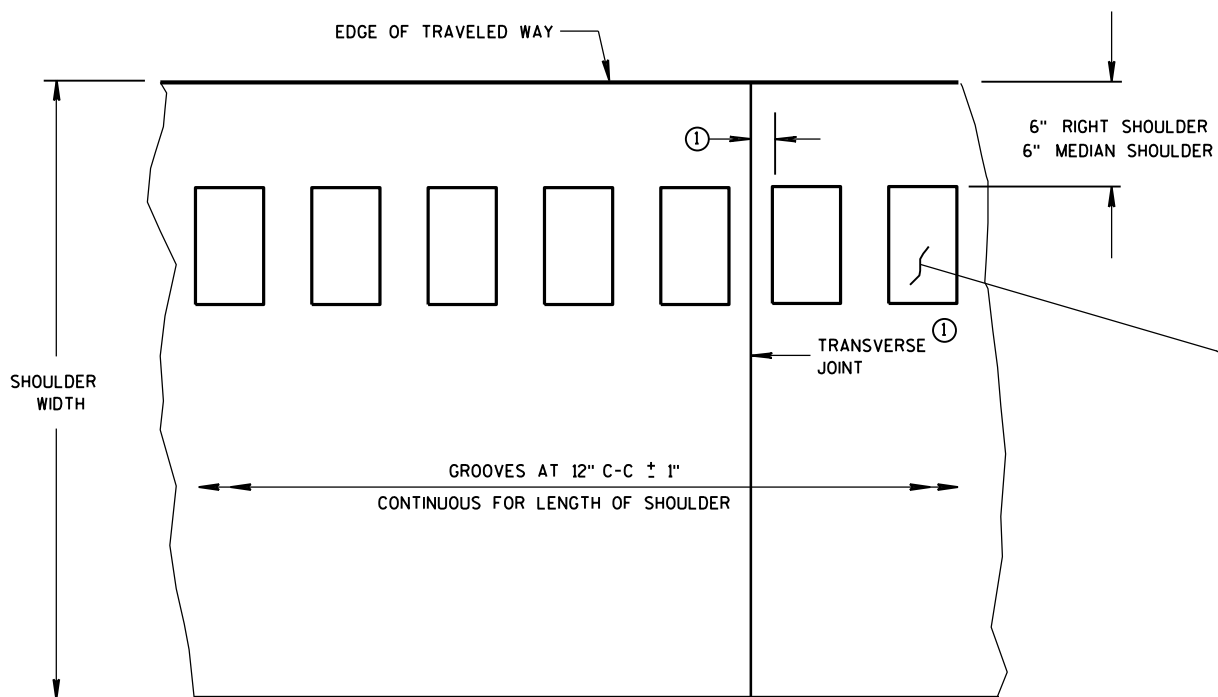
(650.9910)					
CONSTRUCTION STAKING SUPPLEMENTAL CONTROL					
CATEGORY	STATION	-	STATION	LOCATION	(LS)
0010	112+50	-	450+90	"NB"	1
PROJECT TOTAL:					1

SAWING ASPHALT

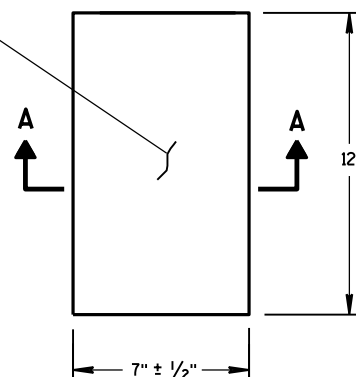
(690.0150)				
SAWING ASPHALT				
CATEGORY	STATION	LOCATION	(LF)	REMARKS
0010	116+50	"NB" RT NB	8	
	146+10	"NB" LT NB	4	
	188+88	"NB" LT NB	4	
	194+43	"NB" LT NB	4	
	261+20	"NB" LT NB	4	
	267+75	"NB" LT NB	4	
	416+40	"NB" LT NB	4	
	426+00	"NB" LT NB	4	
	446+65	"NB" RT NB	8	
	446+65	"NB" LT NB	4	
	441+69	"NB" LT SB	8	
	105+00	"SB 3" LT	8	
	118+00	"H" RT	5	
	118+00	"H" LT	5	
	129+00	"I" RT	5	
	129+00	"I" LT	5	
	135+00	"J" RT	5	
	135+00	"J" LT	5	
	137+00	"K" RT	5	
	137+00	"K" LT	5	
	227+00	"L" RT	5	
	227+00	"L" LT	5	
	232+00	"M" RT	5	
	232+00	"M" LT	5	
	236+00	"N" RT	5	
	236+00	"N" LT	5	
	250+00	"O" RT	5	
	250+00	"O" LT	5	
	355+89	"P" RT	5	
	355+89	"P" LT	5	
	368+08	"Q" RT	5	
	368+08	"Q" LT	5	
	374+00	"R" RT	5	
	374+00	"R" LT	5	
	349+00	"S" RT	5	
	349+00	"S" LT	5	
	444+00	"U" RT	5	
	444+00	"U" LT	5	
	440+00	"V" RT	5	
	440+00	"V" LT	5	
PROJECT TOTAL:			204	

Standard Detail Drawing List

13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C19-04C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-01A	PAVEMENT MARKING (RAMPS AND GORES)
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D14-03	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)



PLAN VIEW
SHOULDER WITH GROOVES



PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

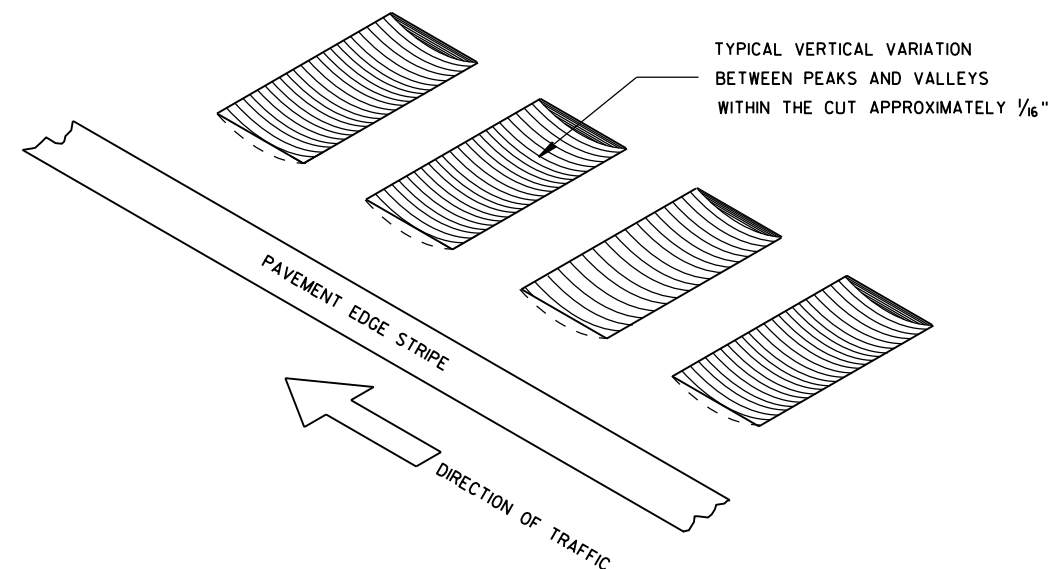
GENERAL NOTES

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

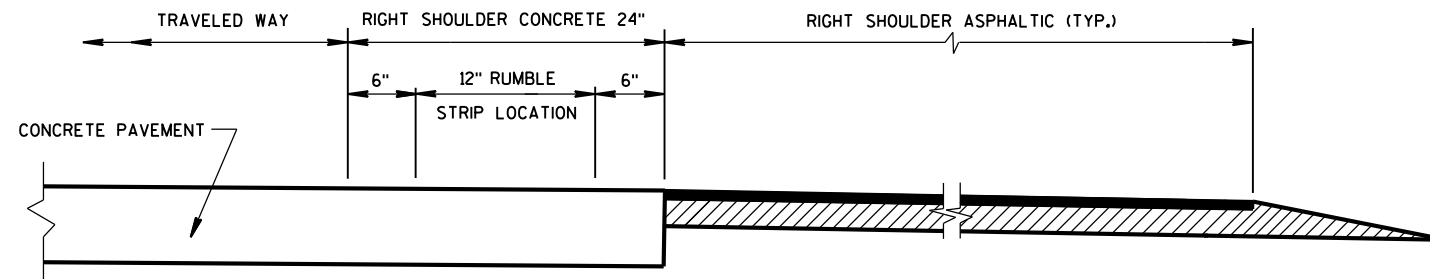
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

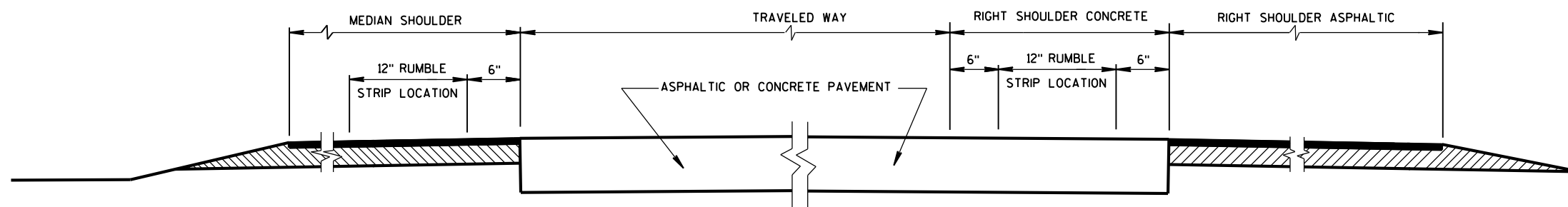
① CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



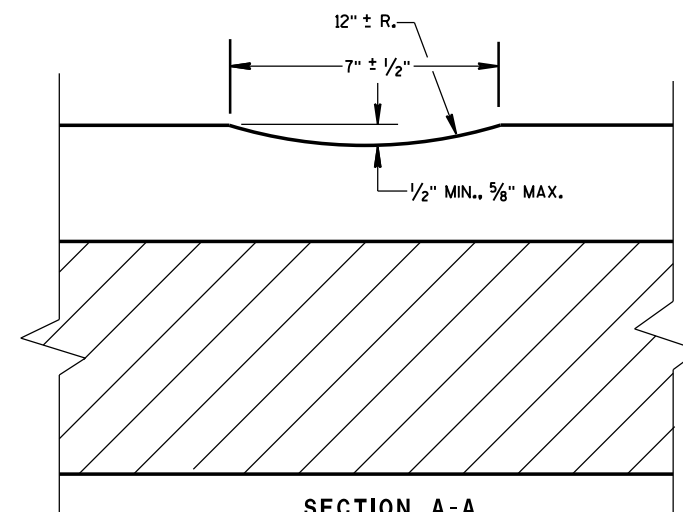
ISOMETRIC



SECTION VIEW
(CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



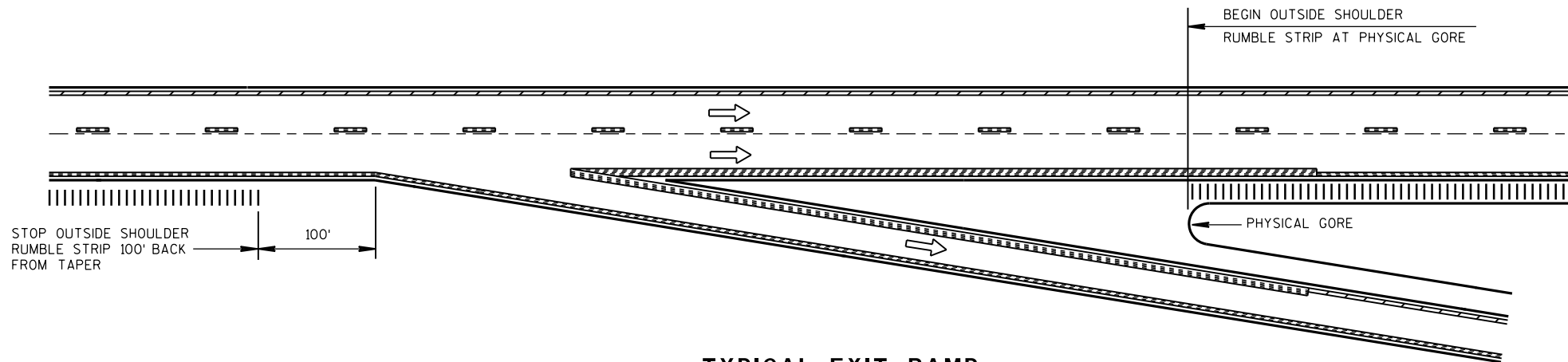
SECTION VIEW
TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS
IN RURAL DIVIDED HIGHWAYS
(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP,
MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



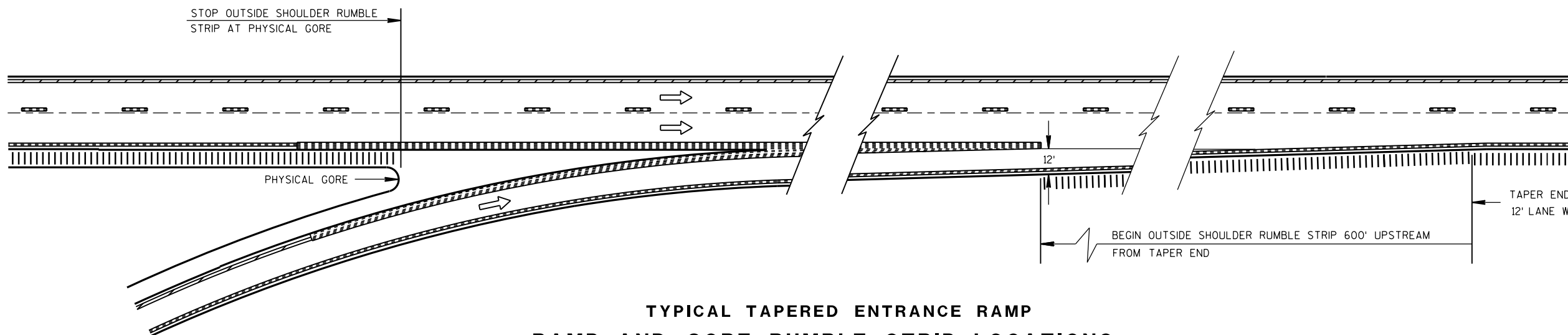
TYPICAL EXIT RAMP

NOTES:

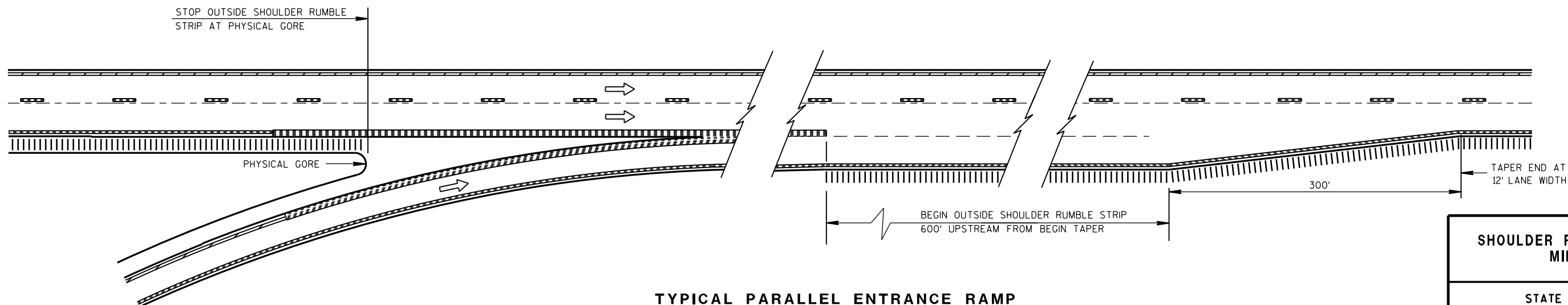
NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (→)
SHOWS DIRECTION OF TRAVEL



**TYPICAL TAPERED ENTRANCE RAMP
RAMP AND GORE RUMBLE STRIP LOCATIONS**

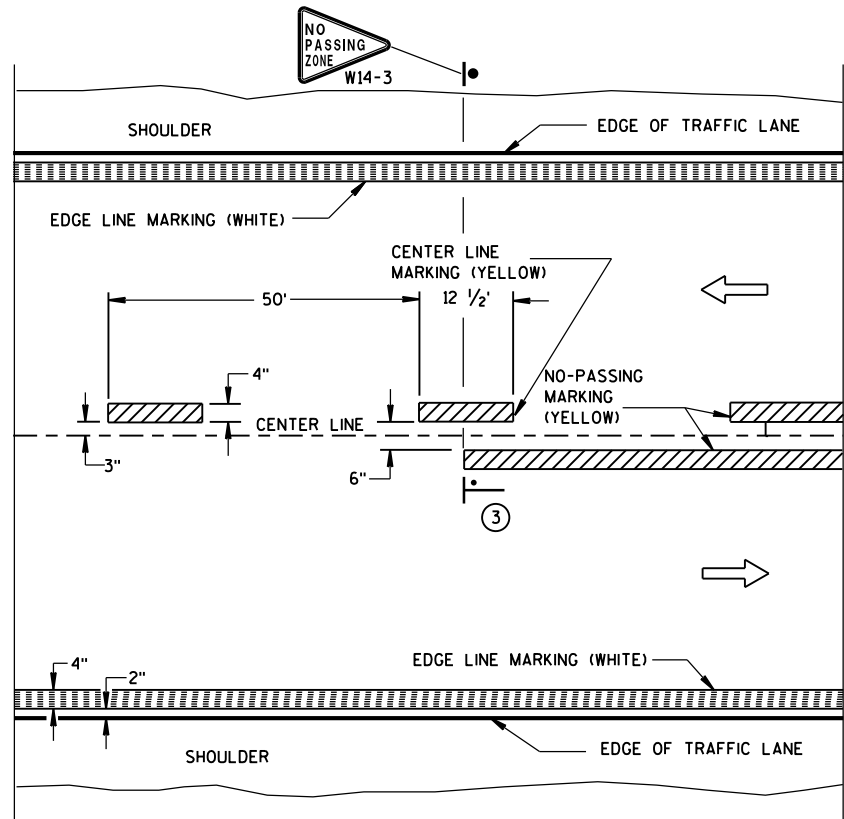


**TYPICAL PARALLEL ENTRANCE RAMP
RAMP AND GORE RUMBLE STRIP LOCATIONS**

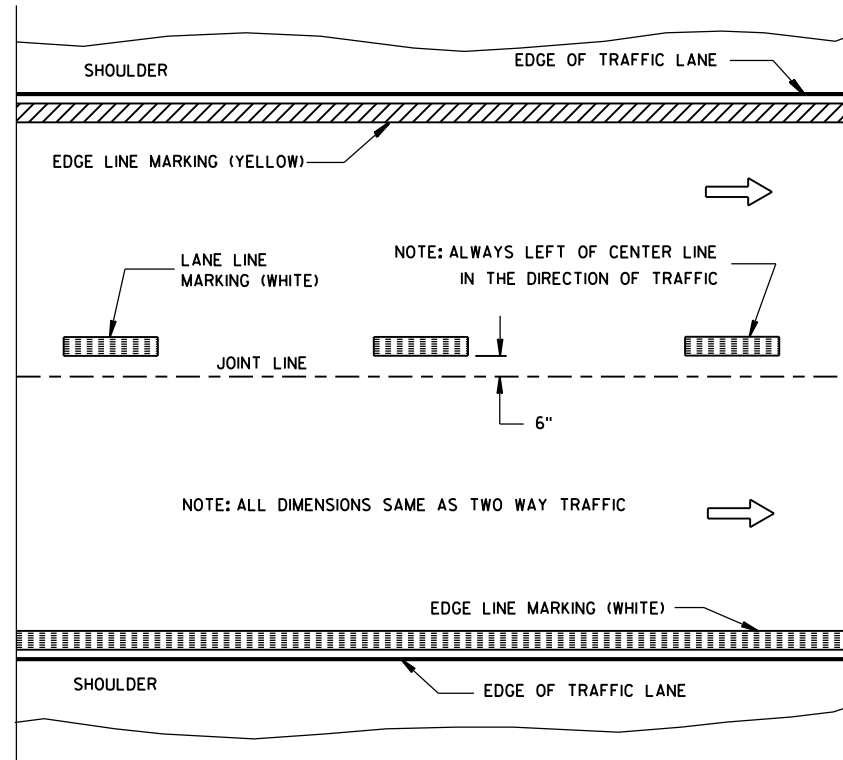
**SHOULDER RUMBLE STRIP,
MILLING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
12/17/2012 DATE /S/ Jerry H. Zoag
ROADWAY STANDARDS 46 ENT
ENGINEER

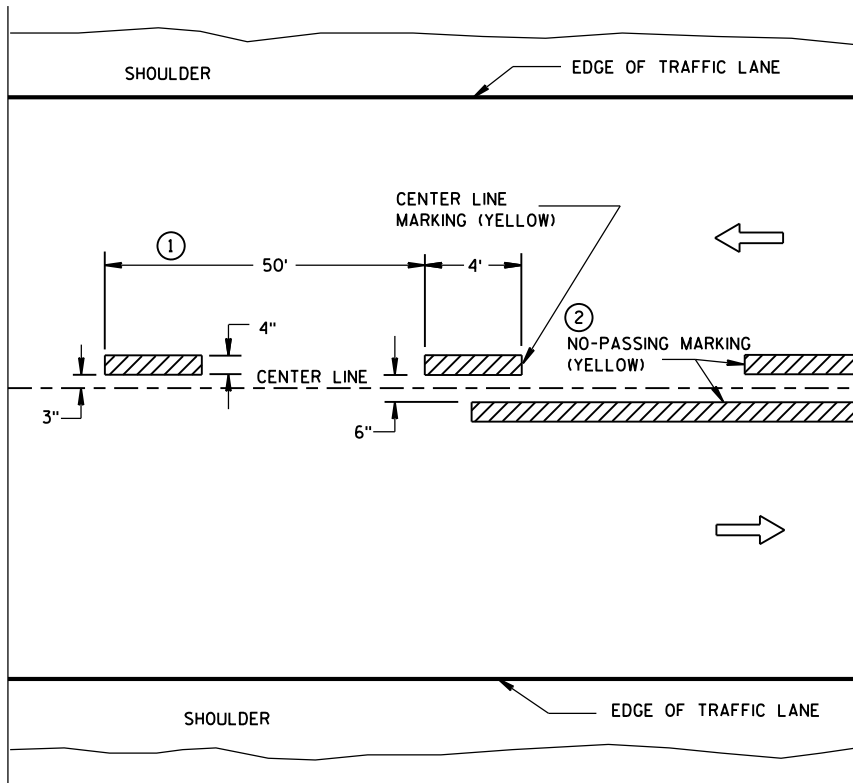


TWO WAY TRAFFIC

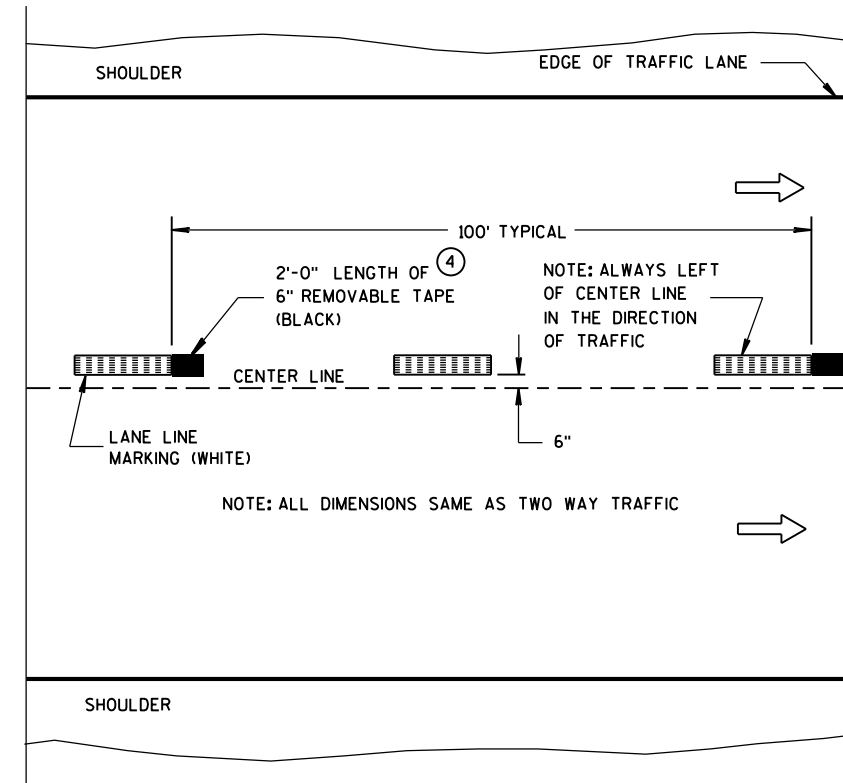


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

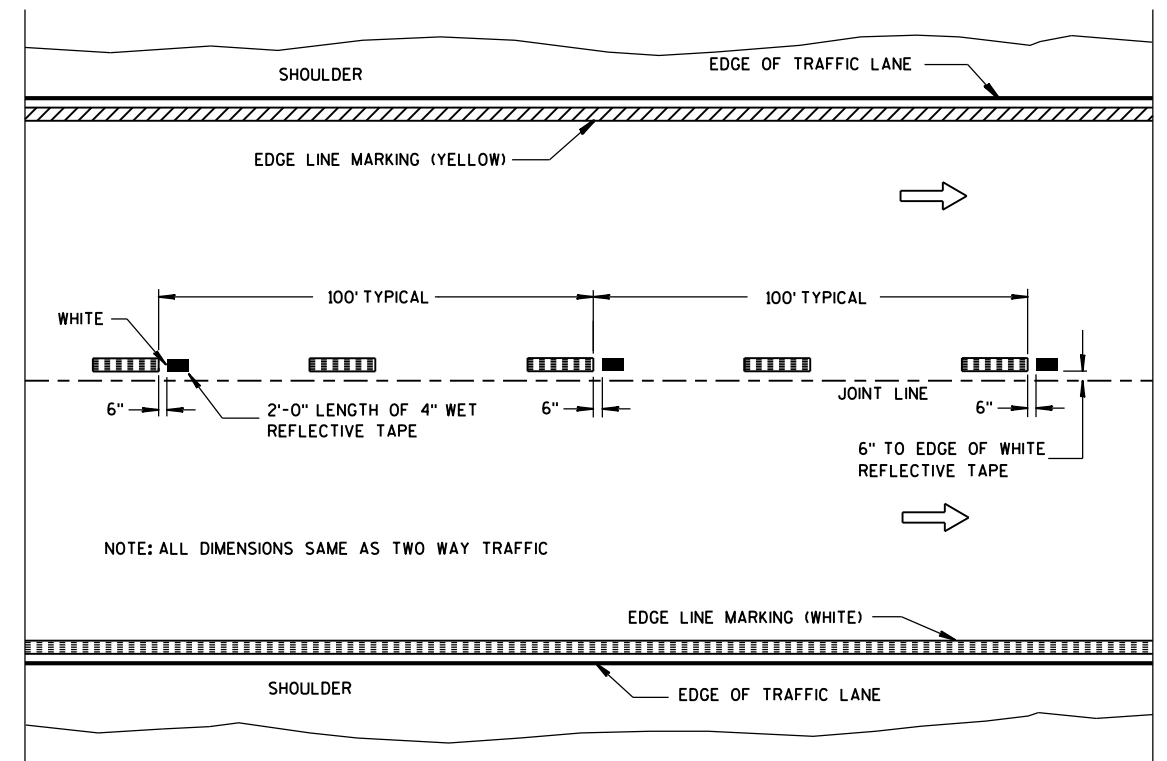
GENERAL NOTES

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

- 1 HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- 2 NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- 3 NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- 4 CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

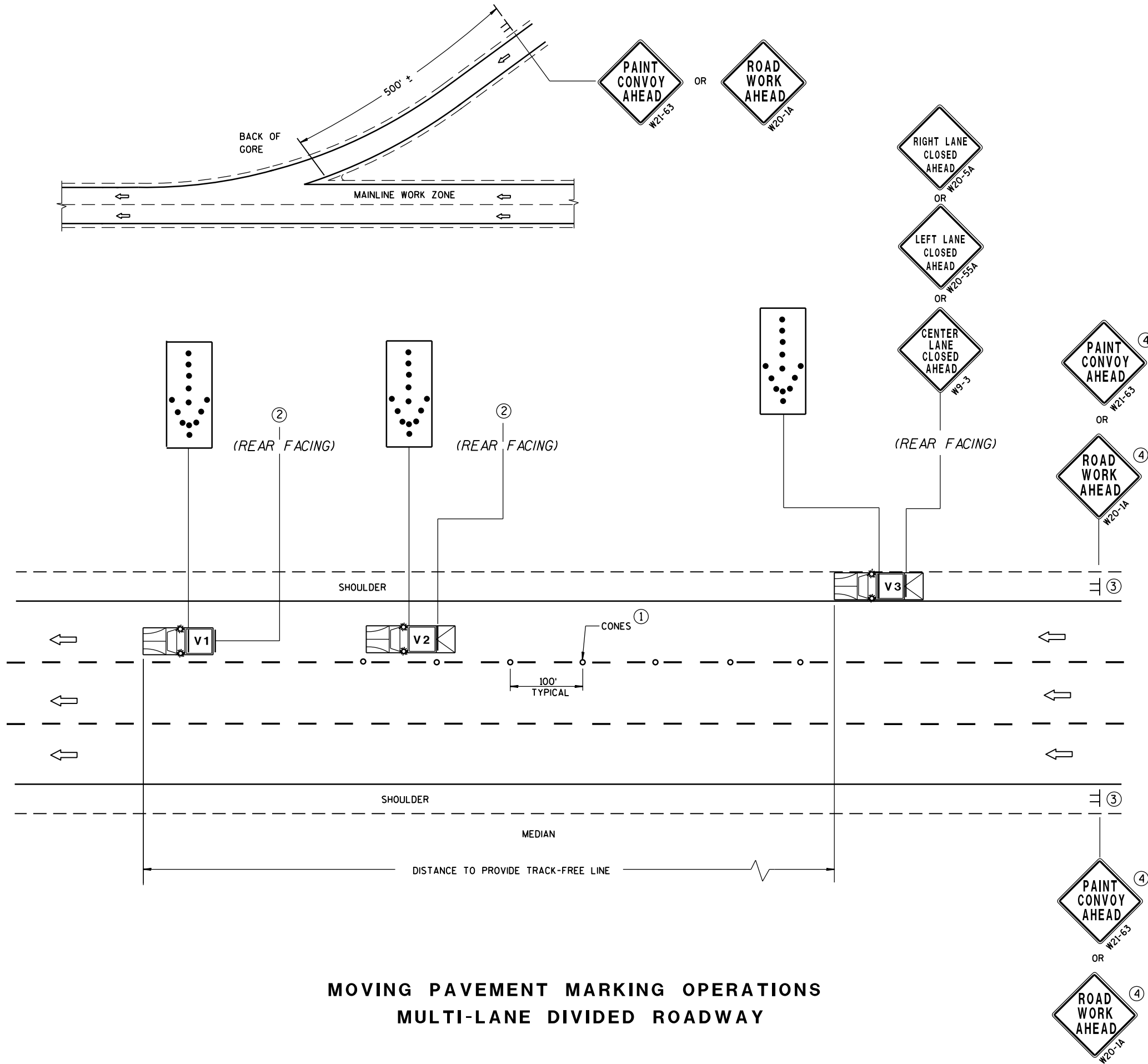
LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
5-13-2013 /S/ Travis Feltes
DATE STATE TRAFFIC E 47
FHWA



MOVING PAVEMENT MARKING OPERATIONS
MULTI-LANE DIVIDED ROADWAY

GENERAL NOTES

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

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

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

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.

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

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

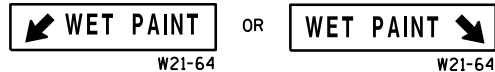
USE AN ATTENUATOR ON THE REARMOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.

FOR EDGE LINE MARKING OR IF CONES ARE NOT USED, POSITION THE REARMOST SHADOW VEHICLE ON THE SHOULDER AS SHOWN IN THE MUTCD IF THE SHOULDER HAS ADEQUATE WIDTH. USE DOUBLE ARROWS WHEN CONVOY IS IN CENTER LANE ONLY.

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

THIS DRAWING SHALL BE USED FOR EDGE LINE OR LANELINE MARKING FOR MULTILANE DIVIDED ROADWAYS.

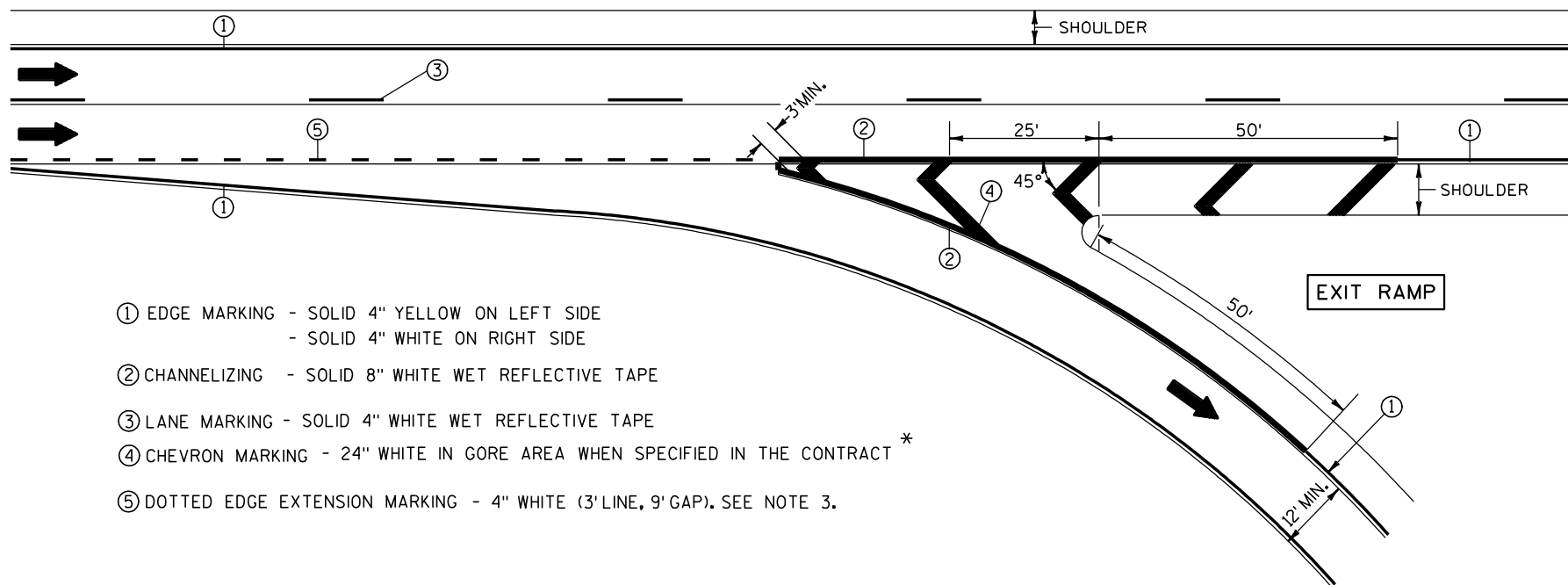
- ① CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- ② USE STANDARD SIGN W21-64 WITH APPROPRIATE ARROW.
- ③ SIGNS SHALL BE REPEATED AFTER EVERY ON RAMP OR EVERY THREE MILES.
- ④ IF CONSTRUCTION WORK ZONE SIGNS ARE IN PLACE, W20-1 OR W21-63 ARE NOT REQUIRED.



LEGEND

- 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 (MERGE)

MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE SAFETY ENGINEER 48
FHWA	

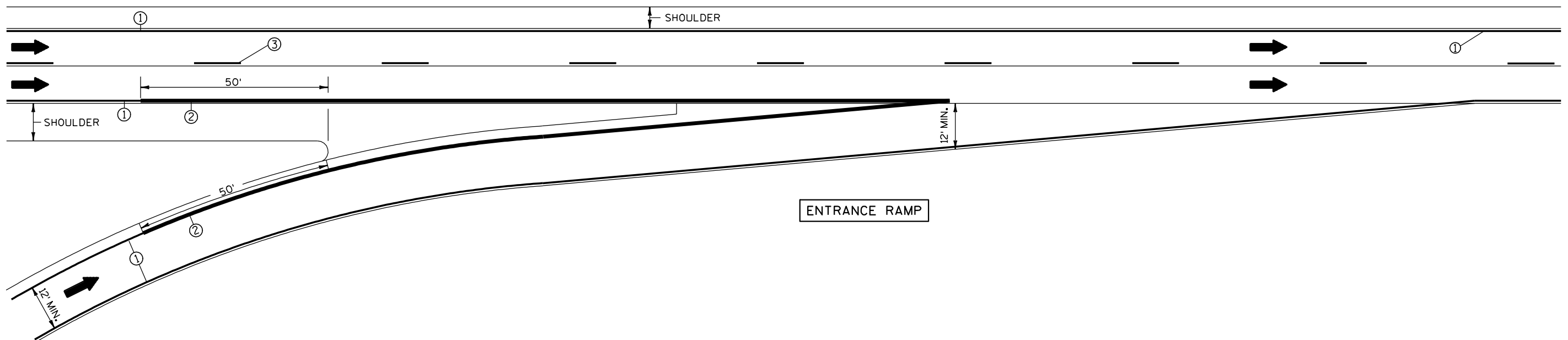


- ① EDGE MARKING - SOLID 4" YELLOW ON LEFT SIDE
- SOLID 4" WHITE ON RIGHT SIDE
- ② CHANNELIZING - SOLID 8" WHITE WET REFLECTIVE TAPE
- ③ LANE MARKING - SOLID 4" WHITE WET REFLECTIVE TAPE
- ④ CHEVRON MARKING - 24" WHITE IN GORE AREA WHEN SPECIFIED IN THE CONTRACT *
- ⑤ DOTTED EDGE EXTENSION MARKING - 4" WHITE (3' LINE, 9' GAP). SEE NOTE 3.

NOTES:

- 1. ARROWS SHOWN ON THIS MARKING PLAN DESIGNATE TRAFFIC FLOW, AND SHALL NOT BE TAKEN AS PROPOSED PAVEMENT MARKINGS.
- 2. PLACE WHITE EDGE OF TAPE 6" LEFT FROM JOINT.
- 3. 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE-GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- 4. RETRACE EXISTING DIAGONAL MARKINGS.

* REFER TO DESIGN NOTES.



6

6

PAVEMENT MARKING
(RAMPS AND GORES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMENENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKING
- DIRECTION OF TRAFFIC
- WORK AREA

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.

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET, (500 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

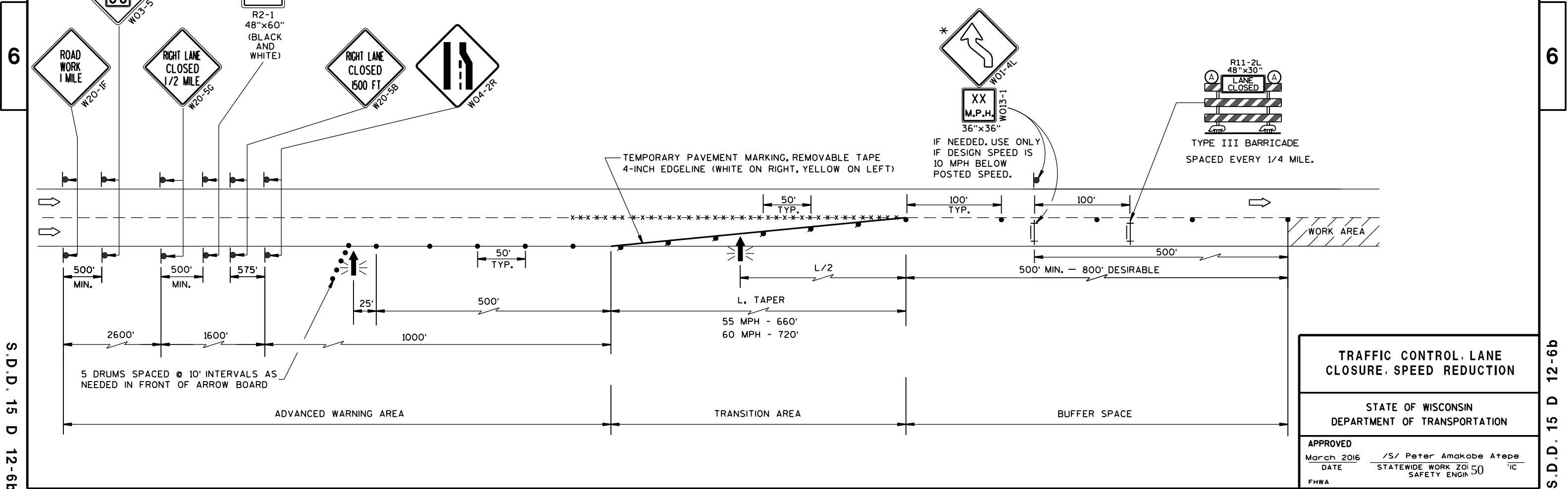
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

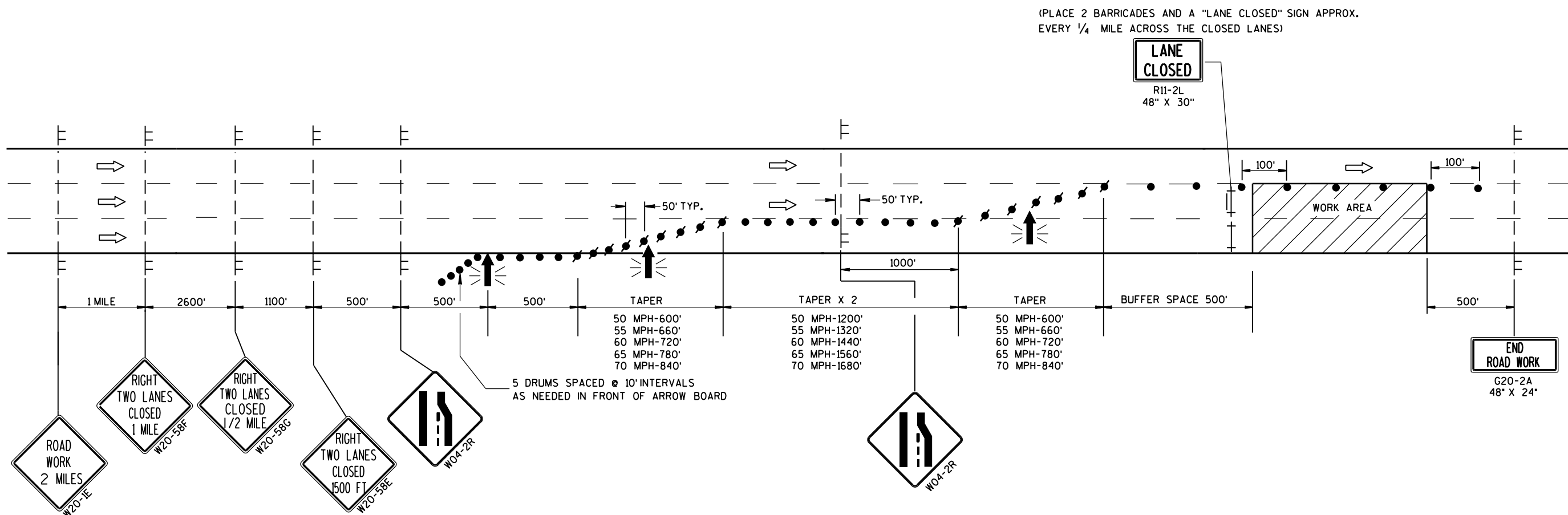
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* THE LEFT REVERSE CURVE SIGN (WO1-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

** A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIREABLE) BEYOND THE "END OF ROADWORK" SIGN.



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED March 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA	



LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- WORK AREA

GENERAL NOTES

THIS DETAIL IS TYPICAL FOR CLOSING THE RIGHT TWO LANES. FOR CLOSING THE LEFT TWO LANES, REVERSE THE TRAFFIC CONTROL.

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

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

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

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

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.

W20-1E AND G20-2A SIGNS ARE NOT REQUIRED IF THE LANE CLOSURE IS WITHIN A LARGER WORK ZONE WHERE THESE SIGNS ARE ALREADY PRESENT.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

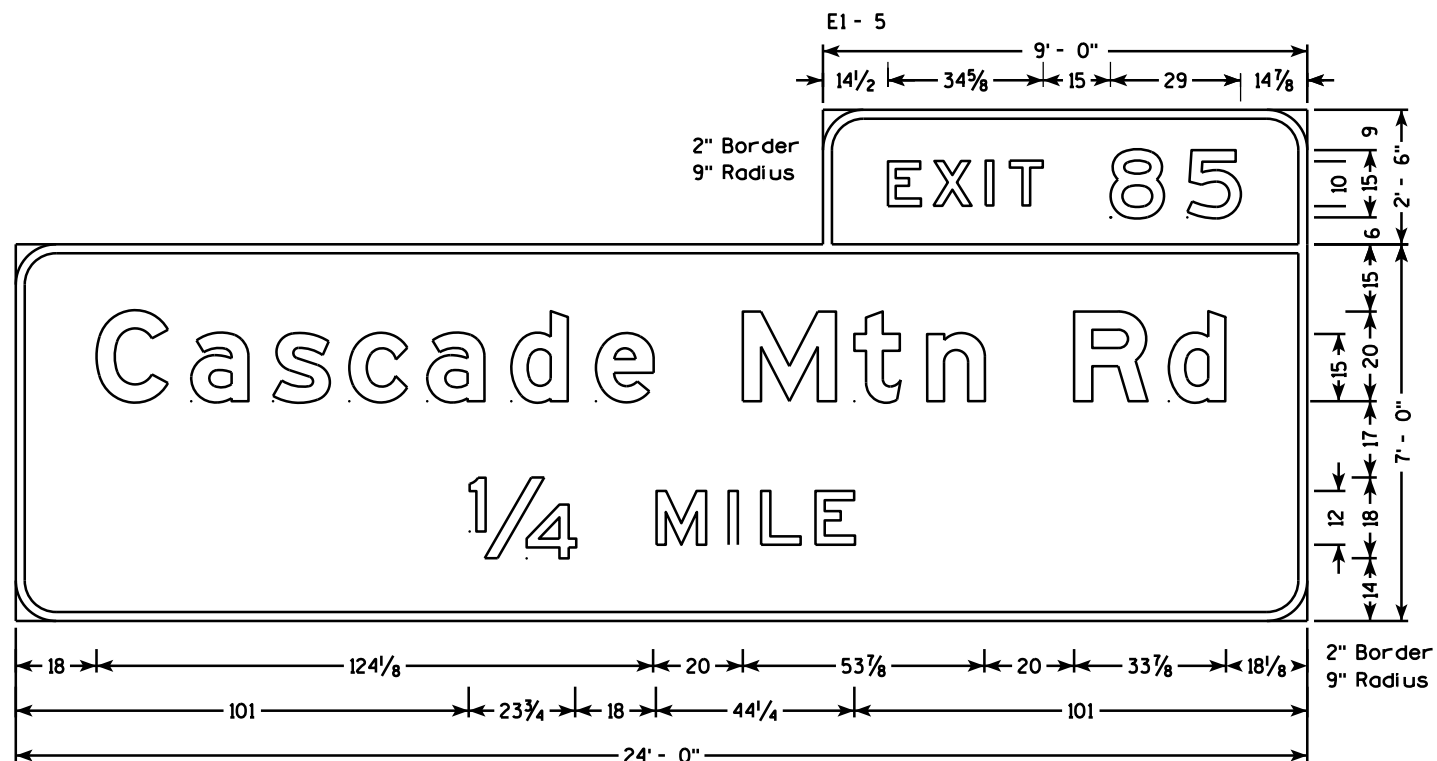
WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

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

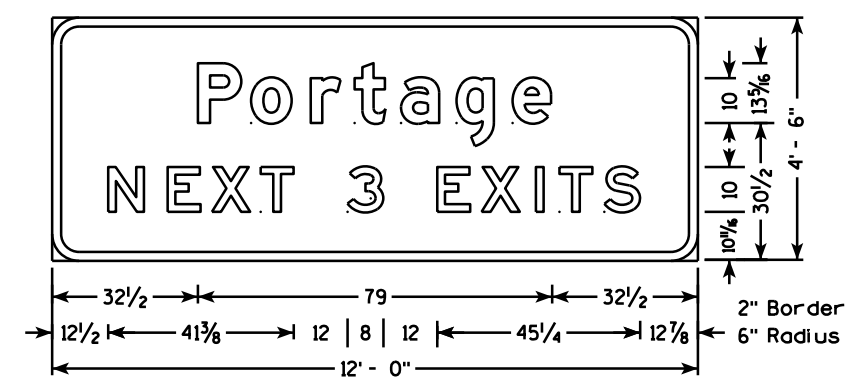
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

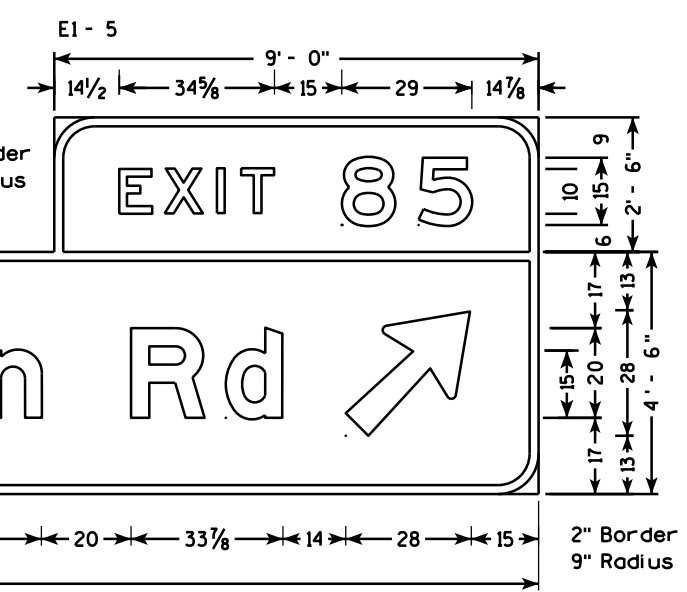
TRAFFIC CONTROL. TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY. SHORT TERM (LESS THAN 24 HOURS)		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE SAFETY ENGINEER	IC
FHWA		



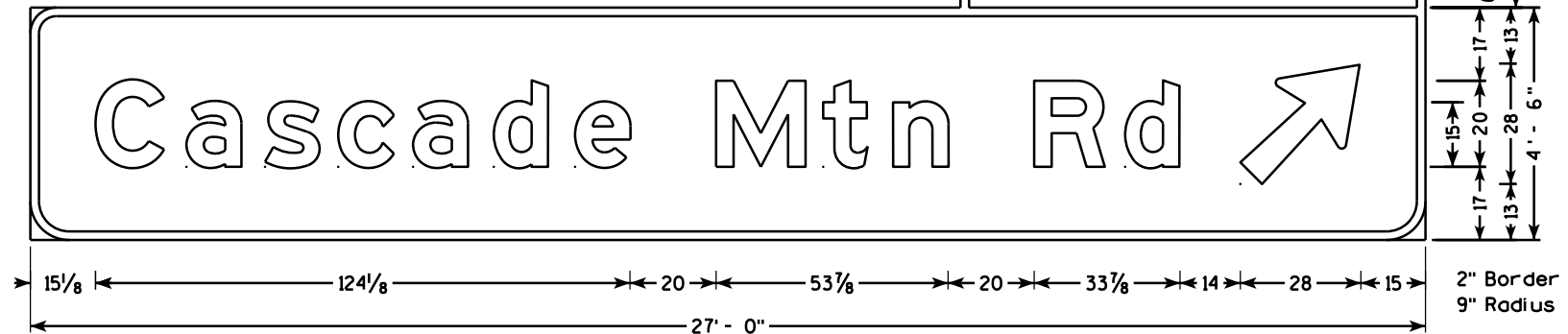
E1-1A



E9-1



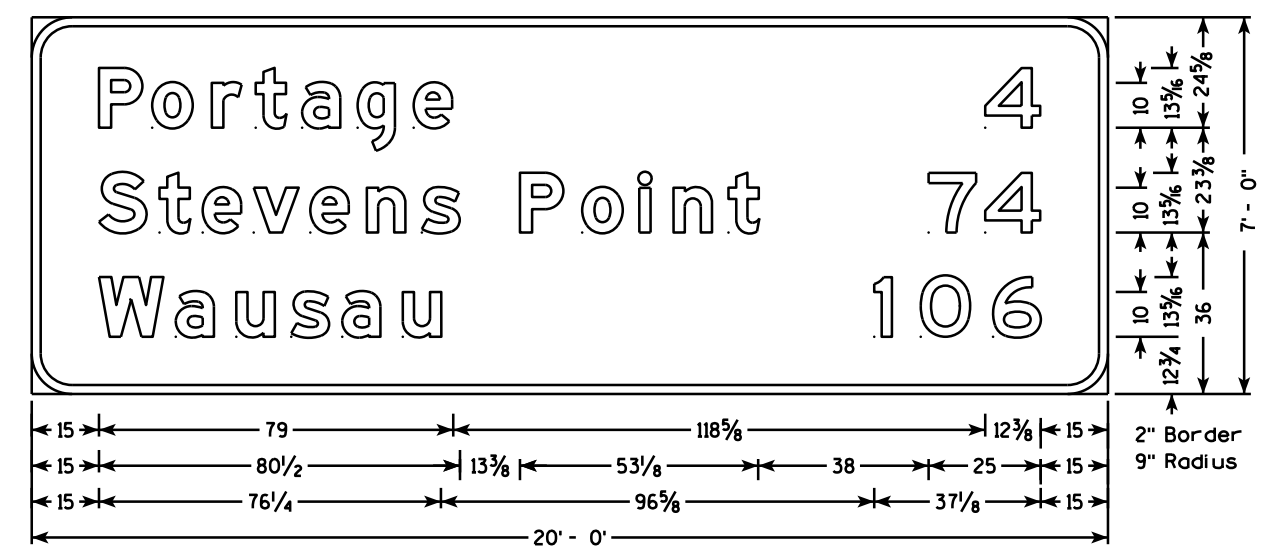
2" Border
9" Radius



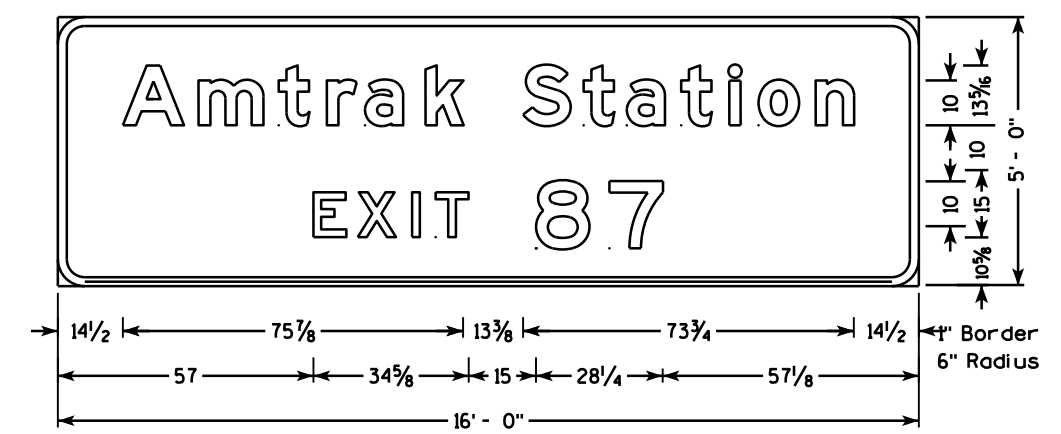
E4-1A

NOTES

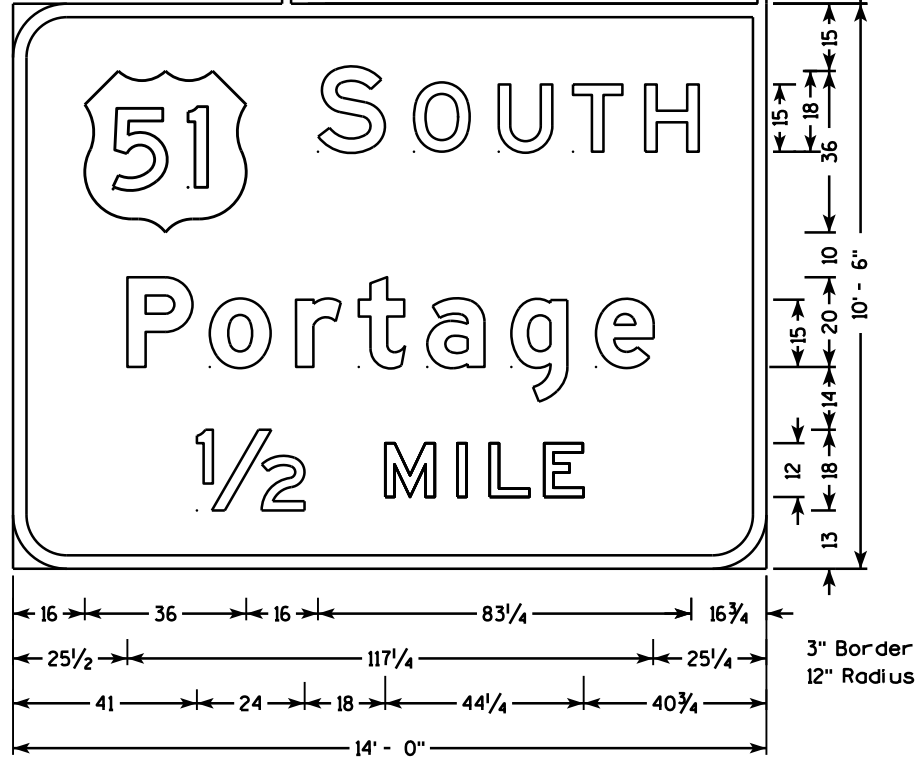
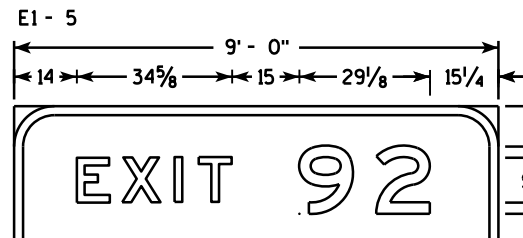
1. All Signs are Type I - Type SH Reflective
2. Color:
Background - Green
Message - White
3. Message Series - E Modified except all cap WORDS are Series E



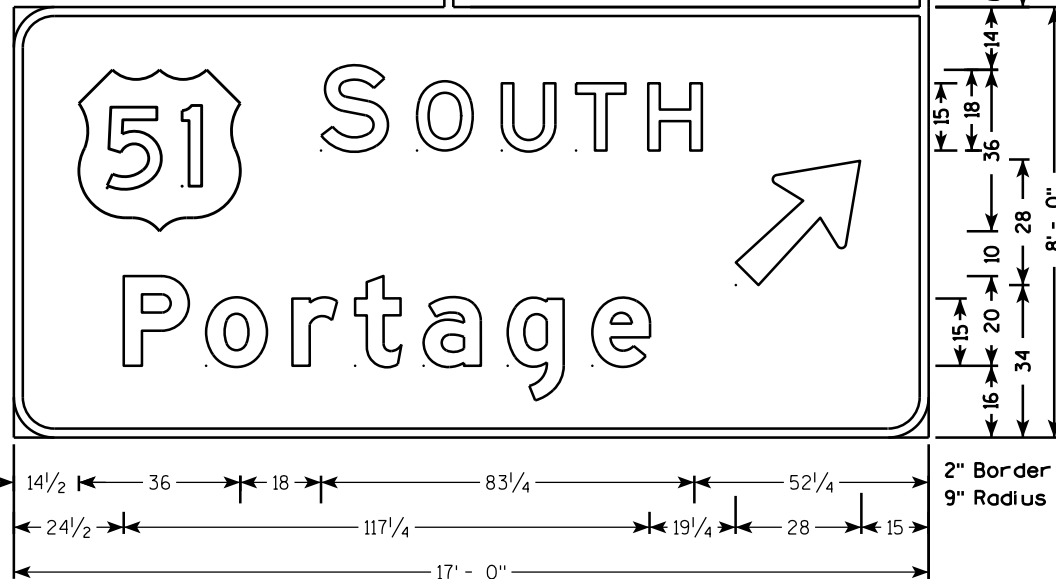
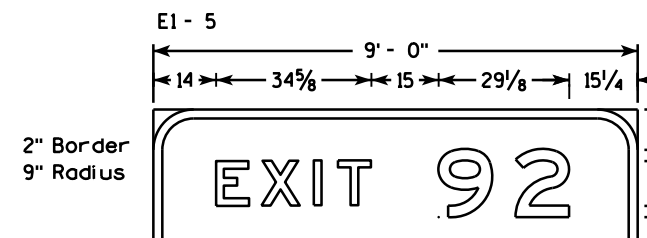
D2-3



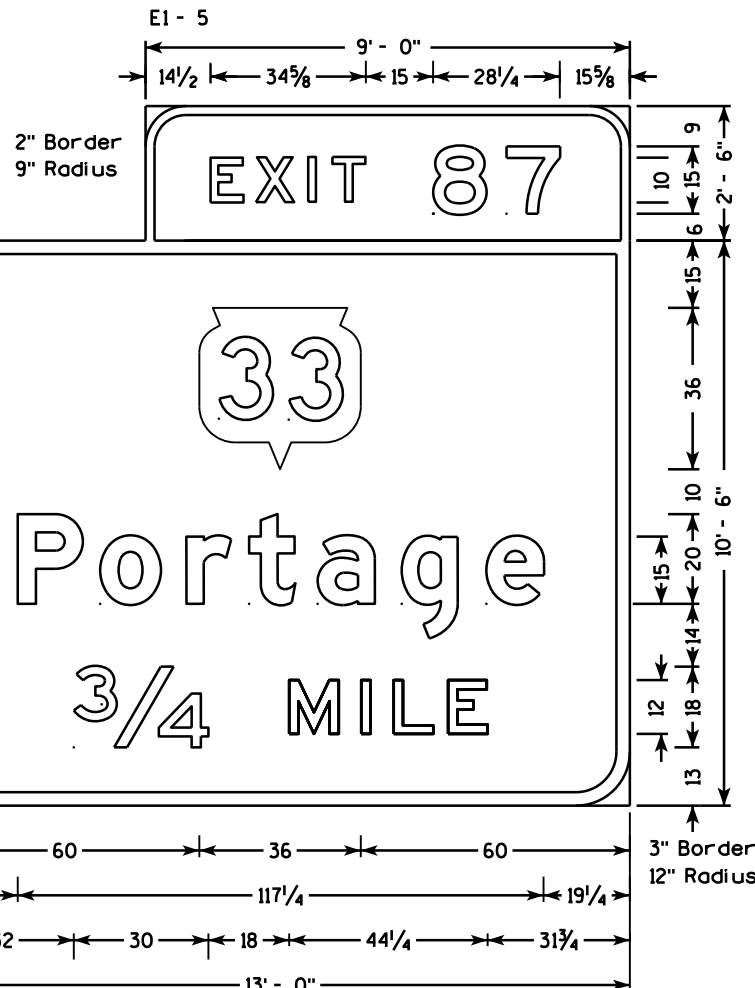
E3-1



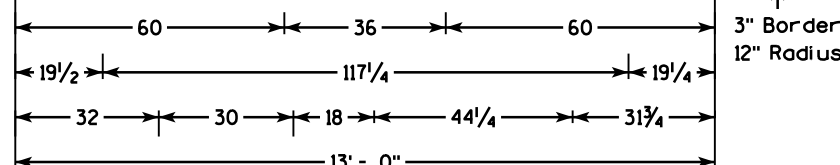
E1-1A



E4-1A

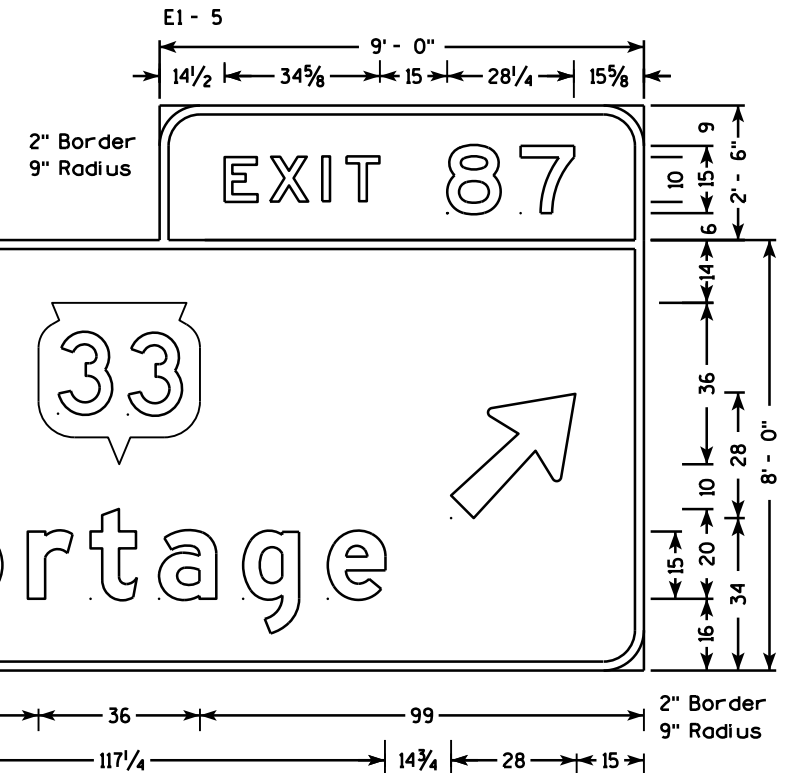


E1-1A

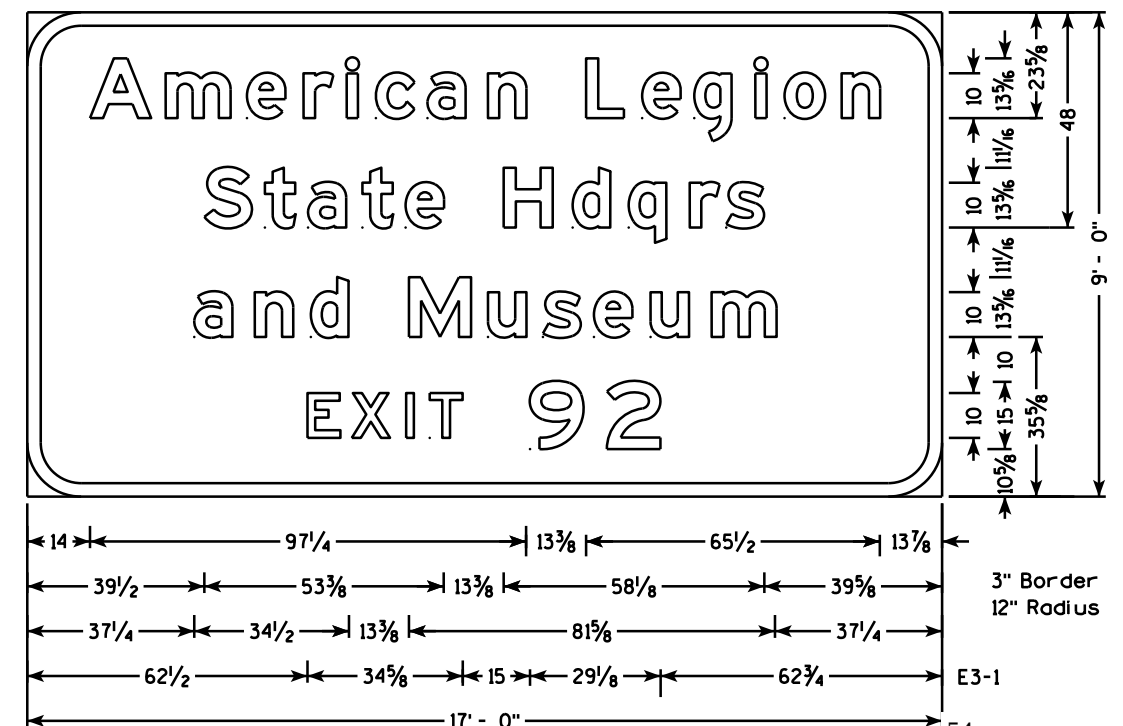


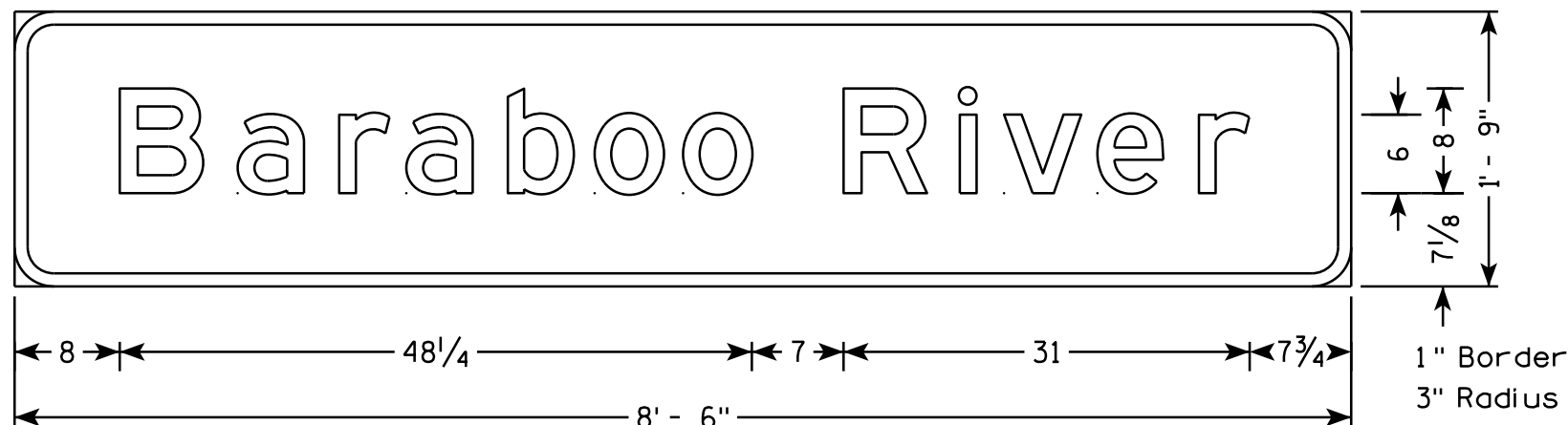
NOTES

1. All Signs are Type I - Type SH Reflective
2. Color:
Background - Green
Message - White
3. Message Series - E Modified except all cap WORDS are Series E

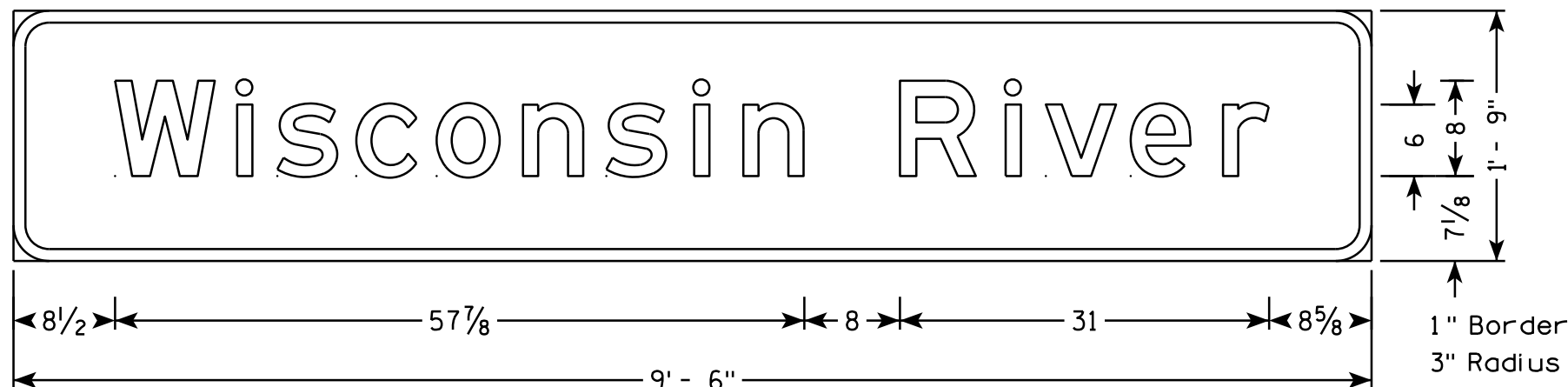


E4-1A

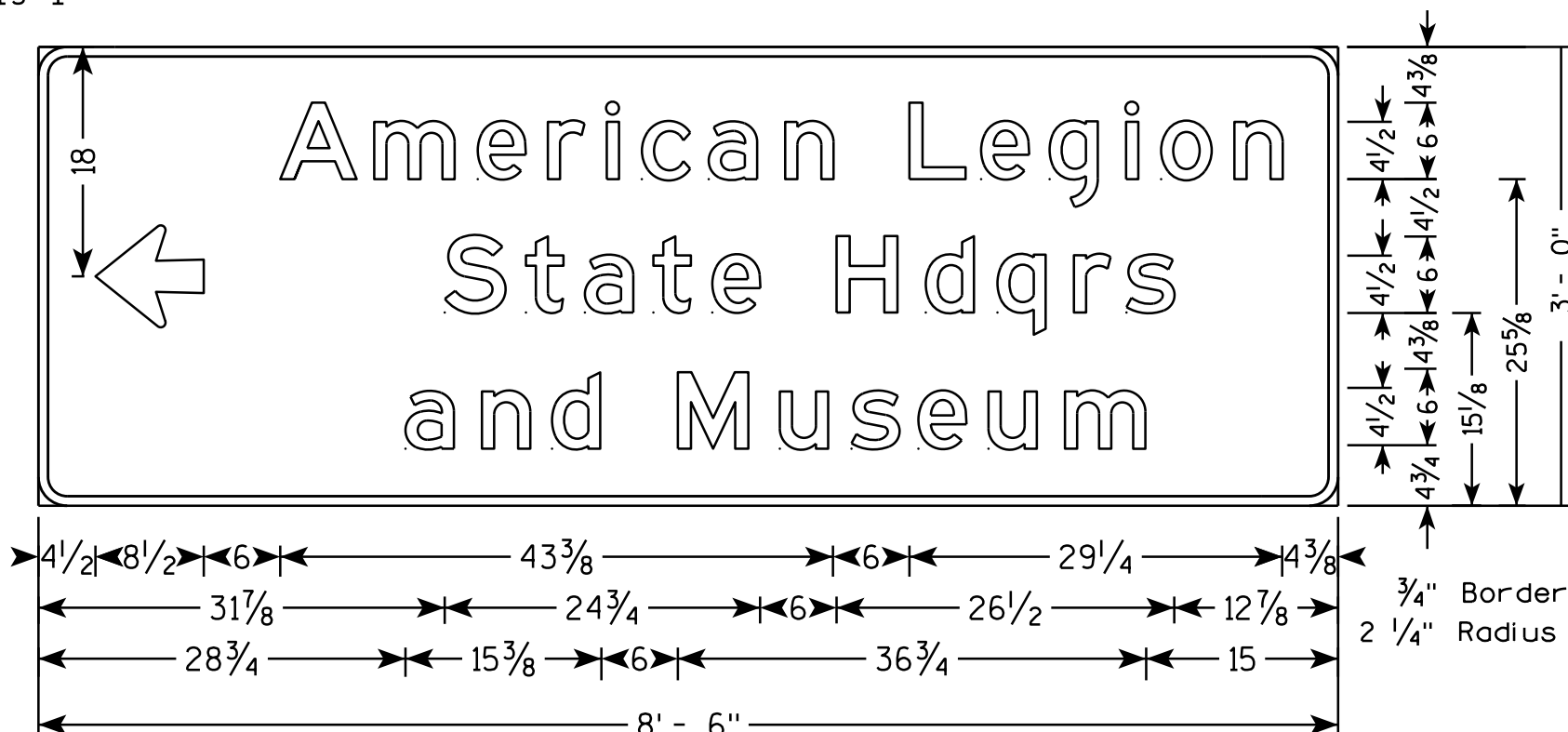




I3-1



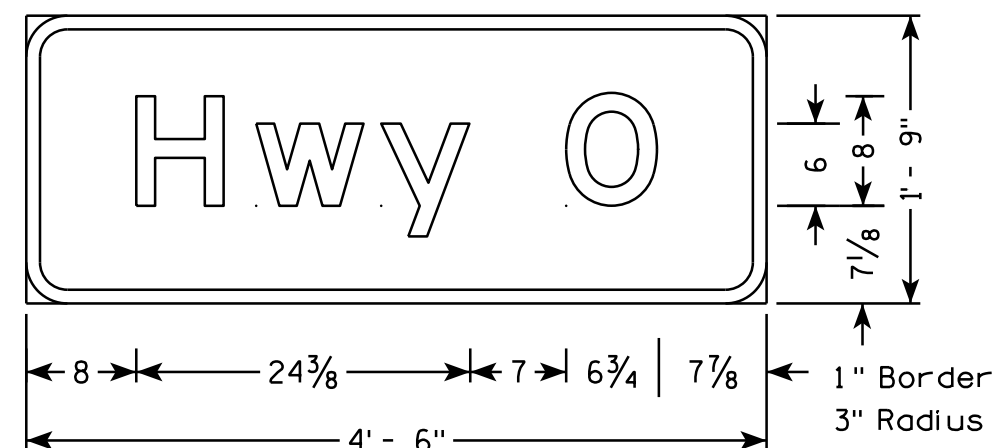
I3-1



D1-3

NOTES

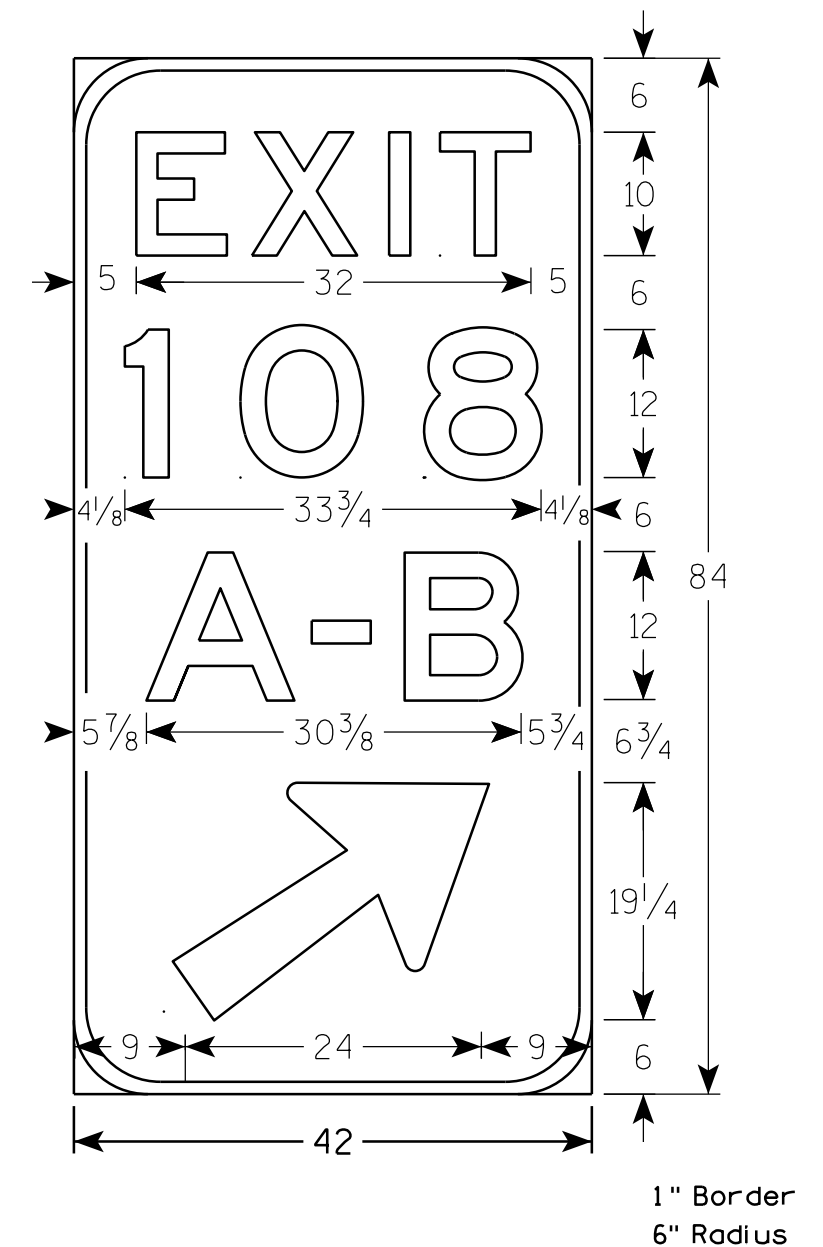
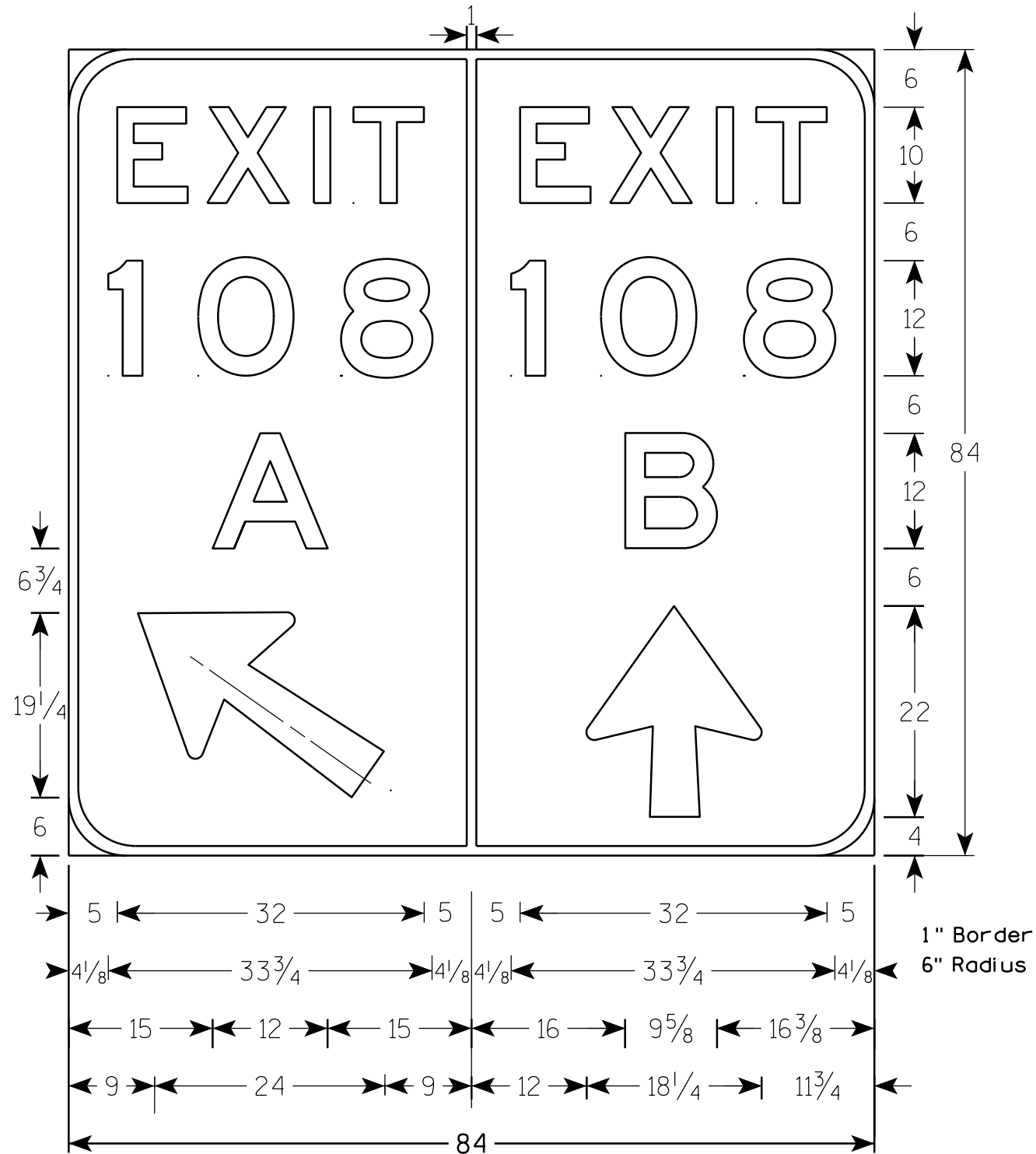
1. All Signs Type II - Type H Reflective - reference
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E



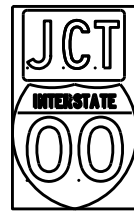
M1-94

NOTES

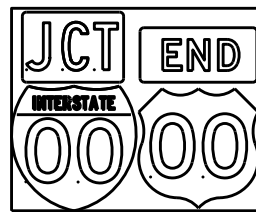
1. All Signs Type II - Type H Reflective - reference
2. Color:
Background - GREEN
Message - WHITE
3. Message Series - E



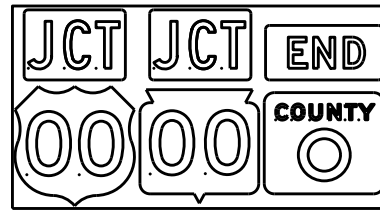
TYPICAL ASSEMBLIES



J1-1



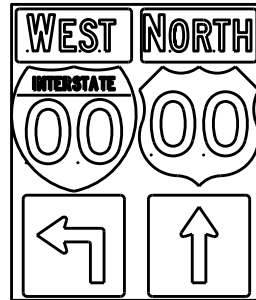
J1-2



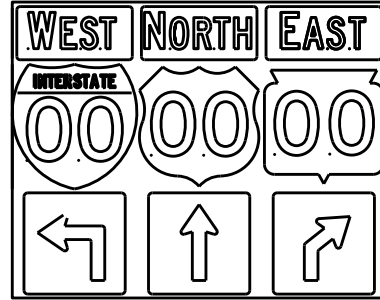
J1-3



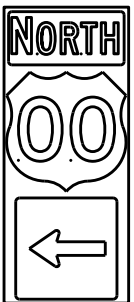
J2-1



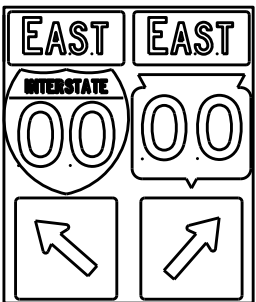
J2-2



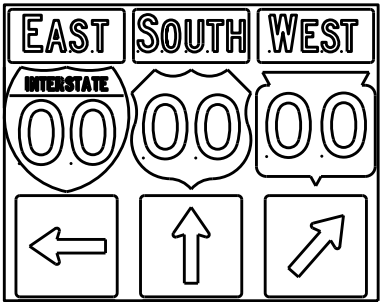
J2-3



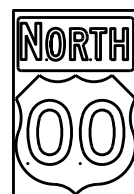
J3-1



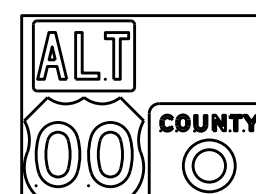
J3-2



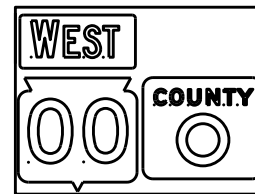
J3-3



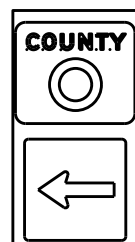
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

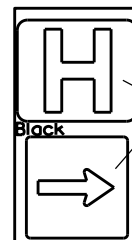


J22-1



JV

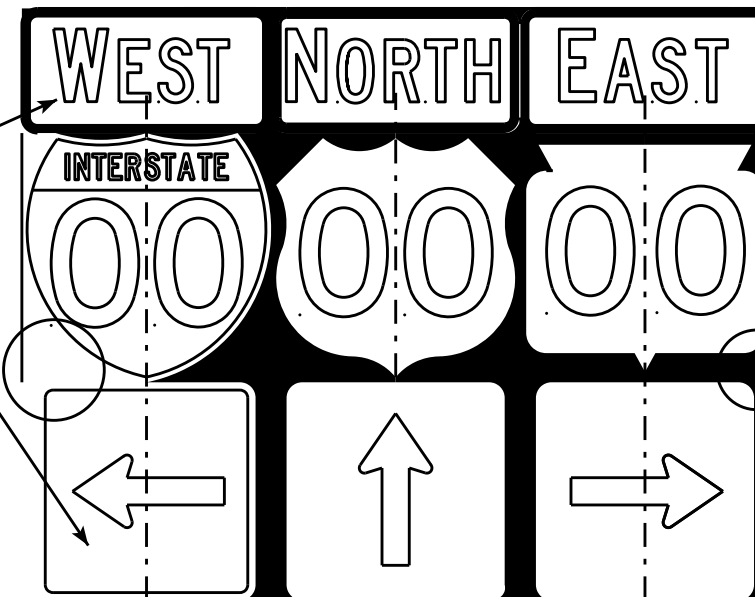
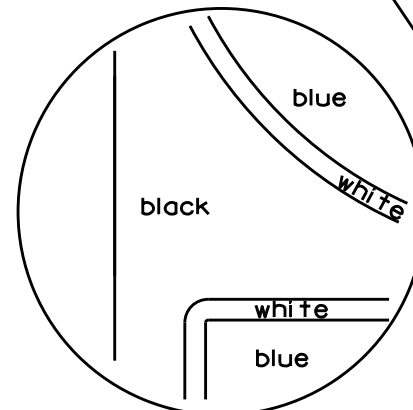
(Typical Vertical J-Assembly
See Note 10 and 11)



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 PL 57 A2-1S.8

SHEET NO: E

NOTES

- Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - Black Non-reflective
Message - see Note 5
- Message Series - See Note 5
- Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
- The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
- 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.
- 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.
- 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.
- 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.
- All Vertical J Assemblies are given a Sign Code of JV
- 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

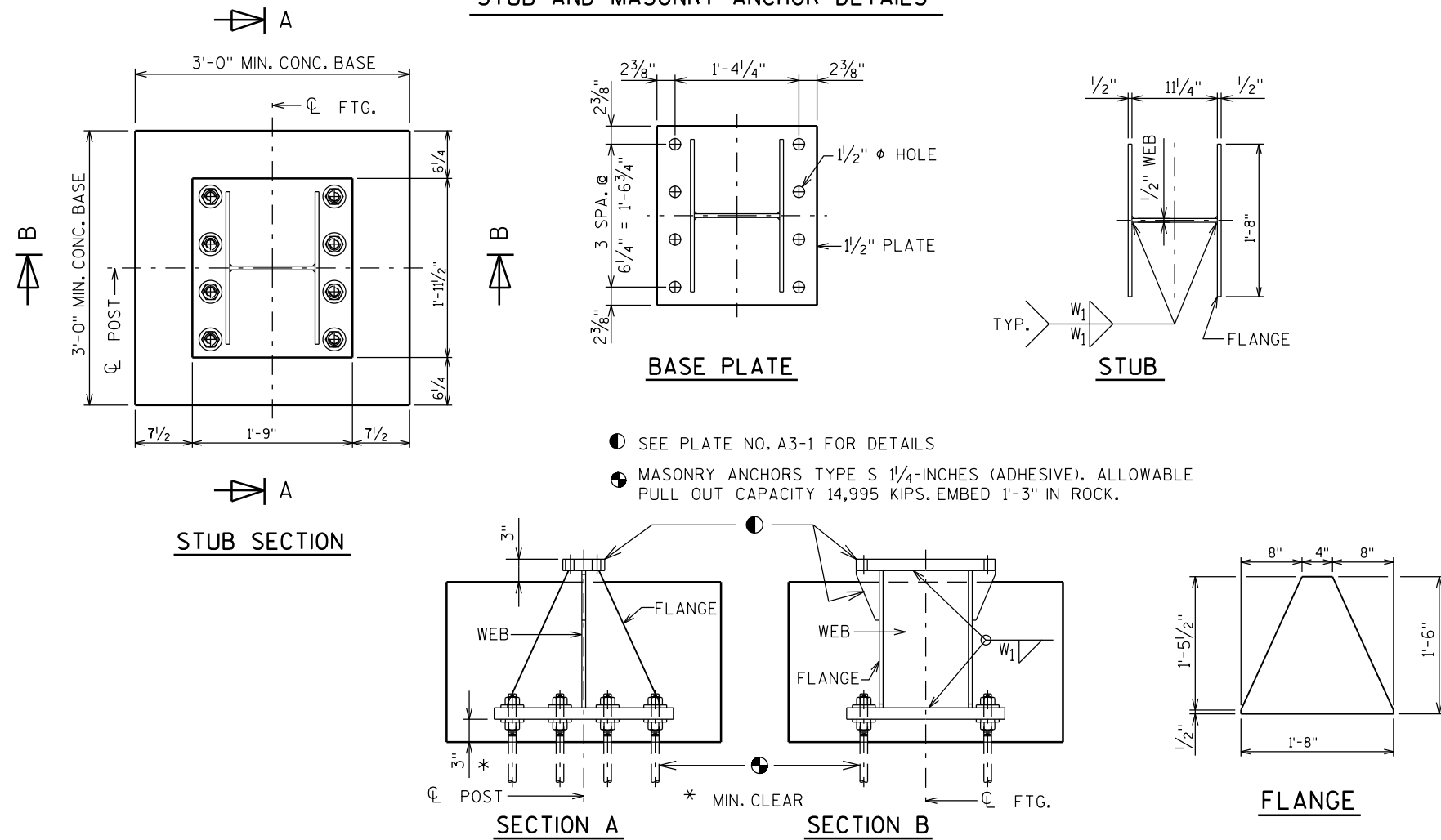
PLOT DATE : 06-FEB-2014 14:10

PLOT BY : mscs.ja

PLOT NAME :

WISDOT/CADDs SHEET 42

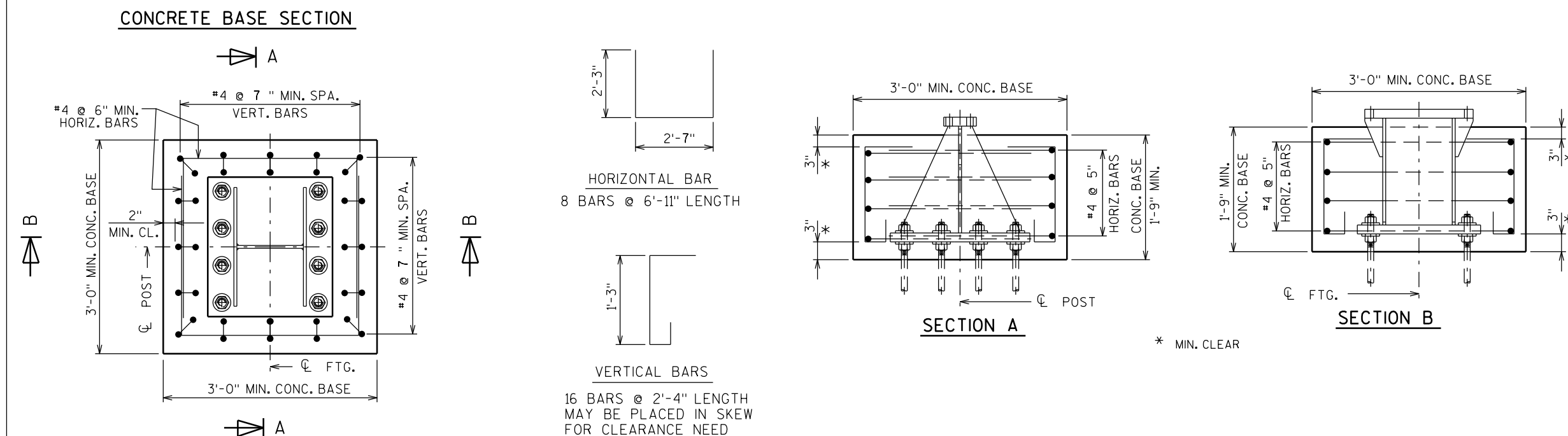
STUB AND MASONRY ANCHOR DETAILS



GENERAL NOTES

- Quantities per Base:
 - REINFORCING BAR STEEL = 62 LBS
 - CONCRETE = 0.6 C.Y.
 - STEEL WEIGHT = 335 LBS
- All materials, except anchor rod, nuts and washers, are to be A.S.T.M. A709 grade 50. All materials to be galvanized after fabrication.
- If the contractor encounters rock before reaching the footing depth, per the A3-1 Sign Detail, determine the pull-out capacity of a test adhesive anchor installed in the rock. If the test result equals or exceeds the pull-out capacity of 14,995 KIPS, the contractor may install the breakaway stub for rock, according to this detail.

CONCRETE BASE AND REINFORCING STEEL DETAILS



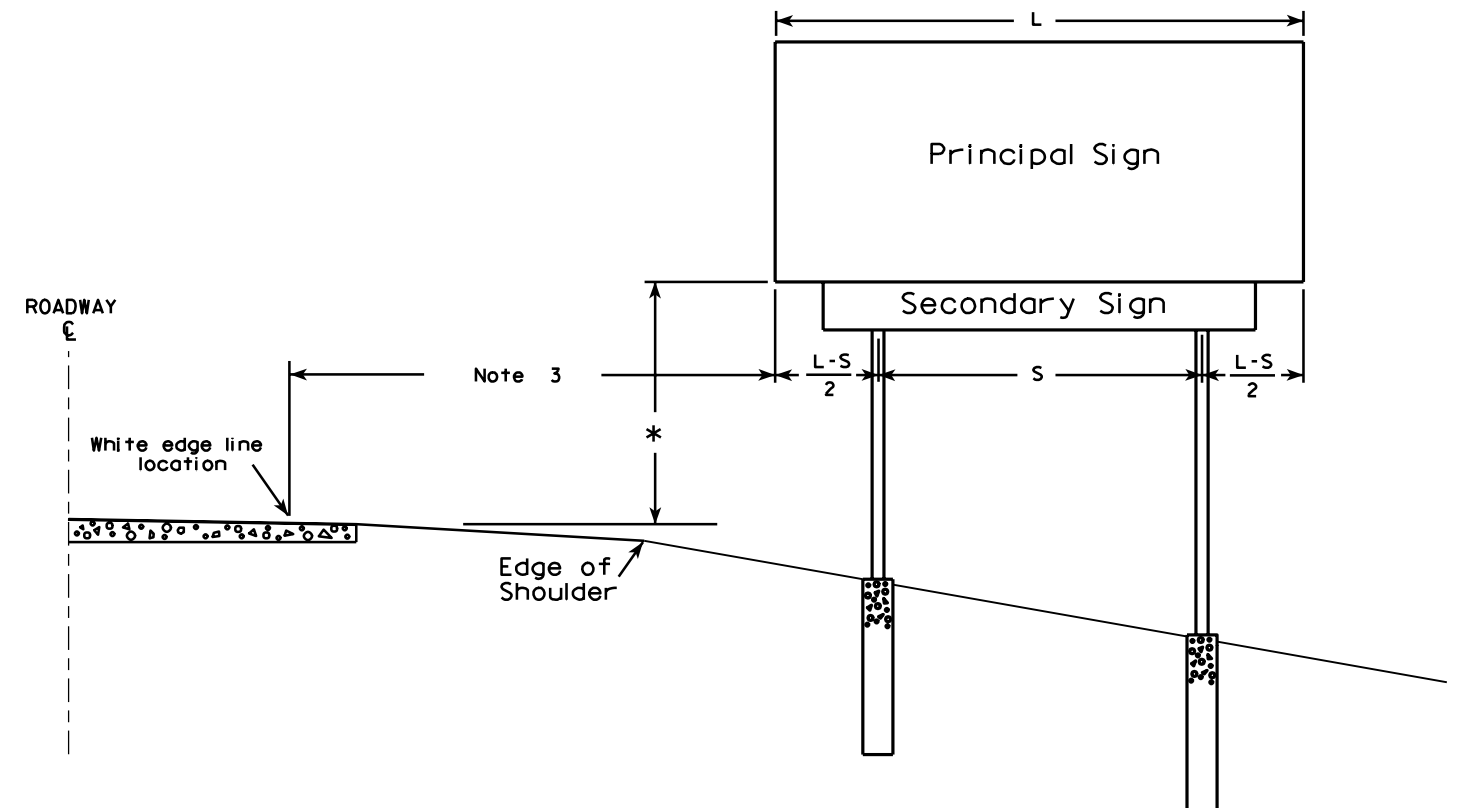
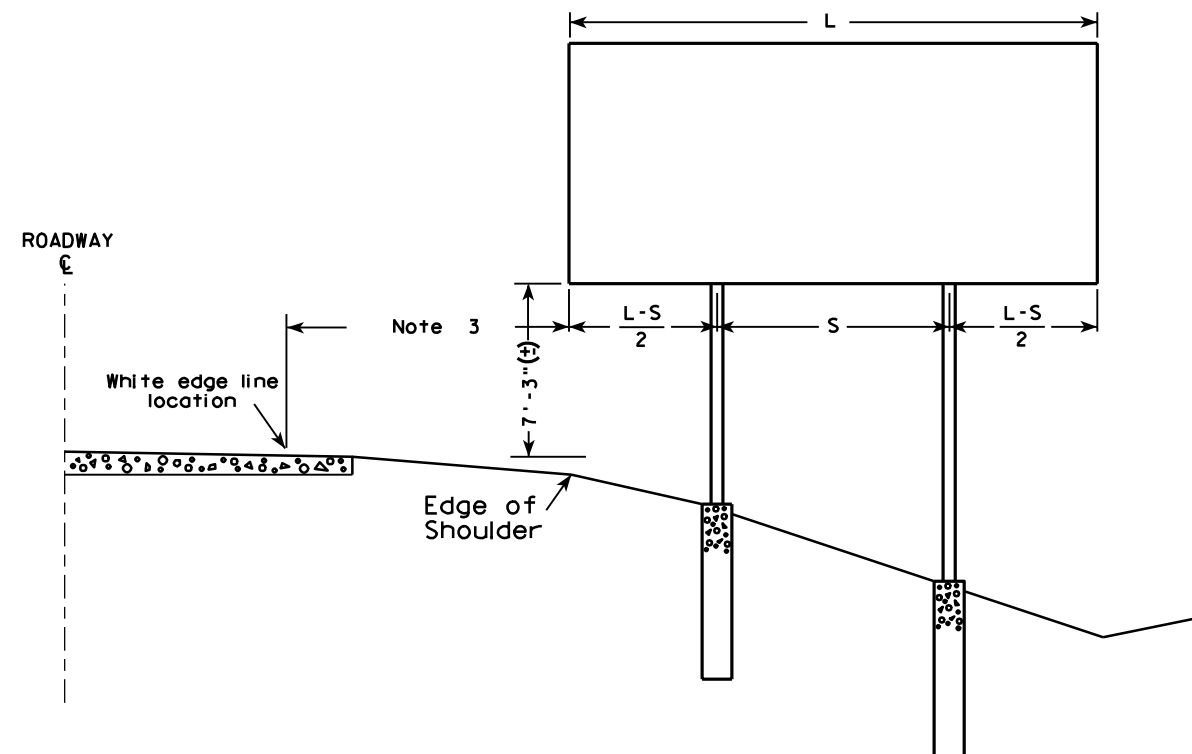
ALTERNATE BREAK-AWAY
BASE ON ROCK
A3-1M

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*

For State Traffic Engineer

DATE 2/06/2014 PL 59 A3-1M.1



GENERAL NOTES

1. For a 2 post installation, S equals $3L/5$, but shall not be less than 9 ft.
2. For a 3 post installation, S equals $5L/7$, but shall not be less than 18 ft., and the space between any two posts shall not be less than 9 ft.
3. Unless noted in the plan, the sign offset distance shall be a minimum of 17'-6", desirable 30'-0".
4. The (±) tolerance shown on this sheet is 3 in.
5. The vertical sign height clearance detailed is measured from the bottom of the sign to the near edge of pavement.
6. Post lengths shown in the miscellaneous quantities are estimated lengths. The contractor shall verify post lengths at the time of final grading.
7. Refer to the Traffic Guidelines Manual for further guidance on minimum vertical clearance requirements.

* Clearance is 8'-3" (±) when the secondary sign is 3 ft. or less in height. For secondary signs larger than 3 ft., the clearance to the bottom of the secondary sign shall be 5'-3" (±).

TYPICAL INSTALLATION OF TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

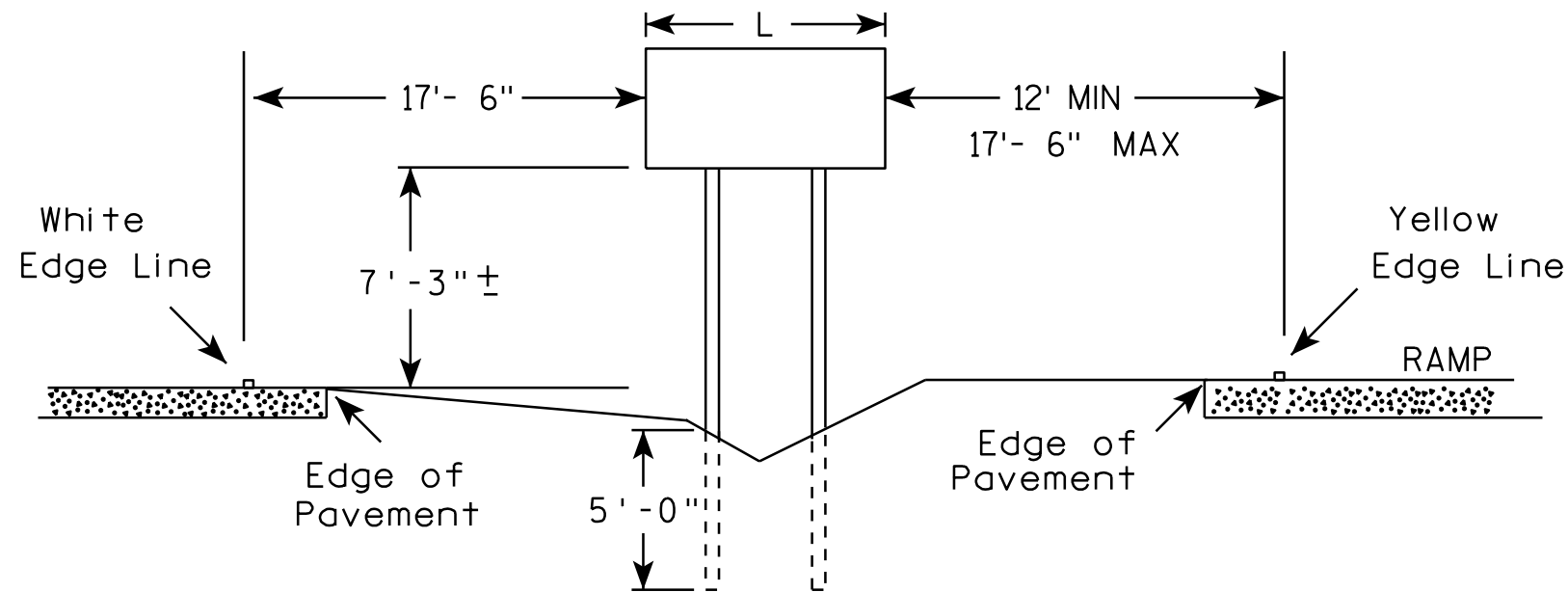
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 4/02/08 PLATE NO. A4-1.9

PROJECT NO:

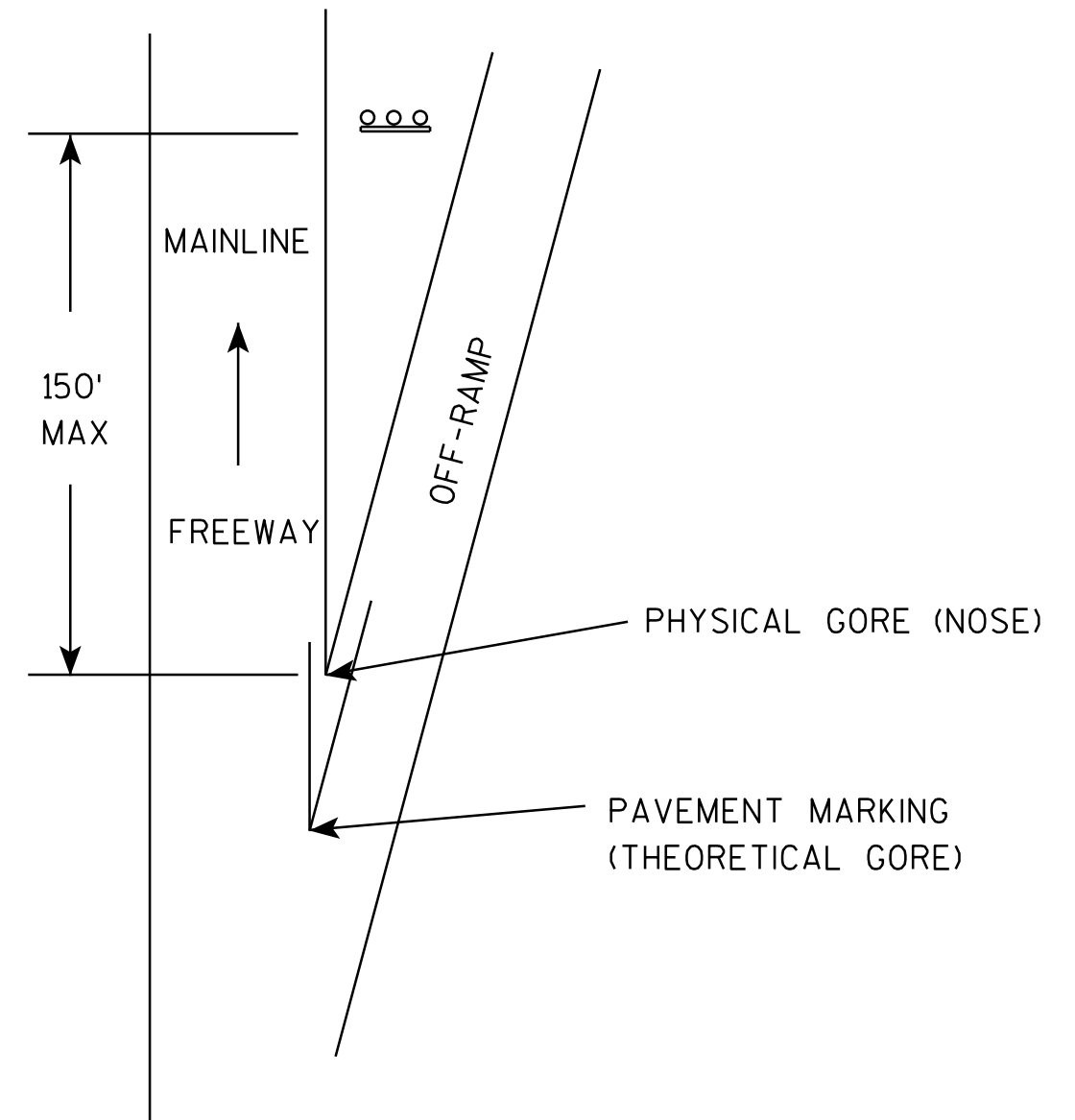
SHEET NO: 60

E



GENERAL NOTES

1. The 150 foot distance from the physical gore (where pavement ends) will normally provide the offsets as shown.
2. If roadway geometrics permit, the sign may be closer than the 150 foot distance as long as the offsets are maintained.
3. At no time shall the location be greater than 150 feet. If the normal offsets cannot be maintained, they can be reduced to 6 feet from the edge of the paved shoulder (both freeway and ramp).
4. The offset from edge of sign to the yellow edge line on the ramp is shown as a minimum of 12 feet and a maximum of 17 feet, 6 inches. Preference is adhering to the maximum rather than the minimum dimension.
5. When L is equal to or exceeds 10 feet, use 3 posts as per A4-4.
6. The ($\pm$) tolerance for the mounting height is 3 inches.



TYPICAL INSTALLATION
OF TYPE II SIGNS ON
WOOD POSTS IN GORE

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

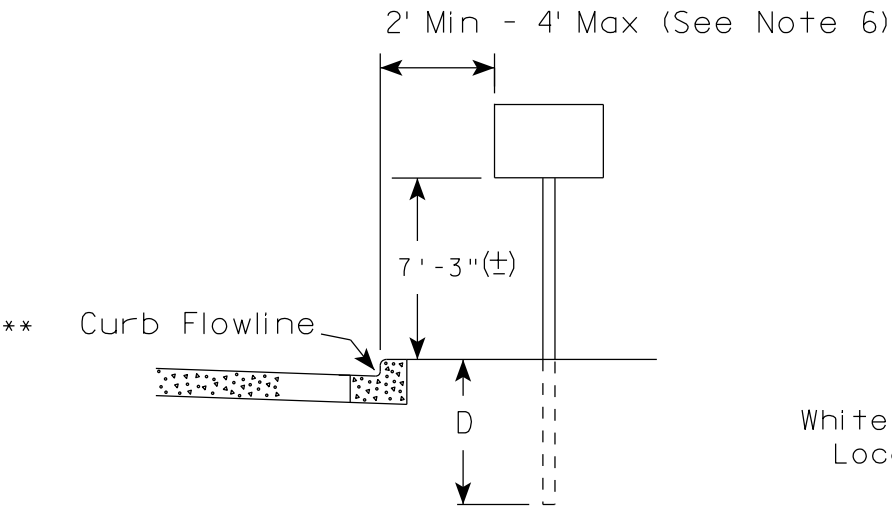
DATE 2/06/14 PLA 61 A4-2.3

PROJECT NO:

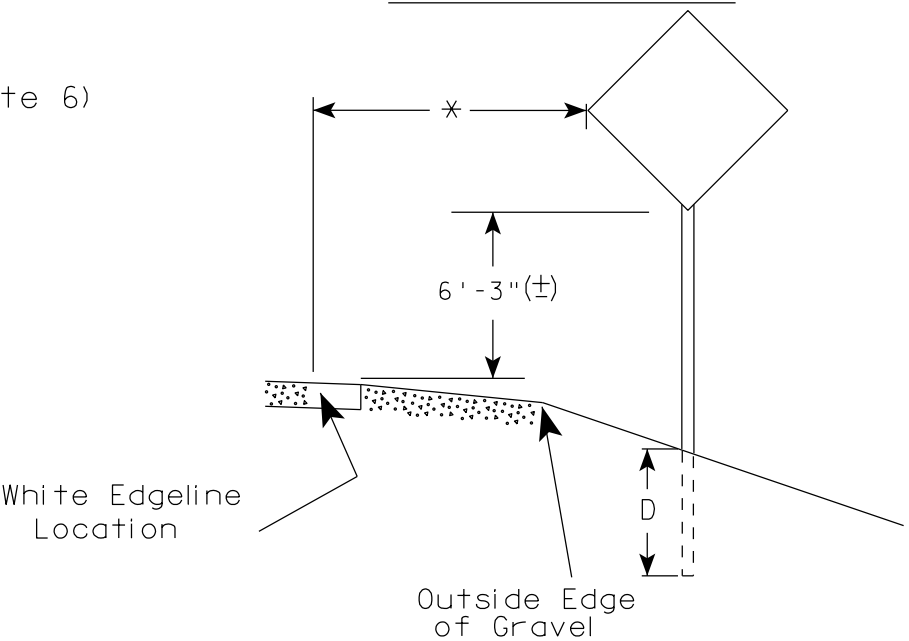
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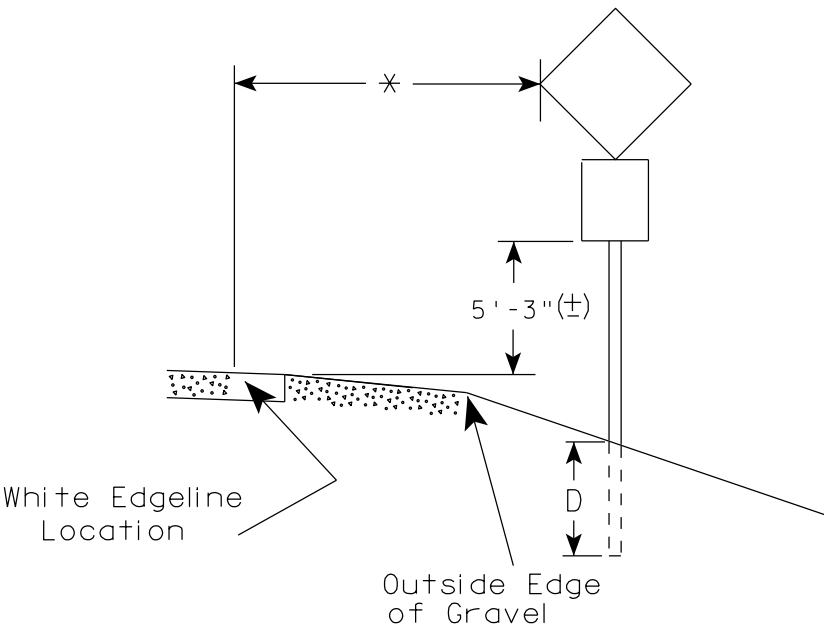
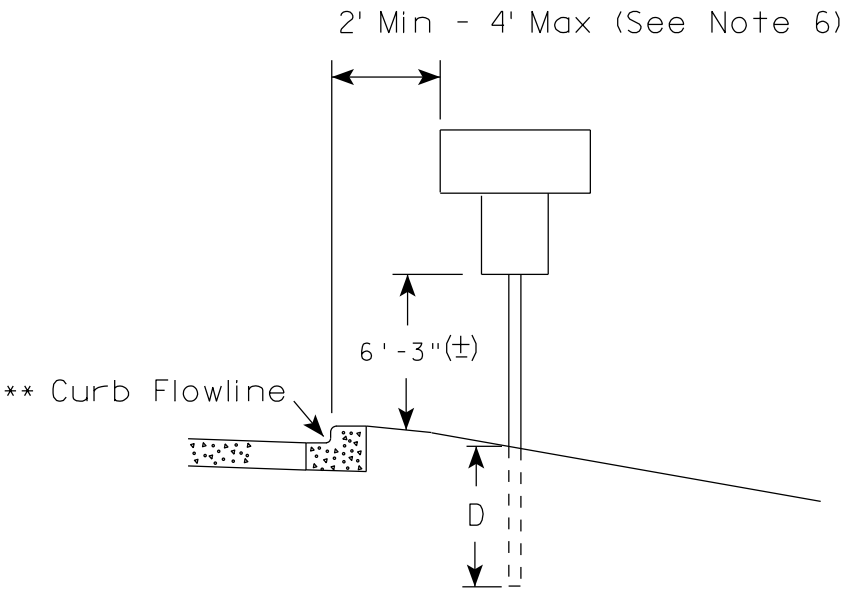
URBAN AREA



RURAL AREA (See Note 2)



- GENERAL NOTES
1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
 2. If signs are mounted on barrier wall, see A4-10 sign plate.
 3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
 4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 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" (±).



POST EMBEDMENT DEPTH

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

* * 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.

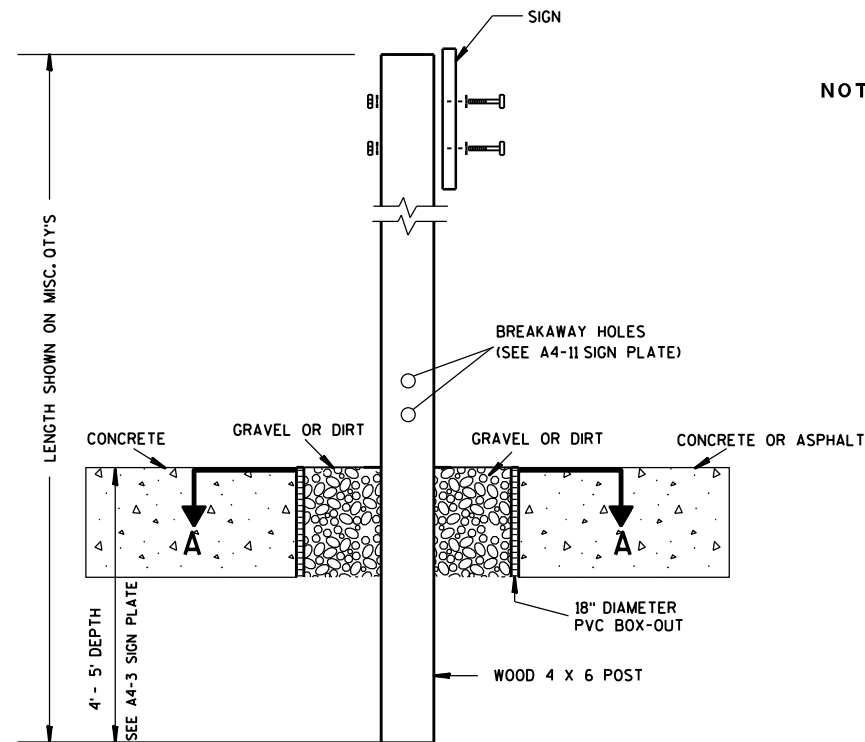
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

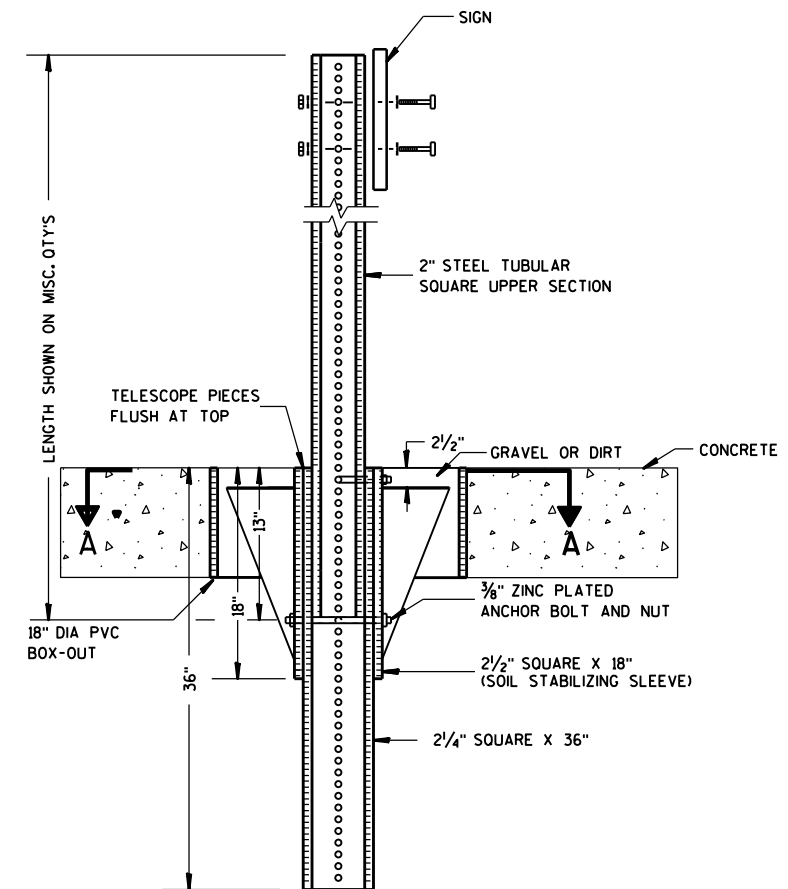
DATE 7/23/15 PLATE NO. A4-3.20



ELEVATION VIEW

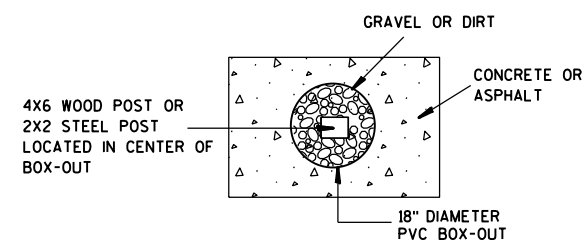
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- 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 63 A4-3B.1

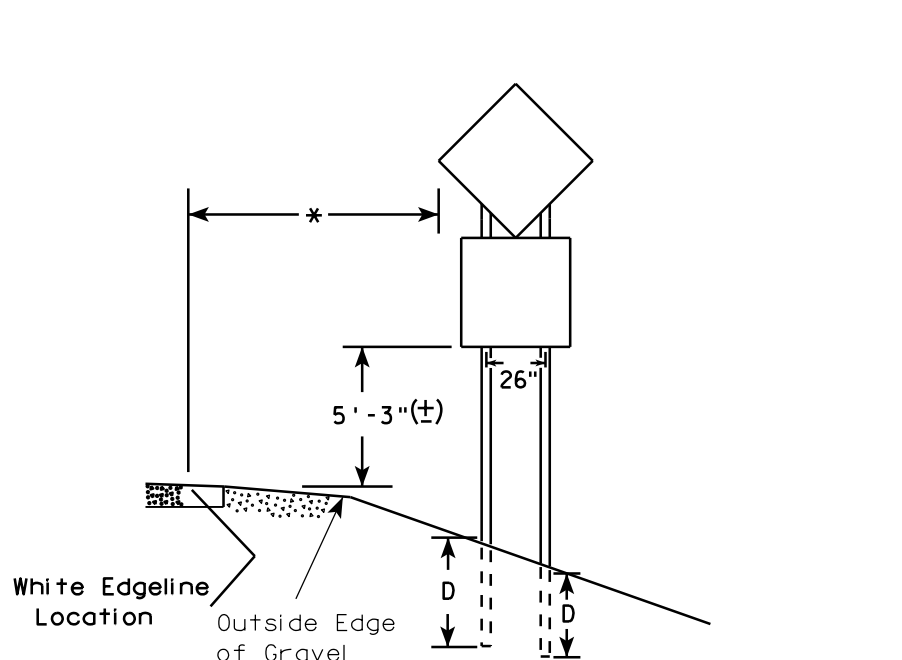
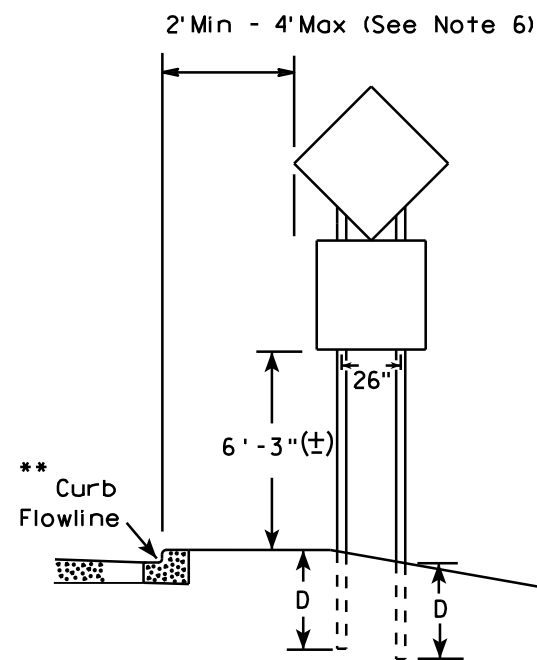
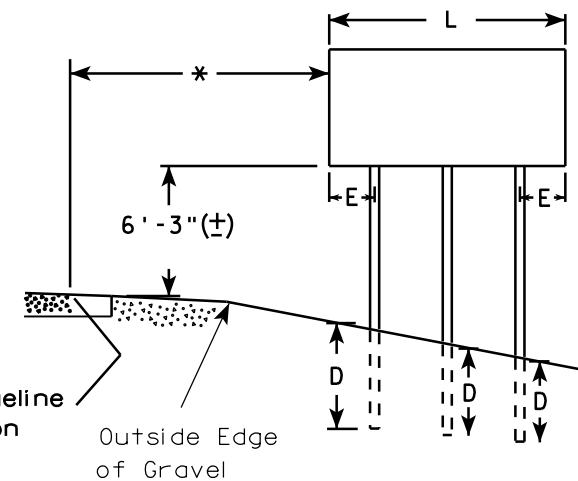
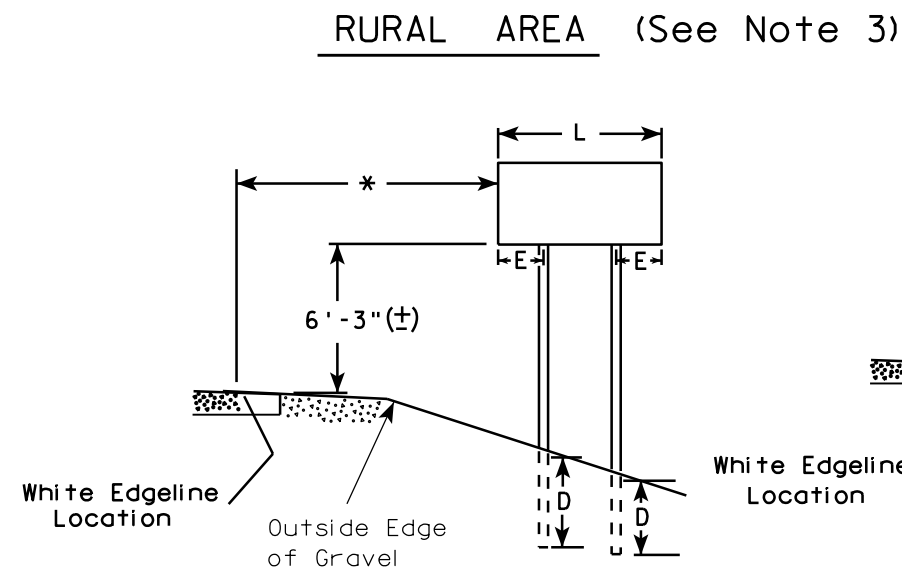
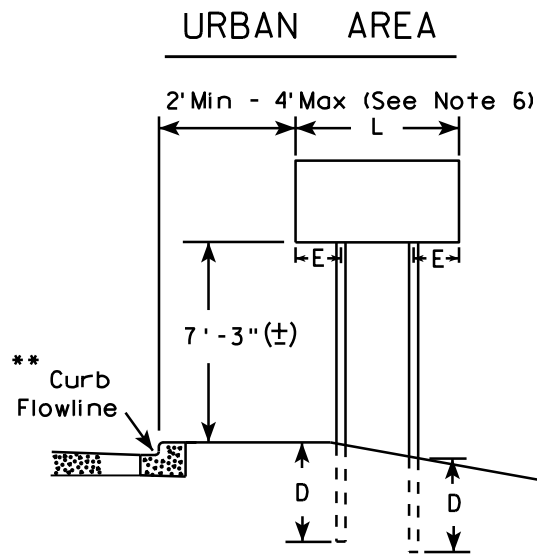
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



48" DIAMOND WARNING SIGN

48" DIAMOND WARNING SIGN

- GENERAL NOTES**
- For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
 - See tables below for required number of posts.
 - For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
 - The (±) tolerance for mounting height is 3 inches.
 - Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
 - Offset distance shall be consistent with existing signs or consistent throughout length of project.
 - Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
 - 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 120"	L/5

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

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

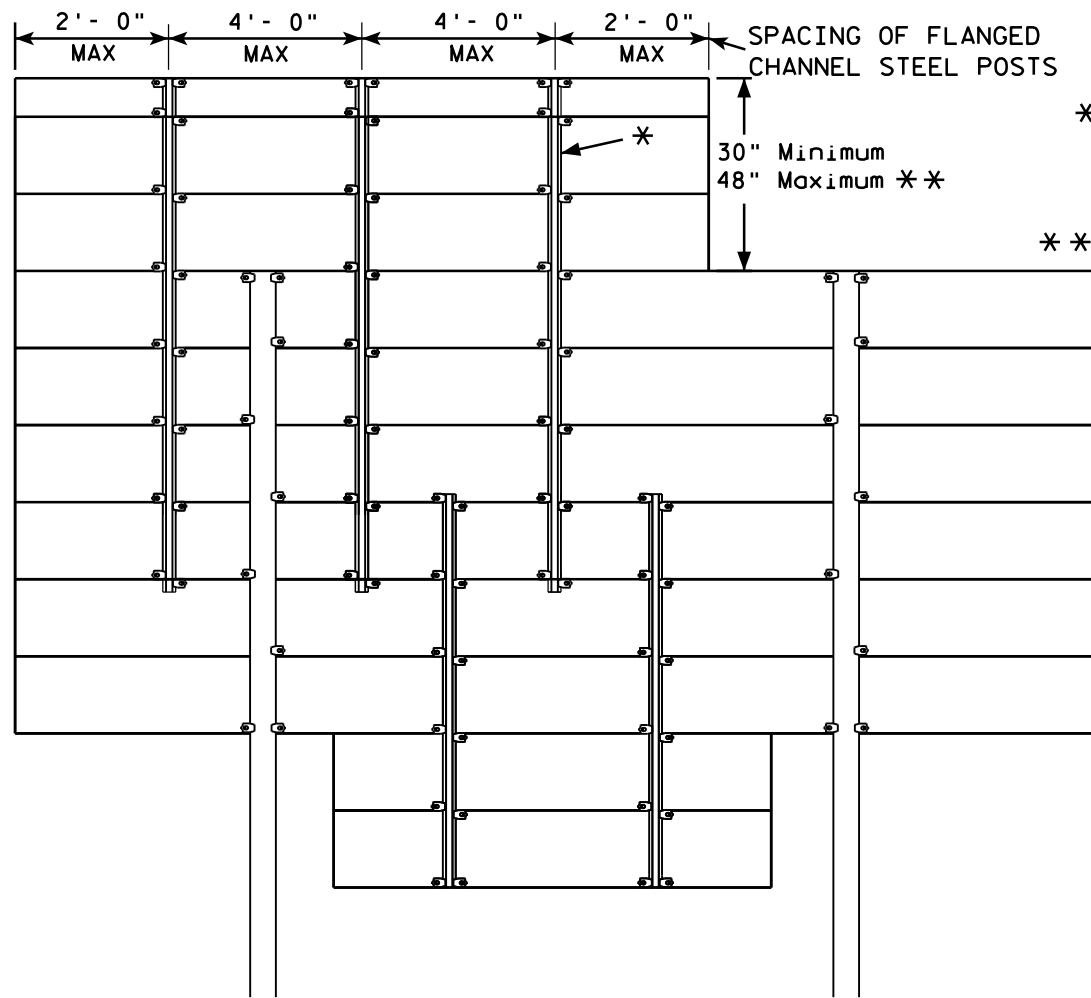
TYPICAL INSTALLATION
OF TYPE II SIGNS
ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/23/15 PLATE NO. 14

GROUND MOUNTED SIGN

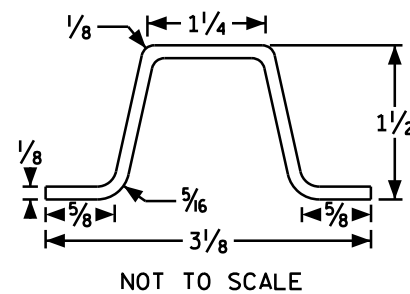


* = 2.00 lb/ft FLANGED CHANNEL, MIN. YIELD STRENGTH = 60,000 PSI (GRADE 60) GALVANIZED

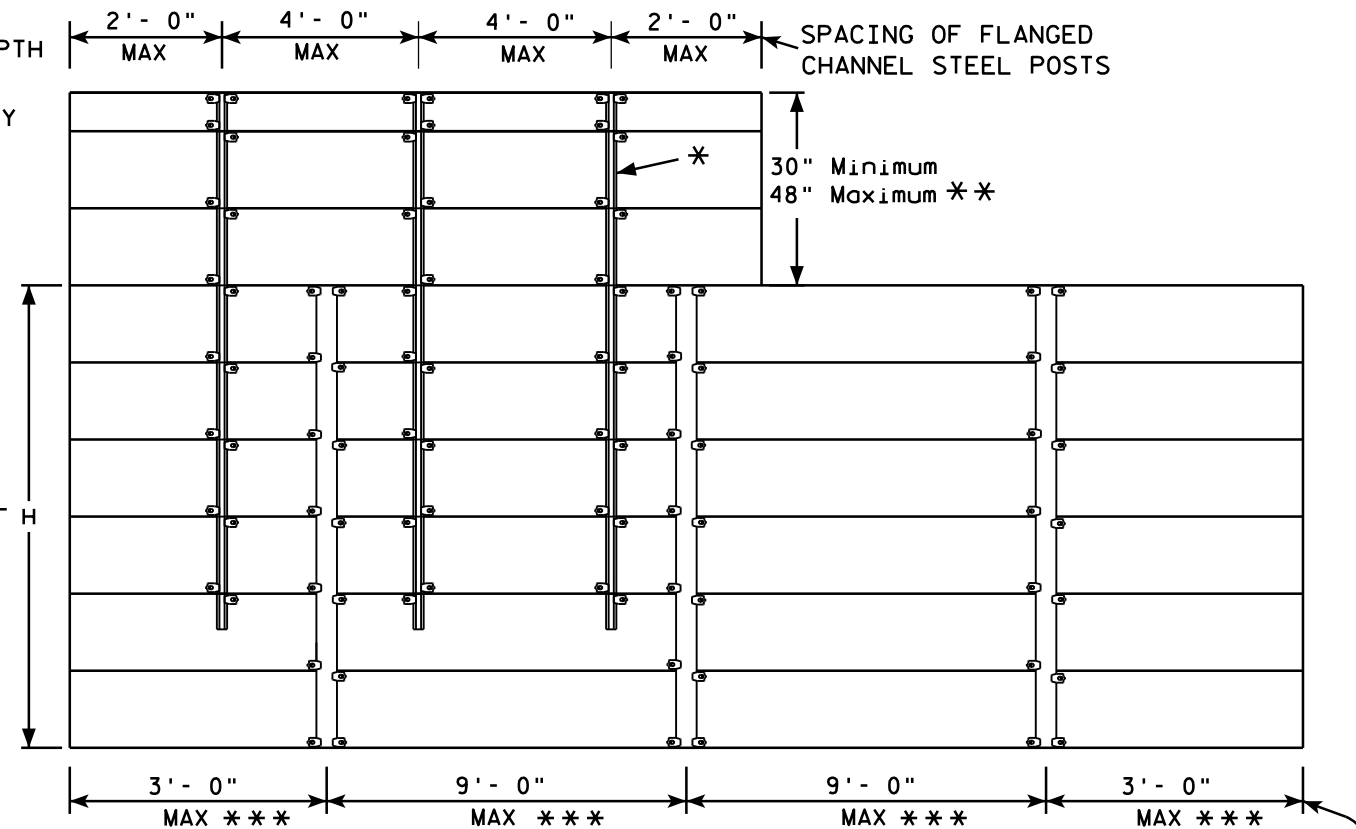
** = FOR 48" HEIGHT PANELS ON OVERHEAD STRUCTURES, ENTIRE SIGN SHALL BE CENTERED VERTICALLY ABOUT THE DEPTH OF THE TRUSS.

*** THESE SPACING DISTANCES SHALL ONLY BE USED WHEN THE MAIN SIGN HAS A MAXIMUM HEIGHT (DIMENSION H) OF 16 FT OR LESS. FOR SIGNS WITH A HEIGHT OF GREATER THAN 16 FT, STRUCTURAL CALCULATIONS SHALL BE PERFORMED.

FLANGE CHANNEL DETAIL



SIGN BRIDGE MOUNTED SIGN



SPACING OF ALUMINUM SIGN SUPPORTS 5" X 3.5" X 3.7 LBS./ft.

GENERAL NOTES

1. Flanged channel steel posts shall conform to size and material above, and shall be considered as incidental to other items in the contract.
2. Number of Flanged channel steel supports varies with length of panel and shall be spaced as shown:
PANEL LENGTH 8'-0" OR LESS = 2 CHANNELS
PANEL LENGTH 9'-0" - 12'-0" = 3 CHANNELS
PANEL LENGTH 13'-0" OR MORE = 4 CHANNELS
If the flanged channel steel posts can not be horizontally spaced as shown, they can be moved so as to securely hold the sign.

3. The EXIT NUMBER PANEL shall normally be positioned above the guide sign aligned with the right edge of the guide sign. If the guide sign indicates a left exit, the EXIT NUMBER PANEL shall be aligned with the left edge of the guide sign.
4. If the bolt holes in the top panel (EXIT NUMBER), or sub panel (NEXT EXIT) line up with holes in main sign panel, stitch bolts shall be used in addition to the channels.
5. Provide post clips for each sign as shown. (Please note the differences between a ground mounted versus Sign bridge mounted sign as far as number of clips required on the main supports or beams)
6. Structural steel sign supports shall extend to the top of the main signs, as shown on the above details.

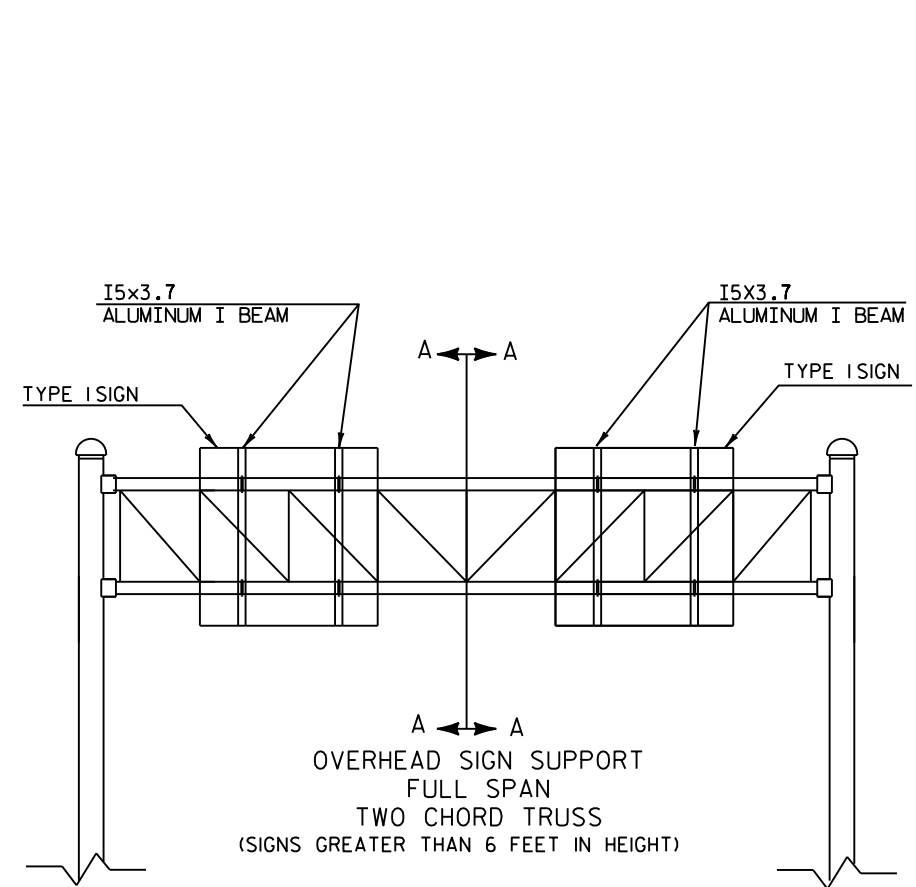
ATTACHMENT OF GUIDE SIGNS TO SUPPORTS

WISCONSIN DEPT OF TRANSPORTATION

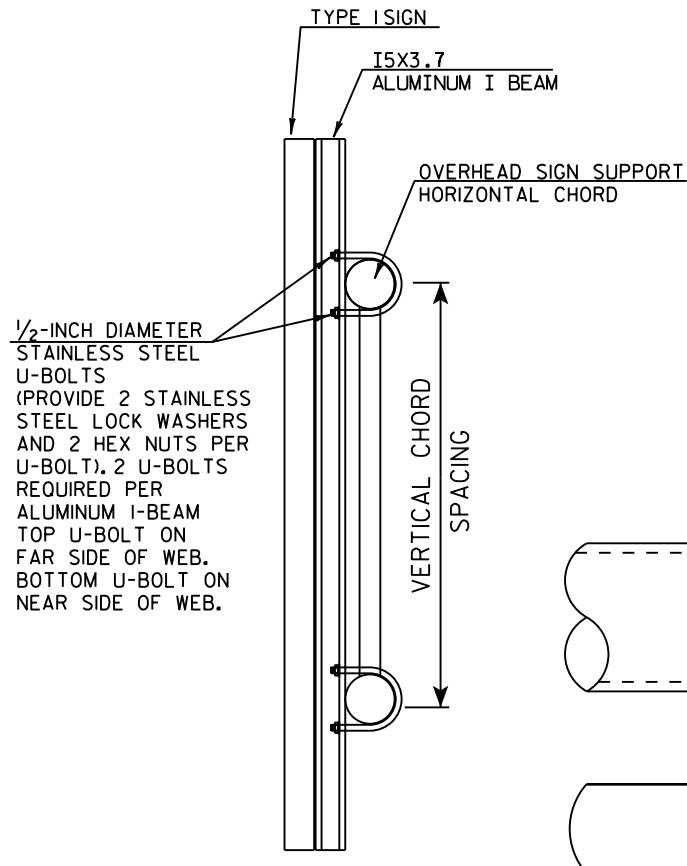
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/05/13 PLAT 65 ^4-6.12

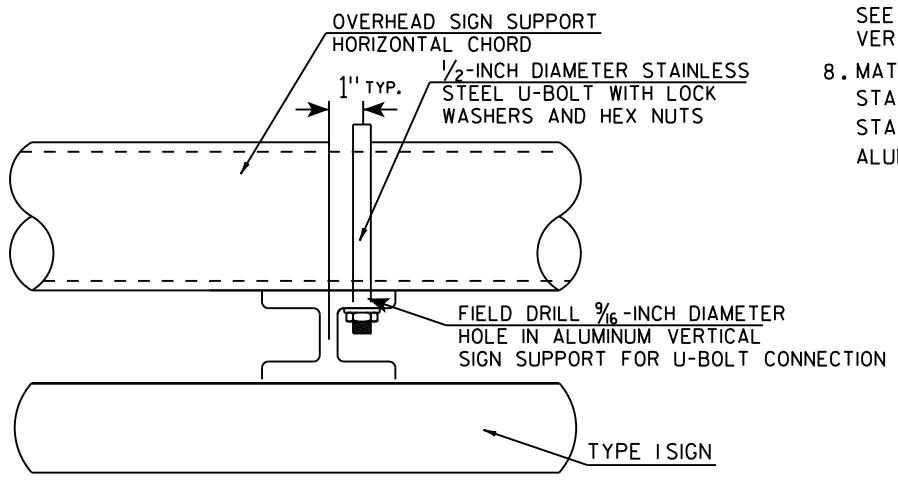
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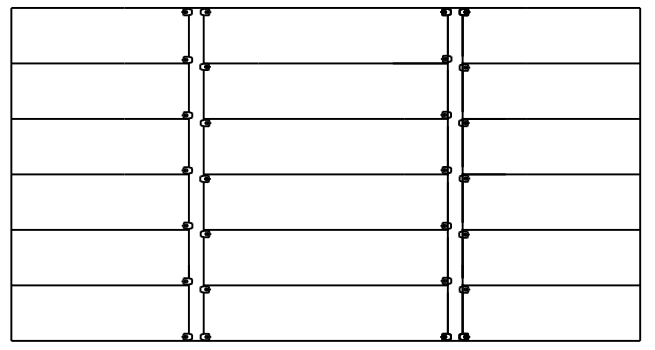
OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



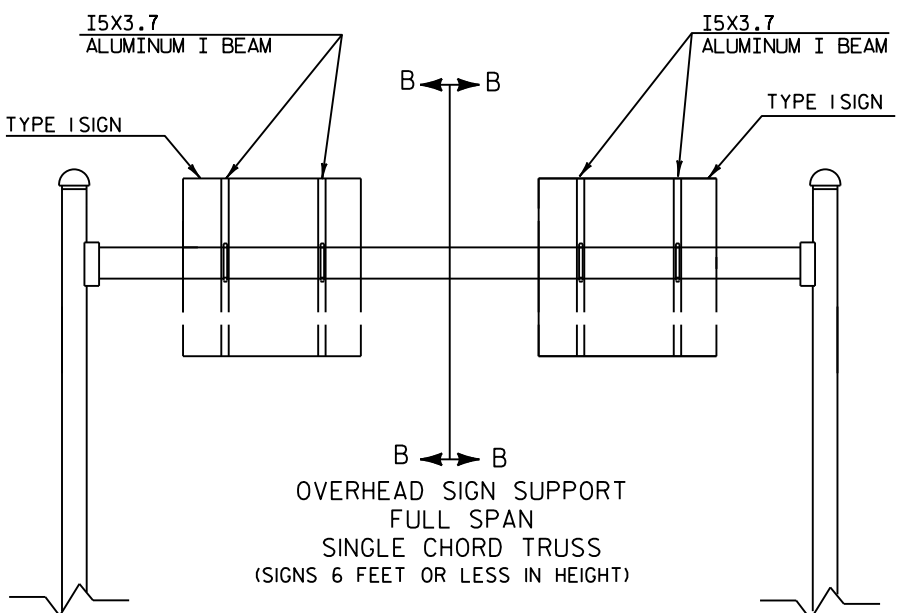
CUT SECTION A-A



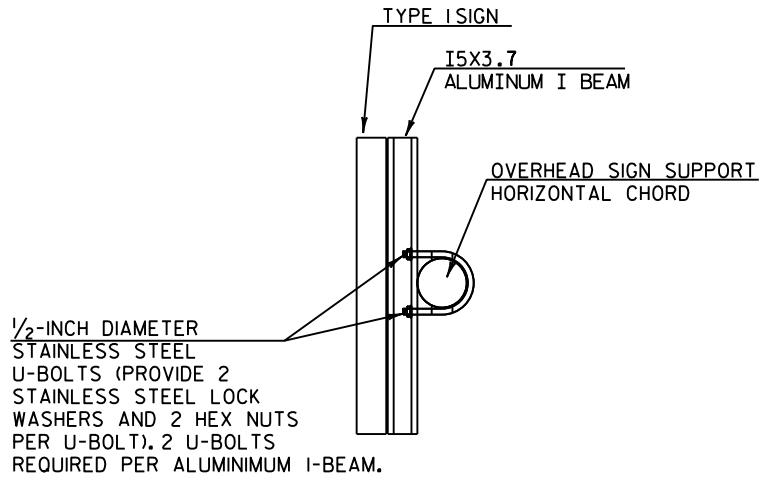
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW



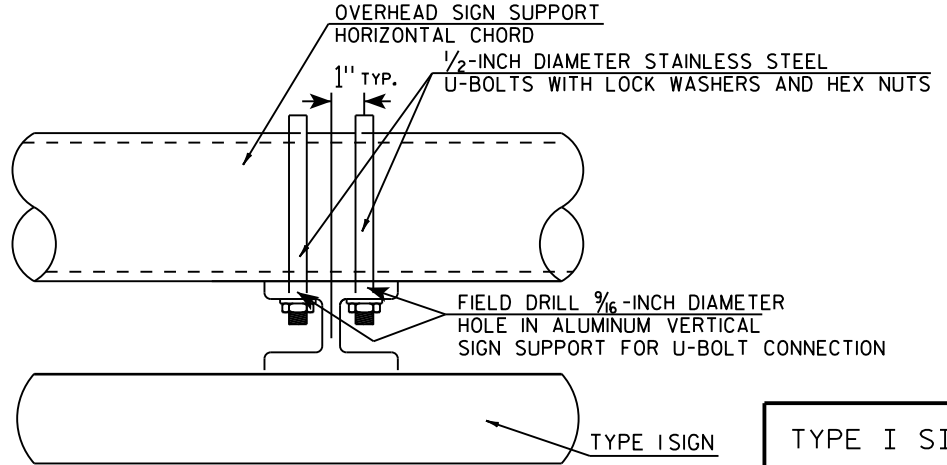
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



OVERHEAD SIGN SUPPORT
FULL SPAN
SINGLE CHORD TRUSS
(SIGNS 6 FEET OR LESS IN HEIGHT)



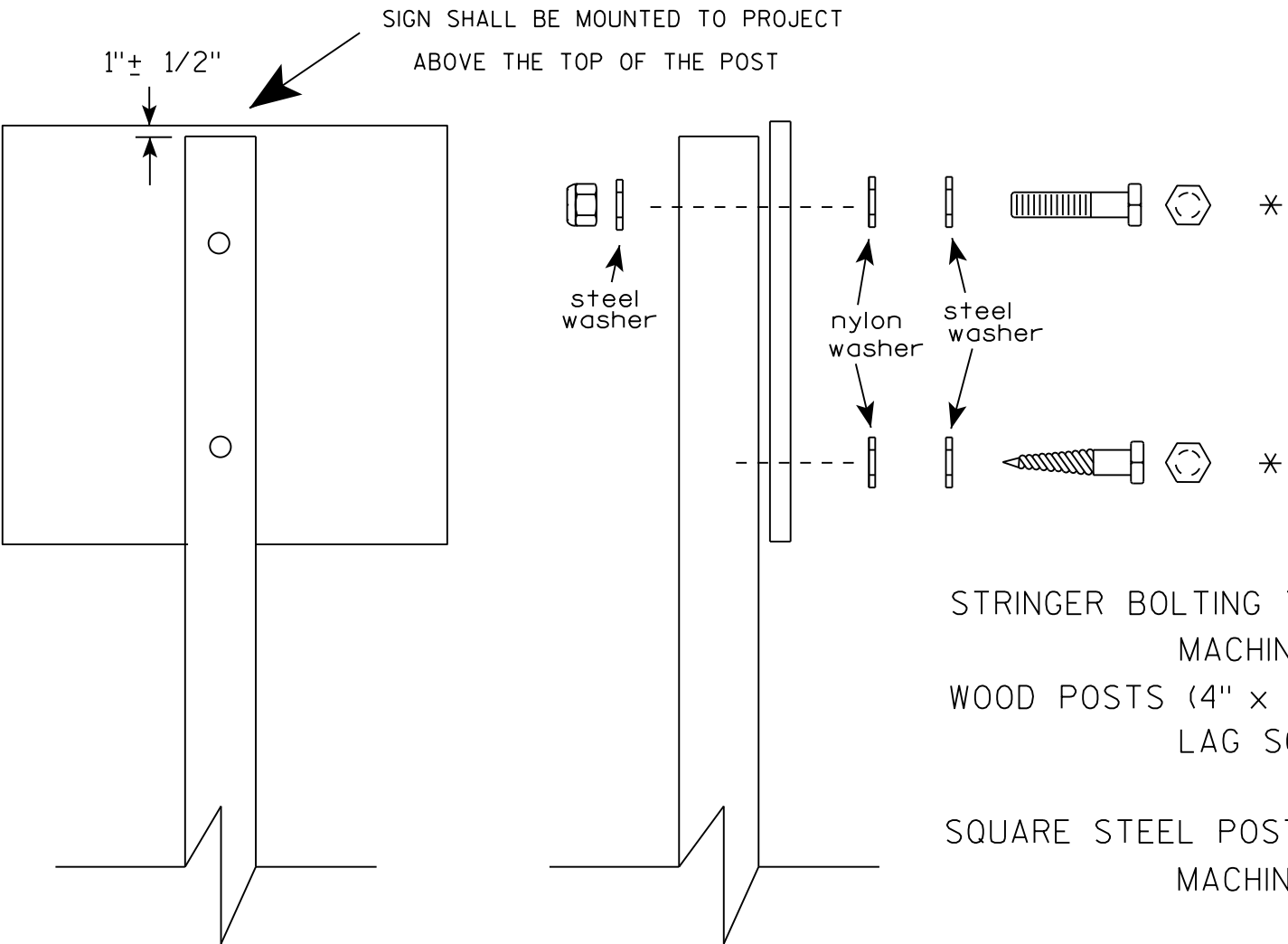
CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
SINGLE CHORD TRUSS
PLAN VIEW

TYPE I SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 11/10/15 PLAT 66 A4-7.4



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

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

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

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

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

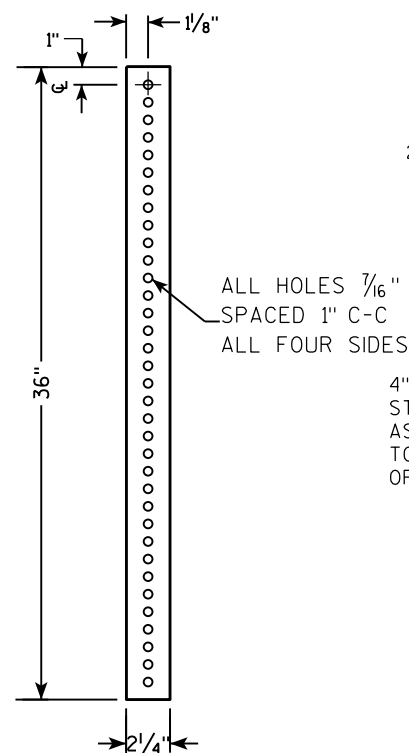
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

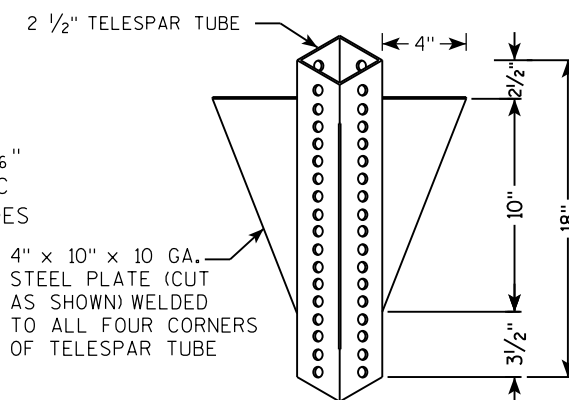
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 8/11/16 PLATE NO. A4-8.8
67

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



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

[illegible]

TECHNICAL DRAWING OF A SIGNPOST ASSEMBLY.

Side View (Left):

- Overall height dimension: LENGTH SHOWN ON MISC. Q'TYS
- Top section: 2" STEEL TUBULAR SQUARE UPPER SECTION
- Intermediate section: 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
- Bottom section: 2 1/4" SQUARE X 36"
- Vertical dimensions from the top of the stabilizing sleeve:
 - 36" (to the top of the upper section)
 - 18" (to the top of the stabilizing sleeve)
 - 12" (to the top of the bottom section)

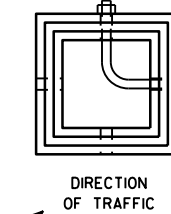
End View (Right):

- Top: SIGN
- Sign mounting: SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
- Upper section: 2" STEEL TUBULAR SQUARE UPPER SECTION
- Hole specifications: ALL HOLES 7/16" SPACED 1" C-C ALL FOUR SIDES
- Anchor bolt: 3/8" ZINC PLATED CORNER ANCHOR BOLT AND NUT
- Stabilizing sleeve: 2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
- Bottom section: 2 1/4" SQUARE X 36"
- Bottom anchor bolt: 3/8" ZINC PLATED ANCHOR BOLT AND NUT
- Vertical dimensions from the top of the stabilizing sleeve:
 - 1" (to the top of the upper section)
 - 18" (to the top of the stabilizing sleeve)
 - 12" (to the top of the bottom section)

Other Labels:

- TELESCOPE PIECES FLUSH AT TOP
- Arrows labeled 'A' point to the top and bottom of the stabilizing sleeve.

3/8" ZINC PLATED CORNER
ANCHOR BOLT AND NUT



SECTION A-A

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

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

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

DATE 2/05/15 PLAT 68 14-9.9

SHEET NO:

TE

PROJECT NO:

HWY:

COUNTY:

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

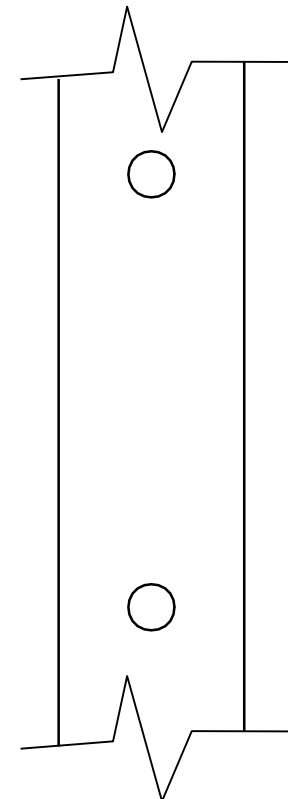
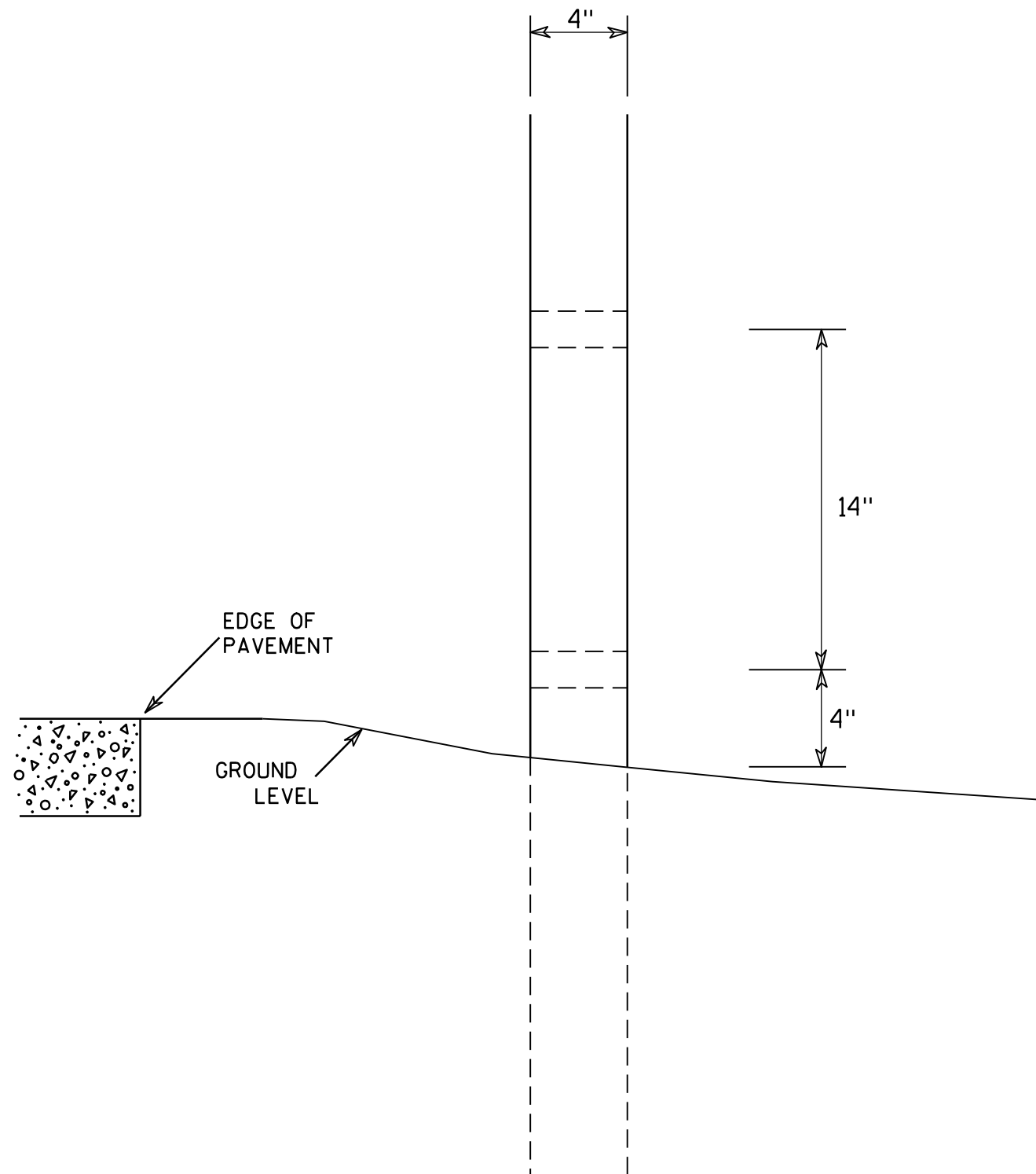
PLOT DATE : 05-FEB-2015 17:09

PLOT BY : mscs_ja

PLOT NAME :

PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



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

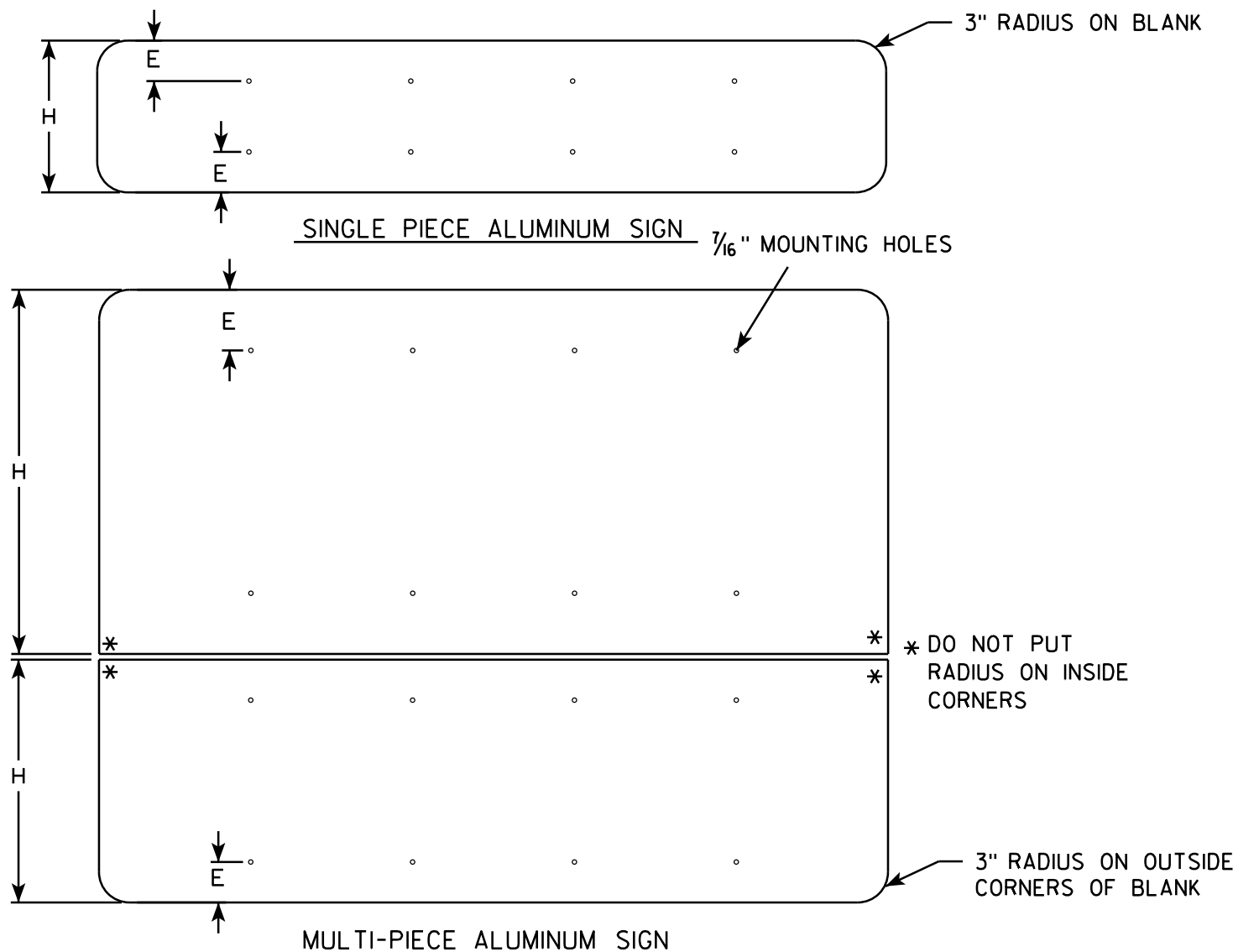
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COUNTY:

SHEET NO: 69

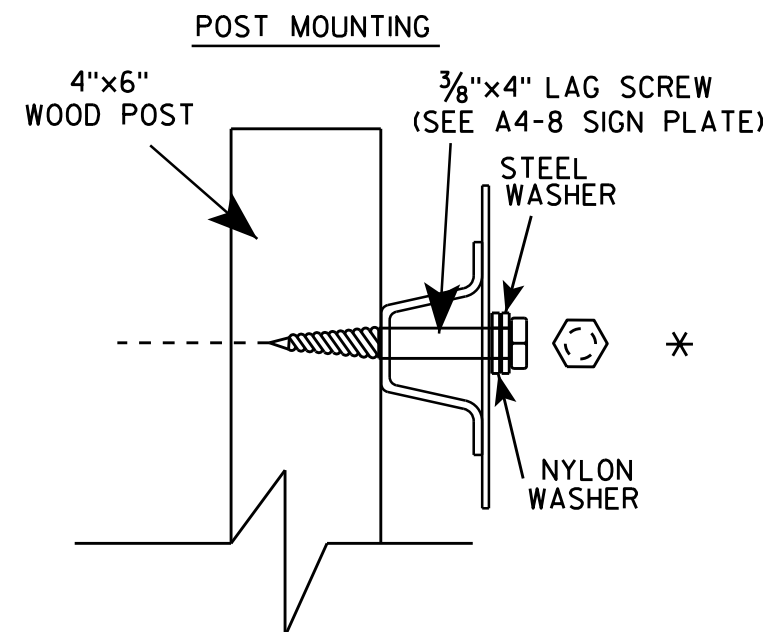
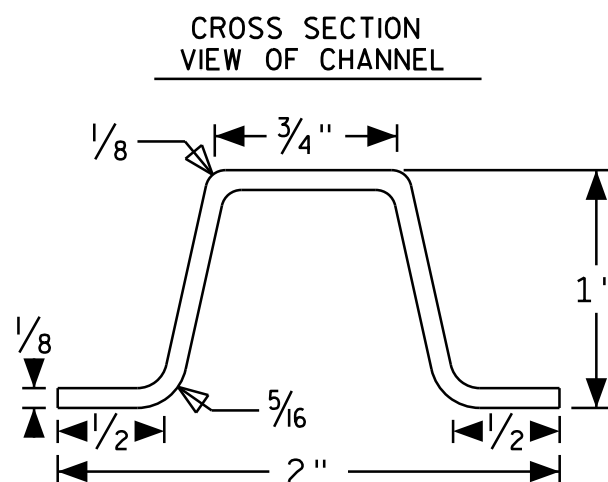
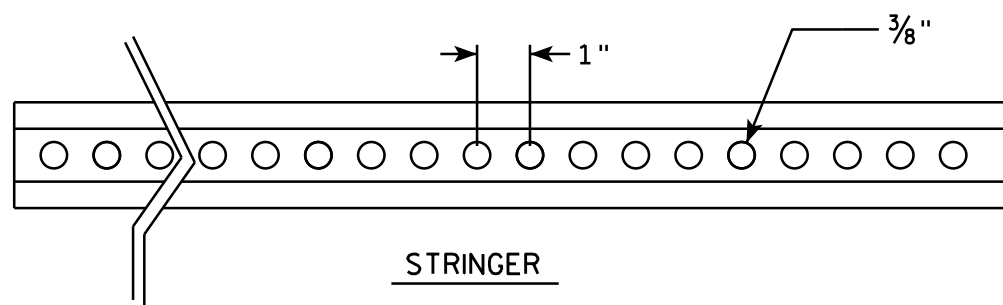
E



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	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/26/16	PLATE No A4-18.1 70

Extruded Shape

- See Detail A

✓ See Detail A

Hardware

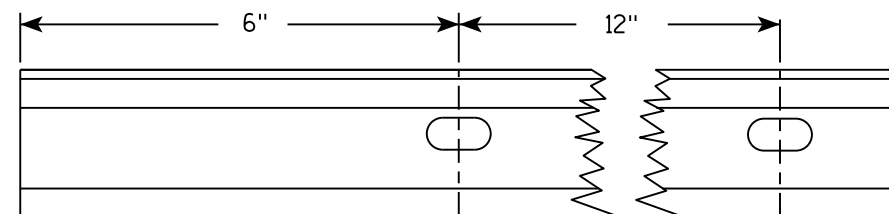
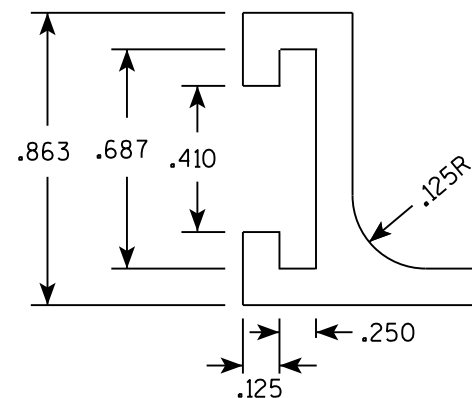
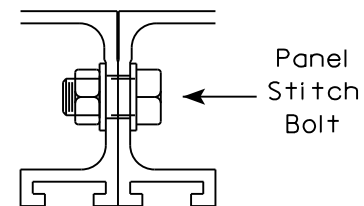
STITCH BOLT, WASHER & NUT

The hardware includes:

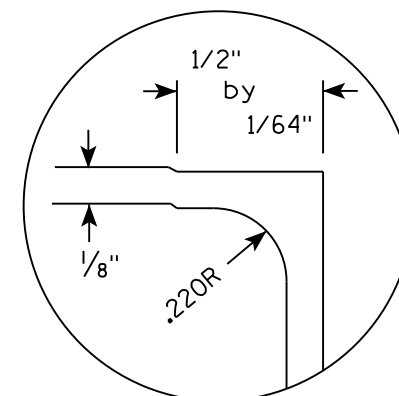
3/8 " - 16 X 3/4 " Economy Bolt 2024-T4 alloy

3/8 " - Stainless steel stop nut

3/8" X .064 Flat Washers, Alclad 2024-T4 alloy



Punch 7/16" x 7/8" oval holes beginning 6" in from end of extrusion 12" CC on both edges of 6" and 12" panels.



DETAIL A (EDGE WRAP JOINT)

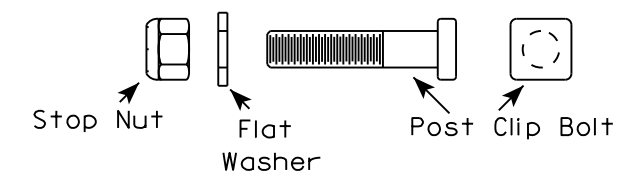
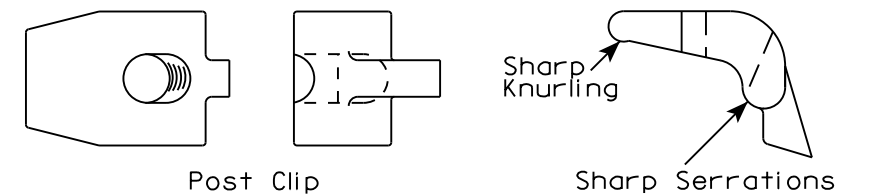
POST CLIP, POST CLIP BOLT, WASHER & NUT

Post Clip shall be Alum. Alloy 356-T6

Post Clip Bolt shall be Stainless Steel.

Flat washer shall be 3/8" X .091, Stainless Steel.

Stop nut shall be stainless steel.



NOTES

1. The contractor may select any brand of extrusion that conforms to the illustrations or meets with the approval of the engineer, but all extrusions used on this contract shall be of the same brand.
2. Panel Stitch Bolts shall be used to assemble adjacent panels. Maximum stitch bolt spacing shall be 24" C-C, and a minimum of 4 bolts shall be used to connect any two extrusions.
3. Post Clips shall be used to attach the sign panel to the sign support.
4. Edge wrapping of sign sheeting required on all extrusions joints shown in Detail A.

ALUMINUM EXTRUSIONS FOR TYPE I SIGNS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 11/30/16 PLATE NO. A5-2.10

PROJECT NO:

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A52.DGN

PLOT DATE : 30-NOV-2016 12:05

PLOT BY : \$\$...plotuser...\$\$

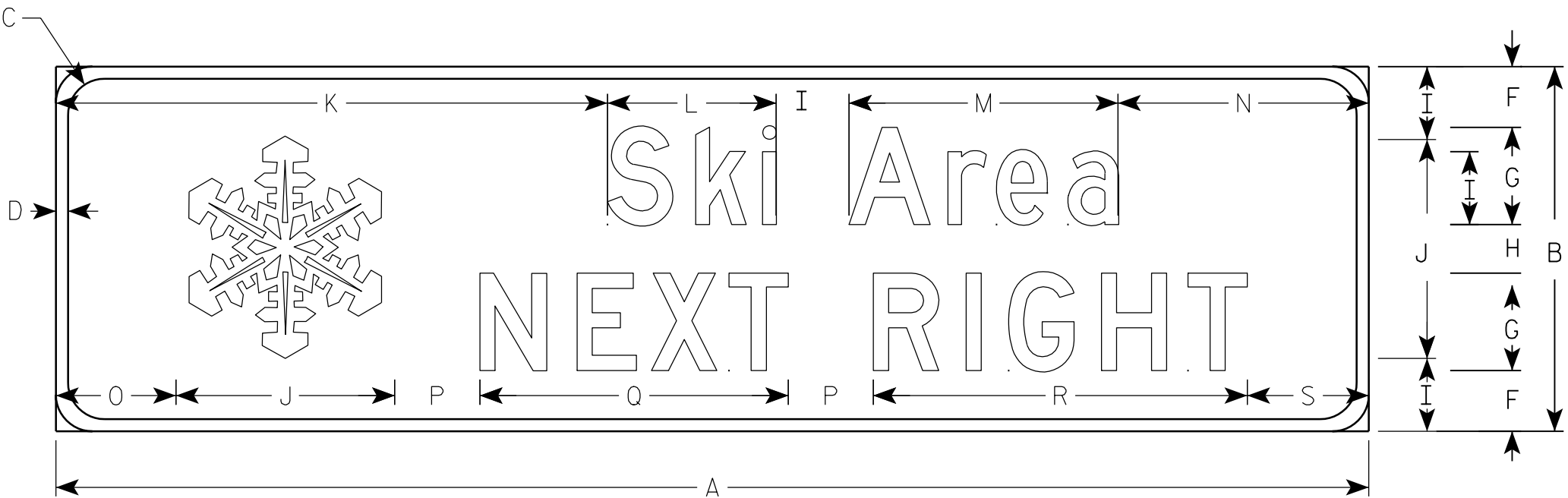
SHEET NO: 71

11

WISDOT/CADDS SHEET 42

NOTES

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



D7-81

7

Metric equivalent
for this sign is:

SIZE	
1	
2	2700 mm X 750 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	108	30	3	1		5	8	4	6	18	45 ³ / ₈	13 ⁷ / ₈	22 ¹ / ₈	20 ⁵ / ₈	9 ⁷ / ₈	7	25 ³ / ₈	30 ³ / ₄	10								22.5	2.0
3																												
4																												
5																												

PROJECT NO:

FILE NAME : C:\Users\Projects\tr_stdplate\D781.DGN

PLOT DATE : 17-OCT-2005 14:11

PLOT BY : DOTDZK

STANDARD SIGN
D7-81

WISCONSIN DEPT OF TRANSPORTATION

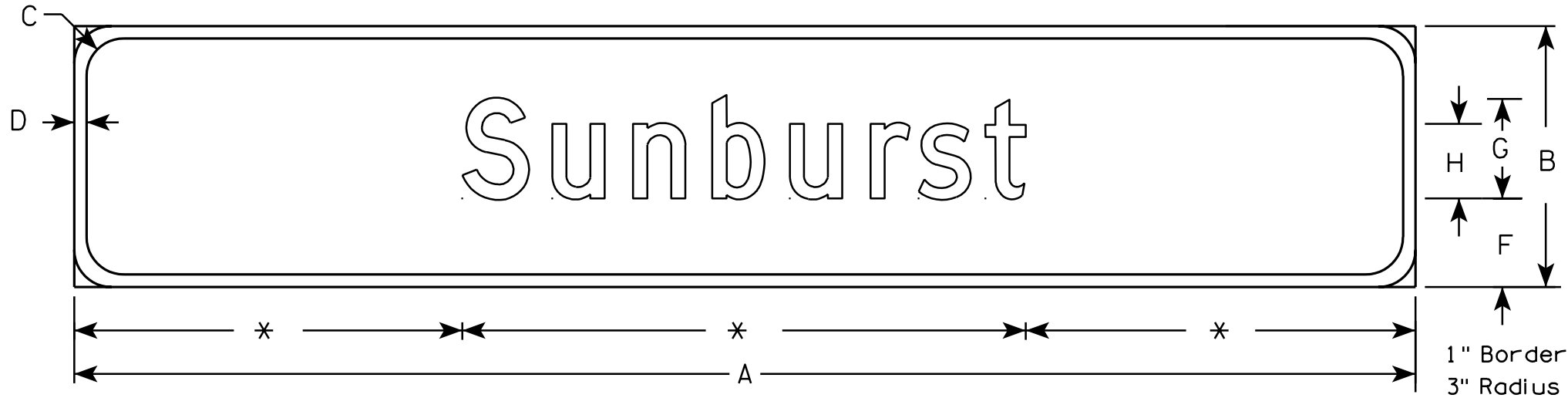
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/03/05 PLATE NO. D7-81.1

SHEET NO: 72

E

7



D7-81A

* VARIES

NOTES

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

Metric equivalent
for this sign is:

SIZE	
1	
2	2700 mm X 525 mm
3	
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	108	21	3	1		7 ⅛	8	6																			15.7	1.41
3																												
4																												
5																												

7

7

Metric equivalent
for this sign is:

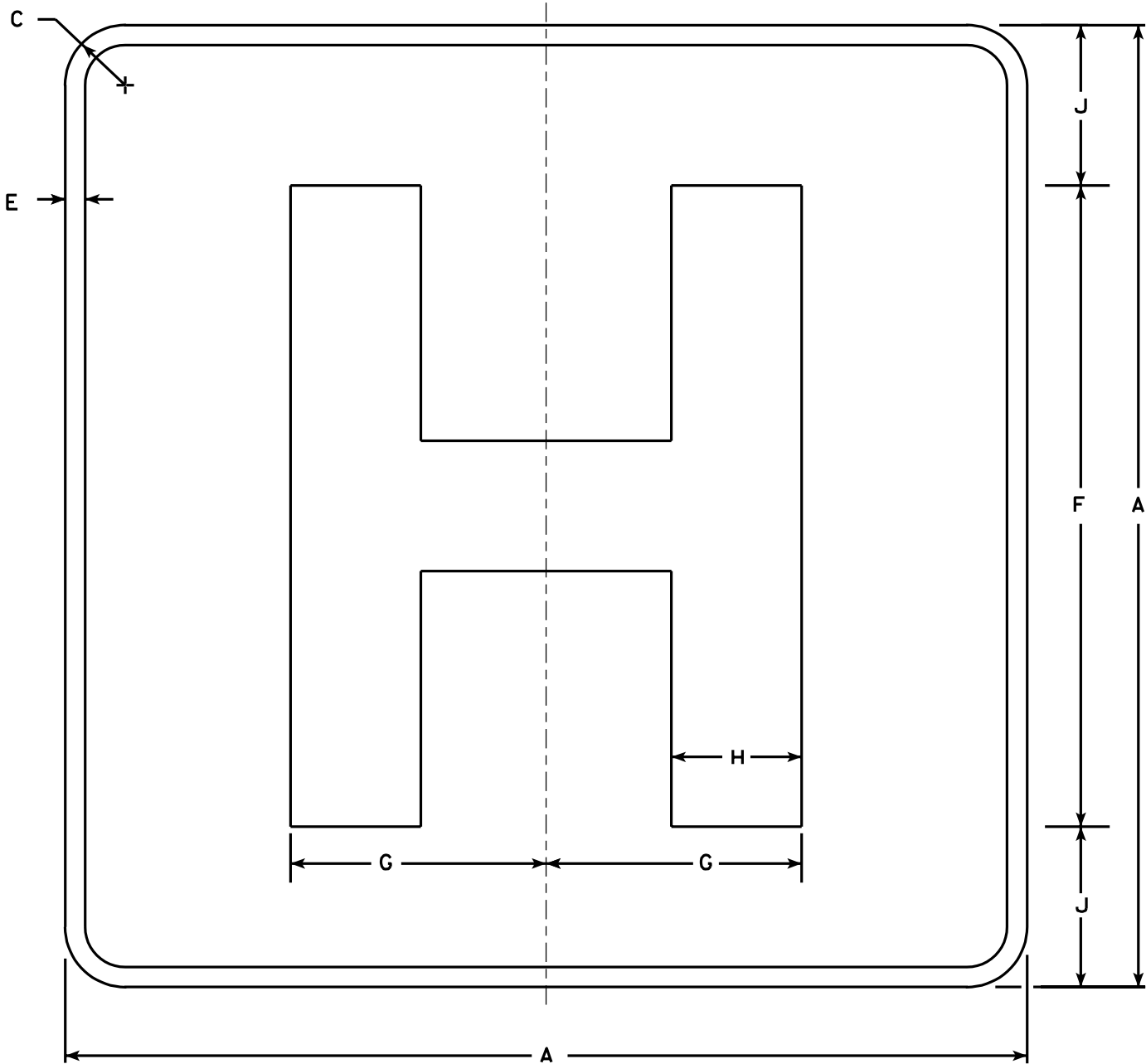
SIZE	
1	450 mmX 450 mm
2	600 mmX 600 mm
3	900 mmX 900 mm
4	X
5	X

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		1 1/8		1/2	12	4 3/4	2 3/8		3																	4.0
2	24		1 1/2		1/2	16	6 3/8	3 1/4		4																	4.0
3	36		2 1/4		3/4	24	9 1/2	4 7/8		6																	9.0
4																											
5																											

PROJECT NO:

SHEET NO: 74

E



D9-2

NOTES

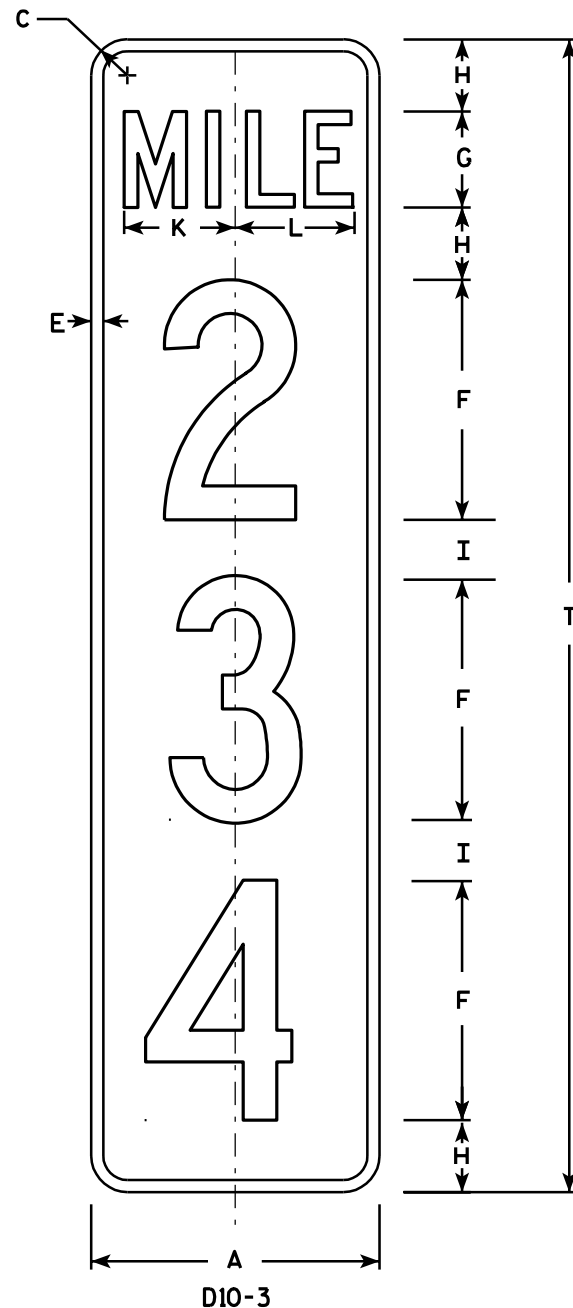
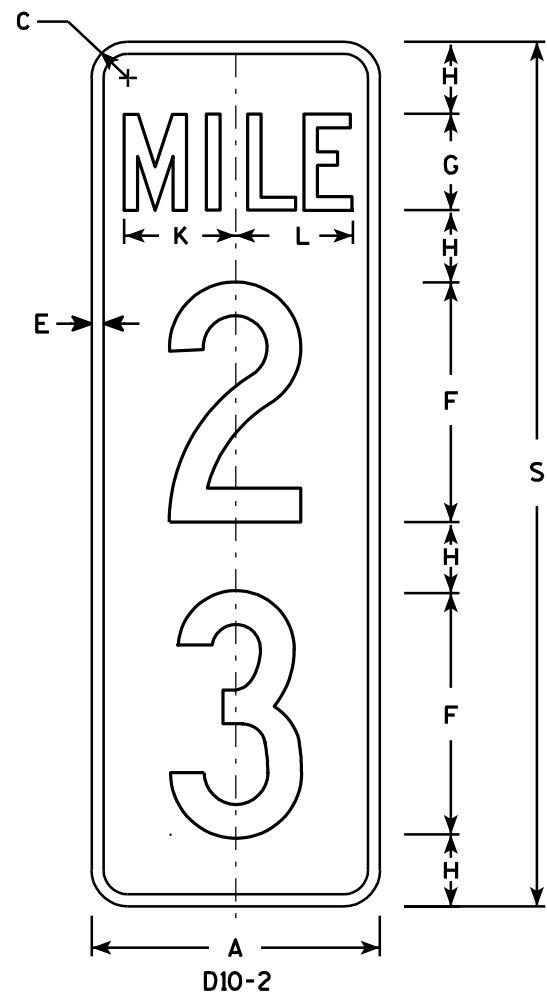
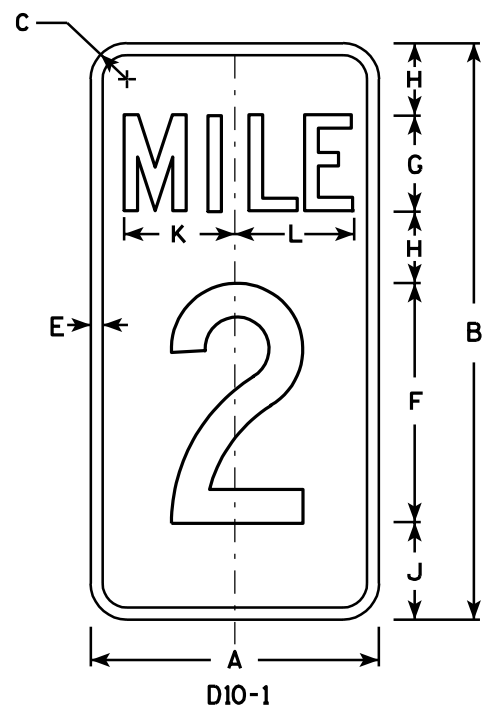
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Blue
Message - White - Type H Reflective
3. Message Series - E Modified
4. Corners may be square or rounded when base material is plywood but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

STANDARD SIGN
D9-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chester J. Spang
for State Traffic Engineer

DATE 1/15/02
PLATE NO. D9-2.4



NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White - Type H Reflective
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. Optically adjust numerals about the centerline of the sign to achieve proper balance.

7

Metric equivalent
for this sign is:

PHY. SIZE	
12 X 24	300 mm X 600 mm
12 X 36	300 mm X 900 mm
12 X 48	300 mm X 1200 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
1																										
2																										
3																										
4	12	24	1 1/2		1/2	10	4	3	2 1/2	4	4 5/8	4 7/8							36	48						
5	12	24	1 1/2		1/2	10	4	3	2 1/2	4	4 5/8	4 7/8							36	48						

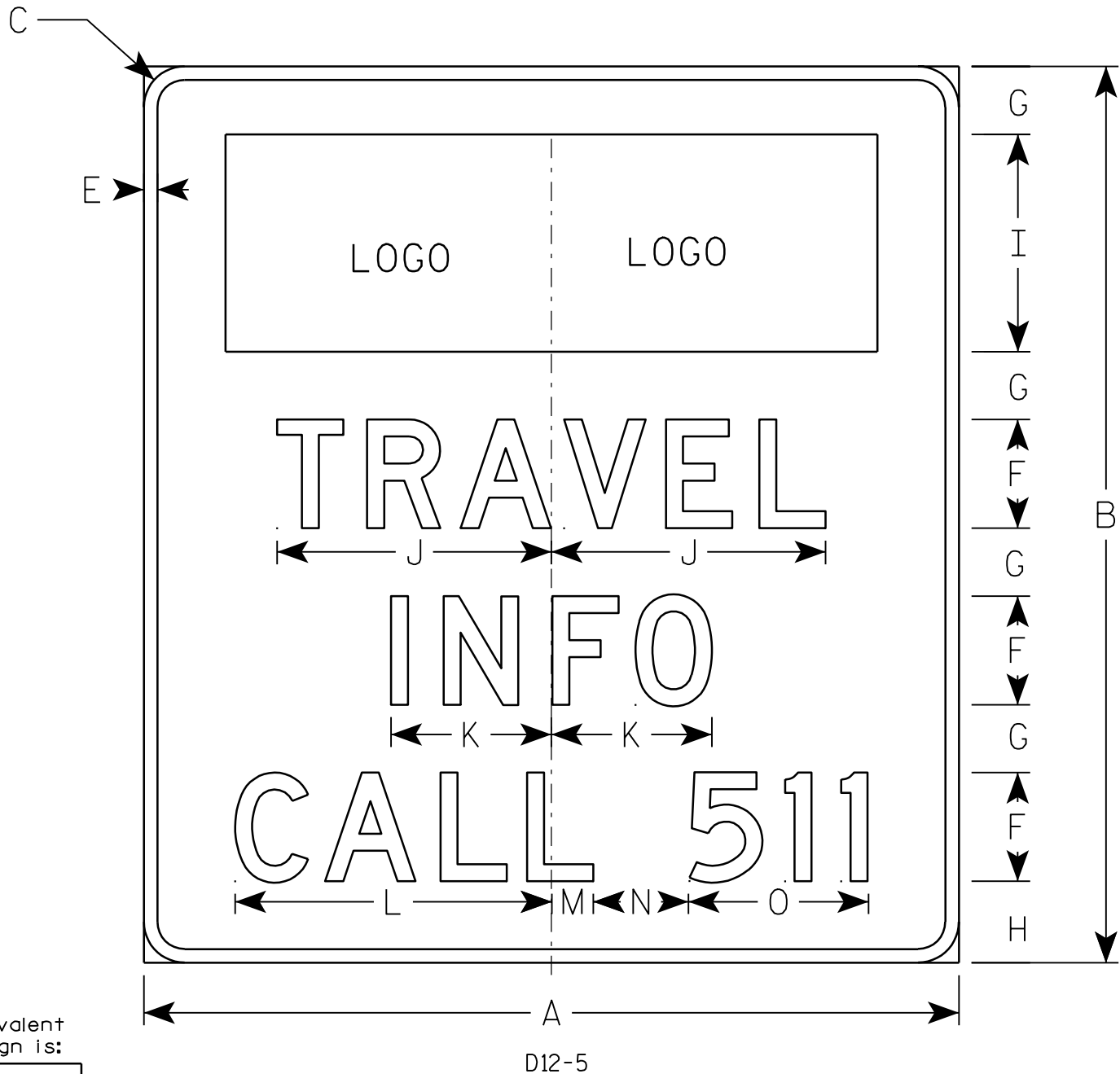
D10-1	D10-2	D10-3
Area sq. ft.	Area sq. ft.	Area sq. ft.
2.0	3.0	4.0
Area m2	Area m2	Area m2
.19	.28	.38

STANDARD SIGN D10-1 , D10-2 & D10-3	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Chester J. Spore</i> for Director, Office of Traffic
DATE 1/16/02	PLATE NO. D10-3.2

PROJECT NO:				SHEET NO: 75	E
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NOTES

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



Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 1650 mm
3	
4	
5	

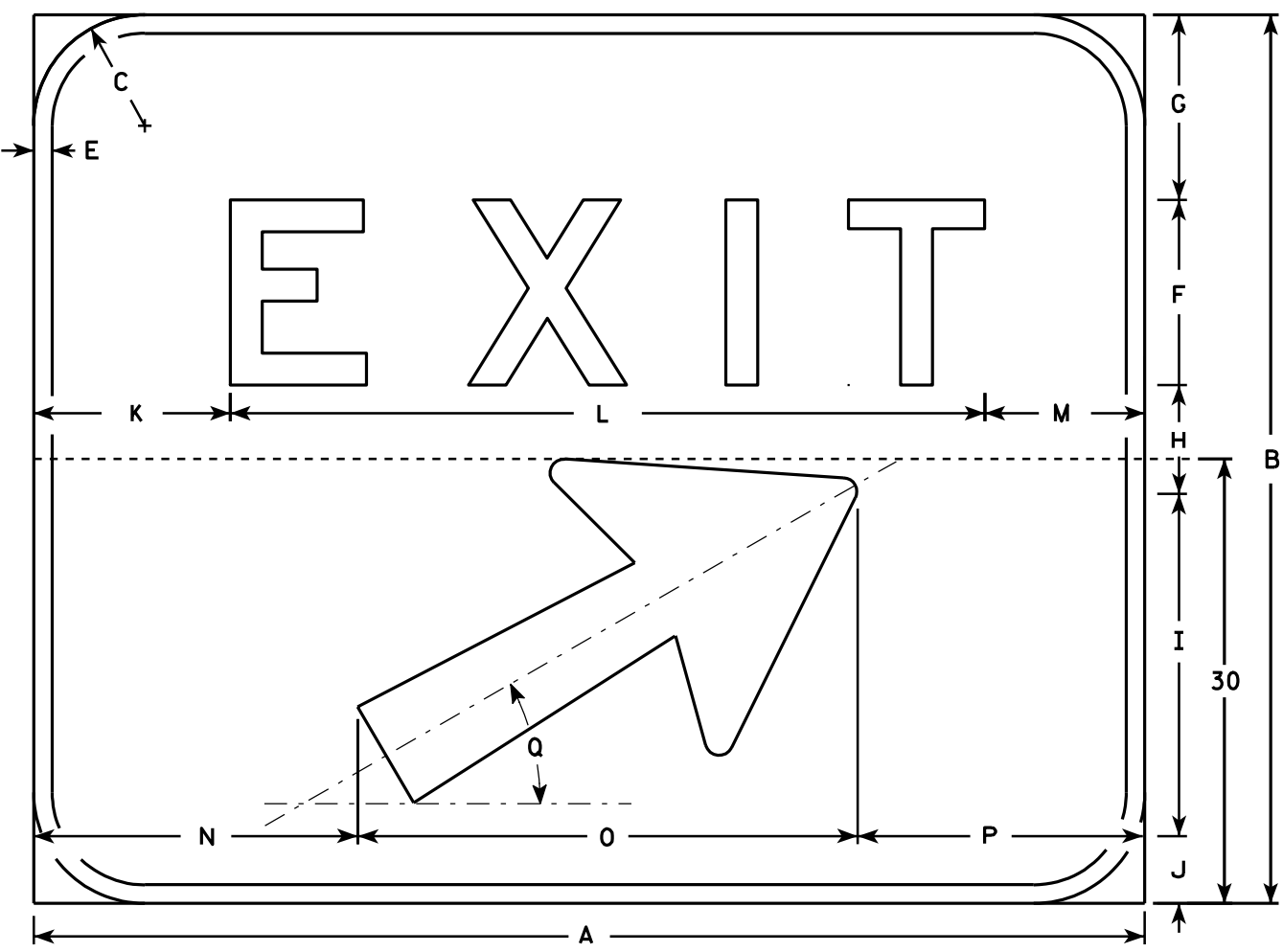
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	60	66	2 1/4		1	8	5	6	16	20 1/4	11 7/8	23 3/8	3 1/8	7	13 1/4												27.5	2.48
3																												
4																												
5																												

STANDARD SIGN
D12-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Raush*
for State Traffic Engineer

DATE 12/5/08 PLATE NO. D12-5.2



E5-1

NOTES

- 1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Green
Message - White (Type H reflective)
- 3. Message Series - E
- 4. Corners may be square or rounded but borders shall be rounded as shown.
- 5. Base material for this sign shall be plywood and shall be split into two seperate pieces for the 72 x 60 size as shown on the detail by the dashed line (-----).
- 6. Arrow is Type "A" from sign plate A1-1.
- 7. As per the Standard Spec's, this sign shall not have a vertical joint.

Metric equivalent for this sign is:

SIZE	
1	
2	
3	
4	1500 mm X 1200 mm
5	1800 mm X 1500 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2																												
3																												
4	60	48	6		1	10	10	5 7/8	18 1/2	3 5/8	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°										20.0	1.80
5	72	60	6		1	12	12	10	18 1/2	7 1/2	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°										30.0	2.70

STANDARD SIGN
E5 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Christa J. Spang
for State Traffic Engineer

DATE 6/22/00 PLATE NO. E5-1.8

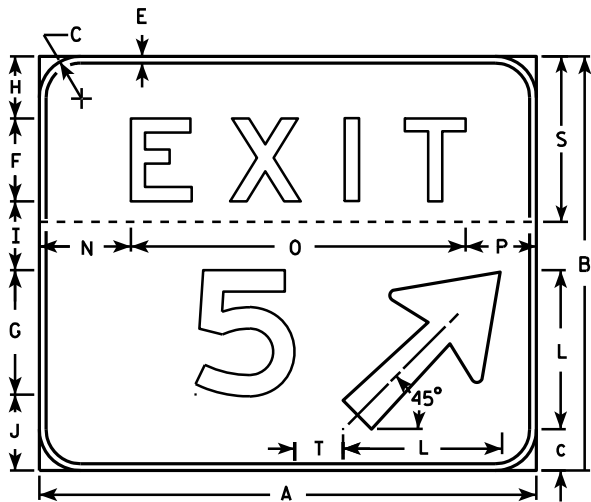
PROJECT NO:

HWY:

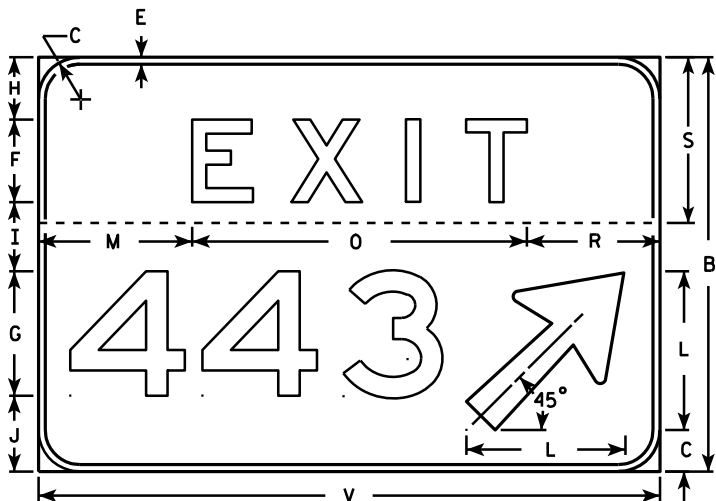
COUNTY:

SHEET NO: 77

E



NOTE: T dimension shall be measured from the back of the number to the front of the arrow



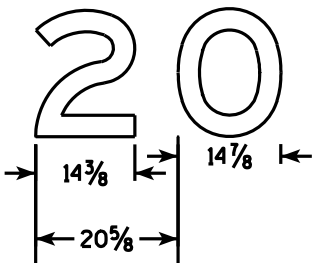
NOTES

- 1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Green
Message - White (Type H reflective)
- 3. Message Series - E
- 4. Corners may be square or rounded but the border shall be rounded as shown.
- 5. Base material for this sign shall be plywood and shall be split into two separate pieces as shown on each detail by the dashed line (-----).
- 6. Arrow is Type "A" from sign plate A1-1.
- 7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
- 8. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8			
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14			
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8			
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4			
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8			
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8			
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8			
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4			
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8			
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4			
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

EXAMPLE FOR USING SPACING CHART



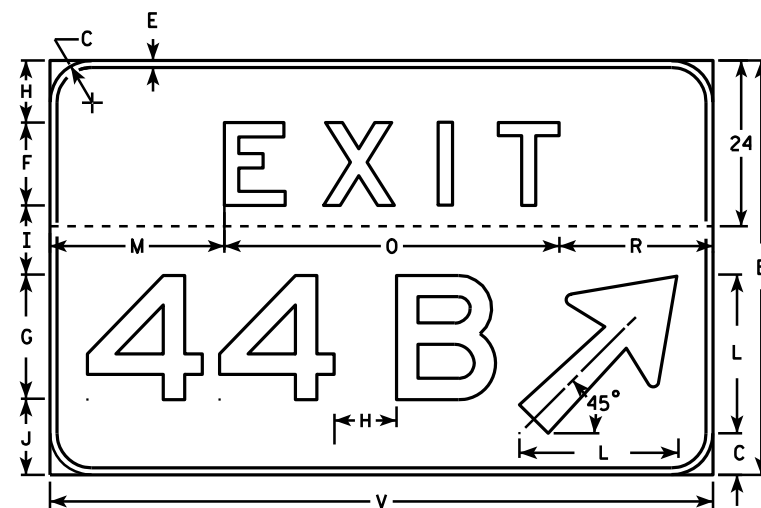
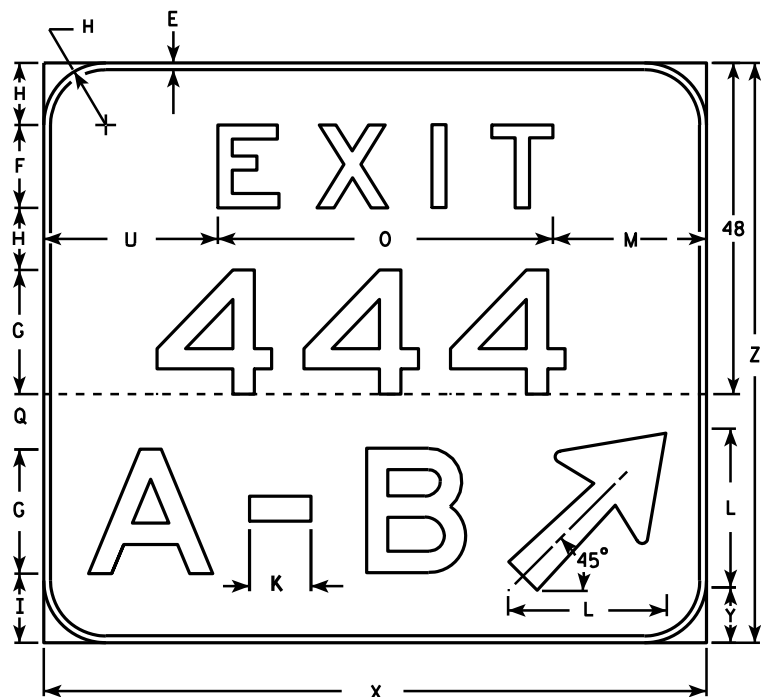
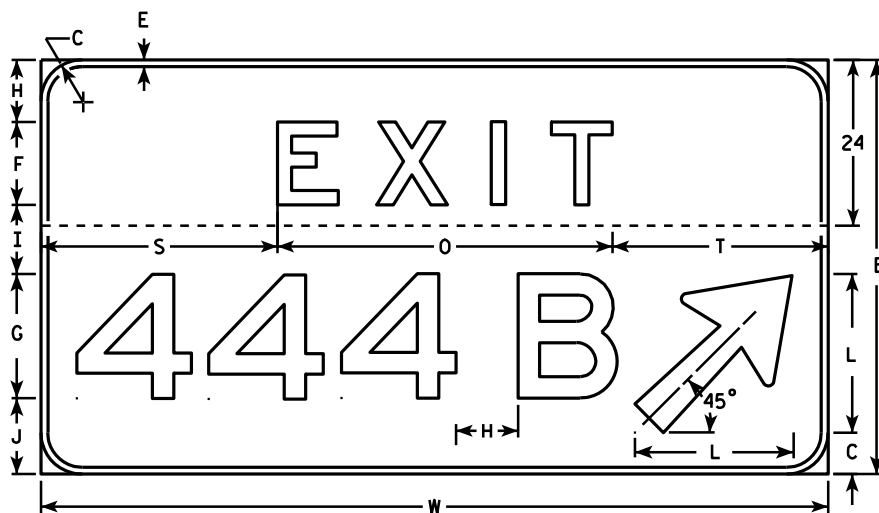
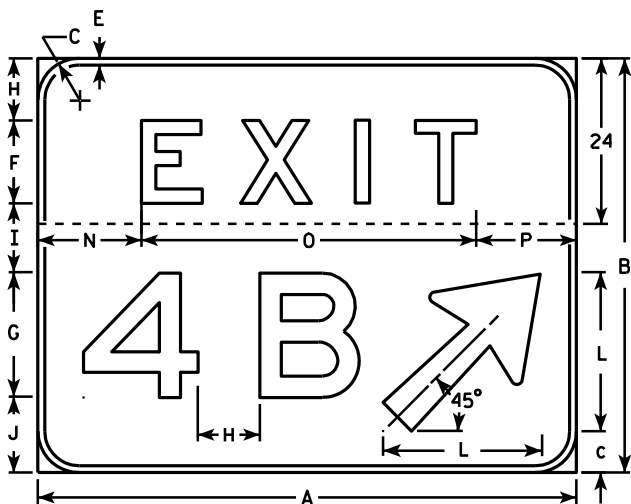
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
2																										
3																										
4																										
5	72	60	6		1	12	18	9	10	11	8 ⁷ / ₈	23	22 ¹ / ₄	13 ¹ / ₄	48 ¹ / ₂	10 ¹ / ₄		19 ¹ / ₄	24	7		90		96	7 ¹ / ₂	

1-2 Digit Bid Area	3 Digit Bid Area
Sq. Ft.	
30	37.5

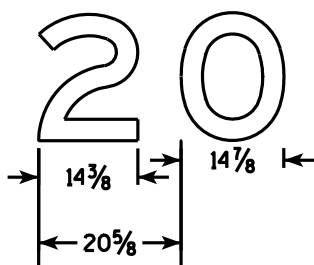
STANDARD SIGN
E5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/11/10 PLATE NO. E5-1A.12



EXAMPLE FOR USING
SPACING CHART



NOTES

1. Sign is Type II - Type H reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Green
Message - White (Type H reflective)
3. Message Series - E
4. Corners may be square or rounded but the border shall be rounded as shown.
5. Base material for this sign shall be plywood and shall be split into two separate pieces as shown on each detail by the dashed line (-----).
6. Arrow is Type "A" from sign plate A1-1.
7. Substitute appropriate message, space per the table and adjust placement on sign to achieve proper balance.
8. When two letters are hyphenated, the distance between them should be equal to two letter heights and the hyphen is spaced optically between them.
9. As per the Standard Spec's, these signs shall not have a vertical joint.

SPACING CHART FOR 18" NUMERALS

NUMBERS	WIDTH	0	1	2	3	4	5	6	7	8	9	A	B	C
0	14 7/8	21 5/8	21 5/8	21 1/4	20 3/8	21 1/4	21 1/4	21 5/8	19 7/8	22 1/8	21 5/8	19 7/8	22 1/8	22 1/8
1	5 7/8	14	14	14	13 1/8	12 1/8	14	14	12 1/4	14	14	9 7/8	14	14
2	14 3/8	20 5/8	21 1/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8	18 7/8	21 1/8	20 5/8	20 1/4	21 1/8	21 1/8
3	14 3/8	20 3/4	21 1/8	20 3/4	20 1/4	19 3/4	20 3/4	20 3/4	19 3/8	21 1/8	20 3/4	20 1/4	21 1/8	21 1/8
4	16 5/8	22 7/8	22	22 1/2	21 5/8	21 5/8	22 7/8	22 7/8	20 5/8	23 3/8	22 7/8	22 1/2	25 1/2	23 3/8
5	14 1/4	20 5/8	20 5/8	20 1/8	18 3/4	18 3/4	20 5/8	20 5/8	18 3/8	20 5/8	20 5/8	19 1/4	20 5/8	20 5/8
6	14 1/2	21 1/4	20 3/4	20 3/4	19 7/8	19 1/2	20 3/8	20 3/4	19	20 3/4	20 3/8	18	20 3/4	20 3/4
7	14 3/8	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	20 1/4	20 5/8	20 5/8
8	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/4	21 1/2	21 1/2
9	14 1/2	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18	21 3/4	21 3/4
A	18	19 3/4	19 3/4	20 1/4	19 3/4	17	19 3/4	20 5/8	18 7/8	20 5/8	19 3/4	21 5/8	23 7/8	23
B	14 1/4	21 1/2	21 1/2	20 5/8	19 1/4	19 3/4	20 5/8	21 1/2	19 5/8	21 1/2	20 5/8	19 1/2	22 3/8	21 1/2
C	14 1/4	21 1/4	21 1/4	20 7/8	20	20 7/8	20 7/8	21 1/4	19 1/2	21 3/4	21 1/4	18 3/8	21	19 3/4

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
2																										
3																										
4																										
5	78	60	6		1	12	18	9	10	11	8 7/8	23	25 1/4	15	48 1/2	14 1/2	8	22 1/4	34 1/4	31 1/4	25 1/4	96	114	96	7 1/2	84

2 Digit Bid Area	3 Digit Bid Area	4 Digit Bid Area	5 Digit Bid Area
Sq. Ft.			
32.5	40.0	47.5	56.0

STANDARD SIGN
E5-1B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 6/8/10

PLATE NO. E5-1B.12

PROJECT NO:

HWY:

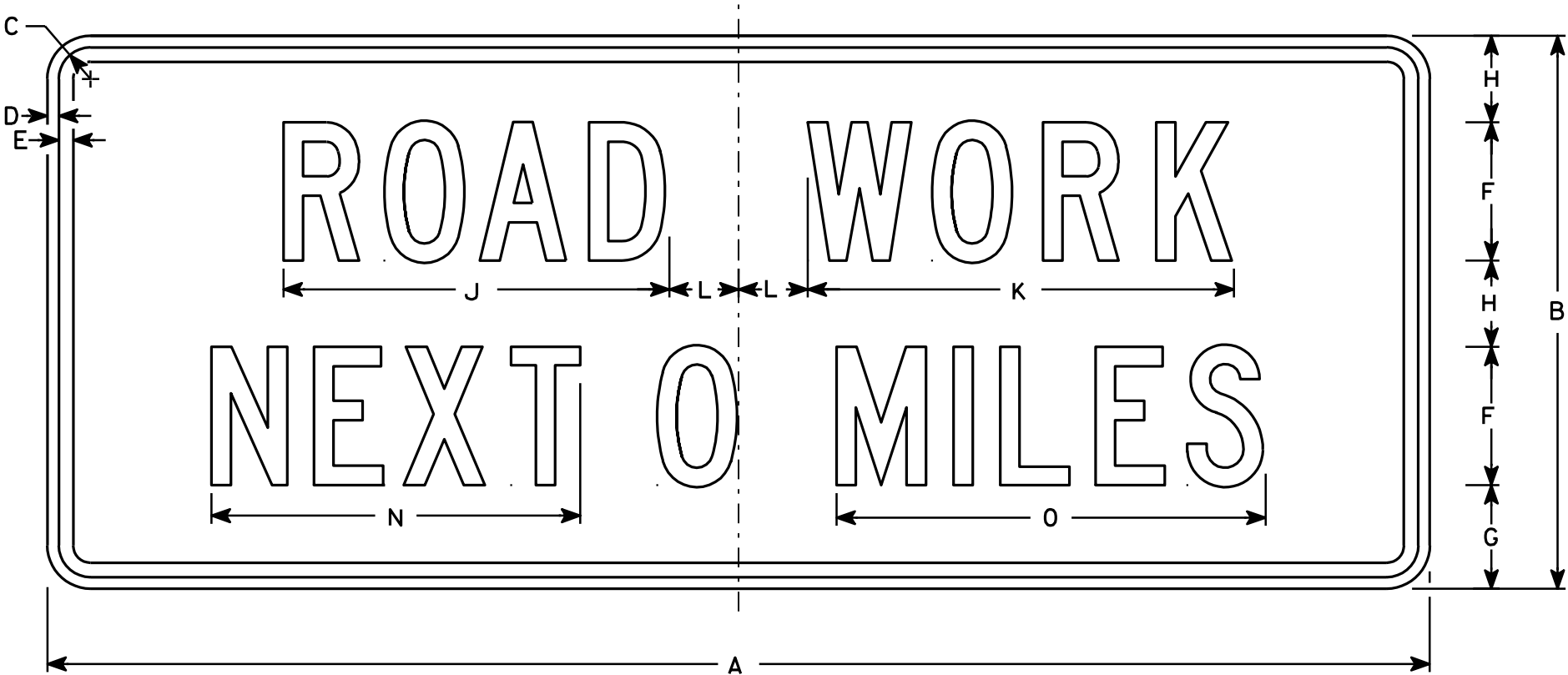
COUNTY:

SHEET NO: 79

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



G20-1

Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
5	

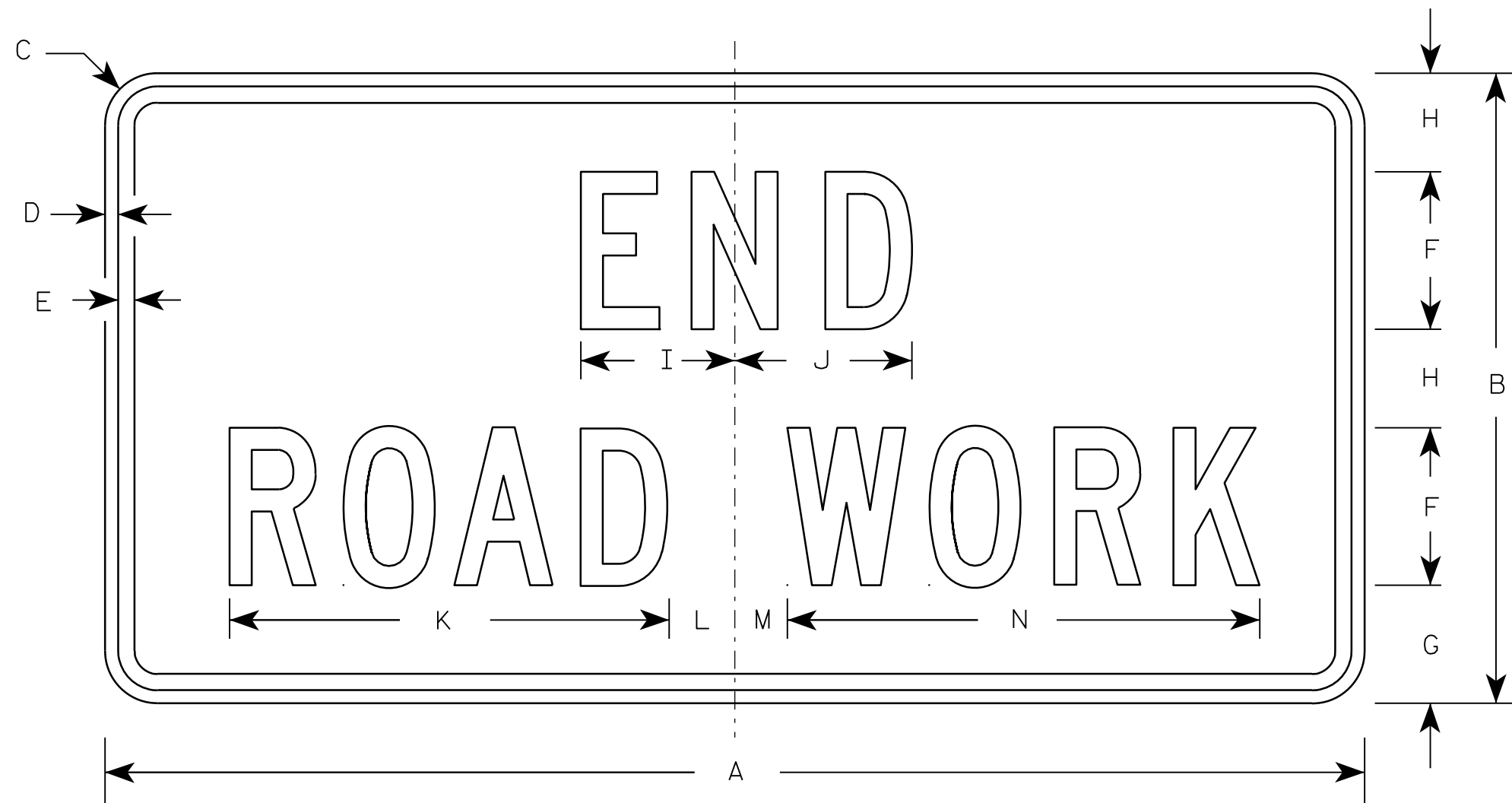
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
3																												
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4		16 3⁄4	18 1⁄2	3		16	18 5⁄8												10	.90
5																												

STANDARD SIGN
G20-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Chris J. Spay
State Traffic Engineer
DATE 4/8/97 PLATE NO. G20-1.7

7



G20-2A

Metric equivalent
for this sign is:

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

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

NOTES

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

7

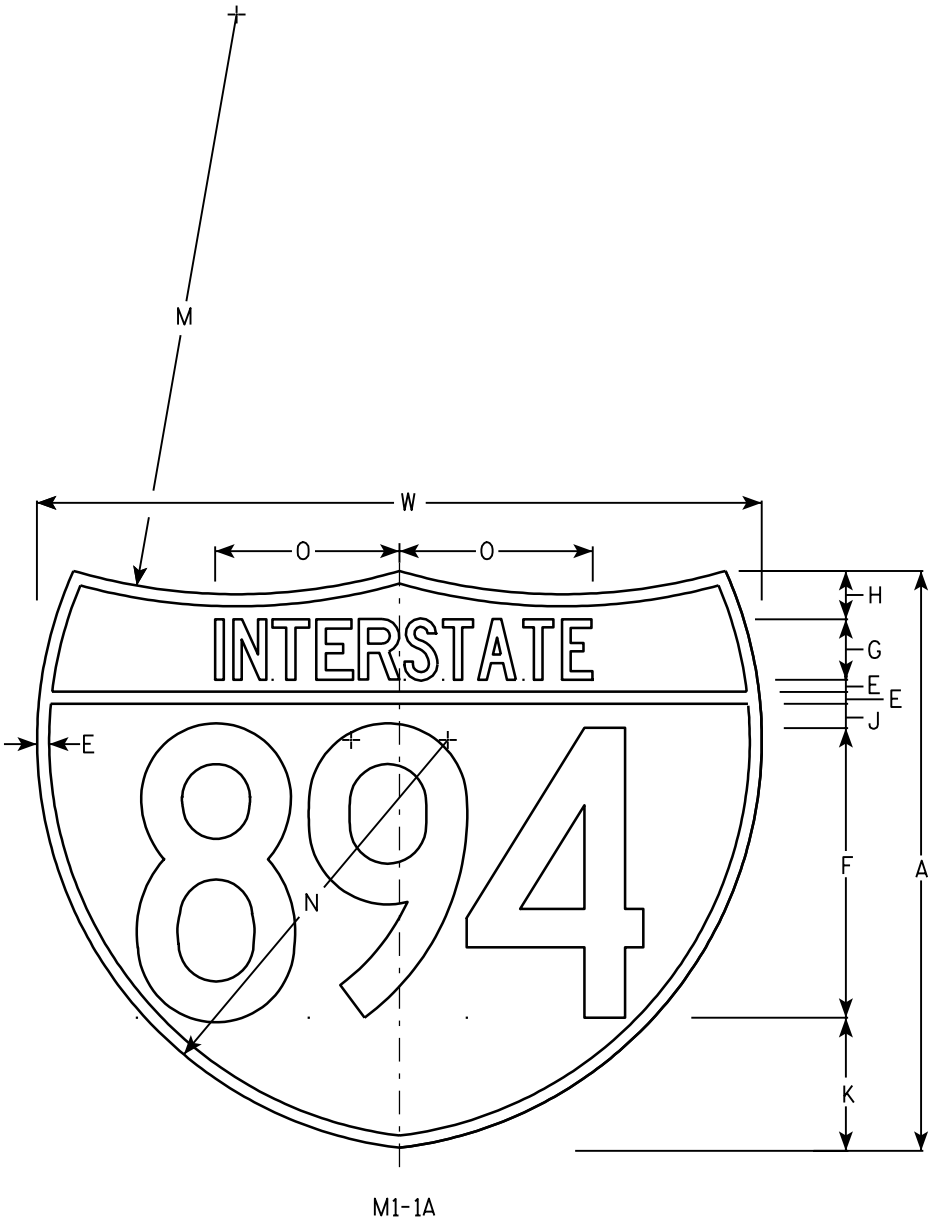
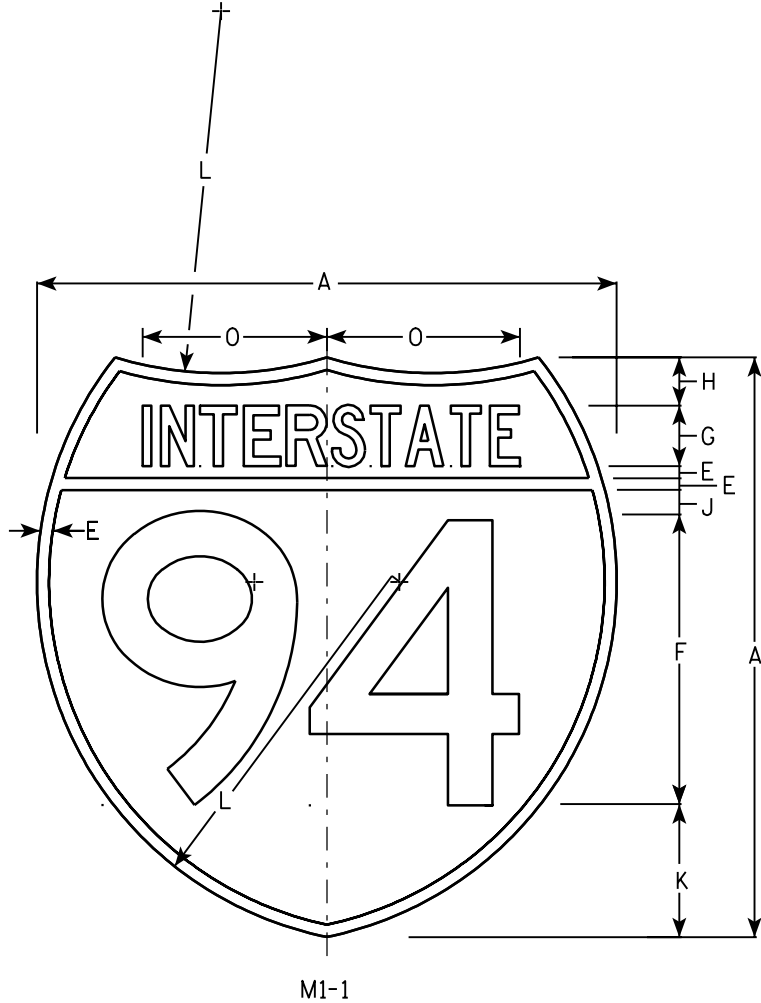
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 81

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 - Top Red - Bottom Blue (See Note 6)
Message - White - See Note 6
- 3. Message Series - See note 5
- 4. Substitute appropriate numerals & adjust spacing as per plate A10-1.
- 5. M1-1 - Numerals - D
Interstate - C
M1-1A - All copy - C
- 6. Permanent Signs
Message - Type H Reflective
Detour or other temporary signs
Background - Reflective
Message - Reflective

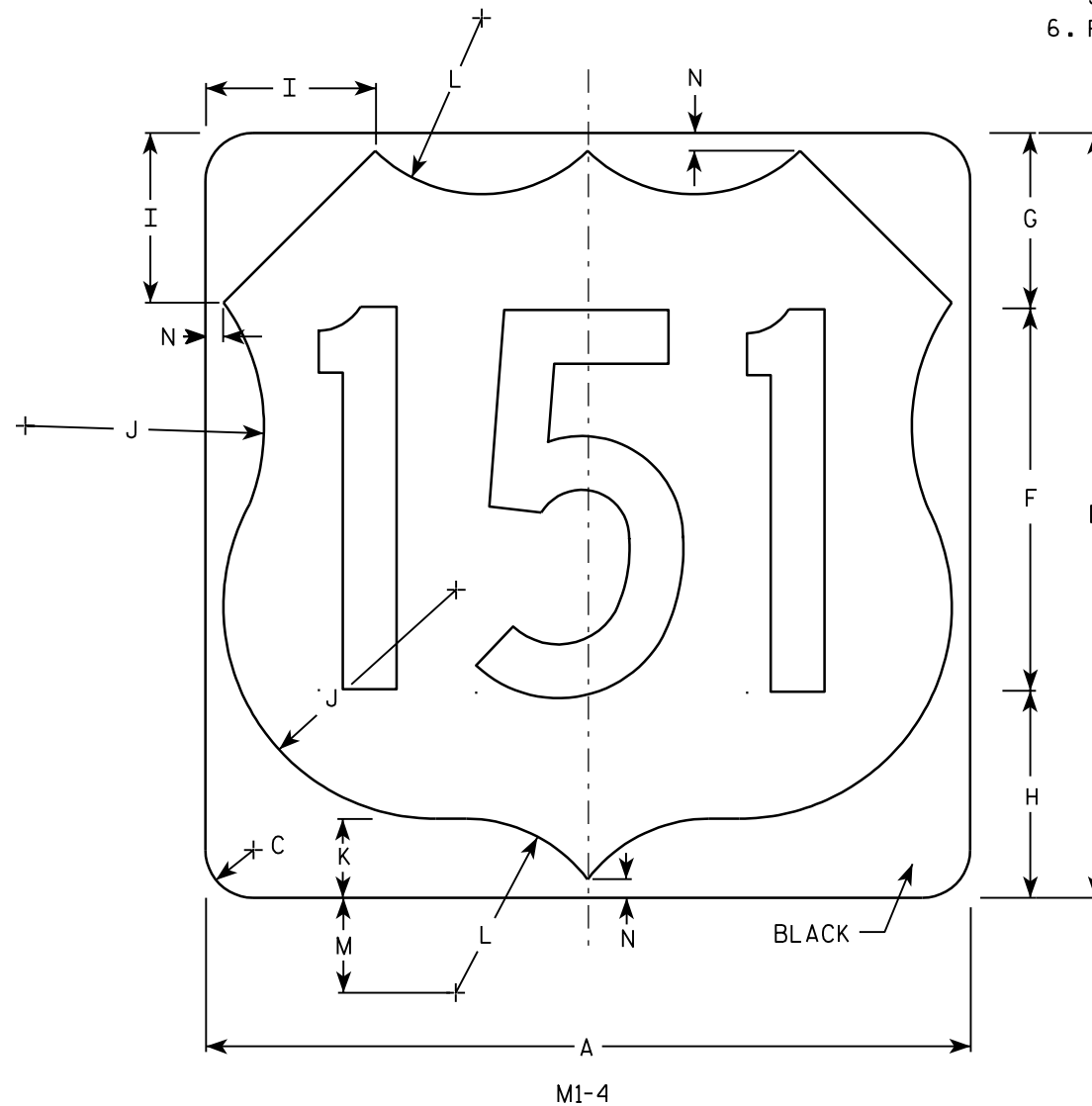
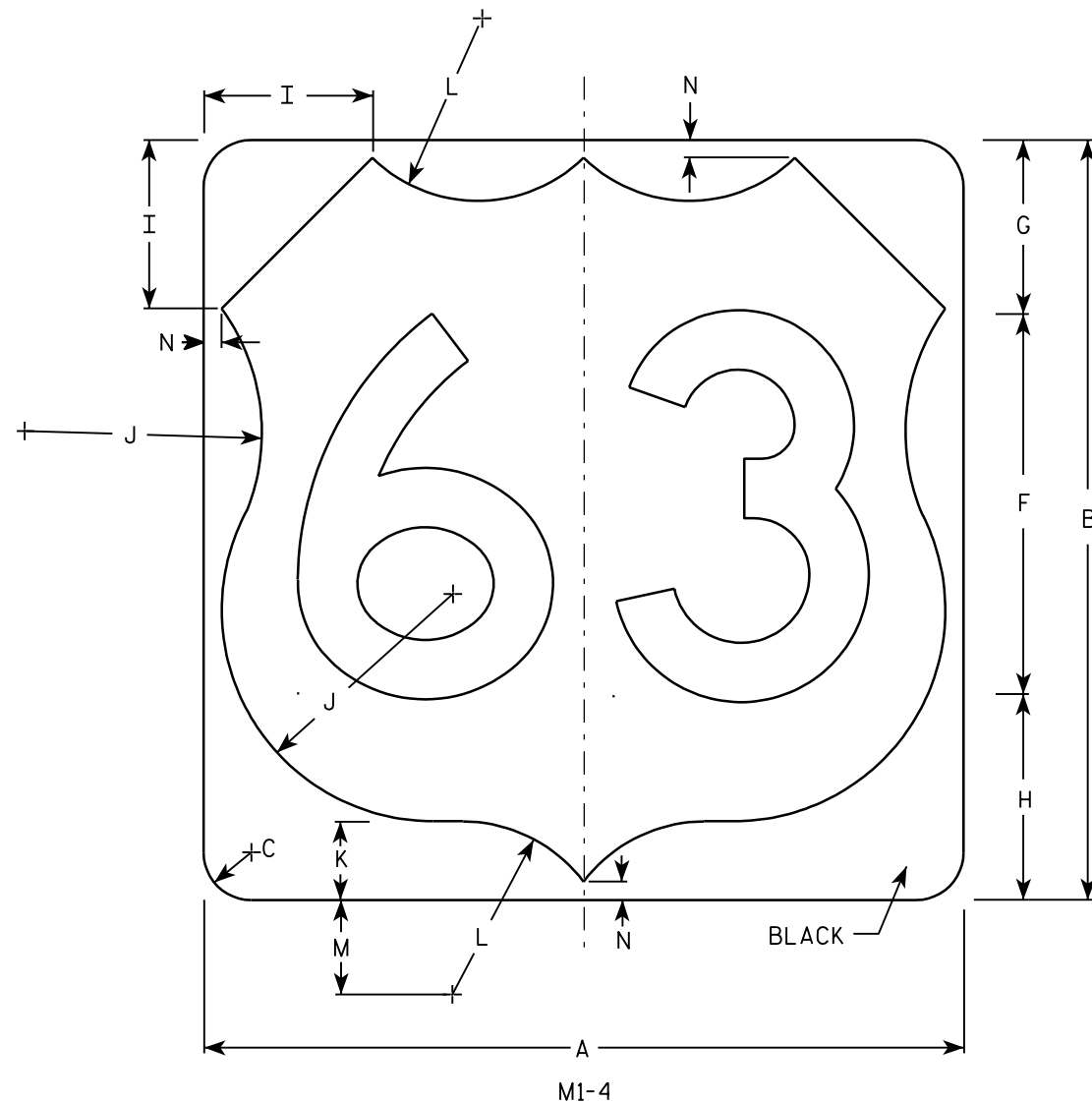
Metric equivalent for these signs are:

SIZE	M1 - 1	SIZE	M1 - 1A
1			
2	600 mm X 600 mm	2	600 mm X 750 mm
3	900 mm X 900 mm	3	900 mm X 1125 mm
4	900 mm X 900 mm	4	900 mm X 1125 mm
5	900 mm X 900 mm	5	900 mm X 1125 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	Area sq. ft.	Area sq. ft.	Area m ²	Area m ²
1																													
2	24				1/2	12	2 1/2	2		1	5 1/2	15	24	17	7 7/8								30			3.13	3.91	.36	.46
3	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
4	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05
5	36				3/4	18	3 3/4	3		1 1/2	8 1/4	22 1/2	36	25 1/2	11 3/4								45			7.03	8.79	.81	1.05

NOTES

- Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White & Black - See Note 6
Message - Black
- Message Series - See note 5
- 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.
- Substitute appropriate numerals and adjust
spacing as per Plate A10-1.
- Permanent Signs
Background - Type H Reflective
Detour or other temporary signs
Background - Reflective

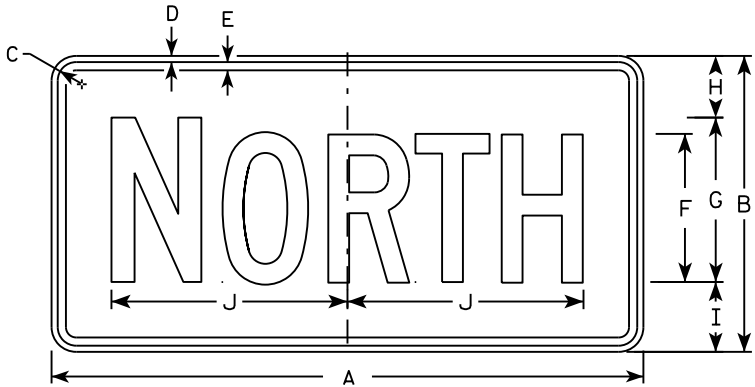


Metric equivalent
for this sign is:

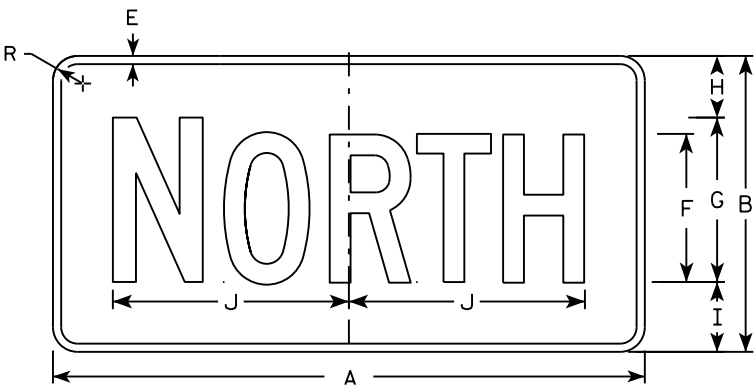
SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

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 ²
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: 83	E
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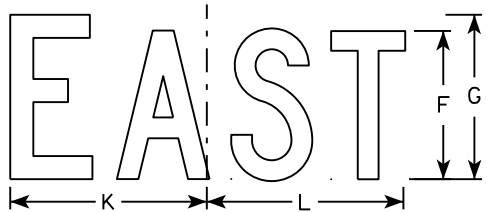
M3-1
MM3-1
MP3-1



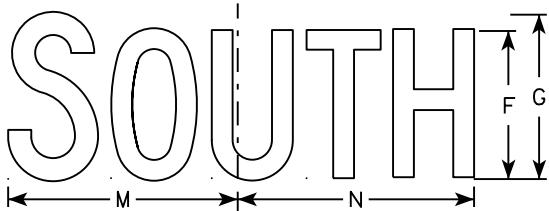
MB3-1
MK3-1
MN3-1



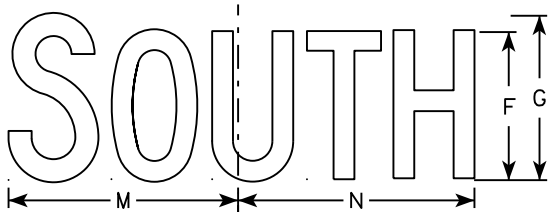
M3-2
MM3-2
MP3-2



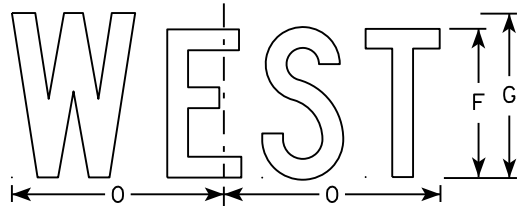
MB3-2
MK3-2
MN3-2



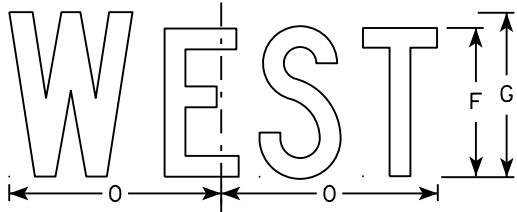
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

NOTES

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.

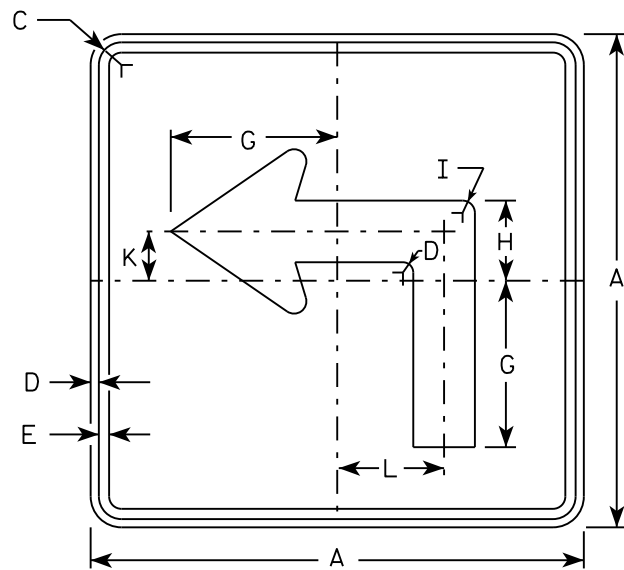
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8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

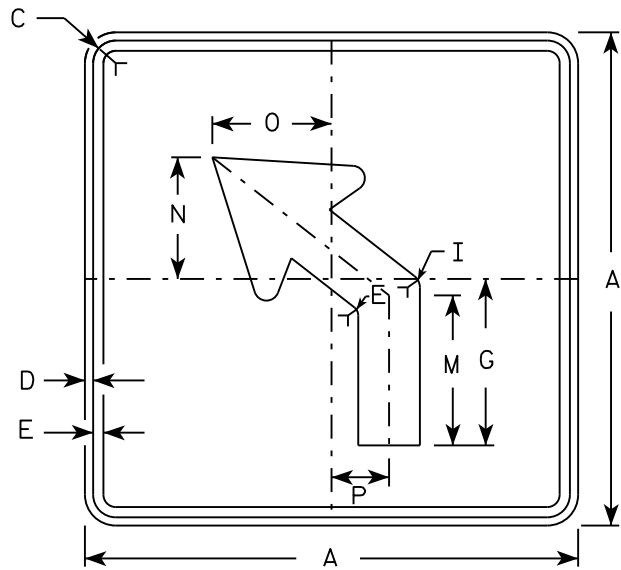
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

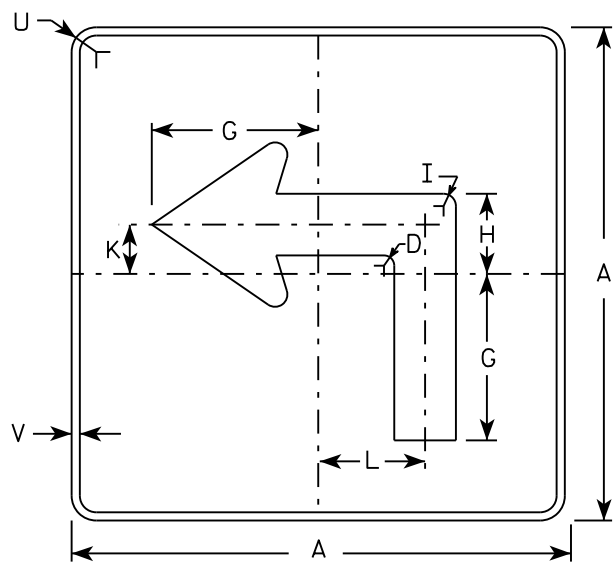
DATE 10/15/15 PLATE NO. 84 M3-1.14



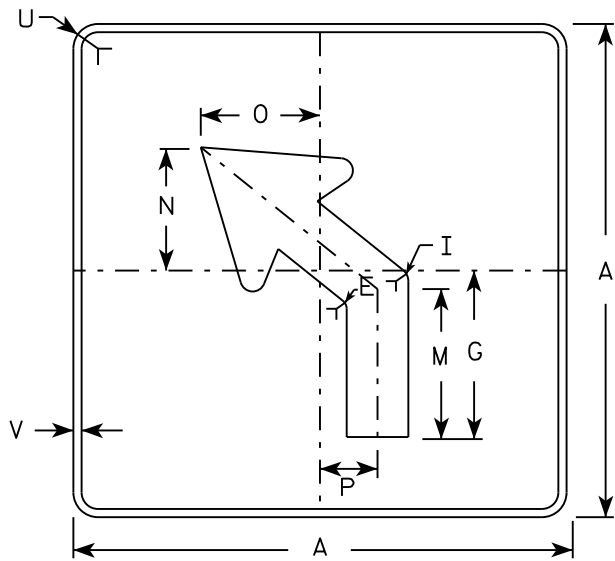
M5-1L
MM5-1L
M05-1L
MP5-1L



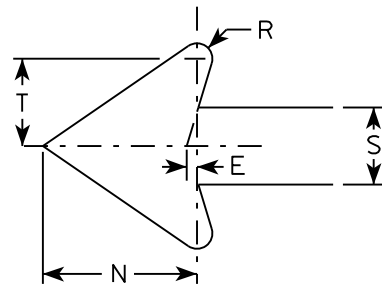
M5-2L
MM5-2L
M05-2L
MP5-2L



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



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



NOTES

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

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

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

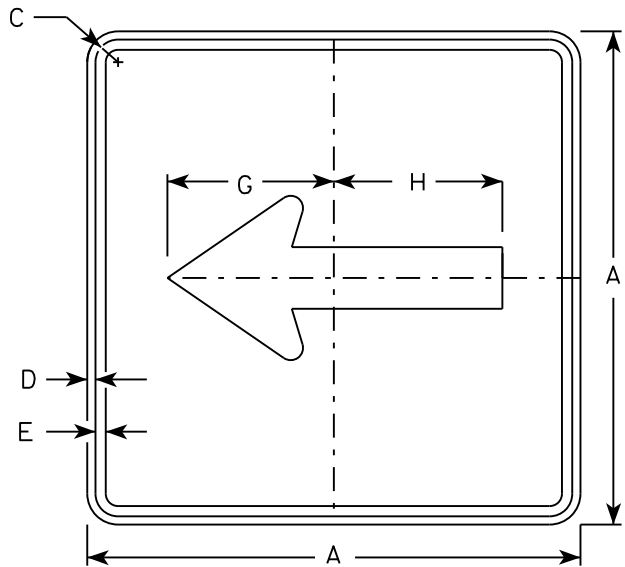
STANDARD SIGN

M5-1 & M5-2

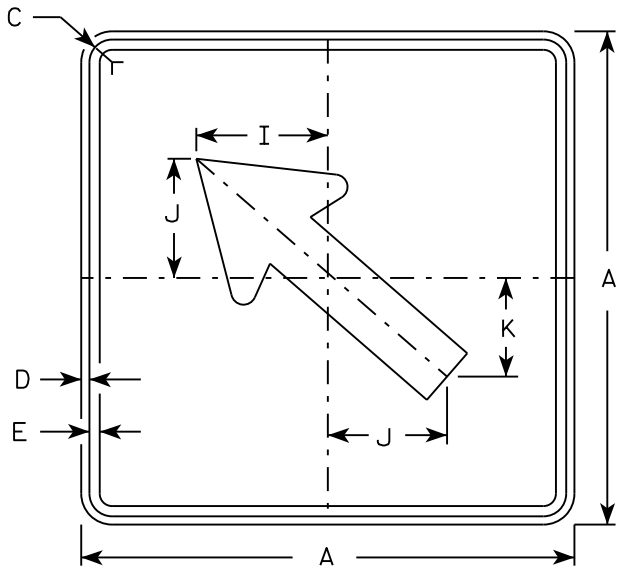
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

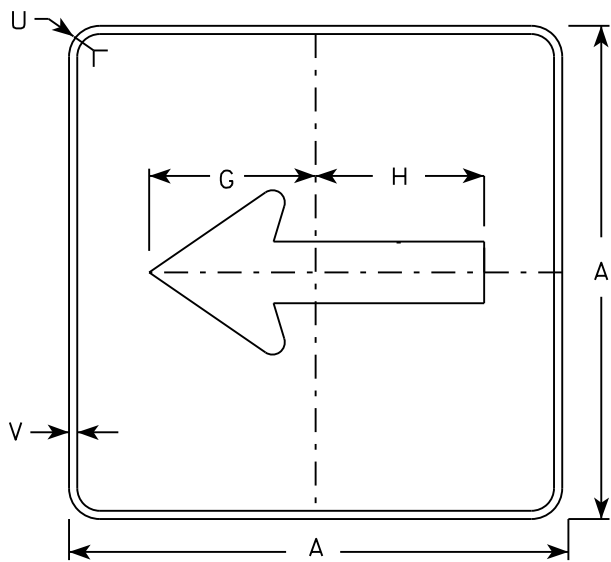
DATE 10/15/15 PLATE 85 M5-1.13



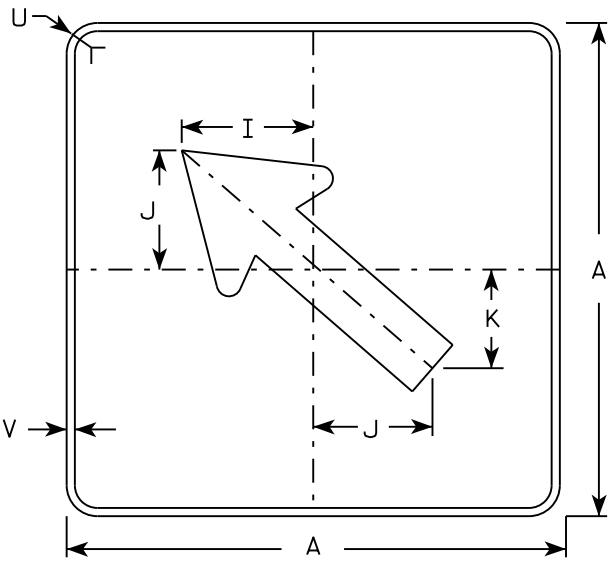
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



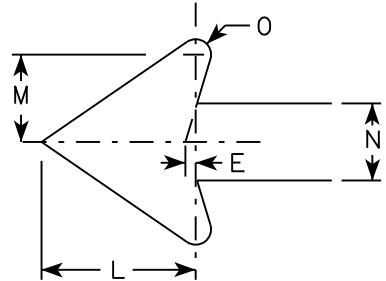
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



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



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



NOTES

- 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.
- M6-1 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:

DATE 10/15/15

PLAT 86

SHEET NO:

E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

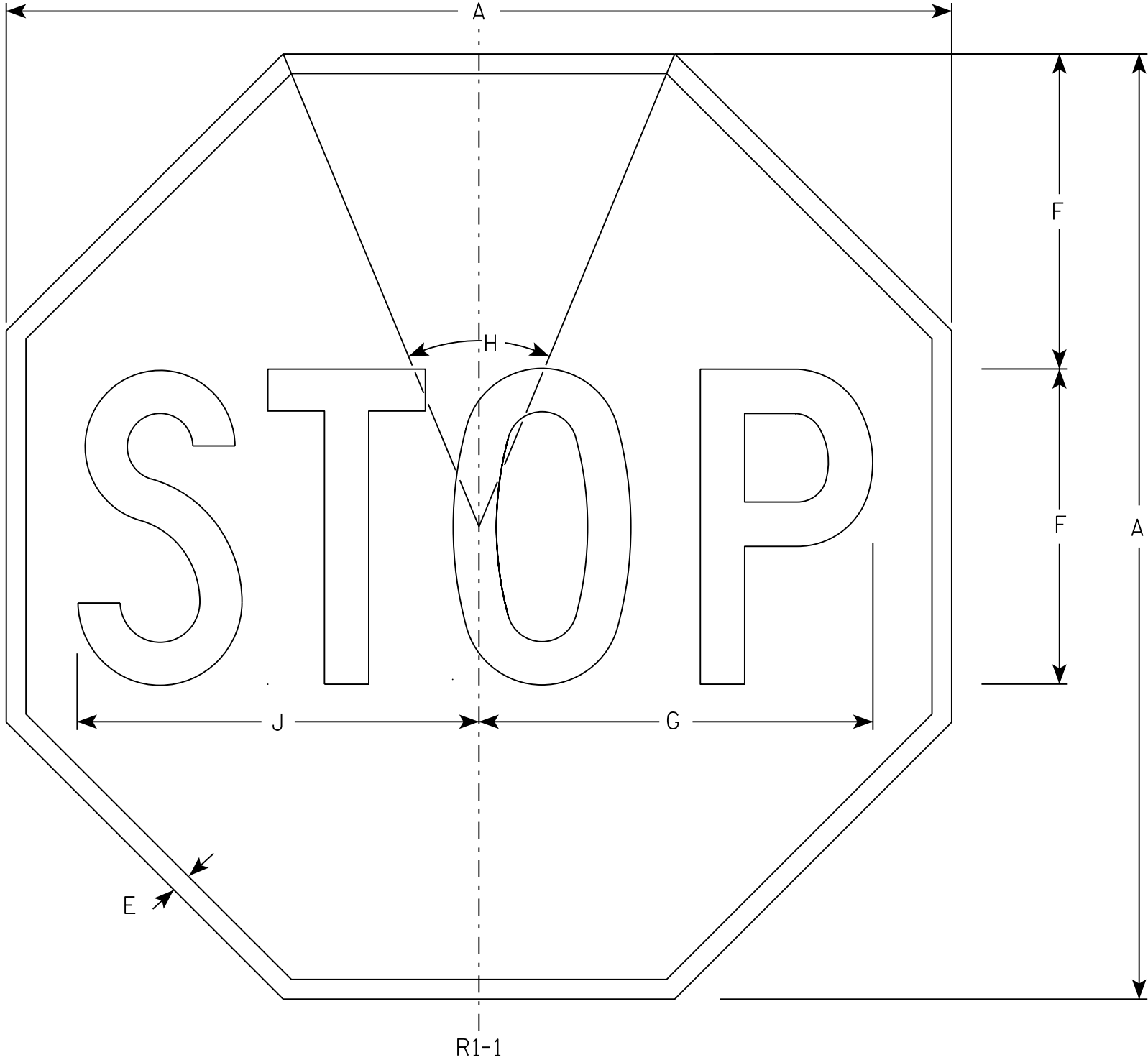
APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15

PLAT 86

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 - Red
Message - White
- 3. Message Series - C

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

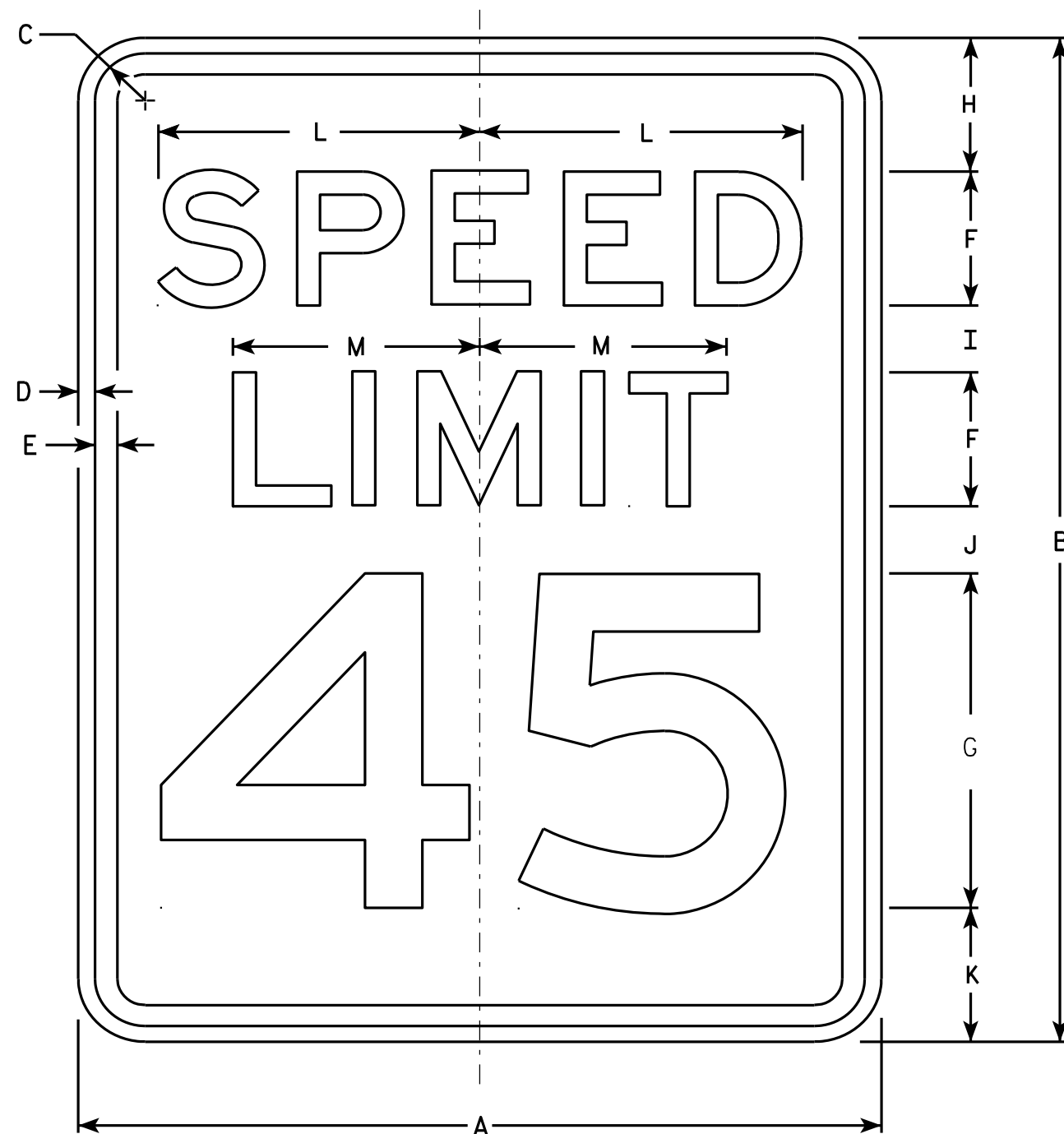
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE 87 R1-1.13



R2-1

NOTES

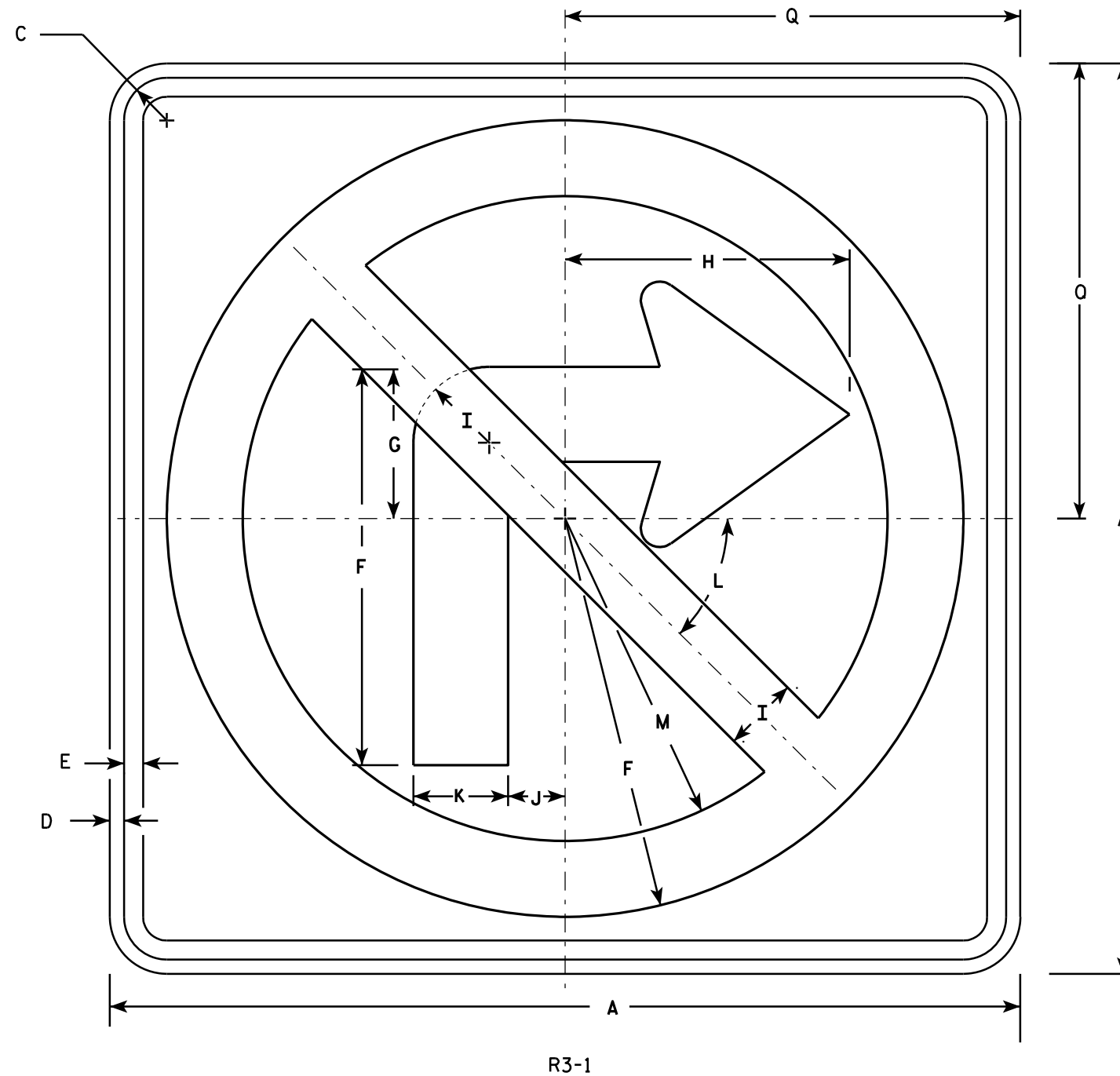
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as 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.

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

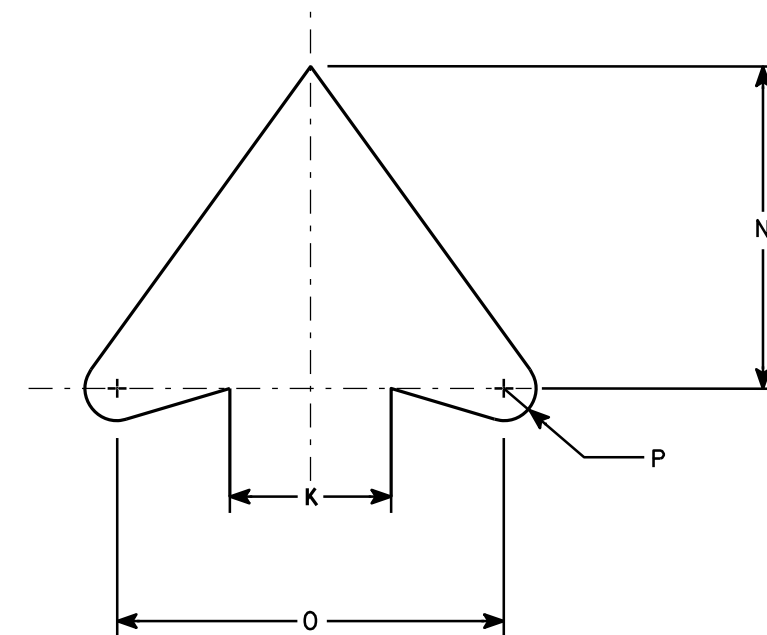
WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 88 E



NOTES

- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White
Message - See note 4
- CornerRadius 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.
- Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



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	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

STANDARD SIGN

R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 89

E



R4-3

NOTES

- Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- Color:
Background - White
Message - Black
- Message Series - D
- 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																											
2S	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
2M	24	30	1 1/8	3/8	1/2	4	3 5/8	2 1/4	9 3/4	10	6 1/4	6 3/4	7 1/8	7 5/8													5.0
3	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
4	36	48	1 5/8	5/8	3/4	6	6	4	14 5/8	15	9 3/8	10	10 3/4	11 3/8													12.0
5	48	60	2 1/4	3/4	1	8	7 1/4	4 1/2	19 1/2	20	12 1/2	13 1/2	14 1/4	15 1/4													20.0

STANDARD SIGN R4-3

WISCONSIN DEPT OF TRANSPORTATION

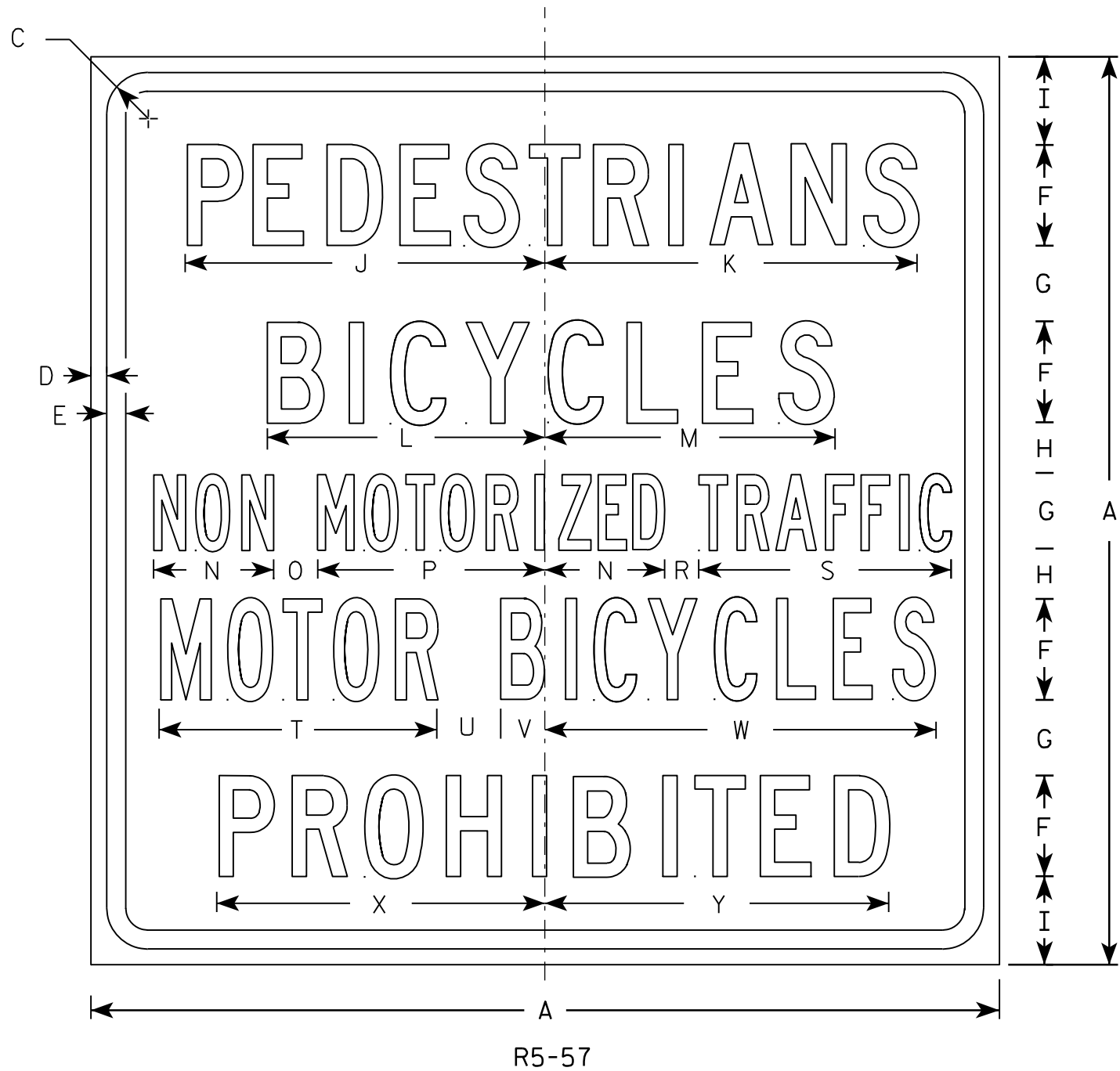
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-3.8

PROJECT NO:

SHEET NO: 90

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 - White
Message - Black
3. Message Series - Lines 1, 2, and 5 are Series C.
Lines 3 and 4 are Series B.
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

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

STANDARD SIGN

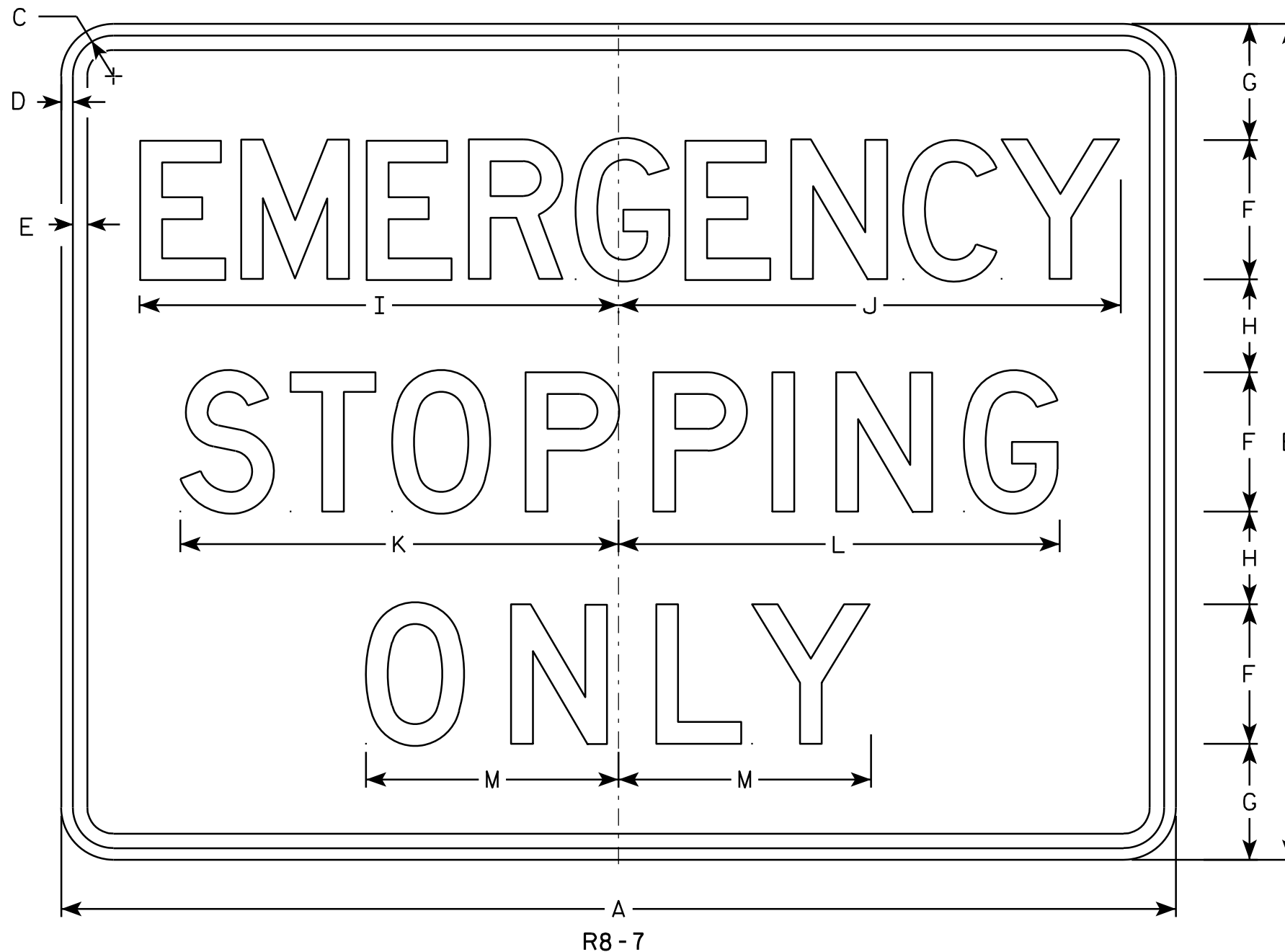
R5-57

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/29/2011 PLATE NO. R5-57.10

PROJECT NO: HWY: COUNTY: SHEET NO: 91 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 - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	48	36	1 ¾	½	⅝	6	5	4	20 ⅝	21 ⅝	18 ⅞	19	10 ⅞														12.0
5	48	36	1 ¾	½	⅝	6	5	4	20 ⅝	21 ⅝	18 ⅞	19	10 ⅞														12.0

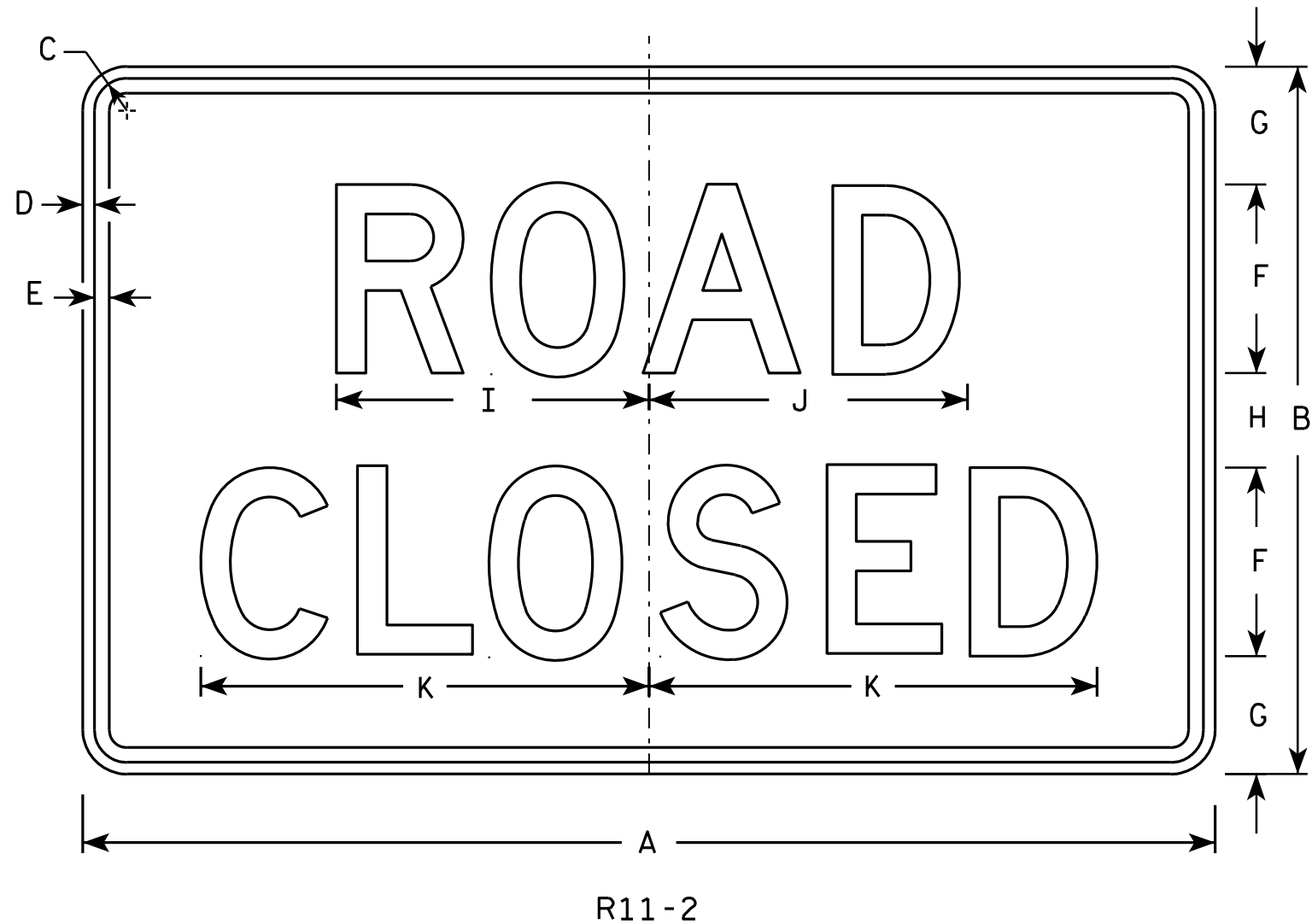
STANDARD SIGN
R8 - 7

WISCONSIN DEPT OF TRANSPORTATION

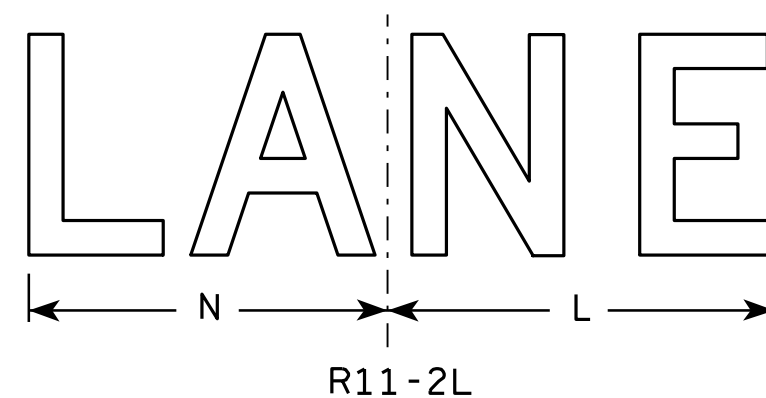
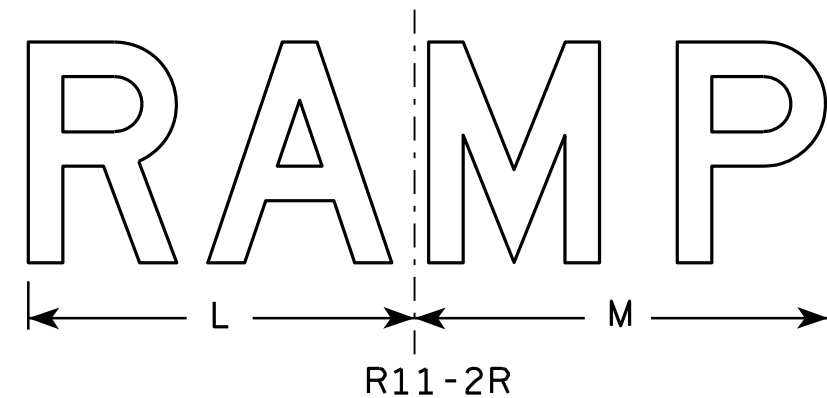
APPROVED Matthew R. Rauch
for State Traffic Engineer

DATE 3/31/2011 PLATE NO. R8-7.6

PROJECT NO: HWY: COUNTY: SHEET NO: 92 E

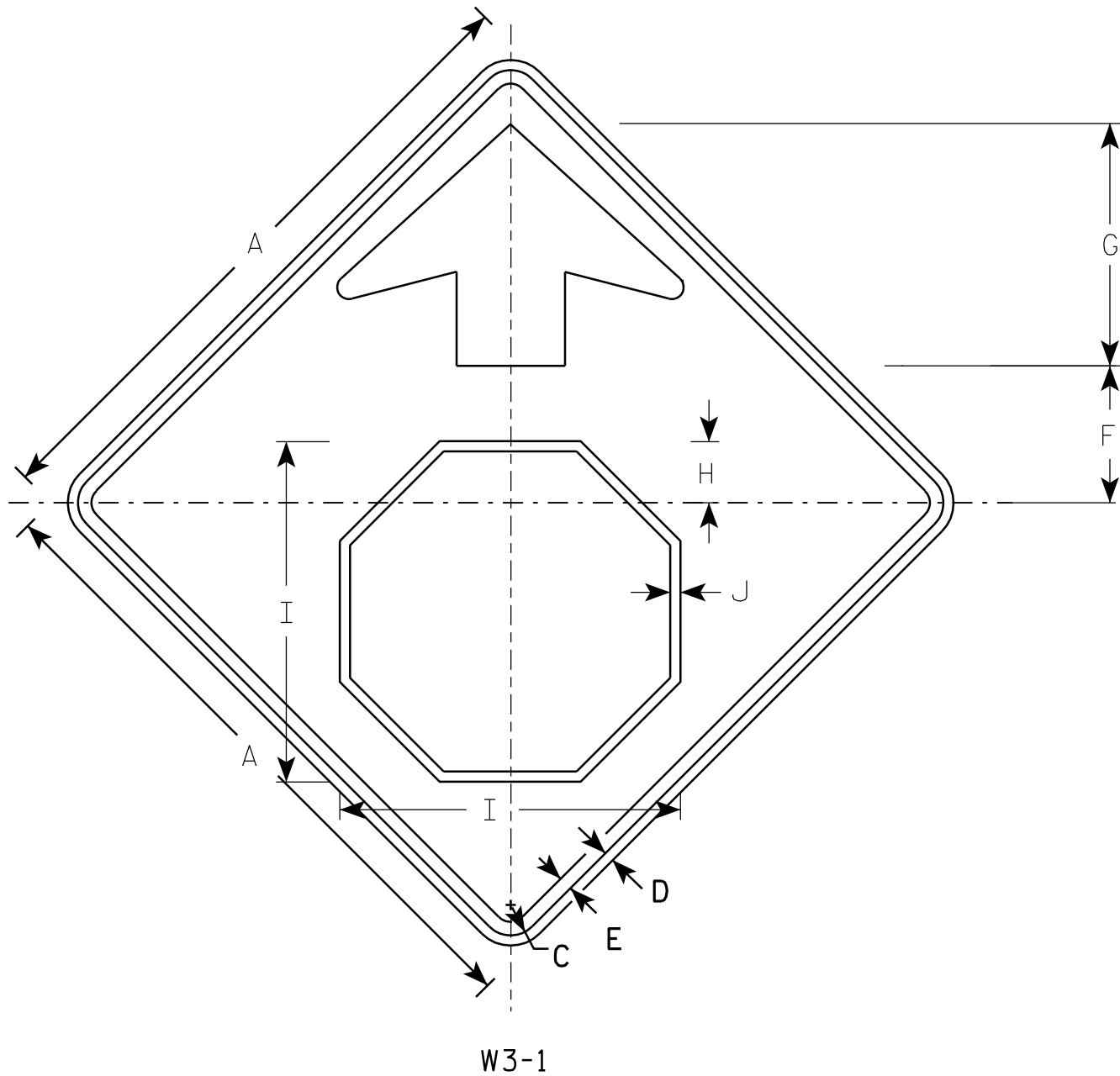


- NOTES
1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - White
Message - Black
 3. Message Series - D
 4. Corners may be square or rounded when base material is plywood but borders shall be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



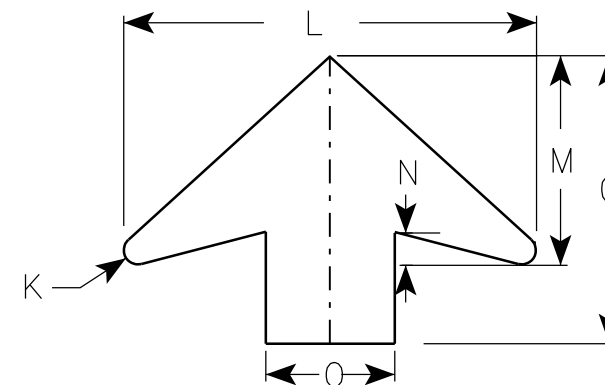
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
2M	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
3	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
4	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0
5	48	30	1 3⁄8	1⁄2	5⁄8	8	5	4	13 1⁄4	13 1⁄2	19	14	15	13													10.0

STANDARD SIGN	
R11-2	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/1/11	PLATE NO. R11-2.10



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
Arrow & Border - BLACK
Stop Symbol - WHITE BORDER ON RED 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	30		1 ³ / ₈	1/2	5/8	6 1/4	11 1/4	2 7/8	15 3/4	1/2	1/2	16	8	1 1/4	5												6.25
2S	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
2M	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
3	36		1 5/8	5/8	3/4	7 1/2	13 1/2	3 1/2	19	5/8	5/8	19 1/4	9 3/4	1 5/8	6												9.0
4	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0
5	48		2 1/4	3/4	1	10	17 7/8	4 1/2	25 1/8	3/4	7/8	25 5/8	13	2	8												16.0

PROJECT NO:

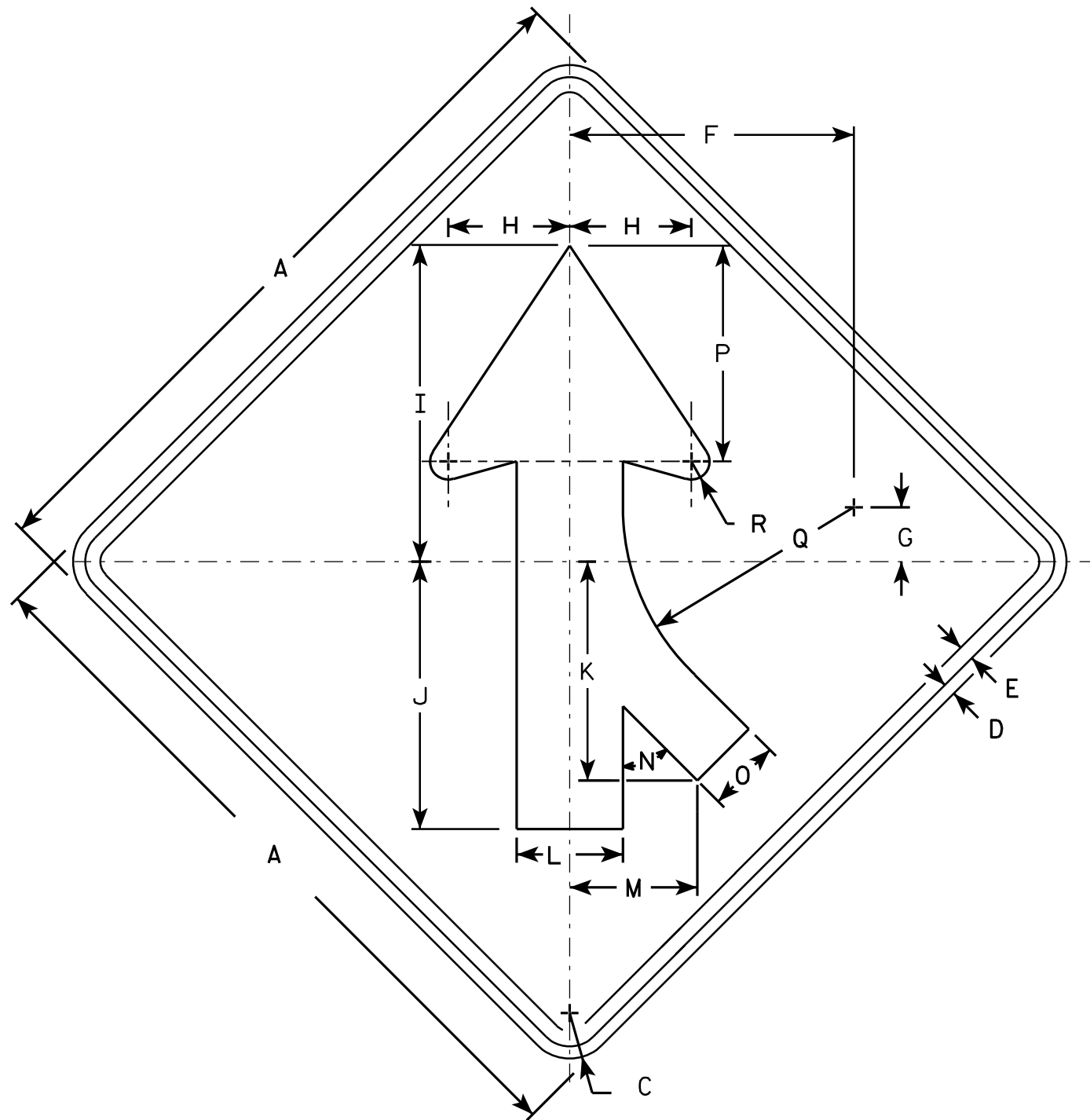
STANDARD SIGN
W3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W3-1.12

SHEET NO: 94

E



W4-1 R

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. W4-1L is the same as W4-1R except the arrow is reversed along the vertical centerline.

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 5/8	2 1/2	5	13	11	9	4 3/8	5 1/4	45°	3	8 7/8	9 1/2	3/4									6.25
2S	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
2M	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
3	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8									9.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4									16.0

STANDARD SIGN W4-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-1.14

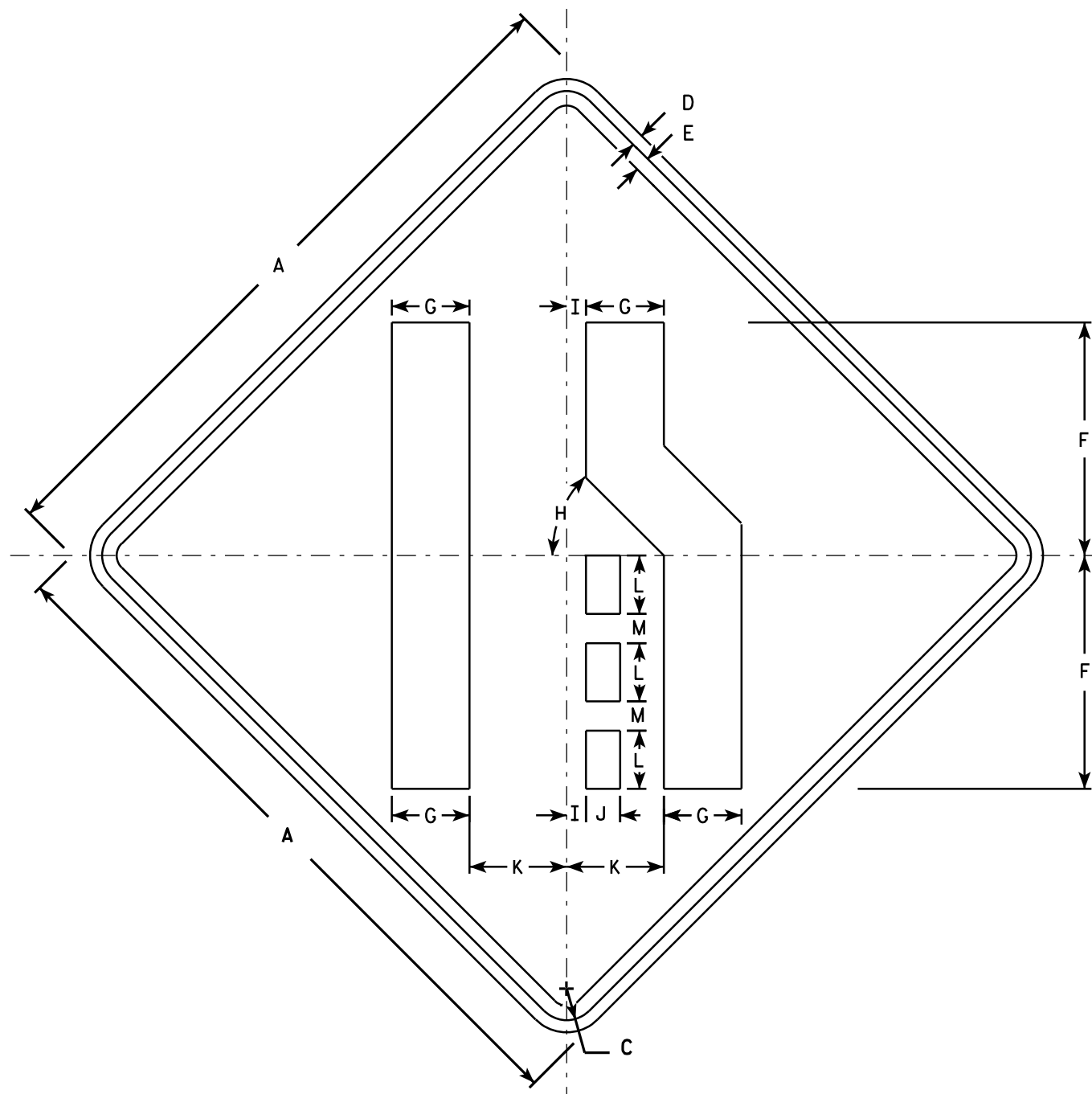
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 95

E



W4-2R

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. W4-2L is the same as W4-2R except the symbols is reversed along the vertical centerline.

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	10	3 3/8	45°	7/8	1 1/2	4 1/4	2 1/2	1 1/4														6.25
2S	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2M	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
3	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN W4-2

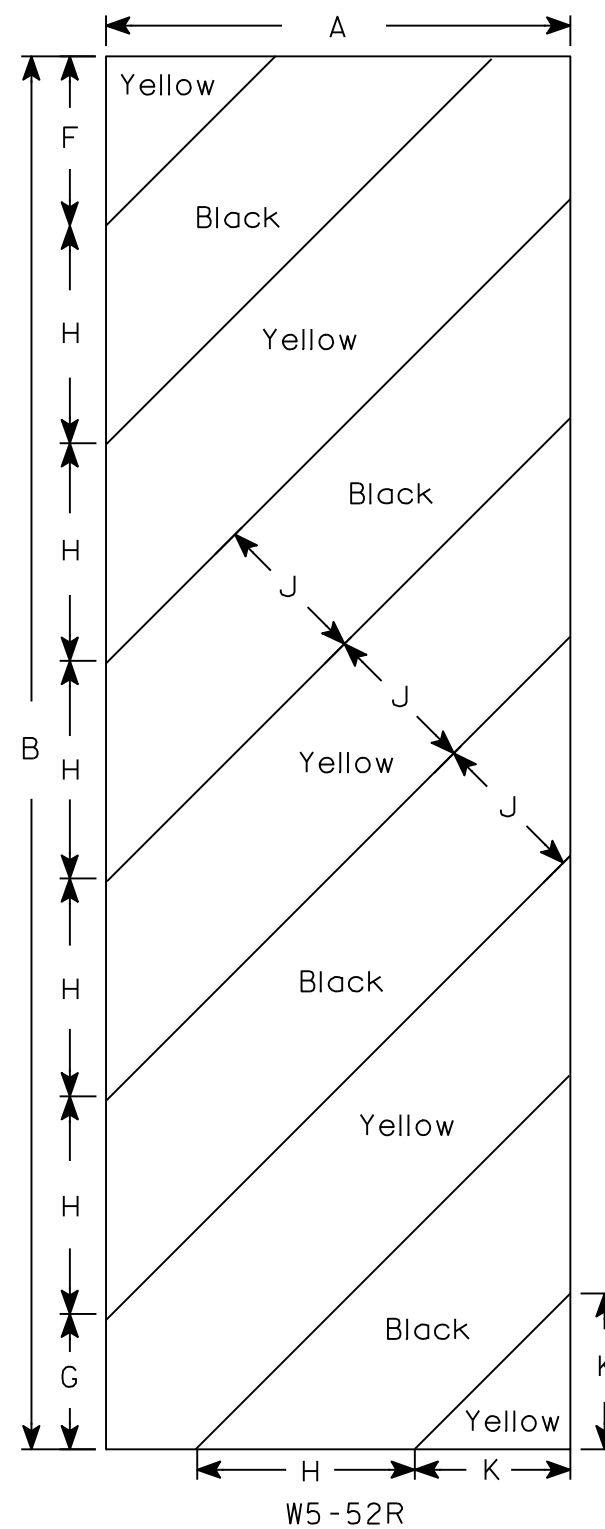
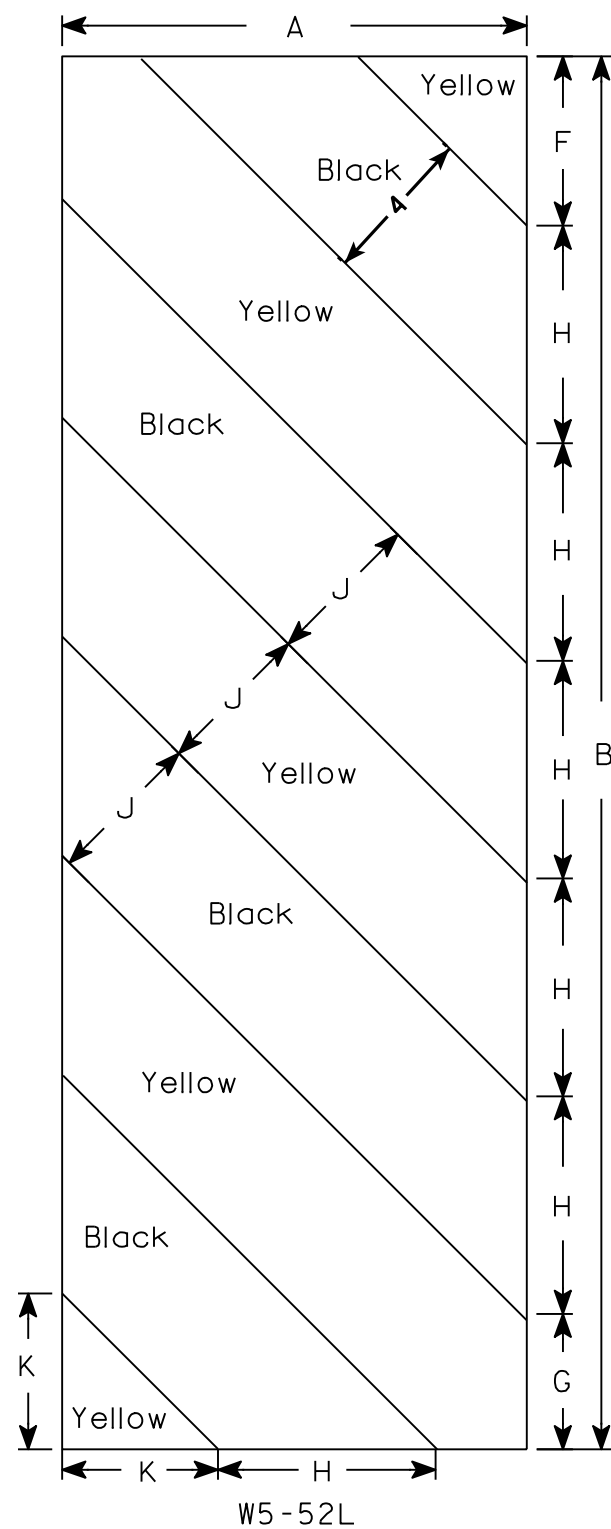
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/12/13 PLATE NO. W4-2.14

PROJECT NO:

SHEET NO: 96



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. Alternate colors of stripes as shown.

[illegible]

STANDARD SIGN
W5-52L & W5-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 5/29/12 PLATE NO. W5-52.9

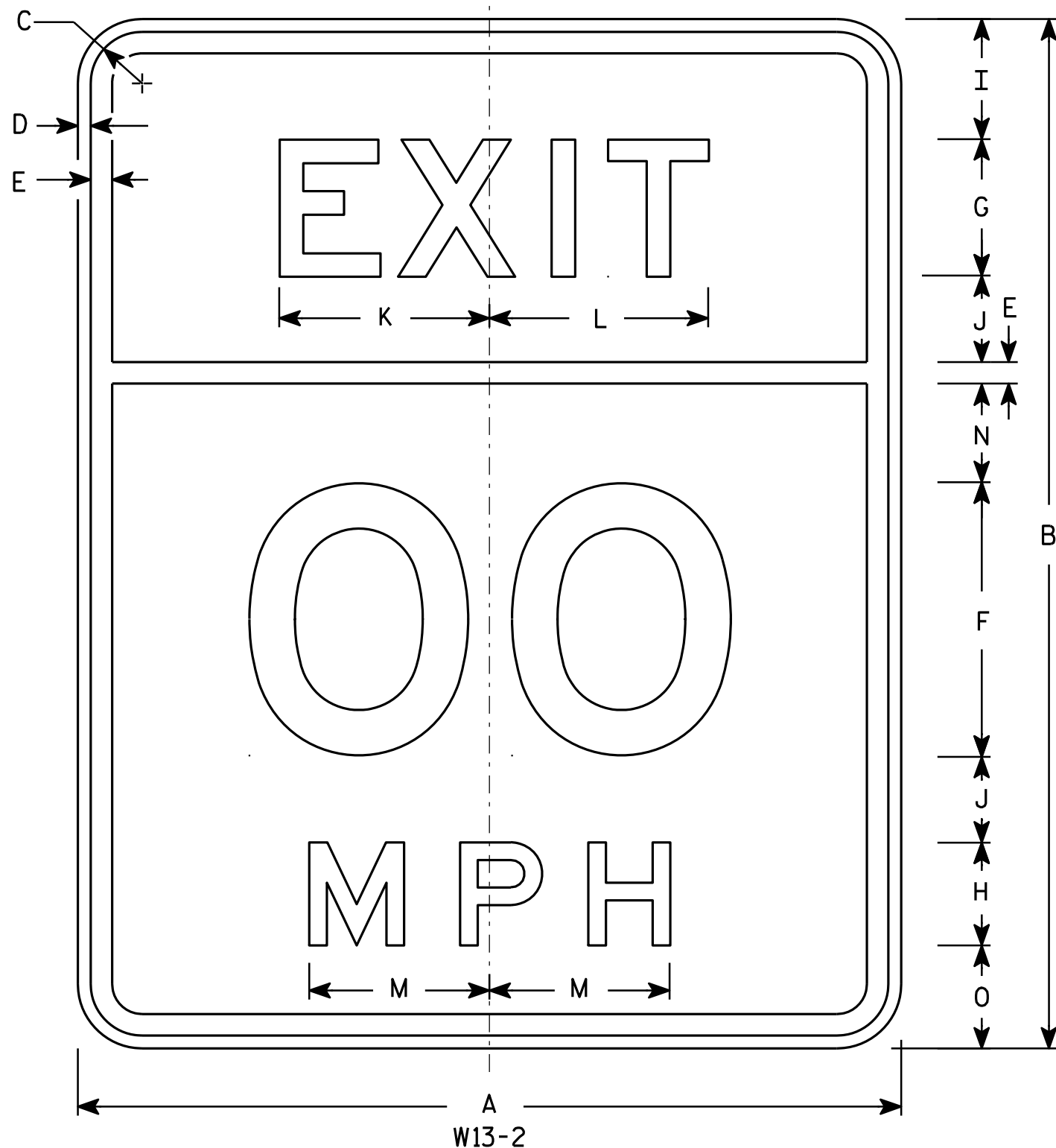
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 97

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. 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 space about centerline to achieve proper balance.

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.
1																											
2S	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0
2M	24	30	1 1/2	3/8	5/8	8	4	3	3 1/2	2 1/2	6 1/8	6 3/8	5 1/4	2 7/8	3												5.0
3	36	48	2 1/4	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0
4	36	48	2 1/4	5/8	7/8	12	6	4	6	4	9 1/4	9 1/2	7 1/8	5 1/8	6												12.0
5	48	60	2 1/4	3/4	1	16	8	6	7	5	12 1/4	12 3/4	10 5/8	5 3/4	6												20.0

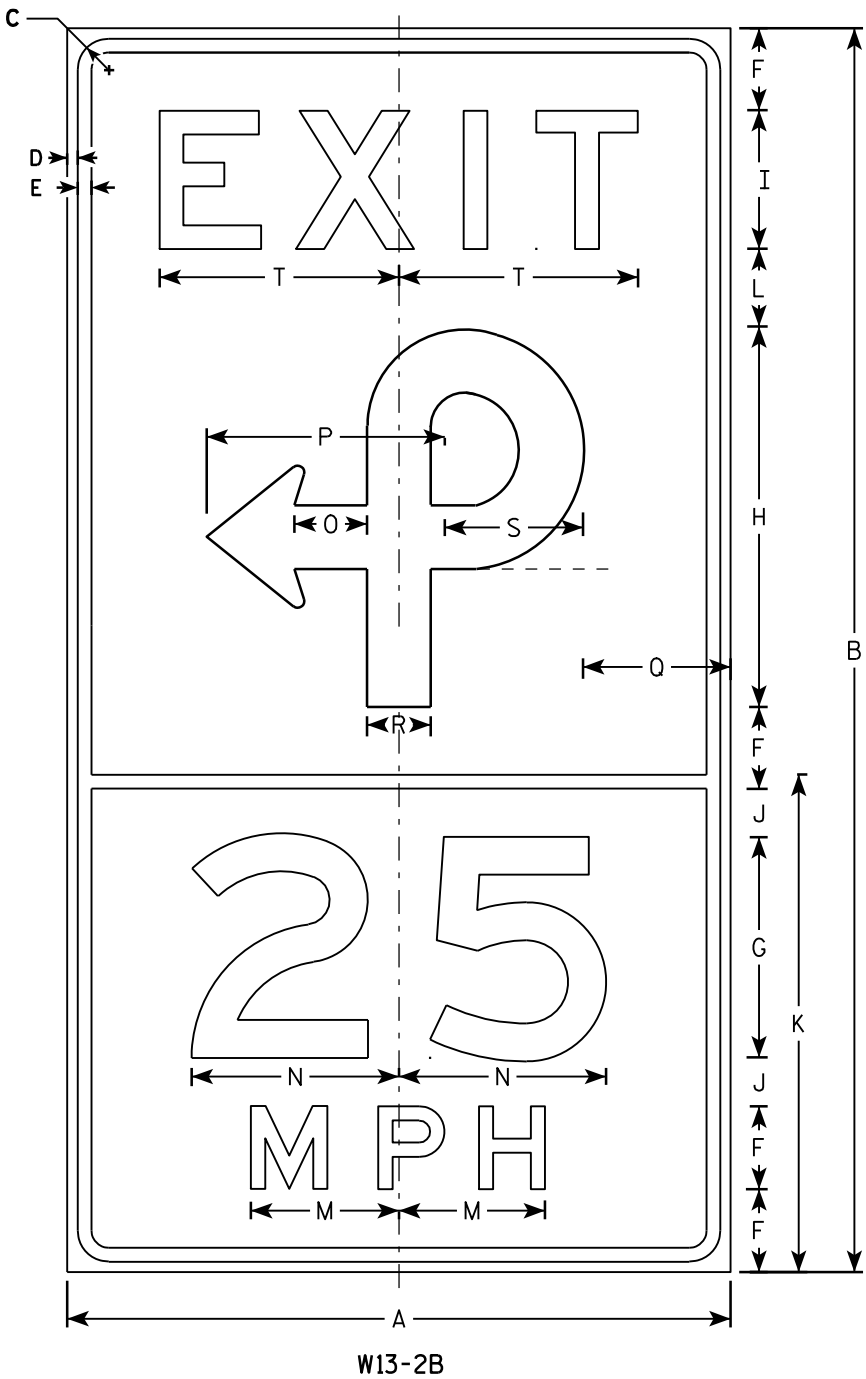
STANDARD SIGN W13-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-2.9

PROJECT NO: HWY: COUNTY: SHEET NO: 98 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. 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.

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	90	2 1/4	3/4	1	6	16	27 1/2	10	3 1/2	36	5 1/2	10 3/4	15	5 1/4	17 1/4	10 3/4	4 5/8	10	17 3/8							30
2M	48	90	2 1/4	3/4	1	6	16	27 1/2	10	3 1/2	36	5 1/2	10 3/4	15	5 1/4	17 1/4	10 3/4	4 5/8	10	17 3/8							30
3																											
4																											
5																											

STANDARD SIGN
W13-2B

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 5/31/12 PLATE NO. W13-2B.3

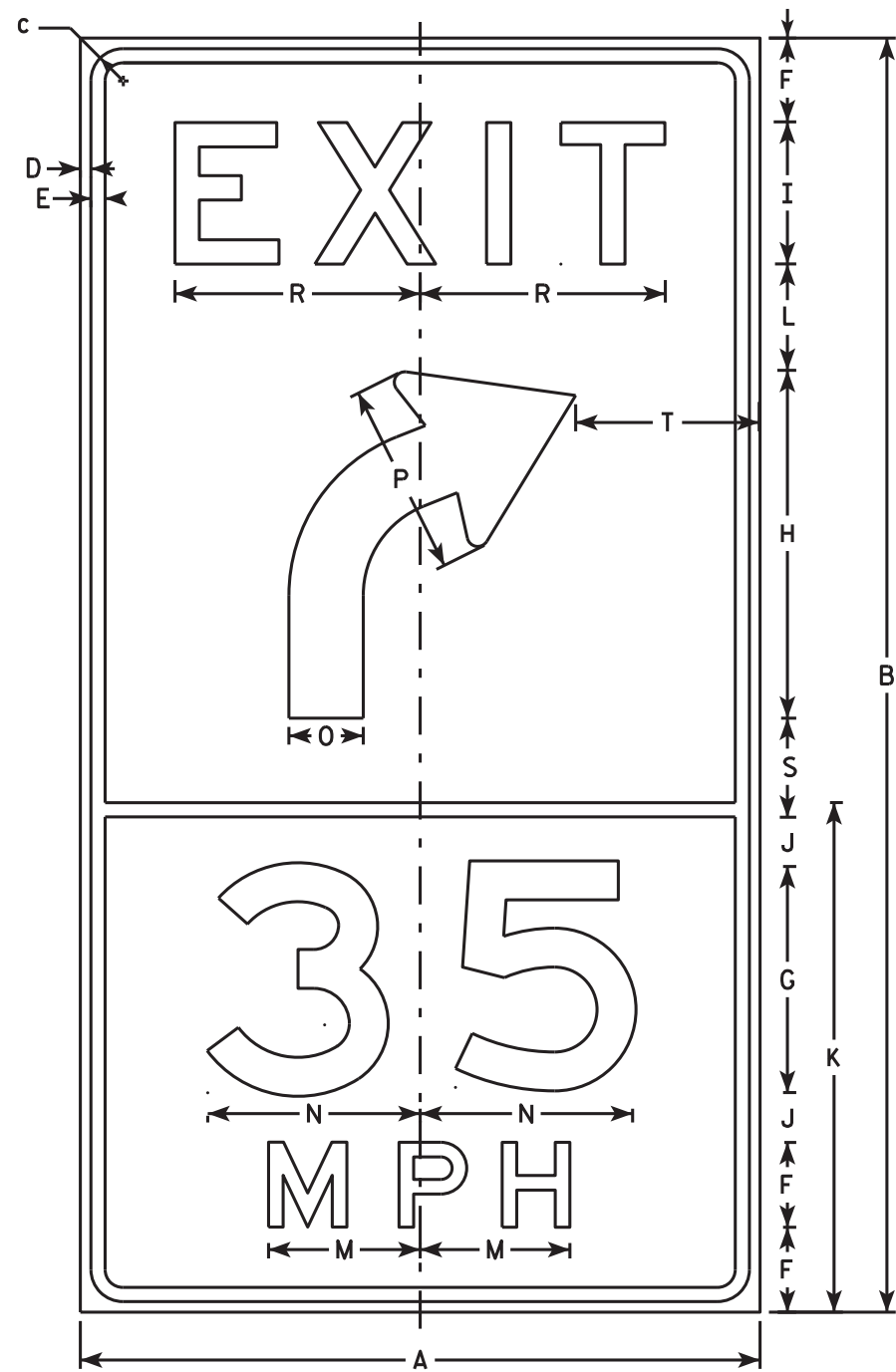
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 99

E



W13-2C

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 - 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.

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	90	2 1/4	3/4	1	6	16	24 5/8	10	3 1/2	36	7 1/2	10 3/4	15	5 1/4	13 5/8	12	17 3/8	7	13							30
2M	48	90	2 1/4	3/4	1	6	16	24 5/8	10	3 1/2	36	7 1/2	10 3/4	15	5 1/4	13 5/8	12	17 3/8	7	13							30
3																											
4																											
5																											

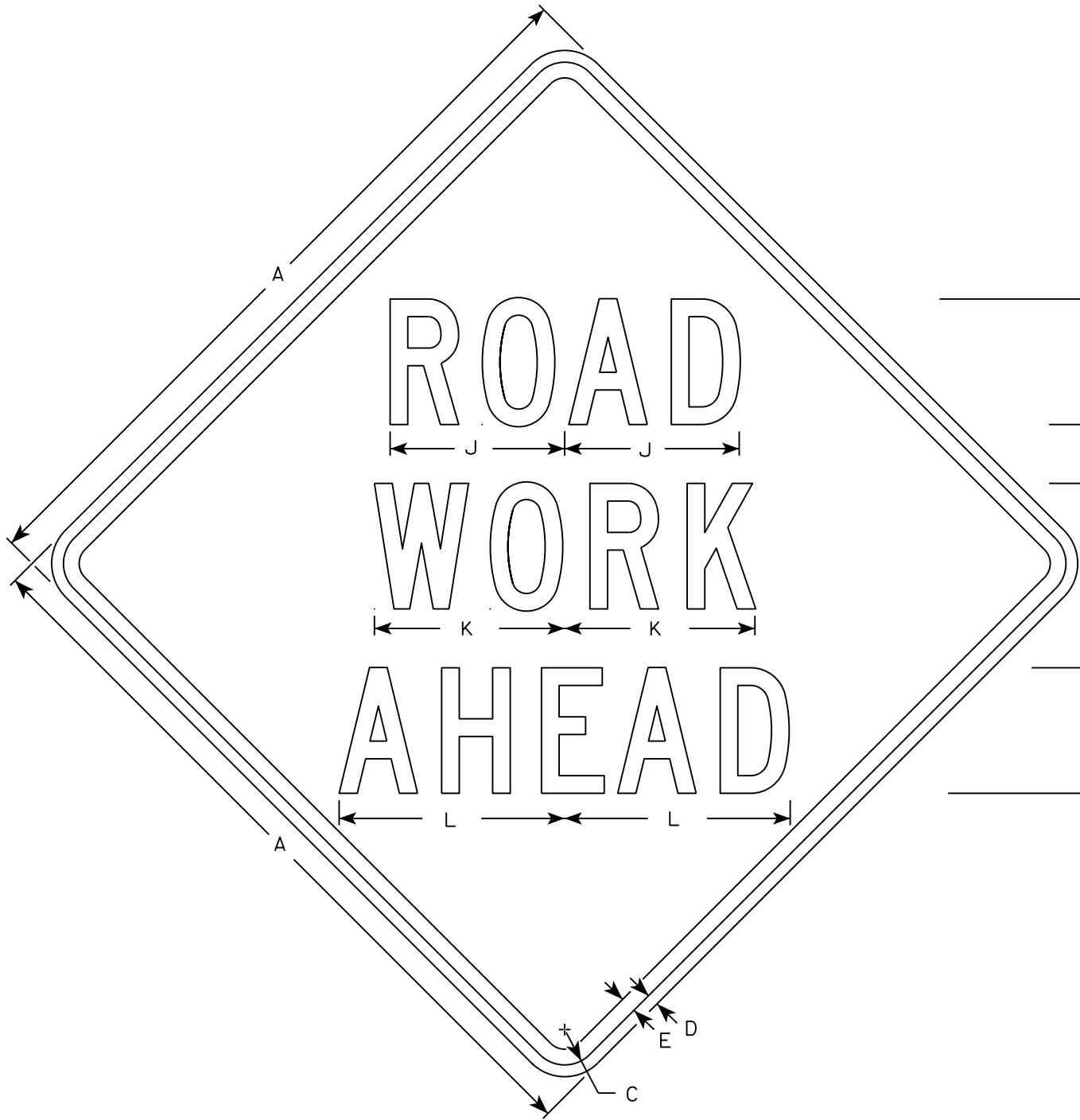
STANDARD SIGN

W13-2C

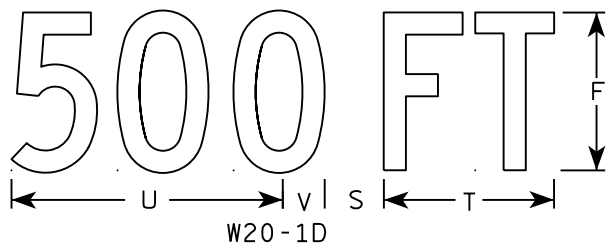
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

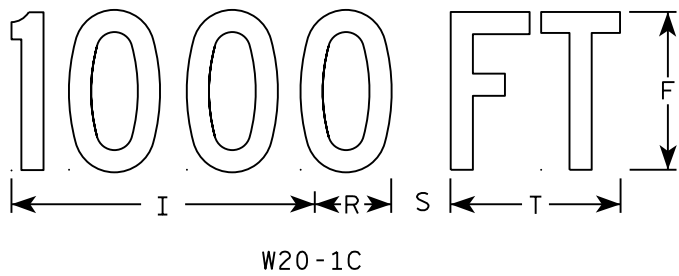
DATE 12/12/13 PLATE NO. W13-2C.4



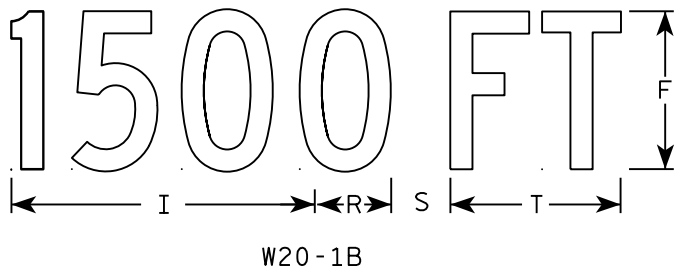
W20-1A



W20-1D



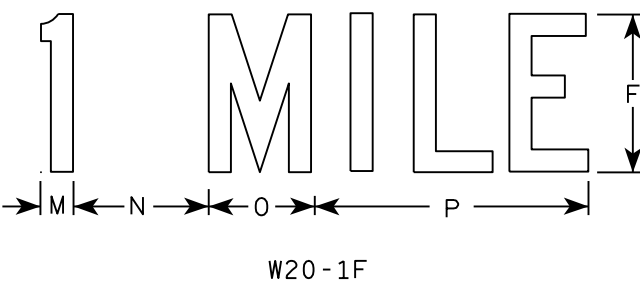
W20-1C



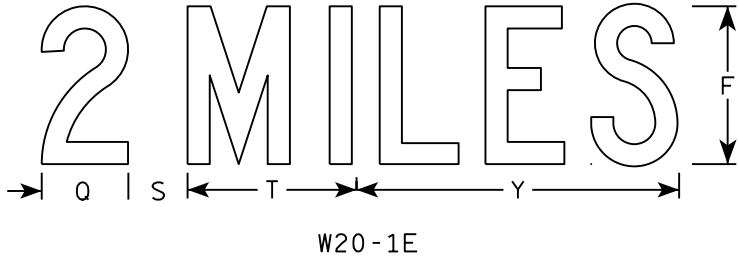
W20-1B



W20-1G



W20-1F



W20-1E

NOTES

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

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

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

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

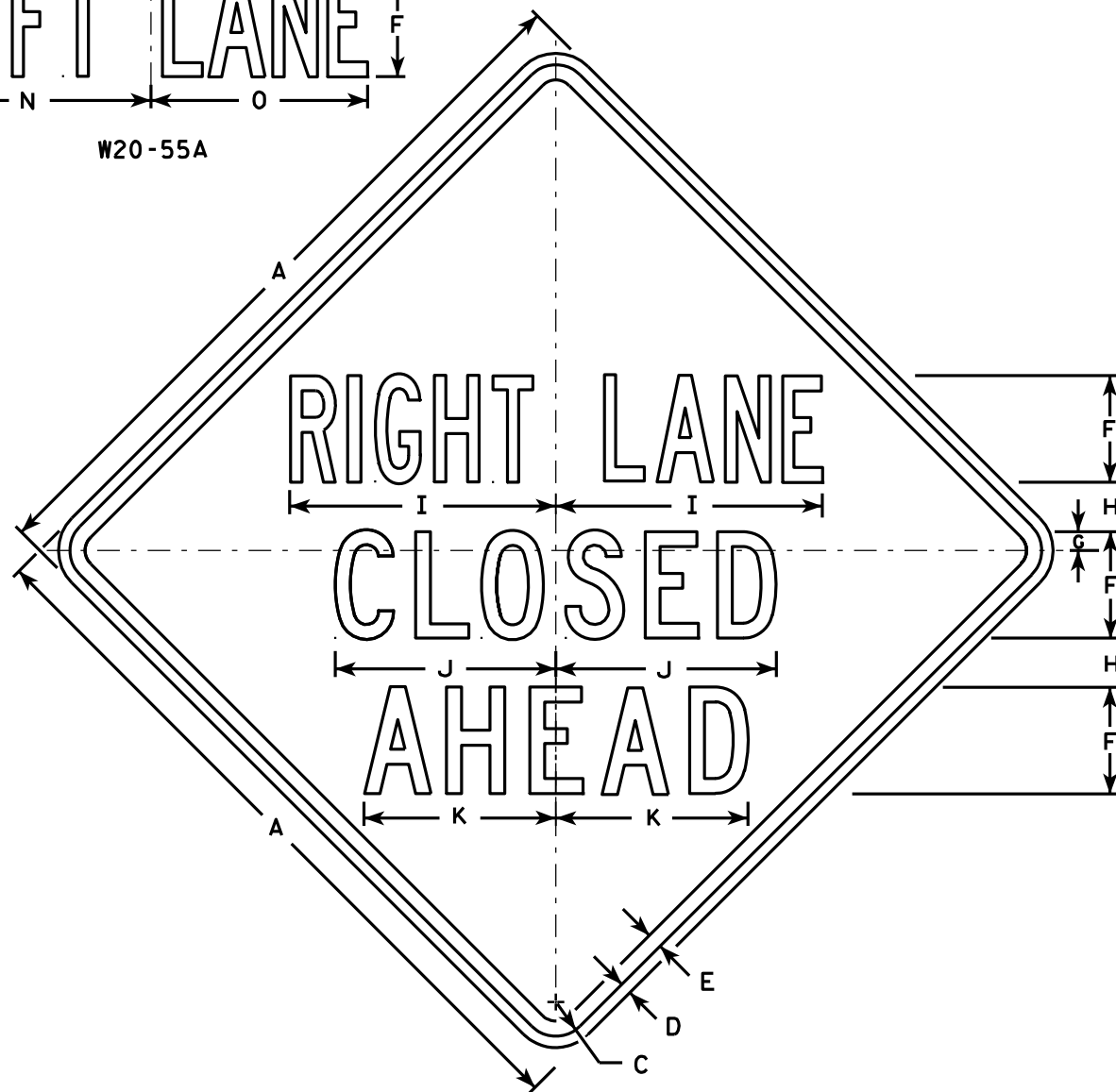
DATE 5/07/15 PLATE NO. W20-1.10

CENTER LANE

W20-56A

LEFT LANE

W20-55A



W20-5A

500 FT

W20-5D

1000 FT

W20-5C

1500 FT

W20-5B

1/2 MILE

W20-5G

1 MILE

W20-5F

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

PROJECT NO:

HWY:

COUNTY:

STANDARD SIGN
W20-5A, B, C, D, F & G

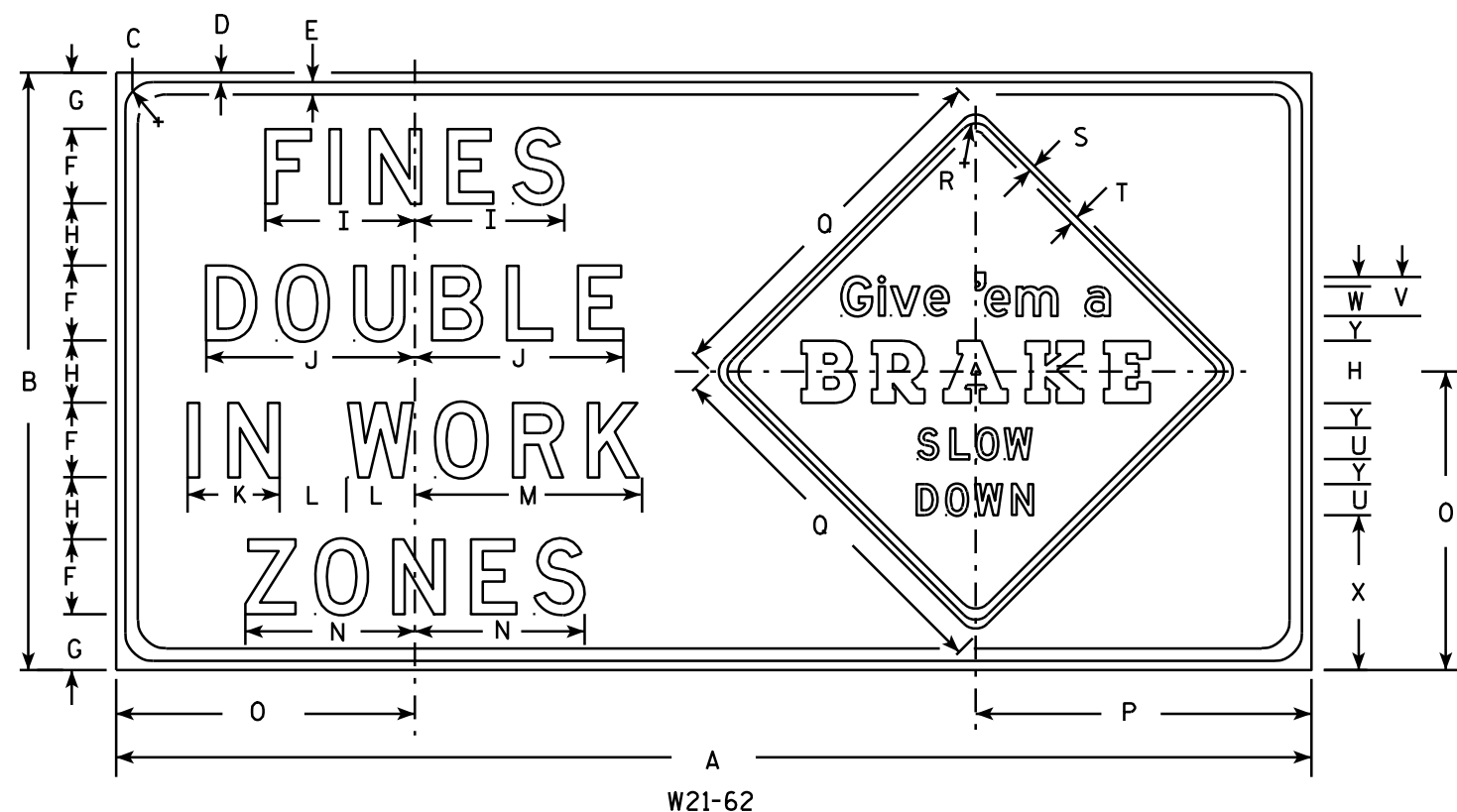
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

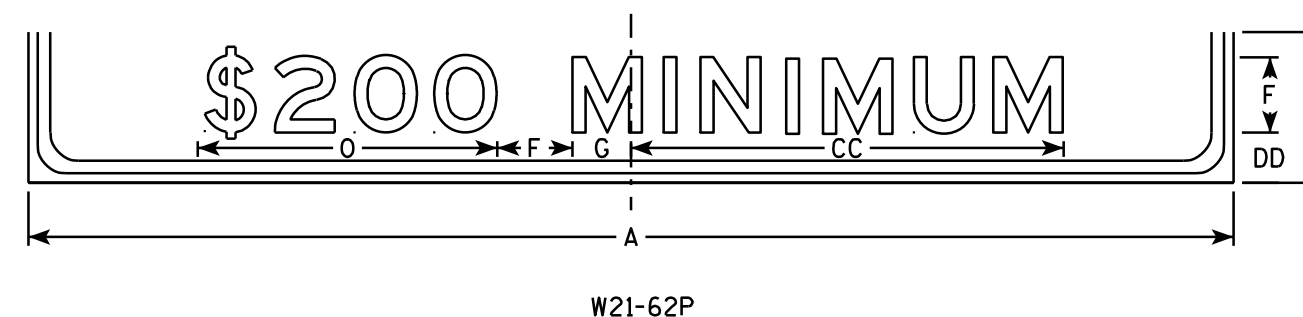
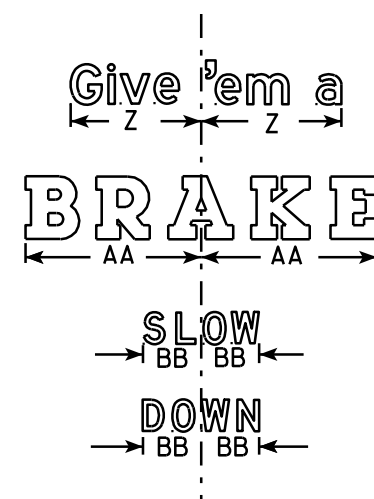
SHEET NO: 102

E



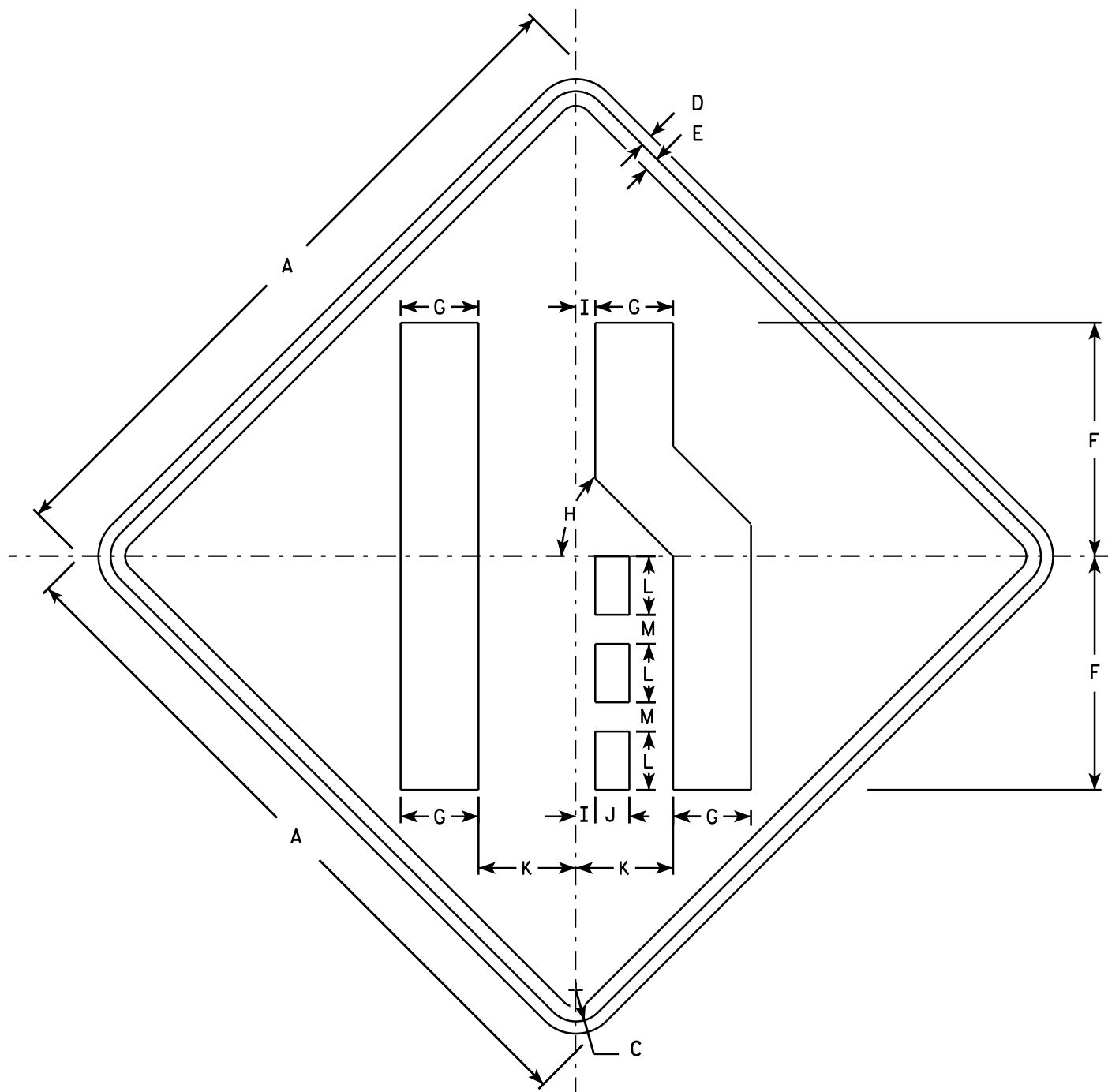
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White - (See Note 5)
Message - Black
3. Message Series -
Fines Double Message - All lines are Series D
Give 'em a Brake -
Line one is Series E, line two is a Special Graphic Series and lines three and four are Series D.
4. The base material shall be plywood. Corners may be square or rounded, but borders shall be rounded as shown. The base material for Give 'em a Brake sign can be a separate sheet of aluminum with the corners and borders rounded as shown. This separate panel shall then be attached to the plywood with aluminum or stainless steel sheet metal screws.
5. Background for the Give 'em a Brake sign shall be Type F reflective orange.



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	AA	BB	CC	DD	Area sq. ft.
1																															
2S																															
2M																															
3	96	48	2 1/4	3/4	1	6	4 1/2	5	12	16 3/4	7 3/8	5 1/2	18 1/4	13 5/8	24	27	30	1 3/8	1/2	5/8	2 1/2	3 1/8	2 3/8	12 1/2	2	10 3/4	14	4 5/8	34 1/2	4	32.0
4																															
5																															

STANDARD SIGN W21-62	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 3/21/11	PLATE NO. W21-62.5



W04-2R

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Orange
Message - Black
- 3. 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. W04-2L is the same as W04-2R except the symbol is reversed along the vertical centerline.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

STANDARD SIGN

W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

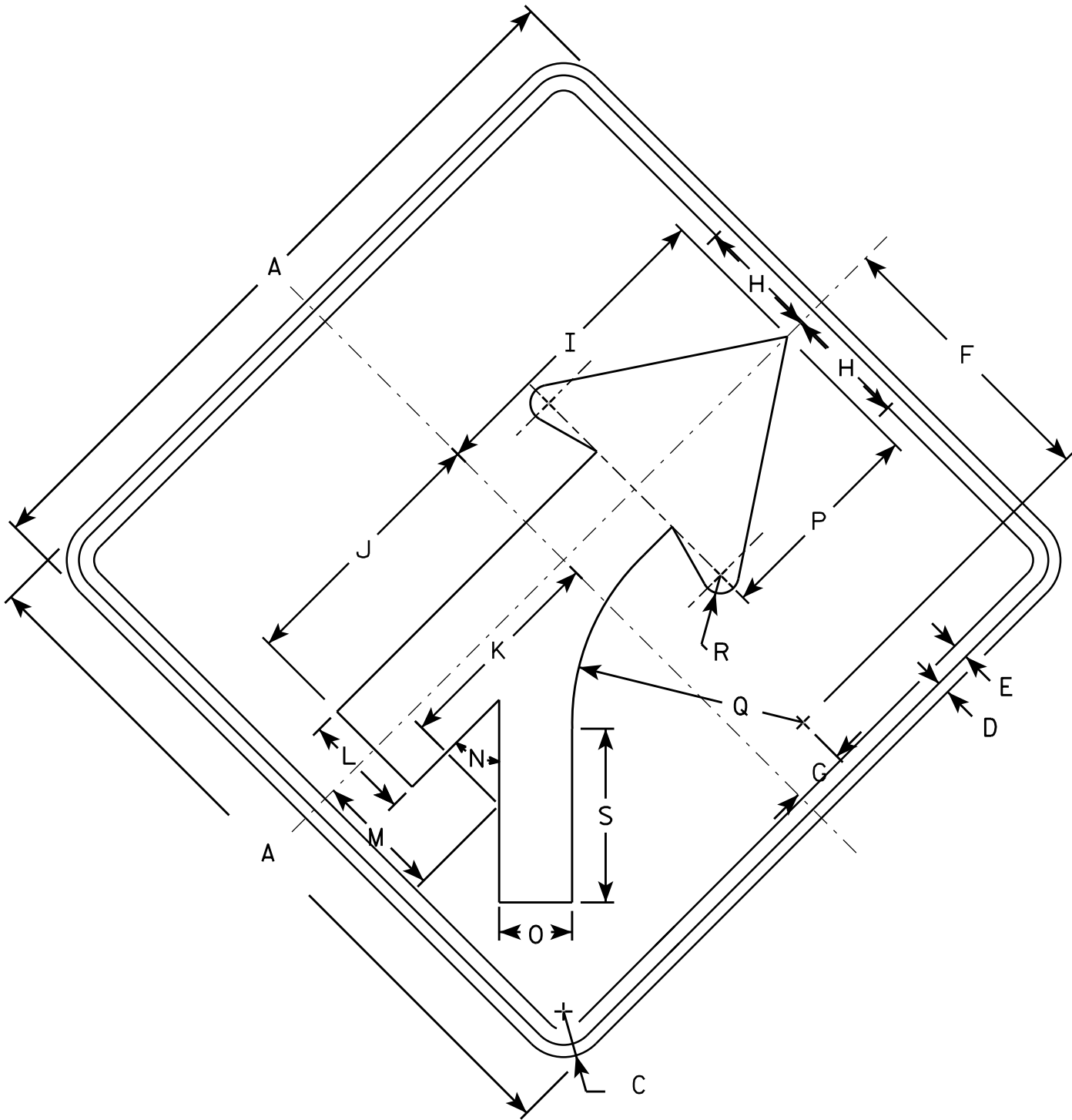
Matthew R. Rauch

For State Traffic Engineer

DATE 11/20/13

PLATE 104

W04-2.1



W04-5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	14	2 3/4	6	15 3/4	13 1/4	10 1/4	5 1/4	6 3/8	45°	3 5/8	10 5/8	11 3/8	7/8	8 1/2								9.0
2S	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0
2M	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0
3	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0
4	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0
5	48		2 1/4	3/4	1	18 3/4	3 5/8	8	20 1/2	17 1/2	14 3/8	7	8 3/8	45°	4 3/4	14 1/4	15 1/4	1 1/4	11 3/8								16.0

NOTES

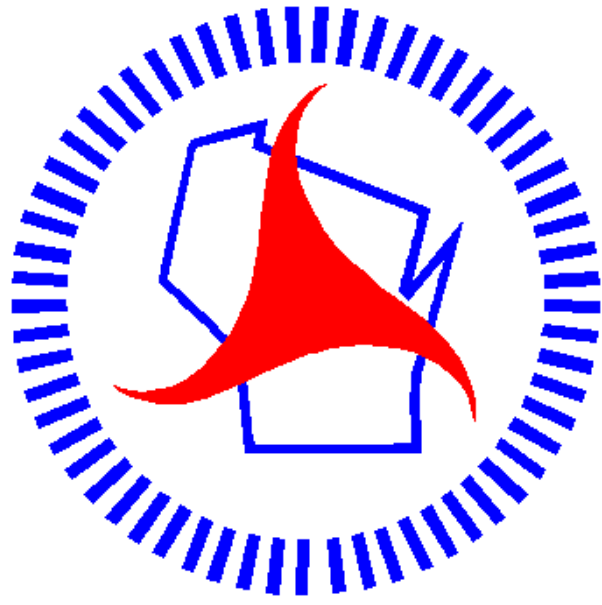
1. Sign is Type II - Type F Reflective - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material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

STANDARD SIGN
W04-5

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew P. Rauch*
for State Traffic Engineer

DATE 4/28/16 PLATE NO 105 W04-5.1



Wisconsin Department of Transportation

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