

WIS WITH: NA

PROJECT ID: 1166-05-84

COUNTY: PORTAGE

JUNE 2022 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 = 76



DESIGN DESIGNATION 1166-05-14

A.A.D.T.	2022	=	34,605
A.A.D.T.		=	NA
D.H.V.		=	NA
D.D.		=	NA
T.		=	20%
DESIGN SPEED		=	70 MPH
ESALS		=	NA

CONVENTIONAL SYMBOLS

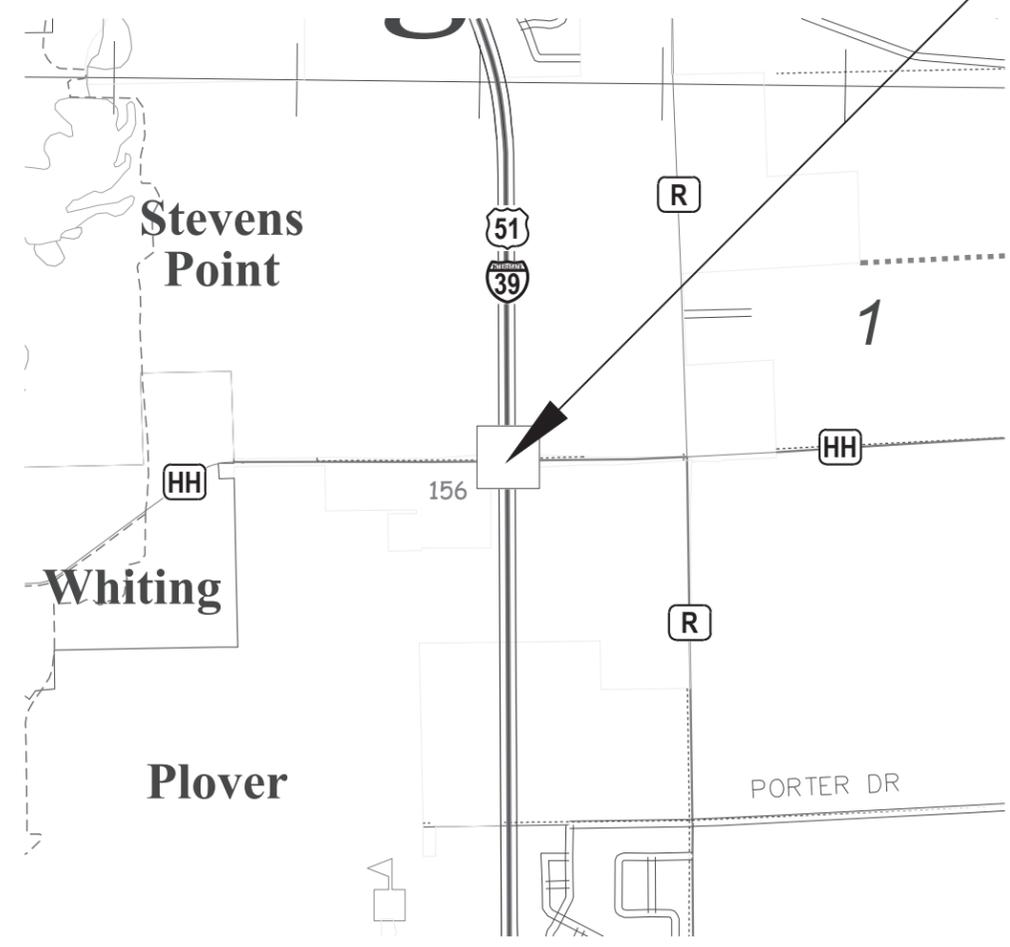
PLAN		PROFILE	
CORPORATE LIMITS		GRADE LINE	
PROPERTY LINE		ORIGINAL GROUND	
LOT LINE		MARSH OR ROCK PROFILE (To be noted as such)	
LIMITED HIGHWAY EASEMENT		SPECIAL DITCH	
EXISTING RIGHT OF WAY		GRADE ELEVATION	
PROPOSED OR NEW R/W LINE		CULVERT (Profile View)	
SLOPE INTERCEPT		UTILITIES	
REFERENCE LINE		ELECTRIC	
EXISTING CULVERT		FIBER OPTIC	
PROPOSED CULVERT (Box or Pipe)		GAS	
COMBUSTIBLE FLUIDS		SANITARY SEWER	
MARSH AREA		STORM SEWER	
WOODED OR SHRUB AREA		TELEPHONE	
		WATER	
		UTILITY PEDESTAL	
		POWER POLE	
		TELEPHONE POLE	

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION
 PLAN OF PROPOSED IMPROVEMENT

PLAINFIELD - STEVENS POINT
 CTH HH BRIDGE B-49-21
 IH 39
 PORTAGE COUNTY

STATE PROJECT NUMBER
1166-05-84

PROJECT 1166-05-84
 B-49-21



LAYOUT
 SCALE 0 0.5 MI
 TOTAL NET LENGTH OF CENTERLINE = 0.00

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

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1166-05-84	WISC 2022457	1

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

PREPARED BY	Surveyor	REGION
Designer	ZACHARY GRULING	
Project Manager	DAN HOLLOWAY	
Regional Examiner	ZACHARY GRULING	
Regional Supervisor	NICHOLE LYSNE	

APPROVED FOR THE DEPARTMENT
 DATE: _____
 Digitally signed by Daniel Holloway
 Date: 2022.03.31 11:36:34 -0500
 (Signature)

GENERAL NOTES

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

SECTION 2 ORDER

- General Notes
- Project Overview
- Typical Section
- Traffic Control

AS-BUILT REFERENCE (YEAR)*

- F05-03(64) (1968)
- 6998-01-41 (1990)

*Approval Year (Not Construction)

ENVIRONMENTAL CONTACTS

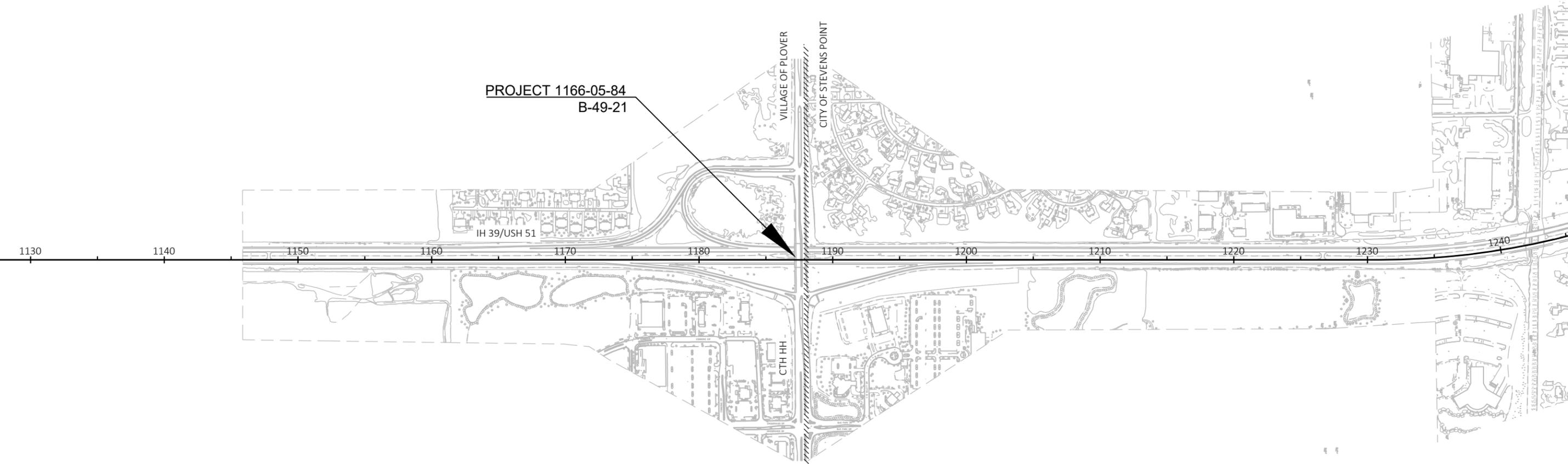
WI Department of Natural Resources
 473 Griffith Ave
 Wisconsin Rapids, WI 54494
 Attn: Casey Jones
 Phone: (715) 213-6571 Mobile
casey.jones@wisconsin.gov

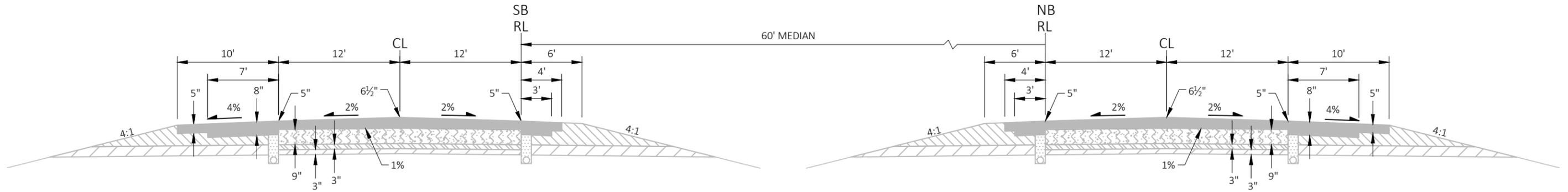
DIGGERS HOTLINE

 Dial **811** or (800)242-8511
www.DiggersHotline.com



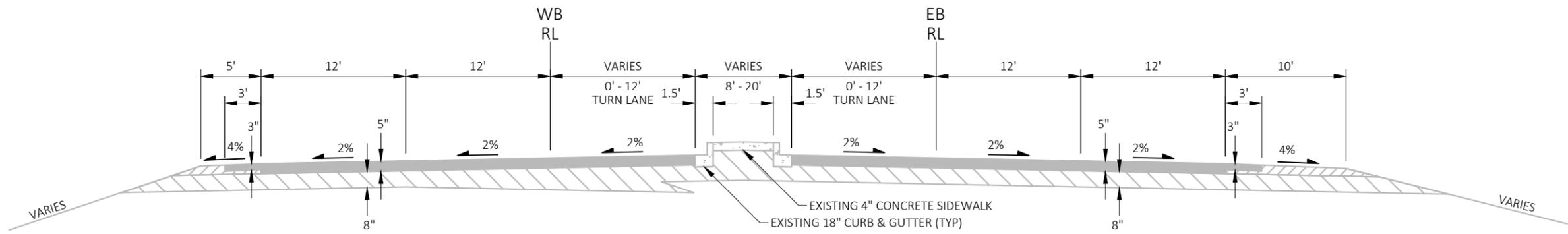
PROJECT 1166-05-84
B-49-21





EXISTING TYPICAL SECTION IH 39

NB: STA 1178+27 TO STA 1191+86
SB: STA 1183+34 TO STA 1200+40

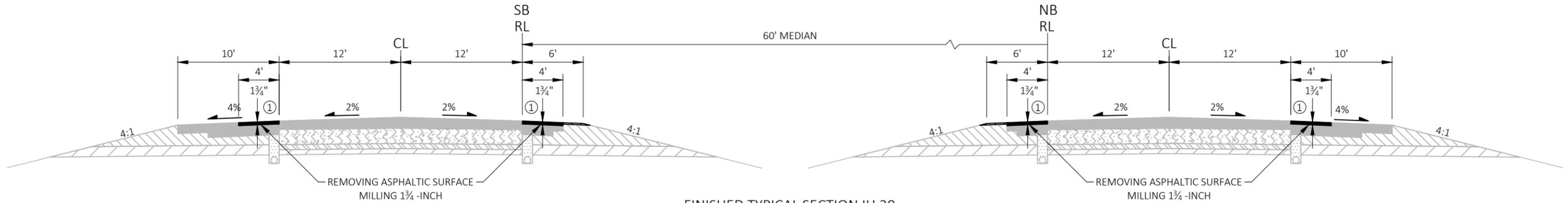


EXISTING TYPICAL SECTION CTH HH

STA 113+00G TO STA 122+50G

LEGEND

-  EXISTING HMA PAVEMENT
-  EXISTING RUBBLIZED CONCRETE PAVEMENT
-  EXISTING BASE AGGREGATE DENSE 3/4-INCH
-  EXISTING BASE AGGREGATE DENSE 1 1/4-INCH
-  EXISTING BASE AGGREGATE OPEN GRADED



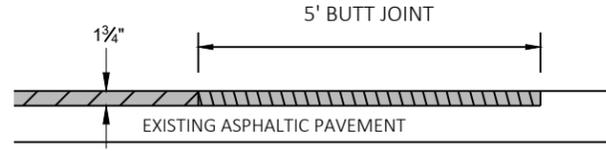
FINISHED TYPICAL SECTION IH 39

NB: STA 1178+27 TO STA 1191+86
SB: STA 1183+34 TO STA 1200+40

① REINSTALL SHOULDER RUMBLE STRIP PER SDD

LEGEND

- ASPHALTIC SURFACE
- BASE AGGREGATE DENSE 3/4-INCH
- EXISTING HMA PAVEMENT
- EXISTING RUBBLIZED CONCRETE PAVEMENT
- EXISTING BASE AGGREGATE DENSE 3/4-INCH
- EXISTING BASE AGGREGATE DENSE 1 1/4-INCH
- EXISTING BASE AGGREGATE OPEN GRADED



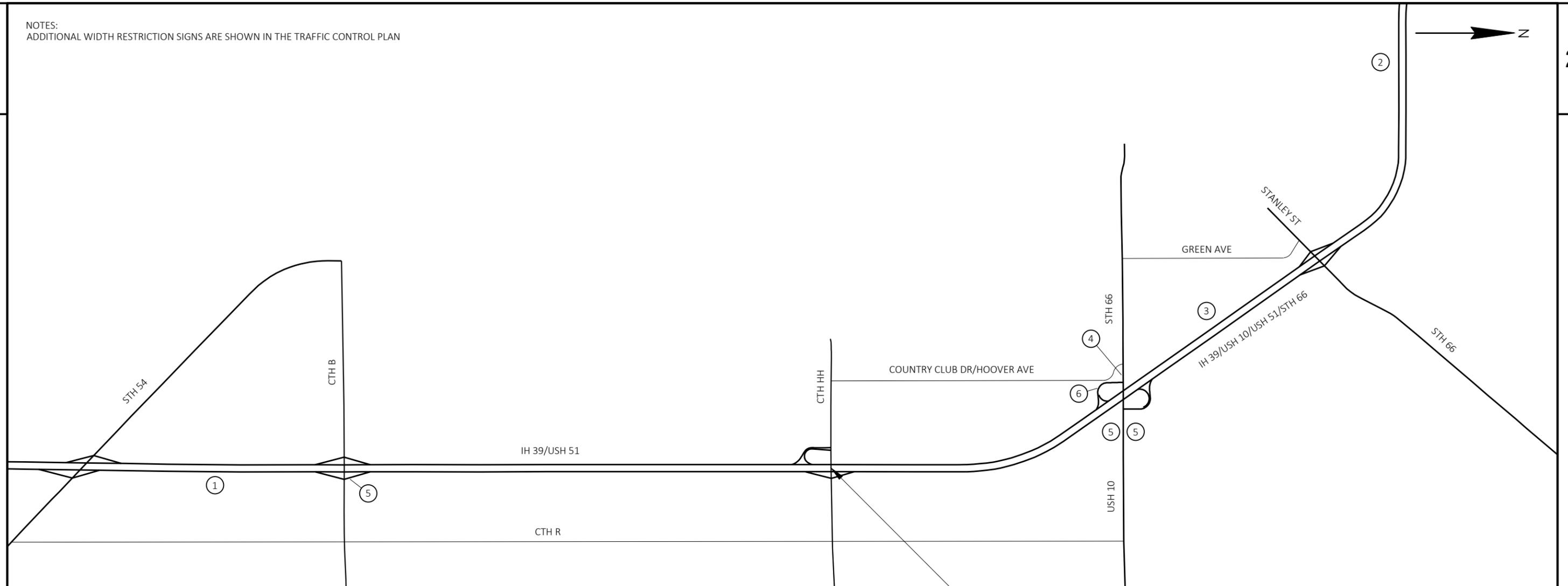
-  HMA PAVEMENT
-  REMOVING ASPHALTIC SURFACE MILLING
-  REMOVING ASPHALTIC SURFACE BUTT JOINTS

BUTT JOINT AT REMOVAL OF EXISTING RUMBLE STRIPS
 SEE MISCELLANEOUS QUANTITIES FOR LOCATIONS

NOTES:
ADDITIONAL WIDTH RESTRICTION SIGNS ARE SHOWN IN THE TRAFFIC CONTROL PLAN

2

2



①

INSTALL TWO ASSEMBLIES AT THIS LOCATION

EXIT 153

B

Plover Amherst
1/2 MILE

②

INSTALL TWO ASSEMBLIES AT THIS LOCATION

EXIT 159

66 EAST

Stevens Point Rosholt
1 MILE

④

INSTALL NEXT TO AUXILIARY LANE

⑤

INSTALL IN MEDIAN AND ALONG OUTSIDE WB SHOULDER BETWEEN MAPLE BLUFF RD AND IH 39 NB RAMPS

⑥

③

INSTALL TWO ASSEMBLIES AT THIS LOCATION

EXIT 158

EAST WEST

10 66

Stevens Point Appleton
3/4 MILE

SITE	LOCATION	7 DAYS PRIOR TO CONSTRUCTION		*DURING LANE CLOSURE	
		PHASE 1 3 SEC	PHASE 2 3 SEC	PHASE 1 3 SEC	PHASE 2 3 SEC
NB-01	ONE MILE BEYOND ESTIMATED QUEUE LENGTH MM 154.2			STOPPED TRAFFIC AHEAD	USE BOTH LANES
NB-02	500' AHEAD OF RIGHT LANE CLOSED 1/2 MILE SIGN			STAY IN LANE	DO NOT MERGE
NB-03	200' AHEAD OF LANE DROP TAPER	CTY HH BRIDGE WORK	BEGINS MONTH DAY	MERGE HERE	TAKE TURNS
SB-01	ONE MILE BEYOND ESTIMATED QUEUE LENGTH 250' NORTH OF PLOVER RIVER			STOPPED TRAFFIC AHEAD	USE BOTH LANES
SB-02	500' AHEAD OF RIGHT LANE CLOSED 1/2 MILE SIGN			STAY IN LANE	DO NOT MERGE
SB-03	200' AHEAD OF LANE DROP TAPER	CTY HH BRIDGE WORK	BEGINS MONTH DAY	MERGE HERE	TAKE TURNS

*PART OF DYNAMIC LATE MERGE SYSTEM AND ONLY TURN ON WHEN ACTIVATED

GENERAL NOTES FOR PORTABLE CHANGEABLE MESSAGE SIGNS

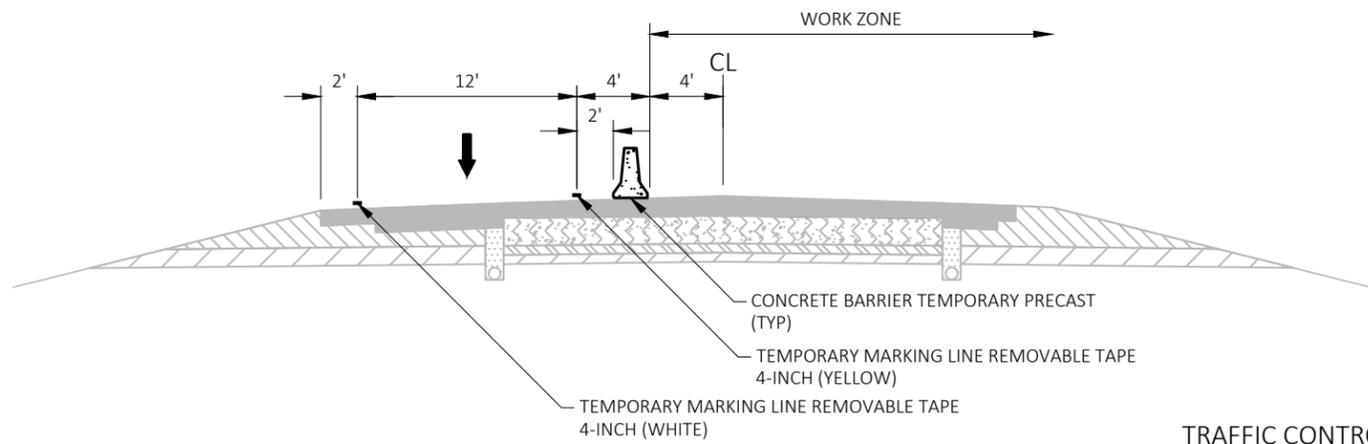
CONSIDER GEOMETRICS WHEN LOCATING MESSAGE BOARDS SO THE DRIVER HAS A CLEAR VIEW OF THE SIGN FOR A MINIMUM OF 1000 FEET IN FRONT OF THE MESSAGE BOARD.

MESSAGE SIGNS SHOULD BE PLACED AS FAR AWAY FROM LIVE TRAFFIC LANES AS POSSIBLE WITHOUT HAMPERING VISIBILITY. IN ADVANCE OF INTERSTATE CONSTRUCTION PROJECTS, THE SIGNS SHOULD BE PLACED ON THE BACKSLOPE BEYOND THE DITCH LINE. THE LOCATIONS SELECTED SHOULD BE AT OR SLIGHTLY ABOVE THE ELEVATION OF THE ROADWAY. FOR INTERMITTANT WORK, SUCH AS FREEWAY LANE CLOSURE, OR WHERE SITE CONDITIONS DO NOT ALLOW OTHERWISE, THE SIGNS MAY BE PLACED ON THE SHOULDER.

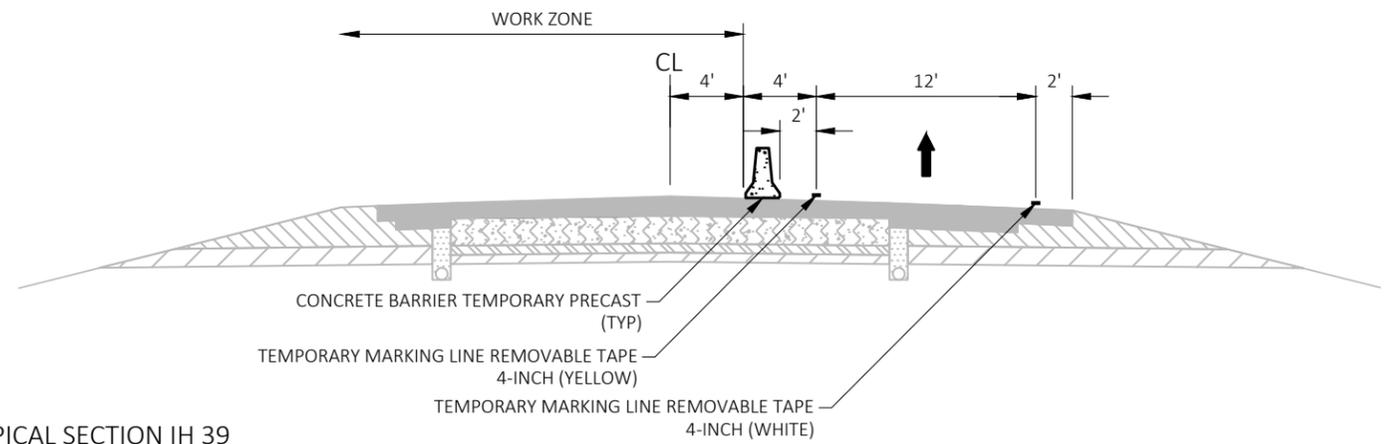
THE SITE SHOULD BE VISITED TO ASSURE VISIBILITY, SAFETY AND MAINENANCE CONSIDERATIONS.

A TAPER OF FIVE (5) REFLECTORIZED DRUMS OR BARRICADES SHALL BE PLACED AHEAD OF PCMS PLACED ON THE SHOULDER IF IT IS NOT SHIELDED BY A BARRIER.

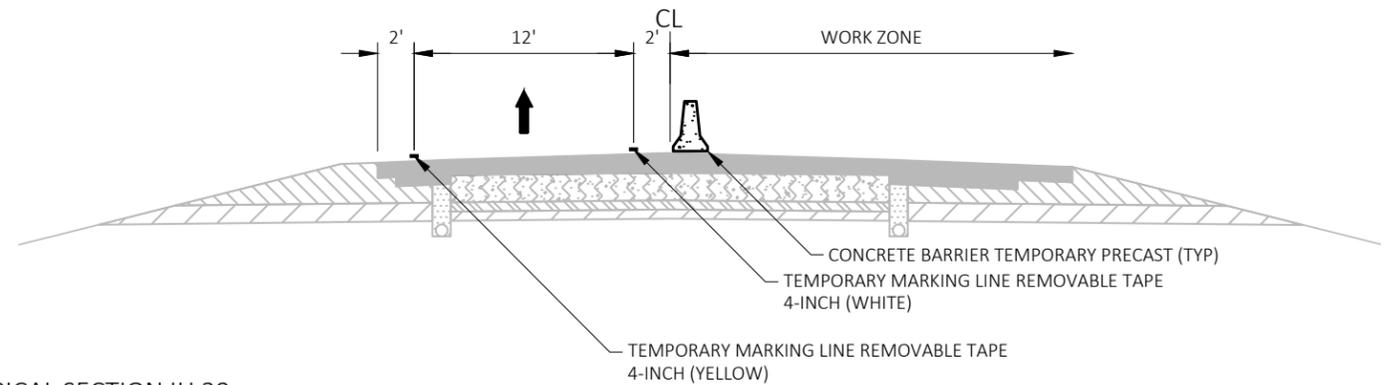
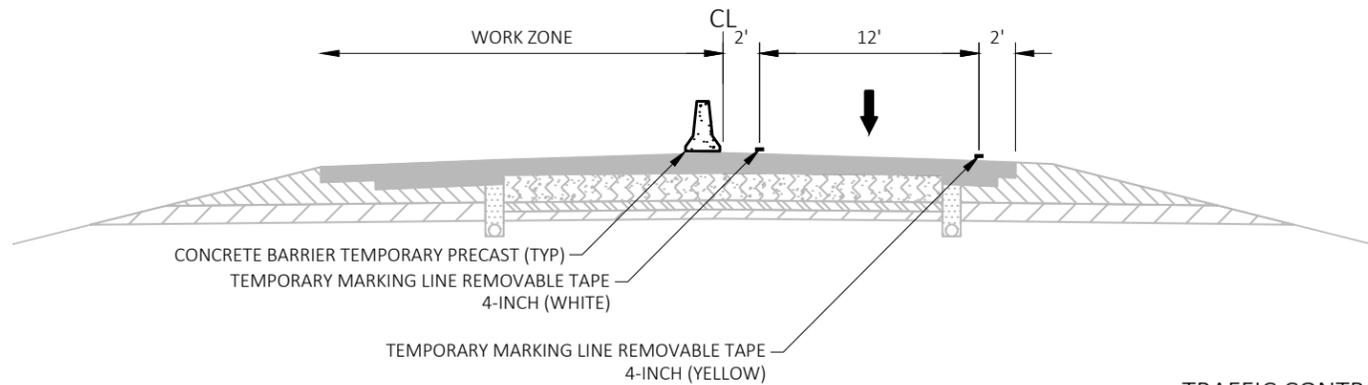
HAVE MESSAGE BOARDS IN PLACE AND DISPLAYING THE "PRIOR TO CONSTRUCTION" MESSAGE 7 DAYS PRIOR TO EXPECTED START OF THE IH 39 ROAD WORK THAT WILL REQUIRE LANE CLOSURES ON IH 39.



TRAFFIC CONTROL TYPICAL SECTION IH 39
PASSING LANE CLOSURE

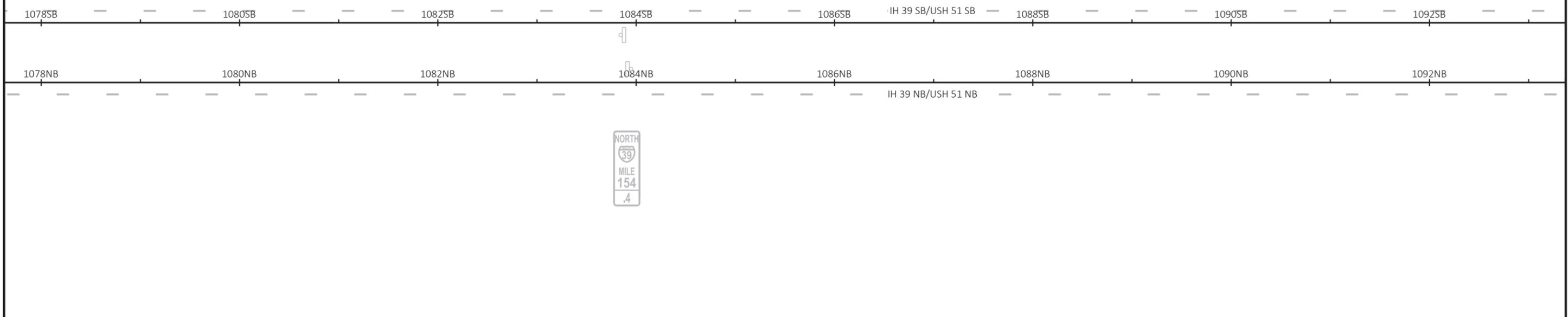
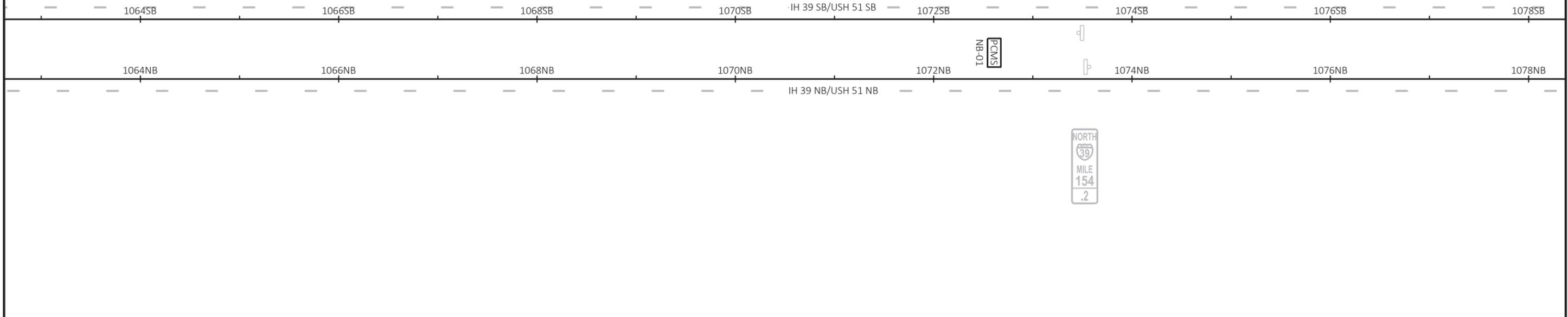


TRAFFIC CONTROL TYPICAL SECTION IH 39
DRIVING LANE CLOSURE



NOTES:
SIGN SIZE 48"x48" UNLESS NOTED OTHERWISE

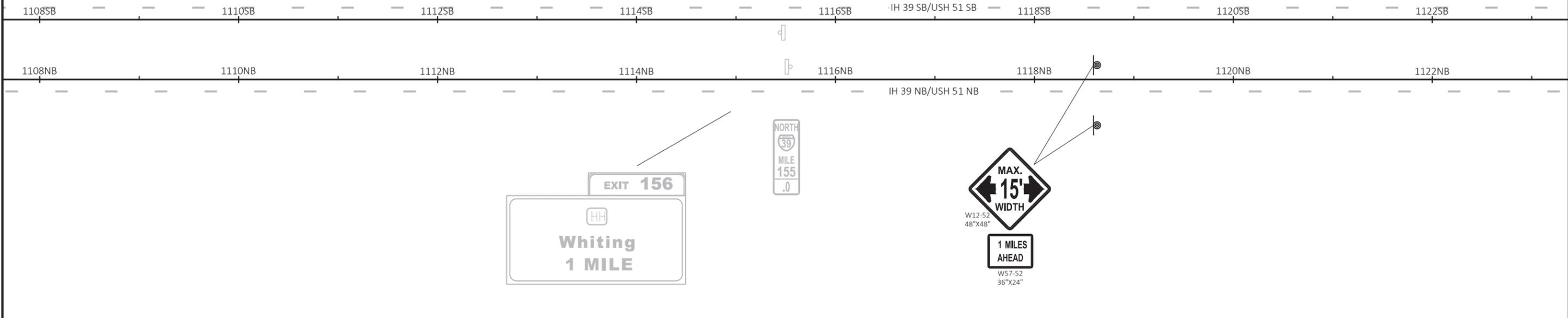
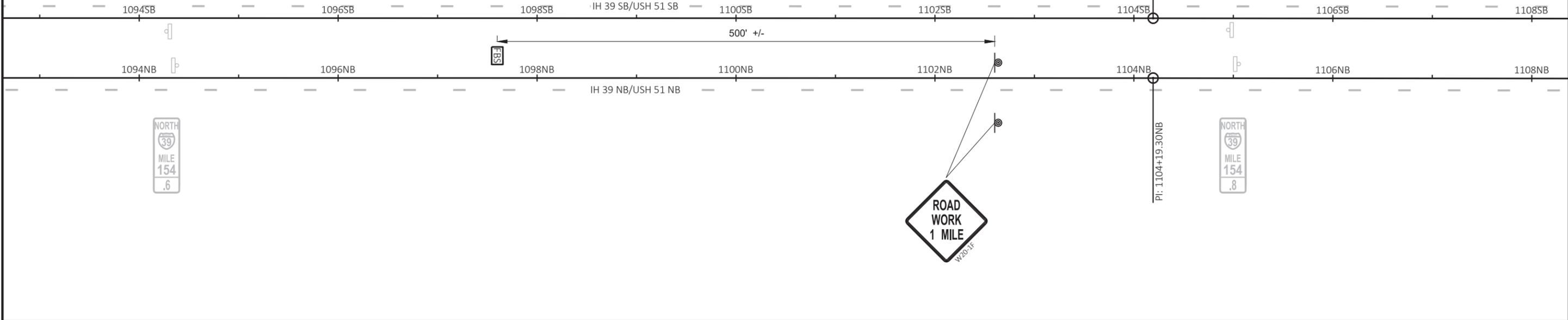
USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - PASSING LANE CLOSURE	SHEET	E
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NOTES:
SIGN SIZE 48"x48" UNLESS NOTED OTHERWISE

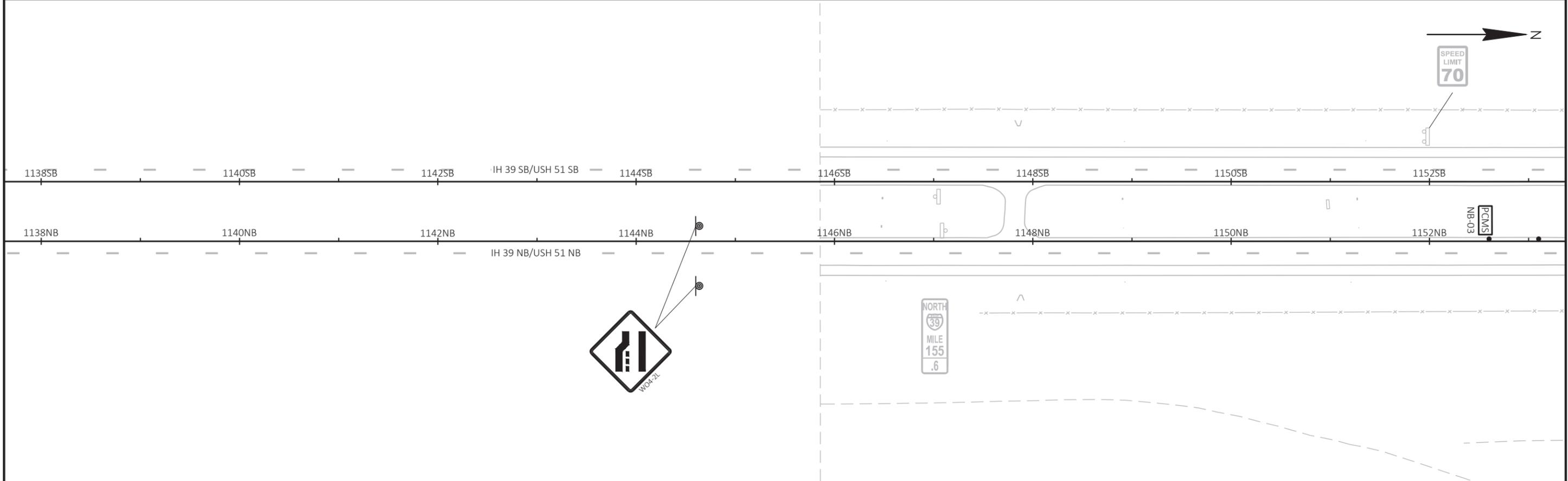
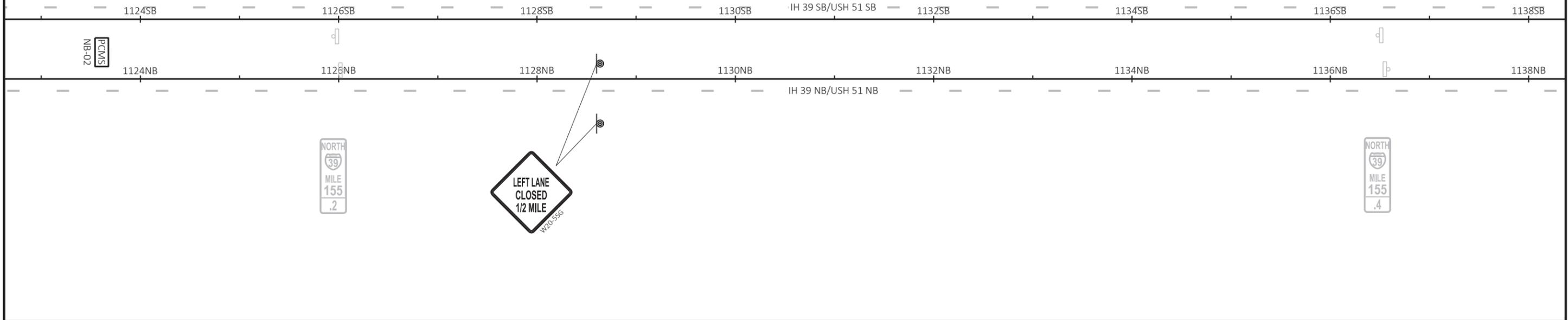
USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE
ADVANCED WIDTH RESTRICTION SIGNING



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - PASSING LANE CLOSURE	SHEET	E
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TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - PASSING LANE CLOSURE	SHEET	E
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NOTES:
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USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE
ADVANCED WIDTH RESTRICTION SIGNING

END ROAD WORK
G20-2A
48"x24"



SIGN

1154SB

1156SB

1158SB

1160SB

1162SB

1164SB

IH 39 SB/USH 51 SB

1166SB

1168SB

1154NB

1156NB

1158NB

1160NB

1162NB

1164NB

1166NB

1168NB

840' TAPER

50'

+00

IH 39 NB/USH 51 NB

100'

SIGN
SIS SIGN

SIGN
SIS SIGN

TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
(CENTERLINE SKIPS)

TEMPORARY MARKING REMOVABLE TAPE 4-INCH
YELLOW



WO13-1
36"x36"



END ROAD WORK
G20-2A
48"x24"



OFF RAMP TO CTH HH

ON RAMP FROM CTH HH

1168SB

1170SB

1172SB

1174SB

IH 39 SB/USH 51 SB

1176SB

1178SB

1180SB

1182SB

1168NB

1170NB

1172NB

1174NB

1176NB

1178NB

1180NB

1182NB

IH 39 NB/USH 51 NB

100'

TEMPORARY MARKING REMOVABLE TAPE 4-INCH
YELLOW

280' SHIFTING TAPER

50'

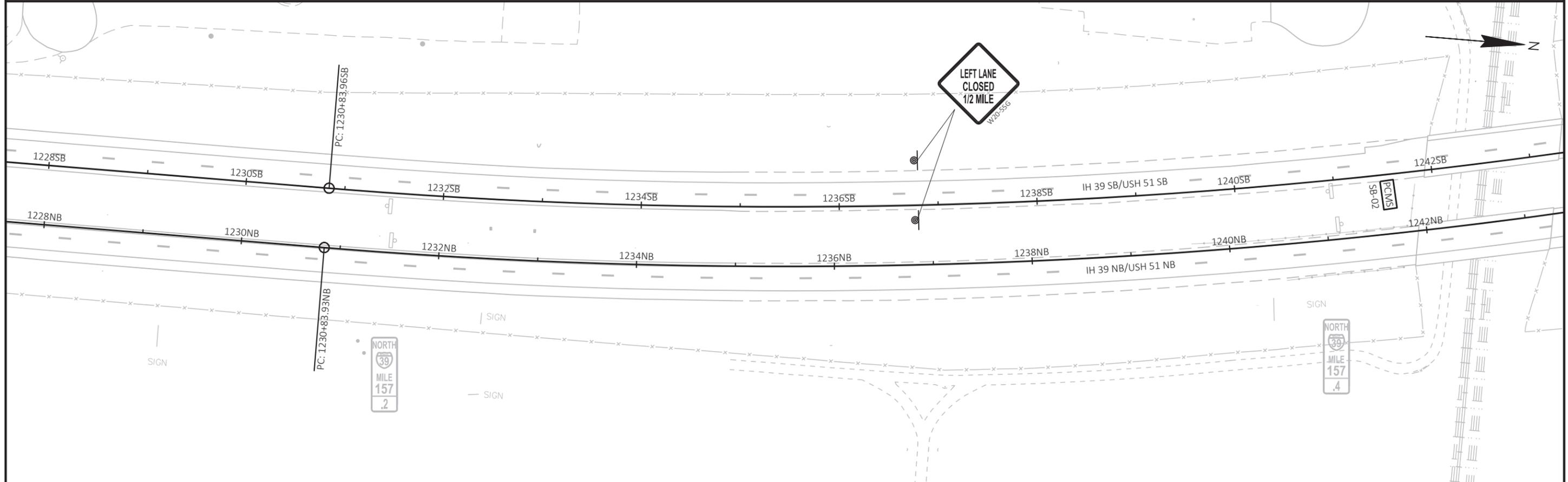
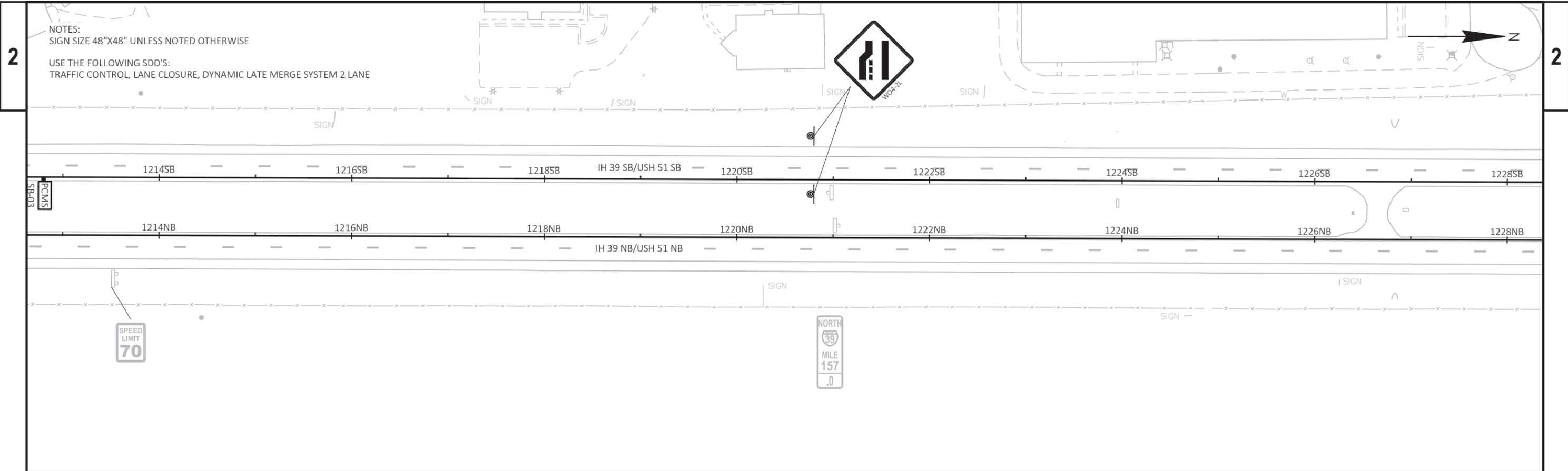
MARKING REMOVAL LINE 4-INCH
(WHITE EDGELINE)

OFF RAMP TO CTH HH

TEMPORARY MARKING REMOVABLE TAPE 4-INCH
WHITE

END ROAD WORK
G20-2A
48"x24"





PROJECT NO: 1166-05-84

HWY: IH 39

COUNTY: PORTAGE

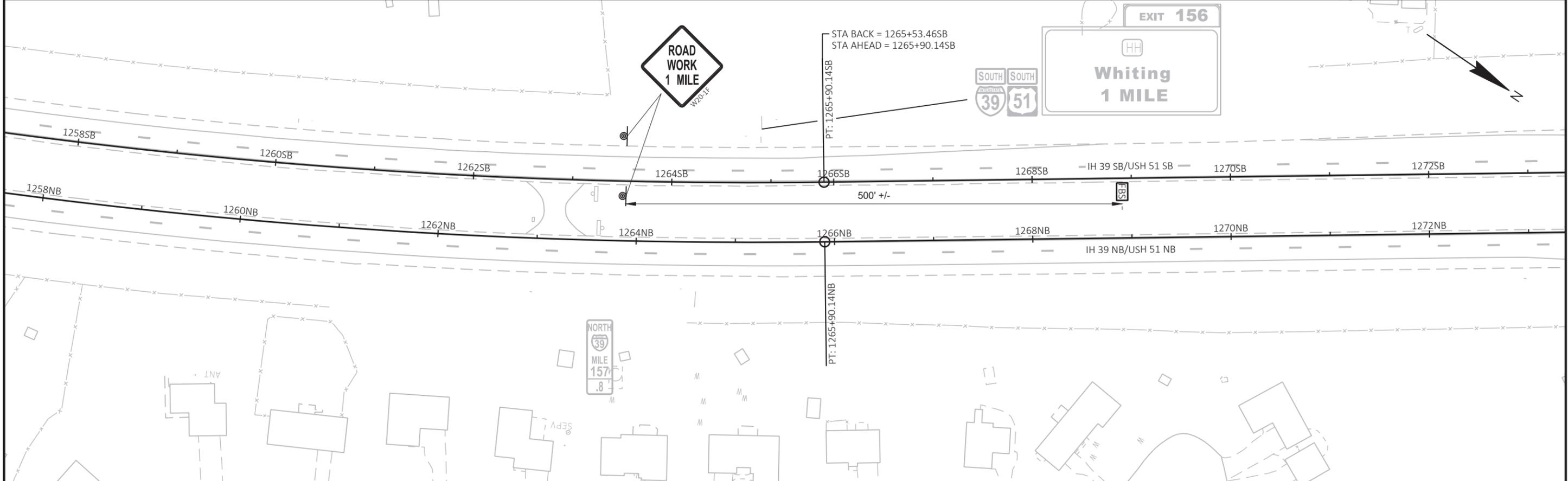
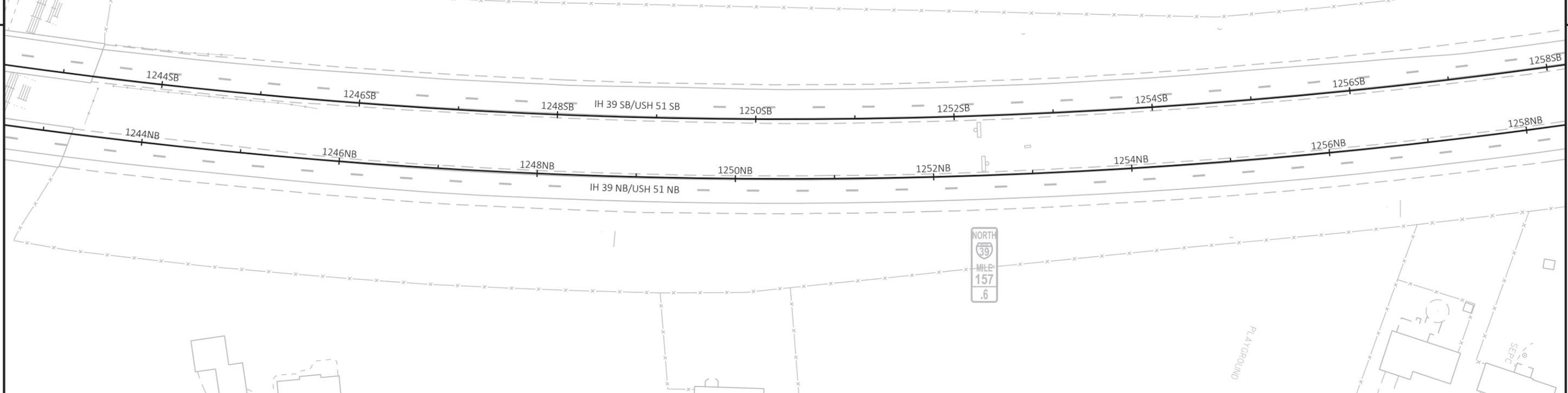
TRAFFIC CONTROL - PASSING LANE CLOSURE

SHEET

E

NOTES:
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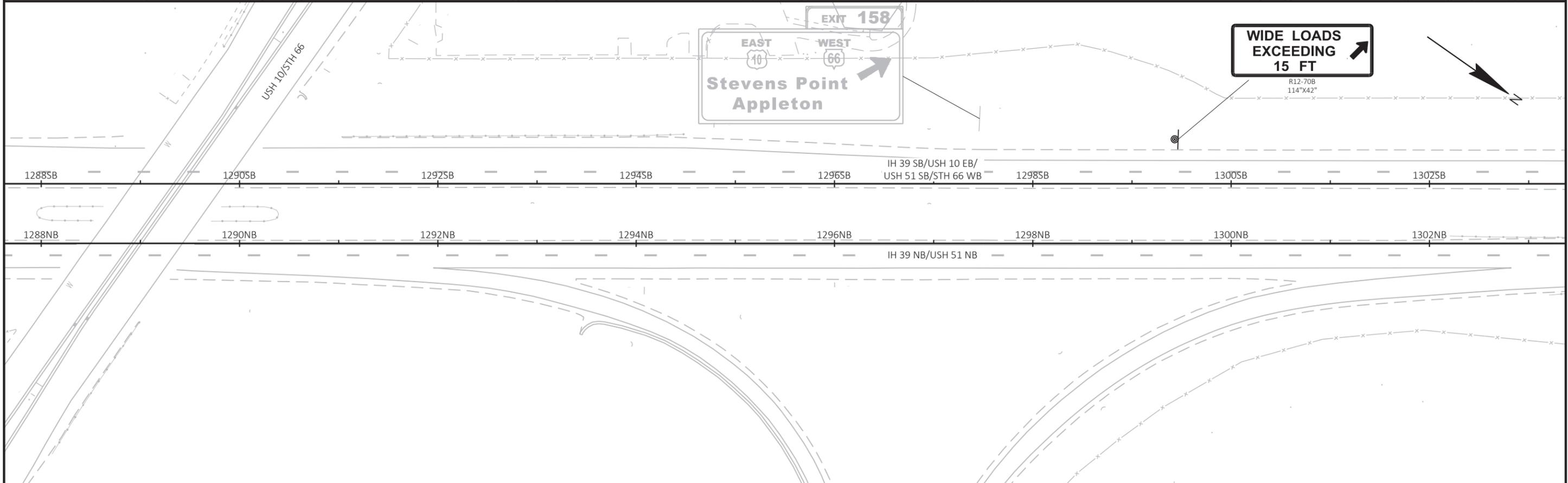
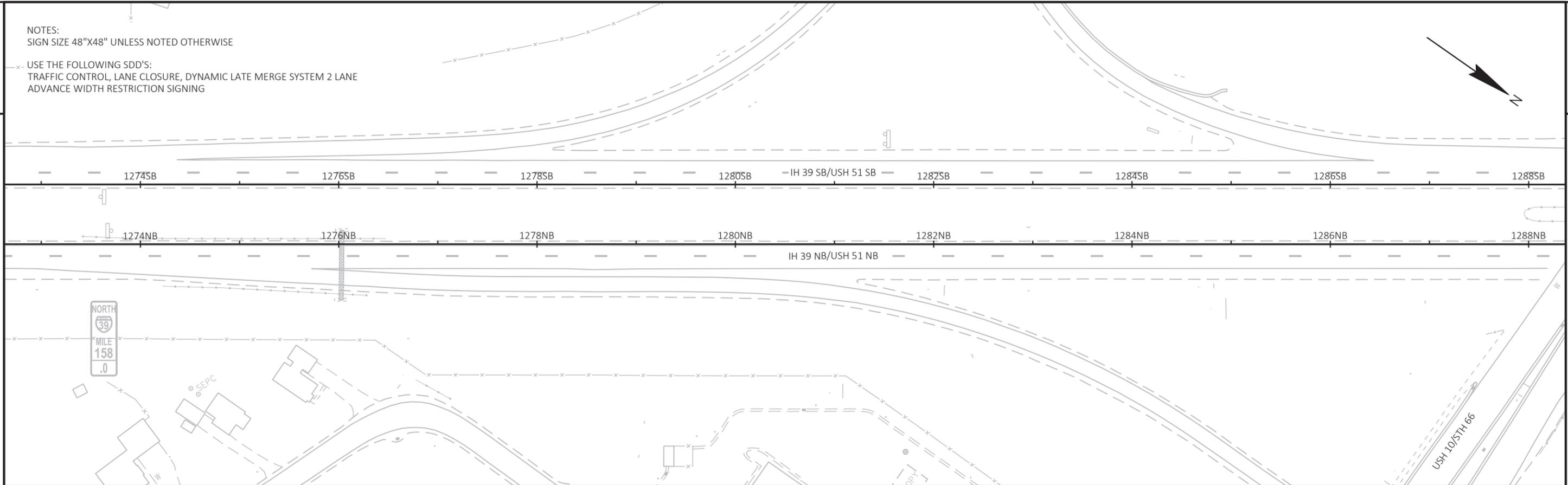
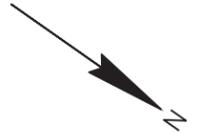
USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - PASSING LANE CLOSURE	SHEET	E
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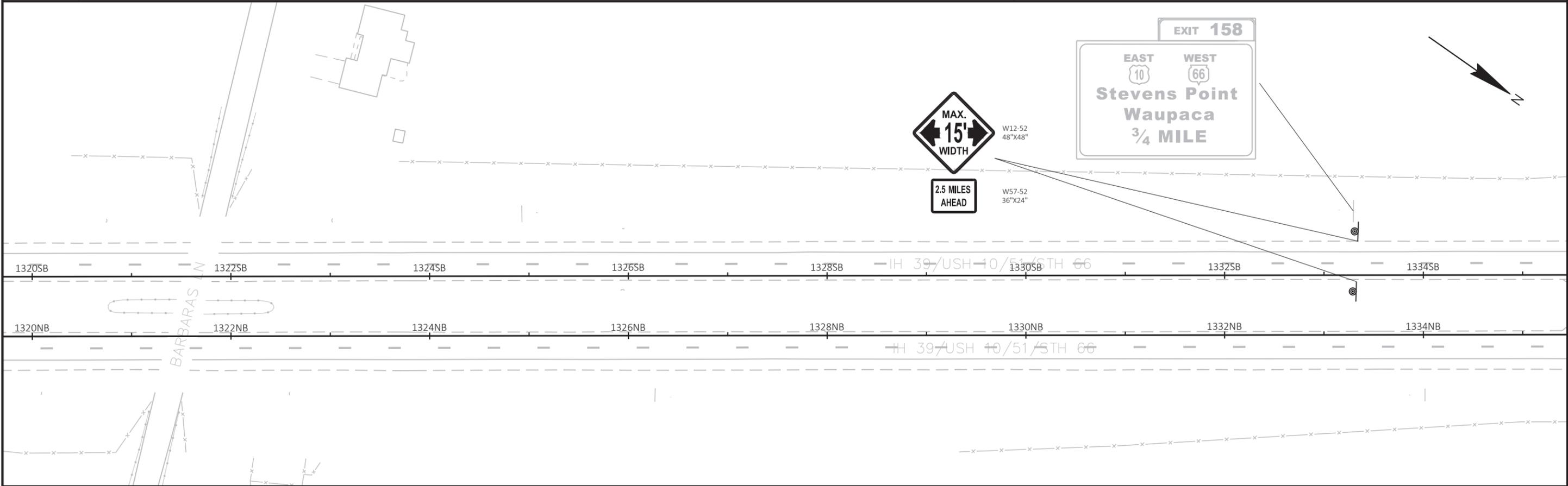
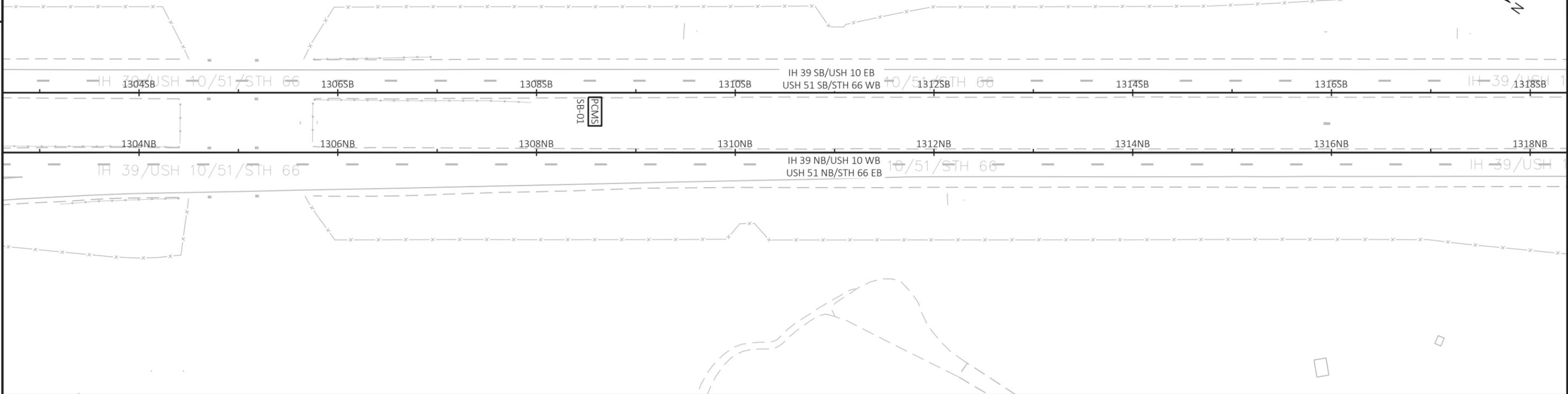
USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE
ADVANCE WIDTH RESTRICTION SIGNING



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - PASSING LANE CLOSURE	SHEET	E
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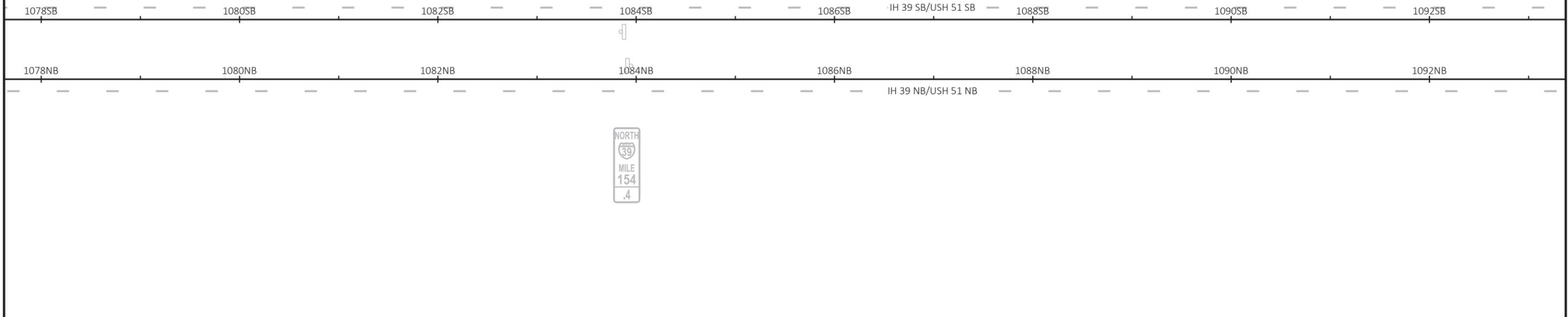
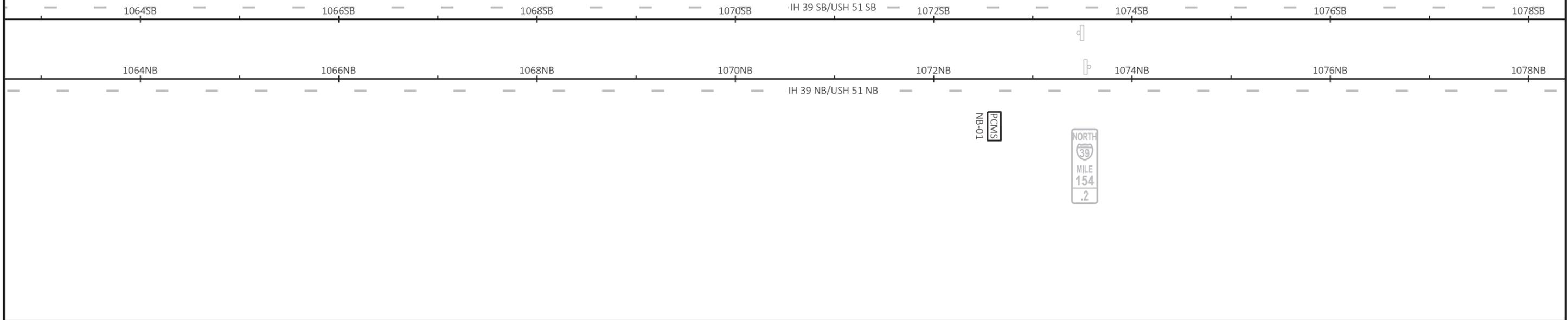
USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE
ADVANCE WIDTH RESTRICTION SIGNING



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - PASSING LANE CLOSURE	SHEET	E
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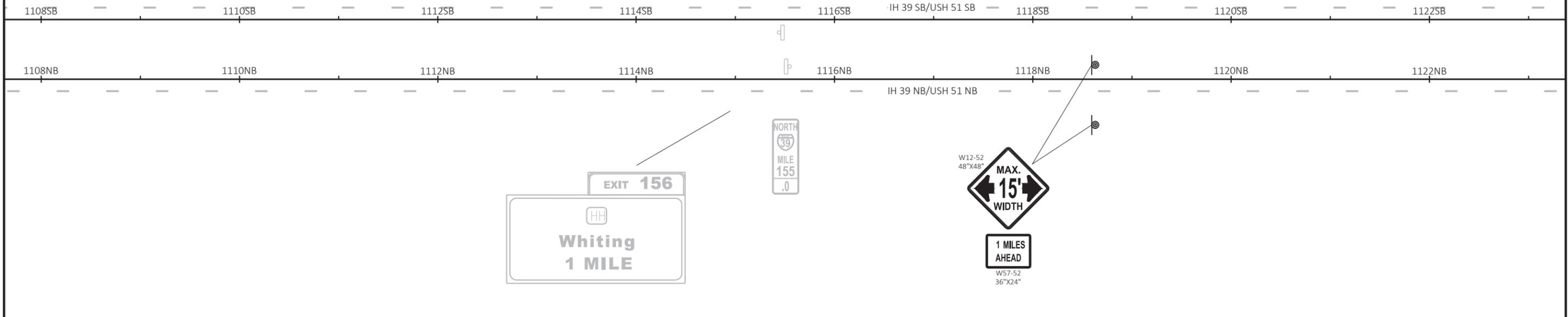
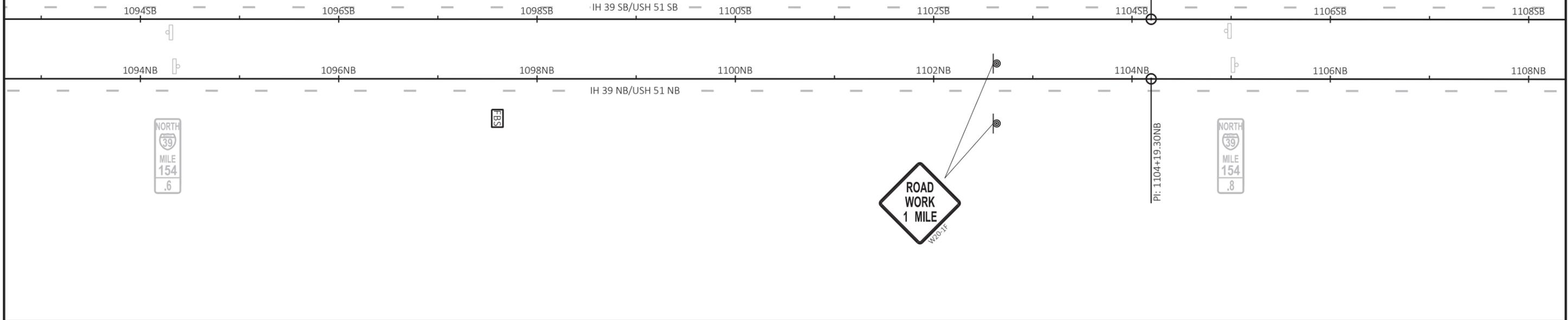
USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - DRIVING LANE CLOSURE	SHEET	E
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NOTES:
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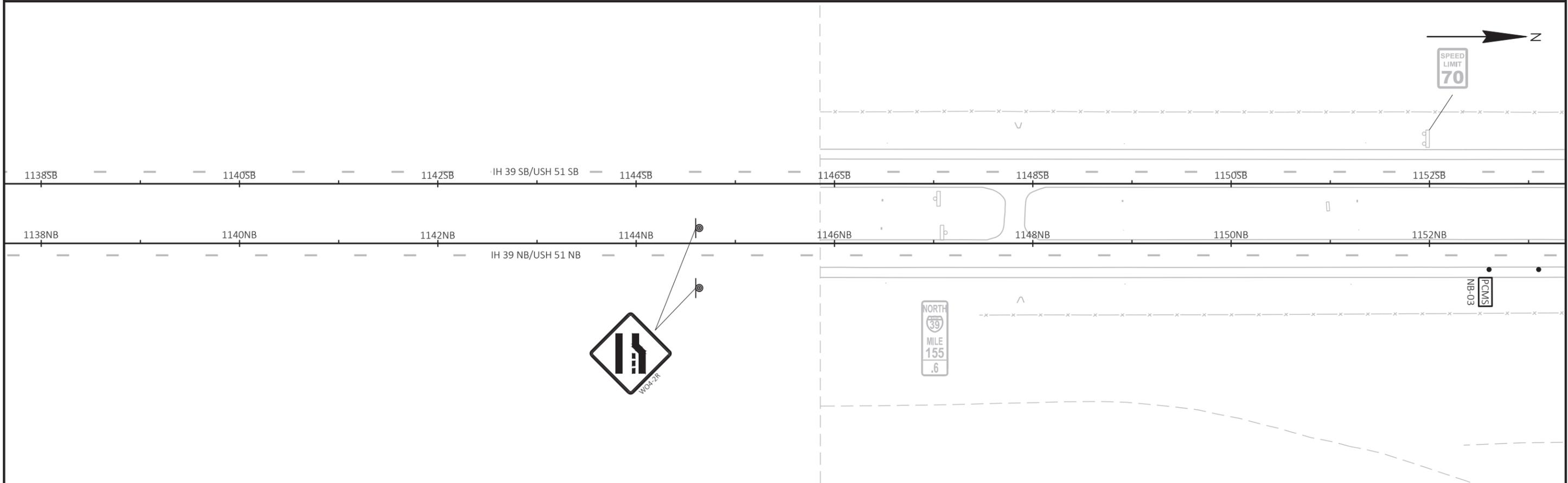
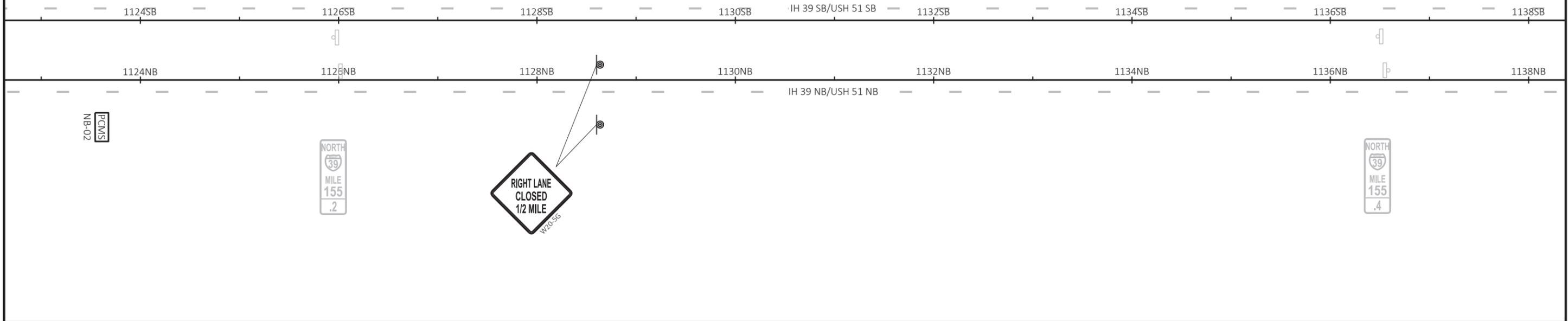
USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE
ADVANCE WIDTH RESTRICTION SIGNING



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - DRIVING LANE CLOSURE	SHEET	E
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NOTES:
SIGN SIZE 48"X48" UNLESS NOTED OTHERWISE

USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - DRIVING LANE CLOSURE	SHEET	E
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NOTES:
SIGN SIZE 48"X48" UNLESS NOTED OTHERWISE

USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LANE MERGE SYSTEM 2 LANE
TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
ADVANCE WIDTH RESTRICTION SIGNING

END ROAD WORK
G20-2A
48"X24"



48"X24"

SIGN

1154SB

1156SB

1158SB

1160SB

1162SB

1164SB

IH 39 SB/USH 51 SB

1166SB

1168SB

1154NB

1156NB

1158NB

1160NB

1162NB

1164NB

IH 39 NB/USH 51 NB

1166NB

1168NB

SIGN
SIS SIGN

840' TAPER

SIGN
SIS SIGN

TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH
(CENTERLINE SKIPS)

TEMPORARY MARKING REMOVABLE TAPE 4-INCH
WHITE



END ROAD WORK
G20-2A
48"X24"

MARKING LINE REMOVABLE MASK OUT TAPE 6-INCH
CENTERLINE SKIPS

ON RAMP FROM CTH HH

TEMPORARY MARKING REMOVABLE TAPE 4-INCH
WHITE

OFF RAMP TO CTH HH

1168SB

1170SB

1172SB

1174SB

IH 39 SB/USH 51 SB

1176SB

1178SB

1180SB

1182SB

200' TAPER

1170NB

1172NB

1174NB

1176NB

1178NB

1180NB

1182NB

IH 39 NB/USH 51 NB

TEMPORARY MARKING REMOVABLE TAPE 8-INCH
WHITE

TEMPORARY MARKING REMOVABLE TAPE 4-INCH
FILL IN GAPS TO MAKE SOLID WHITE LINE

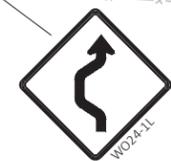
SIGN

SIGN

100' SHIFTING
TAPER

MARKING REMOVAL LINE 4-INCH
(WHITE EDGELINE)

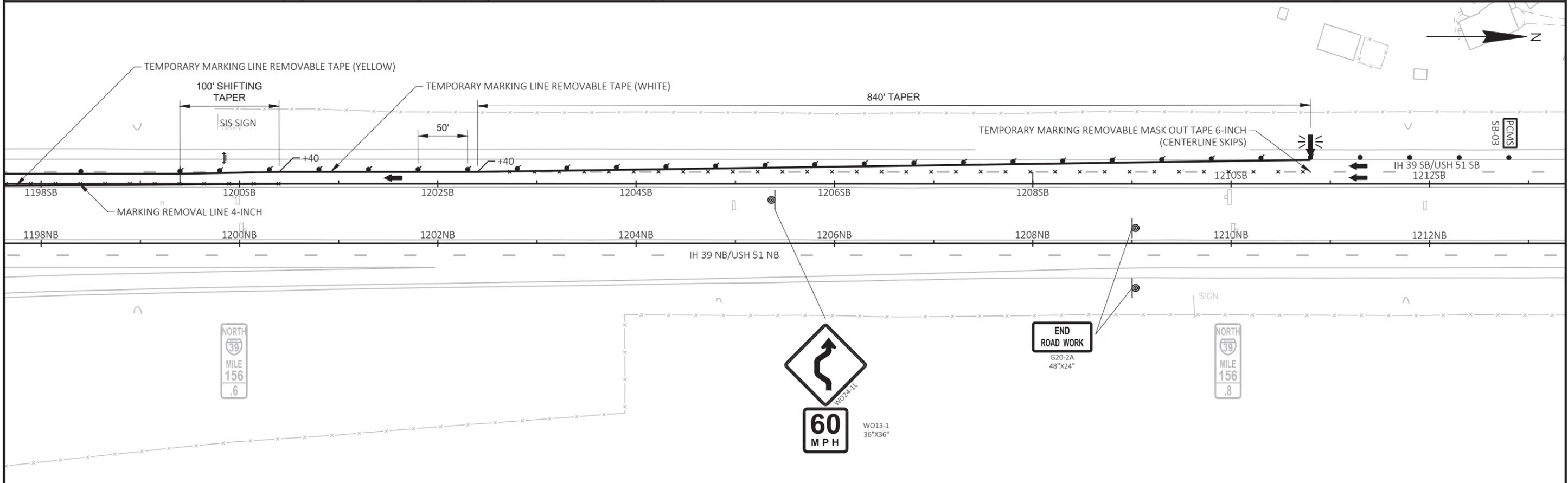
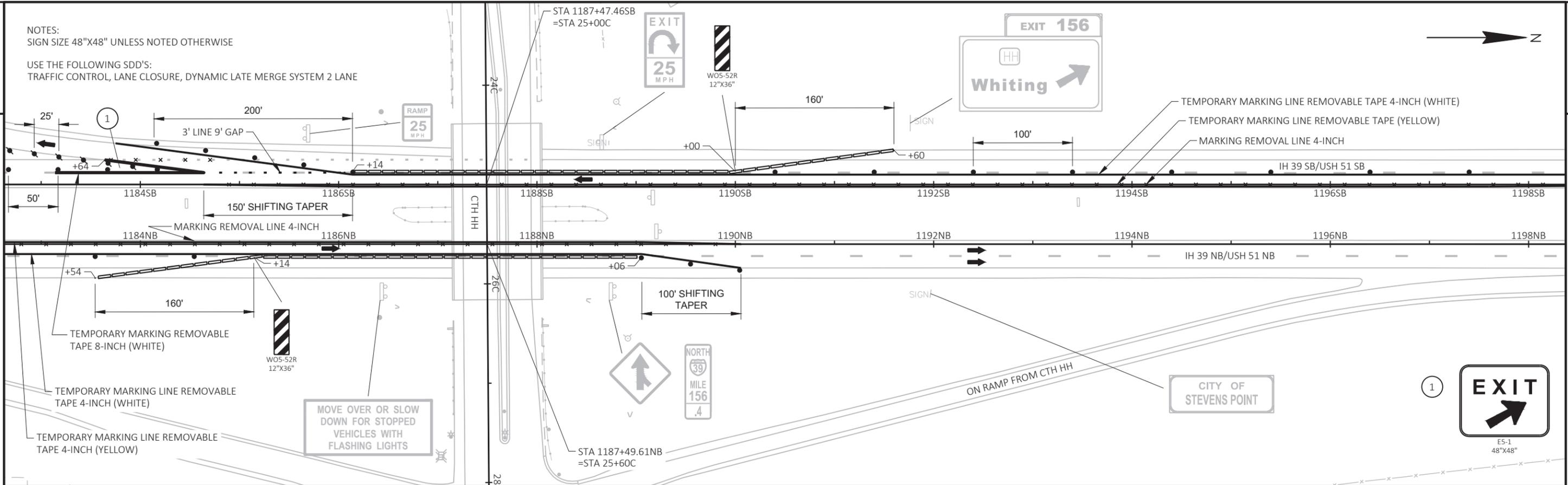
OFF RAMP TO CTH HH



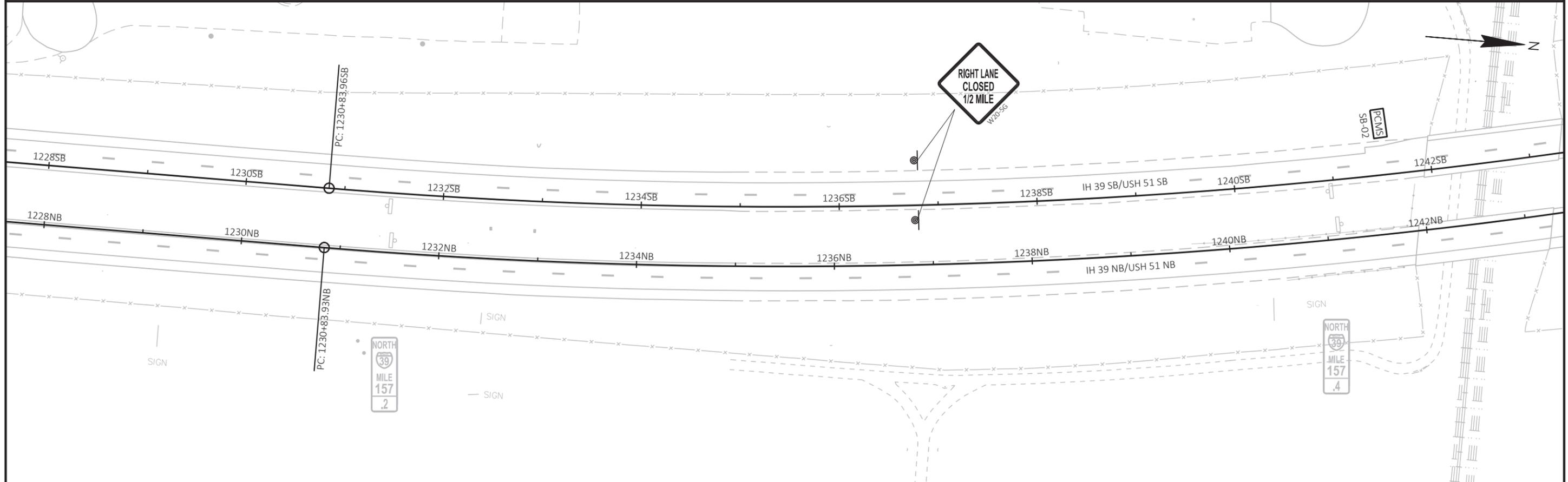
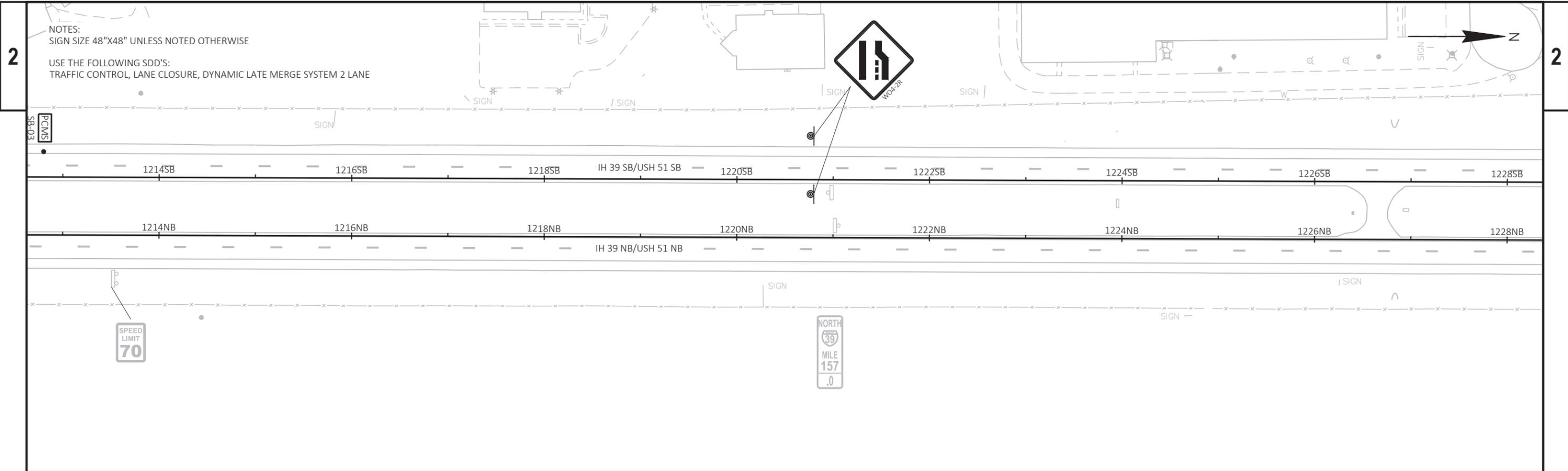
END ROAD WORK
G20-2A
48"X24"

NOTES:
SIGN SIZE 48"X48" UNLESS NOTED OTHERWISE

USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE



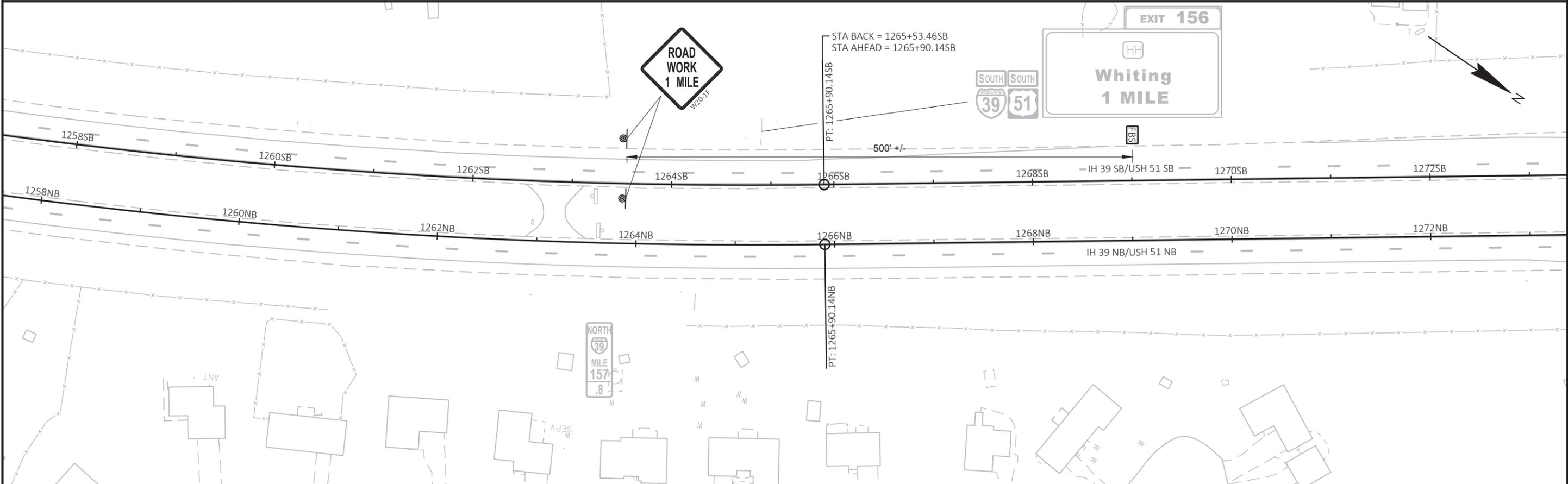
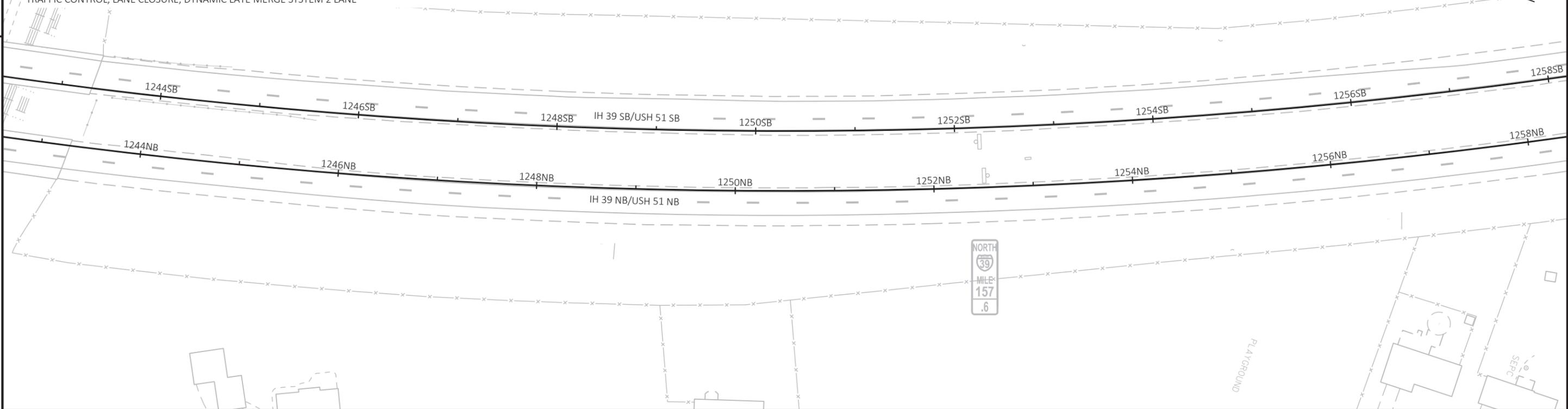
PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - DRIVING LANE CLOSURE	SHEET	E
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PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - DRIVING LANE CLOSURE	SHEET	E
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NOTES:
SIGN SIZE 48"x48" UNLESS NOTED OTHERWISE

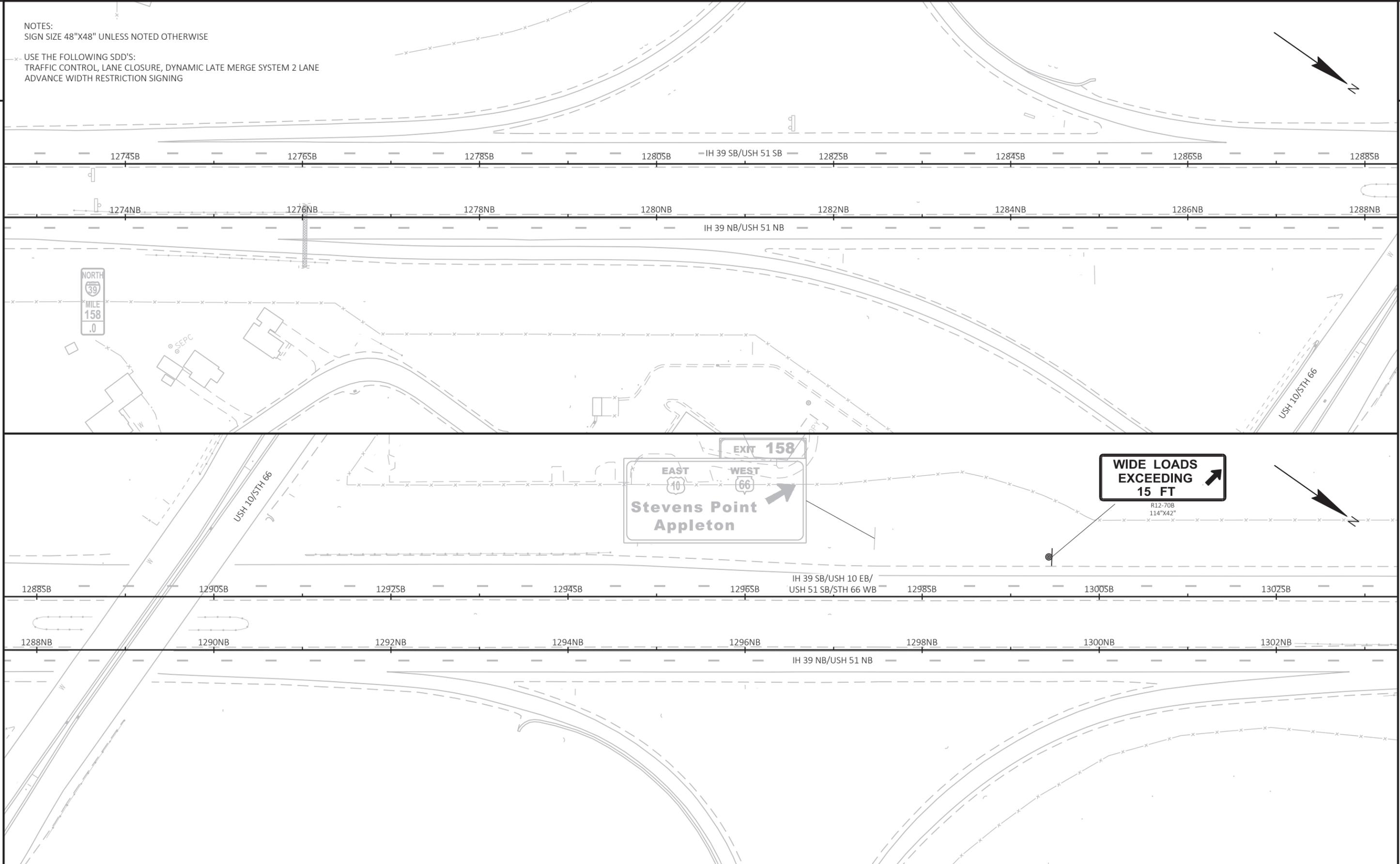
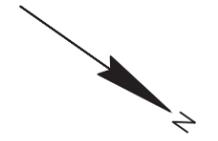
USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - DRIVING LANE CLOSURE	SHEET	E
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NOTES:
SIGN SIZE 48"X48" UNLESS NOTED OTHERWISE

USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE
ADVANCE WIDTH RESTRICTION SIGNING

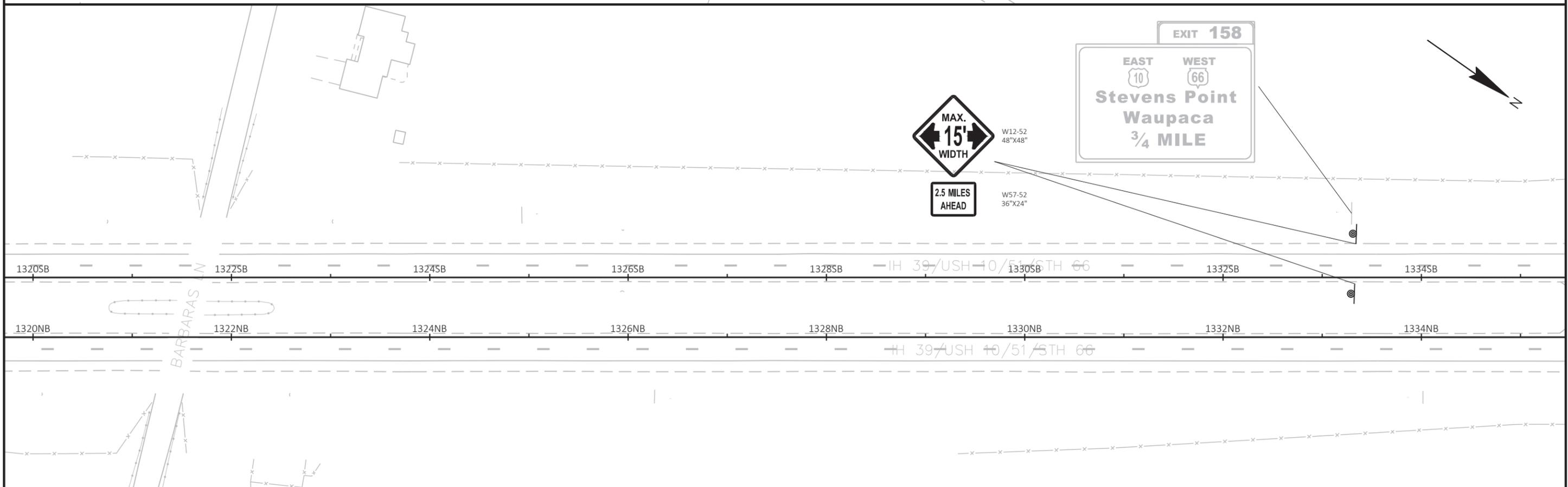
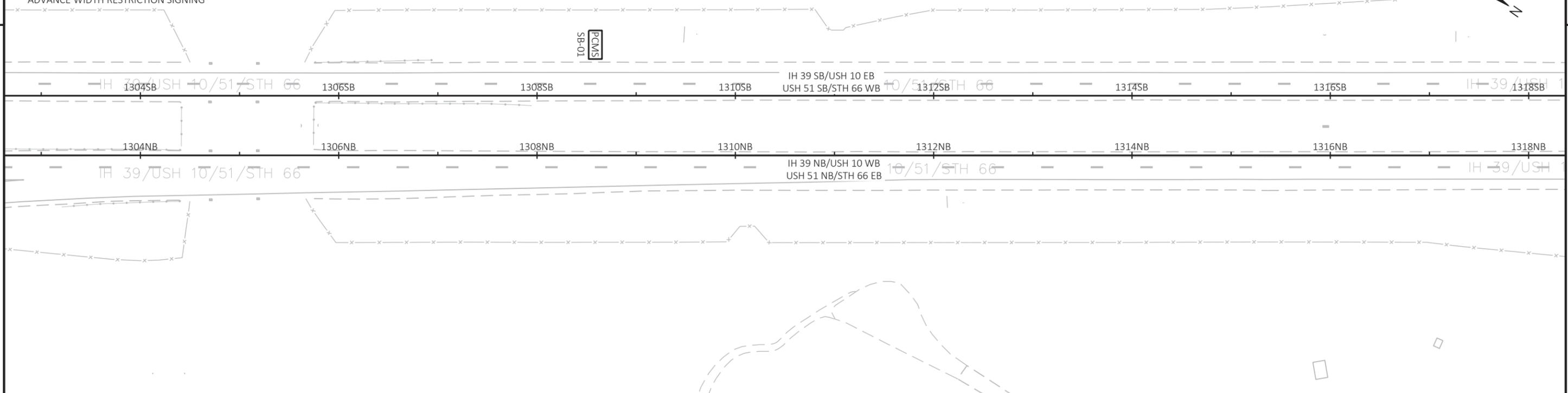


PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - DRIVING LANE CLOSURE	SHEET	E
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NOTES:
SIGN SIZE 48"x48" UNLESS NOTED OTHERWISE

USE THE FOLLOWING SDD'S:
TRAFFIC CONTROL, LANE CLOSURE, DYNAMIC LATE MERGE SYSTEM 2 LANE
ADVANCE WIDTH RESTRICTION SIGNING

PCMS
SB-01



PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	TRAFFIC CONTROL - DRIVING LANE CLOSURE	SHEET	E
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Estimate Of Quantities

1166-05-84

Line	Item	Item Description	Unit	Total	Qty
0002	204.0115	Removing Asphaltic Surface Butt Joints	SY	18.000	18.000
0004	204.0120	Removing Asphaltic Surface Milling	SY	2,325.000	2,325.000
0006	213.0100	Finishing Roadway (project) 01. 1166-05-84	EACH	1.000	1.000
0008	305.0110	Base Aggregate Dense 3/4-Inch	TON	44.000	44.000
0010	455.0605	Tack Coat	GAL	165.000	165.000
0012	465.0105	Asphaltic Surface	TON	236.000	236.000
0014	465.0400	Asphaltic Shoulder Rumble Strips	LF	5,231.000	5,231.000
0016	517.1801.S	Structure Repainting Recycled Abrasive (structure) 01. B-49-21	EACH	1.000	1.000
0018	517.4501.S	Negative Pressure Containment and Collection of Waste Materials (structure) 01. B-49-21	EACH	1.000	1.000
0020	517.6001.S	Portable Decontamination Facility	EACH	1.000	1.000
0022	603.8000	Concrete Barrier Temporary Precast Delivered	LF	1,098.000	1,098.000
0024	603.8125	Concrete Barrier Temporary Precast Installed	LF	2,196.000	2,196.000
0026	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1166-05-84	EACH	1.000	1.000
0028	619.1000	Mobilization	EACH	1.000	1.000
0030	624.0100	Water	MGAL	0.440	0.440
0032	642.5201	Field Office Type C	EACH	1.000	1.000
0034	643.0300	Traffic Control Drums	DAY	4,494.000	4,494.000
0036	643.0420	Traffic Control Barricades Type III	DAY	84.000	84.000
0038	643.0705	Traffic Control Warning Lights Type A	DAY	168.000	168.000
0040	643.0715	Traffic Control Warning Lights Type C	DAY	2,394.000	2,394.000
0042	643.0800	Traffic Control Arrow Boards	DAY	84.000	84.000
0044	643.0900	Traffic Control Signs	DAY	2,142.000	2,142.000
0046	643.0920	Traffic Control Covering Signs Type II	EACH	2.000	2.000
0048	643.1051	Traffic Control Signs PCMS with Cellular Communications	DAY	14.000	14.000
0050	643.1100.S	Dynamic Late Merge System	DAY	84.000	84.000
0052	643.5000	Traffic Control	EACH	1.000	1.000
0054	646.1020	Marking Line Epoxy 4-Inch	LF	8,456.000	8,456.000
0056	646.1041.S	Marking Replace Line Wet Reflective Epoxy 4-Inch	LF	1,168.000	1,168.000
0058	646.3041.S	Marking Replace Line Wet Reflective Epoxy 8-Inch	LF	50.000	50.000
0060	646.9000	Marking Removal Line 4-Inch	LF	5,473.000	5,473.000
0062	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	17,493.000	17,493.000
0064	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	618.000	618.000
0066	649.0960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	625.000	625.000
0068	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	300.000	300.000
0070	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	600.000	600.000

ALL ITEMS ARE CATERGORY 0010 UNLESS NOTED OTHERWISE

REMOVING ASPHALTIC SURFACE MILLING

STATION - STATION	LOCATION	204.0120 SY	REMARKS
1179+54 - 1190+06	NB LT	468	
1178+27 - 1191+86	NB RT	604	
1183+34 - 1200+40	SB LT	758	
1189+26 - 1200+40	SB RT	495	
TOTAL		2325	

TACK COAT & ASPHALTIC SURFACE

STATION - STATION	LOCATION	THICKNESS INCH	455.0605 TACK COAT GAL	465.0105 ASPHALTIC SURFACE TON
1179+54 - 1190+06	NB LT	1.75	33	48
1178+27 - 1191+86	NB RT	1.75	43	61
1183+34 - 1200+40	SB LT	1.75	54	77
1189+26 - 1200+40	SB RT	1.75	35	50
TOTAL			165	236

REMOVING ASPHALTIC SURFACE BUTT JOINTS

STATION	LOCATION	204.0115 SY
1179+54	NB LT	2
1178+24	NB RT	2
1183+34	SB LT	2
1189+26	SB RT	2
1190+06	NB LT	2
1191+89	NB RT	2
1200+40	SB LT & RT	4
TOTAL		18

CONCRETE BARRIER TEMPORARY PRECAST

STATION - STATION	LOCATION	603.8000 DELIVERED LF	603.8125 INSTALLED LF	REMARKS
1183+54 - 1189+06	NB	552	552	PASSING LANE CLOSURE
1183+54 - 1189+06	NB	---	552	DRIVING LANE CLOSURE
1186+14 - 1191+60	SB	546	546	PASSING LANE CLOSURE
1186+14 - 1191+60	SB	---	546	DRIVING LANE CLOSURE
TOTALS		1098	2196	

MARKING REPLACE WET REFLECTIVE EPOXY

STATION - STATION	LOCATION	646.1041.S 4-INCH WHITE LF	646.3041.S 8-INCH WHITE LF	REMARKS
1176+74 - 1192+86	NB CL	403	50	
1184+64 - 1210+80	SB CL	654	---	
1183+64 - 1188+06	SB LT	111	---	3' LINE 9' GAP AT RAM
TOTAL		1168	50	

TRAFFIC CONTROL

LOCATION	CYCLES	NUMBER OF SIGNS	643.0920 COVERING SIGNS TYPE II EACH	REMARKS
NB EXIT 156	1	1	1	DRIVING LANE CLOSURE
SB EXIT 156	1	1	1	DRIVING LANE CLOSURE
TOTALS			2	

MARKING LINE EPOXY

STATION - STATION	LOCATION	646.1020 4-INCH WHITE LF	646.1020 4-INCH YELLOW LF	REMARKS
1176+74 - 1192+86	NB LT & RT	1612	1612	
1184+64 - 1210+80	SB LT & RT	2616	2616	
SUBTOTAL		4228	4228	
TOTAL		8456		

ASPHALTIC SHOULDER RUMBLE STRIP

STATION - STATION	LOCATION	465.0400 LF
1179+54 - 1190+06	NB LT	1052
1178+27 - 1191+86	NB RT	1359
1183+34 - 1200+40	SB LT	1706
1189+26 - 1200+40	SB RT	1114
TOTAL		5231

BASE AGGREGATE DENSE & WATER

STATION - STATION	LOCATION	305.0110 3/4-INCH TON	624.0100 WATER MGAL	REMARKS
1179+54 - 1190+06	NB LT	21	0.21	MEDIAN SHOULDER
1189+26 - 1200+40	SB RT	23	0.23	MEDIAN SHOULDER
TOTAL		44	0.44	

MARKING REMOVAL LINE 4-INCH

STATION - STATION	LOCATION	646.9000 LF	REMARKS - EXISTING MARKING
1179+54 - 1190+06	NB LT	1052	DRIVING LANE CLOSURE
1177+74 - 1191+86	NB RT	1412	PASSING LANE CLOUSRE
1184+64 - 1200+40	SB LT	1576	DRIVING LANE CLOSURE
1186+07 - 1200+40	SB RT	1433	PASSING LANE CLOUSRE
TOTAL		5473	

PROJECT NO: 1166-05-84

HWY: IH 39

COUNTY: PORTAGE

MISCELLANEOUS QUANTITIES

SHEET:

E

ALL ITEMS ARE CATERGORY 0010 UNLESS NOTED OTHERWISE
TRAFFIC CONTROL

LOCATION	STAGE	643.0300		643.0420		643.0705		643.0715		643.0800		643.0900						
		DAYS	QTY	DRUMS	BARRICADES	TYPE III	QTY	WARNING	LIGHTS	TYPE A	QTY	WARNING	LIGHTS	TYPE C	QTY	ARROW	BOARDS	TRAFFIC
SHEET 2	21	0	0	0	0	0	0	0	0	0	0	2	42					
SHEET 3	21	2	42	0	0	0	0	0	0	0	0	5	105					
SHEET 4	21	42	882	2	42	4	84	24	504	1	21	6	126					
SHEET 5	21	47	987	0	0	0	0	27	567	1	21	6	126					
SHEET 6	21	0	0	0	0	0	0	0	0	0	0	5	105					
SHEET 7	21	0	0	0	0	0	0	0	0	0	0	2	42					
PASSING LANE CLOSURE			1911		42		84		1071		42		546					
SHEET 2	21	0	0	0	0	0	0	0	0	0	0	2	42					
SHEET 3	21	2	42	0	0	0	0	0	0	0	0	5	105					
SHEET 4	21	69	1449	2	42	4	84	35	735	1	21	7	147					
SHEET 5	21	52	1092	0	0	0	0	28	588	1	21	7	147					
SHEET 6	21	0	0	0	0	0	0	0	0	0	0	5	105					
SHEET 7	21	0	0	0	0	0	0	0	0	0	0	2	42					
DRIVING LANE CLOSURE			2583		42		84		1323		42		588					
VARIOUS	42	0	0	0	0	0	0	0	0	0	0	24	1008					
WIDTH RESTRICTION SIGNING			0		0		0		0		0		1008					
TOTALS			4494		84		168		2394		84		2142					

DYNAMIC LATE MERGE SYSTEM (DLMS)

LOCATION	STAGE	DISTANCE (MILES)	643.01100.S DAY
IH 39 NB	PASSING LANE CLOSURE	2	42
	DRIVING LANE CLOSURE		
IH 39 SB	PASSING LANE CLOSURE	2	42
	DRIVING LANE CLOSURE		
TOTAL			84

TEMPORARY MARKING REMOVABLE MASK OUT TAPE

STATION - STATION	LOCATION	CYCLES	APPROXIMATE SERVICE PERIOD PER CYCLE	649.0960 6-INCH LF	REMARKS
1154+60 - 1163+00	NB	1	6 WEEKS	210	CL SKIPS
1167+50 - 1171+25	NB	1	3 WEEKS	94	CL SKIPS
1183+64 - 1188+06	SB	1	6 WEEKS	111	EXIT MINI SKIPS
1202+40 - 1210+80	SB	1	6 WEEKS	210	CL SKIPS
TOTALS				625	

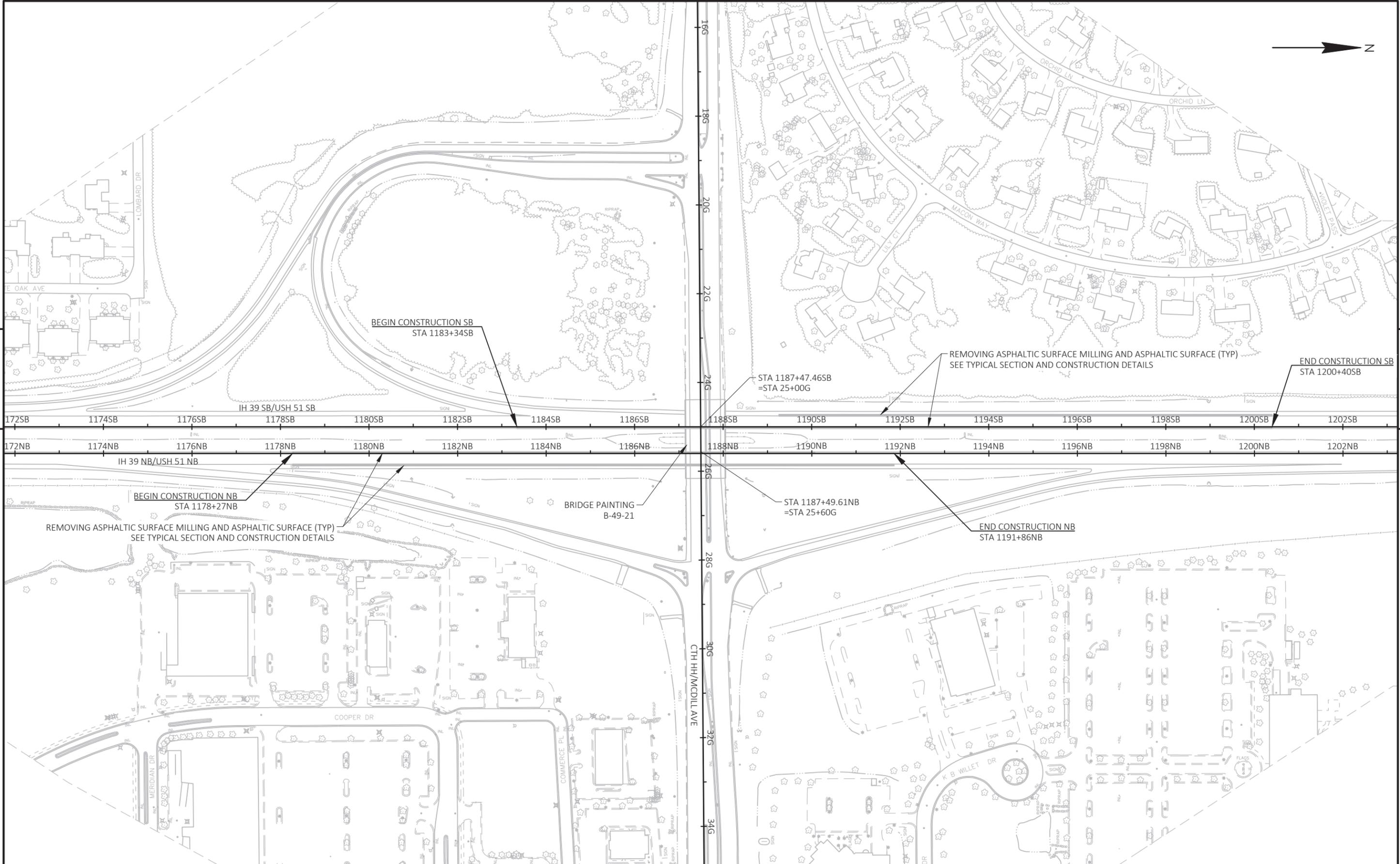
TEMPORARY MARKING REMOVABLE TAPE

STATION - STATION	LOCATION	APPROXIMATE SERVICE PERIOD	649.0150 TAPE 4-INCH		649.0250 TAPE 8-INCH	REMARKS
			WHITE LF	YELLOW LF	LF	
1154+60 - 1177+74	NB	3 WEEKS	---	2314	---	PASSING LANE CLOSURE
1177+74 - 1191+86	NB	3 WEEKS	1412	1232	---	PASSING LANE CLOSURE
1154+60 - 1169+50	NB	3 WEEKS	1490	---	---	DRIVING LANE CLOSURE
1171+25 - 1173+25	NB	3 WEEKS	150	---	---	DRIVING LANE CLOSURE
1173+25 - 1175+34	NB	3 WEEKS	---	---	368	DRIVING LANE CLOSURE
1175+34 - 1190+06	NB	3 WEEKS	1472	1052	---	DRIVING LANE CLOSURE
1183+64 - 1200+40	SB	3 WEEKS	1489	1525	---	PASSING LANE CLOSURE
1200+40 - 1210+80	SB	3 WEEKS	---	1040	---	PASSING LANE CLOSURE
1183+14 - 1186+14	SB	3 WEEKS	275	150	250	DRIVING LANE CLOSURE
1186+14 - 1200+40	SB	3 WEEKS	1426	1426	---	DRIVING LANE CLOSURE
1200+40 - 1210+80	SB	3 WEEKS	1040	---	---	DRIVING LANE CLOSURE
SUBTOTAL			8754	8739		
TOTALS			17493		618	

TRAFFIC CONTROL SIGNS PCMS WITH CELLULAR COMMUNICATIONS

PCMS #	LOCATION	PRIOR TO CLOSURE DAYS	DURING CLOSURE DAYS	643.1051 DAY	REMARKS
NB-01	SEE PCMS MESSAGES	0	**0	0	LANE CLOSURE (DLMS)
NB-02	SEE PCMS MESSAGES	0	**0	0	LANE CLOSURE (DLMS)
NB-03	SEE PCMS MESSAGES	*7	**0	7	LANE CLOSURE (DLMS)
SB-01	SEE PCMS MESSAGES	0	**0	0	LANE CLOSURE (DLMS)
SB-02	SEE PCMS MESSAGES	0	**0	0	LANE CLOSURE (DLMS)
SB-03	SEE PCMS MESSAGES	*7	**0	7	LANE CLOSURE (DLMS)
TOTAL				14	

*PRIOR TO CONSTRUCTION
 **PCMS INCIDENTAL TO DLMS SYSTEM



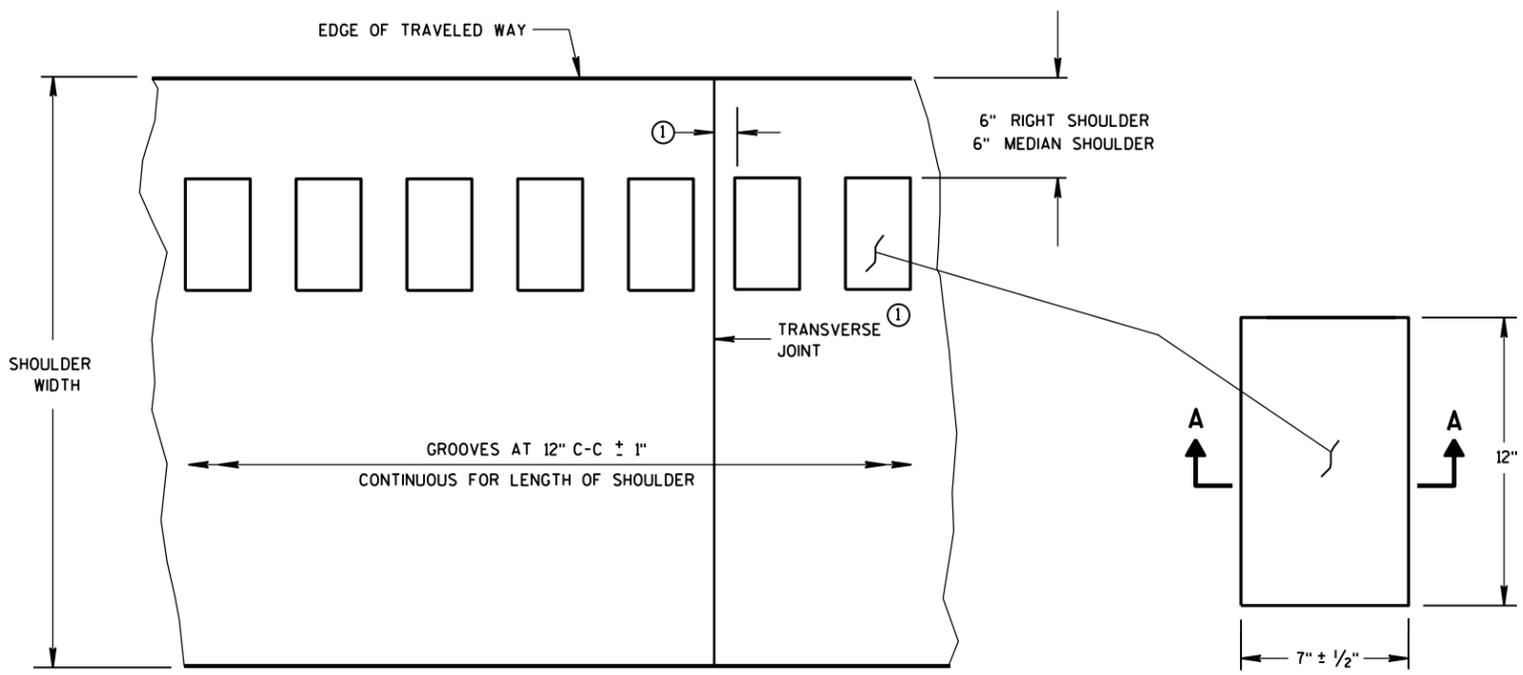
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PROJECT NO: 1166-05-84	HWY: IH 39	COUNTY: PORTAGE	PLAN	SHEET	E
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Standard Detail Drawing List

13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
14B07-15A	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15B	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15C	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15D	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15E	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15F	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15G	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15H	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
14B07-15I	CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
15C02-08F	ADVANCED WIDTH RESTRICTION SIGNING
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C11-09B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C19-06C	MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY
15C31-04A	PAVEMENT MARKING EXIT RAMP AND PARALLEL EXIT RAMP
15C31-04C	PAVEMENT MARKING ENTRANCE RAMP AND PARALLEL ENTRANCE RAMP
15D12-09A	TRAFFIC CONTROL, LANE CLOSURE
15D12-09C	DYNAMIC LANE MERGE SYSTEM
15D15-05E	TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE
15D40-02D	TRAFFIC CONTROL, PARTIAL LANE SHIFT MULTILANE DIVIDED 50 MPH AND GREATER



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

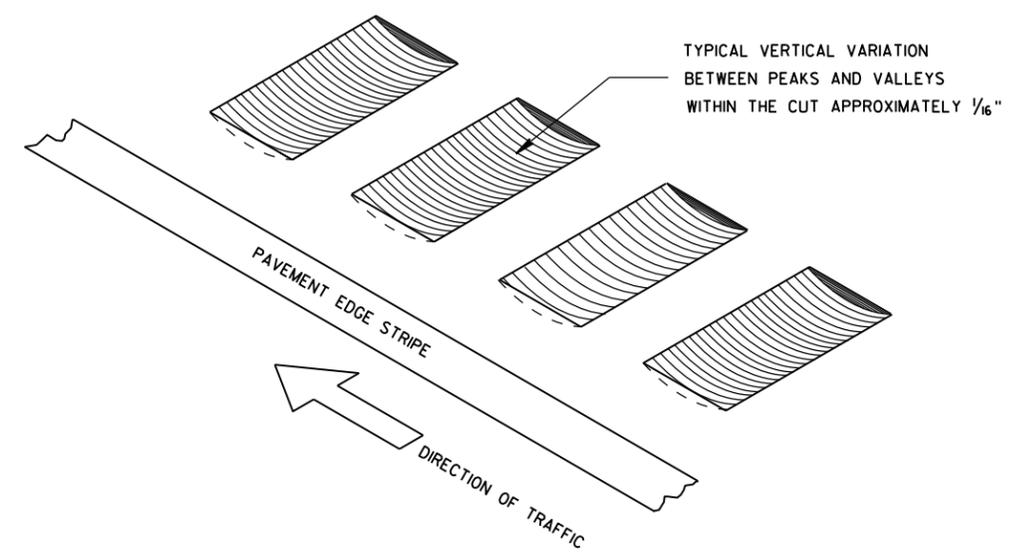
GENERAL NOTES

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

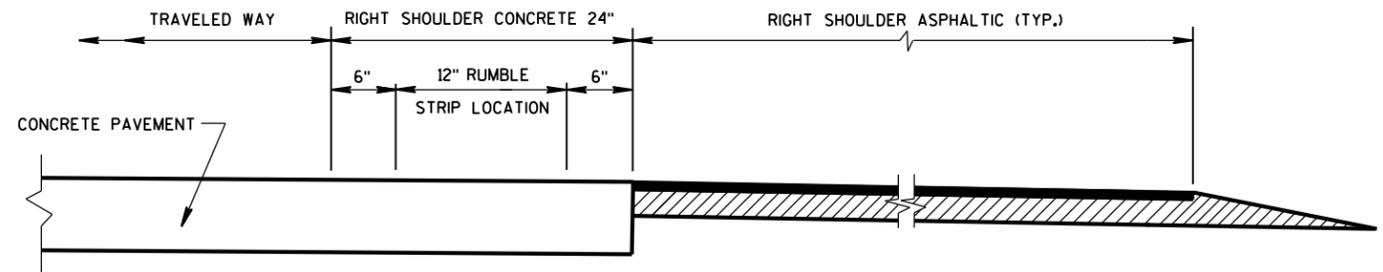
RUMBLE STRIPS ON EXPRESSWAYS

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.

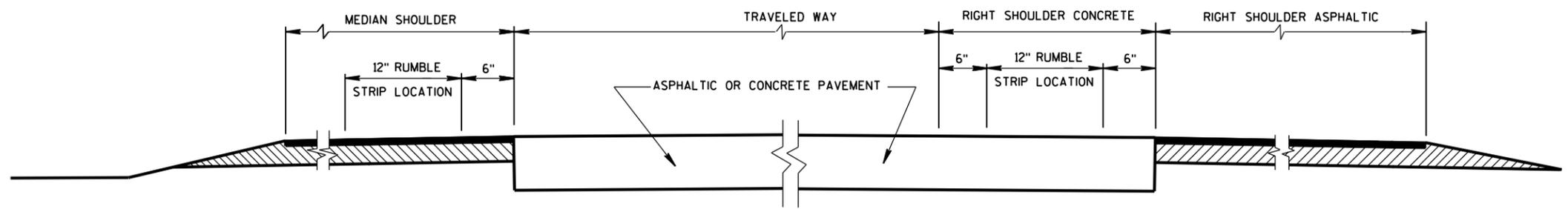
① CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



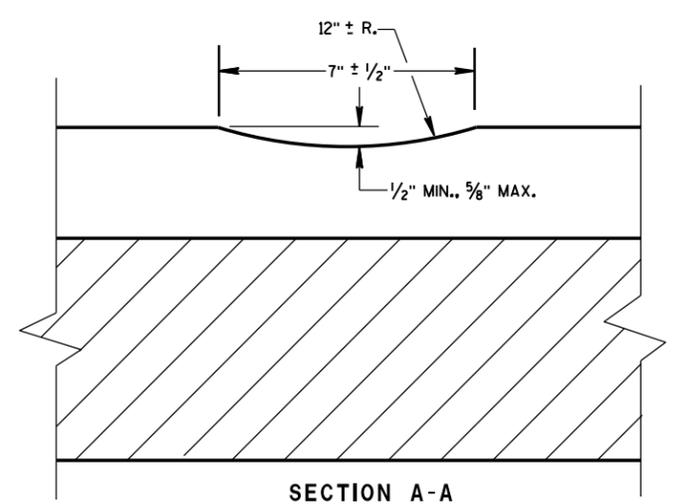
ISOMETRIC



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

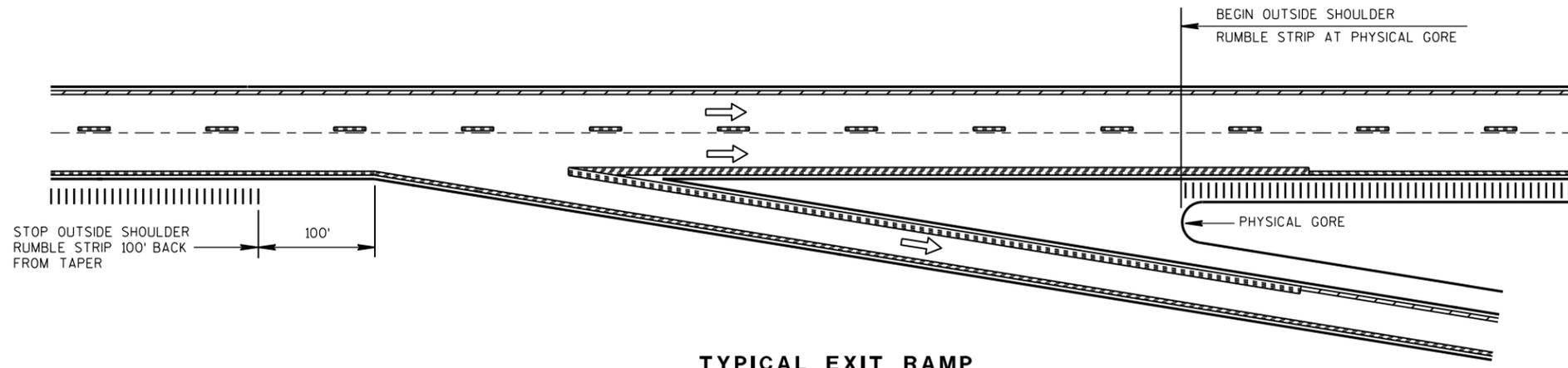
6

6

S.D.D. 13 A 5-5a

S.D.D. 13 A 5-5a

<p>SHOULDER RUMBLE STRIP, MILLING</p>
<p>STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION</p>

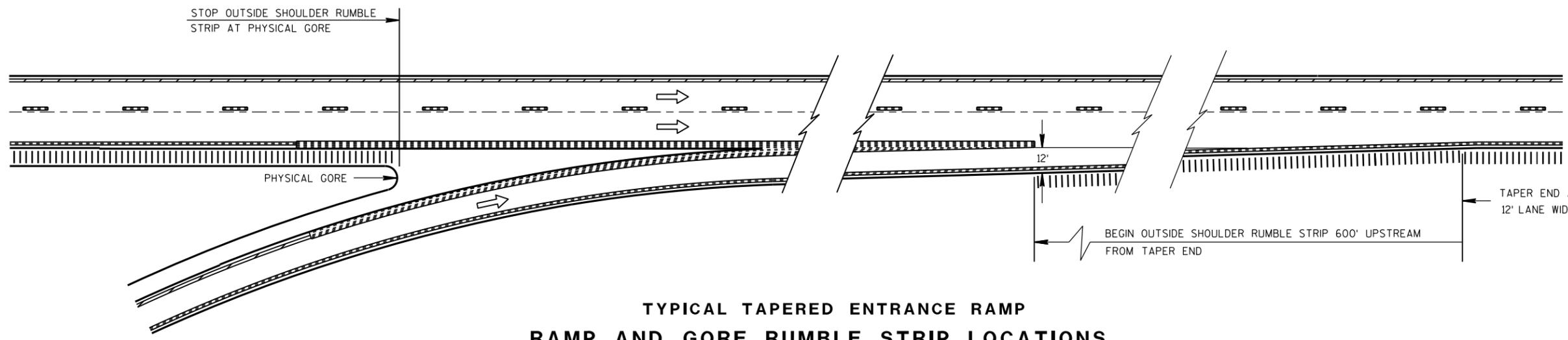


TYPICAL EXIT RAMP

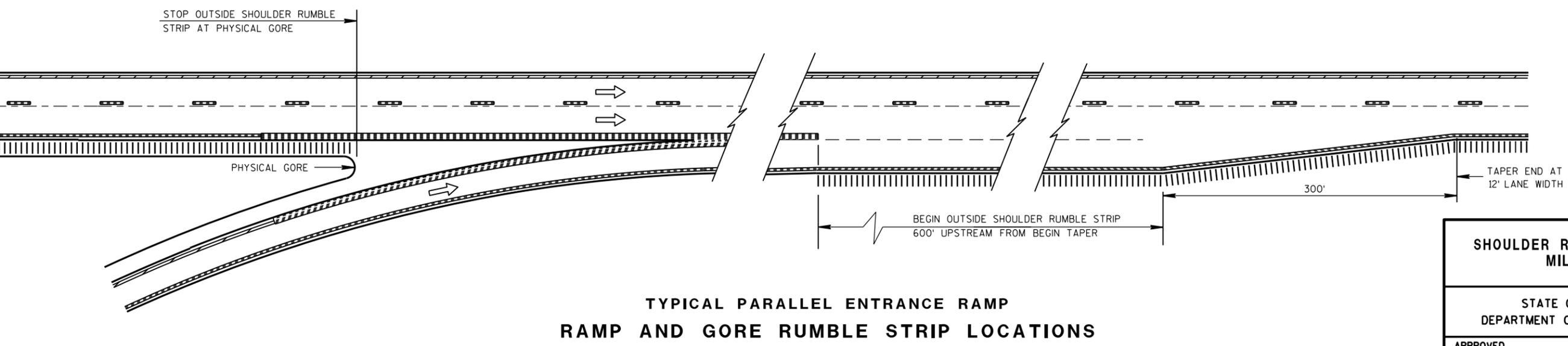
NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMP, 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

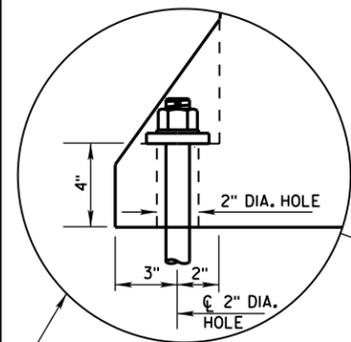
6

6

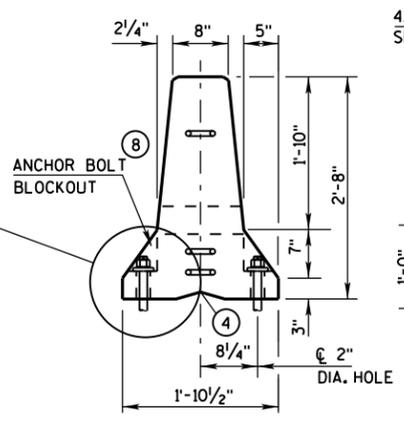
S.D.D. 13 A 5-5b

S.D.D. 13 A 5-5b

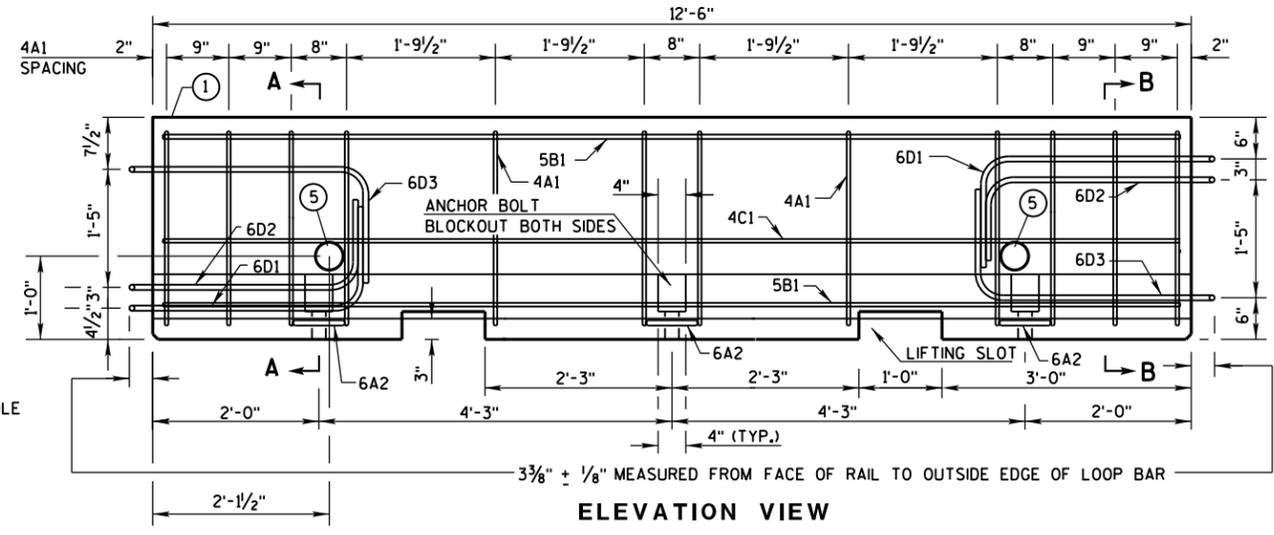
SHOULDER RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 12/17/2012	/S/ Jerry H. Zogg ROADWAY STANDARDS DEVELOPMENT ENGINEER
FHWA	



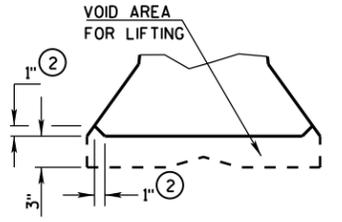
ANCHOR ON TRAFFIC SIDE (8) ONLY WHEN REQUIRED (SEE SHEET D FOR ADDITIONAL ANCHOR DETAIL)



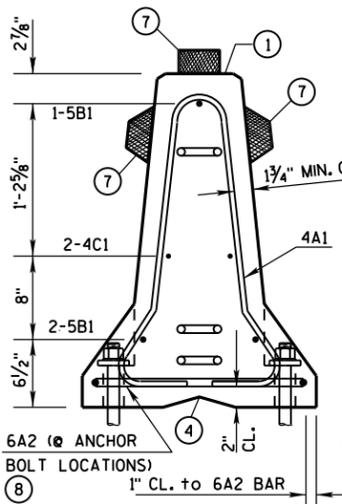
END VIEW



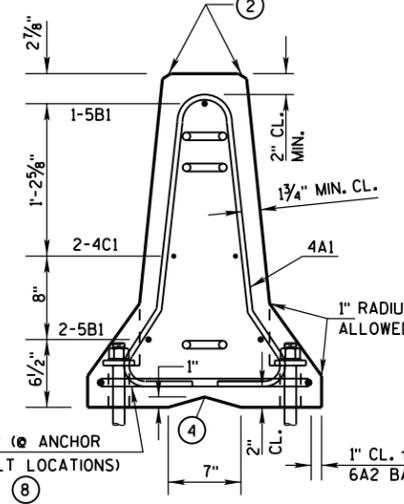
ELEVATION VIEW



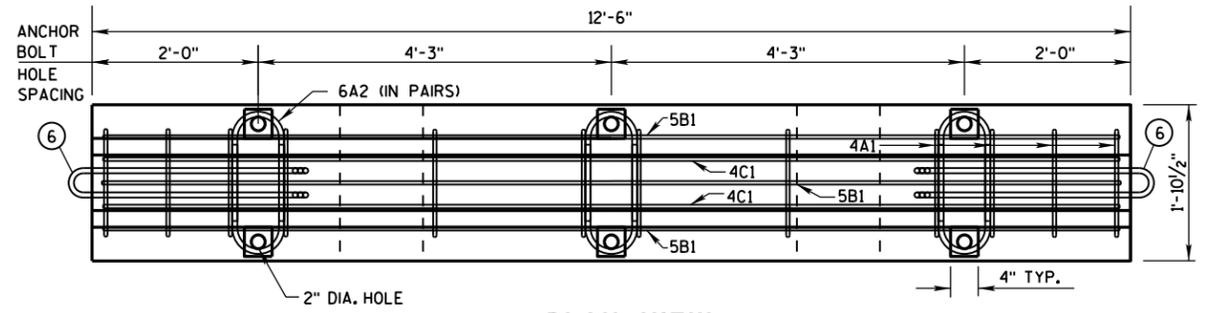
DETAIL "B" LIFTING SLOT DETAIL



SECTION A-A (STIRRUP PLACEMENT)



SECTION B-B (STIRRUP PLACEMENT)



PLAN VIEW

DETAILS OF BARRIER SECTION

GENERAL NOTES

THESE GENERAL NOTES APPLY TO SHEETS 14B7-15(d) THRU 14B7-15(i).

DO NOT INTERMIX CONCRETE BARRIER TEMPORARY PRECAST, 12'-6" (CBTP12.5) WITH OTHER TEMPORARY CONCRETE BARRIERS.

USE ASTM A-615, GRADE 60, DEFORMED STEEL BARS FOR BARS 4A1, 6A2, 5B1 AND 4C1 IN THE BARRIER SECTION AND FOR 4V1, 4V2, 4V3, 4V4, 4V5, 4V6, 4F1, 4F2 AND 5F3 IN THE BARRIER TAPER SECTION.

LOOP BARS 6D1, 6D2 AND 6D3 SHALL BE 3/4" SMOOTH STEEL BARS WITH A MINIMUM YIELD STRENGTH OF 60 KSI, A TENSILE STRENGTH OF NOT LESS THAN 1.25 TIMES THE YIELD STRENGTH BUT A MINIMUM OF 80 KSI, A MINIMUM 14% ELONGATION IN 8 INCHES AND PASSING A 180 DEGREE BEND TEST USING A 3-1/2" PIN BEND DIAMETER FOR BEND TESTS. THE LOOPS SHALL BE INSTALLED WITHIN 1/8" OF THE PLAN DIMENSION.

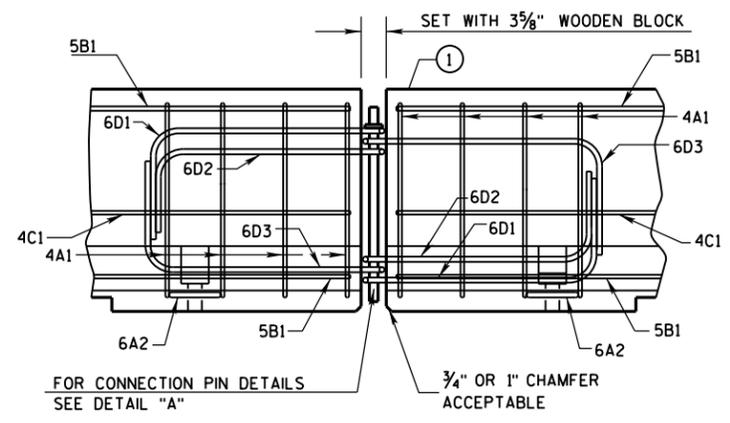
CONSTRUCT LIFTING SLOTS AS SPECIFIED ON THE PLANS TO FACILITATE THE DRAINAGE OF WATER AFTER INSTALLATION.

PLACE BARRIER ON A PAVED SURFACE. REMOVE ALL LOOSE DIRT AND SAND FROM THE ROADWAY SURFACE PRIOR TO PLACEMENT OF THE BARRIER.

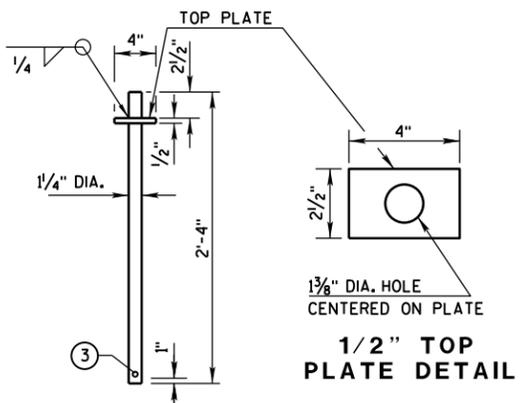
INSTALL MECHANICAL OR ADHESIVE ANCHORS PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE MANUFACTURER'S INFORMATION TO PROJECT ENGINEER.

- 1 MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE: WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- 2 1" CHAMFER TO PREVENT SPALLING.
- 3 A 3/8" HOLE IN THE CONNECTION PIN, AT THE LOCATION SHOWN, IS ACCEPTABLE, BUT NOT REQUIRED..
- 4 "V" NOTCH IS OPTIONAL.
- 5 THE 4" DIAMETER, 11 GAUGE STEEL, ROUND MECHANICAL TUBING SLEEVE FOR LIFTING (OPTIONAL).
- 6 NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.
- 7 USE DELINEATORS CONFORMING TO SECTION 633 OF THE STANDARD SPECIFICATIONS. CONTRACTOR MAY USE ALTERNATE SHAPES AND HOUSING. INSTALL DELINEATORS ACCORDING TO MANUFACTURER'S INSTRUCTION. INSTALL YELLOW REFLECTORS WHEN BARRIER IS LOCATED TO THE LEFT OF TRAFFIC AND WHITE REFLECTORS WHEN BARRIER IS LOCATED TO THE RIGHT OF TRAFFIC. SPACE DELINEATORS A MAXIMUM OF 25 FEET APART. PROVIDE TOP MOUNTED DELINEATORS IN ADDITION TO THE SIDE MOUNTED DELINEATORS ON ALL BARRIER INSTALLATIONS LOCATED ON A CURVED ALIGNMENT LONGER THAN 200 FEET AND ON BARRIERS USED TO SEPARATE OPPOSING TRAFFIC.
- 8 SEE SHEET D FOR HOW TO ANCHOR BARRIER. SEE SHEET E FOR WHEN TO ANCHOR BARRIER.
- 9 1" CHAMFER OPTIONAL.

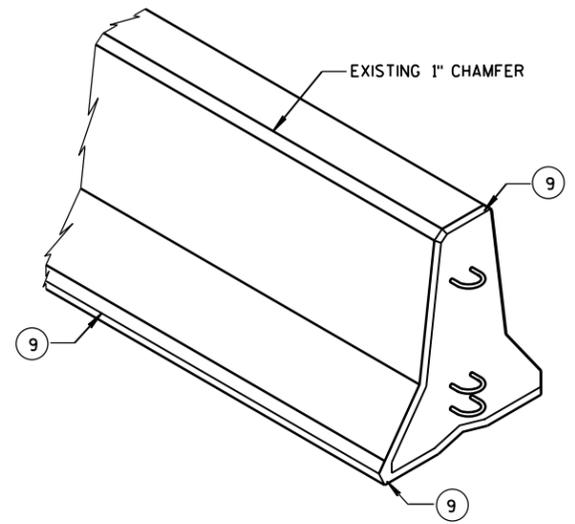
f'c = 4,000 psi



DETAILS OF BARRIER CONNECTION



DETAIL "A" CONNECTION PIN (A36 STEEL (10.9 LB EACH))



CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

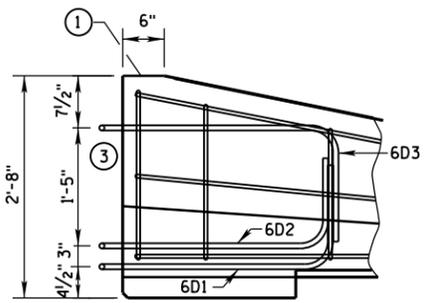
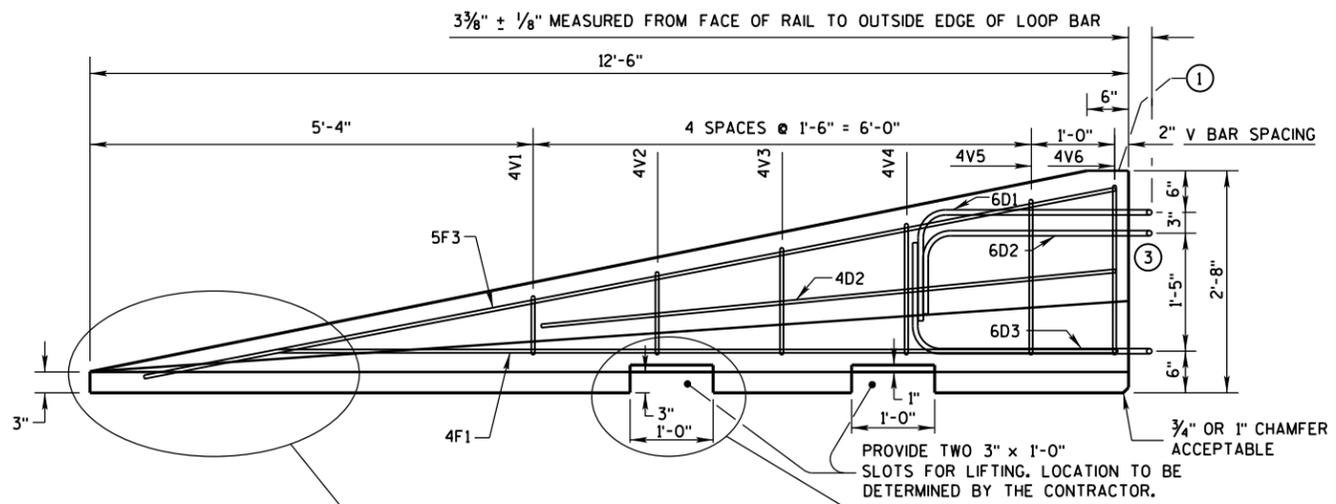
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

6

S.D.D. 14 B 7-15a

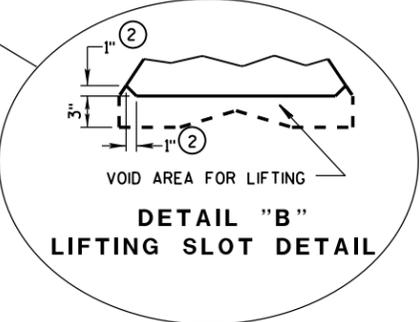
S.D.D. 14 B 7-15a



GENERAL NOTES

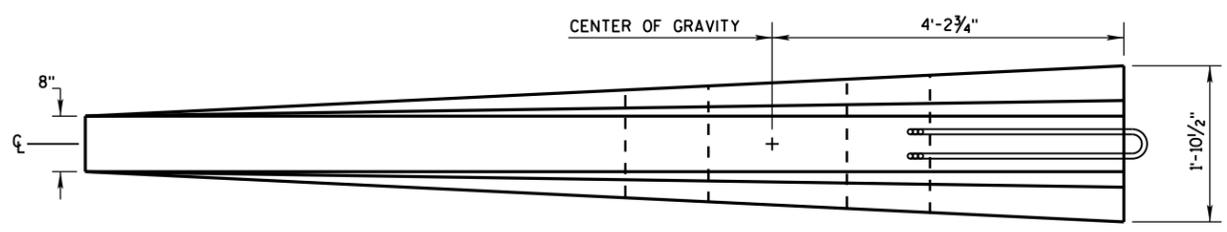
- ① MARK ONE END OF EACH BARRIER PERMANENTLY BY FORMING INTO THE BARRIER THE FOLLOWING INFORMATION:
 - a. TYPE WICBTP
 - b. MANUFACTURER
 - c. DATE MANUFACTURED (MONTH AND YEAR)
- ② 1" CHAMFER TO PREVENT SPALLING.
- ③ NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

SIDE ELEVATION
 LOOP BAR ASSEMBLY INVERTED FOR OPPOSITE END.
 (FOR CONNECTION TO RIGHT END OF BARRIER)

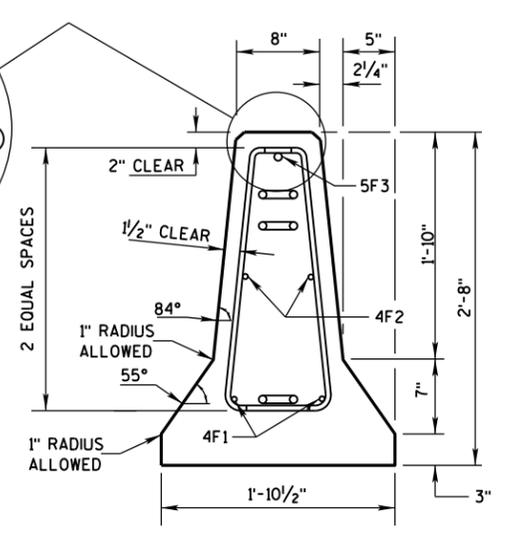
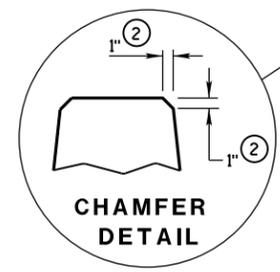


SIDE ELEVATION
 (FOR CONNECTION TO LEFT END OF BARRIER)

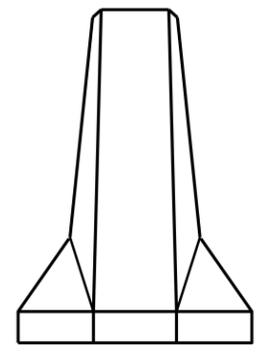
SEE DETAIL "C", BENT BAR DETAIL



PLAN VIEW

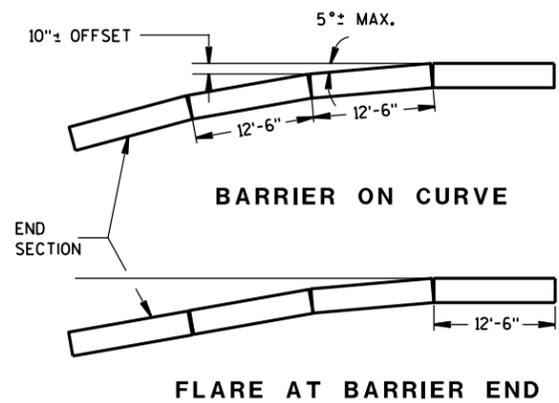


END SECTION



FRONT ELEVATION

DETAILS OF BARRIER TAPER SECTION



POSTED SPEED, (MPH)	FLARE RATE
40 OR LESS	6:1
45 OR GREATER	8:1

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

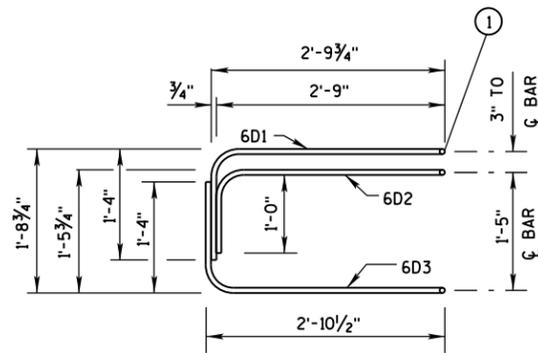
① NEVER USE LOOP BARS (6D1, 6D2 OR 6D3) TO LIFT, MOVE OR REPOSITION THE BARRIER.

**BARRIER TAPER SECTION
BILL OF MATERIALS**

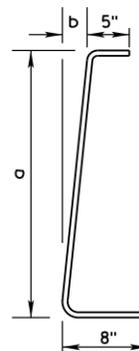
(PER 12'-6" BARRIER TAPER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4V1	4	2	1'-11"
4V2	4	2	2'-2"
4V3	4	2	2'-6"
4V4	4	2	2'-9"
4V5	4	2	3'-2"
4V6	4	2	3'-4"
4F1	4	2	12'-0"
4F2	4	2	7'-6"
5F3	5	1	11'-9"

LOOP ASSEMBLY			
6D1	6	1	8'-5"
6D2	6	1	7'-7"
6D3	6	1	8'-6"

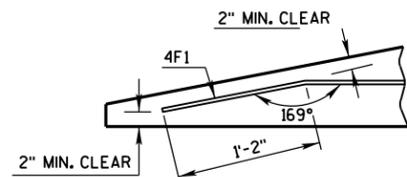


**ELEVATION
LOOP BAR ASSEMBLY**



BAR	a	b
V1	10"	1"
V2	1'-1"	1 1/4"
V3	1'-5"	1 5/8"
V4	1'-8"	1 7/8"
V5	2'-0 1/2"	2 3/8"
V6	2'-3"	2 3/4"

4V BARS
2 AT EACH SIZE REQUIRED
FOR STIRRUP ASSEMBLY



**DETAIL "C"
BENT BAR DETAIL**

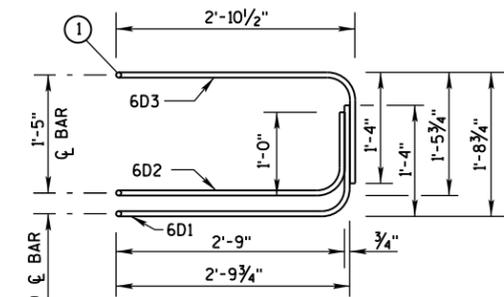
TAPER BARRIER SECTION

**BARRIER SECTION
BILL OF MATERIALS**

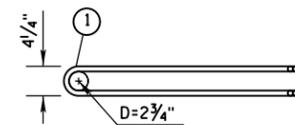
(PER 12'-6" BARRIER SECTION)

BAR	BAR SIZE	NO. OF BARS	LENGTH FT.
4A1	4	12	6'-0"
6A2	6	6	2'-11"
5B1	5	3	12'-2"
4C1	4	2	12'-2"

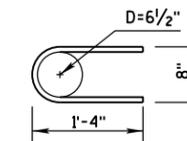
LOOP ASSEMBLY			
6D1	6	2	8'-5"
6D2	6	2	7'-7"
6D3	6	2	8'-6"



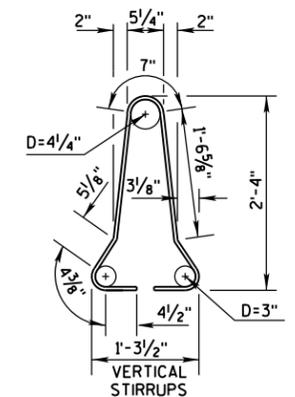
ELEVATION VIEW



**PLAN VIEW
LOOP BAR ASSEMBLY**
(MARKED END SHOWN, INVERT FOR OTHER END)



6A2

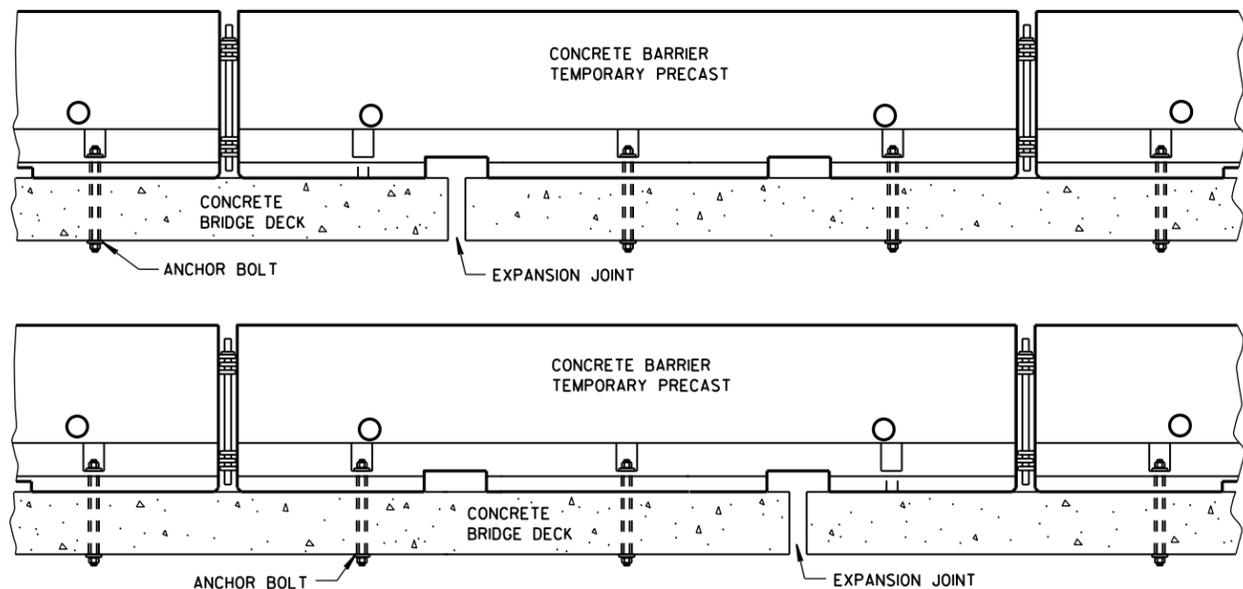


4A1

BARRIER SECTION

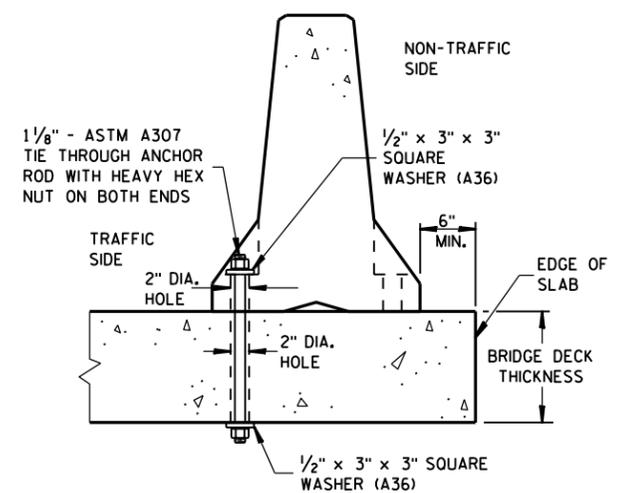
CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



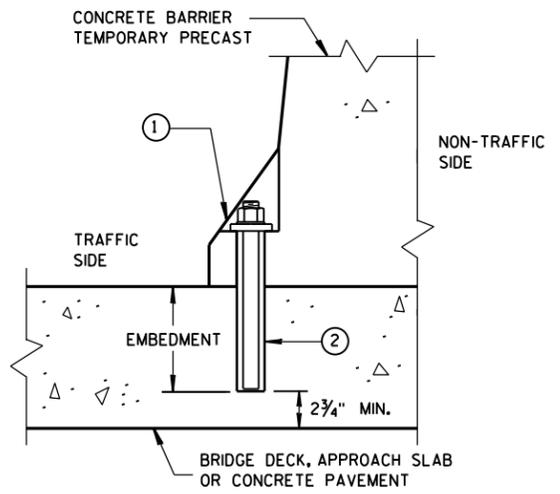
TREATMENT AT BRIDGE DECK EXPANSION JOINTS

(NO SINGLE CONCRETE BARRIER SECTION SHALL BE ANCHORED TO BOTH THE BRIDGE DECK AND THE APPROACH SLAB. ALL ANCHOR BOLT LOCATIONS SHALL BE ANCHORED TO THE DECK IN ACCORDANCE WITH THE DETAIL. NO MORE THAN ONE ANCHOR BOLT SHALL BE ELIMINATED FROM A BARRIER SECTION WHEN SPANNING AN EXPANSION JOINT.)



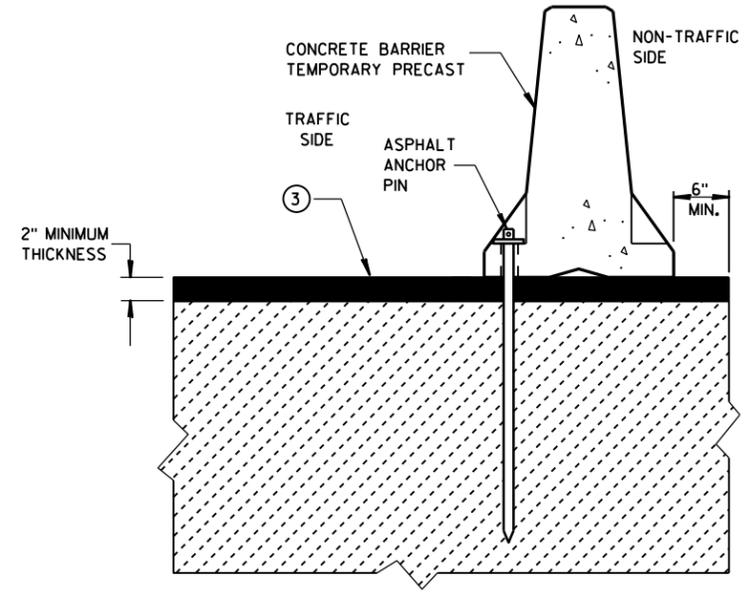
THROUGH BOLTED ANCHOR INSTALLATION ON BRIDGE DECK

(DO NOT USE ON CONCRETE BRIDGE DECK WITH ASPHALT OVERLAY)

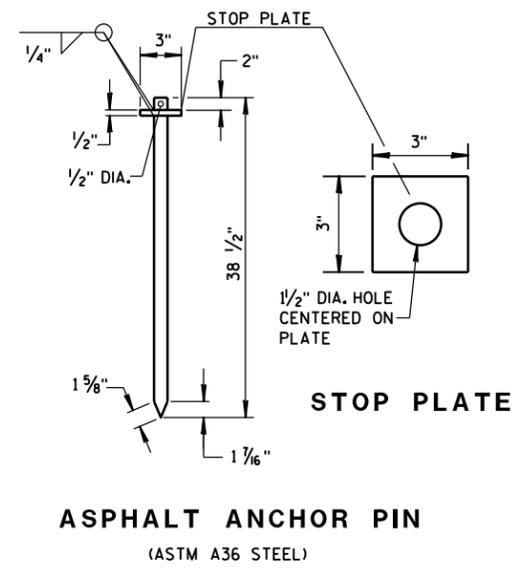


REMOVABLE ADHESIVE ANCHOR INSTALLATION ON CONCRETE BRIDGE DECK, CONCRETE APPROACH SLAB, OR CONCRETE PAVEMENT

(DO NOT USE ON CONCRETE WITH AN ASPHALTIC OVERLAY)



STAKE DOWN INSTALLATION FOR ASPHALTIC SURFACE



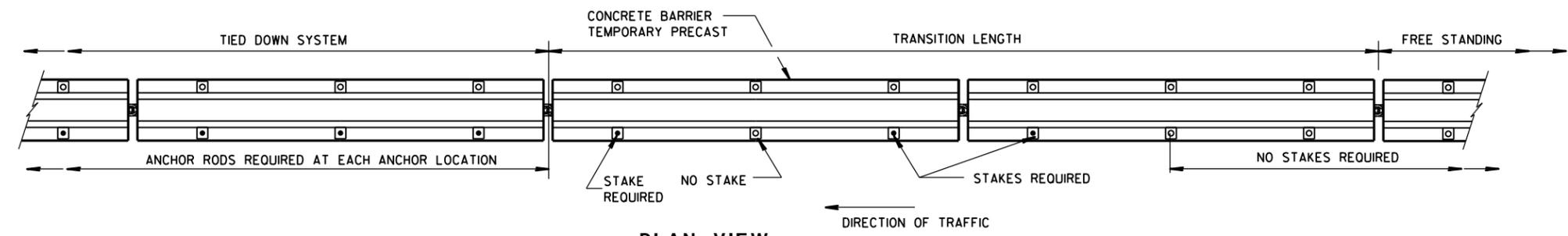
ASPHALT ANCHOR PIN (ASTM A36 STEEL)

GENERAL NOTES

SEE SHEET E FOR WHEN TO ANCHOR. OTHER PARTS OF THE PLAN MAY SHOW ADDITIONAL LOCATIONS REQUIRING ANCHORING.

REMOVE ALL ANCHORS WHEN NO LONGER NEEDED. FILL CONCRETE PAVEMENTS, DECKS AND APPROACH SLABS WITH NON-SHRINK COMMERCIAL GROUT FROM THE APPROVED PRODUCT LIST. FILL ASPHALT PAVEMENTS WITH ASTM D6690 TYPE II RUBBERIZED CRACK FILLER.

- ① 1/8" DIAMETER A307 THREADED ROD, 1/2" X 3" X 3" SQUARE PLATE WASHER WITH ASTM A36 STEEL, ASTM A563A HEAVY HEX NUT.
- ② ADHESIVE ANCHORS WITH A MINIMUM BOND STRENGTH OF 1,800 PSI AND 5/4" EMBEDMENT. SEE 603.2 AND 603.3.1.2 OF THE WISCONSIN STANDARD SPECIFICATIONS FOR MORE INFORMATION ON ADHESIVE ANCHORS.
- ③ ASPHALT SURFACE SHOWN. CONTRACTOR MAY DRILL THROUGH CONCRETE PAVEMENT AND THEN DRIVE ASPHALT ANCHOR PIN.



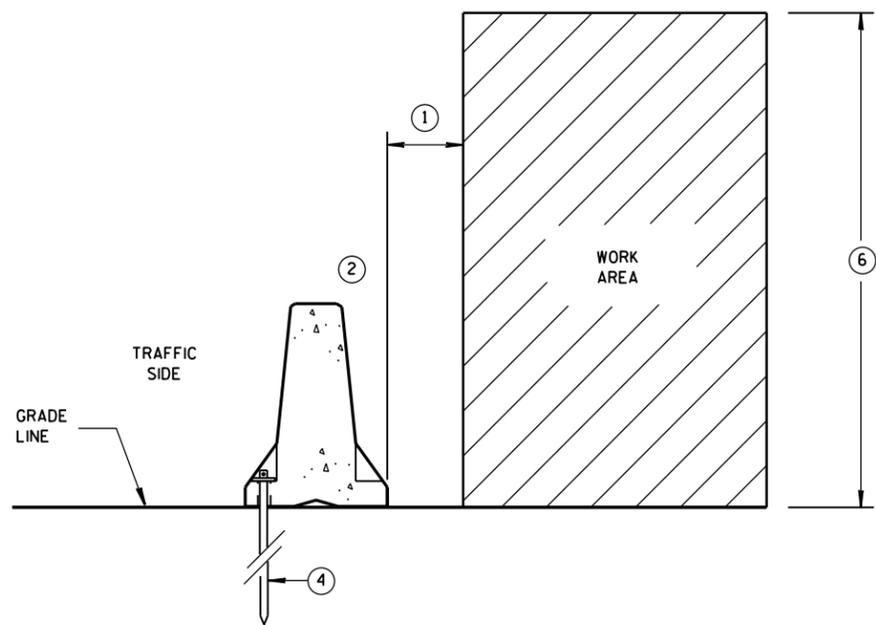
FREE STANDING TRANSITION TO TIED-DOWN SYSTEM

(PLACE TRANSITION IN A TANGENT SECTION OF BARRIER PARALLEL TO THE ROADWAY. IF TRANSITION OCCURS ON STRUCTURAL SLAB, ANCHOR AS SHOWN.)

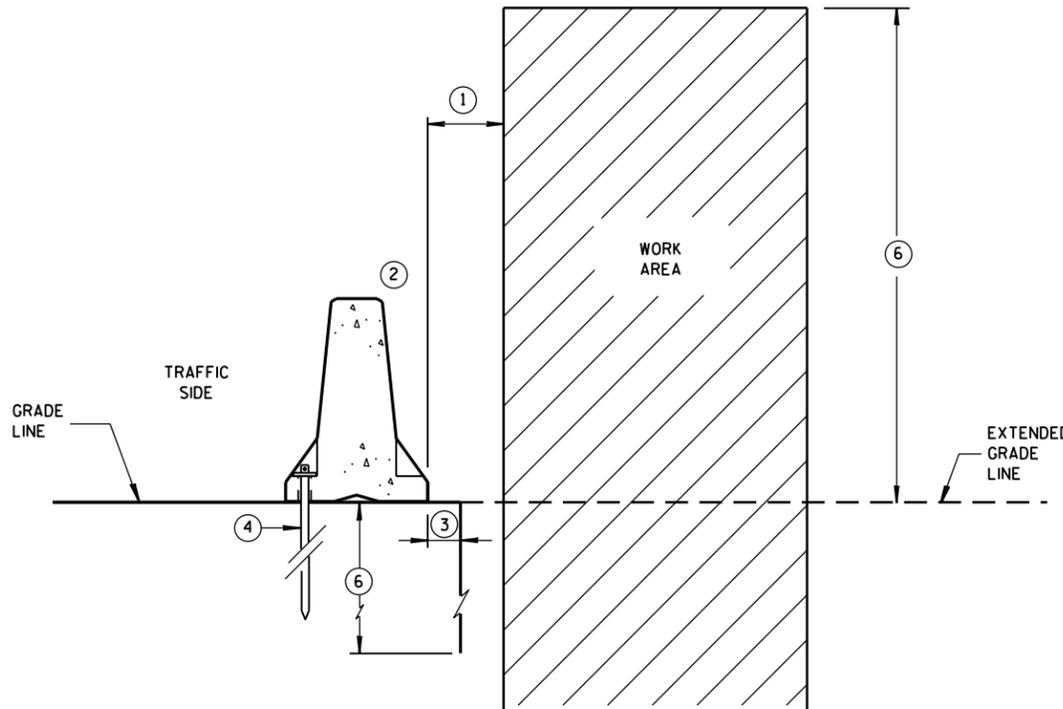
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

- ① WHEN OBJECTS EXTEND ABOVE THE GRADE, A MINIMUM OF 1 FOOT IS REQUIRED FROM BACK OF BARRIER TO OBJECT. SEE OTHER DETAILS FOR THE MINIMUM OFFSET FROM BACK OF BARRIER TO SLOPES OR VERTICAL DROPS.
- ② OBJECTS ARE NOT TO BE PLACED ON, MOUNTED TO, OR LEANED AGAINST THE BARRIER WITHOUT PERMISSION OF THE PROJECT ENGINEER.
- ③ SEE OTHER DETAIL ON SHEET "D" FOR SPACE REQUIREMENTS.
- ④ SEE BOLT THROUGH DECK, REMOVABLE ADHESIVE ANCHOR, OR A STAKE DOWN FOR ASPHALTIC SURFACE TREATMENT DETAILS. ASPHALTIC ANCHOR SHOWN.
- ⑤ DEPTH OF 3 FEET OR MORE.
- ⑥ Y = 6'-6".

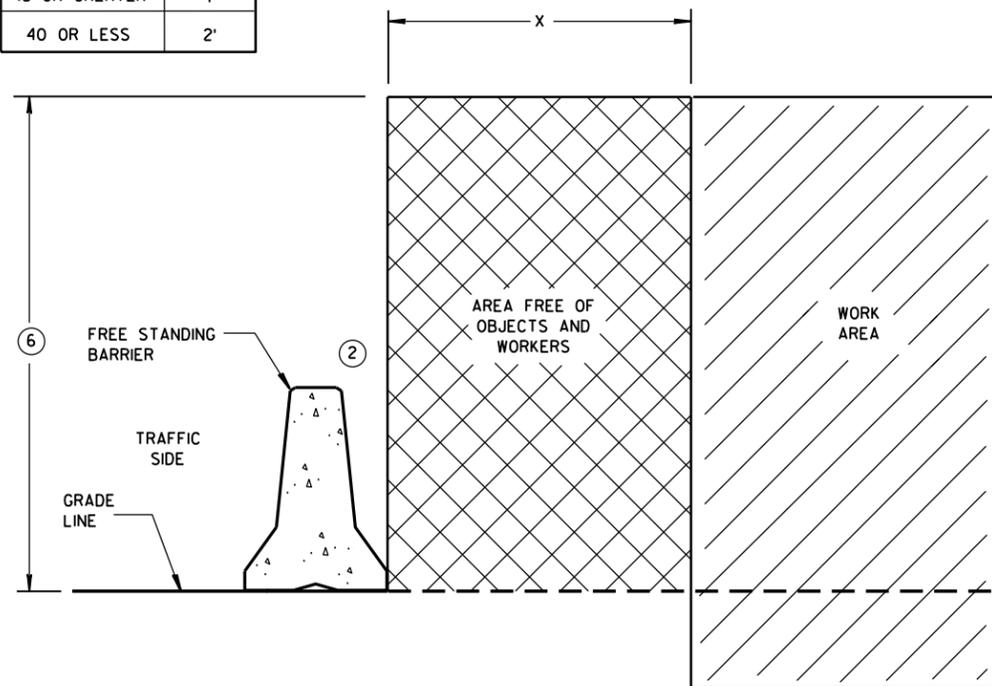


ANCHORED BARRIER SPACE REQUIREMENTS FOR HAZARDS EXTENDED ABOVE THE GRADE LINE

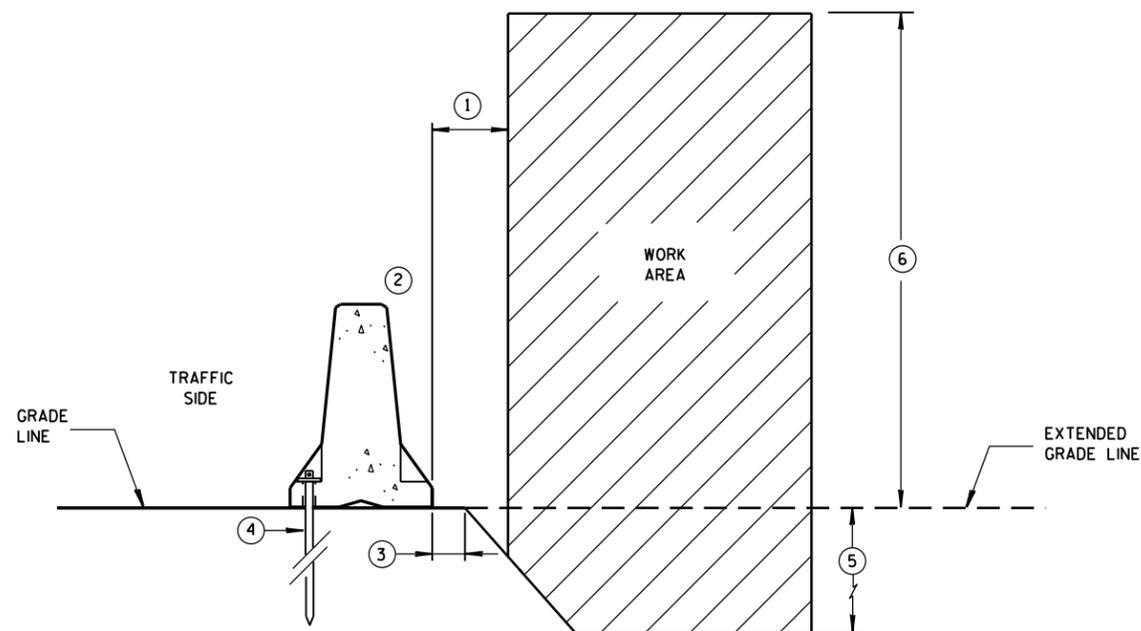


ANCHORED BARRIER SPACE REQUIREMENTS ON VERTICAL DROP OFFS

POSTED SPEED MPH	X
45 OR GREATER	4'
40 OR LESS	2'



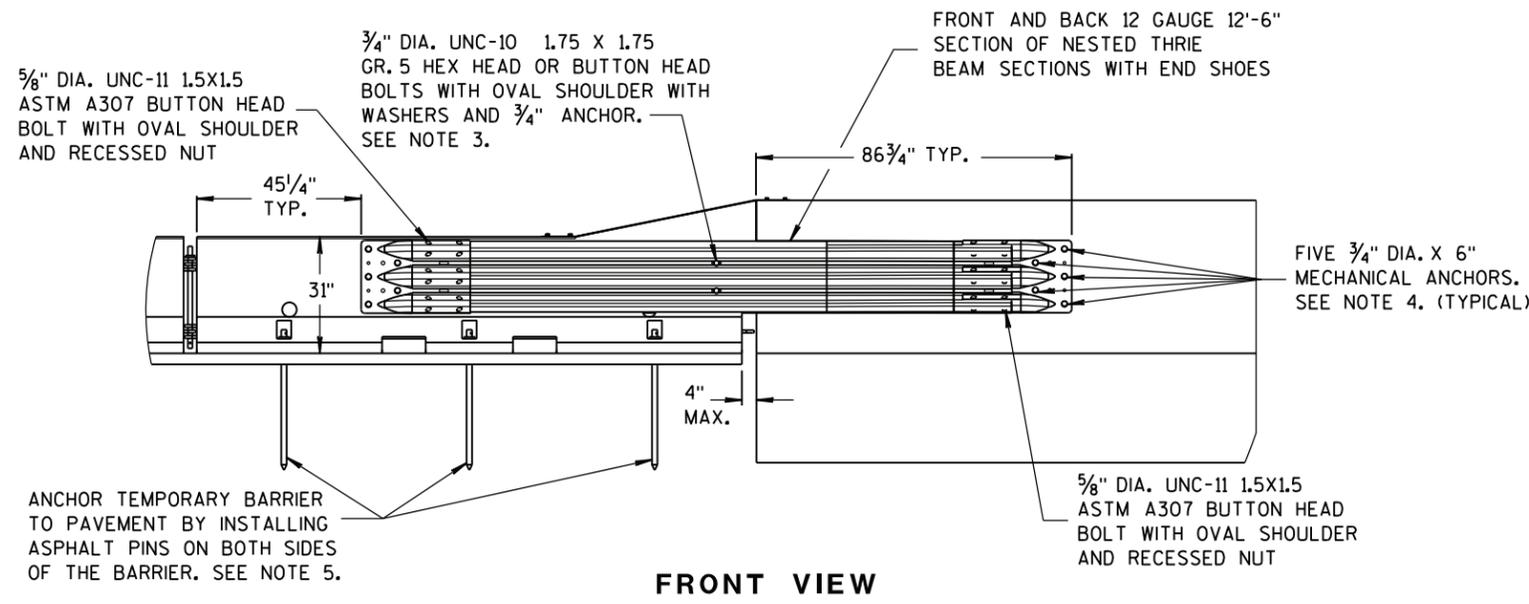
FREE STANDING BARRIER SPACE REQUIREMENTS



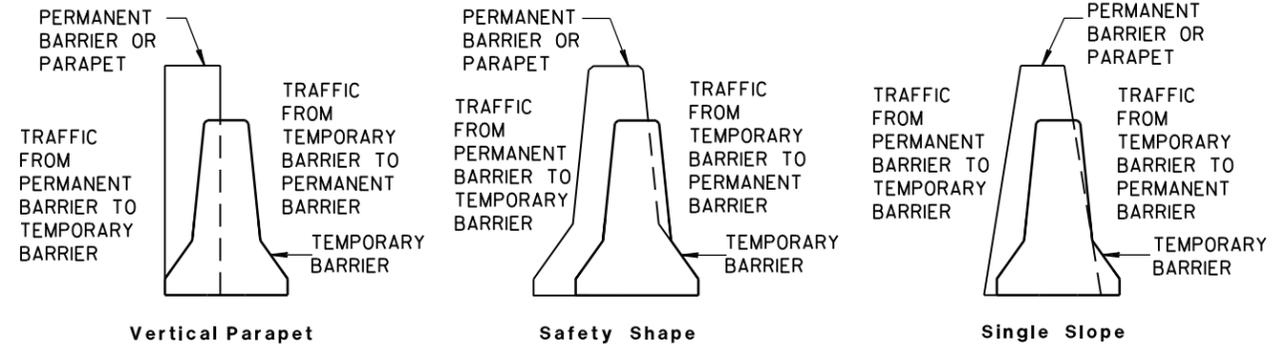
ANCHORED BARRIER SPACE REQUIREMENTS ON SLOPES

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

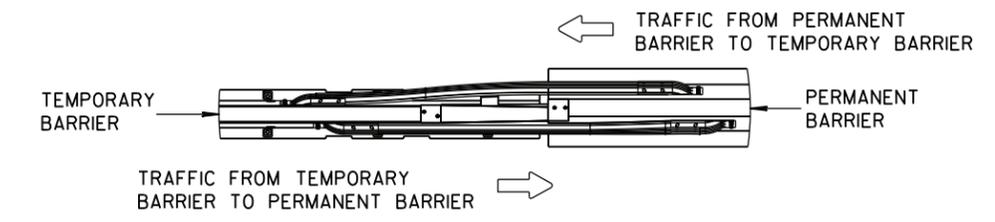
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



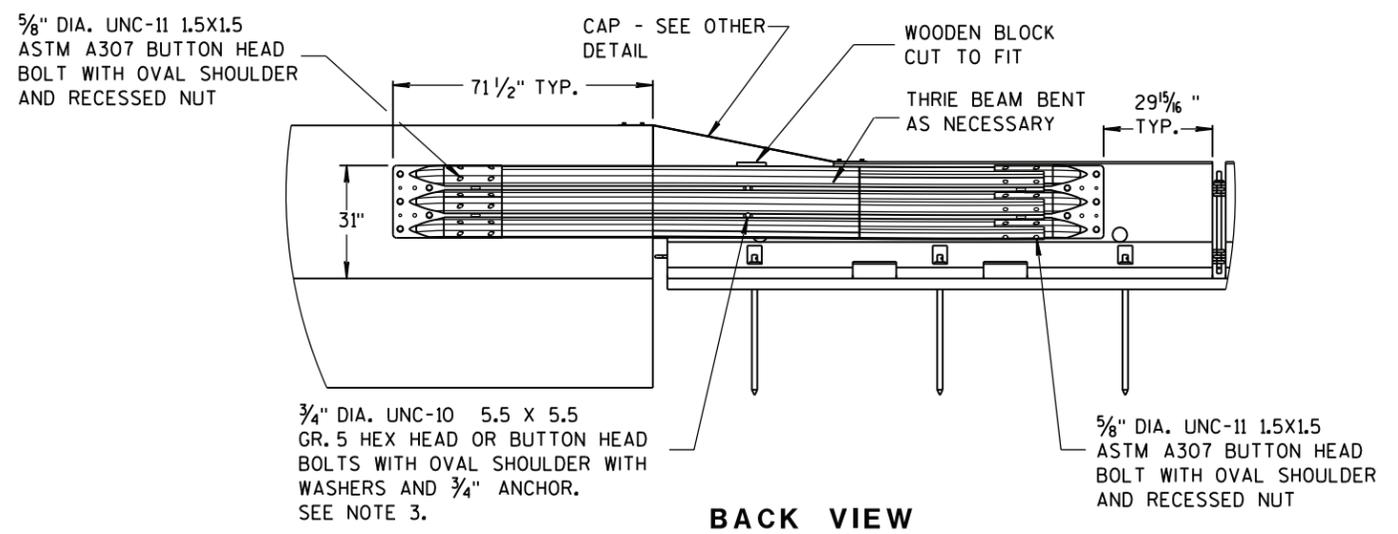
FRONT VIEW



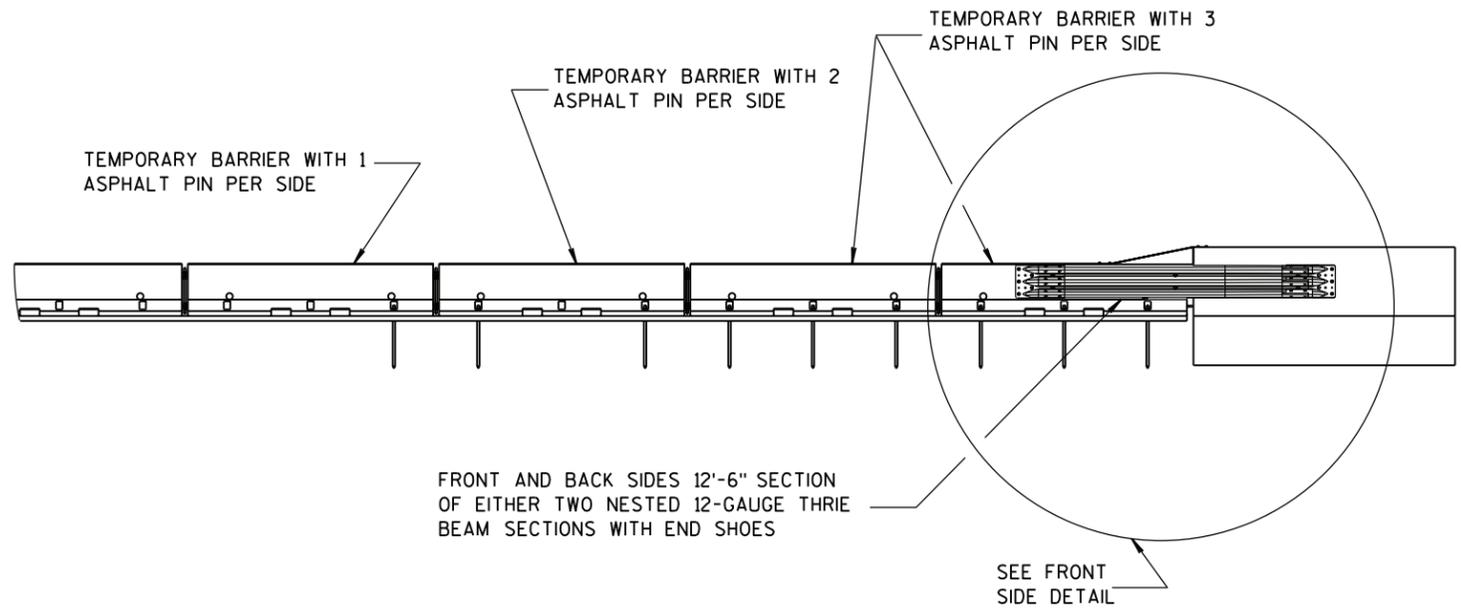
TEMPORARY BARRIER PLACEMENT FOR TRANSITION TO TIED DOWN SYSTEM



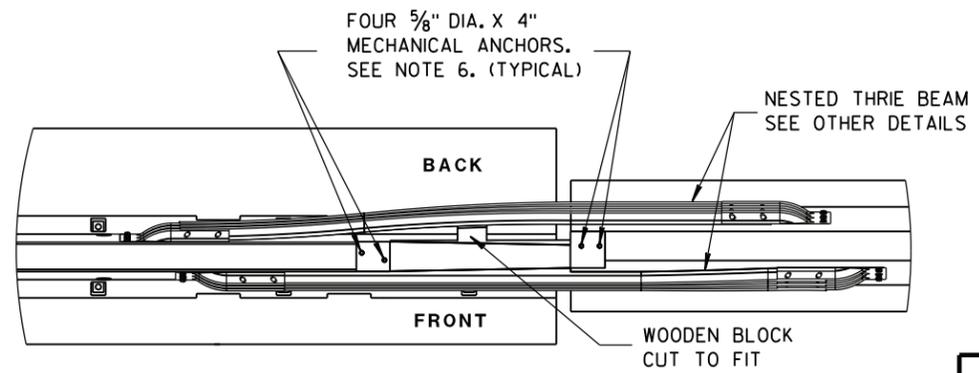
- NOTES**
1. CAP END PLATE PLACED FLUSH WITH UPSTREAM END OF PERMANENT BARRIER OR PARAPET.
 2. THRIE BEAM PIECES ARE OFFSET 15 1/4" TO PREVENT INTERFERENCE FROM THE ANCHORS ON OPPOSING SIDES.
 3. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 9.48 KIPS AND ULTIMATE SHEAR LOAD 10.48 KIPS.
 4. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 17.9 KIPS AND ULTIMATE SHEAR LOAD 21.96 KIPS.
 5. MAY BE USED ON CONCRETE OR ASPHALT PAVEMENTS. ASPHALT OPTION SHOWN. FOR CONCRETE OPTION SEE OTHER DETAILS.
 6. MINIMUM MECHANICAL OR ADHESIVE ANCHOR STRENGTH REQUIREMENTS: ULTIMATE TENSILE LOAD 12.14 KIPS AND ULTIMATE SHEAR LOAD 17.5 KIPS.



BACK VIEW



FRONT VIEW

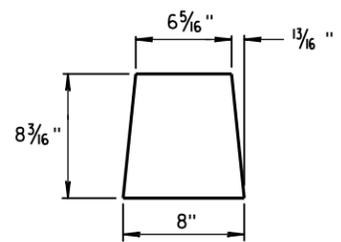


PLAN VIEW

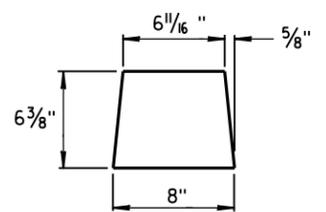
**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

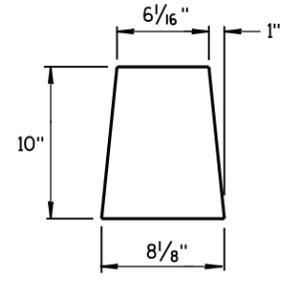
TRANSITION TO TIED DOWN SYSTEM



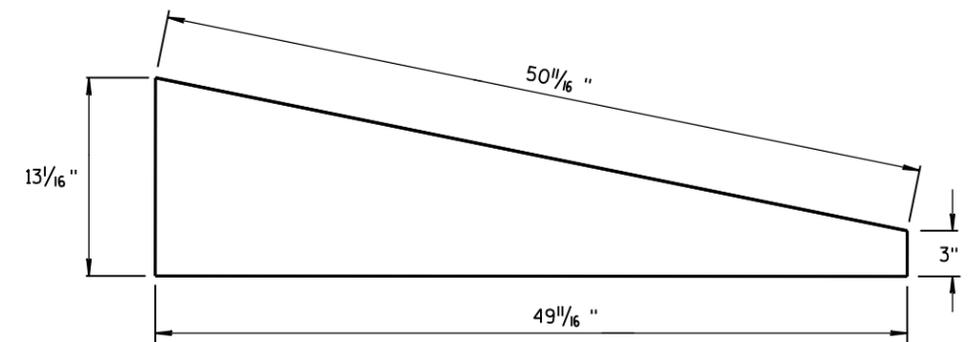
GUSSET 1



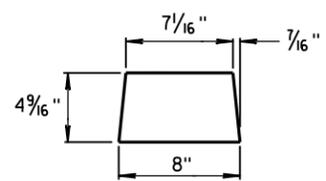
GUSSET 2



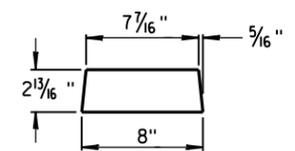
END PLATE



SIDE PLATE

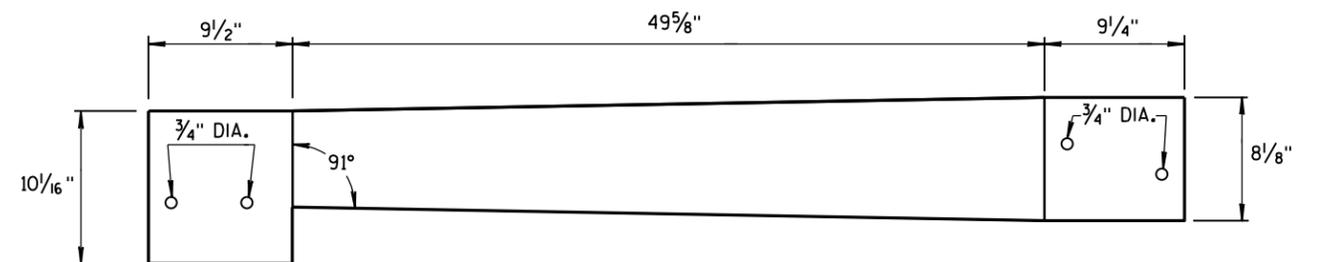


GUSSET 3

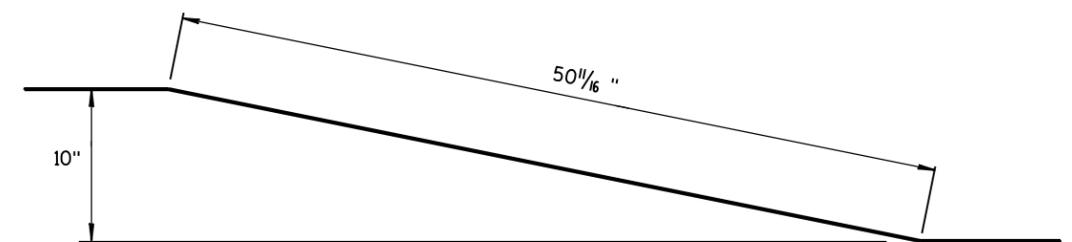


GUSSET 4

GUSSETS

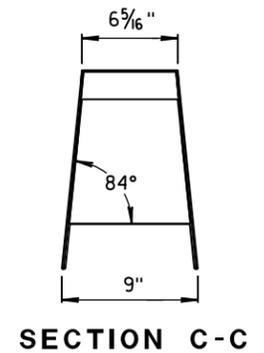
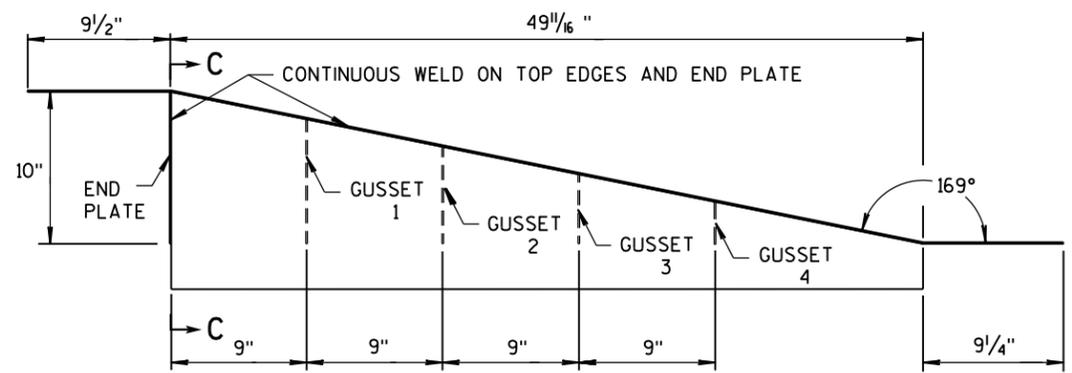
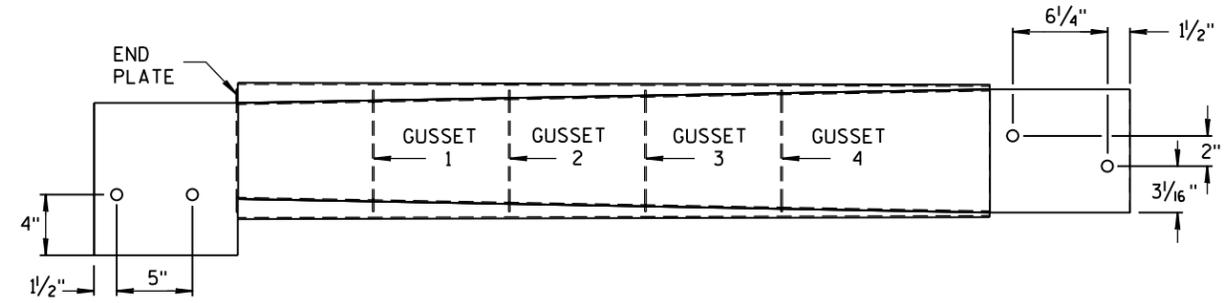


TOP PLATE



SIDE, TOP AND END PLATES FOR CAP FROM TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 GALVANIZED STEEL.



SECTION C-C

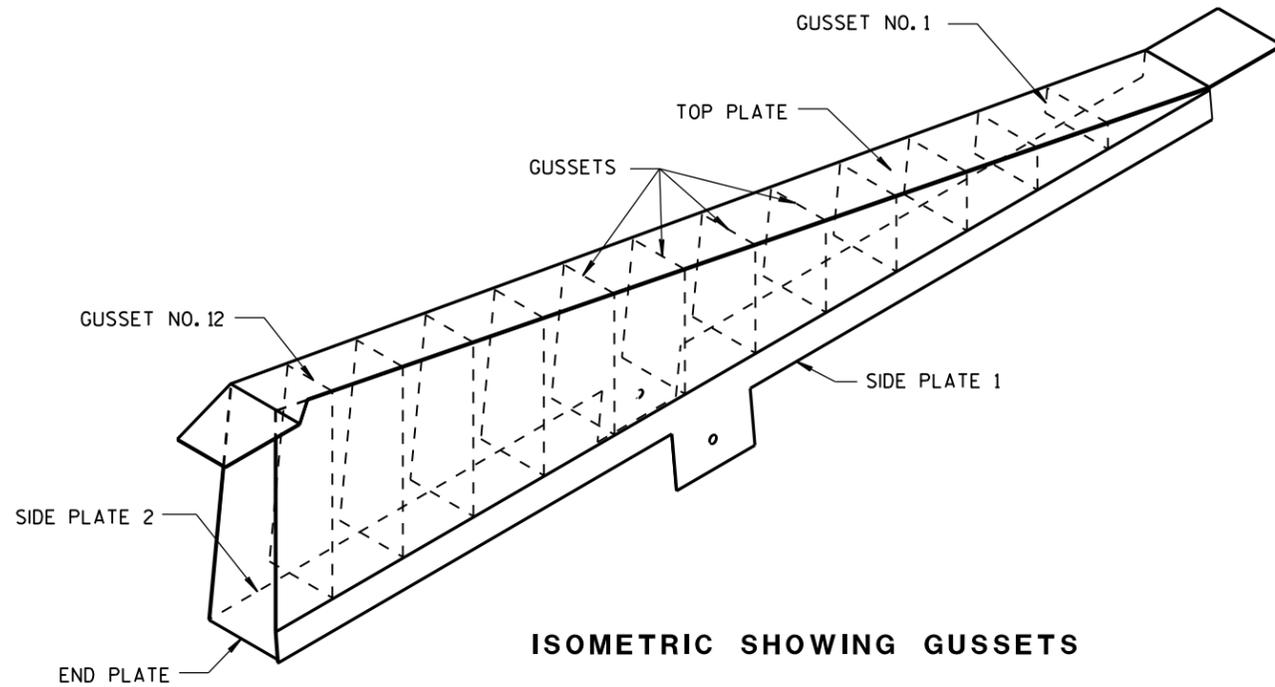
NOTES

1. FOUR GUSSETS AND END PLATE ARE STITCH WELDED ON THREE SIDES.
2. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE, AND GUSSETS.

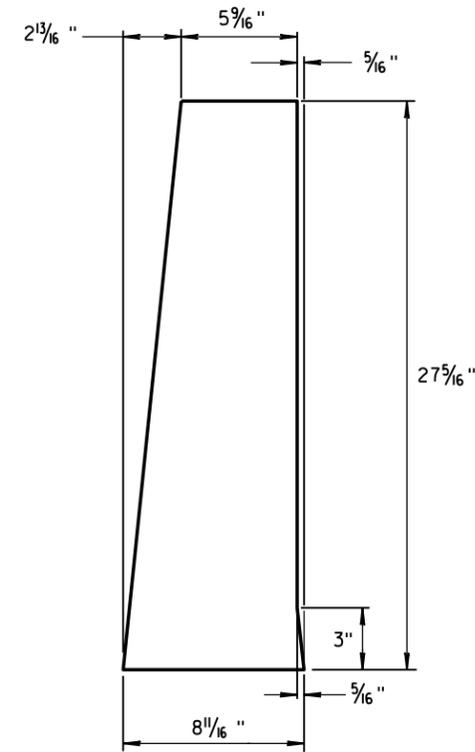
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 42" PERMANENT CONCRETE BARRIER

**CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

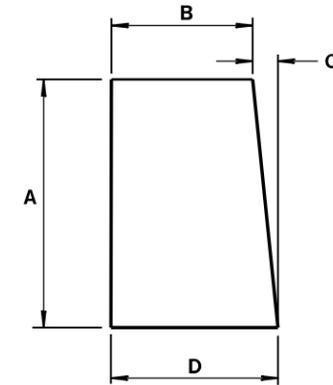


ISOMETRIC SHOWING GUSSETS



END PLATE

1/8" STEEL PLATE



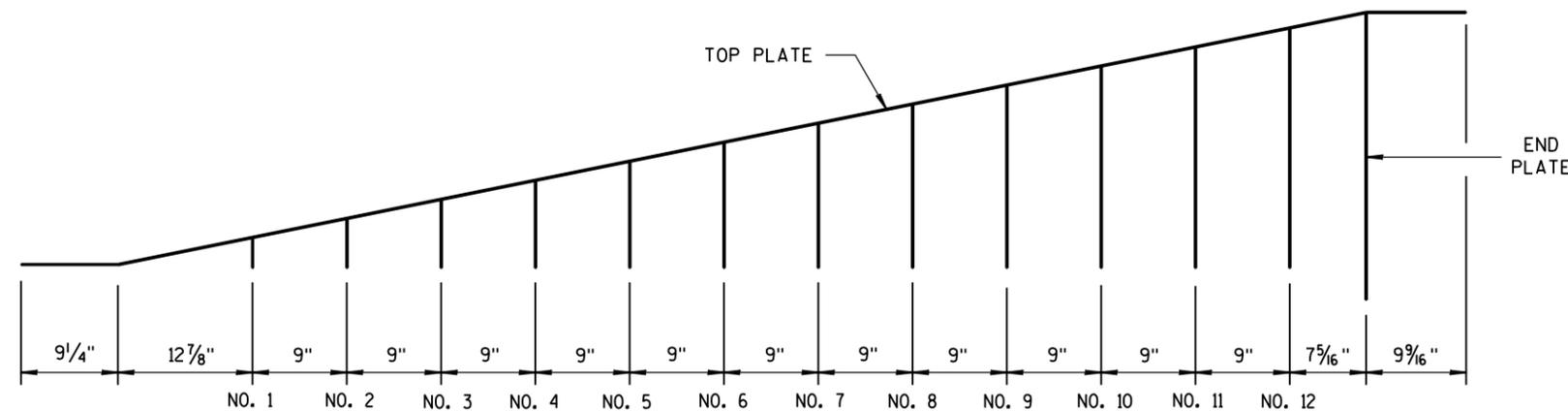
GUSSETS 1 - 12

ALL GUSSETS 1/8" STEEL PLATE

GUSSET DIMENSIONS				
GUSSET NO.	A	B	C	D
1	2 7/8"	7 3/4"	1/4"	8
2	4 1/16 "	7 7/16 "	1/2"	8
3	6 1/2"	7 3/8"	11/16 "	8 1/16 "
4	8 5/16 "	7 3/16 "	7/8"	8 1/16 "
5	10 1/8"	7"	1 1/16 "	8 1/16 "
6	11 5/16 "	6 13/16 "	1 1/4"	8 1/16 "
7	13 3/4"	6 5/8"	1 7/16 "	8 1/16 "
8	15 3/16 "	6 7/16 "	1 9/16 "	8 1/16 "
9	17 3/8"	6 1/4"	1 13/16 "	8 1/16 "
10	19 3/16 "	6 1/16 "	1 15/16 "	8 1/16 "
11	21"	5 7/8"	2 3/16 "	8 1/16 "
12	22 13/16 "	5 11/16 "	2 5/16 "	8 1/16 "

SIDE PLATES, TOP PLATE, END PLATE AND GUSSETS ARE 12 GAUGE ASTM A36 STEEL AND GALVANIZED.

GUSSETS AND END PLATE ARE STITCH WELDED ON 3 SIDES. TWO TRIANGULAR SIDE PLATES ARE STITCH WELDED TO TOP PLATE, END PLATE AND GUSSETS.

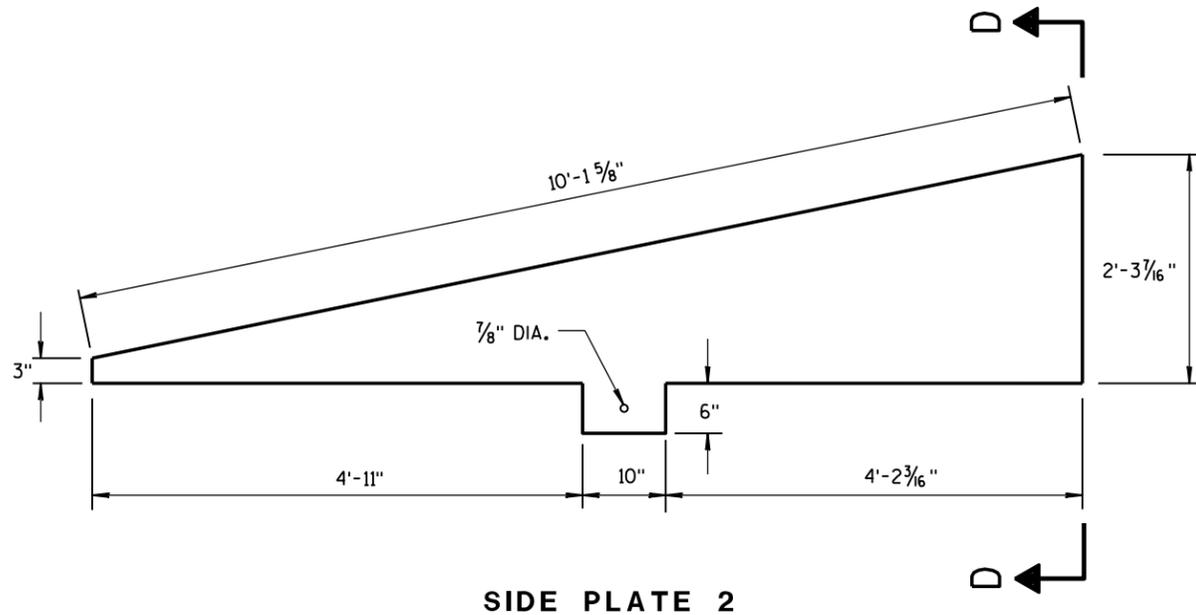


GUSSET LOCATION

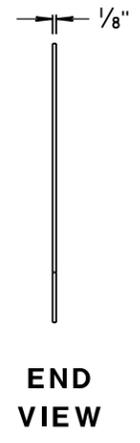
CAP DETAILS FOR TEMPORARY CONCRETE BARRIER TO 56" PERMANENT CONCRETE BARRIER

CONCRETE BARRIER
TEMPORARY PRECAST, 12'-6"

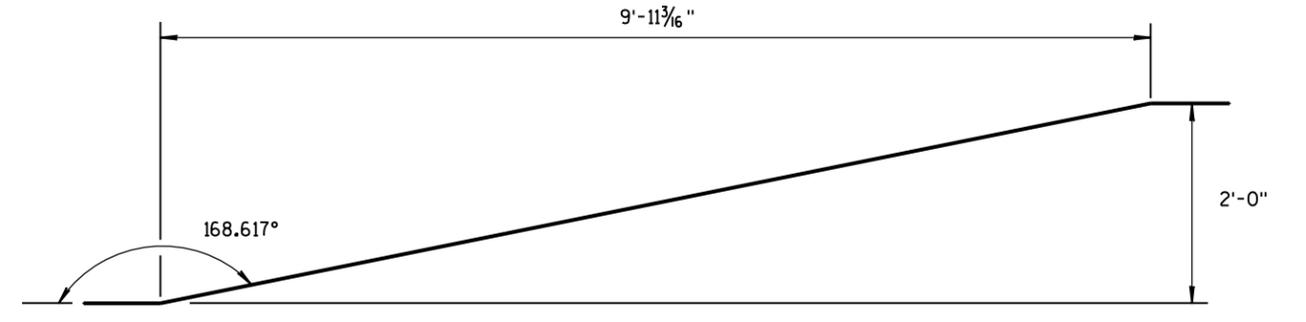
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



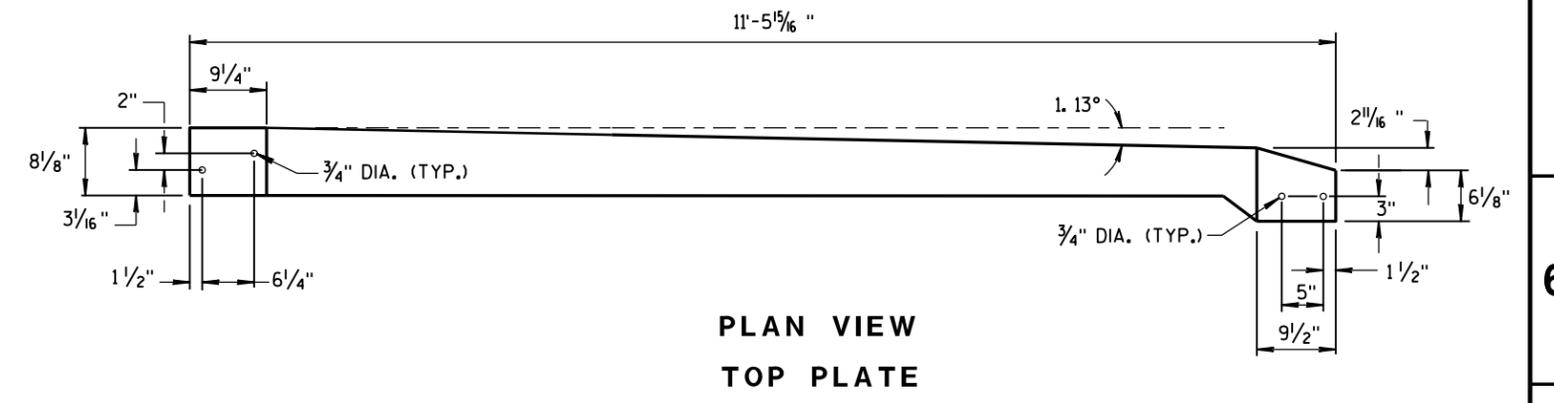
SIDE PLATE 2



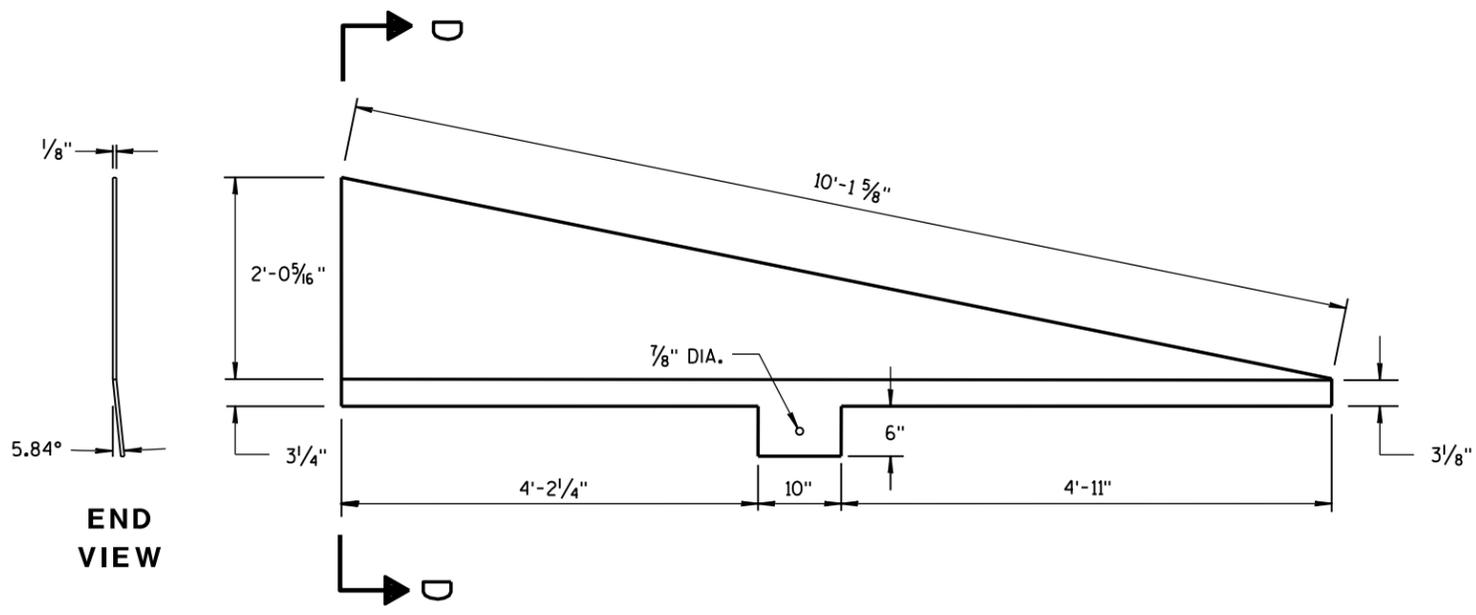
END VIEW



**SIDE VIEW
TOP PLATE**



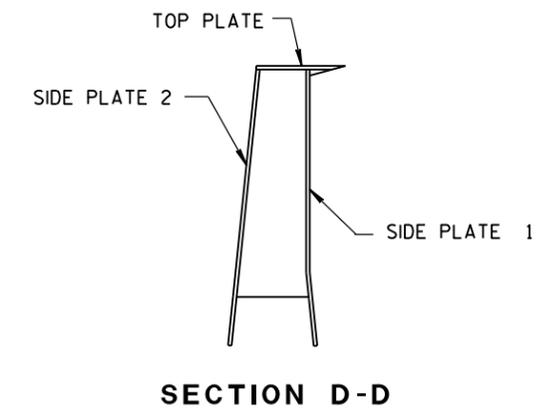
**PLAN VIEW
TOP PLATE**



SIDE PLATE 1



END VIEW



SECTION D-D

**CAP DETAILS FOR TEMPORARY CONCRETE
BARRIER TO 56" PERMANENT CONCRETE BARRIER**

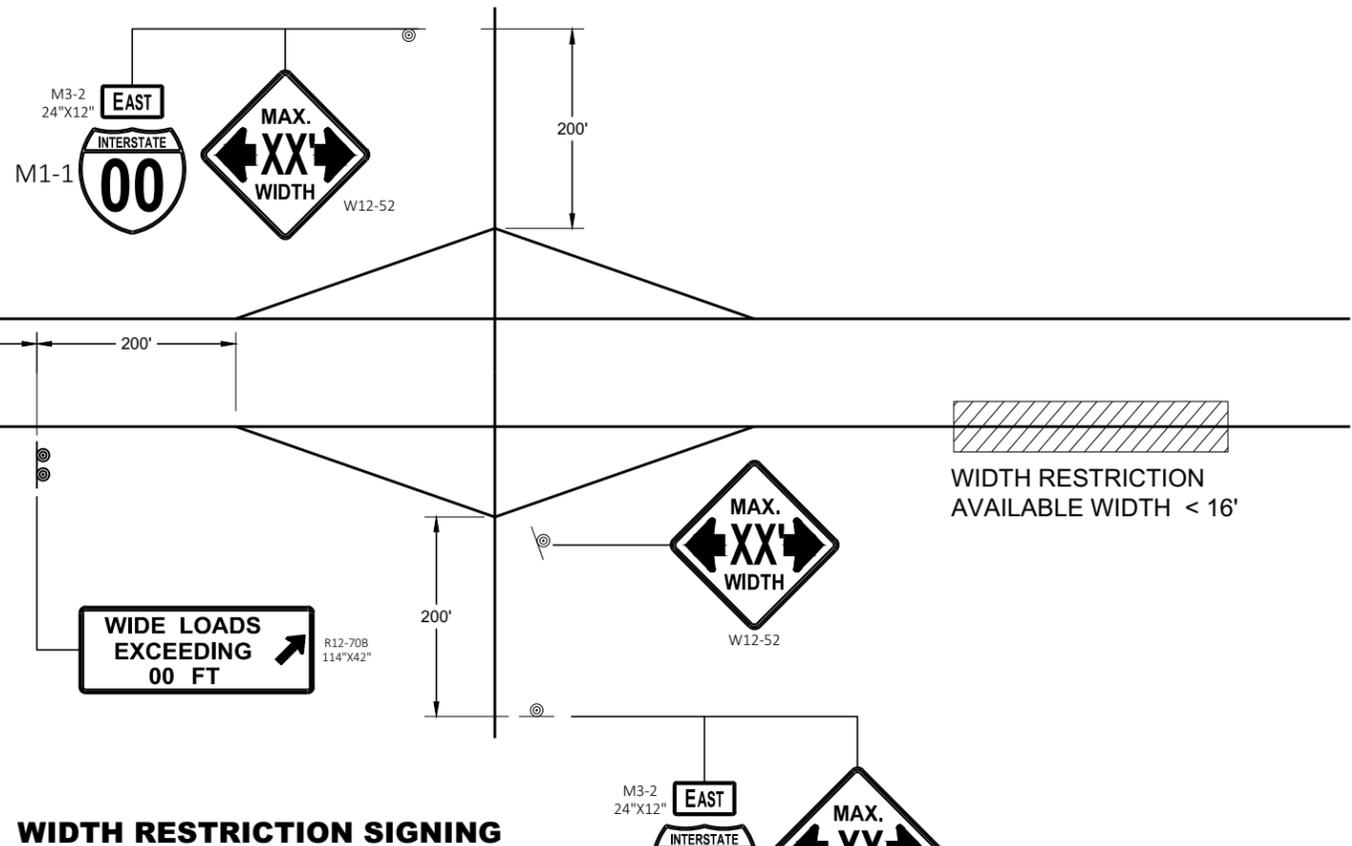
CONCRETE BARRIER TEMPORARY PRECAST, 12'-6"	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/s/ Rodney Taylor ROADWAY STANDARD DEVELOPMENT UNIT SUPERVISOR
FHWA	

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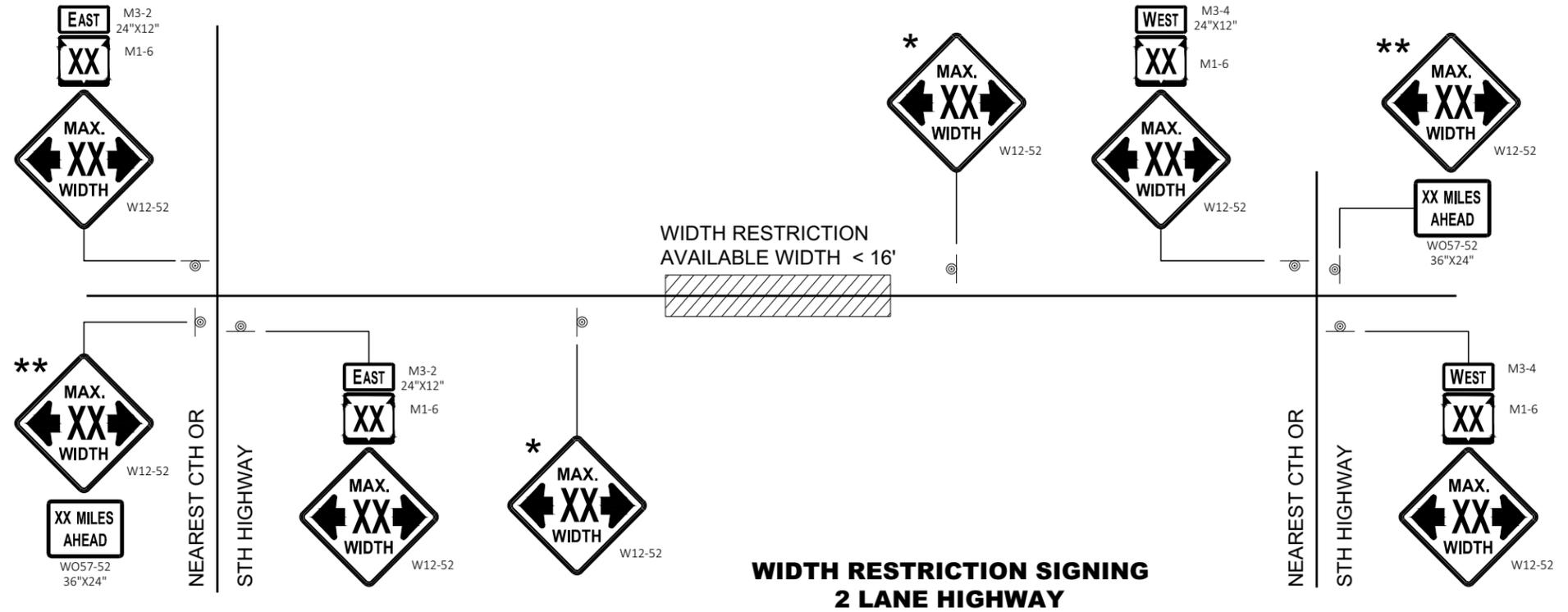
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S.D.D. 14 B 7-15i

S.D.D. 14 B 7-15i



WIDTH RESTRICTION SIGNING



**WIDTH RESTRICTION SIGNING
2 LANE HIGHWAY**

LEGEND

⊙ SIGN ON PERMANENT SUPPORT

GENERAL NOTES

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

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

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

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

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

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

* PLACE 500 FEET AFTER THE W20 - 1A AND 500 FEET BEFORE ADDITIONAL SIGNS FOR ROADWAYS WITH A PRE - CONSTRUCTION SPEED LIMIT OF 45 MPH OR MORE. FOR 35-40 MPH, USE 350 FOOT TYPICAL SPACING. FOR 25-30 MPH, USE 200 FOOT TYPICAL SPACING.

** SIGN SHALL BE VISIBLE FROM ROADWAY.

*** ADDITIONAL SIGNS NEEDED IF THERE IS AN ON RAMP BETWEEN SIGNS.

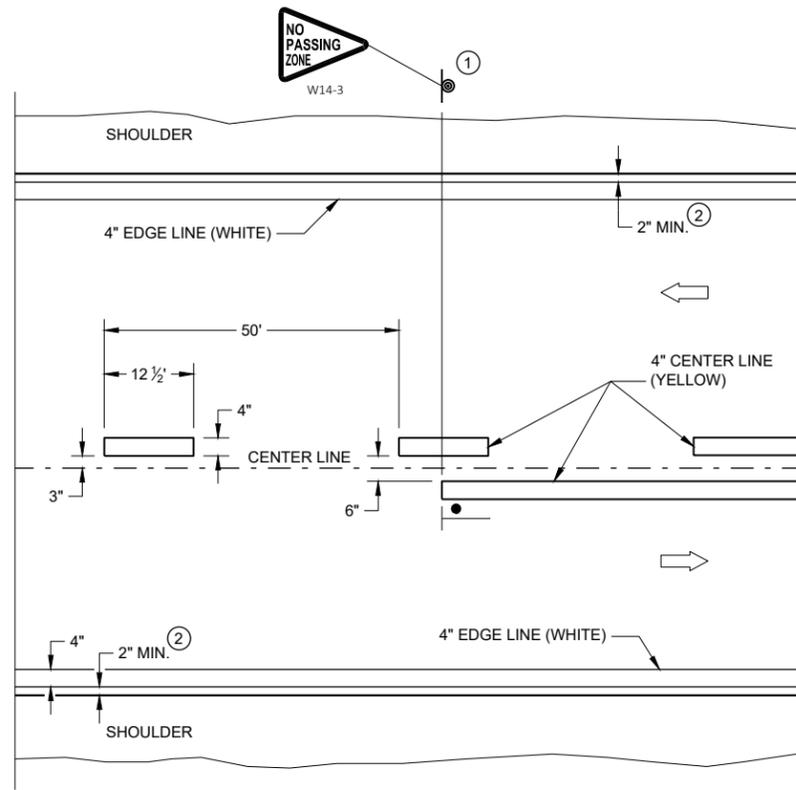


WIDTH ON SIGN TO BE APPROX. 1 - FOOT LESS THAN AVAILABLE WIDTH

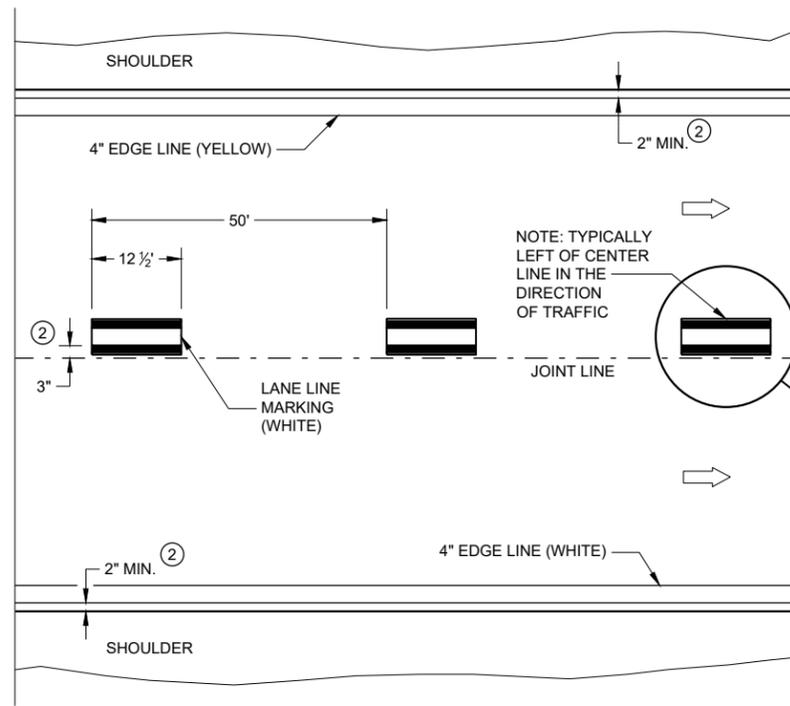
**ADVANCED WIDTH
RESTRICTION SIGNING**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

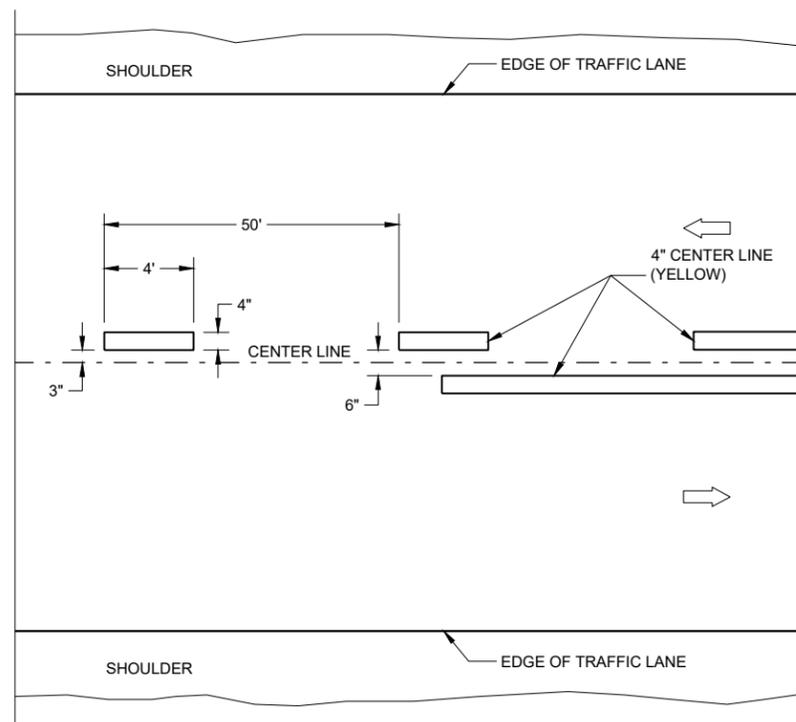


TWO WAY TRAFFIC

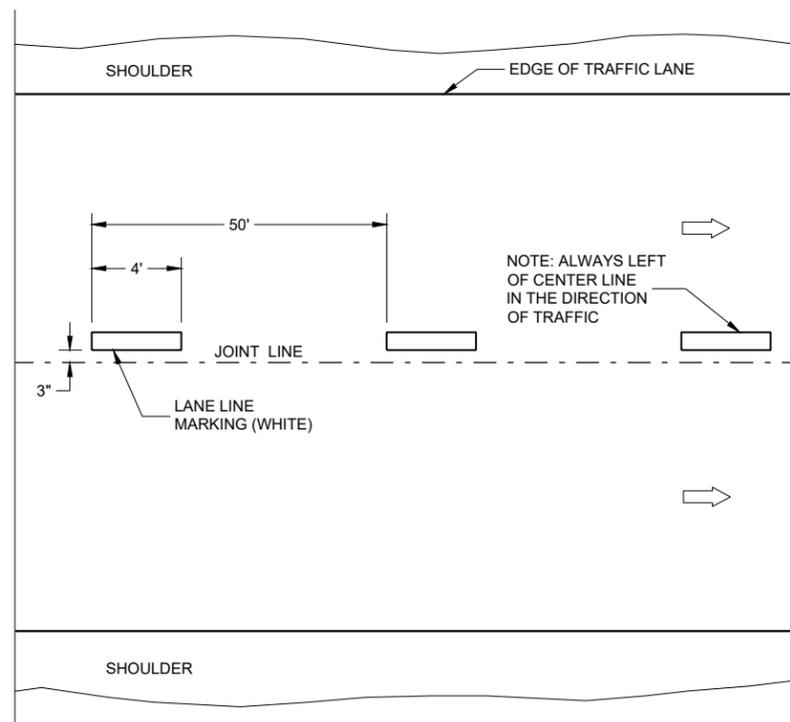


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

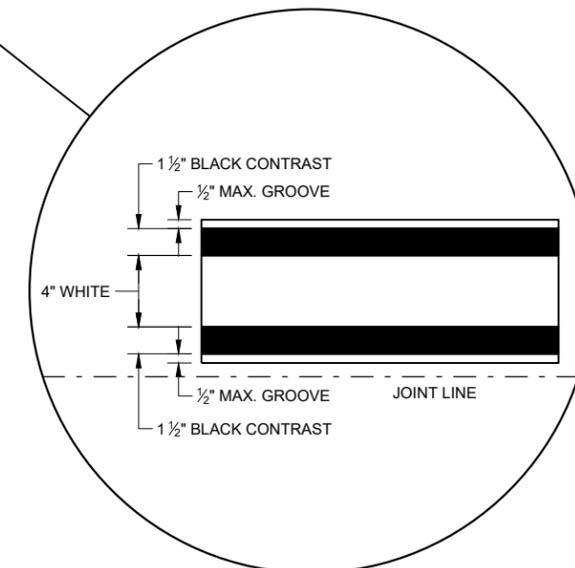
GENERAL NOTES

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

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

LEGEND

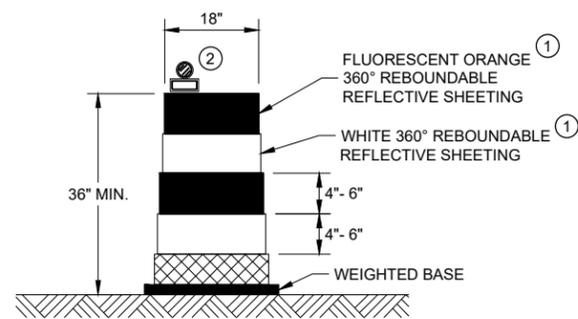
- "T" MARKING
- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC



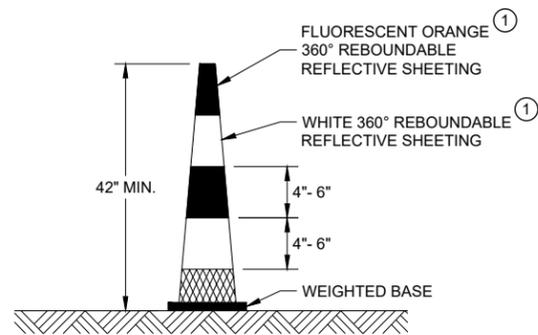
LONGITUDINAL MARKING (MAINLINE)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 /S/ Matthew Rauch
DATE STATEWIDE SIGNING AND MARKING ENGINEER

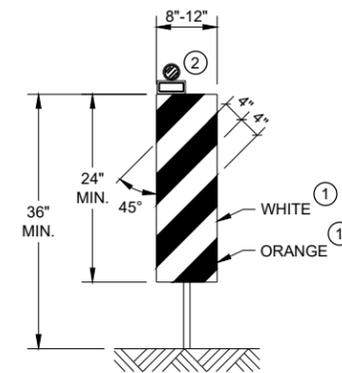


DRUM



42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

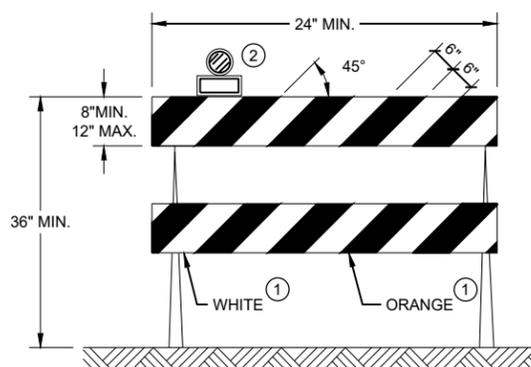


VERTICAL PANEL

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

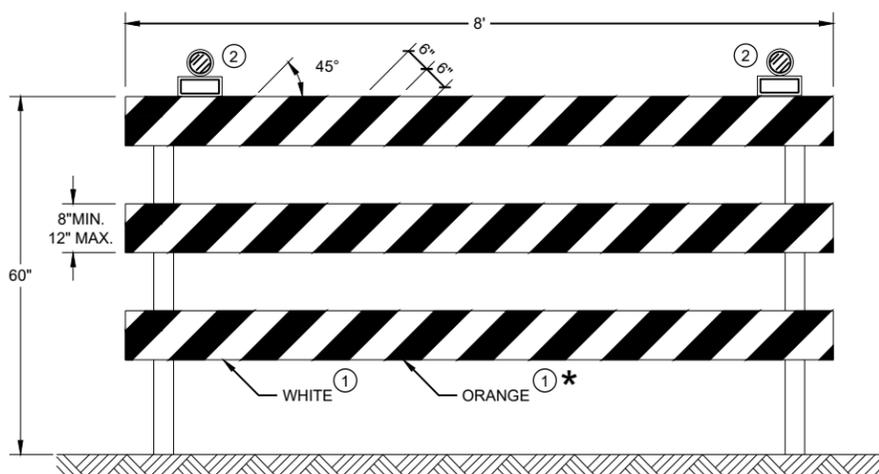
GENERAL NOTES

- ① REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
- ② LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.



TYPE II BARRICADE

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



TYPE III BARRICADE

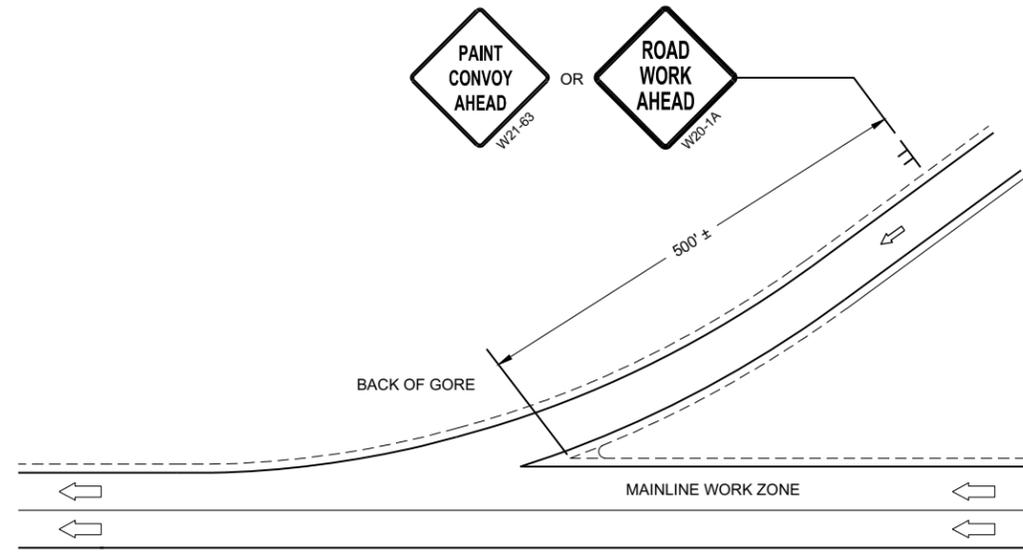
IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2021 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

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



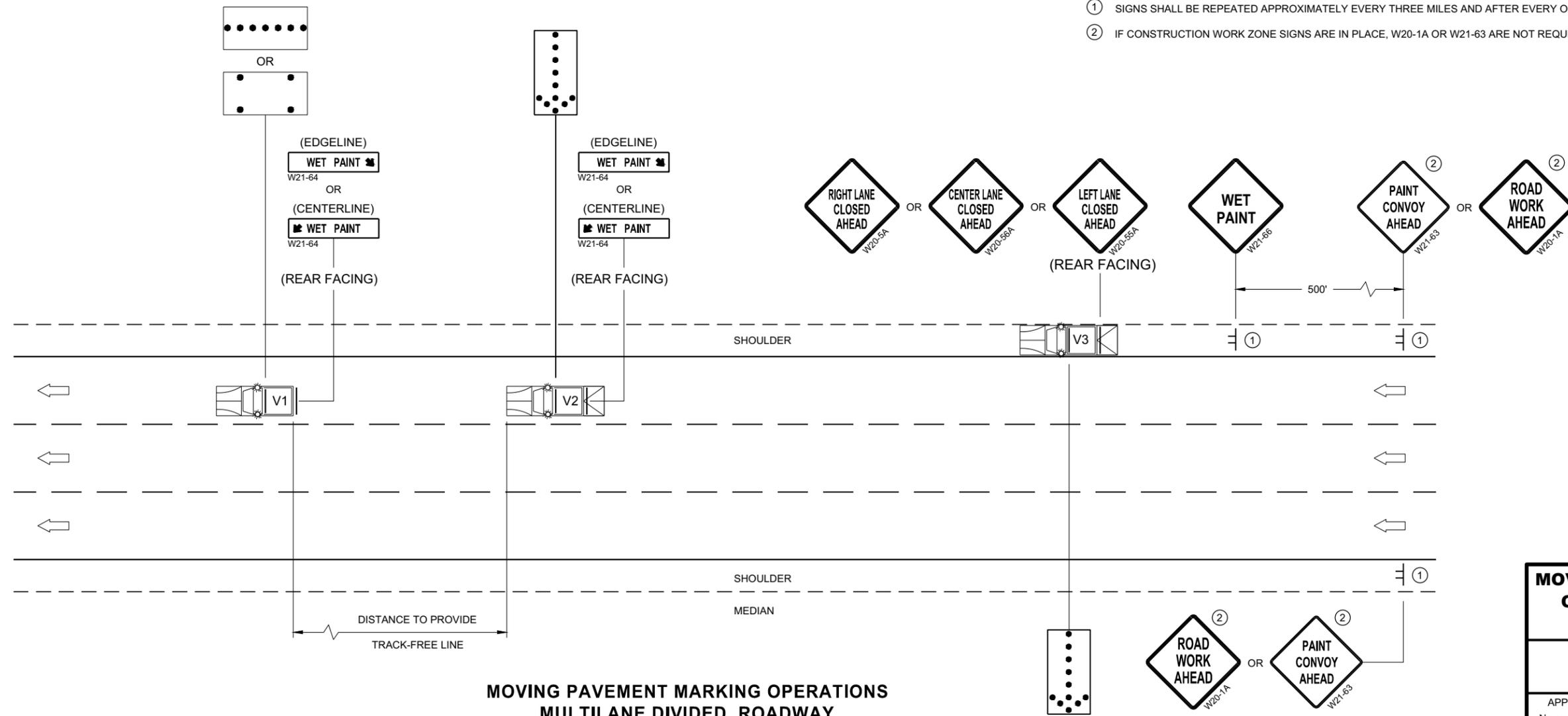
GENERAL NOTES

- ALL VEHICLES SHALL BE EQUIPPED WITH TWO 360 DEGREE HIGH INTENSITY YELLOW FLASHING LIGHTS OR STROBE LIGHTS AND OPERATED WITH HEADLIGHTS TURNED ON.
- ALL VEHICLES SHALL BE EQUIPPED WITH REAR FACING TYPE B OR C FLASHING ARROW PANEL. SIGNS PLACED ON VEHICLES MUST NOT OBSCURE THE ARROW PANEL.
- ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE SPECIFIED.
- DISTANCE BETWEEN VEHICLES MAY VARY ACCORDING TO TERRAIN, SIGHT DISTANCE, PAINT DRYING TIME, AND OTHER FACTORS. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, SHADOW VEHICLES SHOULD MAINTAIN THE MINIMUM DISTANCE FROM THE WORK VEHICLE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. SHADOW VEHICLES SHOULD SLOW DOWN IN ADVANCE OF VERTICAL AND HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
- WHEN WORK ACTIVITY BLOCKS THE LEFT LANE, REVERSE TRAFFIC CONTROL.
- WHEN A RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, PROVIDE ADDITIONAL TRAFFIC CONTROLS AS SPECIFIED IN THE CONTRACT OR AS APPROVED BY THE ENGINEER.
- USE AN ATTENUATOR ON THE REAR MOST VEHICLE THAT BLOCKS ALL OR PART OF THE TRAFFIC LANE.
- IF THE SHOULDER IS TOO NARROW TO ACCOMMODATE THE LAST TRAILING VEHICLE, THE VEHICLE SHOULD STRADDLE THE EDGE LINE.
- WHEN NO WORK ACTIVITY IS TAKING PLACE, REMOVE OR LAY STATIONARY SIGNS AND SUPPORTS FLAT ON THE GRADE WITH UPRIGHTS ORIENTED PARALLEL TO AND DOWNSTREAM FROM TRAFFIC
- CONES SHOULD BE USED BETWEEN THE MARKING AND SHADOW VEHICLE AT 100 FOOT SPACING. CONES MAY BE OMITTED ON PAINTED LINE IF APPROVED BY THE ENGINEER. CONSIDER PAVEMENT MARKING DRY OR CURE TIMES AND TRAFFIC VOLUME.
- CONES SHALL BE A MINIMUM HEIGHT OF 18" FOR WET PAVEMENT MARKINGS

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

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SDD 15C19 - 06C

SDD 15C19 - 06C

**MOVING PAVEMENT MARKING OPERATIONS
MULTILANE DIVIDED ROADWAY**

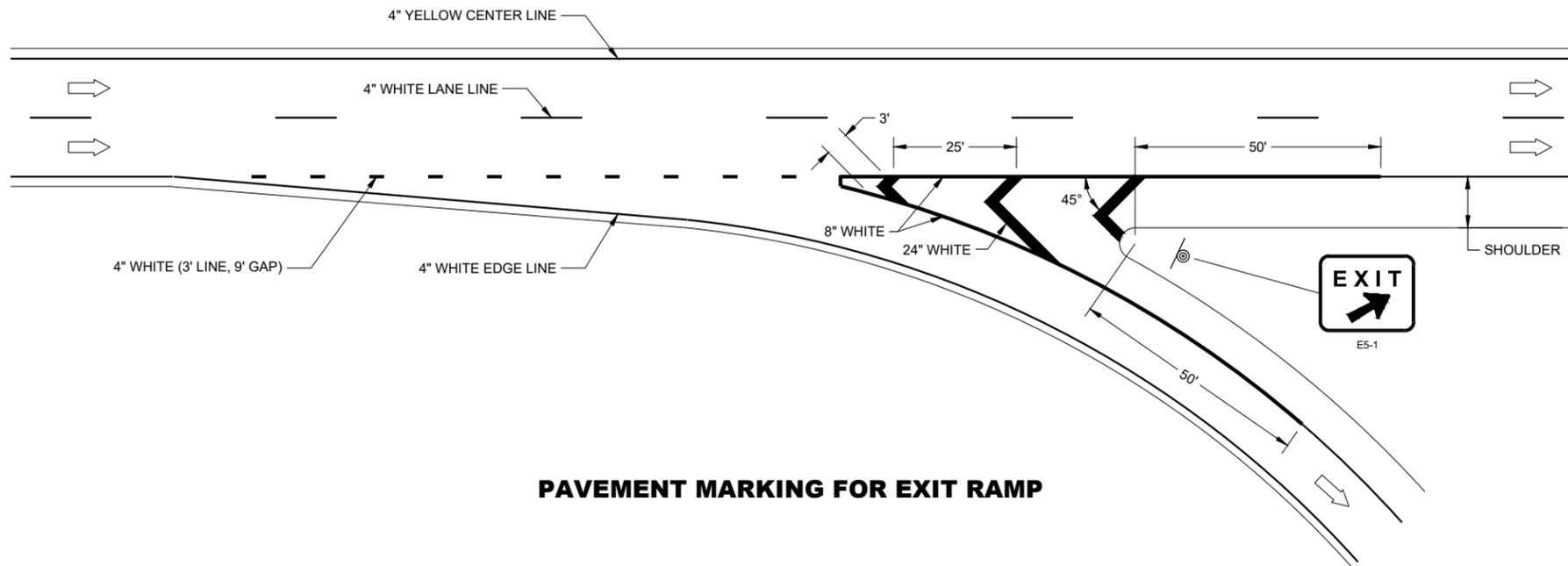
MOVING PAVEMENT MARKING OPERATION MULTI-LANE DIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

GENERAL NOTES

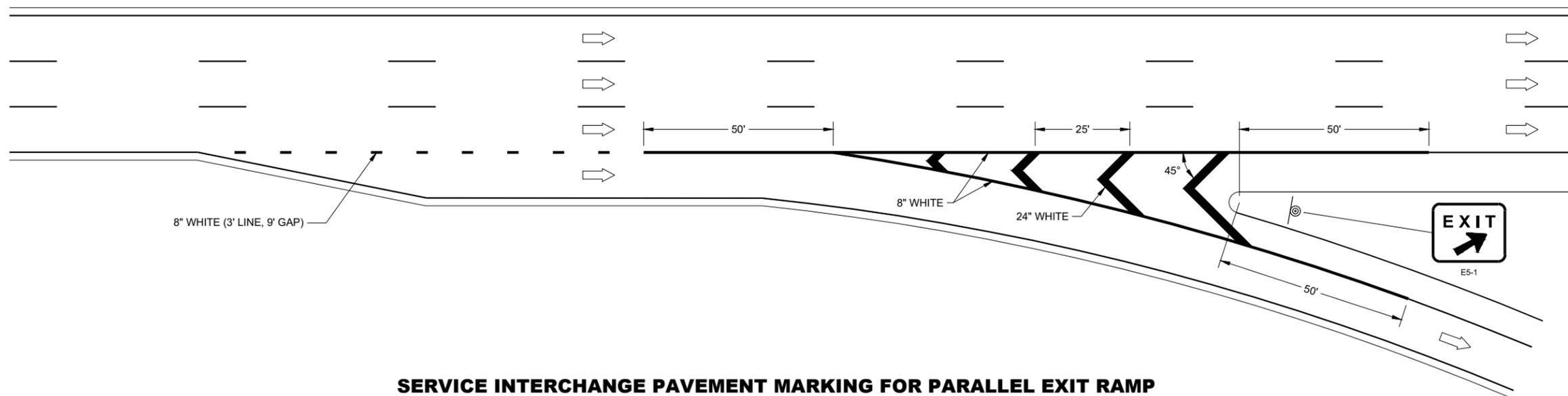
PLACE GROOVE 3 INCHES LEFT OF JOINT.

LEGEND

-  SIGN ON PERMANENT SUPPORT
-  DIRECTION OF TRAVEL



PAVEMENT MARKING FOR EXIT RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL EXIT RAMP

**PAVEMENT MARKING,
EXIT RAMP AND
PARALLEL EXIT RAMP**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 15C31 - 04a

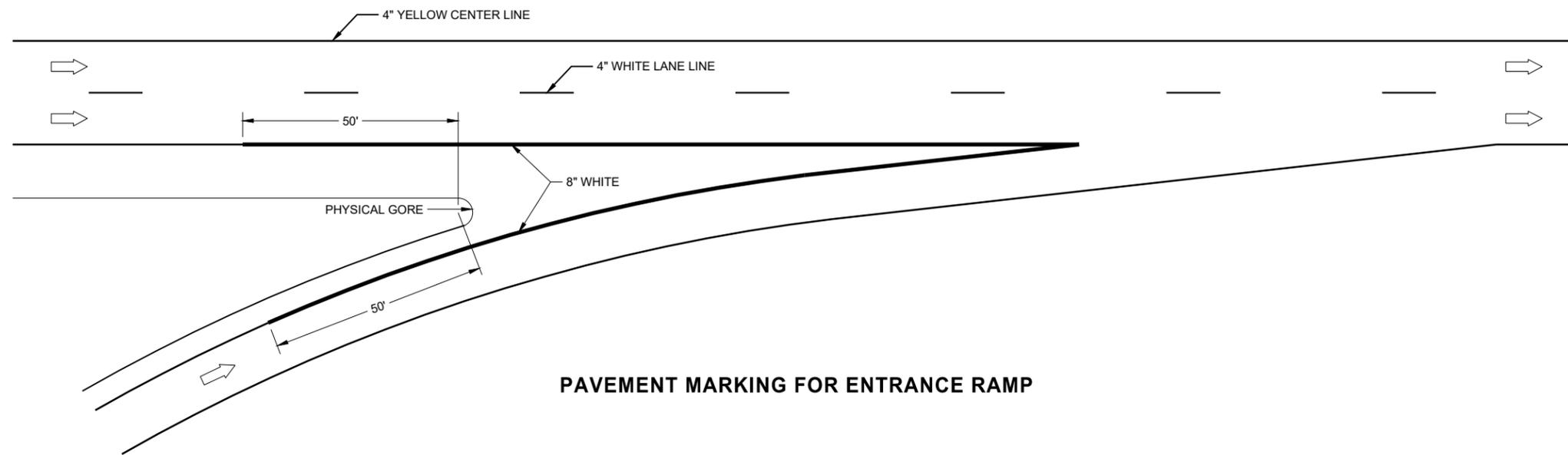
SDD 15C31 - 04a

GENERAL NOTES

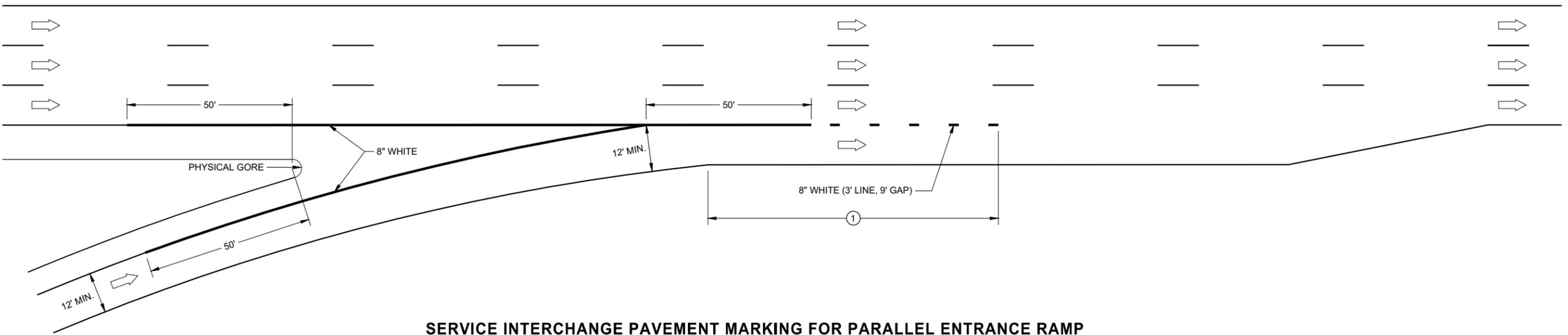
- PLACE GROOVE 3 INCHES LEFT OF JOINT.
- ① ½ LENGTH OF FULL WIDTH ACCELERATION LANE.

LEGEND

➡ DIRECTION OF TRAVEL



PAVEMENT MARKING FOR ENTRANCE RAMP



SERVICE INTERCHANGE PAVEMENT MARKING FOR PARALLEL ENTRANCE RAMP

**PAVEMENT MARKING,
ENTRANCE RAMP AND
PARALLEL ENTRANCE RAMP**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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

ALL SIGNS ARE 48" x 48" 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 OR AS APPROVED BY THE ENGINEER.

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 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

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

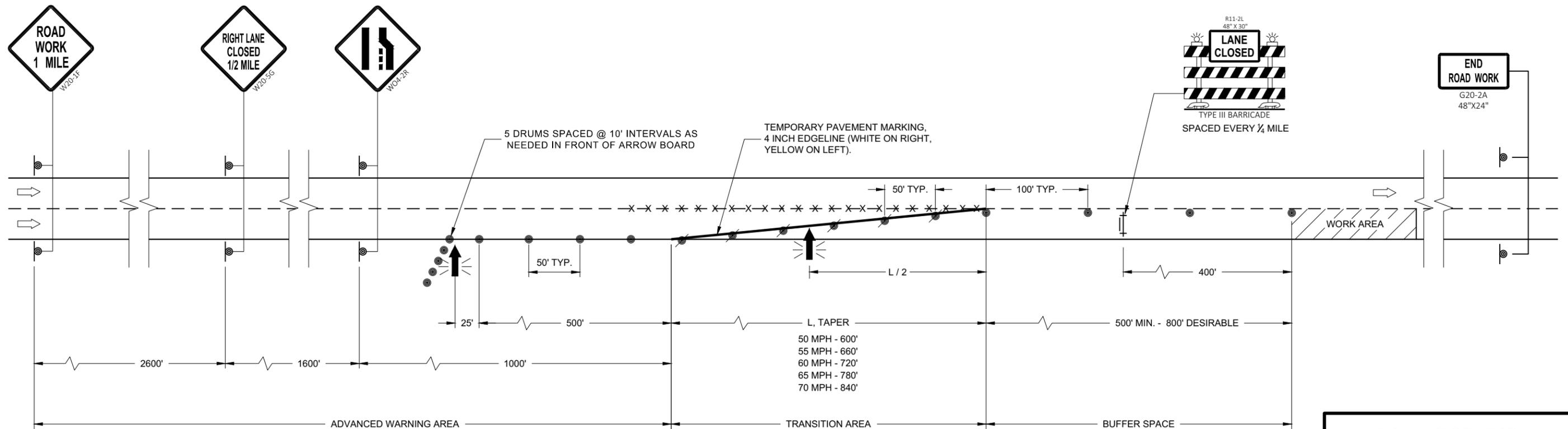
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS

NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE 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 ONE HALF 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.

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

LEGEND

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



TRAFFIC CONTROL LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN
- PORTABLE TRAFFIC SENSOR (PTS)
- FBS FLASHING BEACON SIGNS

STOPPED OR SLOW TRAFFIC WHEN FLASHING
 WO8-76
 60x36

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 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

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 OR AS APPROVED BY THE ENGINEER.

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 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

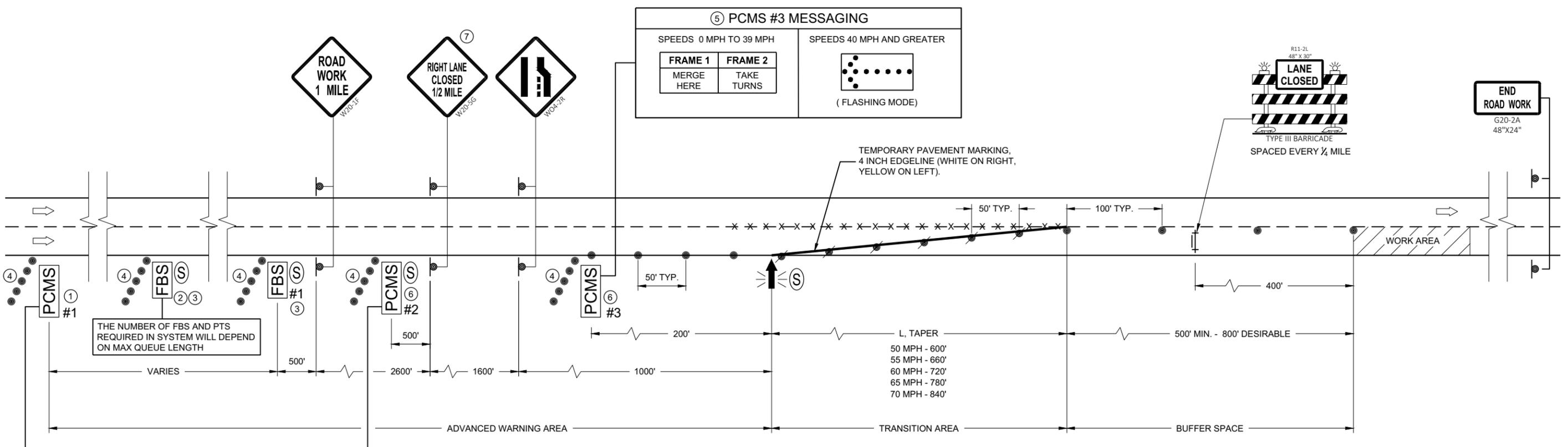
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION. ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE 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 ONE HALF 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.

- CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.
- PORTABLE TRAFFIC SENSOR (PTS) MAY BE MOUNTED ON PCMS, FBS, ARROW BOARD OR OTHER TRAILER DEVICES.
- ① PLACE PCMS #1 ONE MILE BEYOND ESTIMATED MAXIMUM QUEUE LENGTH. PLACE FLASHING BEACON SIGNS EVERY ONE MILE BETWEEN THE W20-1F AND PCMS #1 BEYOND ESTIMATED QUEUE.
 - ② PLACE FLASHING BEACON SIGNS EVERY ONE MILE BETWEEN PCMS #1 AND FBS #1. THE NUMBER OF FBS MAY BE MORE THAN SHOWN ON THIS DETAIL.
 - ③ FOR THREE LANE CONFIGURATION, PLACE FBS ON BOTH SIDES OF ROADWAY. CHANGE PCMS #1 FRAME 2 MESSAGE TO "USE ALL LANES".
 - ④ 5 DRUMS SPACED @ 10' INTERVALS AS NEEDED.
 - ⑤ PCMS SHALL FOLLOW ARROW BOARD STANDARDS WHEN DISPLAYING FLASHING FOUR CORNER CAUTION MODE OR FLASHING ARROW MERGE MODE.
 - ⑥ TO MINIMIZE OBSTRUCTION OF THE ARROW BOARD BY THE PCMS, OFFSET THE PCMS AS NEEDED FROM THE EDGE LINE
 - ⑦ IF THERE IS AN APPROVED TEMPORARY SPEED DECLARATION, ADD WO-3-5 SIGNS 400 FEET AFTER THE W20-5G SIGNS AND ADD R2-1 SIGNS (48"x60") 700 FEET AFTER THE WO3-5 SIGNS. A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A "RESUME SPEED LIMIT" SIGN 200 FEET MINIMUM (800 FEET DESIRABLE) BEYOND THE G30-3A "END ROAD WORK" SIGN.

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SDD 15D12 - 09C

SDD 15D12 - 09C

TRAFFIC CONTROL, DYNAMIC LANE MERGE SYSTEM

STATE OF WISCONSIN
 DEPARTMENT OF TRANSPORTATION

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

FHWA

LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ⊞ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- ⦿ TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ×-×-× REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- ⊞ TYPE III BARRICADE WITH ATTACHED SIGN
- ➡ DIRECTION OF TRAFFIC

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" X 48" 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 R11-2L "LANE CLOSED" SIGNS.

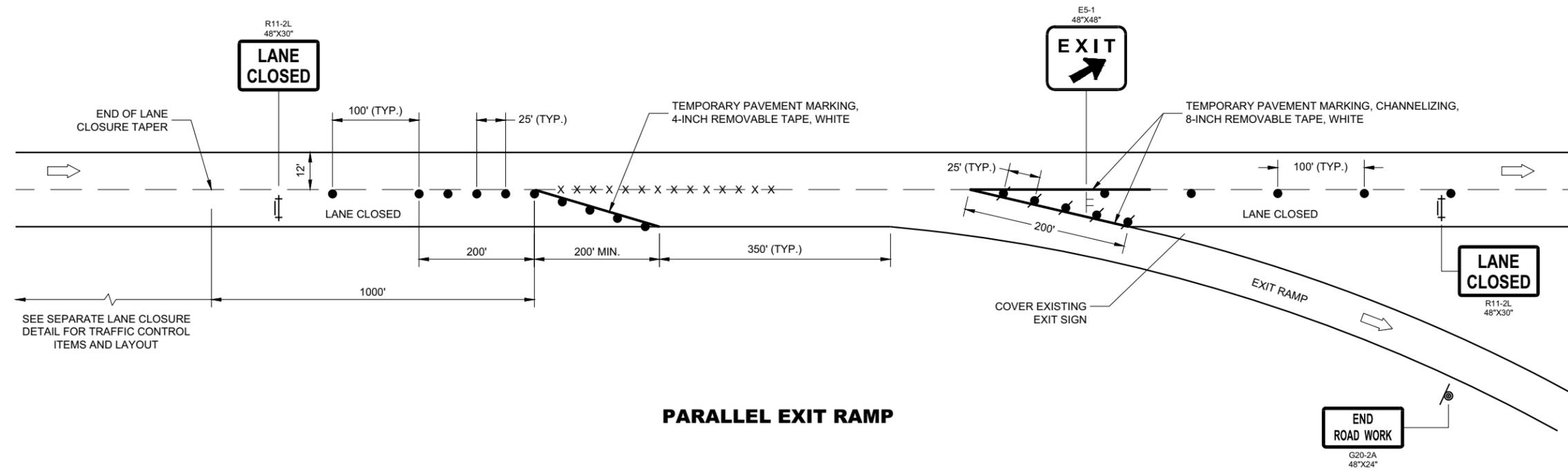
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONSECUTIVE DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE, MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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.

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.

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



PARALLEL EXIT RAMP

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SDD 15D15 - 05e

SDD 15D15 - 05e

TRAFFIC CONTROL, PARALLEL EXIT RAMP WITHIN LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2019 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

LEGEND

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

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 DESIRABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT LEFT - REVERSE FOR SHIFTING RIGHT.

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 ANY "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARDS 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.

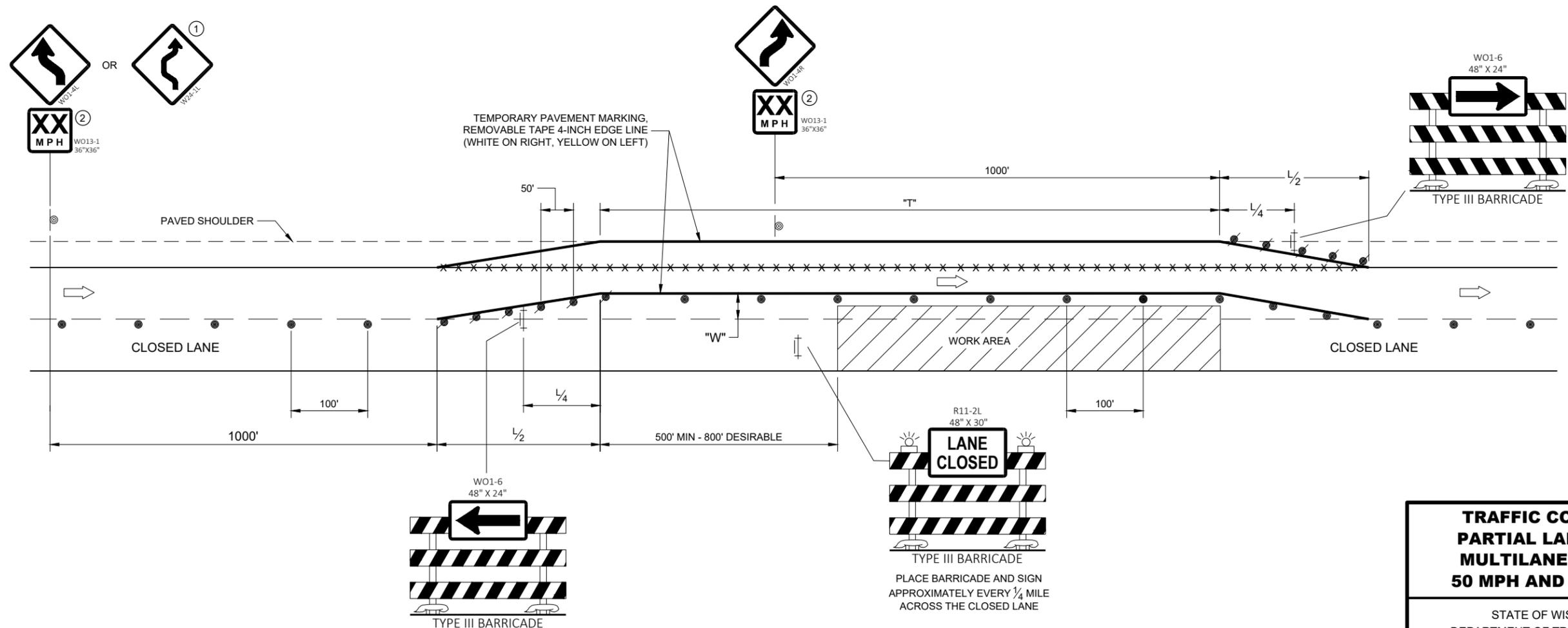
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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 SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT 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.

- ① USE ONLY WHEN T<600', OMIT WO1-4R.
- ② IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.

POSTED SPEED LIMIT PRIOR TO WORK STARTING (MPH)	SHIFTING TAPER $\frac{1}{2}$ W, LATERAL OFFSET (FT)								
	1	2	3	4	5	6	7	8	9
50	25	50	75	100	125	150	175	200	225
55	28	55	83	110	138	165	193	220	248
60	30	60	90	120	150	180	210	240	270
65	33	65	98	130	163	195	228	260	293
70	35	70	105	140	175	210	245	280	315



**TRAFFIC CONTROL,
PARTIAL LANE SHIFT
MULTILANE DIVIDED
50 MPH AND GREATER**

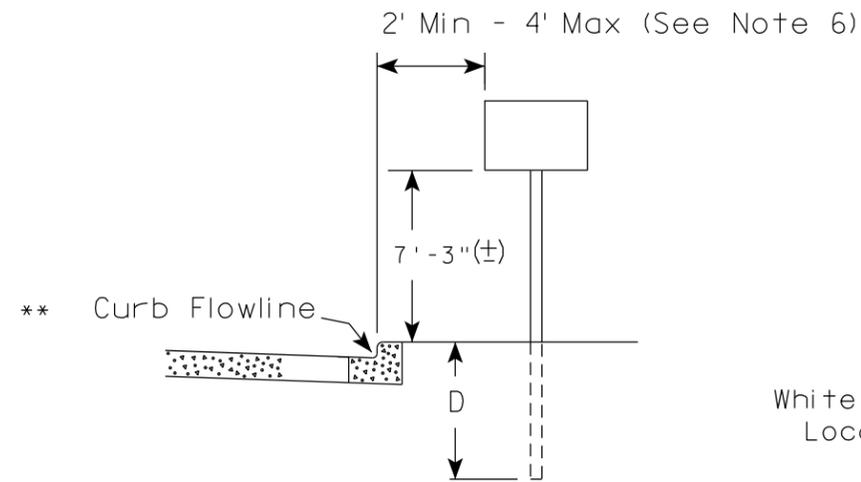
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2021 /S/ Andrew Heidtke
DATE ROADWAY STANDARDS DEVELOPMENT
ENGINEER

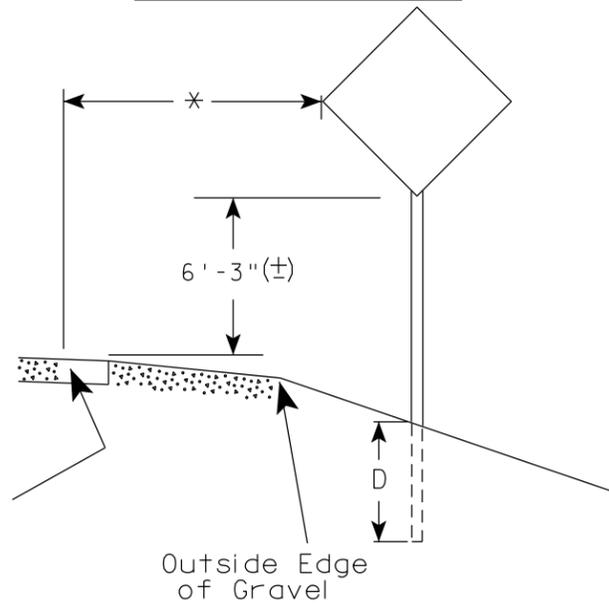
FHWA

URBAN AREA

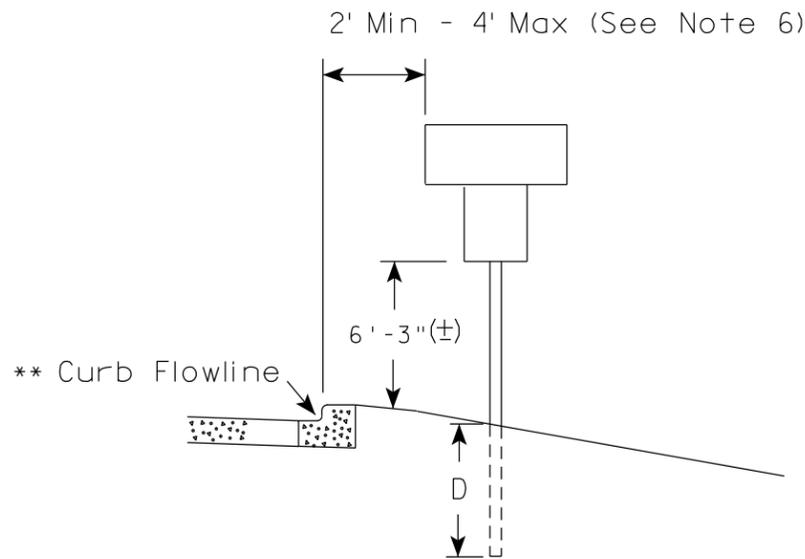
RURAL AREA (See Note 2)



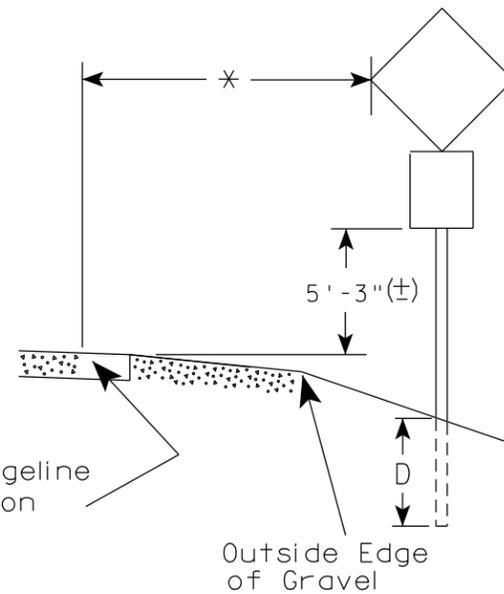
White Edgeline Location



Outside Edge of Gravel



White Edgeline Location



Outside Edge of Gravel

POST EMBEDMENT DEPTH

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

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on or behind barrier wall, see A4-10 sign plate.
The Double Arrow sign (W12-1D) 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" (±).
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 signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the 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.

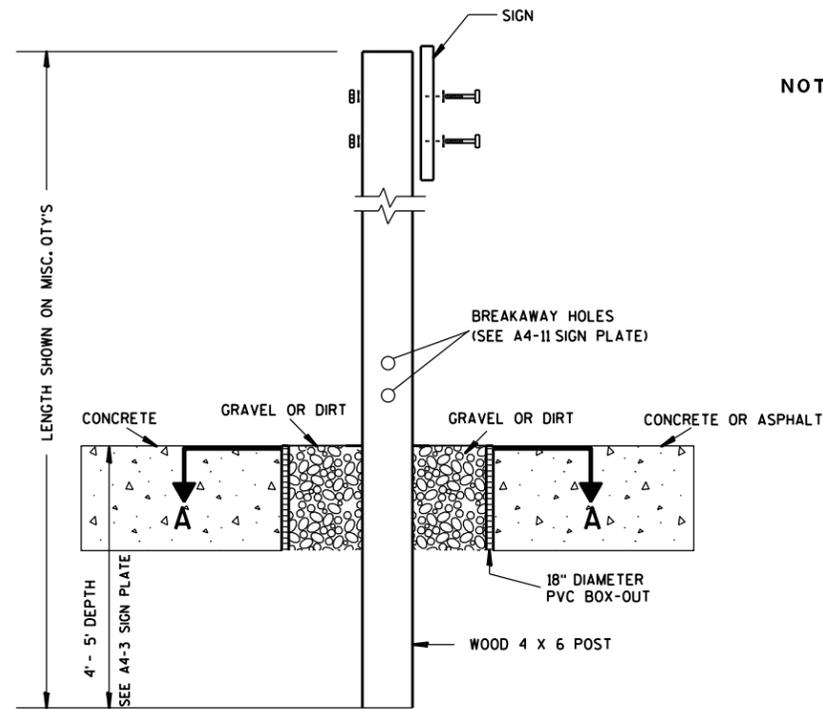
* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

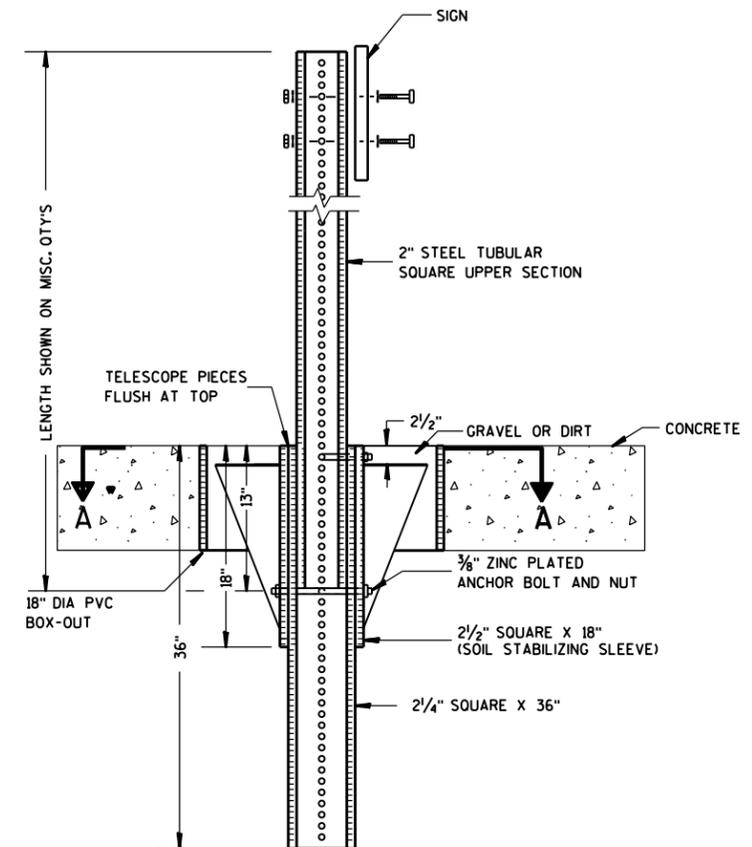
DATE 5/13/2020 PLATE NO. A4-3.22



ELEVATION VIEW

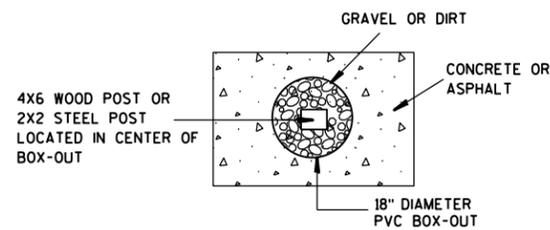
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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



ELEVATION VIEW

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



PLAN VIEW

FOR NEW CONCRETE/ ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

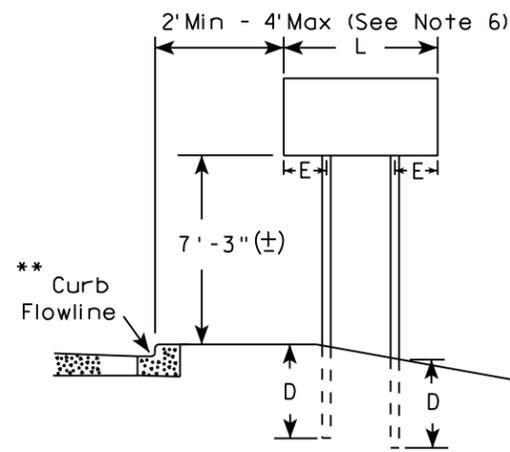
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

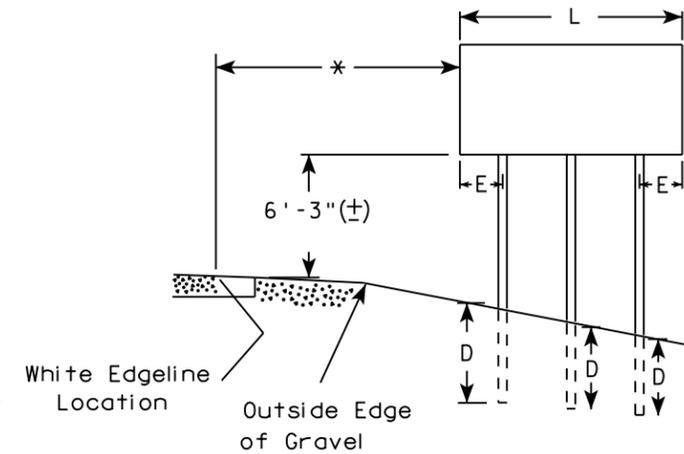
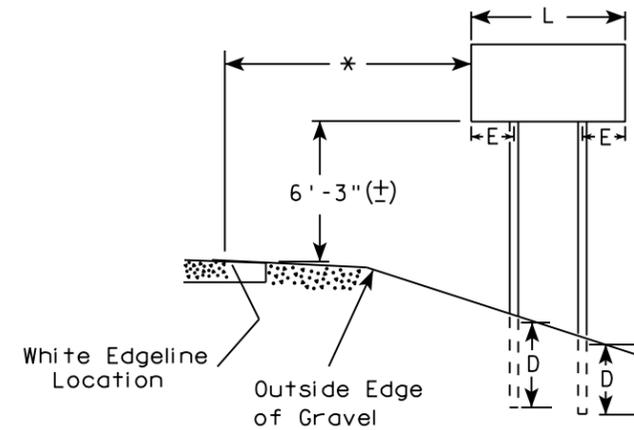
GENERAL NOTES

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

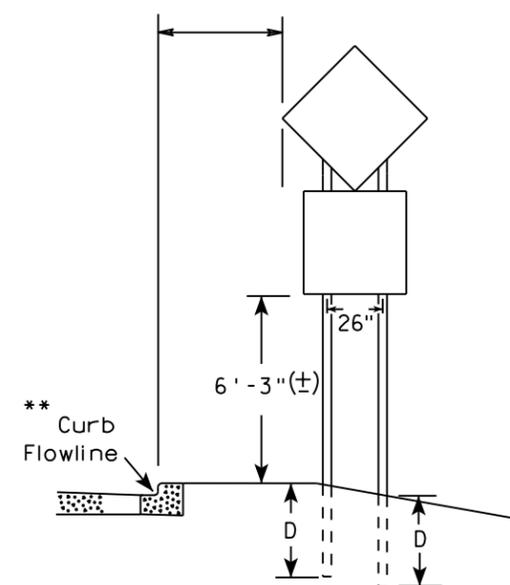
URBAN AREA



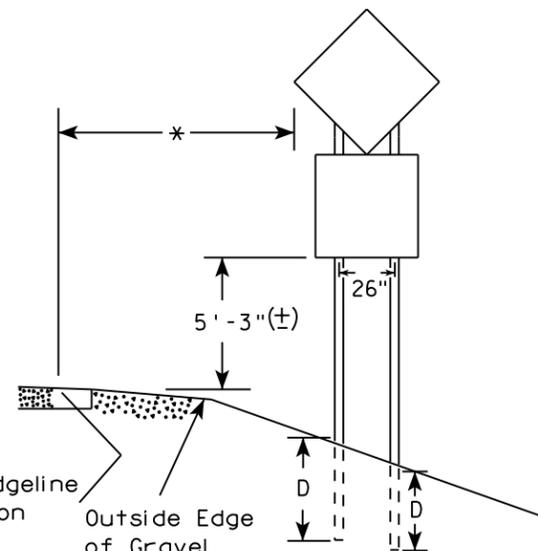
RURAL AREA (See Note 3)



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



48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

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

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

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

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

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

POST EMBEDMENT DEPTH

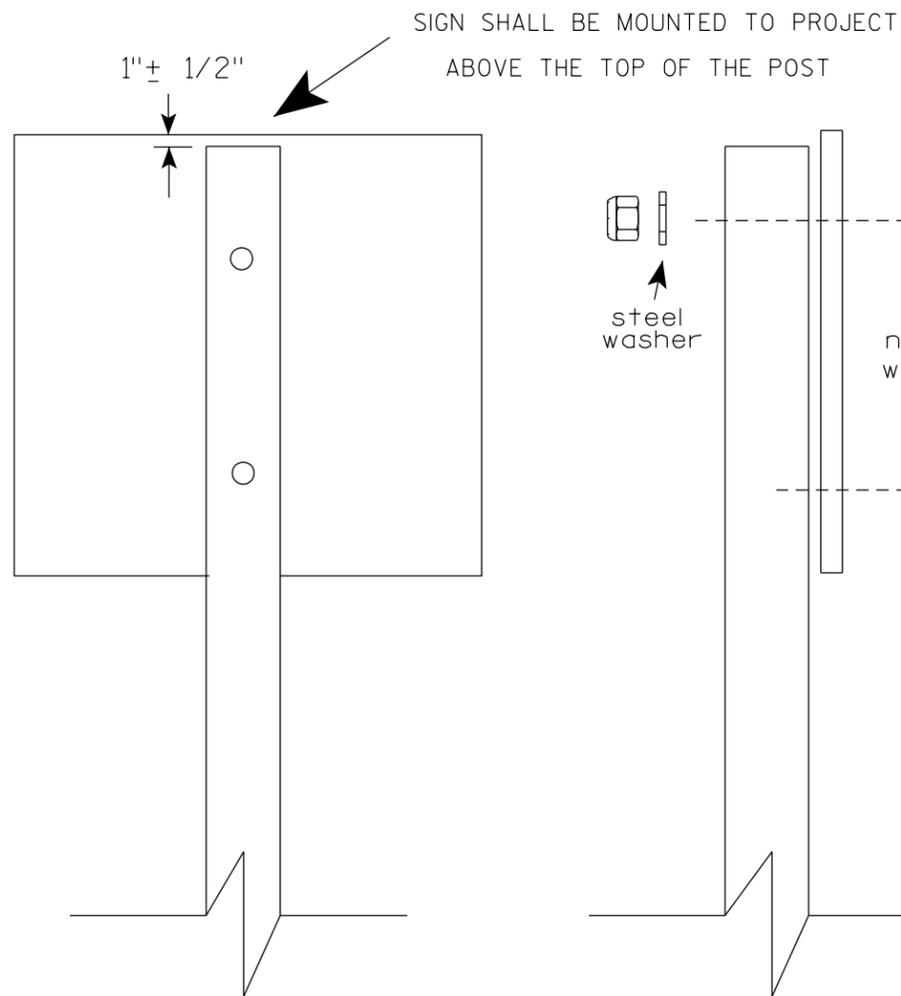
Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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



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

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

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

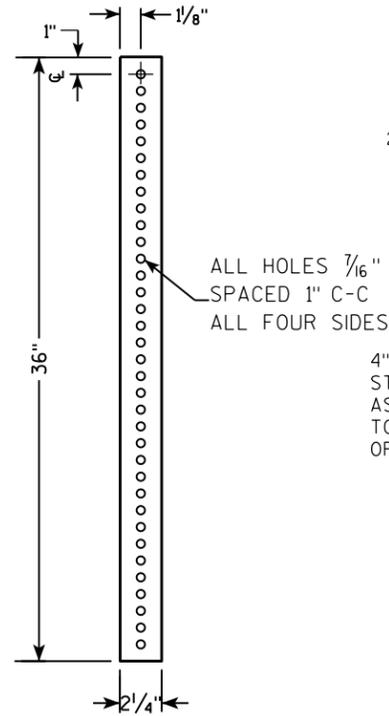
- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ lock nuts
- WOOD POSTS (4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 - $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE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

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

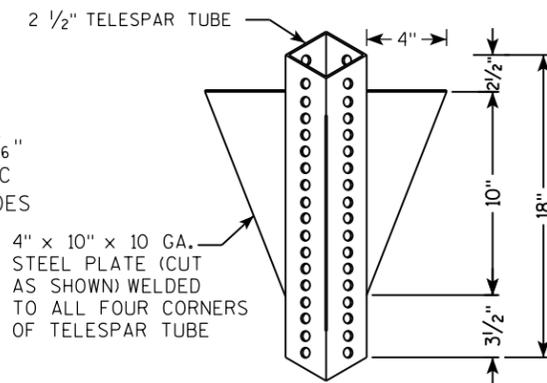
ATTACHMENT OF SIGNS TO POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R Rauch</i> For State Traffic Engineer
DATE 4/1/2020	PLATE NO. A4-8.9

**TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM**

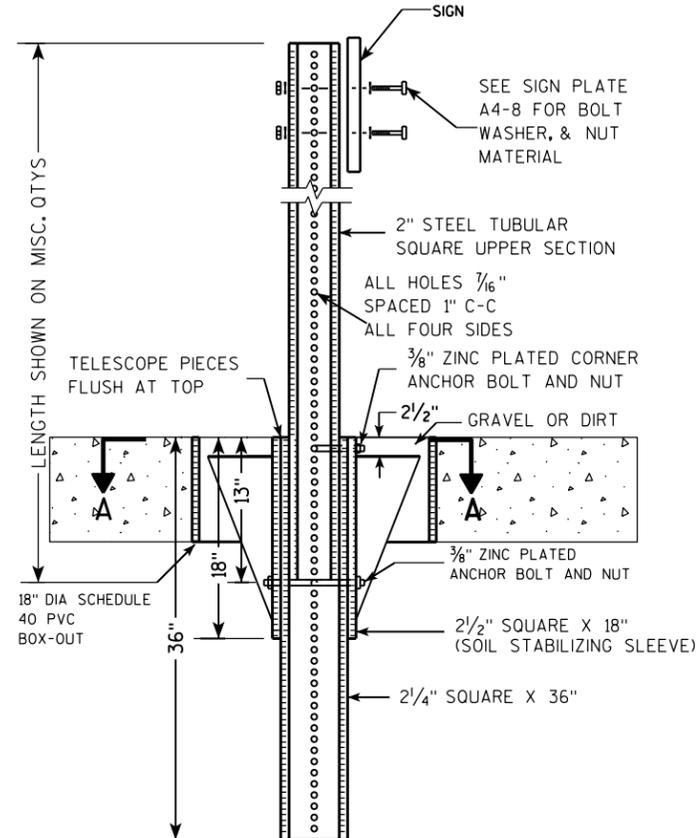
2 1/4" SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



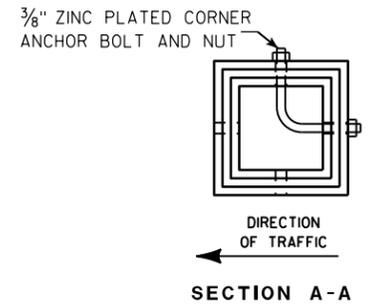
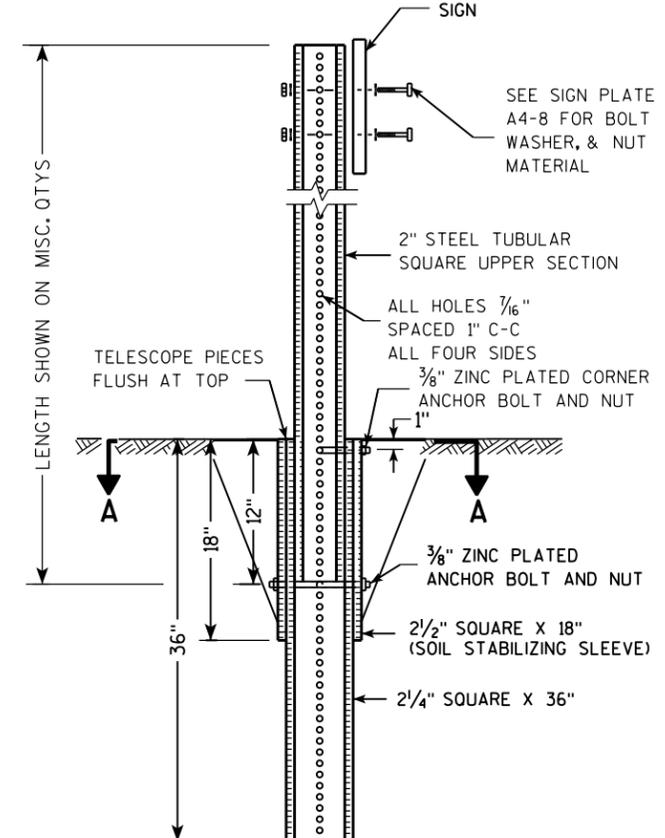
2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH



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



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



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

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

**TUBULAR STEEL
SIGN POST
A4-9**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

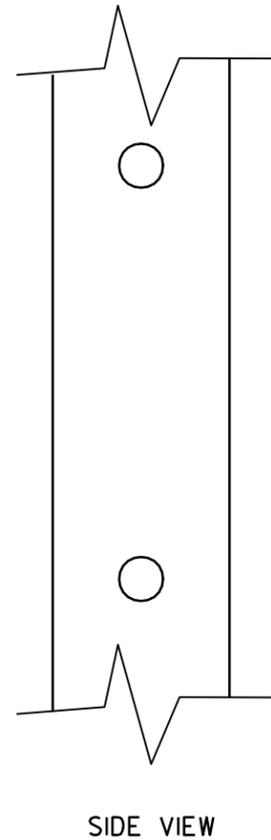
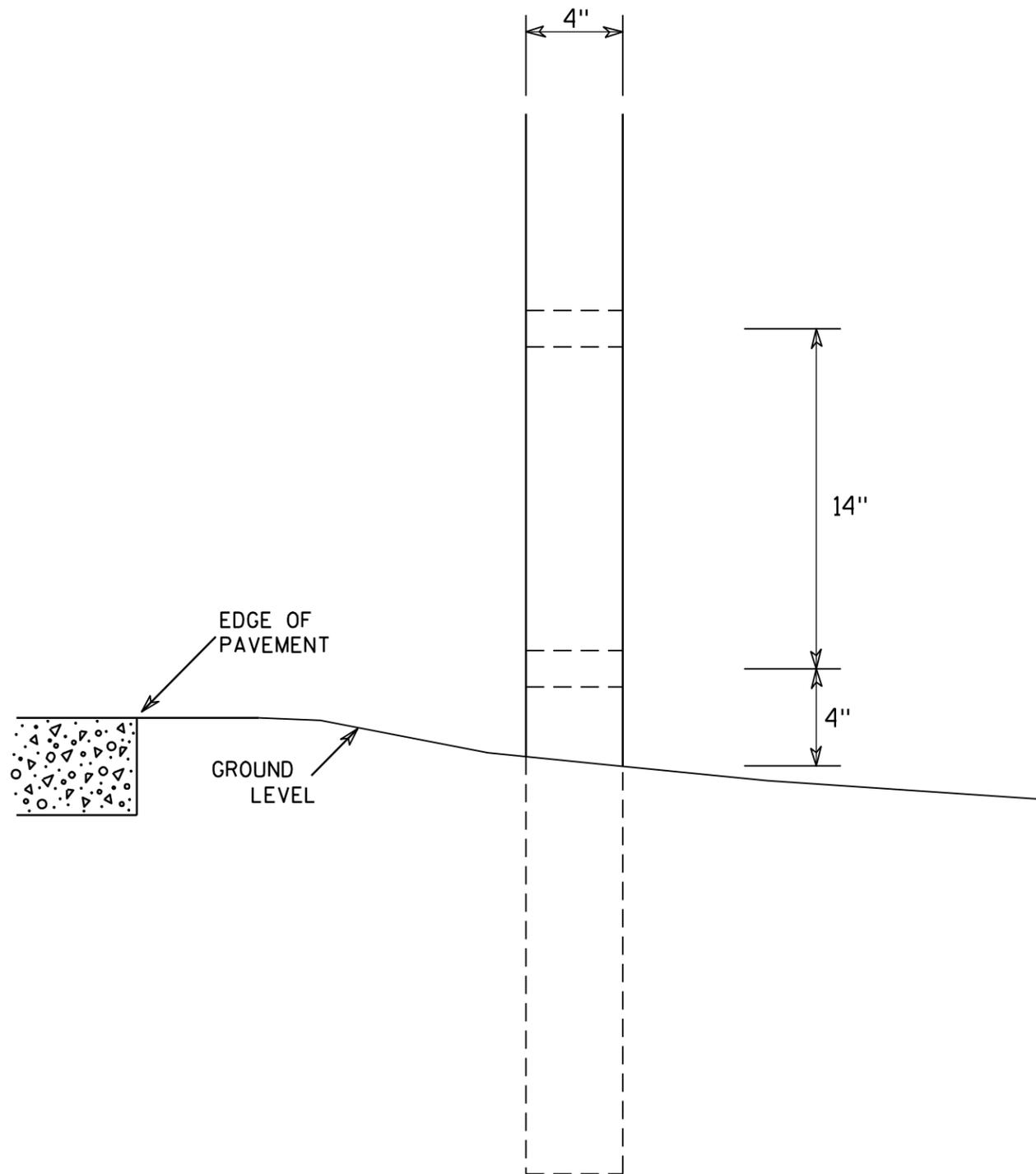
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



GENERAL NOTES

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

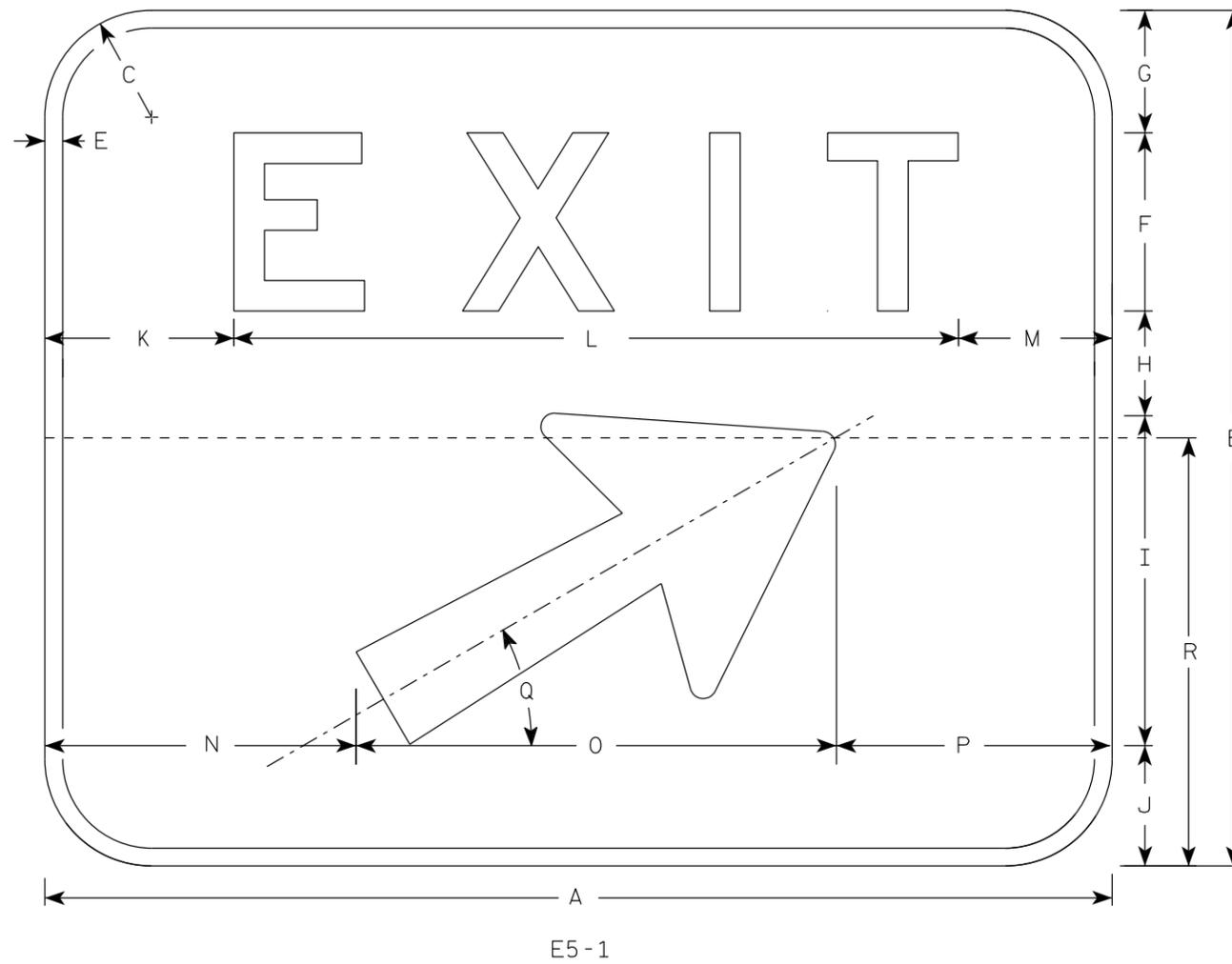
7

7

4 X 6 WOOD POST MODIFICATIONS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Chester J. Spang</i> for State Traffic Engineer
DATE 3/27/97	PLATE NO. A4-11.2

NOTES

1. Sign is Type II - Type H reflective
2. Color:
Background - Green
Message - White
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. When Base material for this sign is plywood sign shall be split into two separate 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.
8. Size 3 E5-1 shall only be used in a Work Zone application with a Temporary Sign Support



E5-1

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																											
2																											
3	48	48	6		1	10	6 7/8	5 7/8	18 1/2	6 3/4	8 1/2	31 1/8	8 3/8	11 1/2	27	9 1/2	30°	30									16.0
4	60	48	6		1	10	6 7/8	5 7/8	18 1/2	6 3/4	10 5/8	40 3/4	8 5/8	17 1/2	27	15 1/2	30°	30									20.0
5	72	60	6		1	12	9 3/4	10	18 1/2	9 3/4	13 1/4	48 1/2	10 1/4	23 1/2	27	21 1/2	30°	30									30.0

STANDARD SIGN

E5-1

WISCONSIN DEPT OF TRANSPORTATION

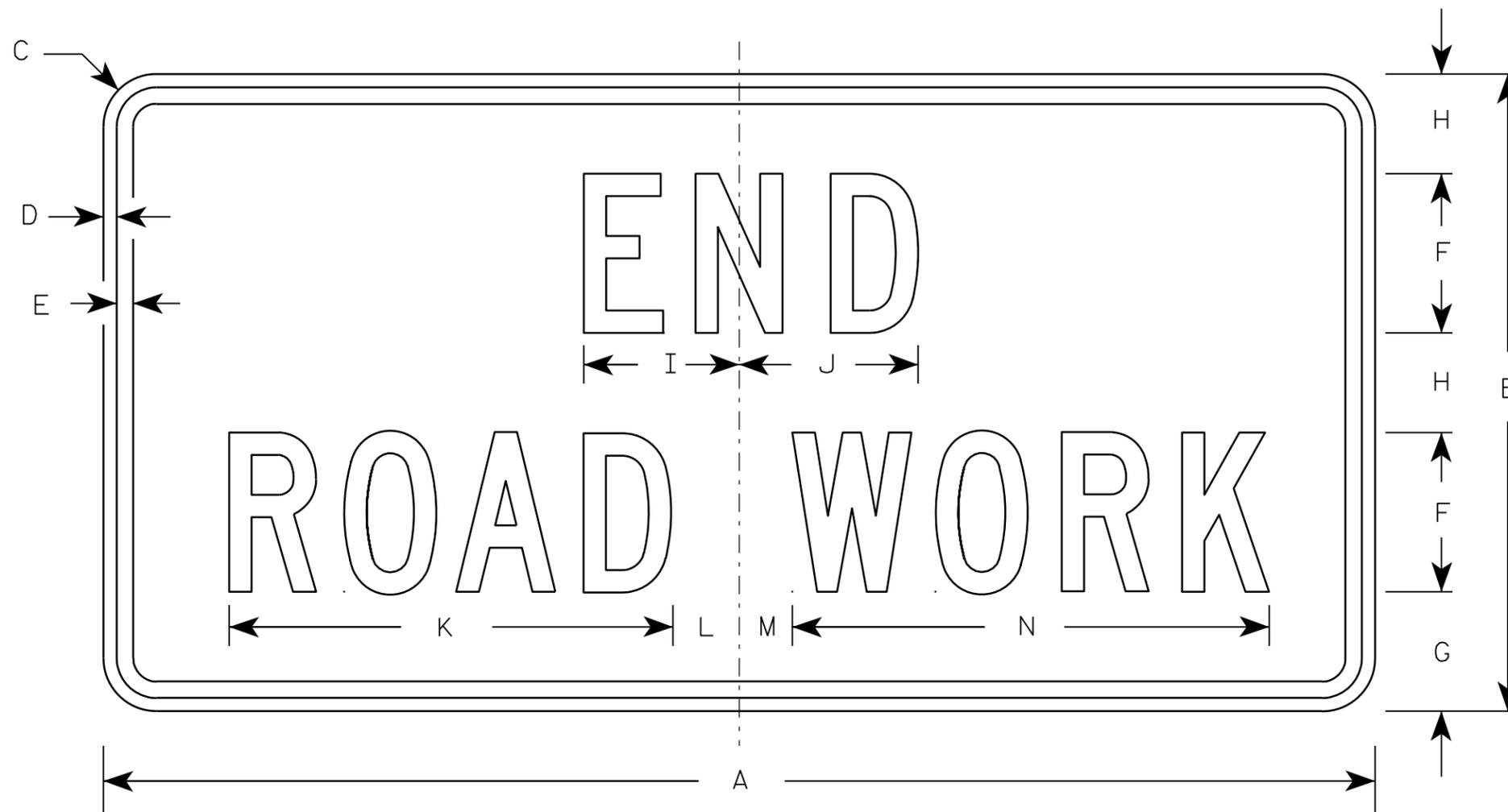
APPROVED

Matthew R. Rauch
For State Traffic Engineer

DATE 7/26/18 PLATE NO. E5-1.10

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.



G20-2A

7

7

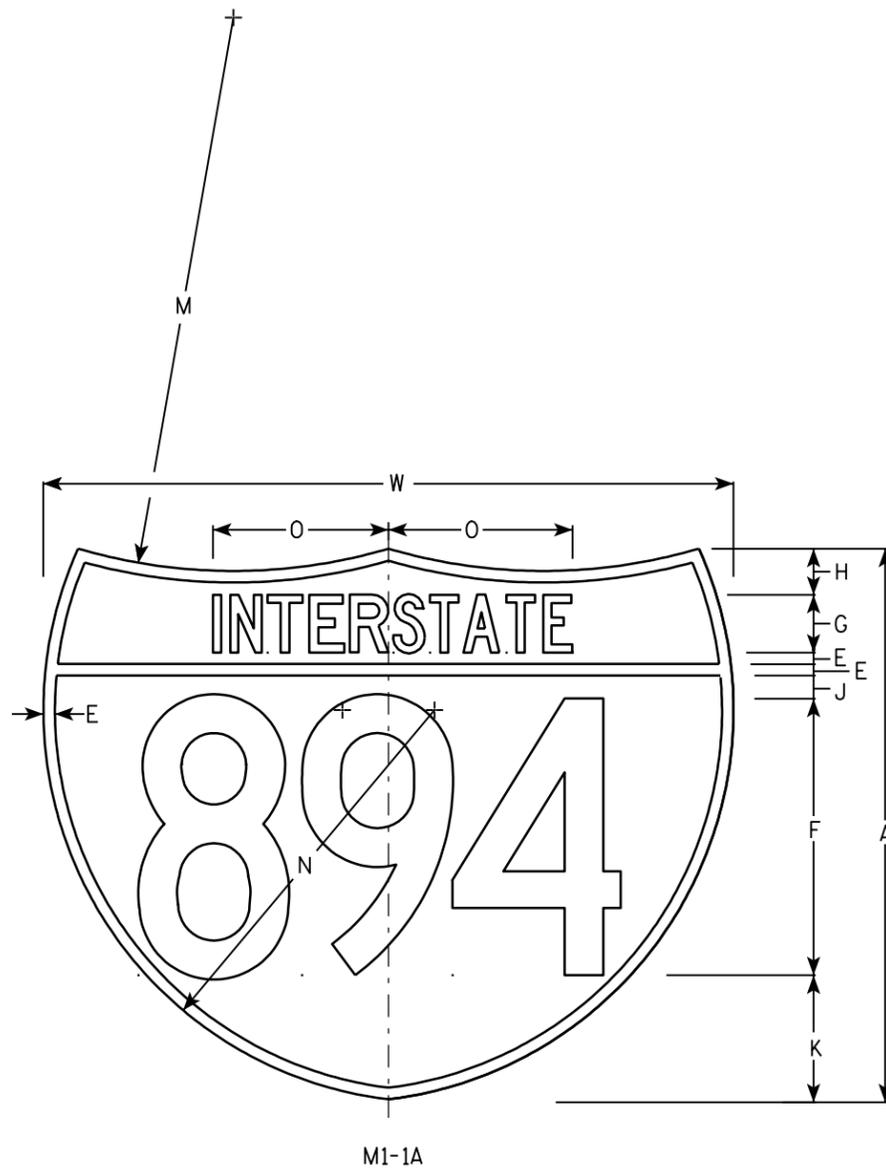
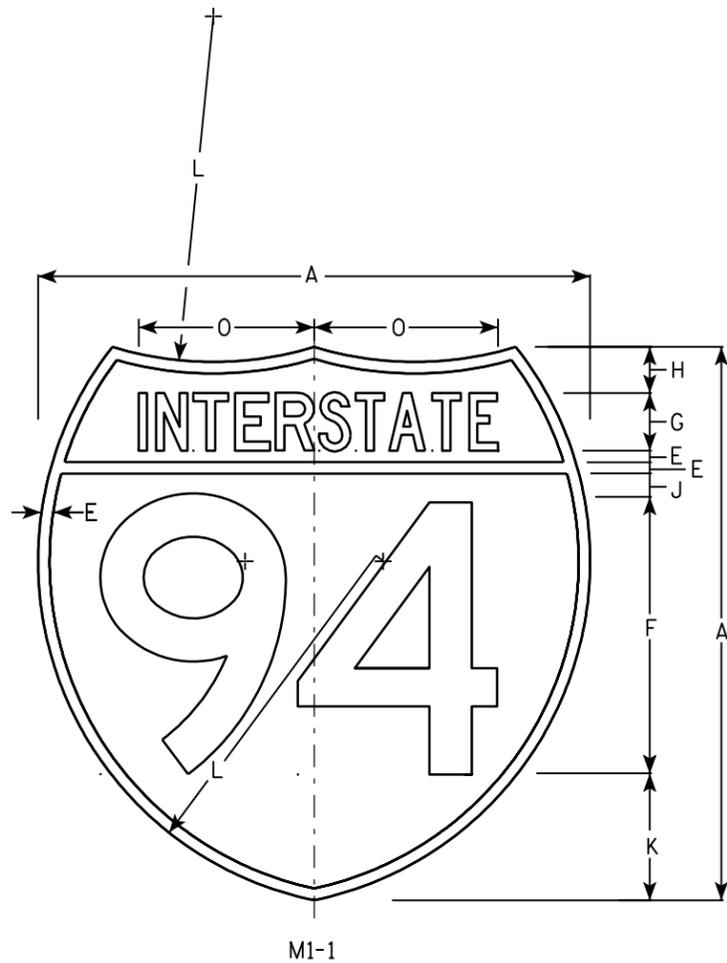
Metric equivalent for this sign is:

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 sq.
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

STANDARD SIGN G20-2A	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> For State Traffic Engineer
DATE 9/30/09	PLATE NO. G20-2A.8

PROJECT NO:	HWY:	COUNTY:	SHEET NO:	E
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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

7

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	M1-1 Area sq. ft.	M1-1A Area sq. ft.	M1-1 Area m ²	M1-1A 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	

INTERSTATE ROUTE MARKER
M1-1 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

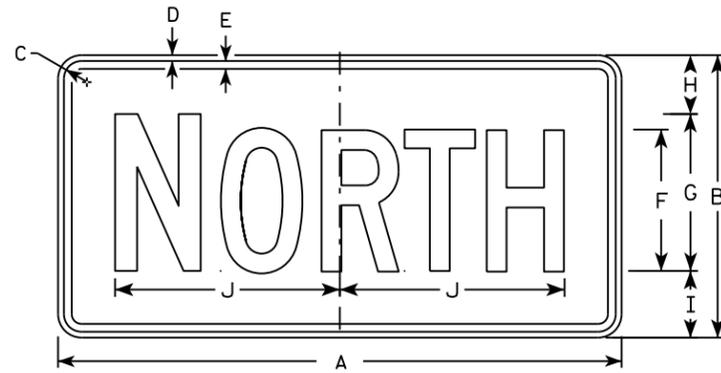
APPROVED *Matthew R Rauch*
for State Traffic Engineer

DATE 08/23/05 PLATE NO. M1-1.8

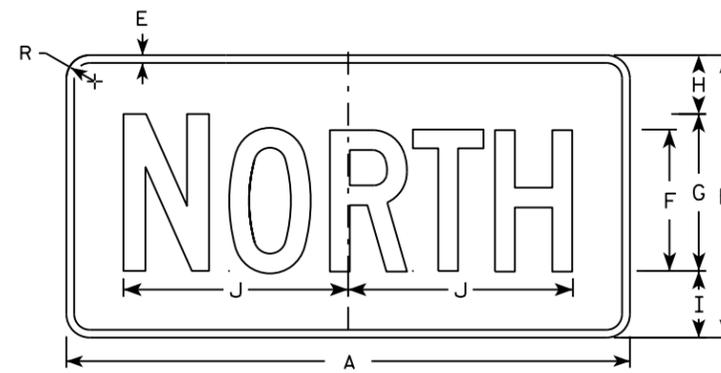
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

NOTES

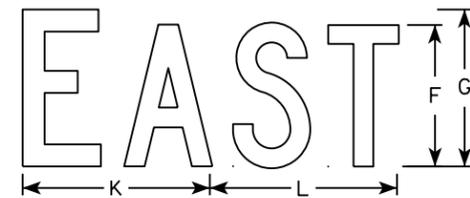
- All Signs Type II - Type H
- Color:
 - Background - See note 5
 - Message - See note 5
- Message Series - C
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M3-1 thru M3-4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



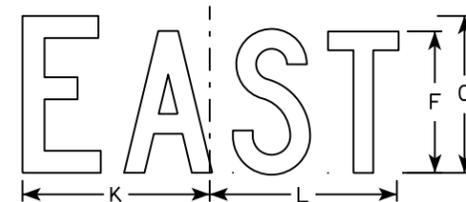
M3-1
MM3-1
MP3-1



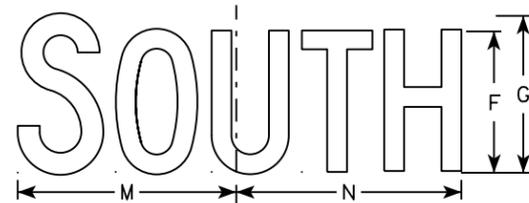
MB3-1
MK3-1
MN3-1



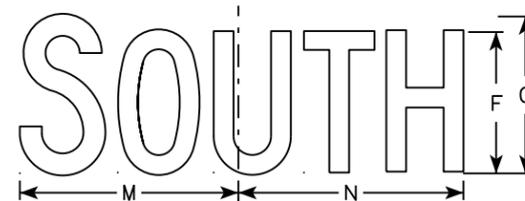
M3-2
MM3-2
MP3-2



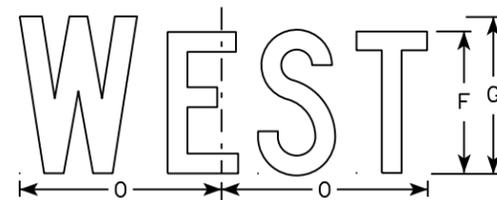
MB3-2
MK3-2
MN3-2



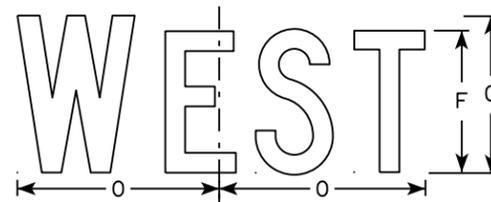
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



MB3-4
MK3-4
MN3-4

7

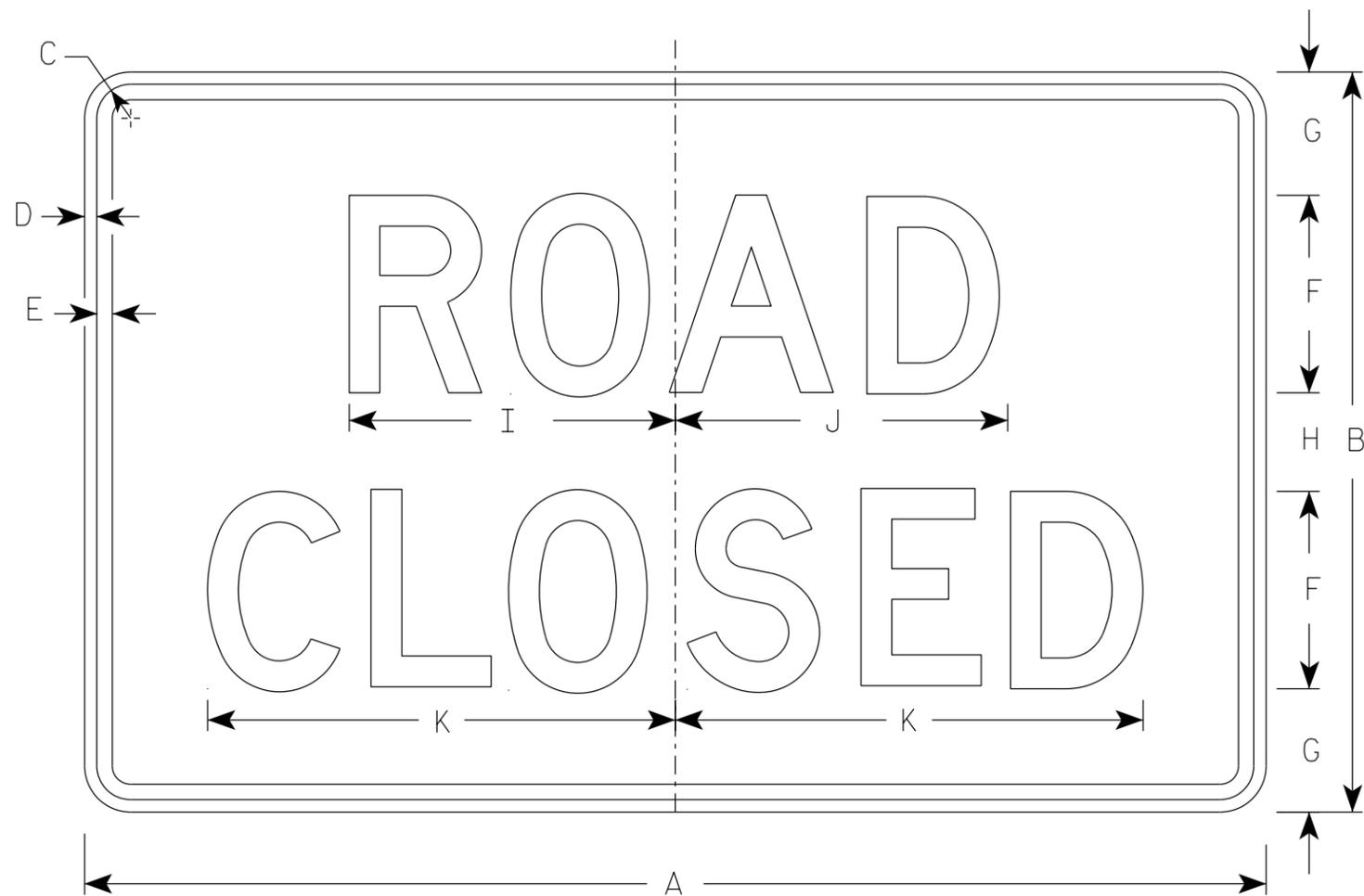
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8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

STANDARD SIGNS
M3-1 thru M3-4
SERIES

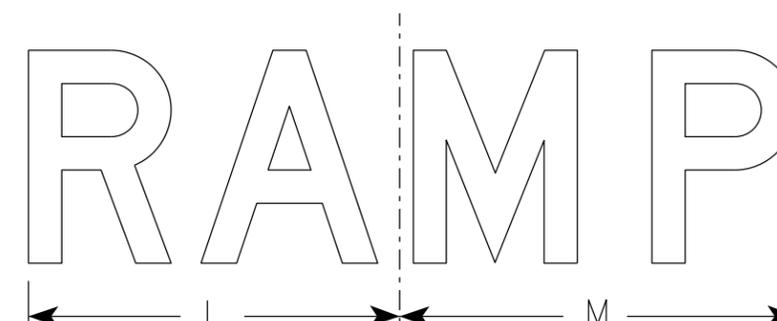
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

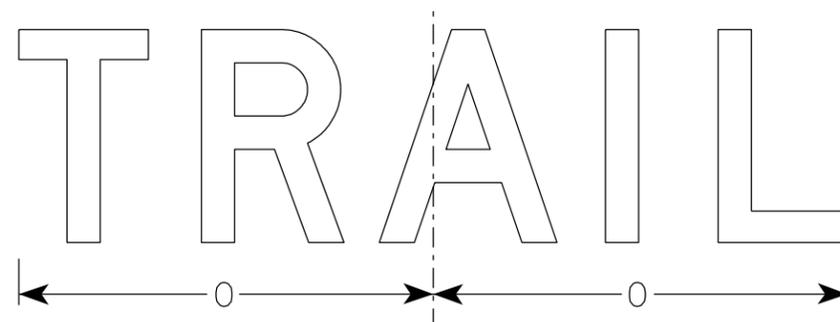
DATE 10/15/15 PLATE NO. M3-1.14



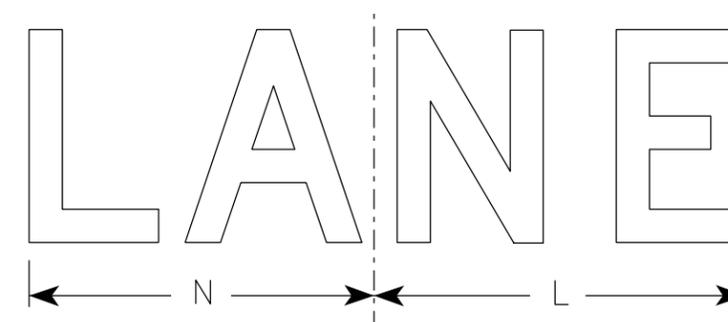
R11-2



R11-2R



R11-2T



R11-2L

NOTES

1. Sign is Type II - Type H Reflective
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.

7

7

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

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

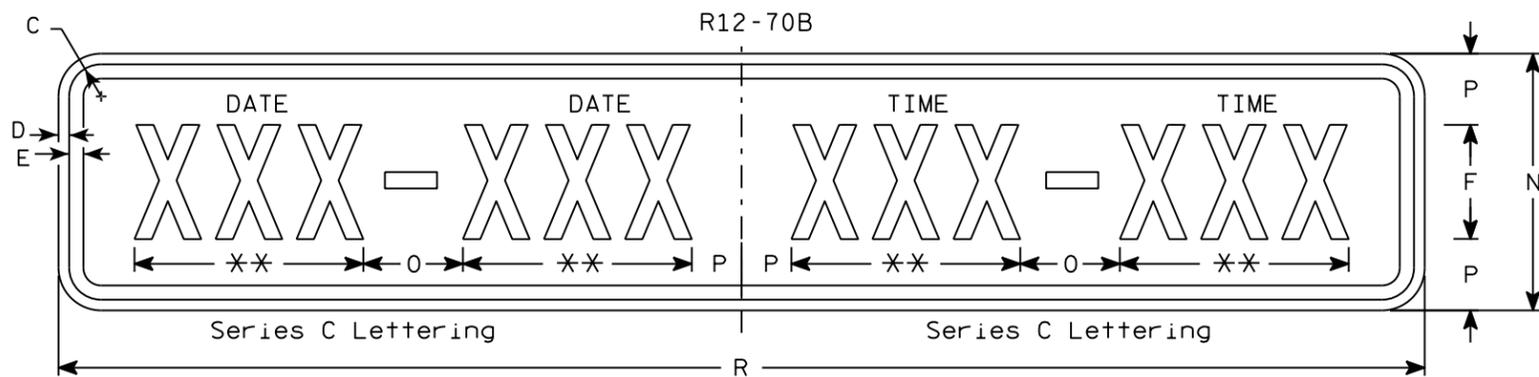
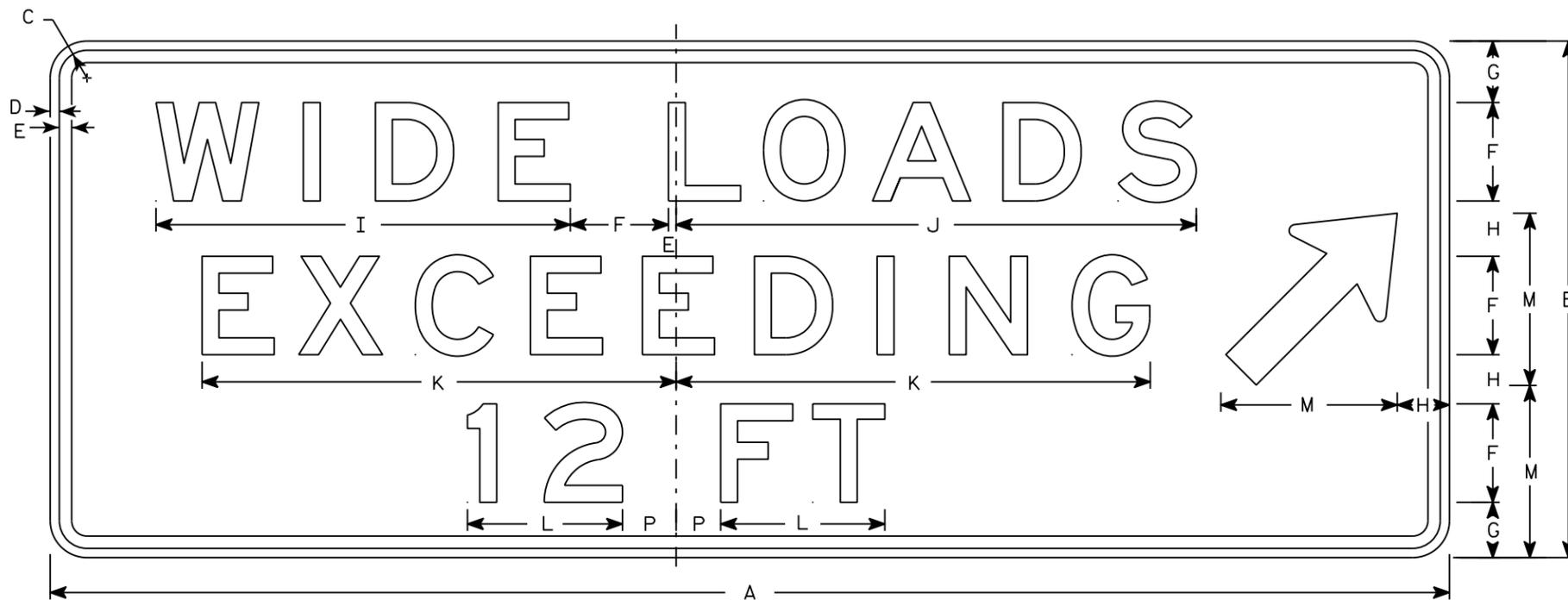
APPROVED *Matthew R Rauch*
For State Traffic Engineer

DATE 3/29/2021 PLATE NO. R11-2.11

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - White
Message - Black
 3. Message Series - E except as noted
 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.
- ** Substitute appropriate message, optically center message



R12-70C

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	R12-70 Area sq. ft.	R12-70C Area sq. ft.
1																												
2S	90	36	2 1/4	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
2M	90	36	2 1/4	1/2	5/8	6	4	5	20 7/8	28 3/8	24 5/8	8 1/8	12	12	6	3		66									22.5	5.5
3																												
4	114	42	2 1/4	3/4	1	8	5	4	34	42	39	13	14	18	7	3 1/2		96									36.75	12.0
5	114	42	2 1/4	3/4	1	8	5	4	34	42	39	13	14	18	7	3 1/2		96									36.75	12.0

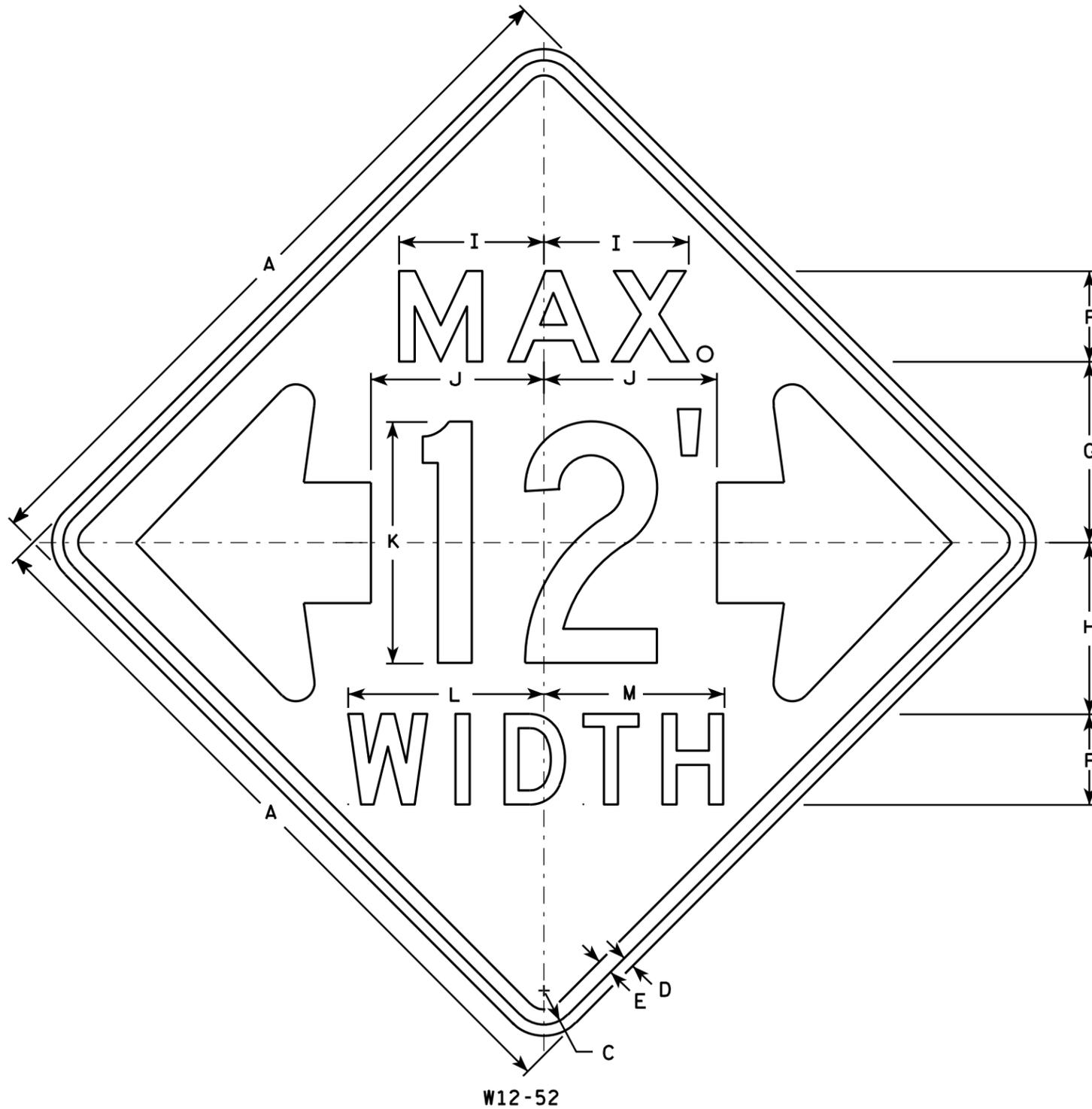
TYPICAL SIGN
R12-70B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/10/15 PLATE NO. R12-70B.3

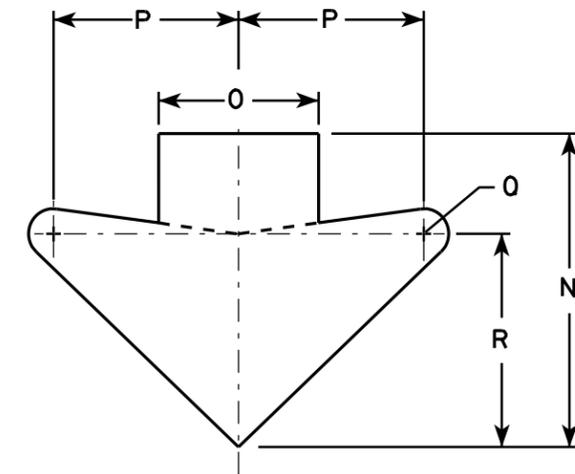
7



W12-52

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. The top line is series E, the numerals are series C, and the bottom line is series D.
6. Substitute appropriate numerals and adjust spacing as required.



ARROW DETAIL

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

STANDARD SIGN
W12-52

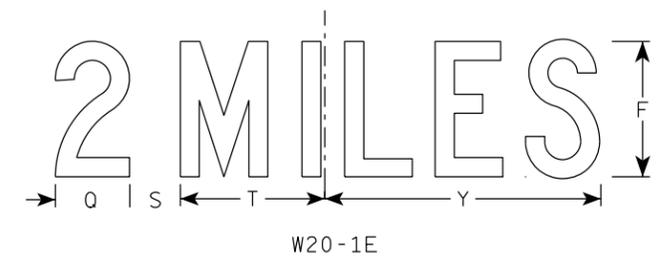
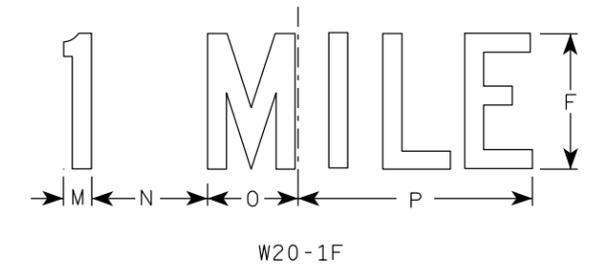
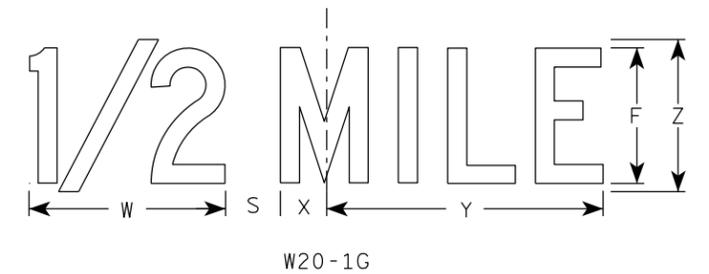
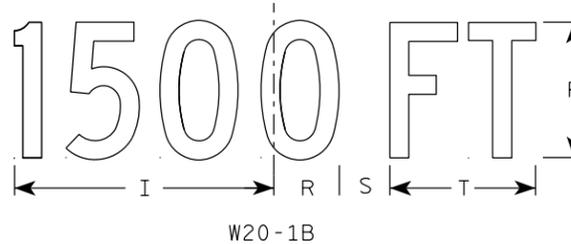
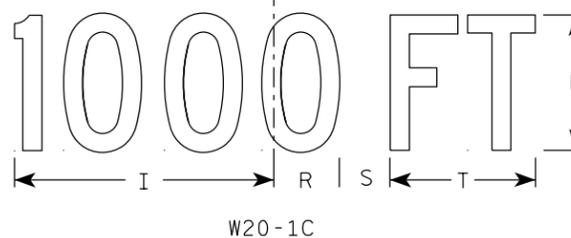
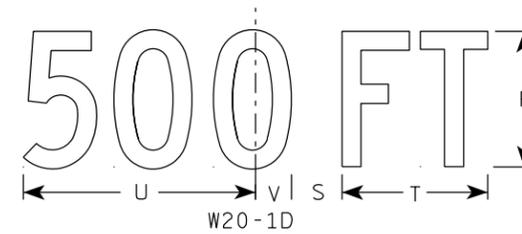
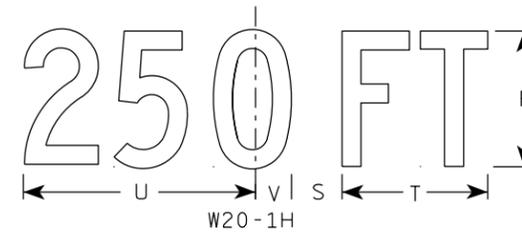
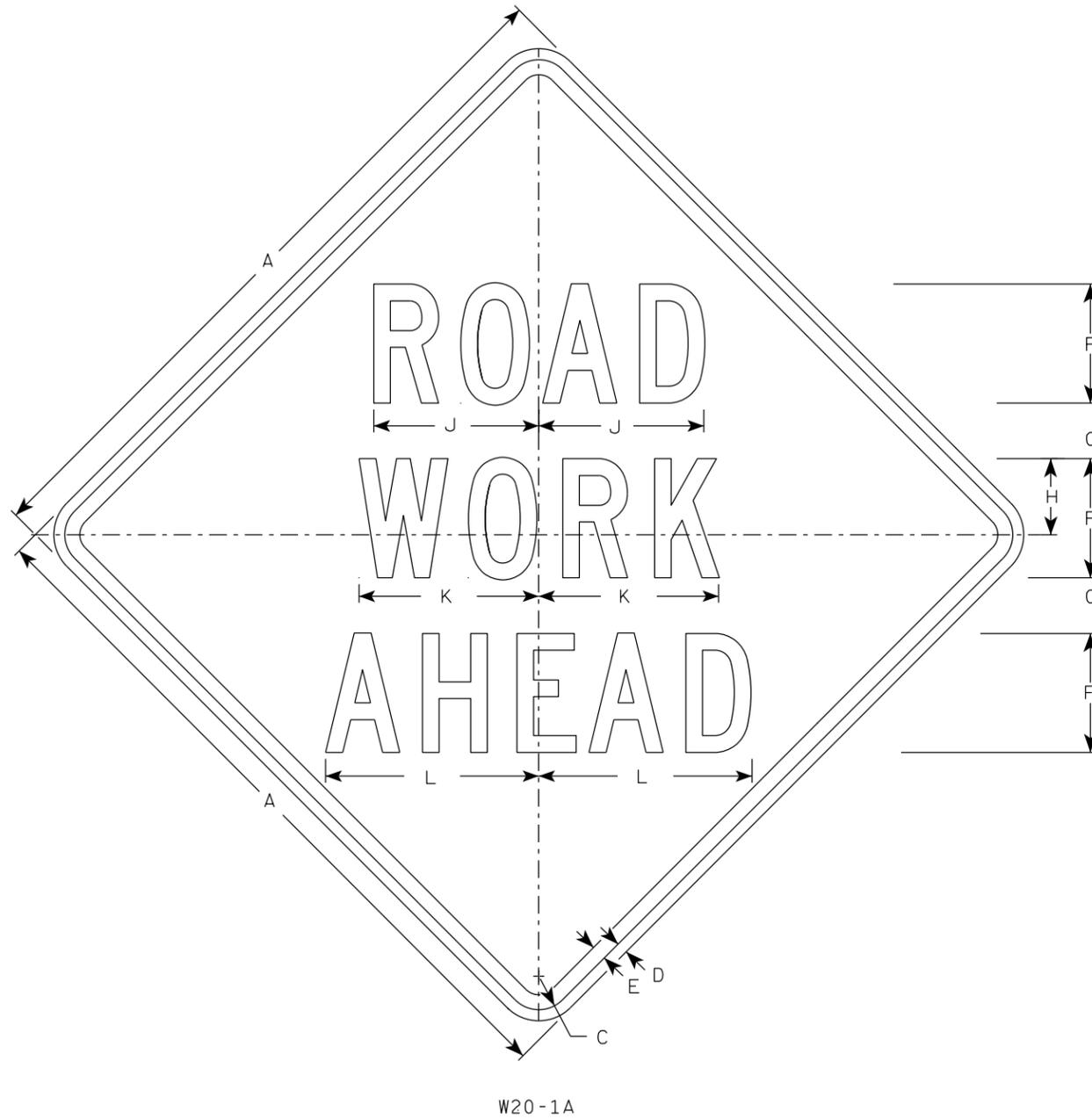
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/16/11 PLATE NO. W12-52.7

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.



W20-1A

W20-1C

W20-1B

W20-1G

W20-1F

W20-1E

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	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	3 1/4	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, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

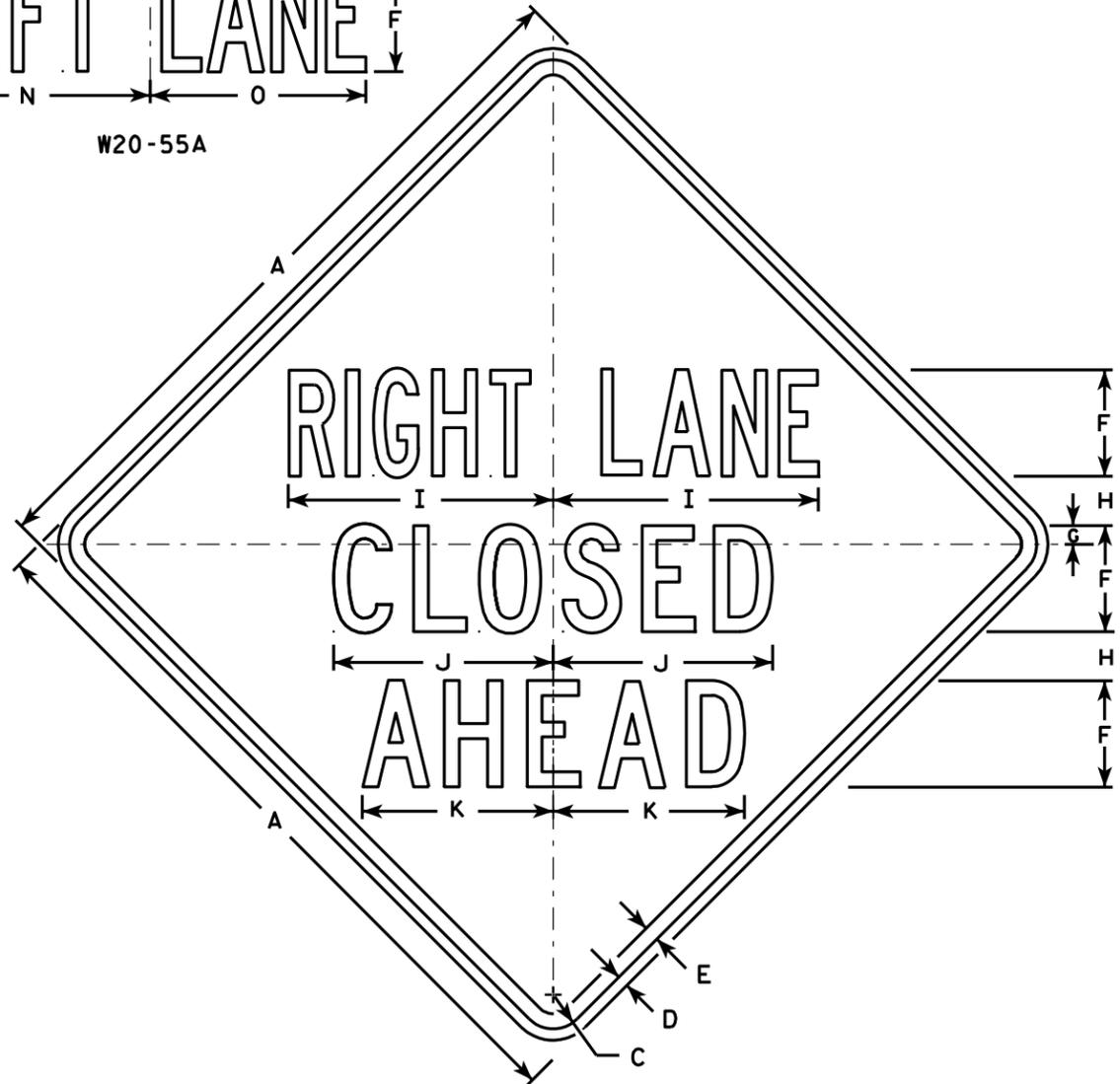
DATE 3/25/2020 PLATE NO. W20-1.11

CENTER LANE

W20-56A

LEFT LANE

W20-55A



W20-5A

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.

500 FT

W20-5D

1000 FT

W20-5C

1500 FT

W20-5B

1/2 MILE

W20-5G

1 MILE

W20-5F

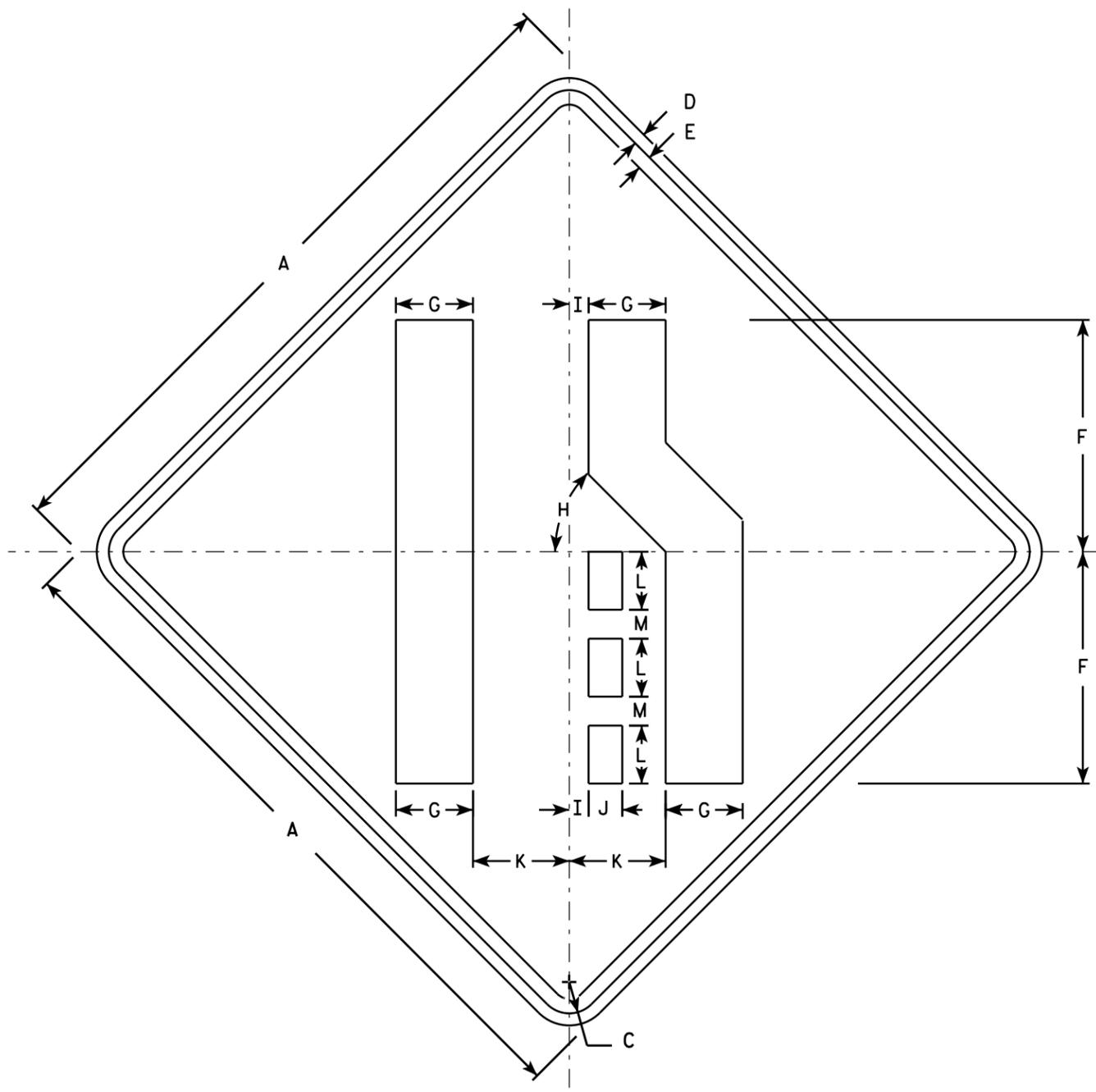
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	6	1 5/8	5/8	3/4	5	7/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 7/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	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: _____ SHEET NO: _____ E

7

7

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



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 symbols is reversed along the vertical centerline.

7

7

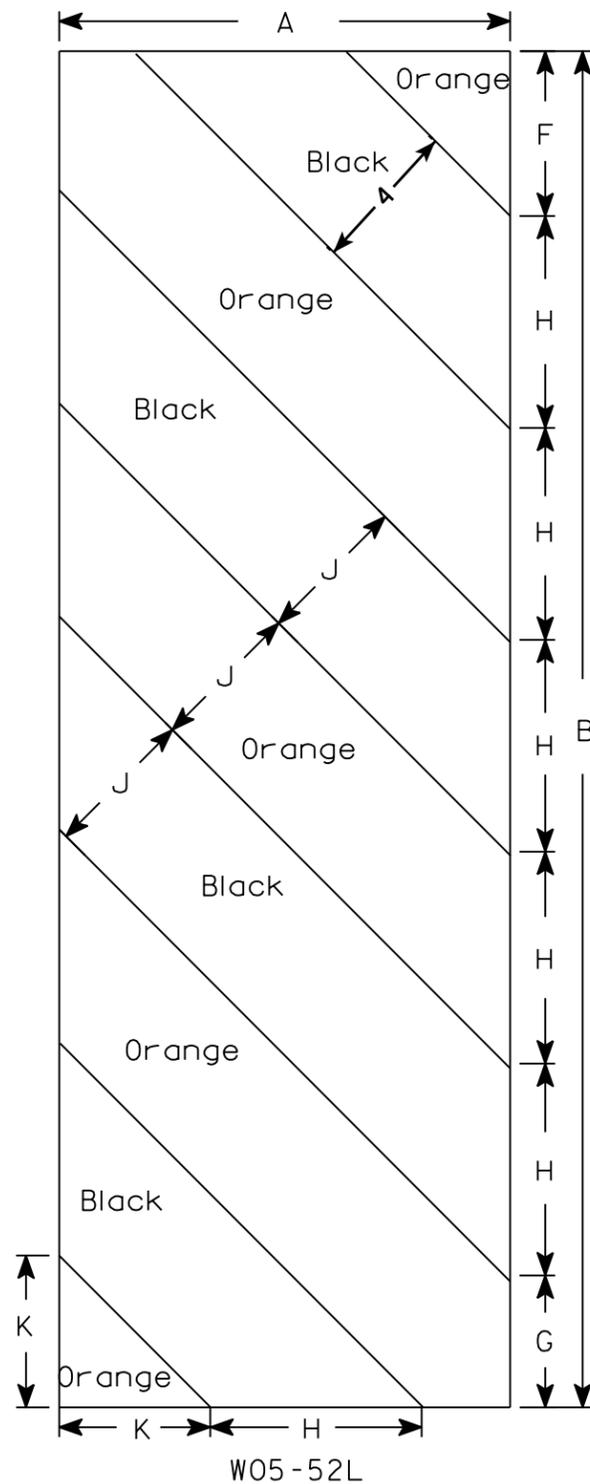
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5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

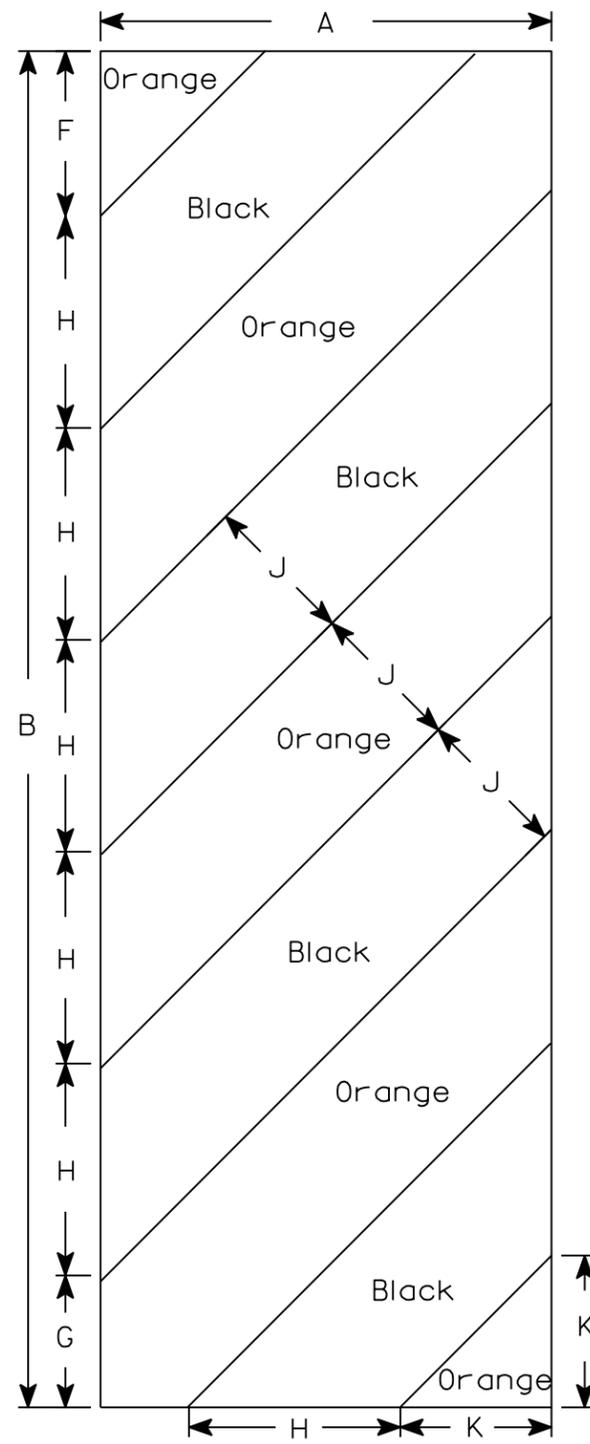
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 11/20/13 PLATE NO. W04-2.1



W05-52L



W05-52R

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. Alternate colors of stripes as shown.

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	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
2M	12	36				4 3/8	3 1/2	5 5/8	45°	4	4																3.0
3	18	54				6	5 1/2	8 1/2	45°	6	6 9/16																6.75
4																											
5																											

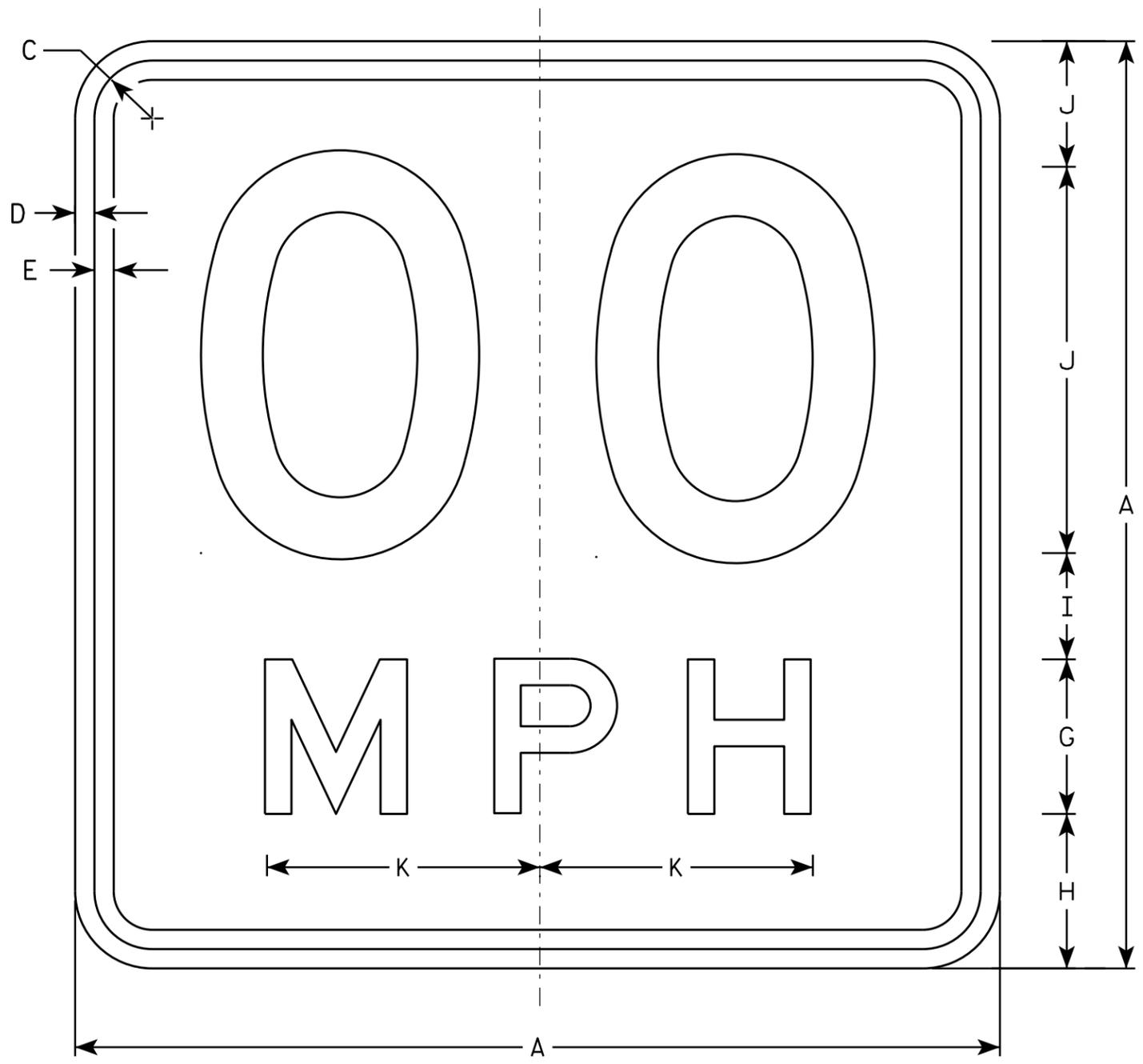
STANDARD SIGN
W05-52L & W05-52R

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R Raub*
for State Traffic Engineer

DATE 11/20/13 PLATE NO. W05-52.1

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



W013-1

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 6
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.
6. Line 1 is Series D
Line 2 is Series E

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	7 1/8																4.00
2S	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
2M	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
3	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

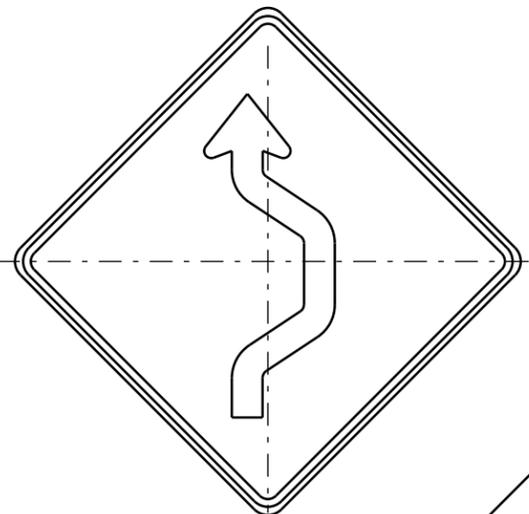
STANDARD SIGN
W013-1

WISCONSIN DEPT OF TRANSPORTATION

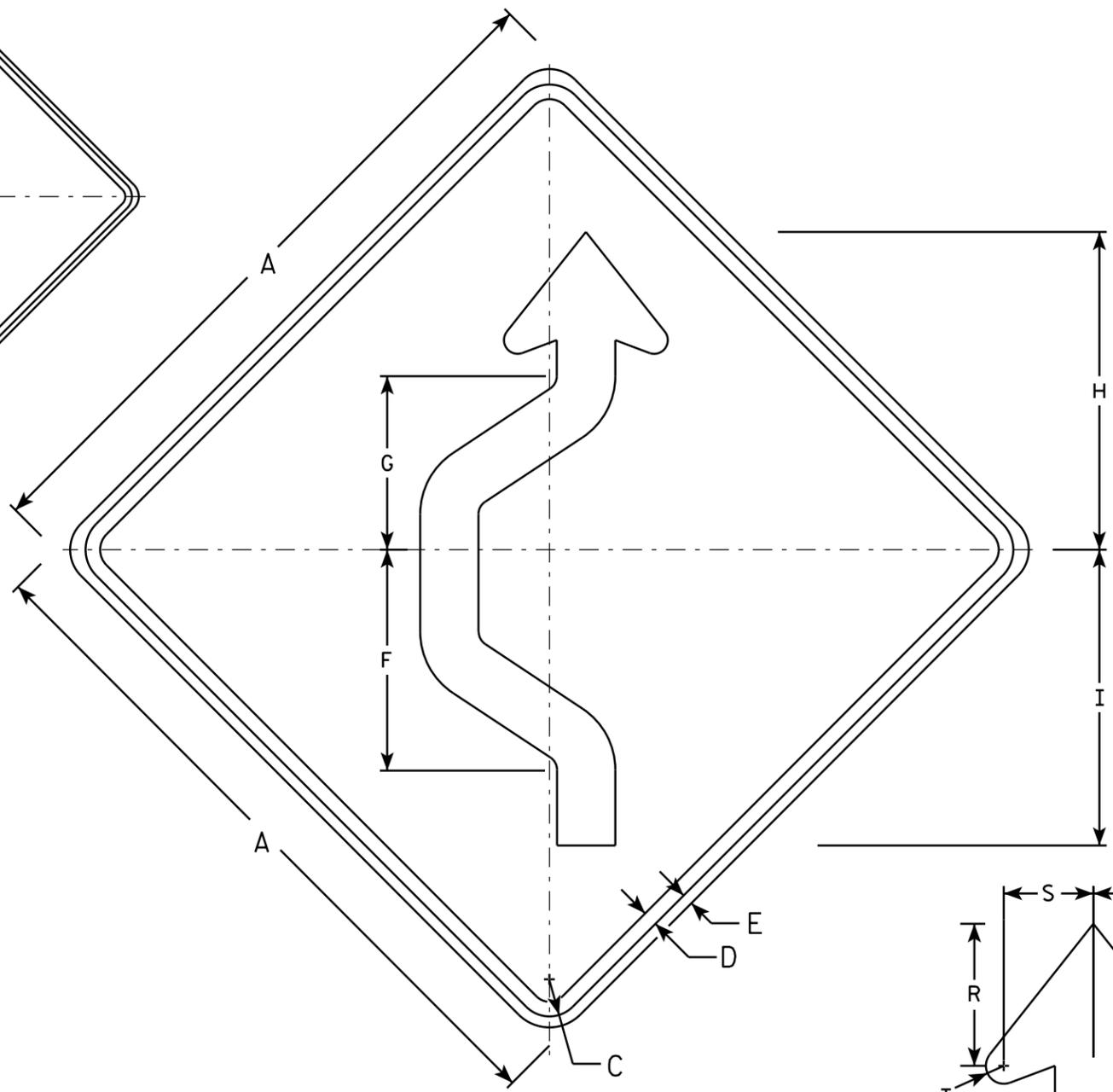
APPROVED *Matthew R Rauch*
For State Traffic Engineer

DATE 11/21/13 PLATE NO. W013-1.1

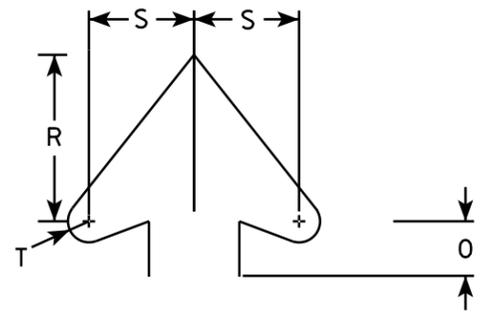
PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: _____ E



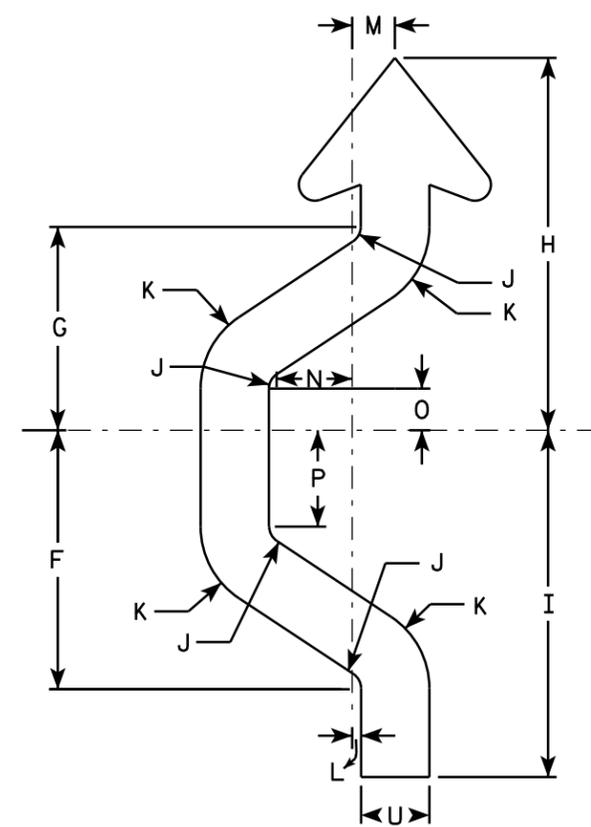
W024-1R



W024-1L



Arrowhead Detail



Arrow Detail

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. W024-1R is the same as W024-1L except reversed along the vertical centerline.

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	36		1 3/8	5/8	1/2	11 3/8	8 7/8	16 3/8	15 1/4	3/4	3 3/4	3/8	2	3 3/8	1 7/8	4 1/4		5 1/2	3 1/2	5/8	3						9
2S	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
2M	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
3	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
4	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16
5	48		2 1/4	1	3/4	15 1/8	11 7/8	21 3/4	20 1/4	1	5	1/2	2 1/2	4 3/8	2 3/8	5 5/8		7 3/8	4 3/4	7/8	4						16

STANDARD SIGN
W024-1 L & R

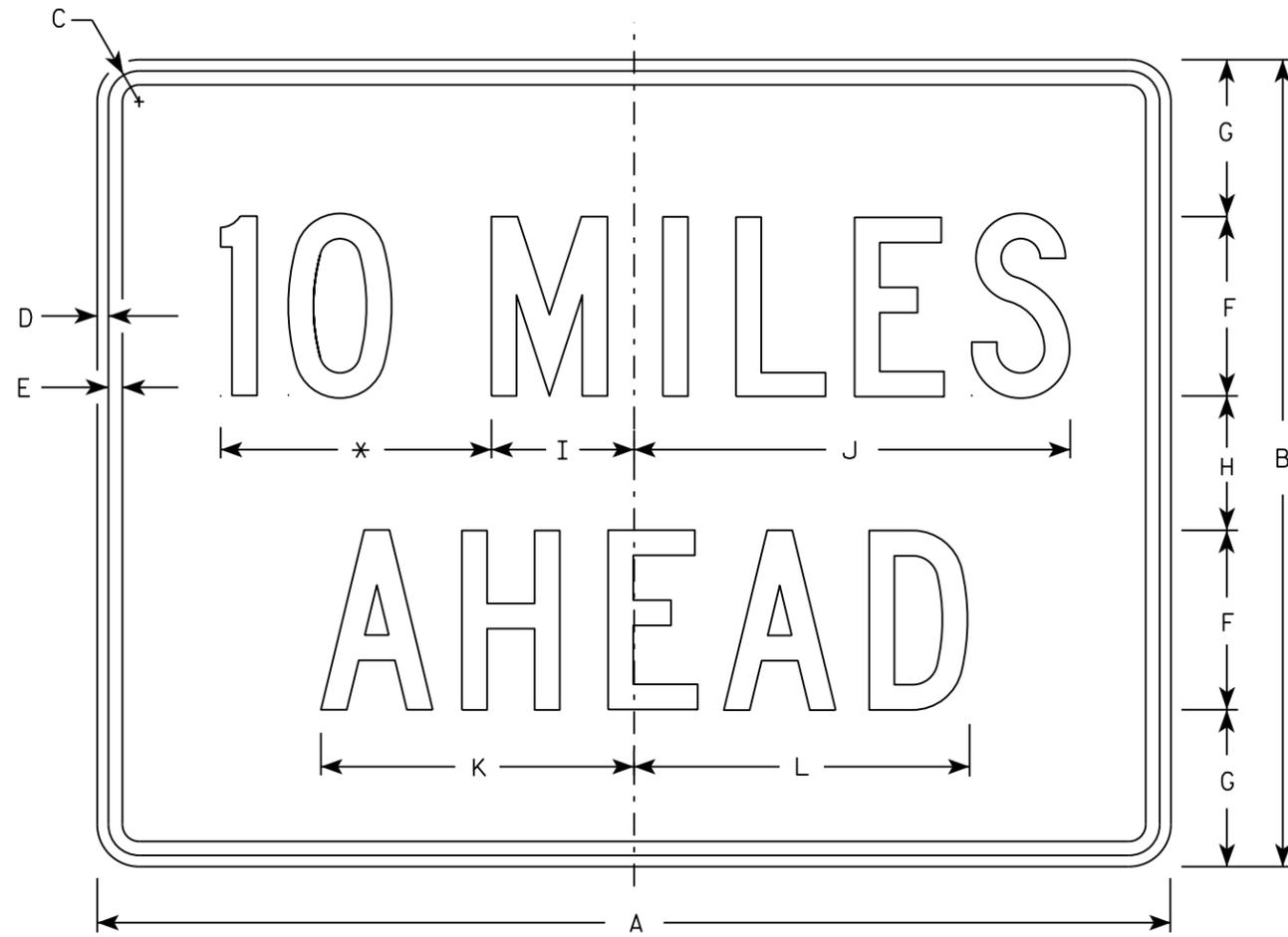
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

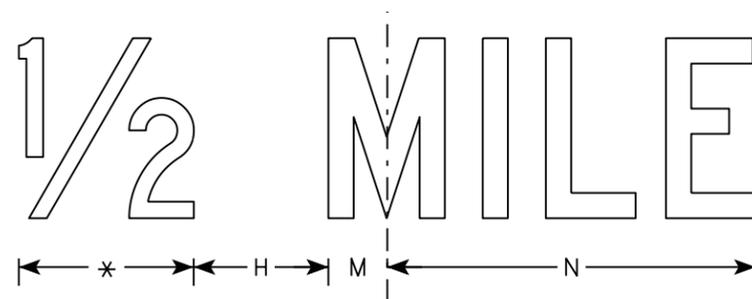
DATE 9/25/2013 PLATE NO. W024-1.1

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.
5. Substitute appropriate numerals to the nearest quarter mile and optically adjust spacing to achieve proper balance.



W057-52



* See note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	24	1 1/8	3/8	1/2	6	4 1/2	3	4 3/4	14 5/8	10 5/8	11 3/8	2	12													6.0
2S	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
2M	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
3	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
4	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0
5	48	36	1 3/8	1/2	5/8	8	7	6	6 3/8	19 1/2	14	15	2 3/4	16 3/8													12.0

STANDARD SIGN
W057-52

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 3/21/17 PLATE NO. W057-52.2

PROJECT NO: _____ HWY: _____ COUNTY: _____ SHEET NO: **E**

DESIGN DATA

LIVE LOAD: (TAKEN FROM HSI - 07/29/13)
 INVENTORY RATING FACTOR: RF = HS-21
 OPERATING RATING FACTOR: RF = HS-35
 MAXIMUM STANDARD PERMIT VEHICLE LOAD - 200 KIPS.

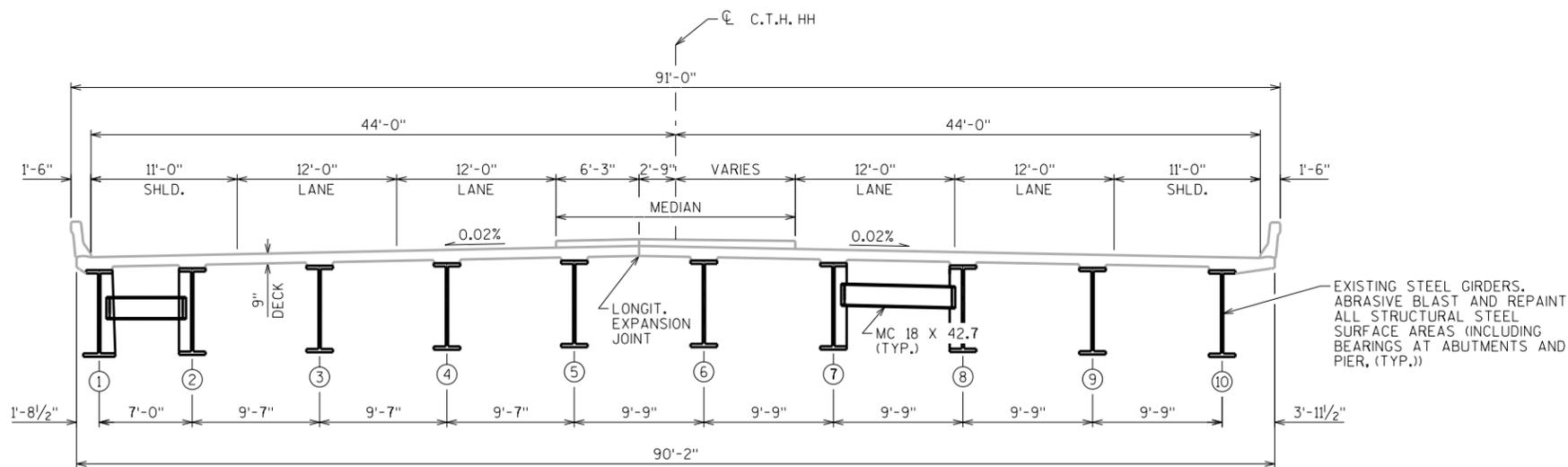
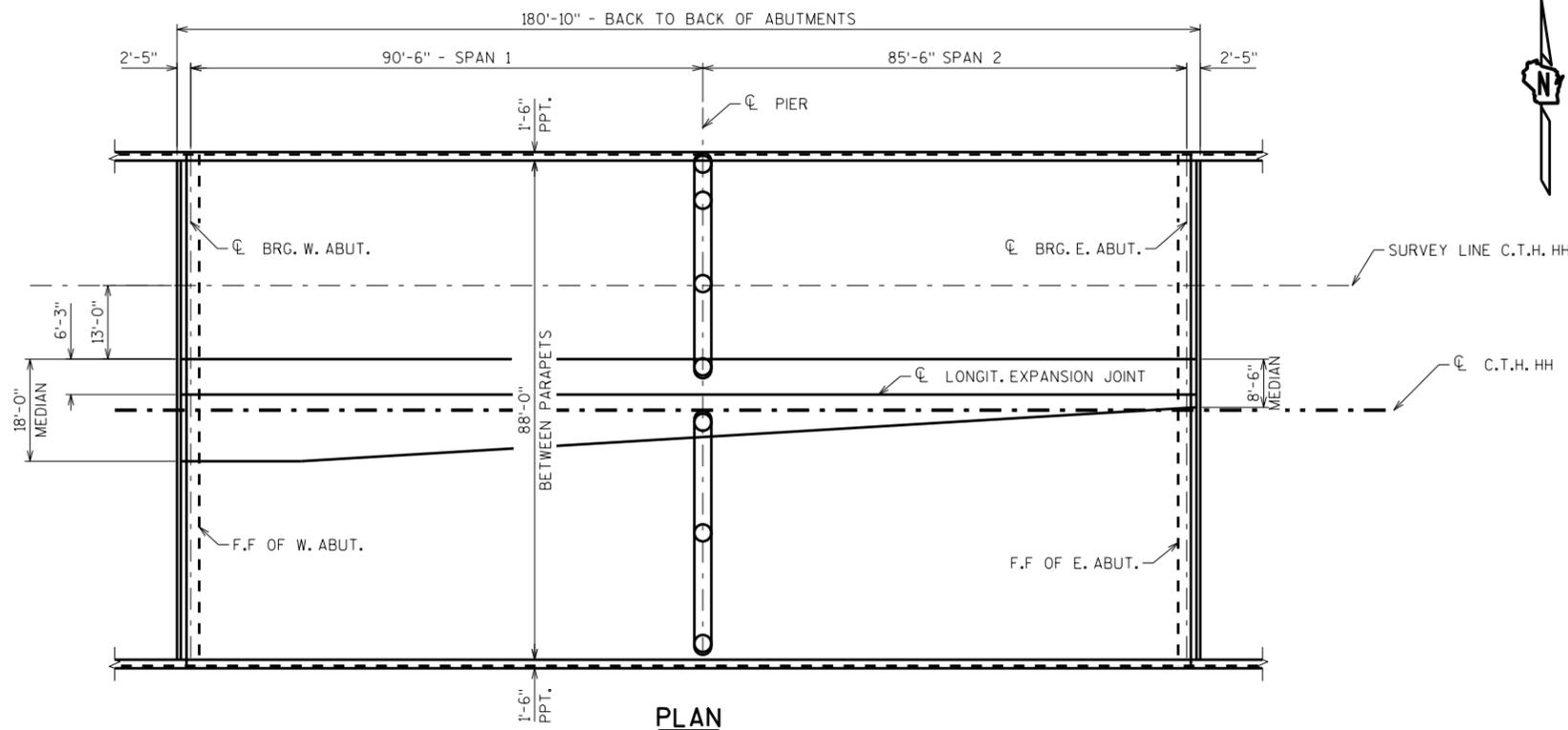
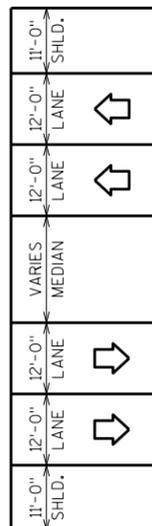
GENERAL NOTES

DRAWINGS SHALL NOT BE SCALED.
 THE COLOR OF THE FINISH TOP COAT SHALL BE LIGHT GREY, AMS STANDARD COLOR #26293.
 DIMENSIONS SHOWN ARE BASED ON THE EXISTING STRUCTURE PLANS.

TRAFFIC VOLUME

CTH HH
 ADT = 18000 (2045)
 R.D.S. = 40 M.P.H.

IH 39
 ADT = 30000 (2045)
 R.D.S. = 75 M.P.H.



EXISTING STEEL GIRDERS, ABRASIVE BLAST AND REPAINT ALL STRUCTURAL STEEL SURFACE AREAS (INCLUDING BEARINGS AT ABUTMENTS AND PIER, (TYP.))

STRUCTURE DESIGN CONTACTS:
 ISATOU CEESAY (608) 266-9557
 LAURA SHADEWALD (608) 267-9592

TOTAL ESTIMATED QUANTITIES

BID ITEM NUMBER	BID ITEMS	UNIT	TOTAL
517.1801.S	STRUCTURE REPAINTING RECYCLED ABRASIVE B-49-021	EACH	1
517.4501.S	NEGATIVE PRESSURE CONTAINMENT AND COLLECTION OF WASTE MATERIALS B-49-021	EACH	1
517.6001.S	PORTABLE DECONTAMINATION FACILITY	EACH	1

LIST OF DRAWINGS

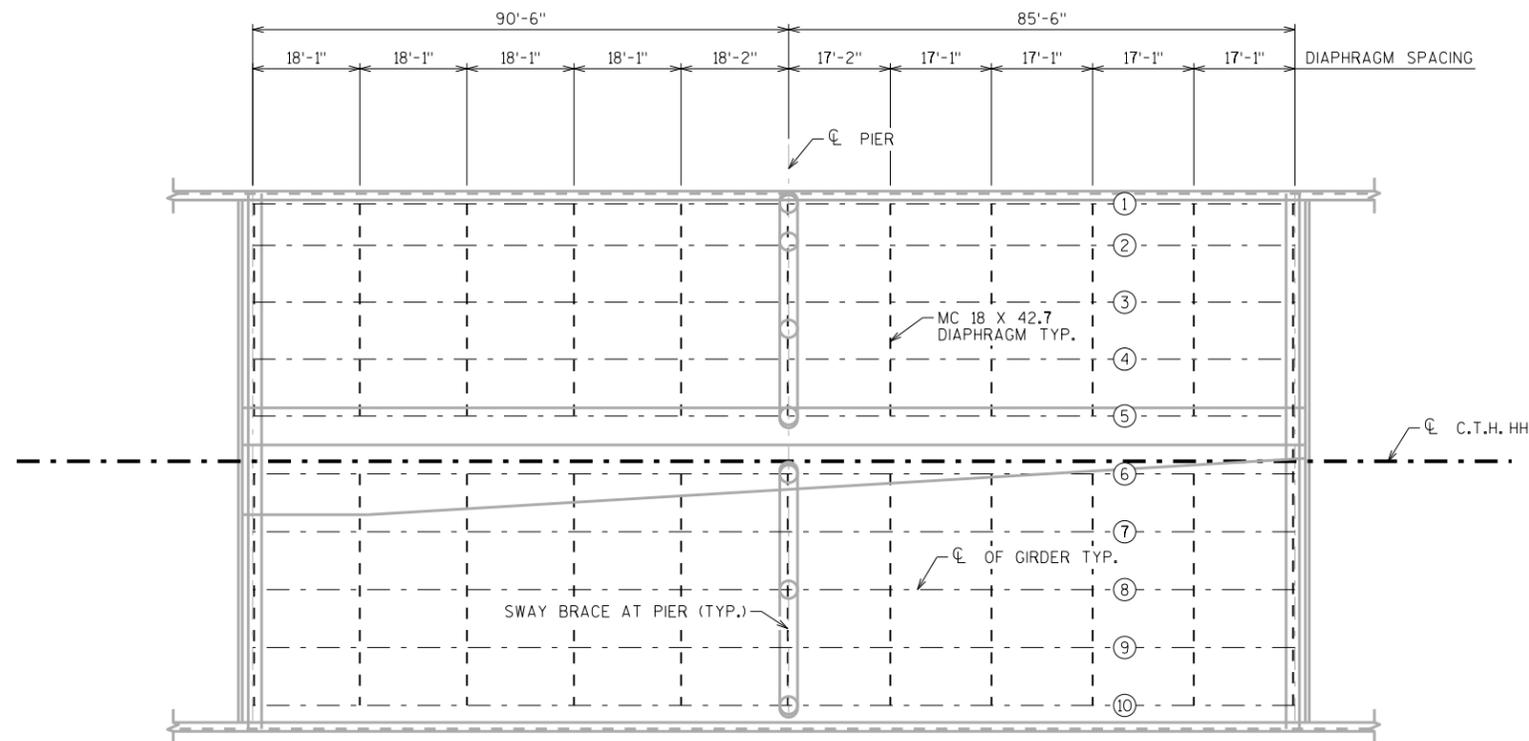
- STRUCTURE REPAINTING
- SUPERSTRUCTURE DETAILS

NO.	DATE	REVISION	BY
ACCEPTED			DATE
CHIEF STRUCTURES DESIGN ENGINEER		4/25/2022	
STRUCTURE B-49-021			
CTH HH OVER IH 39			
COUNTY	PORTAGE	CITY	STEVENS POINT
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
IFC		IFC	DLM
STRUCTURE REPAINTING			SHEET 1 OF 2

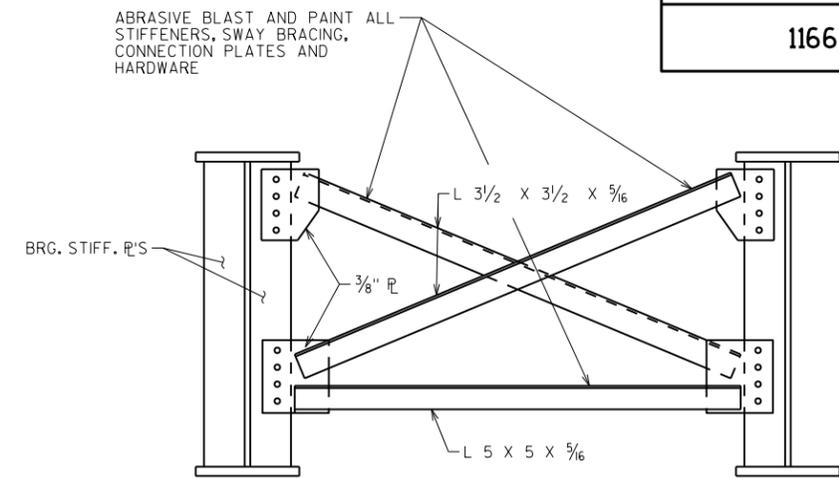
(X) INDICATES GIRDER NUMBER

STATE PROJECT NUMBER

1166-05-84

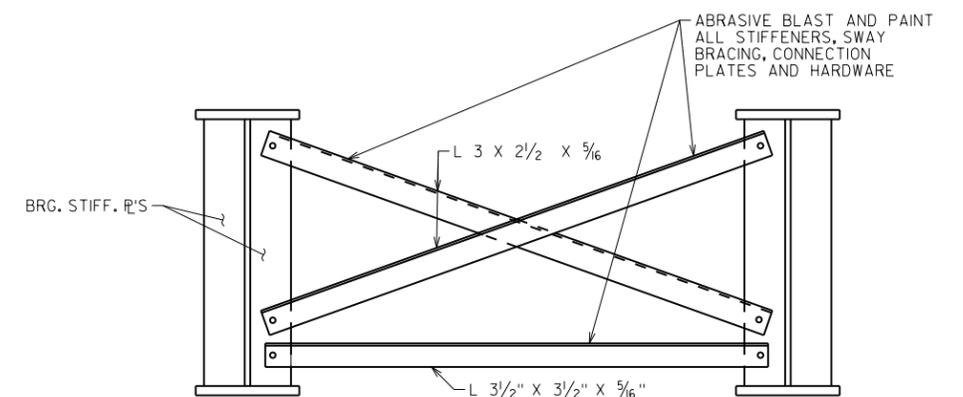


FRAMING PLAN



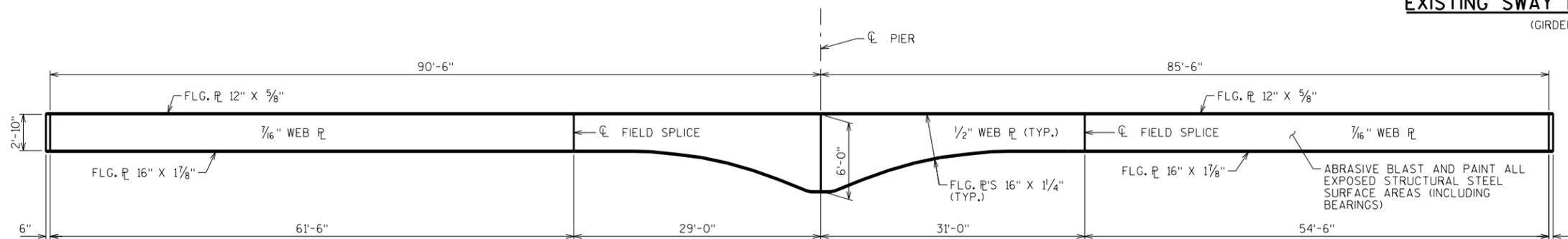
EXISTING SWAY BRACING AT PIER

(GIRDERS 1, 6-10)



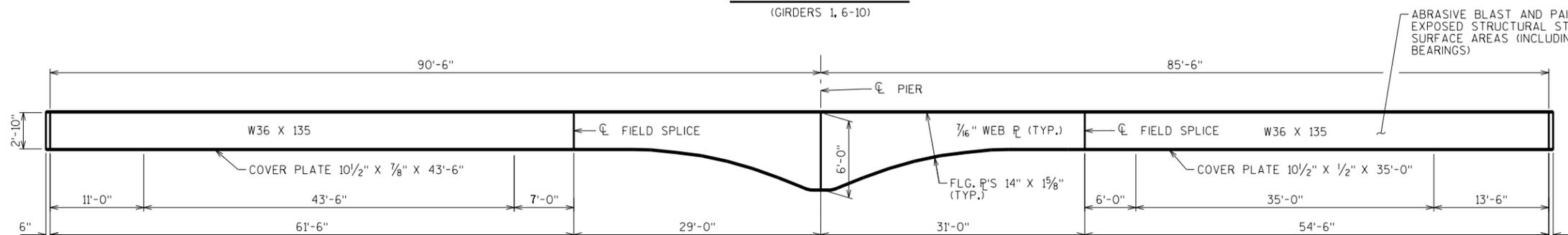
EXISTING SWAY BRACING AT PIER

(GIRDERS 2-5)



GIRDER ELEVATION

(GIRDERS 1, 6-10)



GIRDER ELEVATION

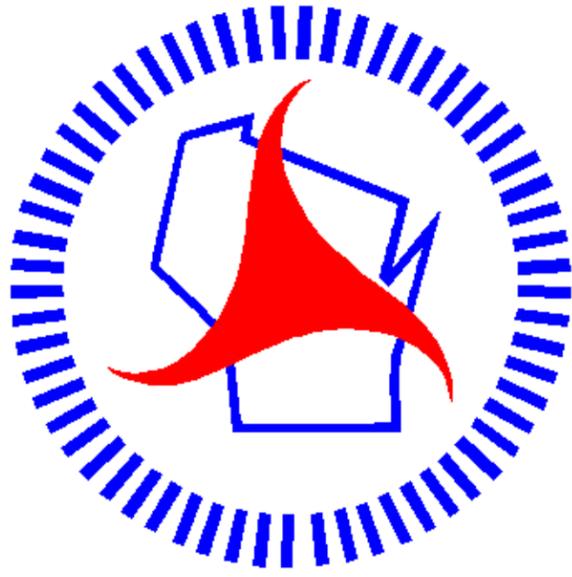
(GIRDERS 2-5)

8

8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-49-021			
DRAWN BY		IFC	PLANS CK'D. DLM
SUPERSTRUCTURE DETAILS		SHEET 2	

SCALE = 15.00



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

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