

PROJECT ID: 1009-30-11

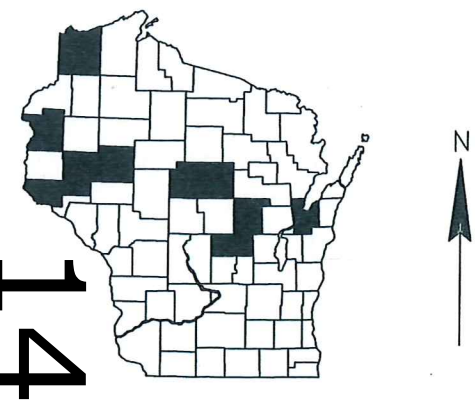
COUNTY: NORTHEAST, NORTH CENTRAL, & NORTHWEST REGIONS WIDE

MAY 2017

ORDER OF SHEETS

Section No.	Title
Section No. 1	Typical Sections and Details
Section No. 2	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right-of-Way Plot
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 = 72



DESIGN DESIGNATION

A.A.D.T.	=	N/A
A.A.D.T.	=	N/A
D.H.V.	=	N/A
D.D.	=	N/A
T.	=	N/A
DESIGN SPEED	=	N/A
ESALS	=	N/A

CONVENTIONAL SYMBOLS

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

PROFILE	
GRADE LINE	=====
ORIGINAL GROUND	=====
MARSH OR ROCK PROFILE (To be noted as such)	=====
SPECIAL DITCH	=====
GRADE ELEVATION	95.36
CULVERT (Profile View)	=====
UTILITIES	
ELECTRIC	E
FIBER OPTIC	FO
GAS	G
SANITARY SEWER	SAN
STORM SEWER	SS
TELEPHONE	T
WATER	W
UTILITY PEDESTAL	=====
POWER POLE	=====
TELEPHONE POLE	=====

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION  
PLAN OF PROPOSED IMPROVEMENT  
SIGN BRIDGE REPLACEMENT  
REGIONWIDE VARIOUS ROUTES  
VAR HWYS  
BROWN COUNTY

STATE PROJECT NUMBER  
1009-30-11



LAYOUT  
SCALE 0 0 MI.

TOTAL NET LENGTH OF CENTERLINE = 0.0 MI.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1009-30-11	WISC 2017270	1

ORIGINAL PLANS PREPARED BY  
Fish & Associates Inc.  
3148 Deming Way, Suite 160 • Middleton, WI 53562 • (608) 831-3238



2/17/17  
(Date) (Signature)

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

PREPARED BY	
Surveyor	
Designer	FISH & ASSOCIATES, INC.
Project Manager	KYLE TREML
Regional Examiner	
Regional Supervisor	ROBERT WAGNER
C.O. Examiner	

APPROVED FOR THE DEPARTMENT  
DATE: 2/20/17 (Signature)

E

GENERAL NOTES

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

DESIGN CONTACT

FISH & ASSOCIATES, INC.  
3148 DEMING WAY, SUITE 160  
MIDDLETON, WI 53562  
ATTN: BRIAN R. SCHMIDT  
(608) 831-3238

DNR LIASION CONTACTS

AMY CRONK	(715) 635-4229	AMY.CRONK@WISCONSIN.GOV
BARRON, BURNETT, DOUGLAS, POLK, RUSK COUNTIES		
JIM DOPERALSKI	(920) 662-5119	JAMES.DOPERALSKI@WISCONSIN.GOV
BROWN, MARINETTE, MENOMINEE, OCONTO, SHAWANO COUNTIES		
BOBBI JO FISCHER	(920) 787-3015	BOBBIFISCHER@WISCONSIN.GOV
GREEN LAKE, MARQUETTE, WAUPACA, WAUSHARA COUNTIES		
SHAWN HASELEU	(715) 635-4228	SHAWN.HASELEU@WISCONSIN.GOV
ASHLAND, BAYFIELD, PRICE, SAWYER, WASHBURN COUNTIES		
MARC HERSHFIELD	(715) 421-7867	MARC.HERSHFIELD@WISCONSIN.GOV
ADAMS, JUNEAU, MARATHON, PORTAGE, WOOD COUNTIES		
KAREN KALVELAGE	(608) 785-9115	KAREN.KALVELAGE@WISCONSIN.GOV
BUFFALO, CRAWFORD, JACKSON, LA CROSSE, MONROE, TREMPPEALEAU, VERNON COUNTIES		
MATT SCHAEVE	(920) 366-1544	MATTHEW.SCHAEVE@WISCONSIN.GOV
CALUMET, DOOR, KEWAUNEE, MANITOWOC, OUTAGAMIE COUNTIES		
JAY SCHIEFELBEIN	(920) 662-5130	JEREMIAH.SCHIEFELBEIN@WISCONSIN.GOV
FOND DU LAC, SHEBOYGAN, WINNEBAGO COUNTIES		
JON SIMONSEN	(715) 365-8916	JONATHAN.SIMONSEN@WISCONSIN.GOV
FLORENCE, FOREST, IRON, LANGLADE, LINCOLN, ONEIDA, TAYLOR, VILAS COUNTIES		
CHRIS WILLGER	(715) 839-1609	CHRISTOPHERJ.WILLGER@WISCONSIN.GOV
CHIPPEWA, CLARK, DUNN, EAU CLAIRE, PEPIN, PIERCE, ST. CROIX COUNTIES		

TRAFFIC CONTACTS

NORTHEAST REGION:	JOSH FALK	(920) 366-8033	JOSHUA.FALK@DOT.WI.GOV
NORTH CENTRAL REGION:	CARA ABTS	(715) 421-8024	CARA.ABTS@DOT.WI.GOV
NORTHWEST REGION:	CHAD HINES	(715) 836-7276	CHAD.HINES@DOT.WI.GOV



BROWN COUNTY

SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-05-0015	STH 172	WB	STH 172 ON RAMP TO IH-41
S-05-0026	IH-43	SB	IH-43 AT WEBSTER AVE. OFF RAMP
S-05-0038	IH-43	SB	IH 43 SB-RAMP STH 172 WB
S-05-0039	IH-43	SB	IH-43, 0.2 MILE NORTH OF STH 172
S-05-0040	STH 172	EB	STH 172 AT GORE FOR IH-43 NB/SB
S-05-0042	STH 172	WB	STH 172, 0.4 MILE EAST OF USH 41
S-05-0043	IH-43	NB	IH-43 AT USH 172 WB RAMP GORE
S-05-0049	STH 172	WB	STH 172, 1/2 MILE EAST OF CTH GV
S-05-0055	STH 54	EB	STH 54 (MASON ST.) JUST WEST OF BROADWAY ST.
S-05-0056	STH 54	EB	STH 54 (MASON ST.) AT RAMP FROM BROADWAY ST.
S-05-0057	STH 54	EB	STH 54 (MASON ST.) AT EXIT RAMP TO MADISON ST.
S-05-0058	STH 54	EB	STH 54 AT EXIT TO MONROE AVE.
S-05-0064	STH 172	EB	STH 172 ON EXIT RAMP TO CTH X
S-05-0067	STH 54	WB	STH 54, 1/4 MILE EAST OF BROADWAY AVE.
S-05-0077	WALNUT ST.	WB	WALNUT ST. JUST EAST OF FOX RIVER
S-05-0222	CTH G	WB	CTH G, AT IH-41 NB EXIT RAMP
S-05-0236	CTH VK	WB	CTH VK, JUST EAST OF IH-41

CHIPPEWA COUNTY

SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-09-0027	STH 178	NB	0.10 MI S OF CTH S
S-09-0028	STH 124	NB	600' S OF BUS. 29
S-09-0029	STH 124	SB	500' N OF BUS 29
S-09-0030	STH 29 - BUS	WB	STH 29 BUS. 550' E OF STH 124

DOUGLAS COUNTY

SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-16-0004	IH-535	NB	IH-535 NB 100 FEET NORTH OF 5TH STREET
S-16-0010	IH-535	SB	IH-535 SB AT EXIT TO USH 53 AND STH 35

DUNN COUNTY

SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-17-0004	IH-94	EB	EB IH-94 ON WILSON ST. (ATTACHED TO B-17-0040)

MARATHON COUNTY

SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-37-0042	USH 51	SB	USH 51 SB, 1/2 MILE NORTH OF STH 29 EB EXIT
S-37-0055	USH 51	NB/SB	USH 51 IN MEDIAN, 1/2 MILE SOUTH OF CTH NN
S-37-0058	USH 51	NB/SB	USH 51 NB/SB, 1/4 MILE NORTH OF CTH NN
S-37-0098	ADAMS ST	EB	ADAMS ST. EB JUST EAST OF STH 13 IN COLBY
S-37-0099	STH 13	NB	STH 13 NB JUST N OF ADAMS ST.

PIERCE COUNTY

SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-47-0007	USH 10	EB	250' W OF JCT STH 29/35
S-47-0009	STH 35	SB	250' N OF JCT WB STH 29/SB STH 65

POLK COUNTY

SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-48-0003	USH 8	EB	USH-8 EB 200' W OF 208 ST.
S-48-0004	USH 8	WB	USH-8 WB 200' E OF 208 ST.
S-48-0006	USH 8	WB	USH 8 WB. 1/4 MILE E. OF GLACIER DR.

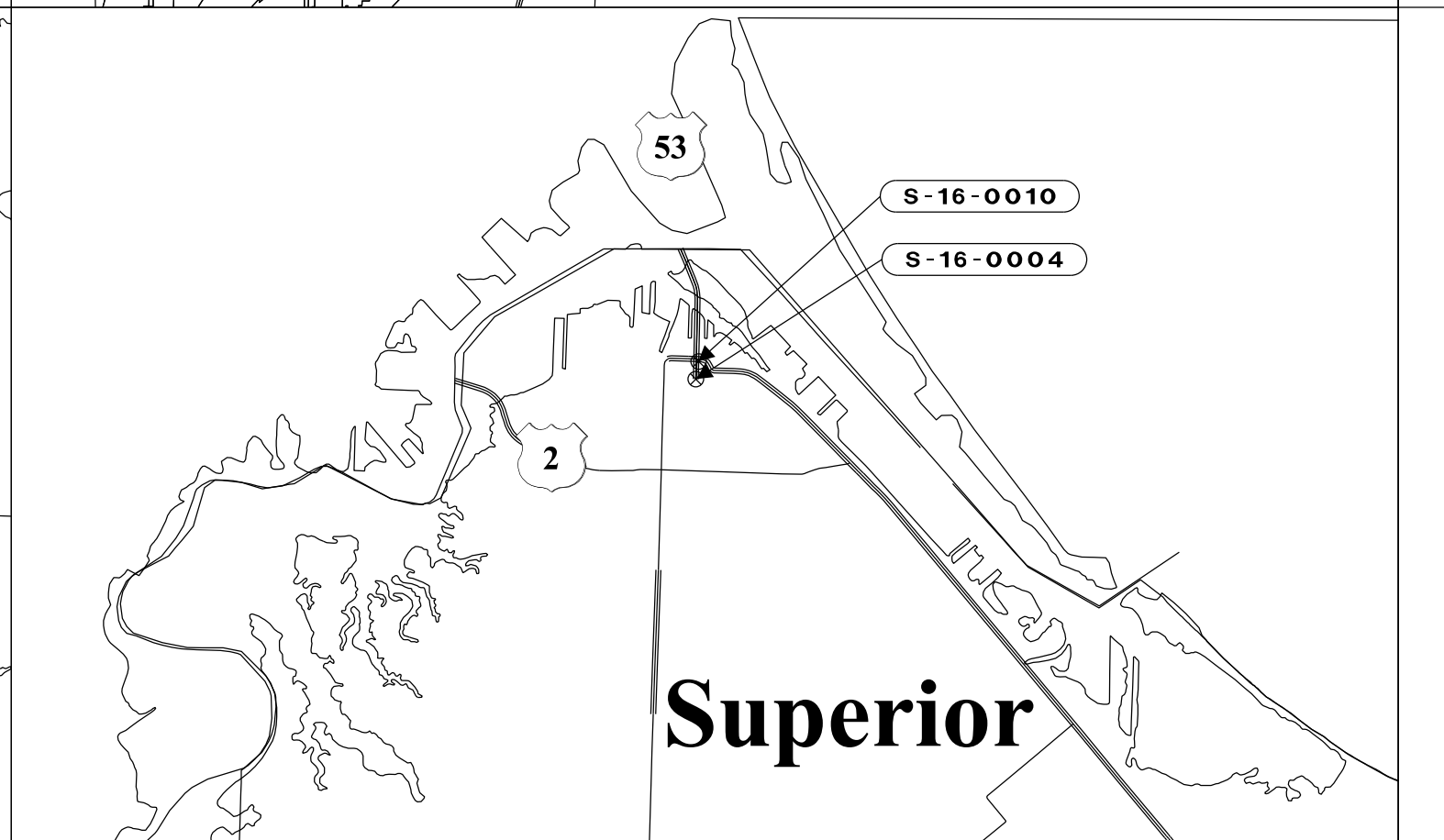
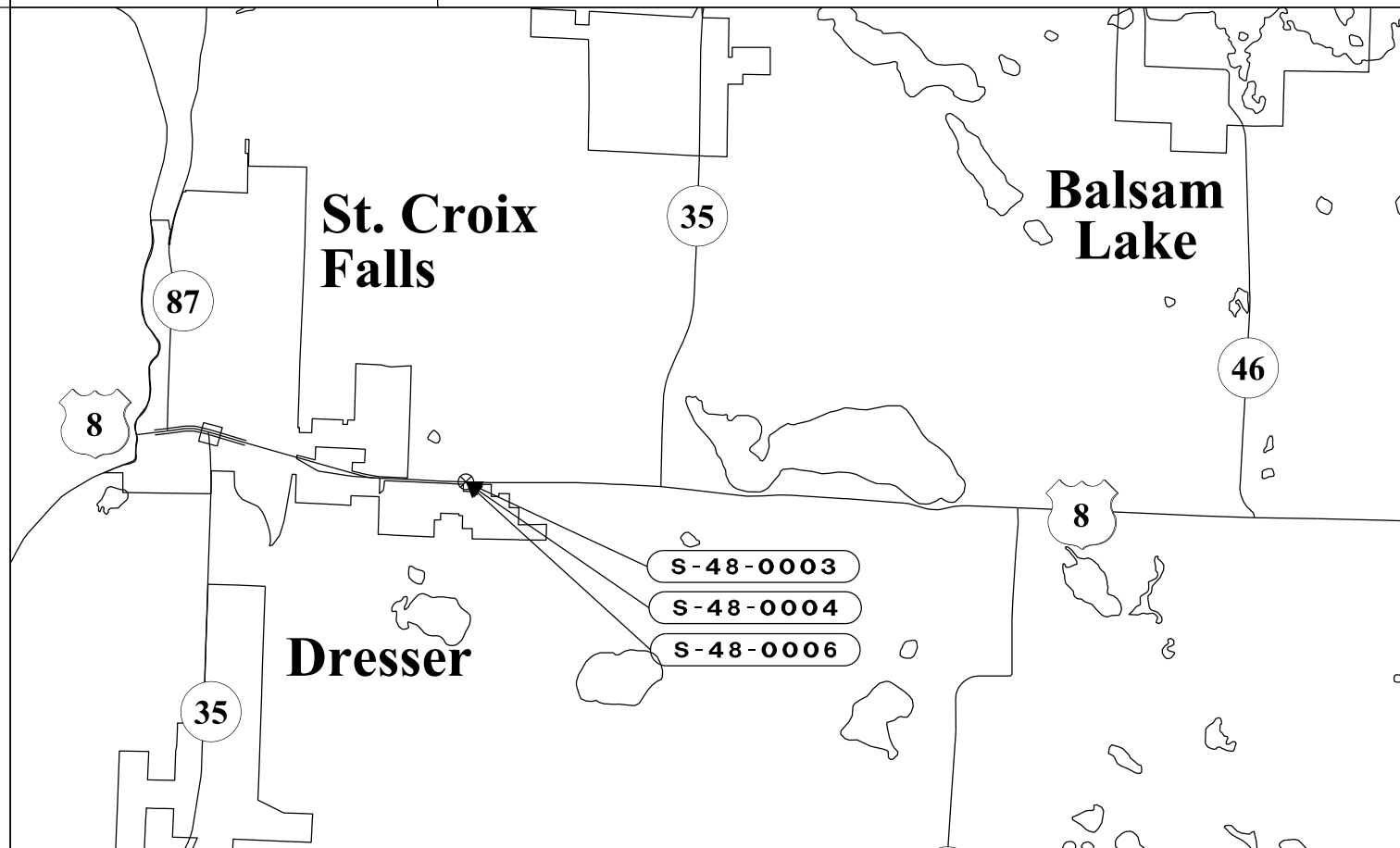
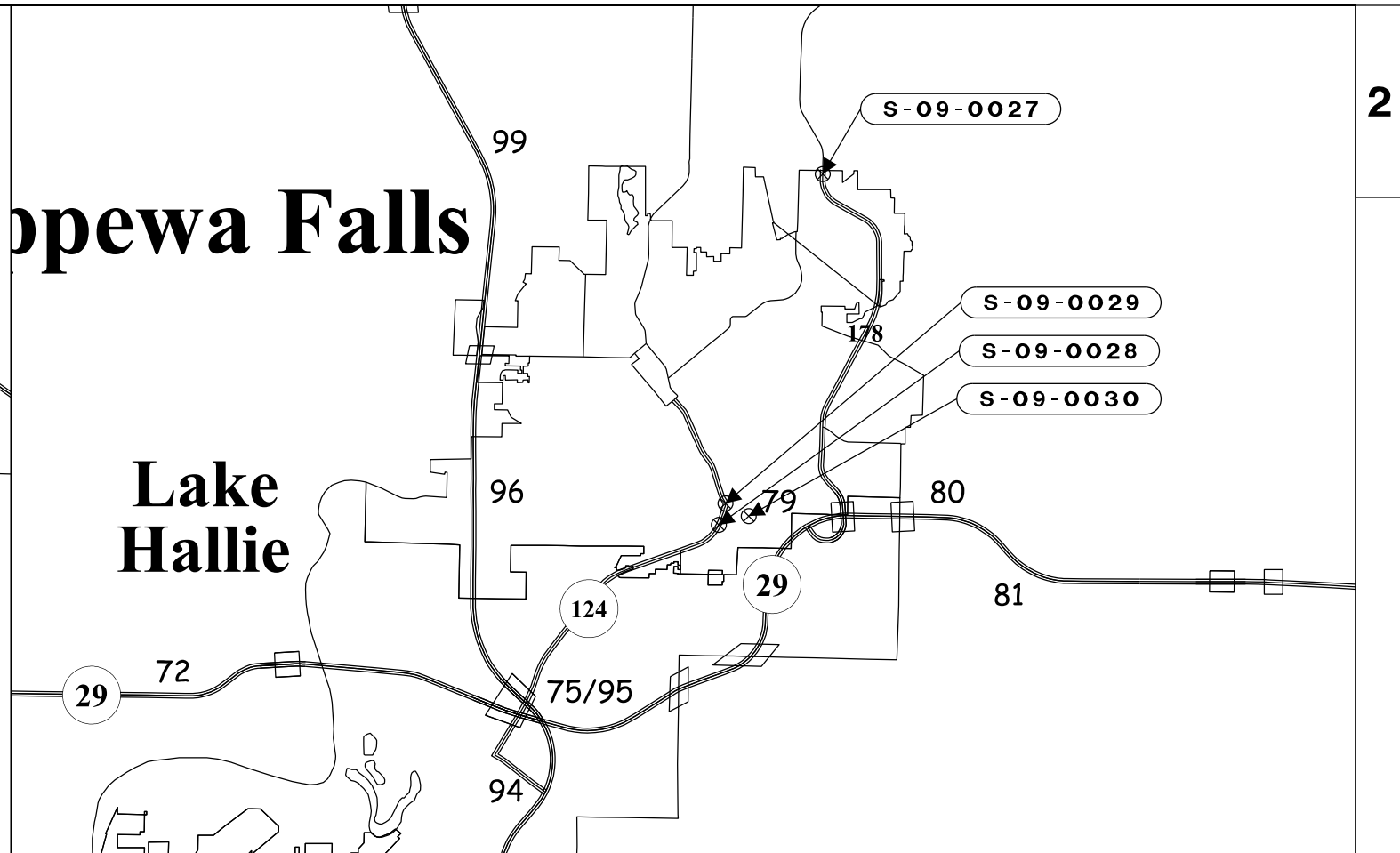
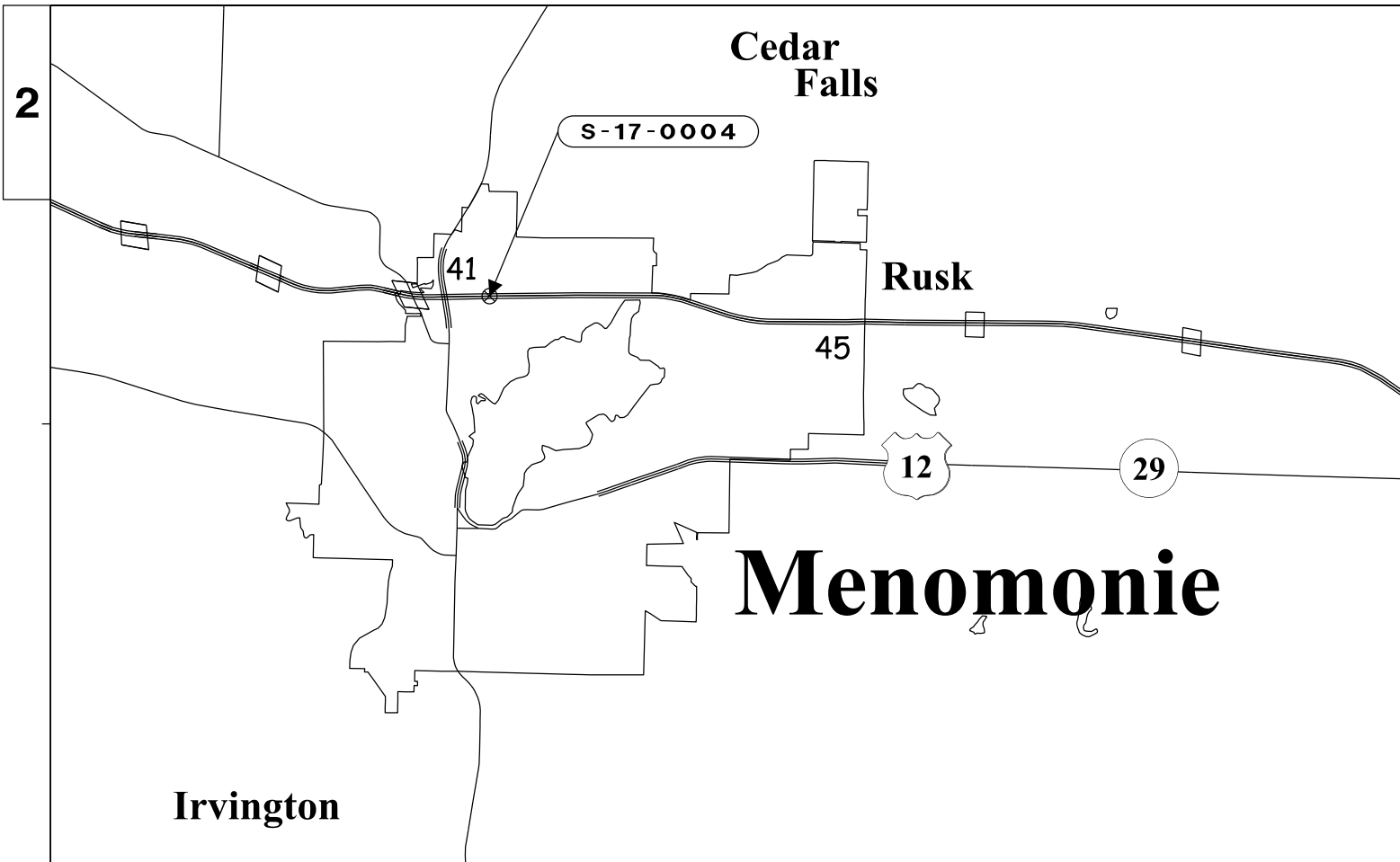
WAUPACA COUNTY

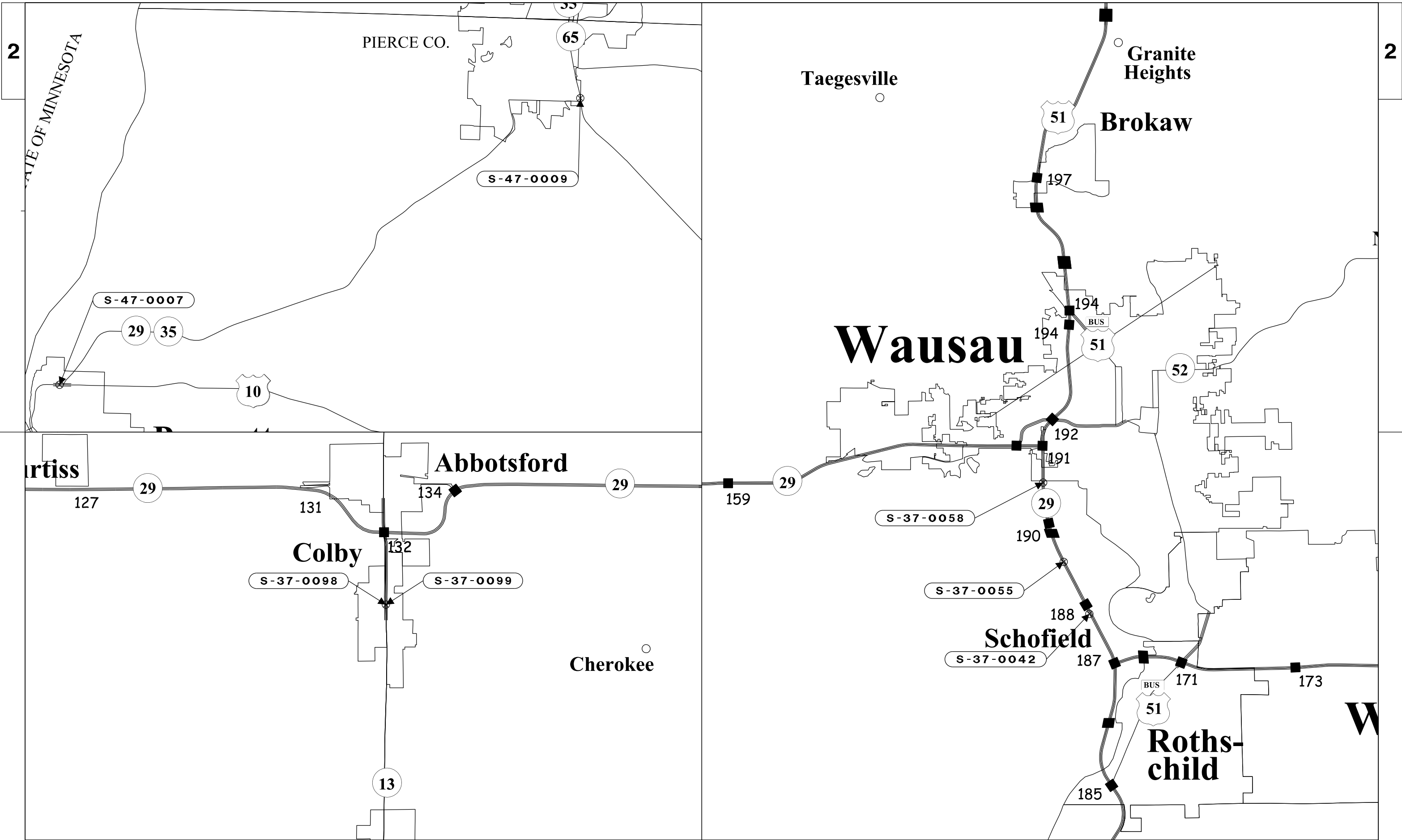
SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-68-0002	STH 110	WB	0.1 MI E OF WOLF RIVER

WAUSHARA COUNTY

SIGN #	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
S-69-0003	STH 21	EB	0.1 ME N OF STH 73







PROJECT NO:1009-30-11

HWY: VARIOUS

COUNTY: MARATHON, PIERCE

COUNTY STRUCTURE LOCATION

SCALE: NOT TO SCALE

SHEET \_\_\_\_\_ **E**

FILE NAME : \$\$....designfile....\$\$

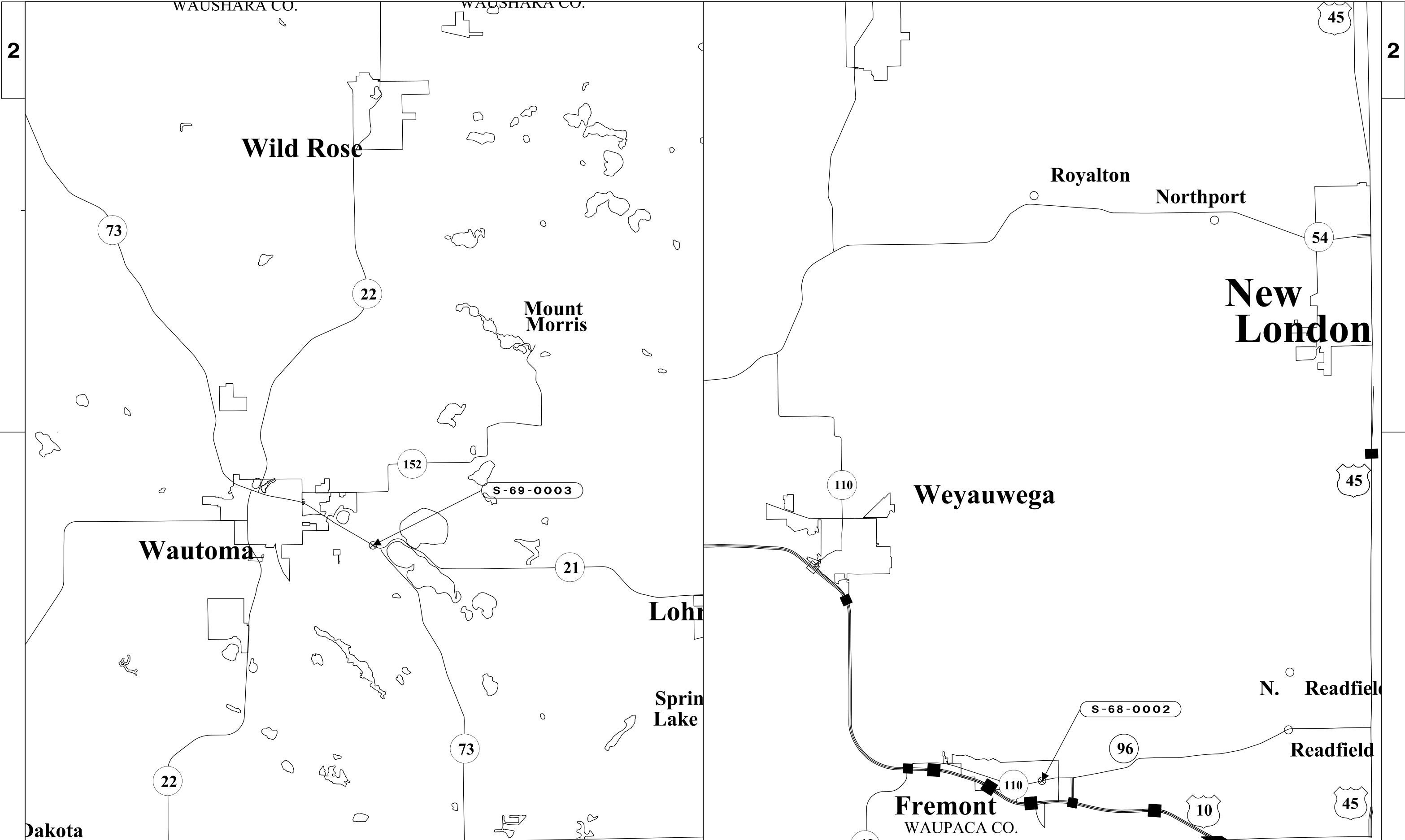
PLOT DATE : \$\$...plottingdate...\$\$

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

PLOT NAME : \_\_\_\_\_

PLOT SCALE : \$\$.....plotscale.....\$\$

WISDOT/CADDs SHEET 42





TRAFFIC CONTROL AND WORK RESTRICTIONS

STRUCTURE NUMBER	HIGHWAY	COUNTY	TRAFFIC CONTROL	WORK RESTRICTION 1	WORK RESTRICTION 2	WORK RESTRICTION 3
S-05-0015	STH 172	BROWN	SDD 15D12	6:00 AM TO 8:00 PM		
S-05-0026	IH-43	BROWN	SDD 15D27			
S-05-0038	IH-43	BROWN	SDD 15D27			
S-05-0039	IH-43	BROWN	SDD 15D12	6:00 AM TO 7:00 PM		
S-05-0040	STH 172	BROWN	SDD 15D27			
S-05-0042	STH 172	BROWN	SDD 15D27			
S-05-0043	IH-43	BROWN	SDD 15D27			
S-05-0049	STH 172	BROWN	SDD 15D27			
S-05-0055	STH 54	BROWN	SDD 15D12, NOTE 3	7:00 AM TO 6:00 PM		
S-05-0056	STH 54	BROWN	SDD 15D12, NOTE 3	7:00 AM TO 6:00 PM		
S-05-0057	STH 54	BROWN	SDD 15D12, NOTE 3	7:00 AM TO 6:00 PM		
S-05-0058	STH 54	BROWN	SDD 15D12, NOTE 3	7:00 AM TO 6:00 PM		
S-05-0064	STH 172	BROWN	SDD 15D12	7:00 AM TO 8:00 PM		
S-05-0067	STH 54	BROWN	SDD 15D12, NOTE 3	7:00 AM TO 6:00 PM		
S-05-0077	WALNUT ST.	BROWN	SDD 15D12, NOTE 3	7:00 AM TO 6:00 PM		
S-05-0222	CTH G	BROWN	SDD 15D12	7:00 AM TO 6:00 PM		
S-05-0236	CTH VK	BROWN	SDD 15D12	3:00 PM TO 7:00 PM		
S-09-0027	STH 178	CHIPPEWA	SDD 15D12			
S-09-0028	STH 124	CHIPPEWA	SDD 15D12			
S-09-0029	STH 124	CHIPPEWA	SDD 15D12			
S-09-0030	STH 29 - BUS	CHIPPEWA	SDD 15D12			
S-16-0004	IH-535	DOUGLAS	SDD 15D27			
S-16-0010	IH-535	DOUGLAS	SDD 15D12	6:00 AM TO 10:00 PM		
S-17-0004	IH-94	DUNN	SDD 15D12	ALL DAY, FRIDAY THROUGH SUNDAY	7:00 AM TO 7:00 PM MONDAY THROUGH THURSDAY	
S-37-0042	USH 51	MARATHON	SDD 15D27	ALL DAY, THURSDAY THROUGH SUNDAY	12:00 AM TO 9:00 AM MONDAY THROUGH WEDNESDAY	3:00 PM TO 12:00 AM MONDAY THROUGH WEDNESDAY
S-37-0055	USH 51	MARATHON	SDD 15D12	ALL DAY, THURSDAY THROUGH SUNDAY	12:00 AM TO 9:00 AM MONDAY THROUGH WEDNESDAY	3:00 PM TO 12:00 AM MONDAY THROUGH WEDNESDAY
S-37-0058	USH 51	MARATHON	SDD 15D12	ALL DAY, THURSDAY THROUGH SUNDAY	12:00 AM TO 9:00 AM MONDAY THROUGH WEDNESDAY	3:00 PM TO 12:00 AM MONDAY THROUGH WEDNESDAY
S-37-0098	ADAMS ST	MARATHON	SDD 15D28			
S-37-0099	STH 13	MARATHON	SDD 15D21			
S-47-0007	USH 10	PIERCE	SDD 15D28			
S-47-0009	STH 35	PIERCE	SEE TRAFFIC CONTROL PLAN, SDD 15C02-06			
S-48-0003	USH 8	POLK	SDD 15D12			
S-48-0004	USH 8	POLK	SDD 15D12			
S-48-0006	USH 8	POLK	SDD 15D12			
S-68-0002	STH 110	WAUPACA	SDD 15D28			
S-69-0003	STH 21	WAUSHARA	SDD 15D20			

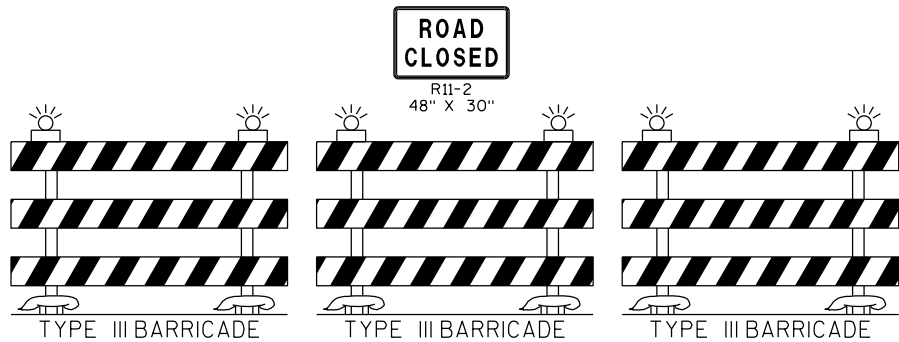
TRAFFIC CONTROL NOTES

1. RESTRICTED HOUR TABLE INDICATES TIME FRAMES WHEN LANE CLOSURES ARE NOT PERMITTED.
2. PRE-WARN TRAFFIC WITH PCMS AND PRESS RELEASE AS DESIGNATED.
3. CONTACT THE TRAFFIC ENGINEERING DIVISION FOR THE CITY OF GREEN BAY, DAVE HANSEN (920.448.3000) AND DISCUSS THE PROJECT SCHEDULES OF OPERATIONS, TRAFFIC CONTROL, AND RELEVANT CONSTRUCTION OPERATIONS PRIOR TO PERFORMING REPAIRS ON STRUCTURES AT WALNUT ST. AND MASON ST. (STH 54).



- NOTES:
1. STATE HIGHWAY 35/65 SOUTHBOUND WILL BE CLOSED AS DESCRIBED BELOW.
  2. SOUTHBOUND TRAFFIC WILL BE DETOURED VIA CASCADE AVE./S. WASSON LANE/830TH ST. TO STATE HIGHWAY 35/65.
  3. CONTRACTOR SHALL COVER EXISTING SIGNS WHICH CONFLICT WITH THE PROPOSED DETOUR, AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER.
  4. REFER TO THE FOLLOWING WSDOT STANDARD DETAIL DRAWINGS FOR MAINLINE CLOSURE FOR LOCATION AND SPACING BETWEEN SIGNS; BARRICADES AND SIGNS FOR MAINLINE CLOSURES; DETOUR SIGNING FOR MAINLINE CLOSURES.
  5. THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS, AS APPROVED BY THE ENGINEER.
  6. "WO" AND "W" SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED.
  7. ALL MO5 AND MO6 ARROWS SHALL BE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
  8. PORTABLE CHANGEABLE MESSAGE BOARDS SHALL BE PLACED 10 DAYS PRIOR TO START OF CONSTRUCTION AT LOCATIONS INDICATED ON PLAN BELOW OR AS DIRECTED BY THE ENGINEER.
  9. NOTIFY CITY OF RIVER FALLS OF DATE AND DETOUR ROUTE A MINIMUM OF 10 DAYS PRIOR TO WORK.
  10. PERFORM DETOUR CLOSURE ON A TUESDAY, WEDNESDAY, OR THURSDAY DURING THE SUMMER.

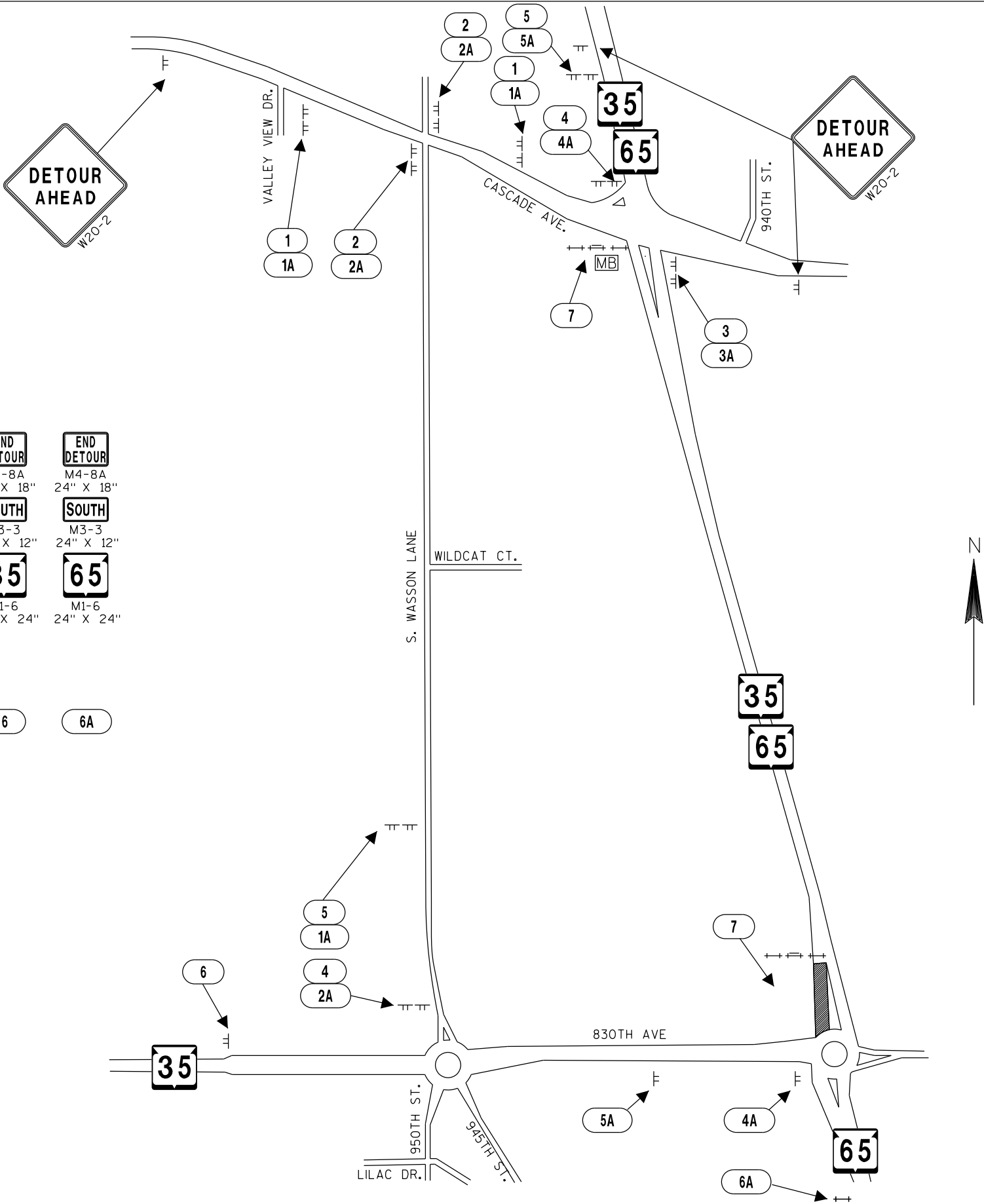
DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	DETOUR	END DETOUR	END DETOUR
M4-8	M4-8	M4-8	M4-8	M4-8	M4-8	M4-8	M4-8	M4-8	M4-8	M4-8	M4-8A	M4-8A
24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 18"	24" X 18"
SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH	SOUTH
M3-3	M3-3	M3-3	M3-3	M3-3	M3-3	M3-3	M3-3	M3-3	M3-3	M3-3	M3-3	M3-3
24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"	24" X 12"
35	65	35	65	35	65	35	65	35	65	35	35	65
M1-6	M1-6	M1-6	M1-6	M1-6	M1-6	M1-6	M1-6	M1-6	M1-6	M1-6	M1-6	M1-6
24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"	24" X 24"
MO5-1L	MO5-1L	MO6-1	MO6-1	MO6-1	MO6-1	MO6-1	MO6-1	MO6-1	MO6-1	MO5-1R	MO5-1R	MO5-1R
21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"	21" X 21"
1	1A	2	2A	3	3A	4	4A	5	5A	6	6A	6A



7

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE III BARRICADE
- WORK AREA
- PORTABLE CHANGEABLE MESSAGE BOARD



Estimate Of Quantities

1009-30-11

Line	Item	Item Description	Unit	Total	Qty
0010	619.1000	Mobilization	EACH	1.000	1.000
0020	643.0100	Traffic Control (project) 01.1009-30-11	EACH	1.000	1.000
0030	SPV.0060	Special 01. Tension Anchor Rod	EACH	42.000	42.000
0040	SPV.0060	Special 02. Fill Erosion	EACH	2.000	2.000
0050	SPV.0060	Special 04. Repair Foundation	EACH	4.000	4.000
0060	SPV.0060	Special 05. Replace Rodent Screen	EACH	3.000	3.000
0070	SPV.0060	Special 06. Remove Grout Pad	EACH	25.000	25.000
0080	SPV.0060	Special 10. Tension Structural Connection Bolt	EACH	4.000	4.000
0090	SPV.0060	Special 12. Replace End Cap	EACH	5.000	5.000
0100	SPV.0060	Special 13. Secure/Replace Post Cap	EACH	1.000	1.000
0110	SPV.0060	Special 17. Repair Dampener	EACH	1.000	1.000
0120	SPV.0060	Special 18. Reinstall Truss	EACH	1.000	1.000
0130	SPV.0060	Special 20. Replace Sign Panel Connector	EACH	16.000	16.000
0140	SPV.0060	Special 22. Slotted Hole Repair on Sign Support Bracket	EACH	34.000	34.000
0150	SPV.0060	Special 24. Replace Sign Connection Clamp	EACH	3.000	3.000
0160	SPV.0060	Special 26. Replace Sign Bridge ID Plaque	EACH	1.000	1.000
0170	SPV.0060	Special 29. Adjust Signal Band Mount	EACH	2.000	2.000
0180	SPV.0060	Special 32. Replace Washers at Pedestal Connection	EACH	4.000	4.000
0190	SPV.0060	Special 42. Replace Attenuator Barrels	EACH	2.000	2.000
0200	SPV.0060	Special 50. Traffic Control - Single Lane Closure	EACH	35.000	35.000

3

BID ITEM QUANTITES

Region	County	Structure Number	SPV.0060.01	SPV.0060.02	SPV.0060.04	SPV.0060.05	SPV.0060.06	SPV.0060.10	SPV.0060.12	SPV.0060.13	SPV.0060.17	SPV.0060.18	SPV.0060.20	SPV.0060.22
			TENSION ANCHOR ROD	FILL EROSION	REPAIR FOUNDATION	REPLACE RODENT SCREEN	REMOVE GROUT PAD	TENSION STRUCTURAL CONNECTION BOLT	REPLACE END CAP	SECURE/ REPLACE POST CAP	REPAIR DAMPENER	REINSTALL TRUSS	REPLACE SIGN PANEL CONNECTOR	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET
			EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA
			SPV.0060.01	SPV.0060.02	SPV.0060.04	SPV.0060.05	SPV.0060.06	SPV.0060.10	SPV.0060.12	SPV.0060.13	SPV.0060.17	SPV.0060.18	SPV.0060.20	SPV.0060.22
Northeast	Brown	S-05-0015									1			
Northeast	Brown	S-05-0026					1							
Northeast	Brown	S-05-0038			1									
Northeast	Brown	S-05-0039											6	
Northeast	Brown	S-05-0040					4							
Northeast	Brown	S-05-0042		2										
Northeast	Brown	S-05-0043					2							
Northeast	Brown	S-05-0049			1									
Northeast	Brown	S-05-0055					4							
Northeast	Brown	S-05-0056			1		4							
Northeast	Brown	S-05-0057					4							
Northeast	Brown	S-05-0058			1		4							
Northeast	Brown	S-05-0064												
Northeast	Brown	S-05-0067					1							
Northeast	Brown	S-05-0077					1							
Northeast	Brown	S-05-0222	6											
Northeast	Brown	S-05-0236	12											
Northwest	Chippewa	S-09-0027												4
Northwest	Chippewa	S-09-0028												7
Northwest	Chippewa	S-09-0029												6
Northwest	Chippewa	S-09-0030												7
Northwest	Douglas	S-16-0004	12											
Northwest	Douglas	S-16-0010				2		4						
Northwest	Dunn	S-17-0004											10	
North Central	Marathon	S-37-0042	8											
North Central	Marathon	S-37-0055							1					
North Central	Marathon	S-37-0058							4					
North Central	Marathon	S-37-0098				1								
North Central	Marathon	S-37-0099												
Northwest	Pierce	S-47-0007	4											
Northwest	Pierce	S-47-0009										1		
Northwest	Polk	S-48-0003												4
Northwest	Polk	S-48-0004												4
Northwest	Polk	S-48-0006												2
North Central	Waupaca	S-68-0002												
North Central	Waushara	S-69-0003								1				
		TOTAL	42	2	4	3	25	4	5	1	1	1	16	34

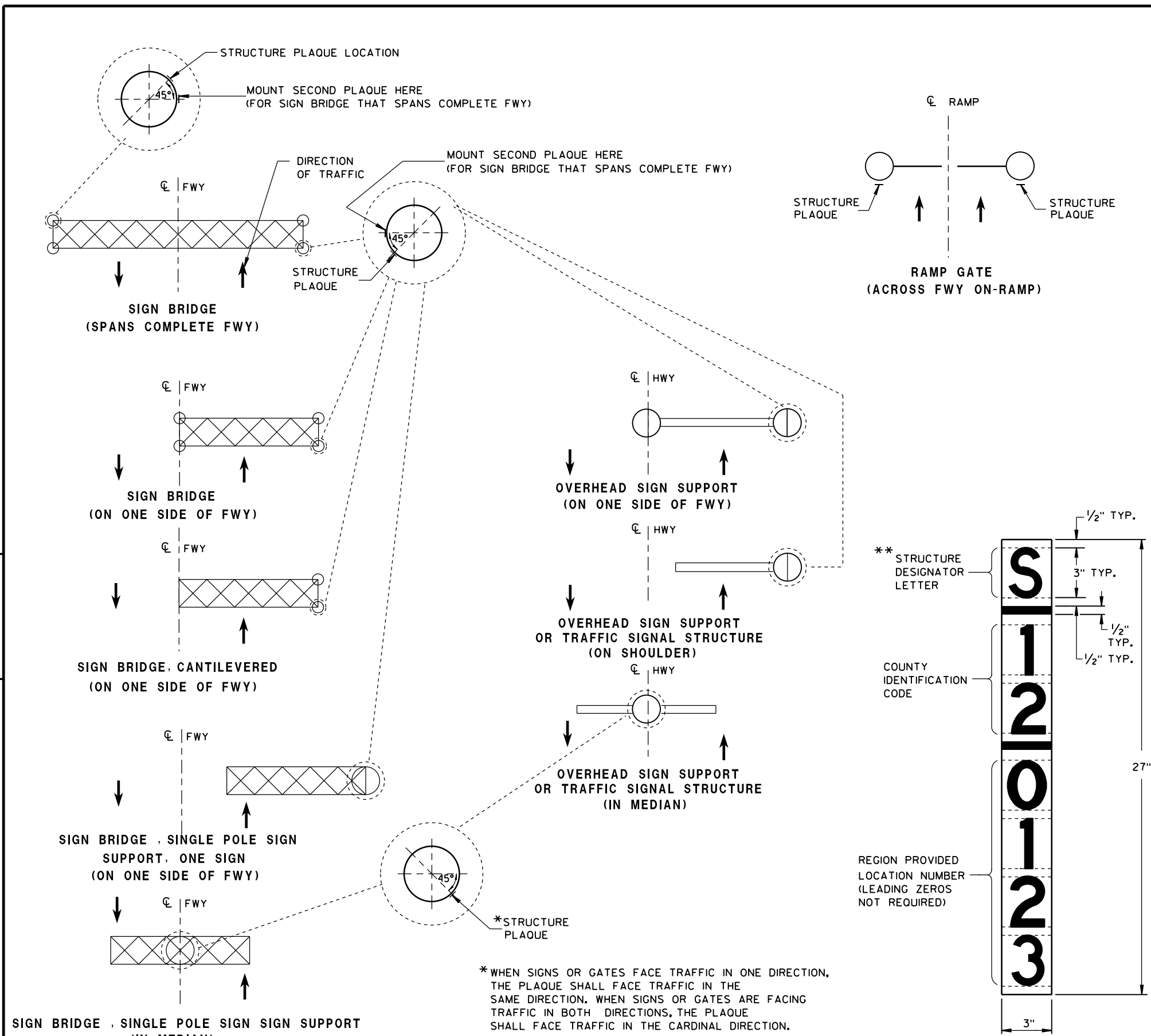
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BID ITEM QUANTITES - CONT.

Region	County	Structure Number	SPV.0060.24	SPV.0060.26	SPV.0060.29	SPV.0060.32	SPV.0060.42	SPV.0060.50
			REPLACE SIGN CONNECTION CLAMP	REPLACE SIGN BRIDGE ID PLAQUE	ADJUST SIGNAL BAND MOUNT	REPLACE WASHERS AT PEDESTAL CONNECTION	REPLACE ATTENUATOR BARRELS	TRAFFIC CONTROL - SINGLE LANE CLOSURE
			EA	EA	EA	EA	EA	EA
			SPV.0060.24	SPV.0060.26	SPV.0060.29	SPV.0060.32	SPV.0060.42	SPV.0060.50
Northeast	Brown	S-05-0015						1
Northeast	Brown	S-05-0026						
Northeast	Brown	S-05-0038						
Northeast	Brown	S-05-0039					2	1
Northeast	Brown	S-05-0040						
Northeast	Brown	S-05-0042						
Northeast	Brown	S-05-0043						
Northeast	Brown	S-05-0049						
Northeast	Brown	S-05-0055						2
Northeast	Brown	S-05-0056						2
Northeast	Brown	S-05-0057						2
Northeast	Brown	S-05-0058						2
Northeast	Brown	S-05-0064	3					1
Northeast	Brown	S-05-0067						1
Northeast	Brown	S-05-0077						
Northeast	Brown	S-05-0222						1
Northeast	Brown	S-05-0236						2
Northwest	Chippewa	S-09-0027						2
Northwest	Chippewa	S-09-0028						2
Northwest	Chippewa	S-09-0029						2
Northwest	Chippewa	S-09-0030						2
Northwest	Douglas	S-16-0004						
Northwest	Douglas	S-16-0010						1
Northwest	Dunn	S-17-0004						1
North Central	Marathon	S-37-0042						
North Central	Marathon	S-37-0055						1
North Central	Marathon	S-37-0058						1
North Central	Marathon	S-37-0098						
North Central	Marathon	S-37-0099			2			2
Northwest	Pierce	S-47-0007						
Northwest	Pierce	S-47-0009						
Northwest	Polk	S-48-0003						2
Northwest	Polk	S-48-0004						2
Northwest	Polk	S-48-0006						1
North Central	Waupaca	S-68-0002		1		4		
North Central	Waushara	S-69-0003						1
		TOTAL	3	1	2	4	2	35

Standard Detail Drawing List

12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD SIGN SUPPORTS & TRAFFIC SIGNALS
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15D03-04	TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER
15D12-06A	TRAFFIC CONTROL, LANE CLOSURE
15D12-06B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D14-03	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)
15D15-02	TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE
15D16-03	TRAFFIC CONTROL, EXIT RAMP CLOSURE
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D21-04	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D22-03	TRAFFIC CONTROL, TWO LANE CLOSURE, NON-FREEWAY/EXPRESSWAY
15D27-03	TRAFFIC CONTROL, SHOULDER CLOSURE ON DIVIDED ROADWAY, SPEEDS GREATER THAN 40 MPH
15D28-03	TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY
15D37-02	TRAFFIC CONTROL, 2-LANE ROUNDABOUT



LOCATION OF RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT & TRAFFIC SIGNAL STRUCTURE PLAQUES

RAMP GATE, SIGN BRIDGE, OVERHEAD SIGN SUPPORT AND TRAFFIC SIGNAL STRUCTURE PLAQUE FOR SIGN BRIDGES AND OVERHEAD SIGN SUPPORT WHICH ARE NOT STRUCTURE MOUNTED

GENERAL NOTES

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

PLAQUES SHALL BE INCIDENTAL TO ALL NEW INSTALLATIONS.

IF THE PROPOSED SIGN BRIDGE OR OVERHEAD SIGN SUPPORT IS REPLACING AN EXISTING SIGN BRIDGE OR OVERHEAD SIGN SUPPORT, A NEW IDENTIFICATION PLAQUE WILL BE REQUIRED.

FASTEN TOP, CENTER AND BOTTOM OF PLAQUE TO POLE OR OTHER LOCATION AS FOLLOWS:

- GALVANIZED STEEL SHAFT - 3 STAINLESS STEEL POP RIVETS
- A588 STEEL SHAFT - SHIM FOR DRAINAGE WITH STAINLESS WASHERS; FASTEN WITH STAINLESS SELF-TAPPING SCREWS
- ALUMINUM SHAFTS - 3 ALUMINUM POP RIVETS

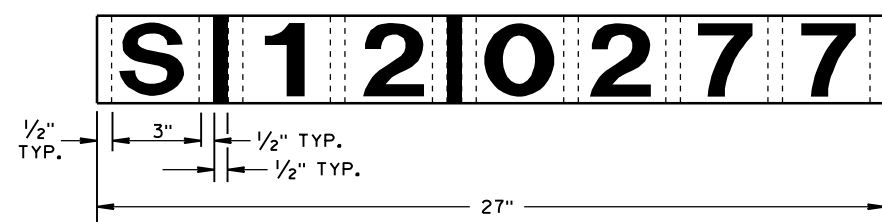
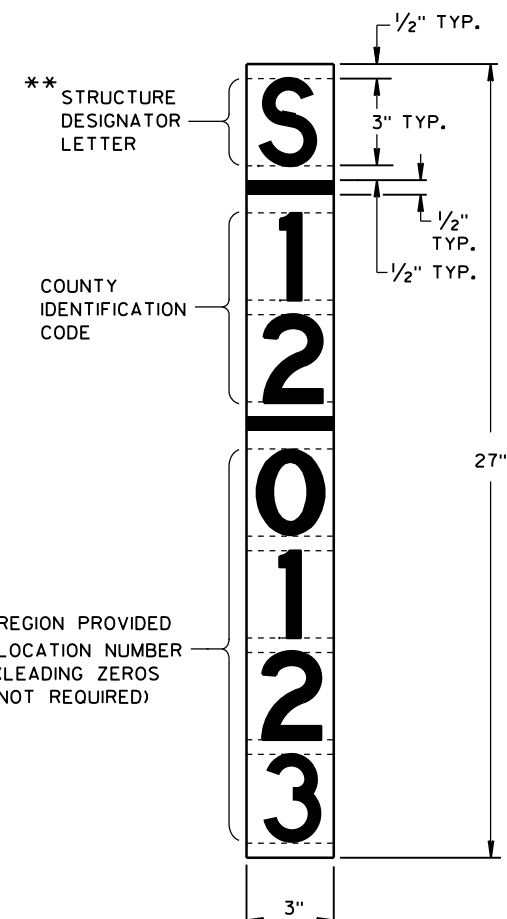
MOUNTING HEIGHT SHALL BE APPROXIMATELY 5.0' ABOVE CURB OR SHOULDER. ADJUST IF IT IS KNOWN THAT REQUIRED TRAFFIC SIGNS WILL OBSTRUCT.

PLAQUE MATERIALS:

- BASE - SHEET ALUMINUM, 0.060" THICK.
- FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE
- LINES - BLACK, 1/2" WIDE, SELF-ADHESIVE
- CHARACTERS:- BLACK, SELF ADHESIVE, SERIES "D", SIZE AS SHOWN.

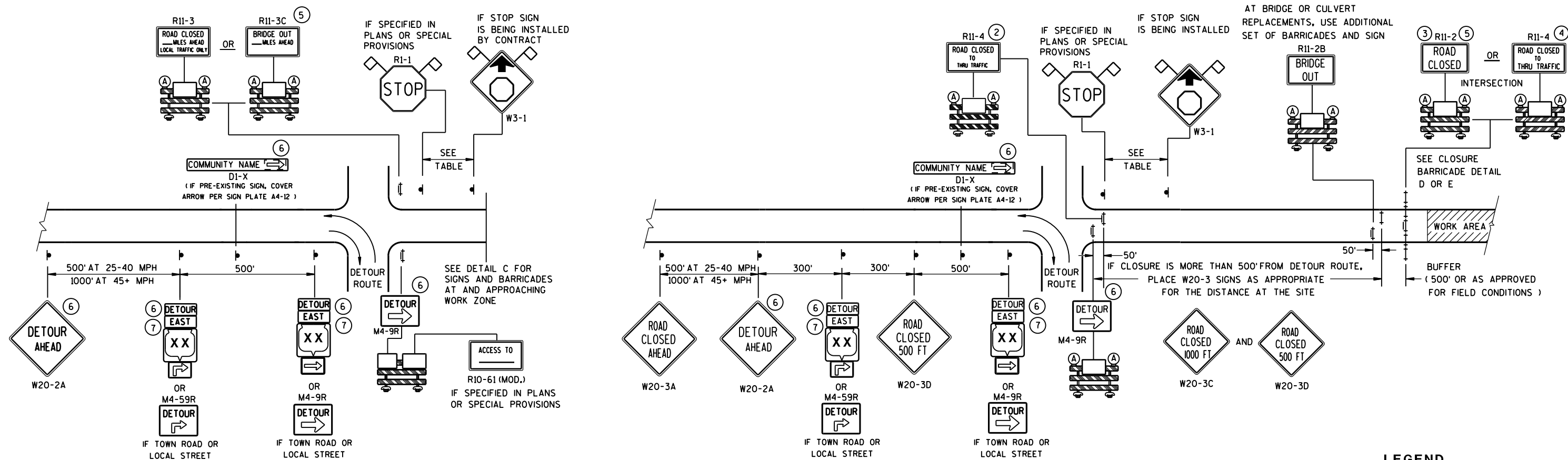
FOR SIGN BRIDGES, STRUCTURE MOUNTED, THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY AS SHOWN ON THE DRAWING. THE STRUCTURE PLAQUE SHALL BE MOUNTED HORIZONTALLY TO THE BACK OF THE SIGN, BETWEEN THE ALUMINUM EXTRUSIONS, NEAR THE TOP LEFT HAND CORNER OF THE SIGN. THE BASE MATERIAL SHALL BE OMITTED AND THE FACE ADHERED DIRECTLY TO THE ALUMINUM SURFACE. PRIOR TO ADHERING THE MATERIAL, THE ALUMINUM SURFACE SHALL BE SMOOTH, CLEAN AND DRY.

WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, & TRAFFIC SIGNALS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/4/2012 DATE	/S/ Travis Feltes STATE TRAFFIC ENGINEER OF DESIGN
FHWA	



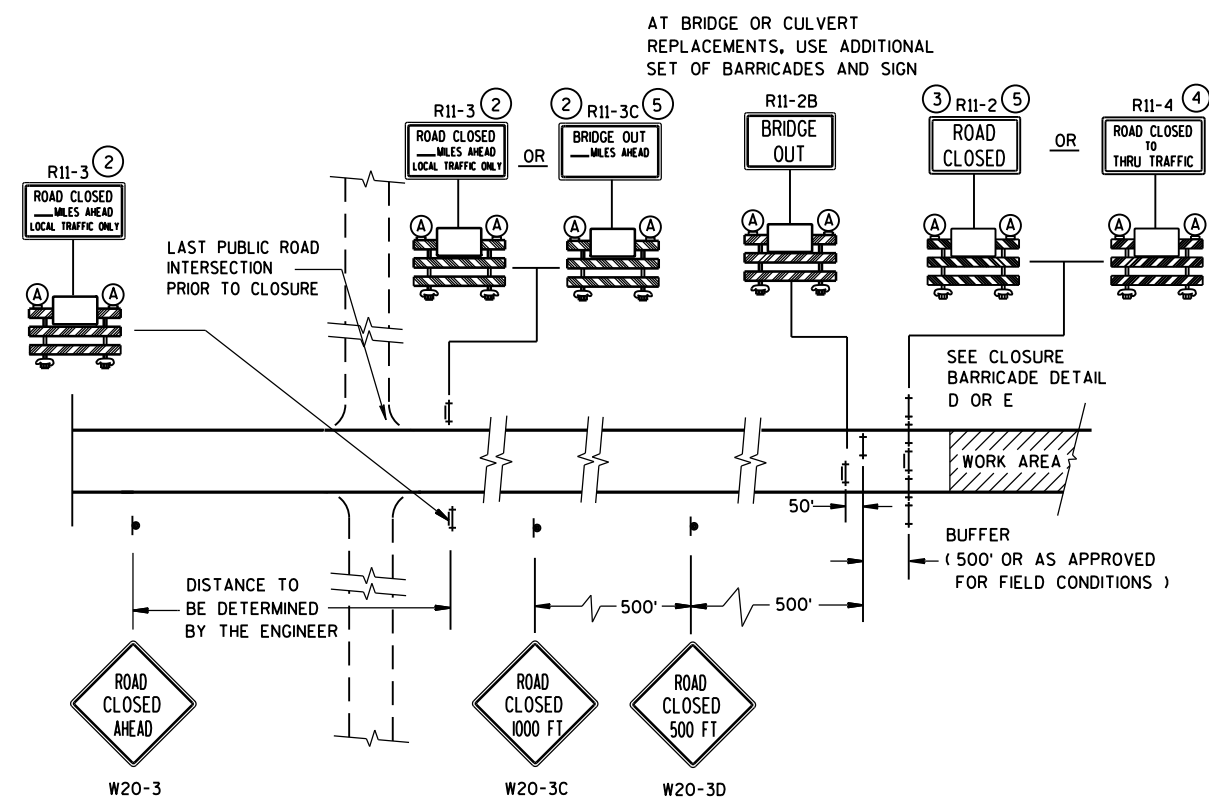
DETAIL A

**MAINLINE CLOSURE WITH POSTED DETOUR**

WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )















WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE ( 1000 FEET IF URBAN )



**DETAIL C**  
**MAINLINE CLOSURE, NO POSTED DETOUR**

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

- # LEGEND
-  SIGN ON PERMANENT SUPPORT
-  TYPE III BARRICADE
-  TYPE III BARRICADE WITH ATTACHED SIGN
-  TYPE "A" WARNING LIGHT (FLASHING)
-  WORK AREA
-  M4-8  
 M3-X
-  M1-4 OR  M1-5A OR  M1-6
-  M05-1 OR  M06-1
- FLAGS, 16" X 16" MIN., (ORANGE)

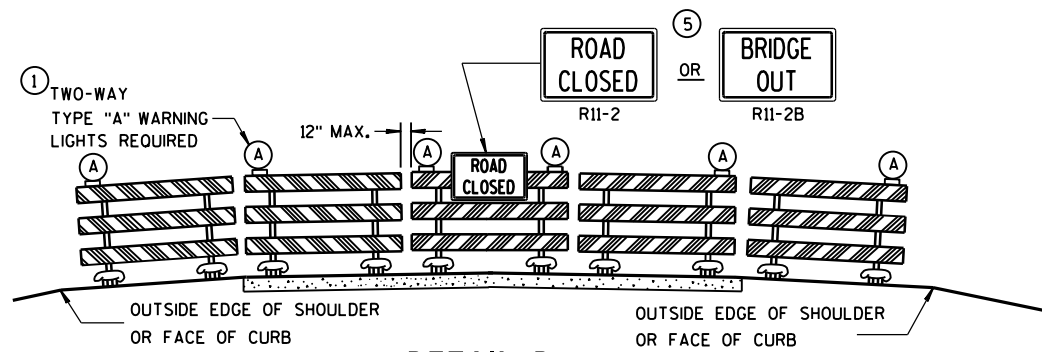
SEE SDD 15C2-SHEET "b"  
FOR GENERAL NOTES  
AND FOOTNOTES ① THROUGH ⑦

## BARRICADES AND SIGNS FOR MAINLINE CLOSURES

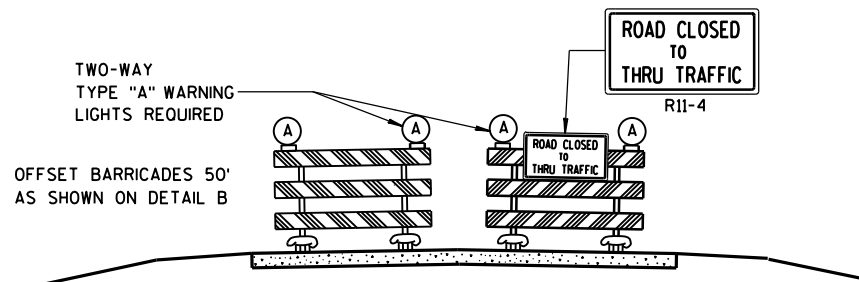
STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

Sept. 2015	/S/ Peter Amakobe Atepe
DATE	STATEWIDE WORK ZONE TRAFFIC
FHWA	SAFETY ENGINEER





DETAIL D  
ROAD CLOSURE BARRICADE DETAIL  
APPROACH VIEW



DETAIL E  
LANE CLOSURE BARRICADE DETAIL  
APPROACH VIEW

SEE SDD 15C2-SHEET "a" FOR LEGEND

### GENERAL NOTES

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

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.

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

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

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

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

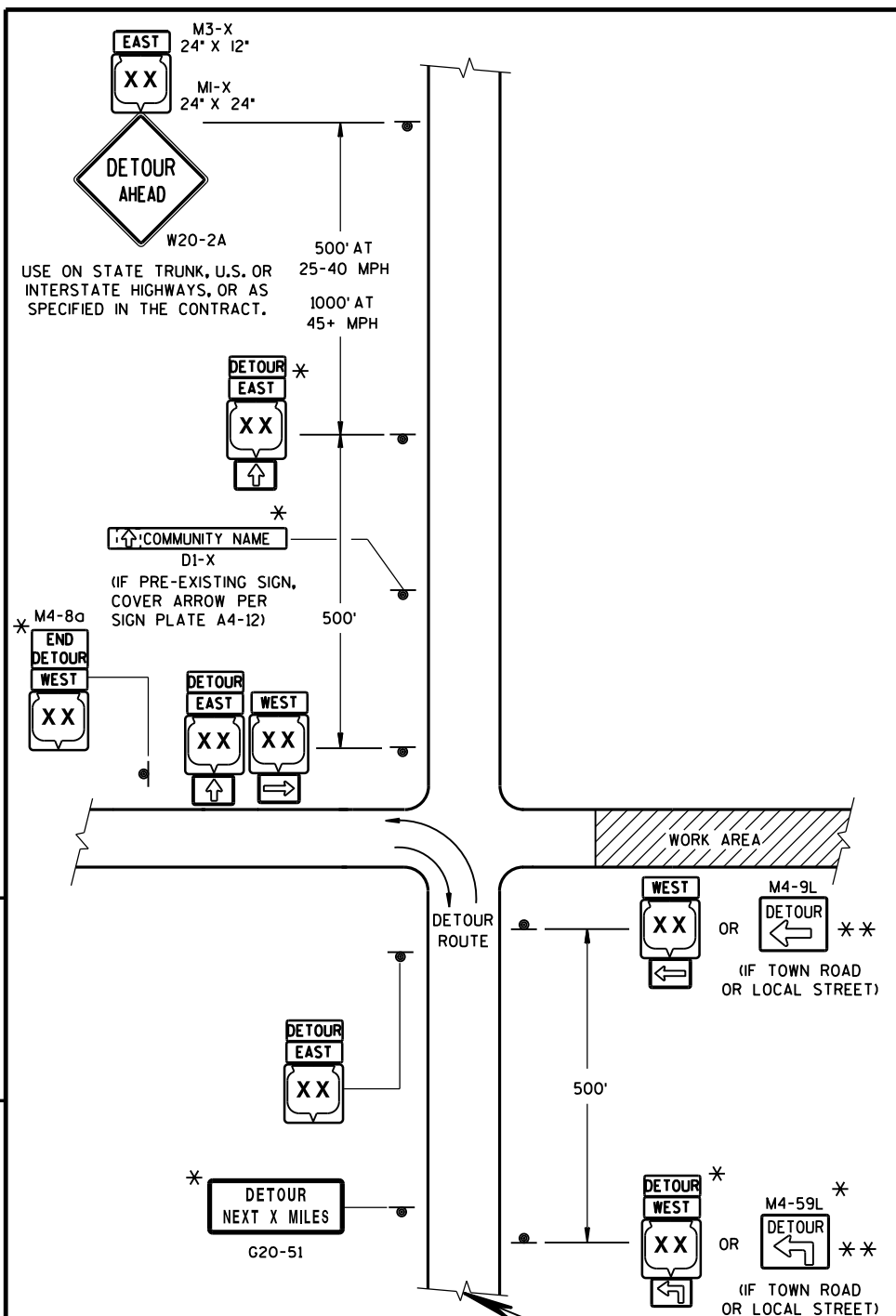
"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

- R11-2 SHALL BE 48" X 30".
- R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".
- M4-9 SHALL BE 30" X 24".
- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- R1-1 SHALL BE 36" X 36".

- 1 TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- 2 THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- 3 FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- 4 FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- 5 FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- 6 INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- 7 "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

MATCH POINT

DETAIL F  
DETOUR SIGNING

GENERAL NOTES

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

IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS, MODIFY EXISTING SIGNS WHERE POSSIBLE.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR 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.

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

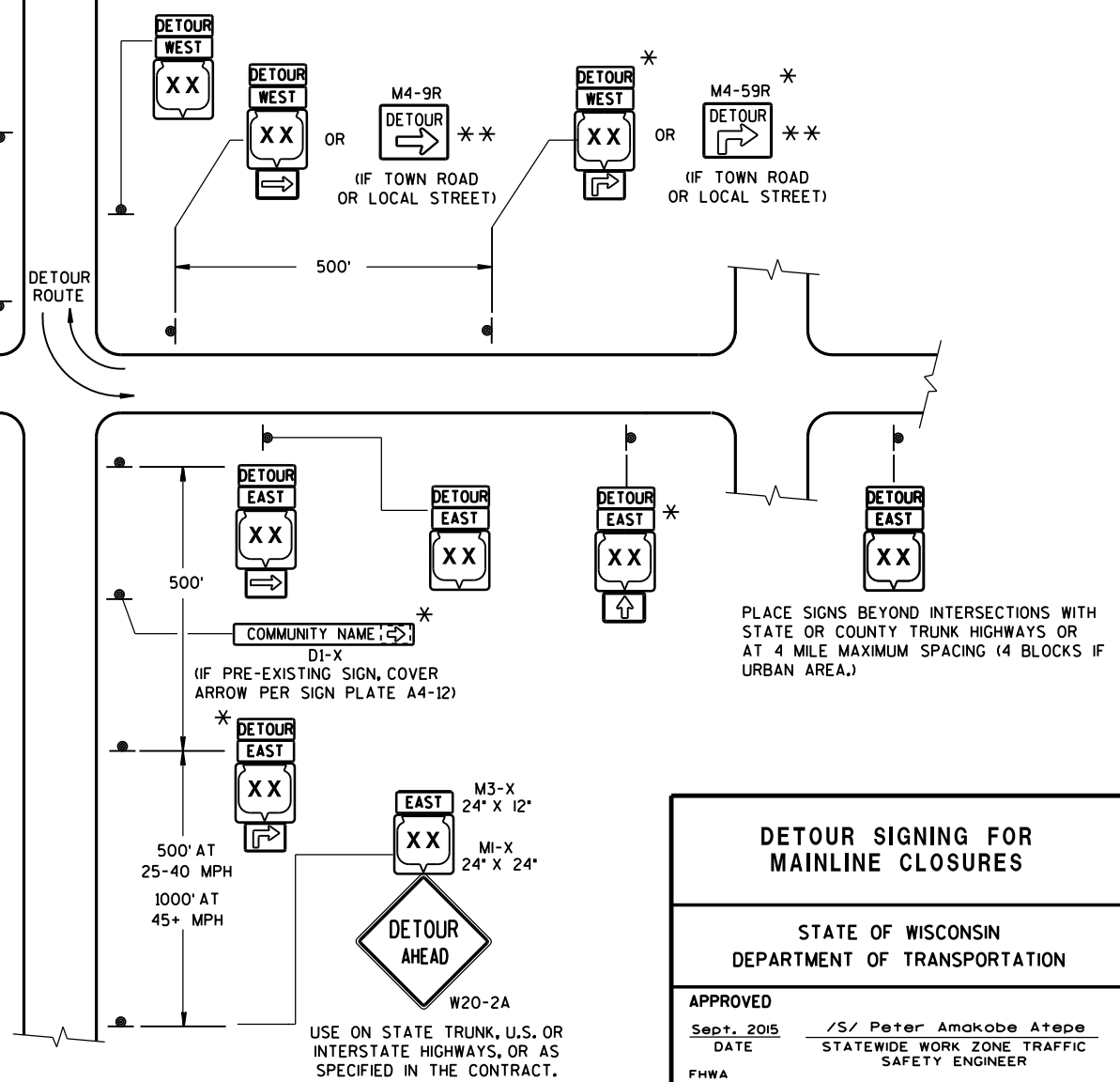
"MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

SIGN SIZES SHALL BE AS FOLLOWS:

- M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
- M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
- M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
- M4-9 SHALL BE 30" X 24".
- M4-8a SHALL BE 24" X 18".
- G20-51 SHALL BE 60" X 24".
- W20-2 SHALL BE 48" X 48".
- D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

\* OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.

\*\* FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.



DETOUR SIGNING FOR MAINLINE CLOSURES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

LEGEND

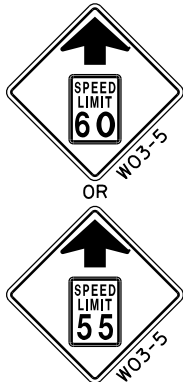
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- REMOVING PAVEMENT MARKING
- CONCRETE BARRIER TEMPORARY PRECAST
- DIRECTION OF TRAFFIC
- WORK AREA

L, TAPER LENGTH (MPH)						
SPEED (MPH)	W, LATERAL OFFSET (FT)					
	10	11	12	13	14	15
45	450	495	540	585	630	675
50	500	550	600	650	700	750
55	550	605	660	715	770	825
60	600	660	720	780	840	900
65	650	715	780	845	910	975
70	700	770	840	910	980	1050



W057-52  
48"x36"

INSTALL ON EACH APPROACH AT THE CLOSEST INTERSECTION WITH A STATE OR COUNTY TRUNK HIGHWAY, OR AS DIRECTED BY THE ENGINEER. WIDTH ON SIGN TO BE APPROX. 1 FOOT LESS THAN AVAILABLE WIDTH (OMIT IF AVAILABLE WIDTH IS MORE THAN 16 FEET).



LOCATED 2600 FEET IN ADVANCE OF R2-1 SIGN AND 500 FEET BEYOND THE "ROAD WORK 1 MILE" SIGN.



IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. THERE SHOULD BE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 2 OR 3 MILES.



\* INCLUDE RESUME SPEED LIMIT SIGN A MINIMUM OF 200 FEET (500 FEET DESIRABLE) AFTER END ROAD WORK SIGNS.

GENERAL NOTES

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

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"x48" UNLESS OTHERWISE NOTED.

"W0" 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.

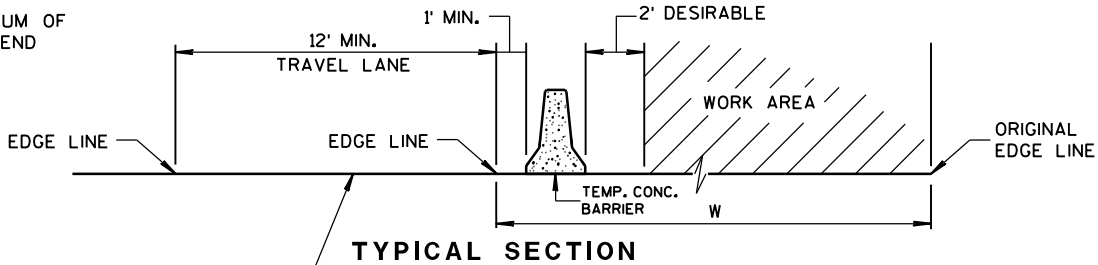
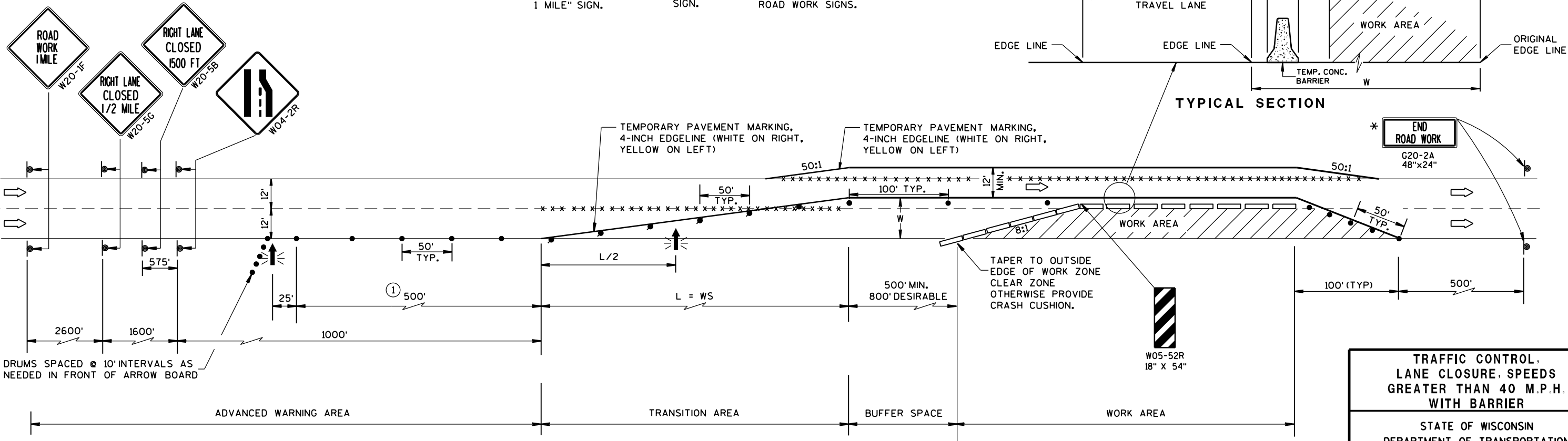
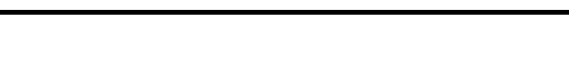
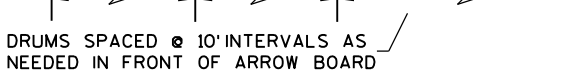
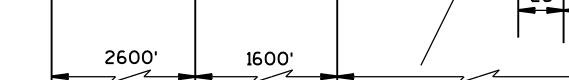
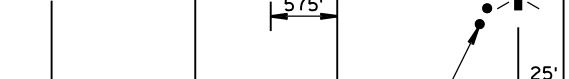
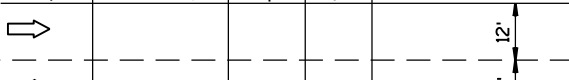
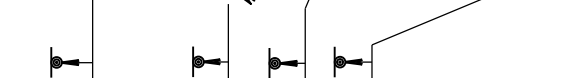
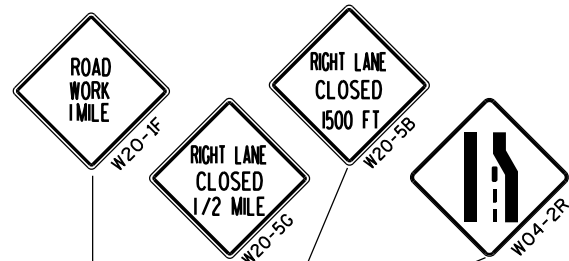
1. CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUM TAPER.

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 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.

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 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.



TRAFFIC CONTROL, LANE CLOSURE, SPEEDS GREATER THAN 40 M.P.H. WITH BARRIER	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept., 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	

LEGEND

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

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

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

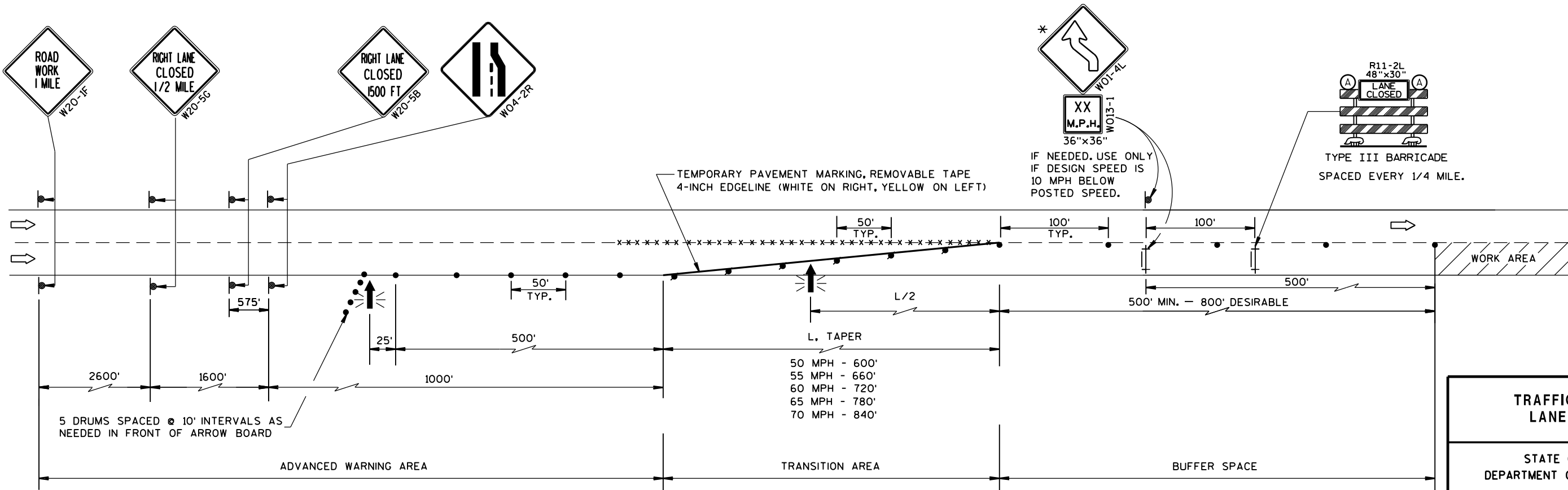
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

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

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

\* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.



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

LEGEND

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

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

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

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

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

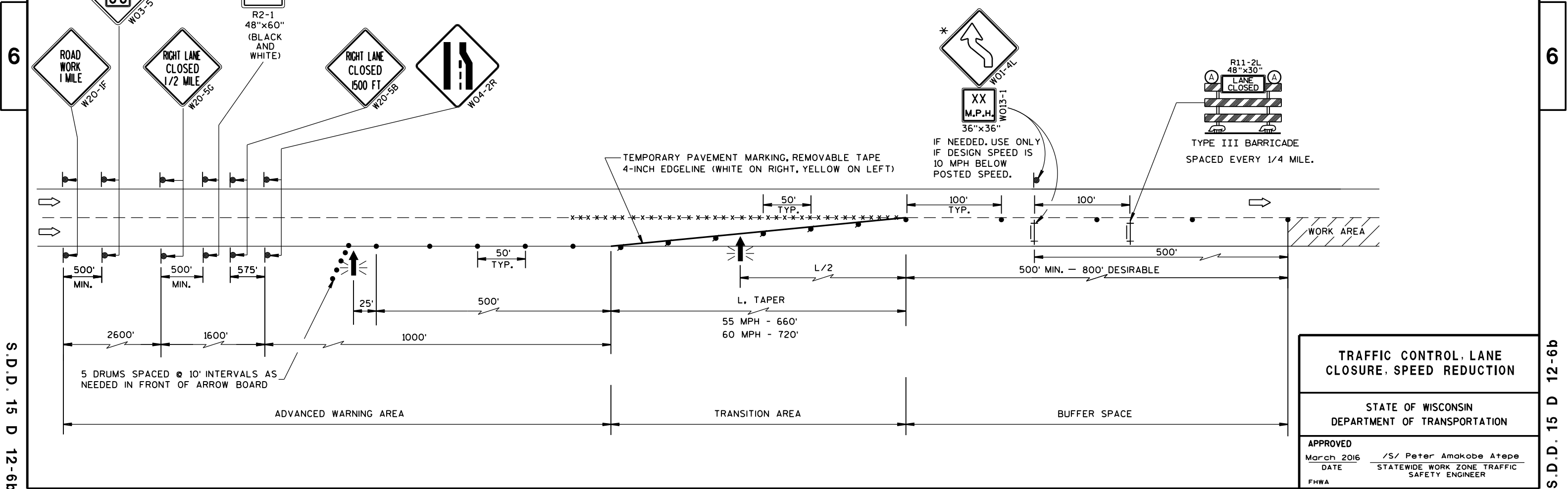
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

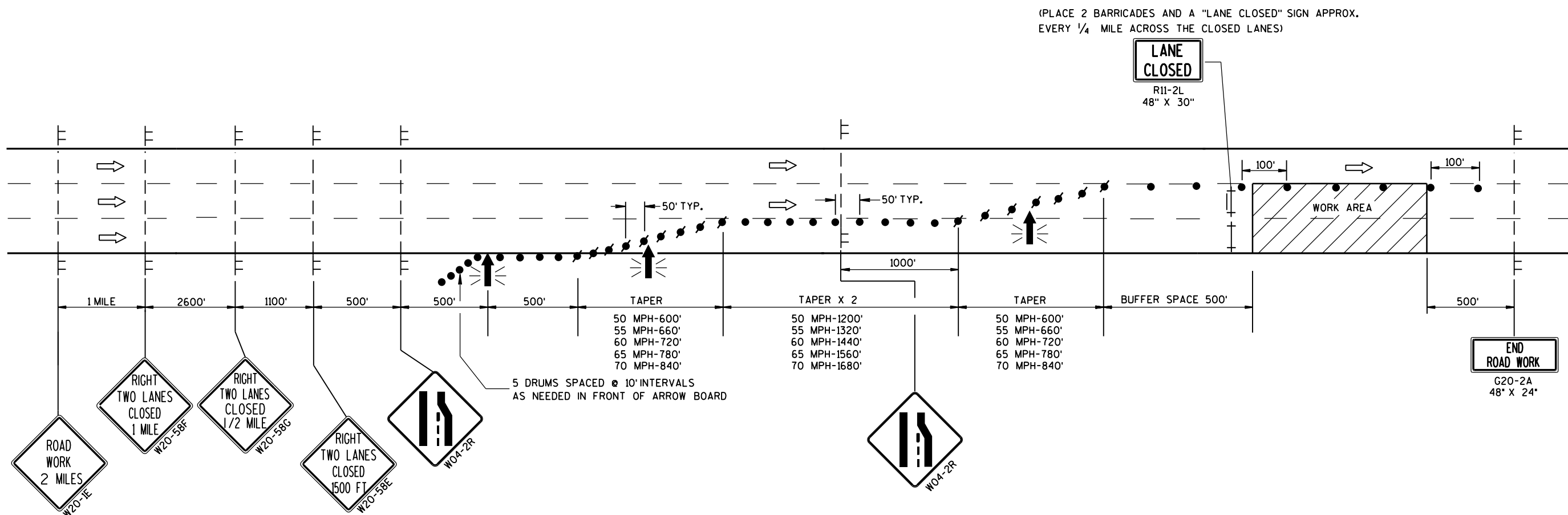
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN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

\* THE LEFT REVERSE CURVE SIGN (W01-4L) IS ONLY REQUIRED WHEN THIS DETAIL IS USED IN COMBINATION WITH "SINGLE LANE CROSSOVER" DETAIL.

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



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



LEGEND

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

GENERAL NOTES

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

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

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

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

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

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

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

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

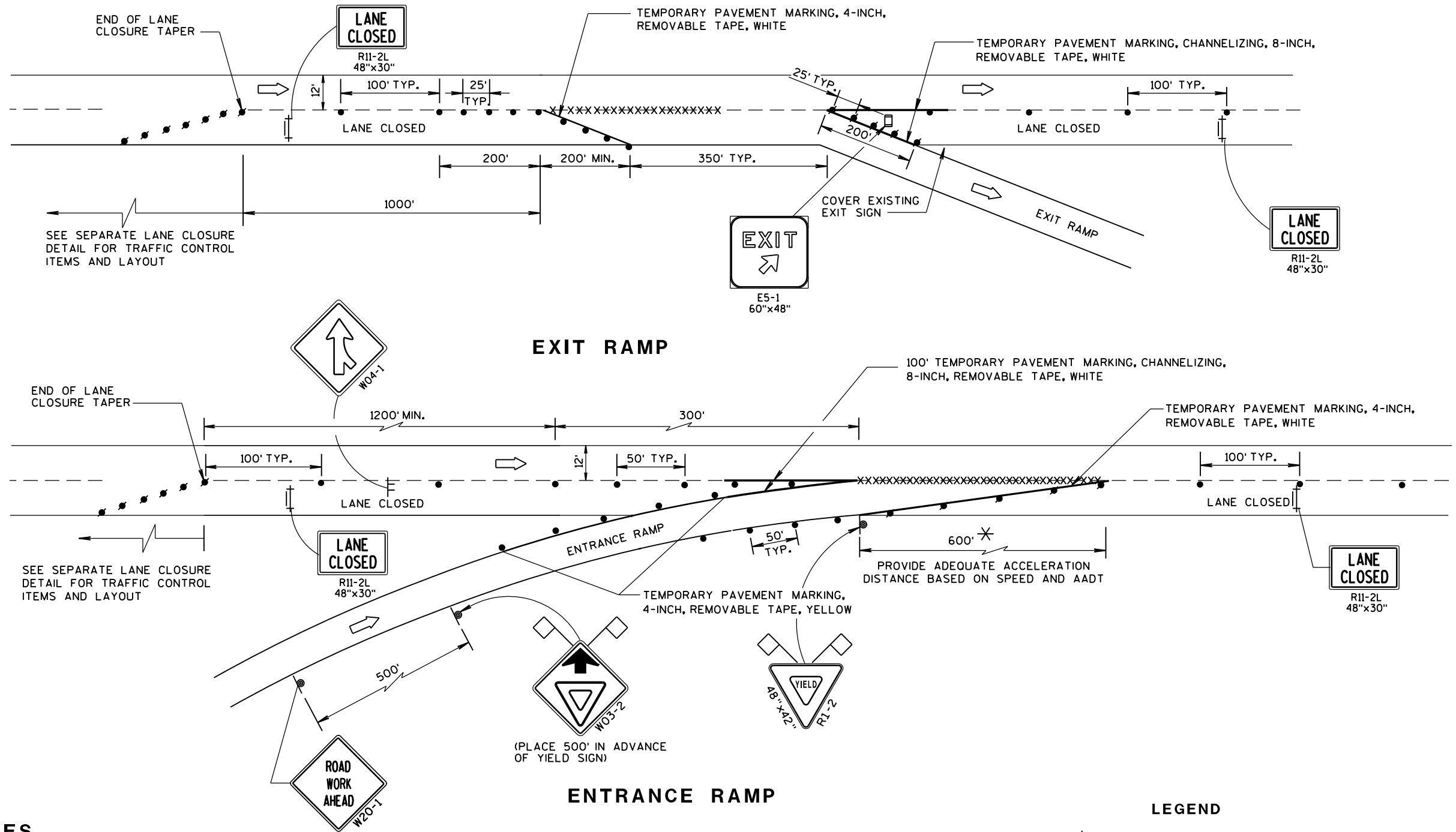
WHEN A RAMP OR SIDE ROAD INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

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

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

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

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



### GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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

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

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

IF INDICATED IN MISCELLANEOUS QUANTITIES, SUBSTITUTE FLEXIBLE TUBULAR MARKERS FOR DRUMS IN THE GORE BETWEEN THE ENTRANCE 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 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

\* LENGTH OF OPENING MAY BE REDUCED TO 150 FEET DURING STAGING OF WORK IN IMMEDIATE AREA OF RAMP TAPER.

### LEGEND

- ⊙ SIGN ON PERMANENT SUPPORT
- ┼ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- XXXXX REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- ┼ TYPE III BARRICADE WITH ATTACHED SIGN
- ▢ FLAGS, 16" x 16" MIN., (ORANGE)
- ➡ DIRECTION OF TRAFFIC

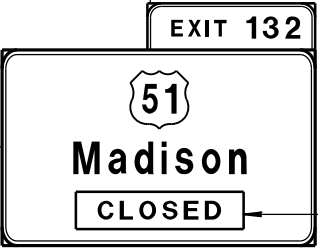
TRAFFIC CONTROL, EXIT AND ENTRANCE RAMP WITHIN LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2015 DATE	/S/ Peter Amokobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	





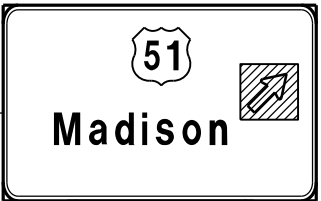
G20-60  
108"x24"

OR



G20-60  
108"x24"

PLACE SIGN G20-60 OVER MILEAGE  
ON EXISTING E1-1A SIGN



COVER ARROW ON  
EXISTING E4-1A  
SIGN (COVERING  
SIGNS TYPE I)

G20-61  
120"x30"

# GENERAL NOTES

THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.

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

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

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

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

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

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

WORK AREAS WITH A DROPOFF ALONG THE EDGE OF AN OPEN TRAVEL LANE SHALL BE LEVELED WITH TEMPORARY FILL WHEN THE CONTRACTOR IS NOT WORKING ADJACENT TO THE TRAVEL LANE. DRUMS SHALL BE PLACED ENTIRELY OUTSIDE THE TRAVEL LANE, ALLOWING THE FULL UNOBSTRUCTED LANE WIDTH, WHEN THE WORK IS NOT IN PROGRESS.

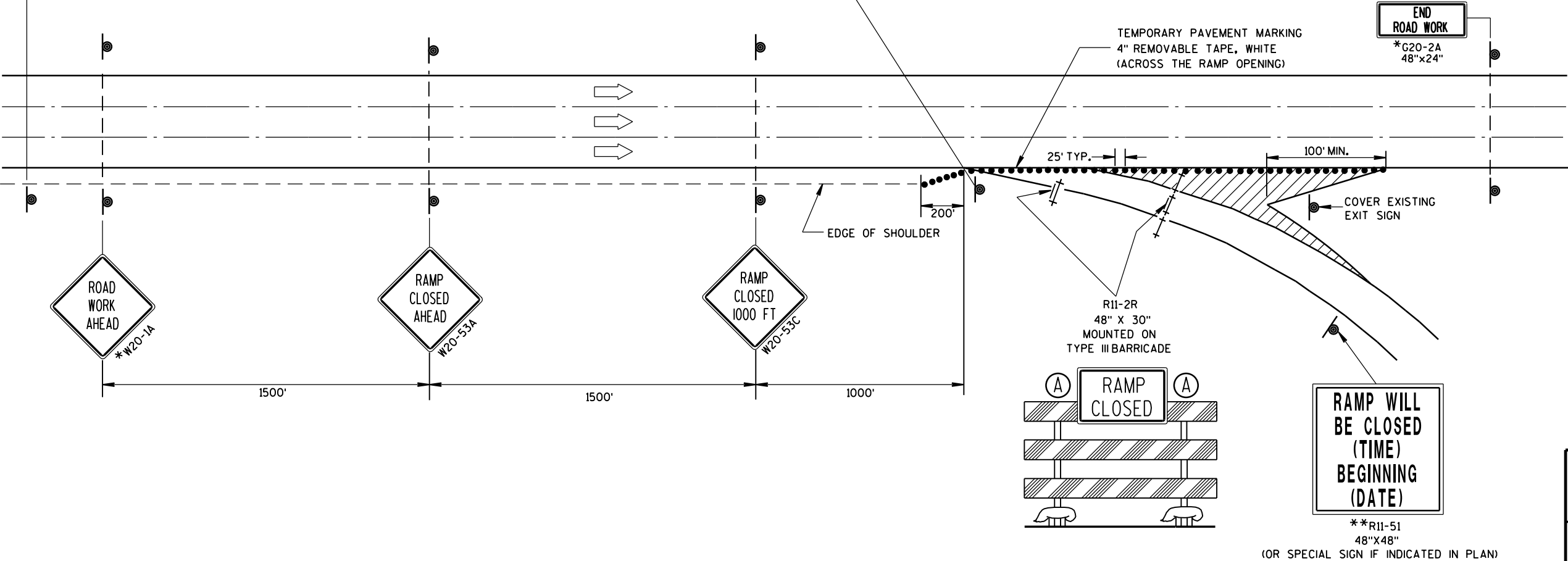
WHERE MEDIAN BARRIER IS IN PLACE, SIGNS SHOWN ON LEFT SIDE OF ROADWAY MAY BE OMITTED FOR RIGHT SIDE RAMP CLOSURES OF LESS THAN 12-HOUR DURATION.

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

\*\* PLACE "RAMP WILL BE CLOSED" SIGN 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

6

6



## LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TRAFFIC CONTROL DRUM
- SIGN ON PERMANENT SUPPORT
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC

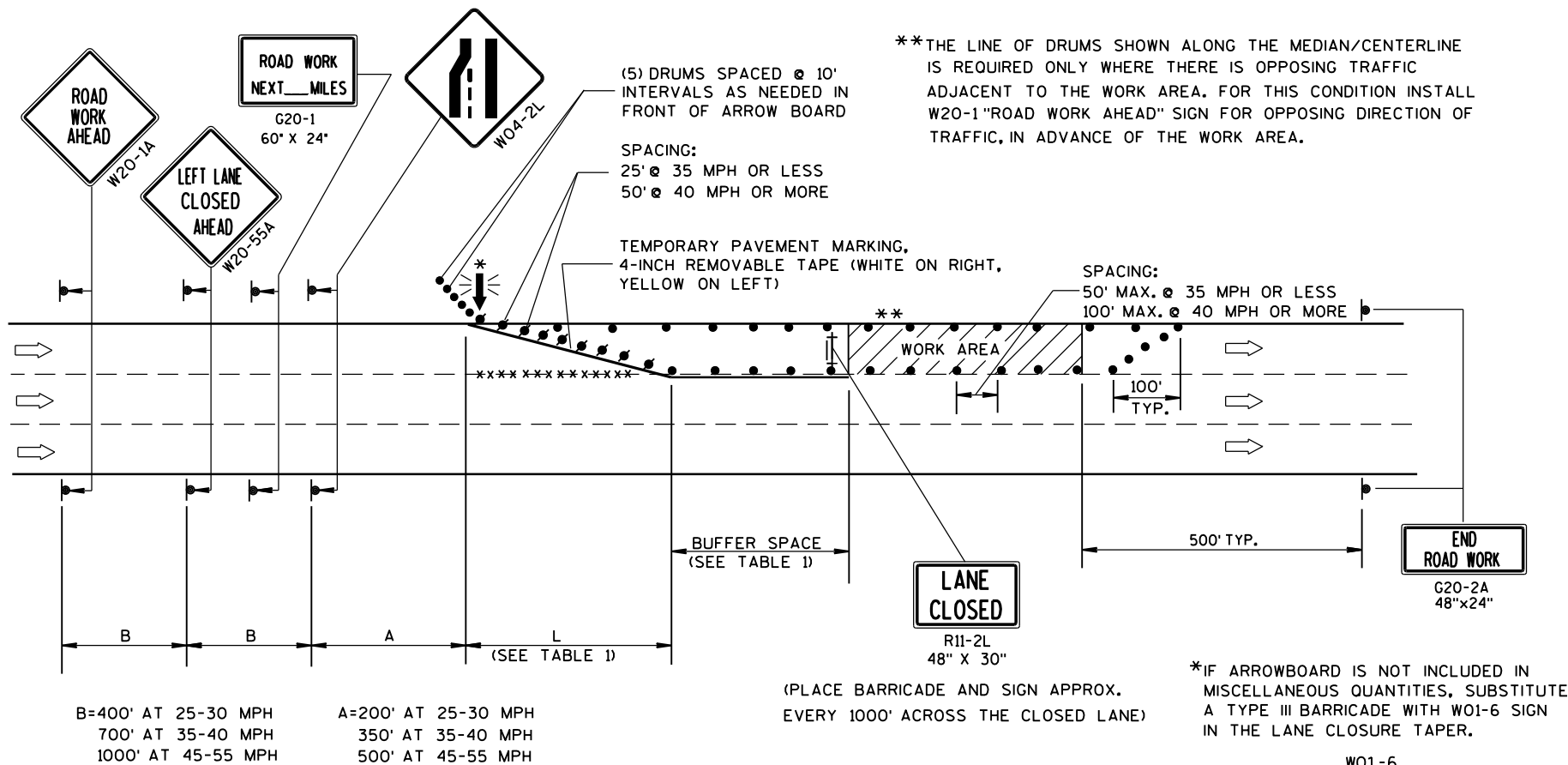
TRAFFIC CONTROL,  
EXIT RAMP CLOSURE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
Sept. 2015 /S/ Peter Amakobe Atepe  
DATE STATEWIDE WORK ZONE TRAFFIC  
FHWA SAFETY ENGINEER

S.D.D. 15 D 16-3

S.D.D. 15 D 16-3



GENERAL NOTES

THIS LANE CLOSURE DETAIL IS TYPICAL FOR CLOSING THE LEFT LANE. FOR A RIGHT LANE CLOSURE, REVERSE THE TRAFFIC CONTROL.

THIS DETAIL MAY BE USED FOR ROADWAYS WITH EITHER TWO OR THREE LANES IN EACH DIRECTION.

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 DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY DISTRICT TRAFFIC UNIT.

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

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

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

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.

ON UNDIVIDED ROADWAYS, OMIT THE SIGNS SHOWN ON LEFT SIDE OF ROAD.

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

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

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

PLACE THE ARROWBOARD AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE LANE CLOSURE TAPER, PREFERABLY ON THE SHOULDER OR TERRACE.

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

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

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

TABLE 1  
TAPER AND BUFFER SPACE  
FOR 12' LANE WIDTH

S	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

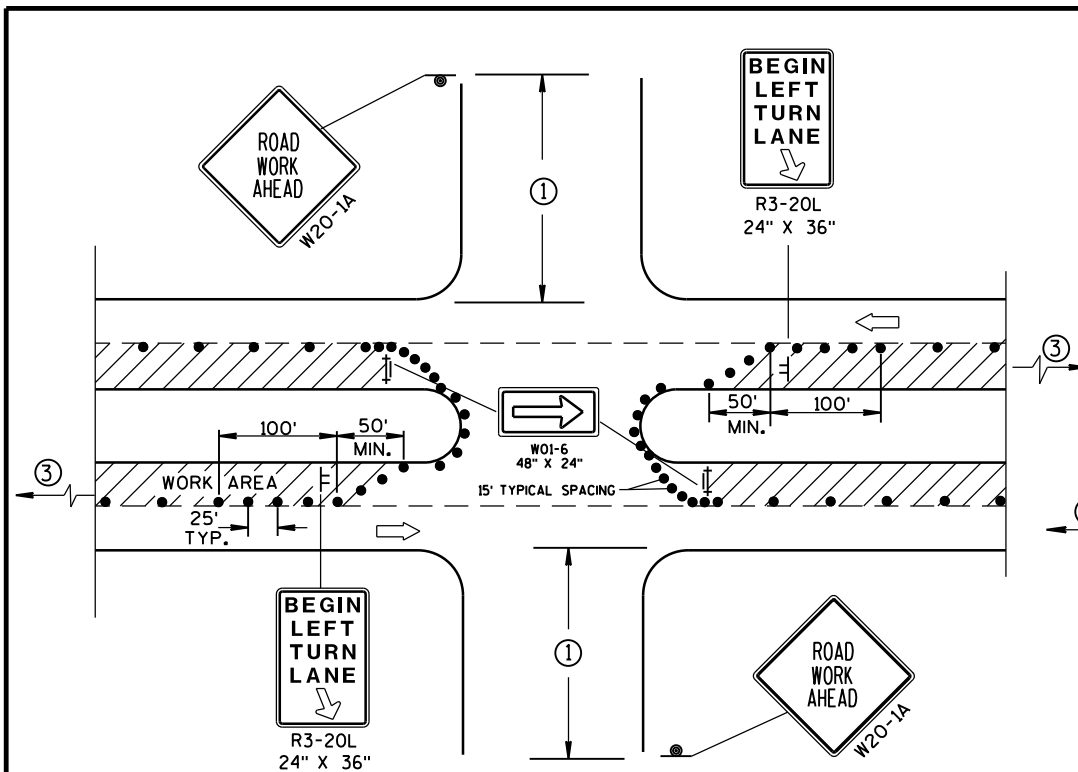
S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

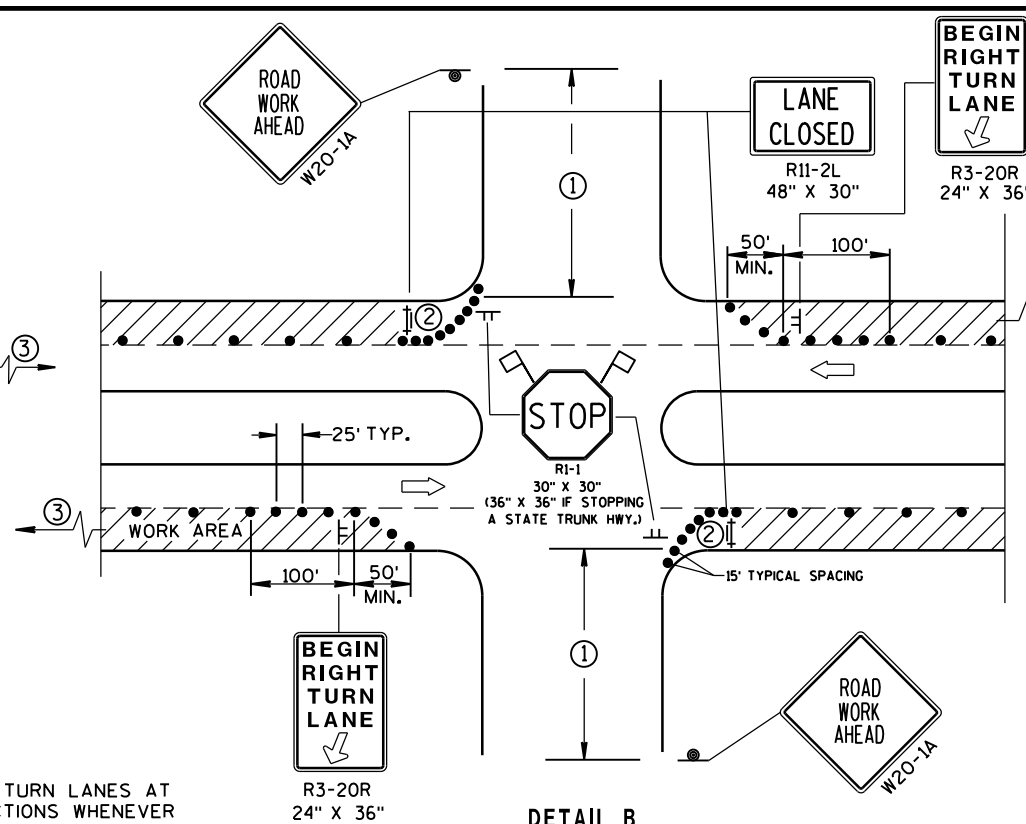
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2016 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



DETAIL A  
FOR LEFT LANE CLOSURE AT  
INTERSECTION OR MEDIAN OPENING

PROVIDE TURN LANES AT  
INTERSECTIONS WHENEVER  
STAGING OF WORK ALLOWS.  
TAPER AND TURN LANE  
LENGTHS BASED ON FIELD  
CONDITIONS AS APPROVED  
BY THE ENGINEER.



DETAIL B  
FOR RIGHT LANE CLOSURE  
AT INTERSECTION

## 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 SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

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

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.

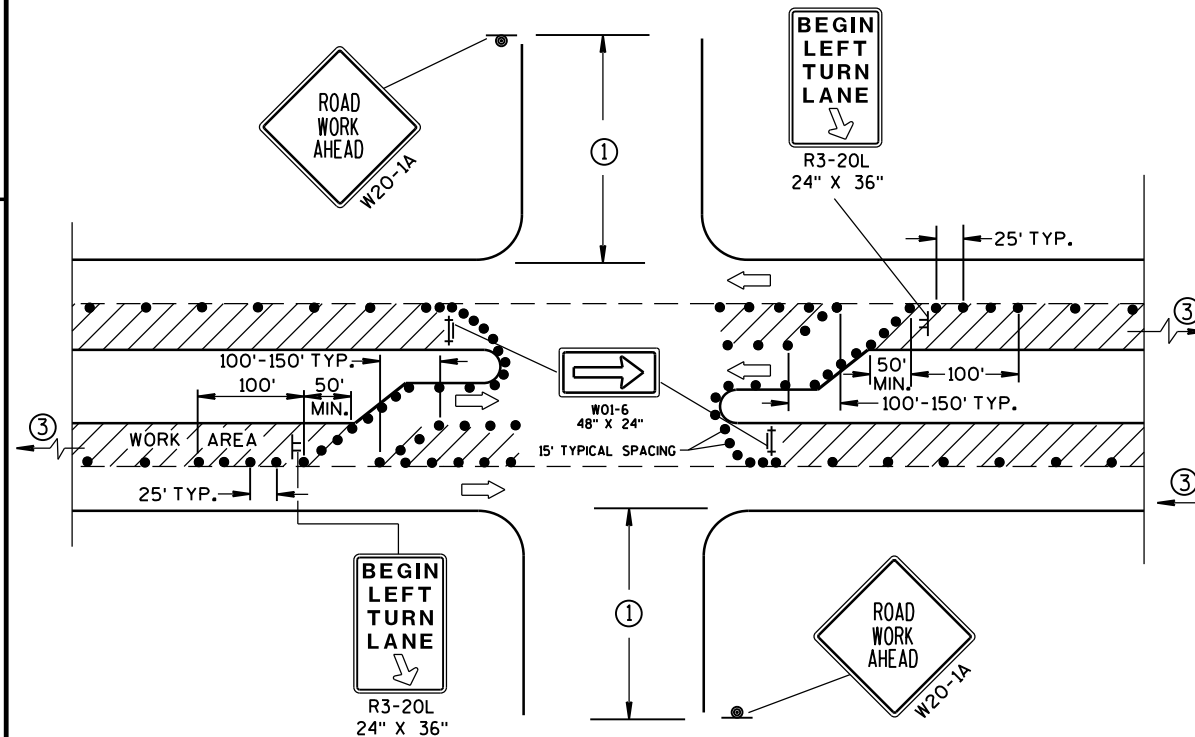
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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

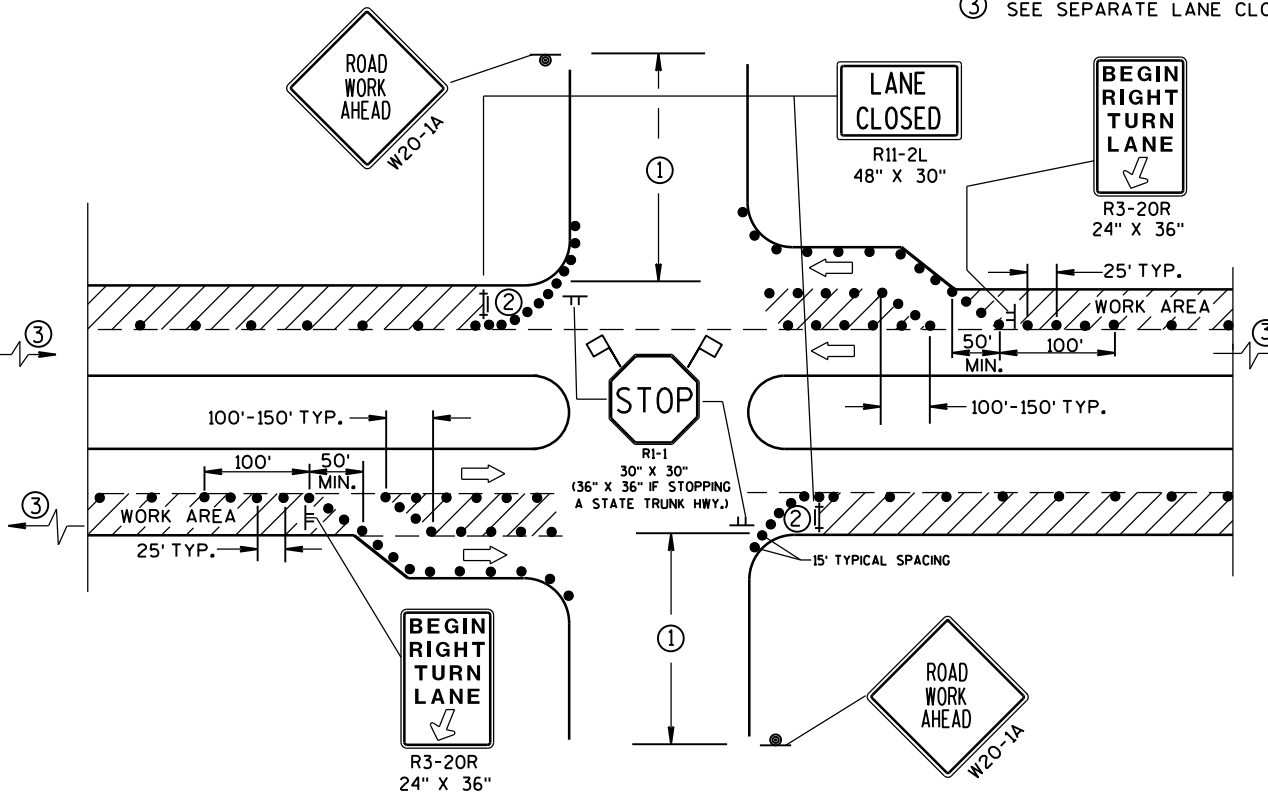
- ① 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.  
350' IF 35-40 MPH.  
200' IF 25-30 MPH.
- ② ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.
- ③ SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

## LEGEND

- TRAFFIC CONTROL DRUM
- ⊙ SIGN ON PERMANENT SUPPORT
- ⊢ SIGN ON TEMPORARY SUPPORT (5' MIN. MOUNTING HEIGHT)
- ⊢ TYPE III BARRICADE WITH ATTACHED SIGN AND TYPE "A" WARNING LIGHT (FLASHING)
- ➡ DIRECTION OF TRAFFIC
- ⚑ FLAGS, 16" X 16" MIN., (ORANGE)
- ▨ WORK AREA



DETAIL C  
FOR LEFT LANE CLOSURE AT INTERSECTION OR  
MEDIAN OPENING (WITH LEFT TURN BAY OPEN)



DETAIL D  
FOR RIGHT LANE CLOSURE AT INTERSECTION  
(WITH RIGHT TURN BAY OPEN)

## TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2016 /S/ Peter Anakobe Atepe  
DATE STATEWIDE WORK ZONE TRAFFIC  
FHWA SAFETY ENGINEER

TABLE 1  
TAPER AND BUFFER SPACE  
FOR 12' LANE WIDTH

s	L	BUFFER SPACE
25	125'	55'
30	180'	85'
35	245'	120'
40	320'	170'
45	540'	220'
50	600'	280'
55	660'	335'

FOR LANE WIDTH OTHER THAN 12':

L = WS AT 45 MPH OR GREATER

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

L = TAPER LENGTH IN FEET

S = NON-CONSTRUCTION SPEED LIMIT (MPH)

W = WIDTH OF LANE CLOSURE

LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- FLASHING ARROW BOARD
- DIRECTION OF TRAFFIC
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)
- WORK AREA

GENERAL NOTES

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

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

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

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" SIGNS MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

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

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

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.

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

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

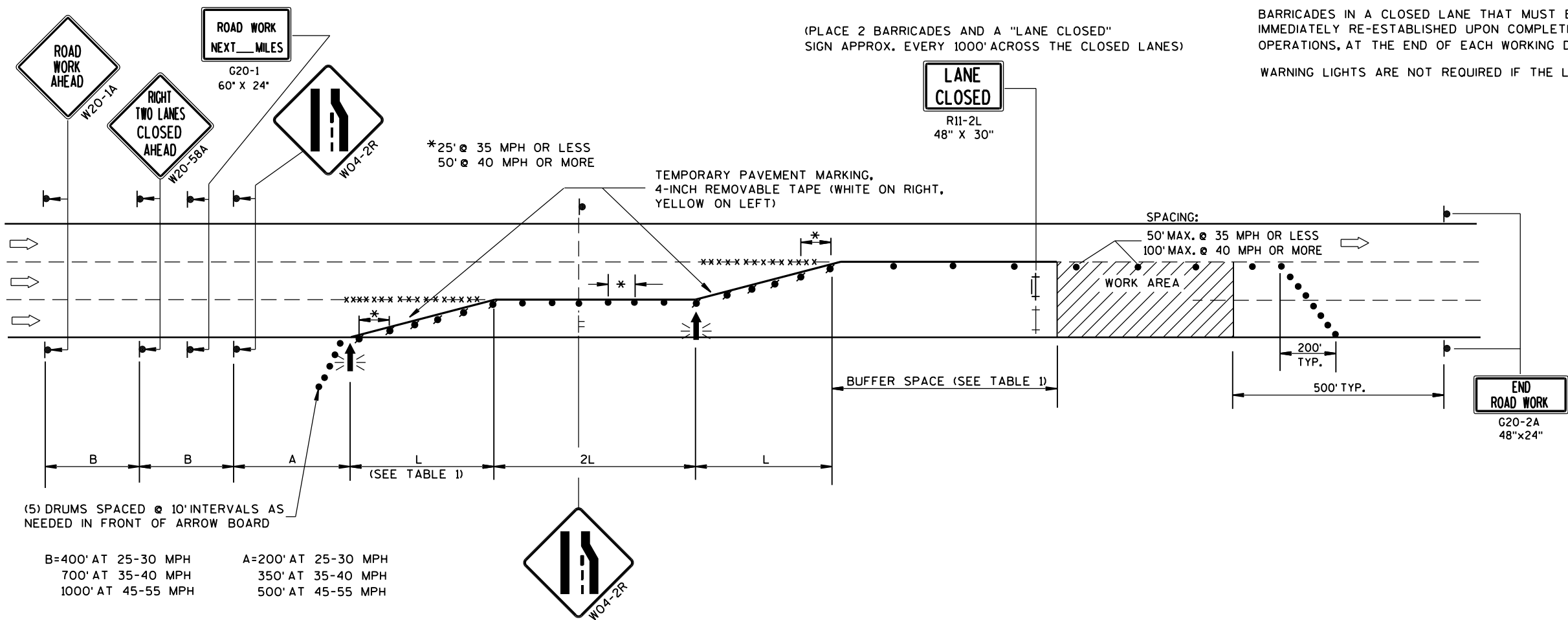
CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROWBOARDS SO THE APPROACHING DRIVER HAS A CLEAR VIEW OF THE ARROWBOARDS AND LANE CLOSURE DRUMS.

WHERE THE SHOULDER OR TERRACE HAS INSUFFICIENT SPACE TO LOCATE THE ARROWBOARD AS SHOWN, PLACE THE ARROWBOARD IN THE LANE CLOSURE TAPER AS CLOSE AS POSSIBLE TO THE BEGINNING OF THE TAPER.

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

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

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



TRAFFIC CONTROL,  
TWO LANE CLOSURE,  
NON-FREEWAY/EXPRESSWAY

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2016

DATE

FHWA

/S/ Peter Amakobe Atepe

STATEWIDE WORK ZONE TRAFFIC

SAFETY ENGINEER

LEGEND

- TRAFFIC CONTROL DRUM
- ⦿ SIGN ON PERMANENT SUPPORT
- ➡ DIRECTION OF TRAFFIC
- ⚡➡ FLASHING ARROW BOARD
- ▨ WORK AREA

GENERAL NOTES

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

THIS DETAIL MAY BE USED FOR DIVIDED ROADWAYS WITH ANY NUMBER OF TRAVEL LANES.

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

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

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

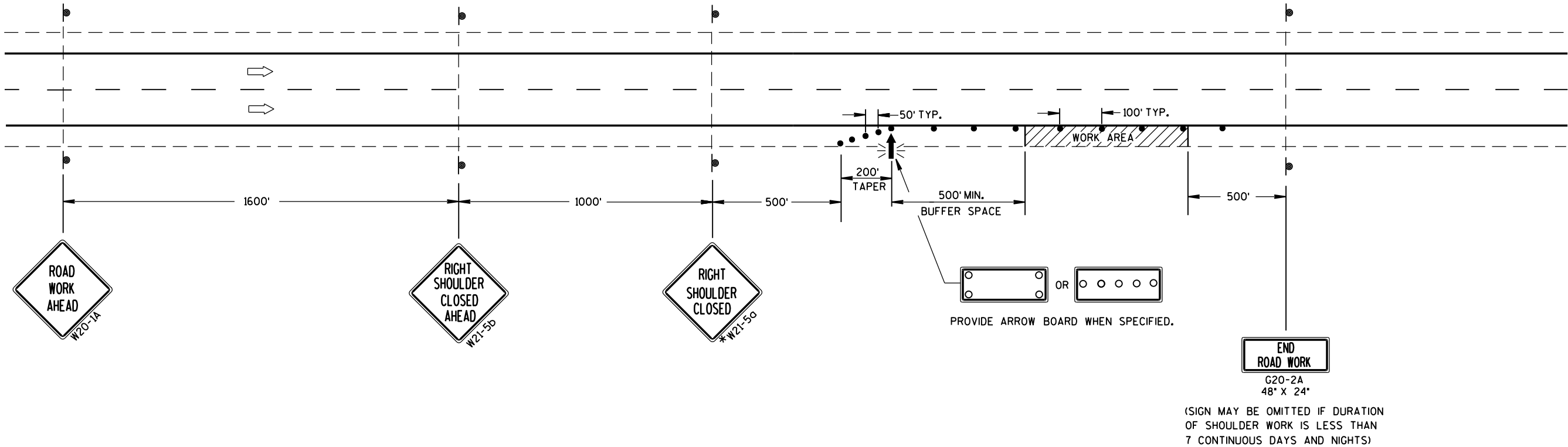
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

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

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

\*FOR SHORT DURATION SHOULDER WORK OF LESS THAN ONE HOUR, THE W21-5a SIGN MAY BE OMITTED.



TRAFFIC CONTROL  
SHOULDER CLOSURE ON DIVIDED  
ROADWAY, SPEEDS GREATER  
THAN 40 MPH

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2016 /S/ Peter Amakobe Atepe  
DATE STATEWIDE WORK ZONE TRAFFIC  
FHWA SAFETY ENGINEER

GENERAL NOTES

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

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

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

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

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

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

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

TABLE A

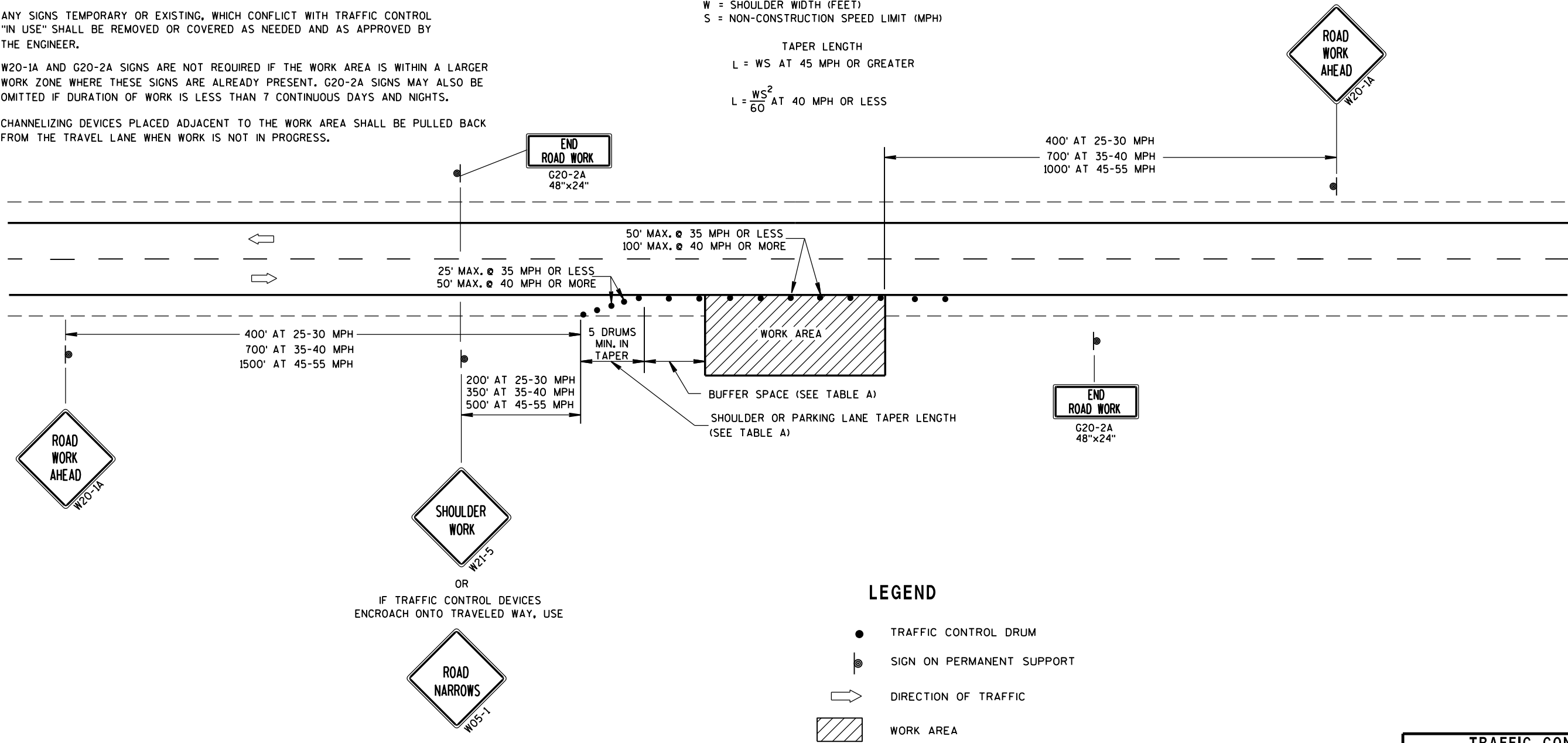
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S	W	4	6	8	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

TAPER LENGTH  
L = WS AT 45 MPH OR GREATER

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

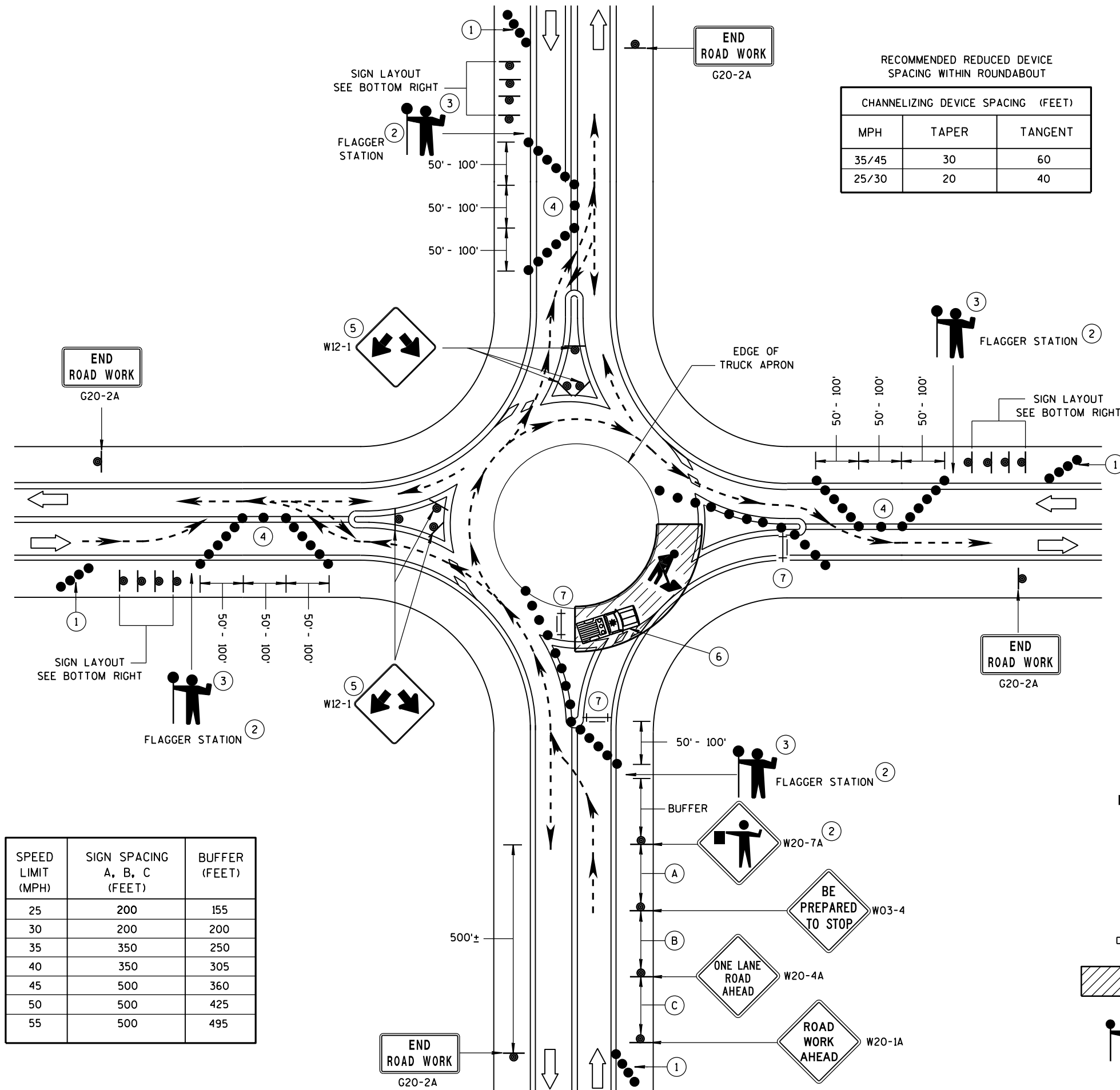
SHOULDER TAPER LENGTH =  $\frac{1}{3}L$



LEGEND

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

TRAFFIC CONTROL, WORK ON SHOULDER OR PARKING LANE, UNDIVIDED ROADWAY	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED July 14, 2015 DATE	/S/ Peter Amakobe Atepe STATEWIDE WORK ZONE TRAFFIC SAFETY ENGINEER
FHWA	



SPEED LIMIT (MPH)	SIGN SPACING A, B, C (FEET)	BUFFER (FEET)
25	200	155
30	200	200
35	350	250
40	350	305
45	500	360
50	500	425
55	500	495

END  
ROAD WORK  
G20-2A

RECOMMENDED REDUCED DEVICE  
SPACING WITHIN ROUNDABOUT

CHANNELIZING DEVICE SPACING (FEET)		
MPH	TAPER	TANGENT
35/45	30	60
25/30	20	40

GENERAL NOTES

ALL SIGNS ARE 48"x48" BLACK ON ORANGE UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS IF APPROVED BY THE ENGINEER.

REMOVE OR COVER CONFLICTING SIGNS.

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

ONLY ONE QUADRANT OF TRAFFIC SHALL BE RELEASED AT A TIME.

FLAGGERS SHALL CONTROL TRAFFIC ON ALL APPROACHES OF THE ONE-LANE ROUNDABOUT. ONE FLAGGER SHALL BE DESIGNATED LEAD FLAGGER.

RADIO COMMUNICATION SHALL BE USED BY ALL FLAGGERS.

NIGHT TIME WORK REQUIRES ADDITIONAL LIGHTING AT FLAGGER STATION(S).

- 1 PLACE A MINIMUM OF 4 DRUMS ON THE SHOULDER IN ADVANCE OF THE PCMS IN A TAPER FOR DELINEATION ON ALL APPROACHES TO THE ROUNDABOUT.
- 2 ESTABLISH THE LIMITS OF THE WORK ZONE TO ENSURE THE MAXIMUM POSSIBLE SIGHT DISTANCE TO THE FLAGGER STATION.
- 3 FLAGGERS SHALL BE IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.
- 4 ADJUST CHANNELIZING DEVICES TO ACCOMMODATE FOR TURNING RADIUS OF LARGE VEHICLES AS DIRECTED BY THE ENGINEER.
- 5 GUIDE SIGN WITH ROAD NAMES MAY BE USED IN LIEU OF THE DOUBLE ARROW (W12-1) SIGN.
- 6 BUFFER VEHICLE RECOMMENDED TO SHIELD WORK AREA.
- 7 TYPE III BARRICADES WITH ROAD CLOSED SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- || TYPE III BARRICADE WITH ATTACHED SIGN
- ➡ DIRECTION OF TRAFFIC
- ▨ WORK AREA
- 🚧 FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

TRAFFIC CONTROL,  
2-LANE ROUNDABOUT

STATE OF WISCONSIN  
DEPARTMENT OF TRANSPORTATION

APPROVED  
June 2016 /S/ Peter Amakobe Atepe  
DATE STATEWIDE WORK ZONE TRAFFIC  
FHWA SAFETY ENGINEER



LIST OF REPAIR DRAWINGS

1. FOUNDATION DETAILS

2. TRUSS DETAILS (1 OF 2)

3. TRUSS DETAILS (2 OF 2)

4. SIGN PANEL DETAILS (1 OF 2)

5. SIGN PANEL DETAILS (2 OF 2)

6. S-05-0015

7. S-05-0026

8. S-05-0038

9. S-05-0039

10. S-05-0040

11. S-05-0042

12. S-05-0043

13. S-05-0049

14. S-05-0055

15. S-05-0056

16. S-05-0057

17. S-05-0058

18. S-05-0064

19. S-05-0067

20. S-05-0077

21. S-05-0222

22. S-05-0236

23. S-09-0027

24. S-09-0028

25. S-09-0029

26. S-09-0030

27. S-16-0004

28. S-16-0010

29. S-17-0004

30. S-37-0042

31. S-37-0055

32. S-37-0058

33. S-37-0098

34. S-37-0099

35. S-47-0007

36. S-47-0009
37. S-48-0003

38. S-48-0004

39. S-48-0006

40. S-68-0002

41. S-69-0003

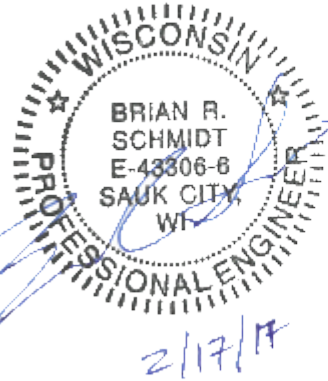


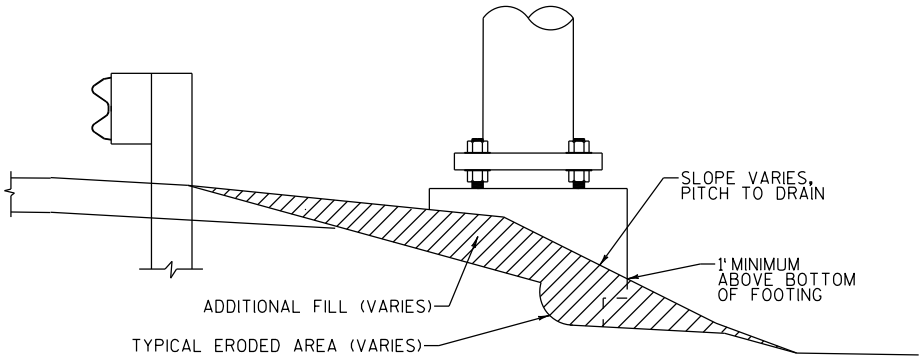
TABLE OF ESTIMATED QUANTITES FOR FOUNDATIONS\*

STRUCTURE NUMBER	ELEVATION VIEW SHEET NUMBER	HIGHWAY	TENSION ANCHOR ROD	FILL EROSION	REPAIR FOUNDATION	REPLACE RODENT SCREEN	REMOVE GROUT PAD	REPLACE WASHERS AT PEDESTAL CONNECTION	REPLACE ATTENUATOR BARRELS
			SPV.0060.01	SPV.0060.02	SPV.0060.04	SPV.0060.05	SPV.0060.06	SPV.0060.32	SPV.0060.42
			EA	EA	EA	EA	EA	EA	EA
S-05-0026	7 OF 41	IH-43					1		
S-05-0038	8 OF 41	IH-43			1				
S-05-0039	9 OF 41	IH-43							2
S-05-0040	10 OF 41	STH 172					4		
S-05-0042	11 OF 41	STH 172		2					
S-05-0043	12 OF 41	IH-43					2		
S-05-0049	13 OF 41	STH 172			1				
S-05-0055	14 OF 41	STH 54					4		
S-05-0056	15 OF 41	STH 54			1		4		
S-05-0057	16 OF 41	STH 54					4		
S-05-0058	17 OF 41	STH 54			1		4		
S-05-0067	19 OF 41	STH 54					1		
S-05-0077	20 OF 41	WALNUT ST.					1		
S-05-0222	21 OF 41	CTH G	6						
S-05-0236	22 OF 41	CTH VK	12						
S-16-0004	27 OF 41	IH-535	12						
S-16-0010	28 OF 41	IH-535				2			
S-37-0042	30 OF 41	USH 51	8						
S-37-0098	33 OF 41	ADAMS ST				1			
S-47-0007	35 OF 41	USH 10	4						
S-68-0002	40 OF 41	STH 110						4	
TOTAL QUANTITY*			42	2	4	3	25	4	2

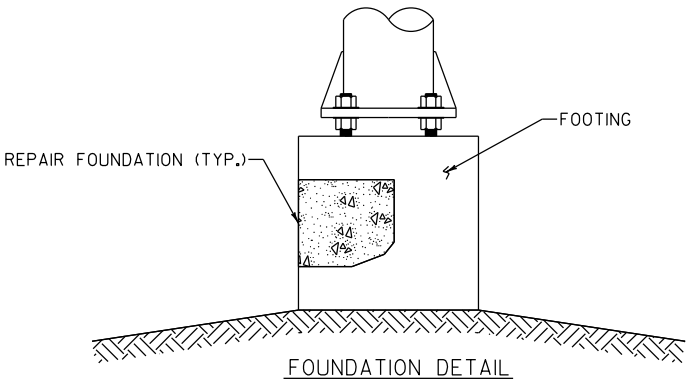
\* THE INFORMATION PROVIDED IN THIS TABLE IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TO BE COUNTED AS ADDITIONAL QUANTITES TO THOSE LISTED ON THE ELEVATION VIEW SHEETS.

FOUNDATION NOTES

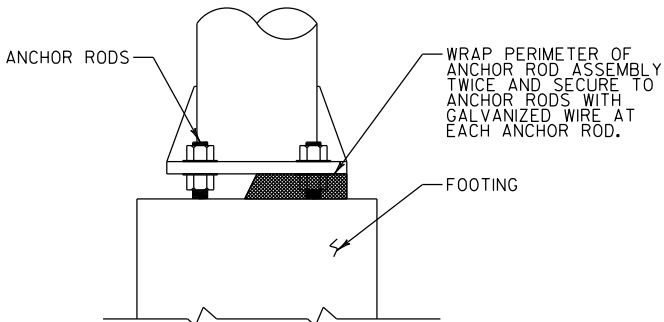
1. CONCRETE -  $f_c' = 3,500$  PSI
2. BAR STEEL REINF. - GRADE 60  
 $f_y = 60,000$  PSI
3. THE CONTRACOR SHALL FIELD VERIFY EXACT LOCATIONS OF ALL REPAIRS.
4. THE CONTRACTOR SHALL FIELD VERIFY DIMENSION OF THE ITEM REQUIRED. DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
5. APPLY ZINC-RICH PAINT TO THE ANCHOR RODS, NUTS, WASHERS, AND LEVELING NUTS IN ACCORDANCE WITH SPECIFICATIONS AFTER REMOVING THE GROUT PAD OR TENSIONING THE ANCHOR ROD. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE BID ITEM, "REMOVE GROUT PAD" OR "TENSION ANCHOR RODS".
6. STEEL ANCHOR ROD NUTS AND WASHERS SHALL BE AASHTO M314 GRADE 55  $f_y = 55,000$  PSI
7. THE TOP OF THE FOOTING SHALL BE SMOOTHED AND SLOPED TO DRAIN.
8. RODENT SCREEN ONLY REQUIRED WHEN ELECTRICAL DEVICES ARE PRESENT.



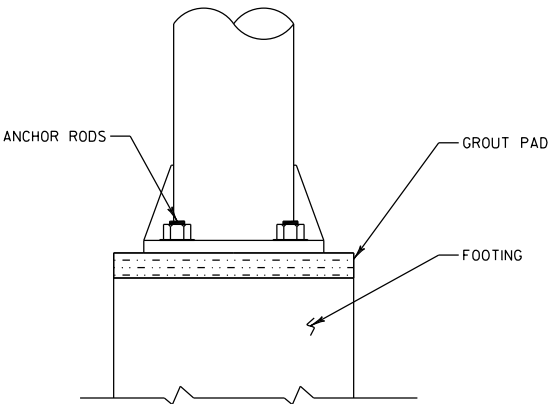
REGRADE/FILL EROSION AT STRUCTURE FOUNDATION



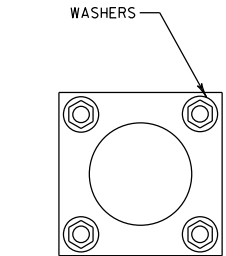
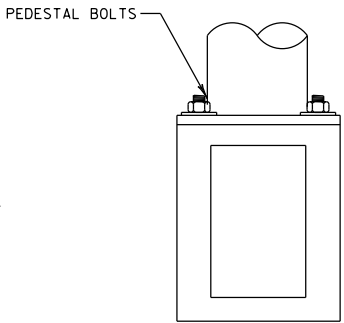
FOUNDATION DETAIL



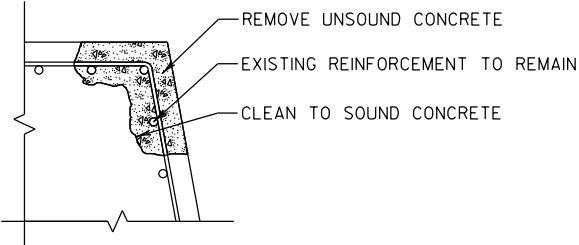
RODENT SCREEN DETAIL



GROUT PAD DETAIL



PEDESTAL WASHER DETAIL



REPAIR FOUNDATION DETAIL

BUREAU OF STRUCTURES CONTACT:  
WILLIAM DREHER (608) 266-8489

CONSULTANT CONTACT:  
BRIAN SCHMIDT (608) 831-3238


NO.	DATE	REVISION	BY
 <b>Fish &amp; Associates Inc.</b> Partners in Structural Solutions			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
ACCEPTED <i>William C. Dreher</i> SDR		02/20/17	
CHIEF STRUCTURES DESIGN ENGINEER		DATE	
SIGN BRIDGE REPAIR NE & NC			
REGION WIDE VARIOUS STH HWY			
COUNTY NE & NC REGION WIDE		TOWN/CITY/VILLAGE VARIOUS	
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY BRS	DESIGN CK'D. TD	DRAWN BY BRS	PLANS CK'D. TD
FOUNDATION DETAILS			SHEET 1 OF 41

TABLE OF ESTIMATED QUANTITES FOR TRUSS\*

STRUCTURE NUMBER	ELEVATION VIEW SHEET NUMBER	HIGHWAY	TENSION STRUCTURAL CONNECTION BOLT	REPLACE END CAP	SECURE/ REPLACE POST CAP	REPAIR DAMPENER	REINSTALL TRUSS
			SPV.0060.10	SPV.0060.12	SPV.0060.13	SPV.0060.17	SPV.0060.18
			EA	EA	EA	EA	EA
S-05-0015	6 OF 41	STH 172				1	
S-16-0010	28 OF 41	IH-535	4				
S-37-0055	31 OF 41	USH 51		1			
S-37-0058	32 OF 41	USH 51		4			
S-47-0009	36 OF 41	STH 35					1
S-69-0003	41 OF 41	STH 21			1		
TOTAL QUANTITY*			4	5	1	1	1

\* THE INFORMATION PROVIDED IN THIS TABLE IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TO BE COUNTED AS ADDITIONAL QUANTITES TO THOSE LISTED ON THE ELEVATION VIEW SHEETS.

TRUSS NOTES

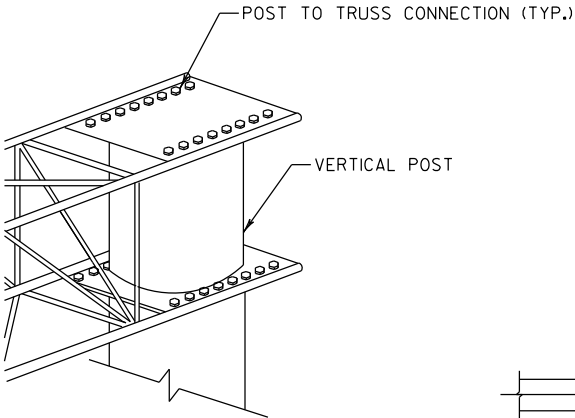
1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE ITEM REQUIRED, DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, AND NUTS SHALL CONFORM TO:  
-ANCHOR BOLT/HEX BOLTS ASTM F593 ANY ALLOY GROUP 1, 2, OR 3  
-WASHERS ASTM A240  
-ANY OF THE 300 SERIES WHICH HAVE A MINIMUM YIELD OF 40,000 PSI AND ELONGATION OF 15% FOR OVER 3/4" AND 12% FOR 3/4" DIAMETER AND SMALLER.
4. REPLACE MISSING BOLTS ON TOWER CAPS WITH STAINLESS STEEL BOLTS.
5. DAMPENER TO BE REPLACED WITH ONE OF THE SAME SIZE, SHAPE, AND WEIGHT OF CURRENT DAMPENER INSTALLED.
6. INSTALL DAMPENER ON A TOP CHORD DIAGONAL NEAR MID-SPAN.

CAP FABRICATED FROM STEEL PLATES (MIN. THICKNESS = 3/16") WILL BE ACCEPTABLE, SUBJECT TO APPROVAL BY THE ENGINEER

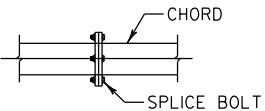
3 HOLES 120° APART FOR 1/2" Ø SET SCREWS  
0.375"  
0.5"  
1"  
0.625"  
R 0.5"  
0.5"  
0.5"

ADJUST TO FIT COLUMN

POST/END CAP DETAIL

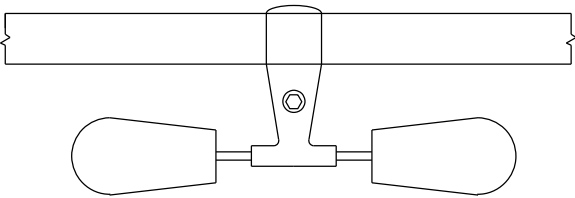


CANTILEVER SIGN BRIDGE  
POST TO TRUSS CONNECTION DETAIL



SPLICE CONNECTION BOLT DETAIL

TENSION STRUCTURAL CONNECTION BOLT REPAIR DETAIL  
REPAIR CAN VARY BY LOCATION, SEE INDIVIDUAL STRUCTURE SHEET FOR DETAILS

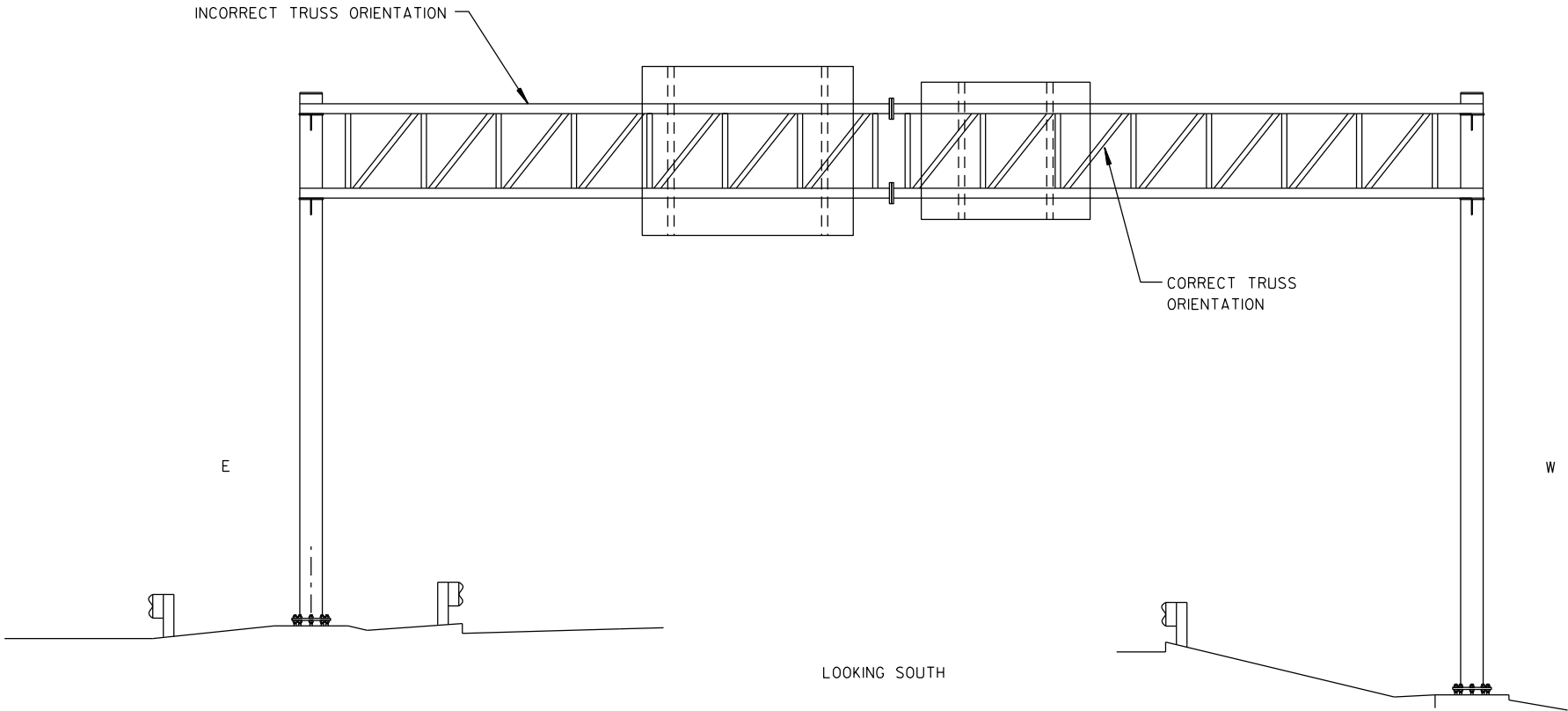


REPAIR DAMPENER DETAIL

STATE PROJECT NUMBER

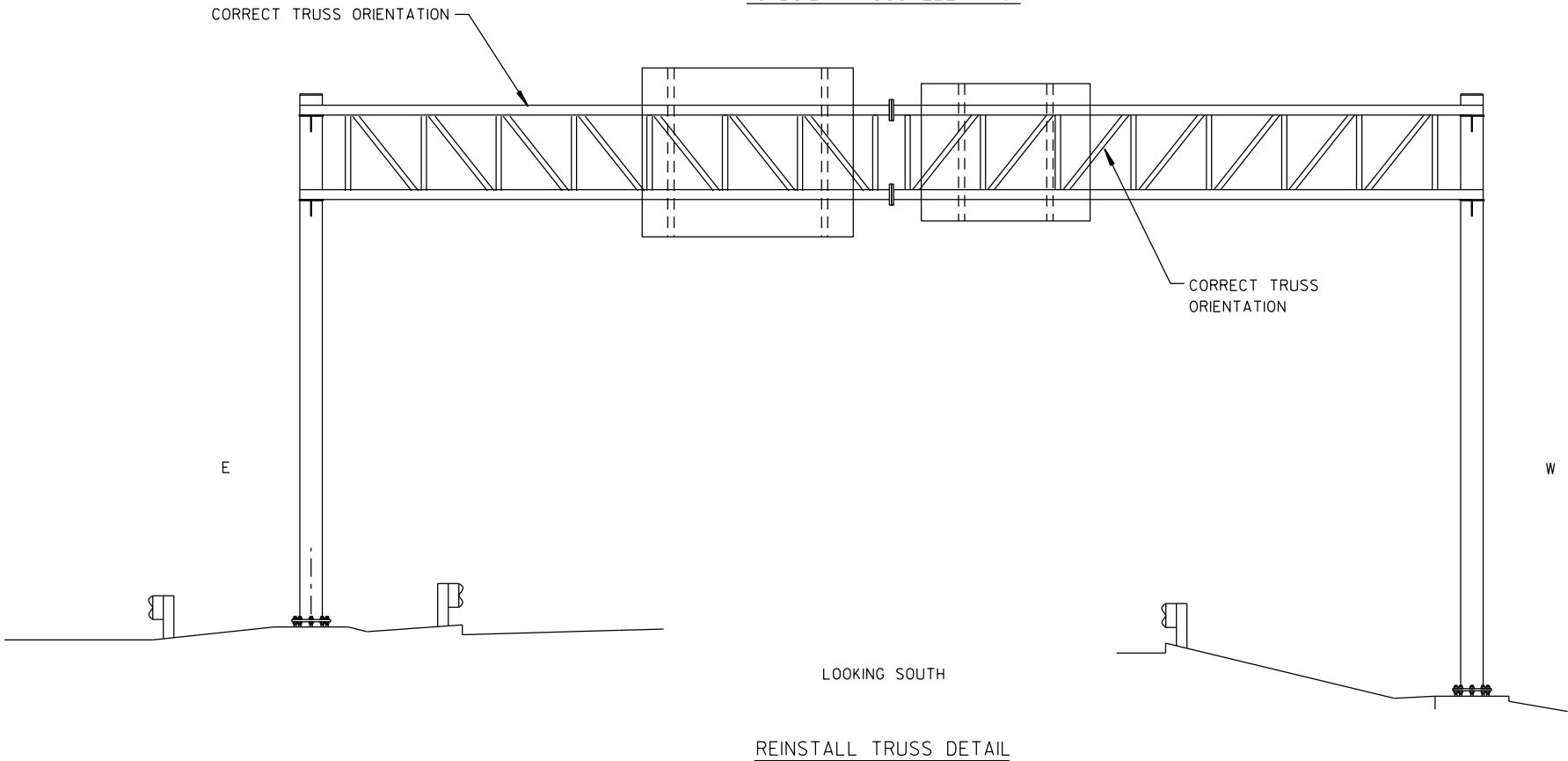
1009-30-11

NO.	DATE	REVISION	BY
SIGN BRIDGE REPLACEMENT			
	DRAWN BY:	BRS	CHECKED BY: TD
TRUSS DETAILS (1 OF 2)		SHEET 2 OF 41	



REINSTALL TRUSS NOTES

1. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF ALL ITEMS ASSOCIATED WITH THE REPAIR THAT MAY NEED TO BE REPLACED DURING TRUSS REINSTALLATION. ALL REPLACED BOLTS AND OTHER ITEMS WILL BE CONSIDERED INCIDENTAL TO SPV.0060.18 - REINSTALL TRUSS
2. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, AND NUTS SHALL CONFORM TO:
  - ANCHOR BOLTS/HEX BOLTS ASTM F593 ANY ALLOW GROUPS 1, 2, OR 3
  - HEX NUTS ASTM F594
  - WASHERS ASTM A240
  - ANY OF THE 300 SERIES WHICH HAVE A MINIMUM YIELD OF 40,000 PSI AND ELONGATION OF 15% FOR OVER 3/4" DIAMETER AND 12% FOR 3/4" DIAMETER AND SMALLER.
3. REMOVE ALL OVERHEAD SIGNS PRIOR TO TRUSS DISASSEMBLY.
4. REINSTALL ALL SIGNS TO THEIR ORIGINAL CONFIGURATION AFTER TRUSS HAS BEEN CORRECTLY REINSTALLED.
5. ALL REMOVAL AND INSTALLATION OF OVERHEAD TYPE I & II SIGNS ON THE TRUSS SHALL BE CONSIDERED INCIDENTAL TO SPV.0060.18 - REINSTALL TRUSS.



NO.	DATE	REVISION	BY
SIGN BRIDGE REPLACEMENT			
	DRAWN BY:	BRS	CHECKED BY: TD
TRUSS DETAILS (2 OF 2)		SHEET 3 OF 41	

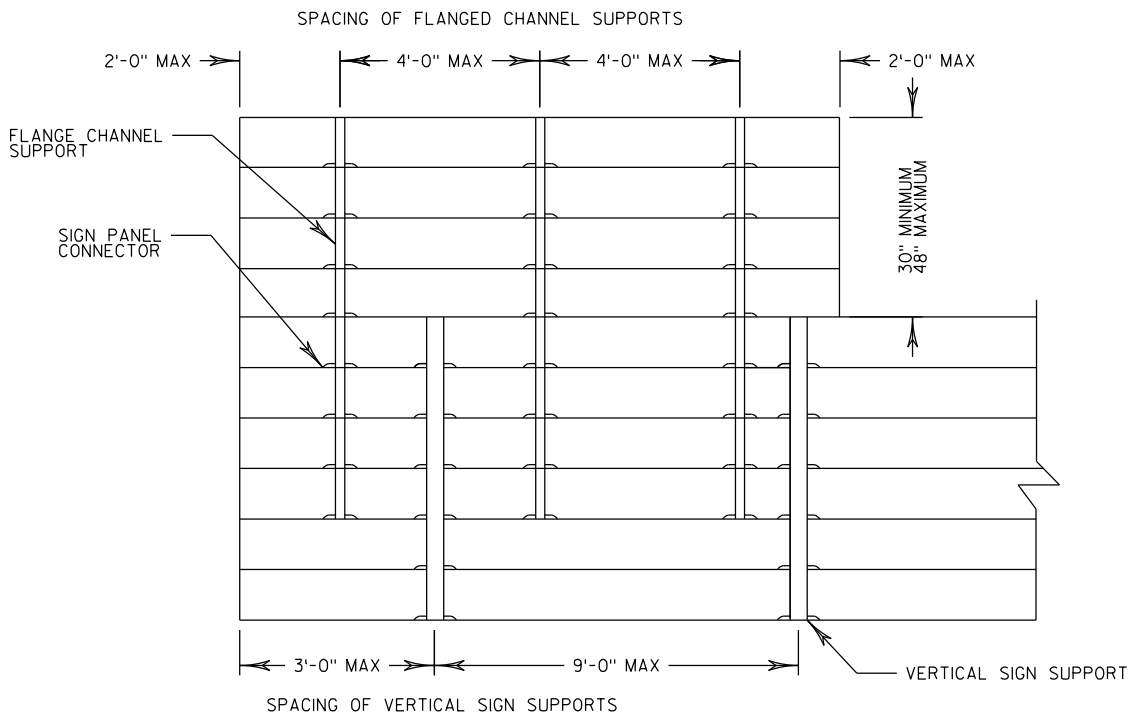
TABLE OF ESTIMATED QUANTITES FOR SIGN PANELS\*

STRUCTURE NUMBER	ELEVATION VIEW SHEET NUMBER	HIGHWAY	REPLACE SIGN PANEL CONNECTOR	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	REPLACE SIGN CONNECTION CLAMP	REPLACE SIGN BRIDGE ID PLAQUE	ADJUST SIGNAL BAND MOUNT
			SPV.0060.20	SPV.0060.22	SPV.0060.24	SPV.0060.26	SPV.0060.29
			EA	EA	EA	EA	EA
S-05-0039	9 OF 41	IH-43	6				
S-05-0064	18 OF 41	STH 172			3		
S-09-0027	23 OF 41	STH 178		4			
S-09-0028	24 OF 41	STH 124		7			
S-09-0029	25 OF 41	STH 124		6			
S-09-0030	26 OF 41	STH 29 - BUS		7			
S-17-0004	29 OF 41	IH-94	10				
S-37-0099	34 OF 41	STH 13					2
S-48-0003	37 OF 41	USH 8		4			
S-48-0004	38 OF 41	USH 8		4			
S-48-0006	39 OF 41	USH 8		2			
S-68-0002	40 OF 41	STH 110				1	
TOTAL QUANTITY*			16	34	3	1	2

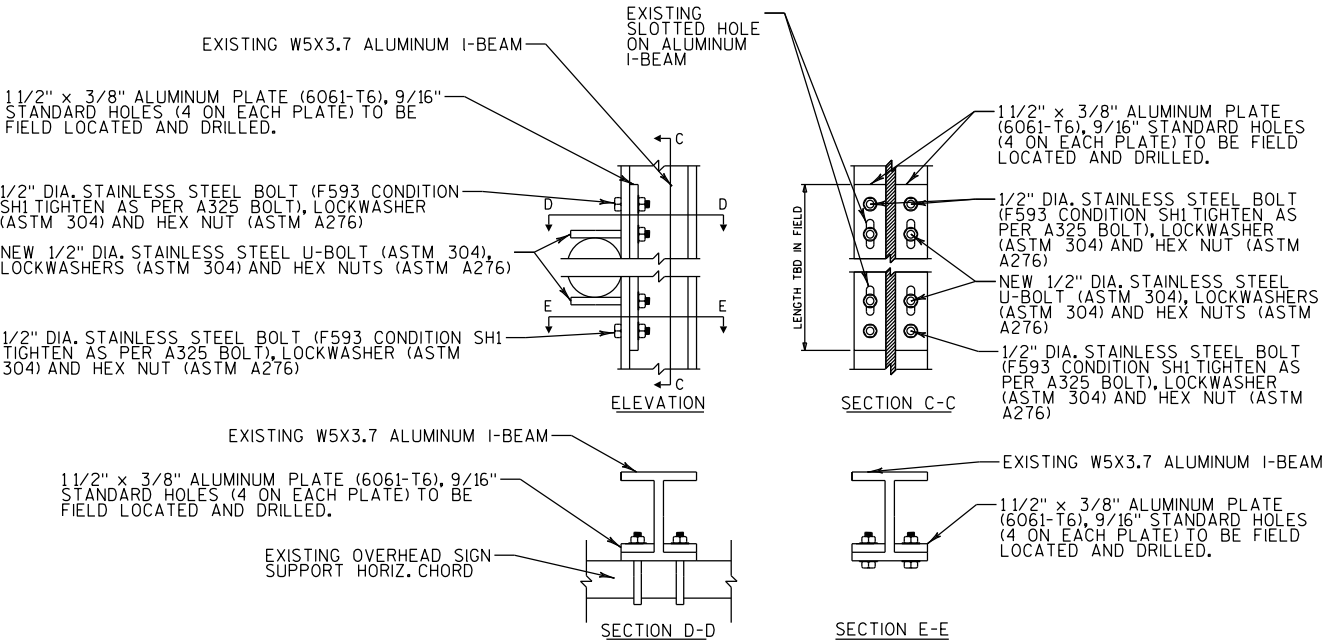
\* THE INFORMATION PROVIDED IN THIS TABLE IS FOR INFORMATIONAL PURPOSES ONLY AND IS NOT TO BE COUNTED AS ADDITIONAL QUANTITES TO THOSE LISTED ON THE ELEVATION VIEW SHEETS.

SIGN PANEL NOTES

1. THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE ITEM REQUIRED. DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, AND NUTS SHALL CONFORM TO:  
-ANCHOR BOLT/HEX BOLTS ASTM F593 ANY ALLOY GROUP 1, 2, OR 3  
-WASHERS ASTM A240  
-ANY OF THE 300 SERIES WHICH HAVE A MINIMUM YIELD OF 40,000 PSI AND ELONGATION OF 15% FOR OVER 3/4" AND 12% FOR 3/4" DIAMETER AND SMALLER.

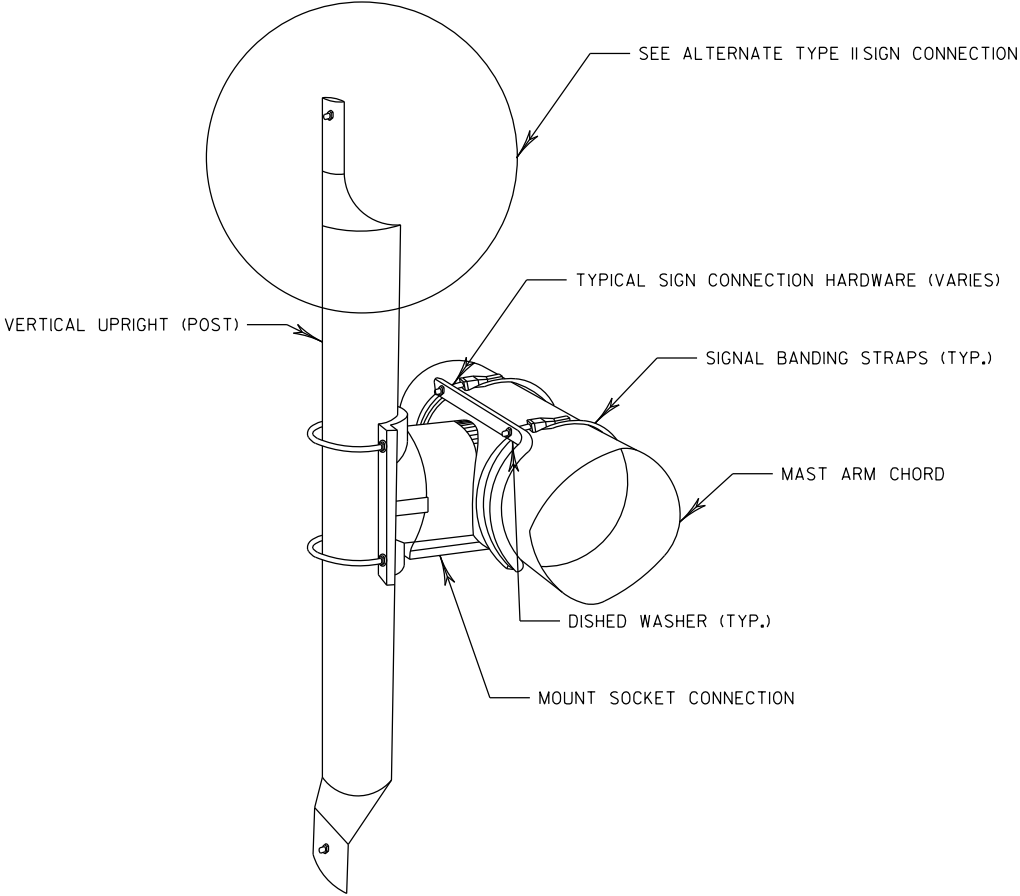


FLANGE CHANNEL SUPPORT/VERTICAL SIGN SUPPORT DETAILS

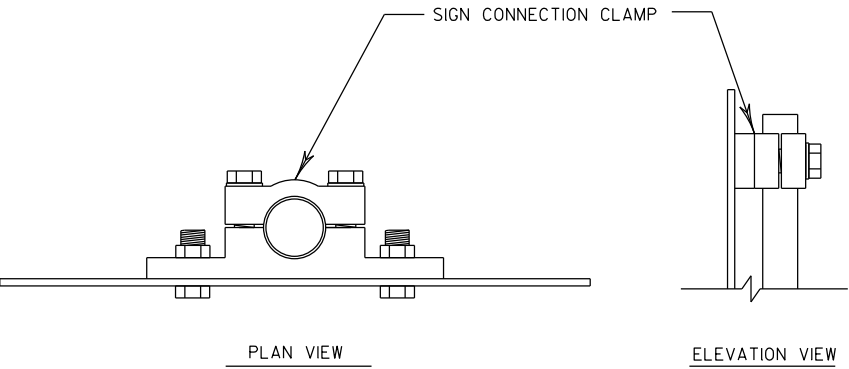


SLOTTED VERTICAL SIGN SUPPORT REPAIR DETAIL  
EACH REPAIR INCLUDES ALL BOLT CONNECTIONS PER I-BEAM

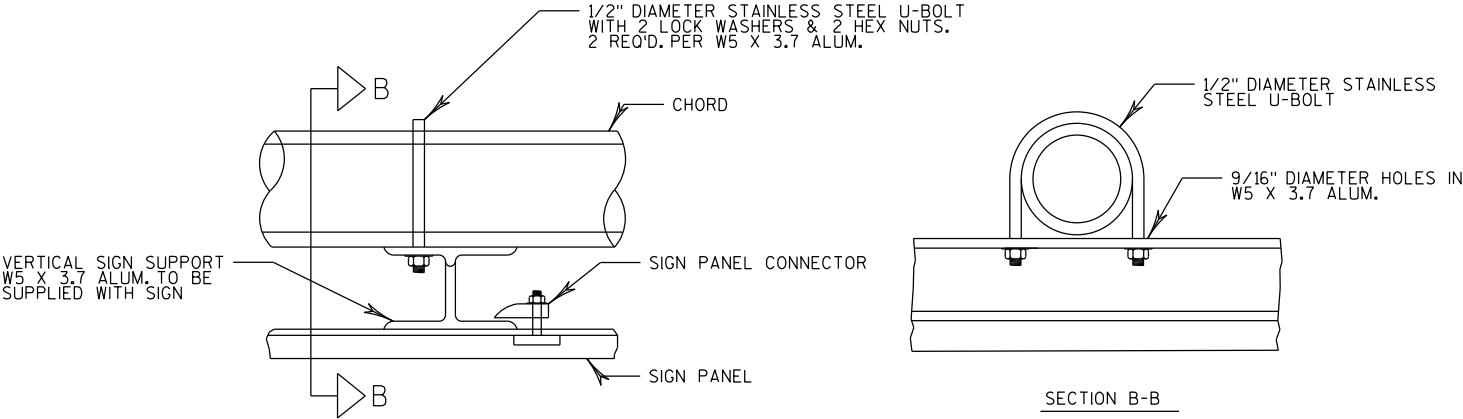
NO.	DATE	REVISION	BY
SIGN BRIDGE REPLACEMENT			
DRAWN BY: BRS		CHECKED BY: TD	
SIGN PANEL DETAILS (1 OF 2)		SHEET 4 OF 41	



TYPE II SIGN/SIGNAL CONNECTION ASSEMBLY DETAIL



ALTERNATE TYPE II SIGN CONNECTION DETAIL - SIGN CONNECTION CLAMP



TYPICAL SIGN PANEL CONNECTION (TYPE I SIGN)

NO.	DATE	REVISION	BY
SIGN BRIDGE REPAIR 2016			
DRAWN BY: BRS		CHECKED BY: TD	
SIGN PANEL DETAILS (2 OF 2)		SHEET 5 OF 41	

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

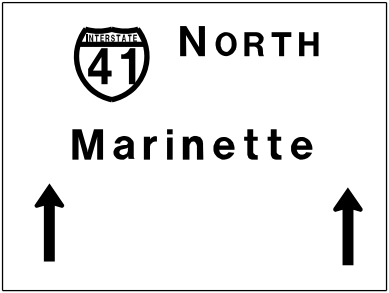
HIGHWAY: STH 172

WORK RESTRICTIONS:  
6:00 AM TO 8:00 PM

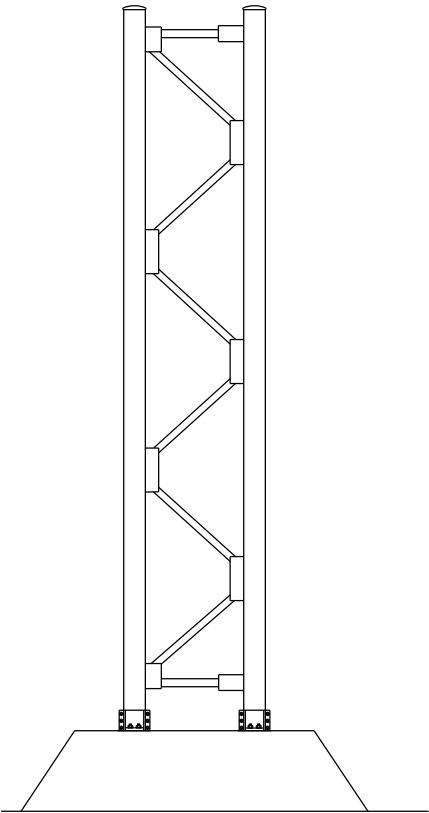
TRAFFIC CONTROL:  
LEFT LANE CLOSURE PER SDD 15D12

STATE PROJECT NUMBER

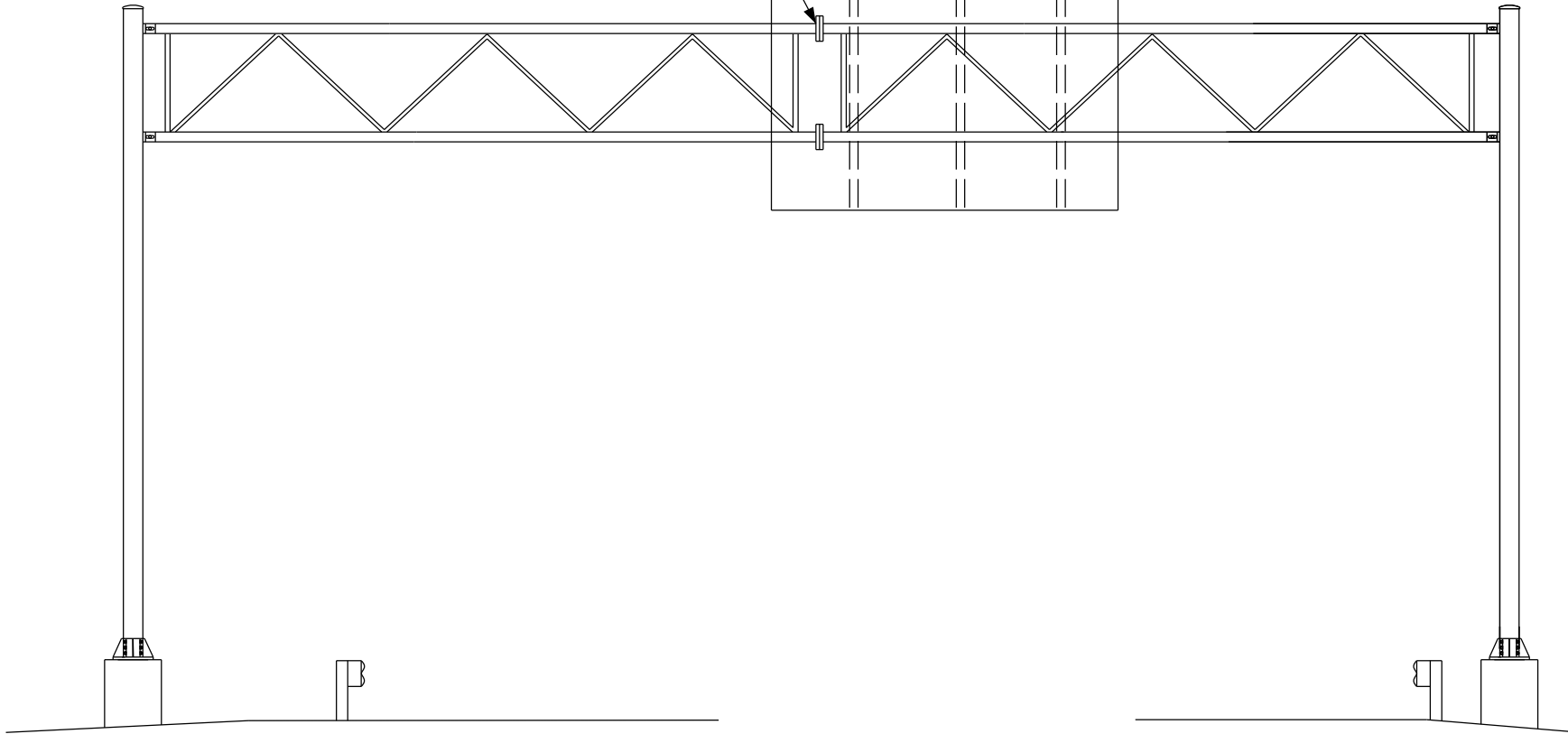
1009-30-11



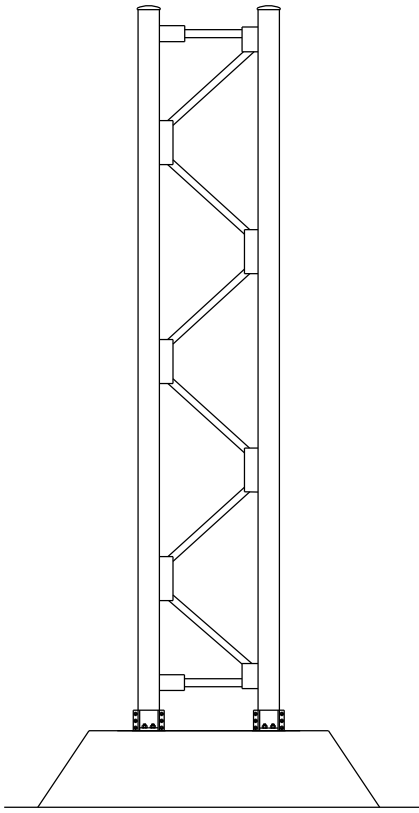
REPAIR DAMPENER (1 EA)



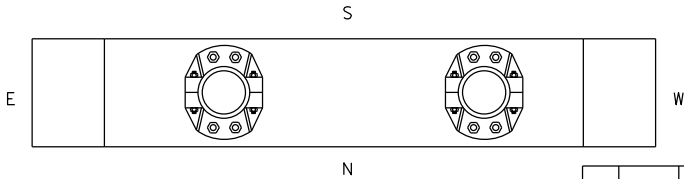
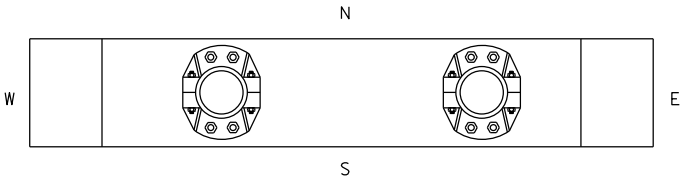
LOOKING NORTH



LOOKING WEST



LOOKING SOUTH



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.17	REPAIR DAMPENER	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0015			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 6 OF 41
			04/12/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: IH-43

WORK RESTRICTIONS:  
NONE

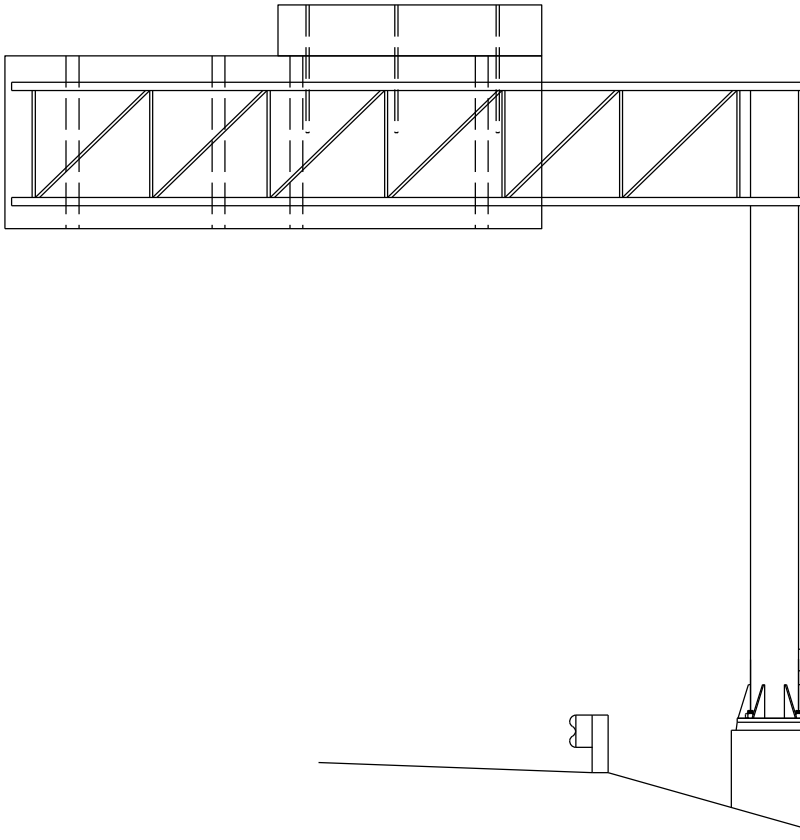
TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D27

STATE PROJECT NUMBER

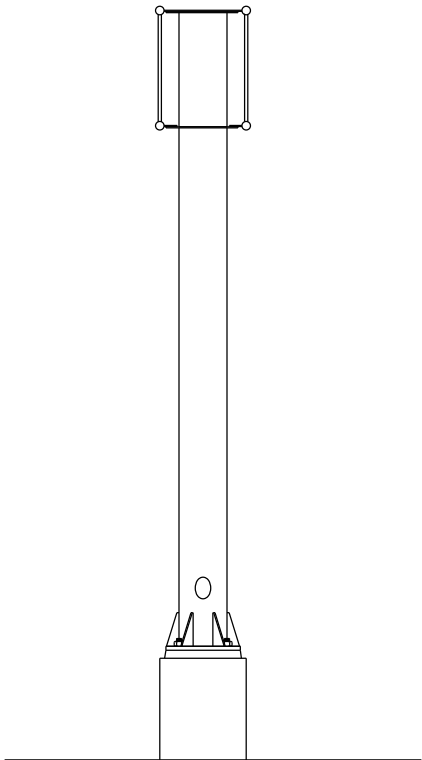
1009-30-11

EXIT 187

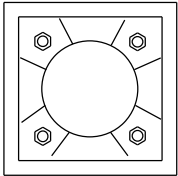
Webster Ave  
East Shore Dr



LOOKING SOUTH



LOOKING EAST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0026			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 7 OF 41
			06/02/2016



STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

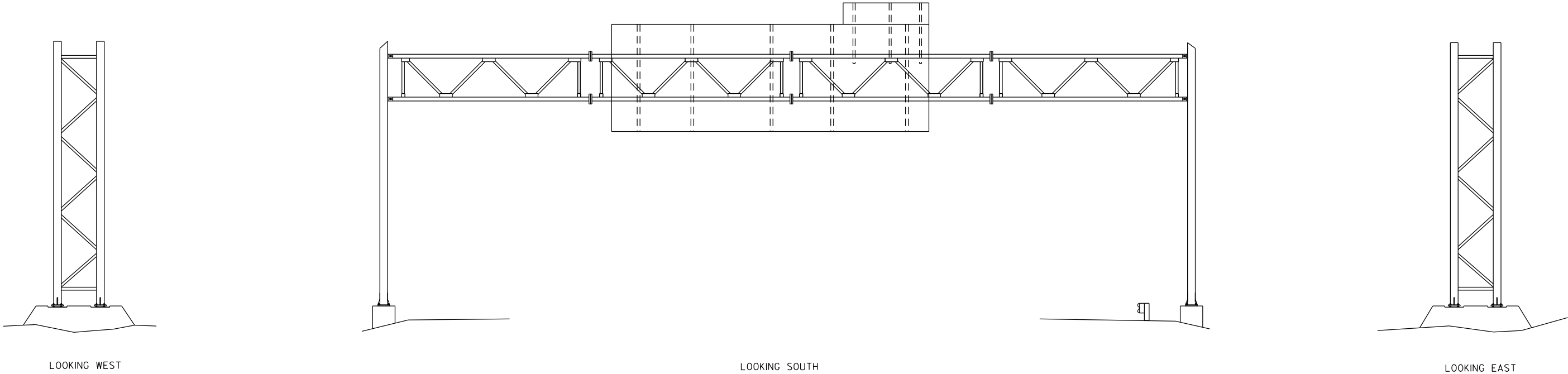
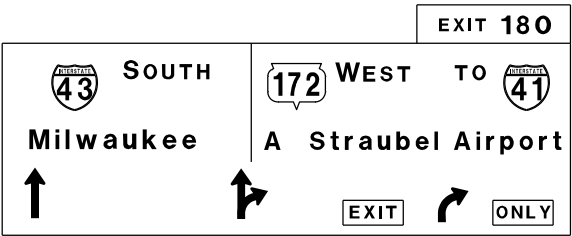
HIGHWAY: IH-43

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D27

STATE PROJECT NUMBER

1009-30-11



REPAIR FOUNDATION (1EA)

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.04	REPAIR FOUNDATION	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0038			
DRAWN BY ZW		PLANS CK'D.	TD
MAINTENANCE ITEMS			SHEET 8 OF 41
			04/14/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

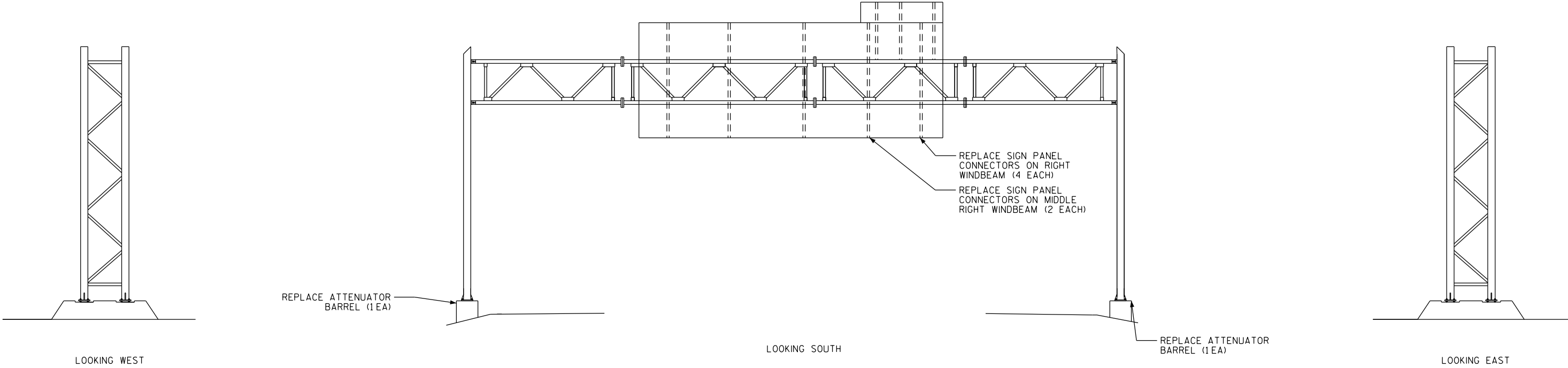
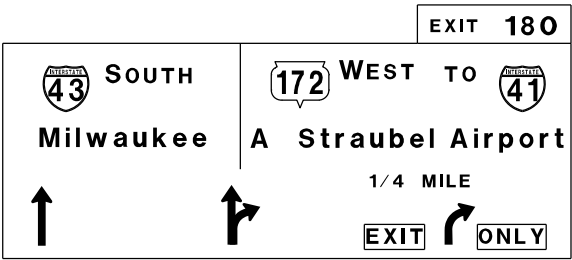
HIGHWAY: IH-43

WORK RESTRICTIONS:  
6:00 AM TO 7:00 PM

TRAFFIC CONTROL:  
RIGHT LANE CLOSURE PER SDD 15D12

STATE PROJECT NUMBER

1009-30-11



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	6 EA	
SPV.0060.42	REPLACE ATTENUATOR BARRELS	2 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0039			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 9 OF 41
			04/13/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

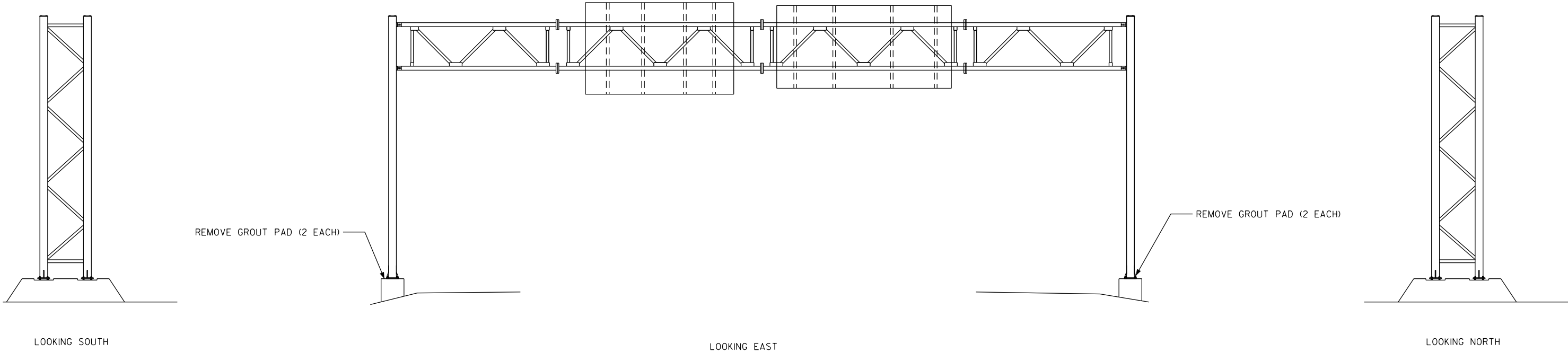
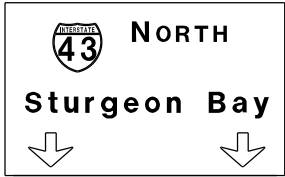
HIGHWAY: STH 172

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT AND LEFT SHOULDER CLOSURE PER SDD  
15D27

STATE PROJECT NUMBER

1009-30-11



8



8

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0040			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 10 OF 41
			04/13/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

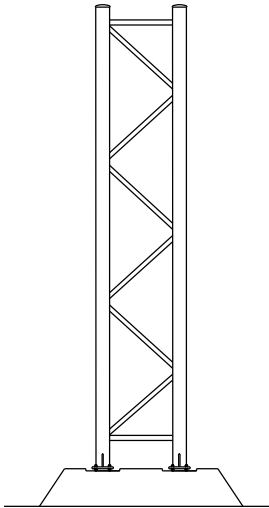
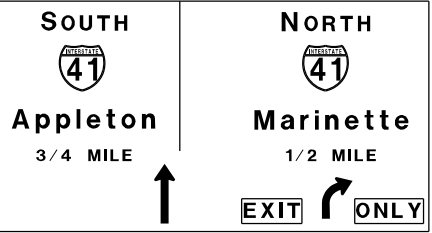
HIGHWAY: STH 172

WORK RESTRICTIONS:  
NONE

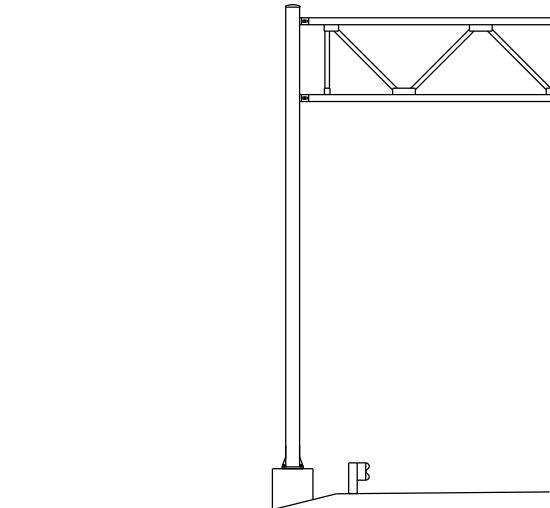
TRAFFIC CONTROL:  
RIGHT AND LEFT SHOULDER CLOSURE PER SDD  
15D27

STATE PROJECT NUMBER

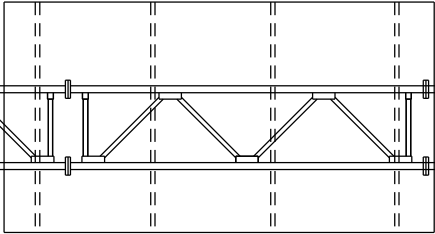
1009-30-11



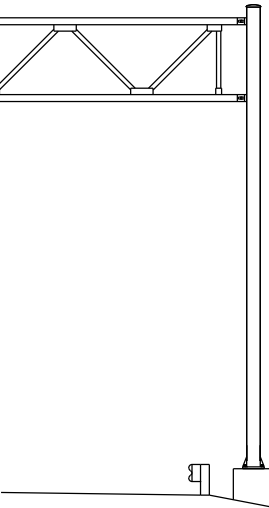
LOOKING NORTH



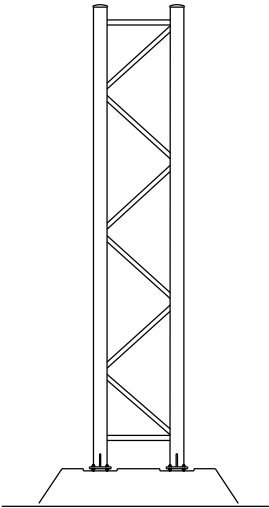
FILL EROSION (1EA)



LOOKING WEST



FILL EROSION (1EA)



LOOKING SOUTH

8



8

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.02	FILL EROSION	2 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0042			
DRAWN BY ZW		PLANS CK'D.	TD
MAINTENANCE ITEMS			SHEET 11 OF 41
			04/13/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

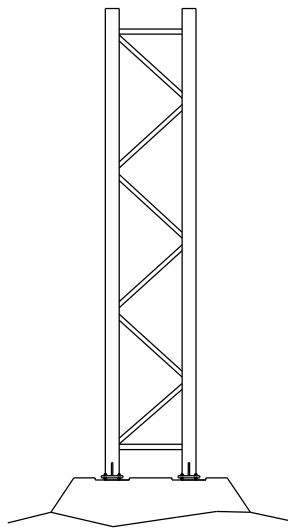
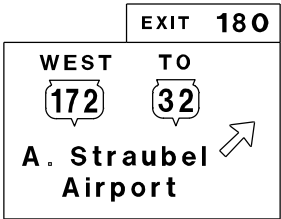
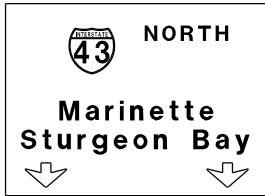
HIGHWAY: IH-43

WORK RESTRICTIONS:  
NONE

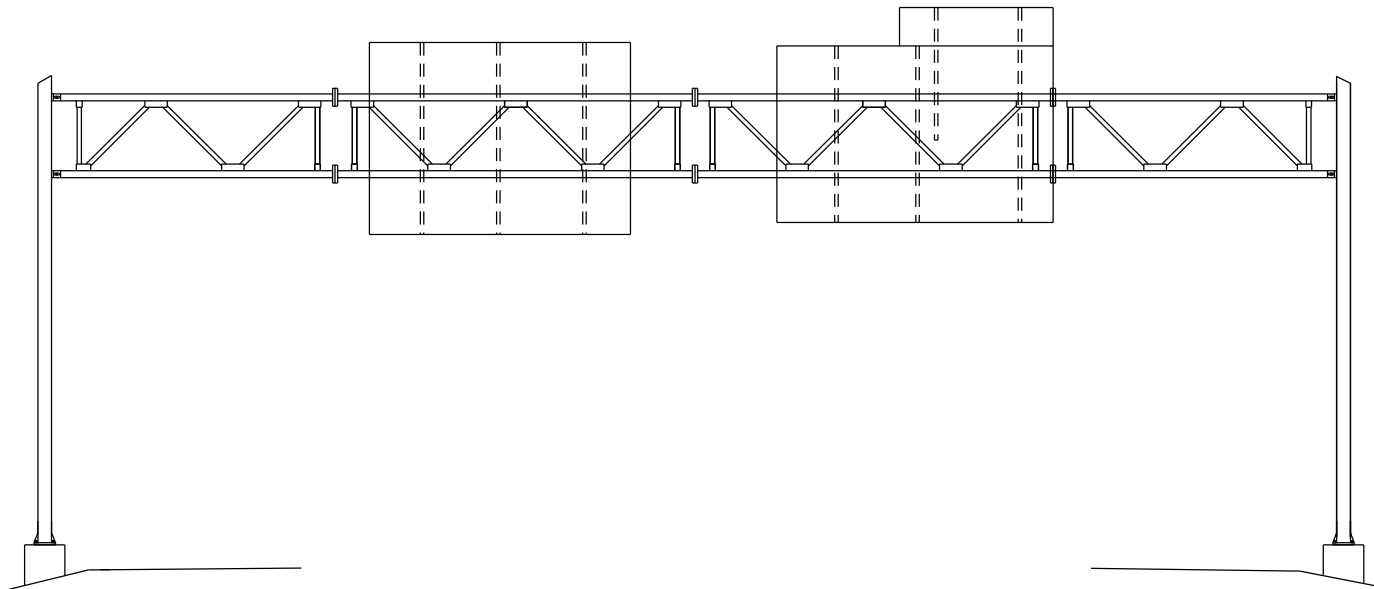
TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D27

STATE PROJECT NUMBER

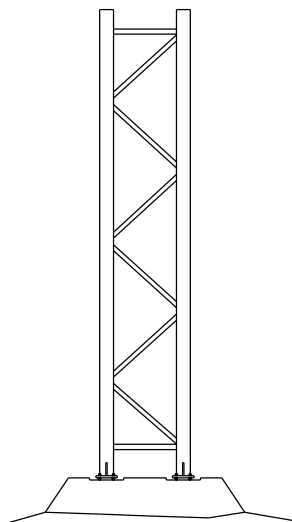
1009-30-11



LOOKING EAST



LOOKING NORTH



LOOKING WEST

REMOVE GROUT PAD (1EA)

REMOVE GROUT PAD (1EA)



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	2 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0043			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 12 OF 41
			04/13/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

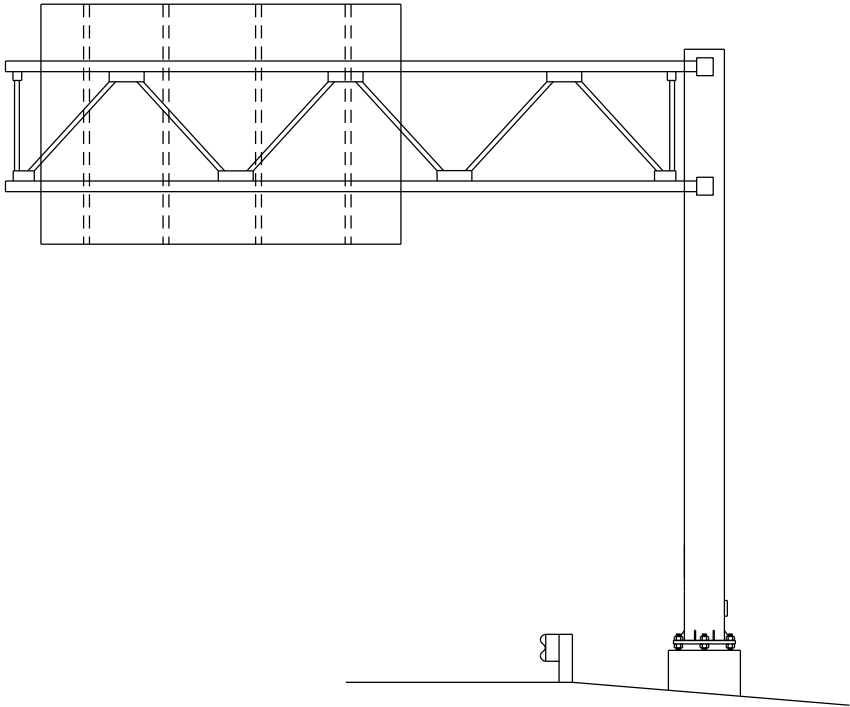
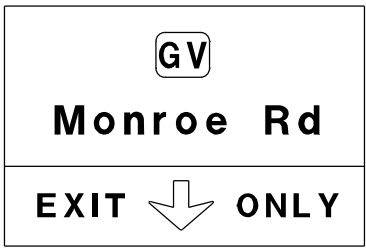
HIGHWAY: STH 172

WORK RESTRICTIONS:  
NONE

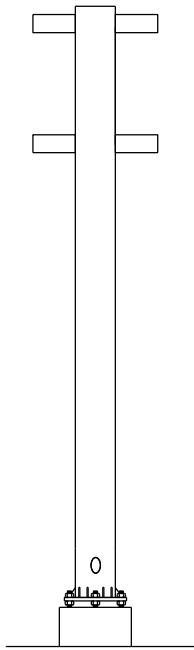
TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D27

STATE PROJECT NUMBER

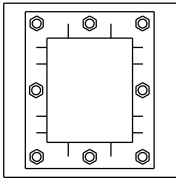
1009-30-11



LOOKING WEST



LOOKING SOUTH



REPAIR FOUNDATION (1EA)

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.04	REPAIR FOUNDATION	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0049			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 13 OF 41
06/01/2016			

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: STH 54

WORK RESTRICTIONS:  
7:00 AM TO 6:00 PM

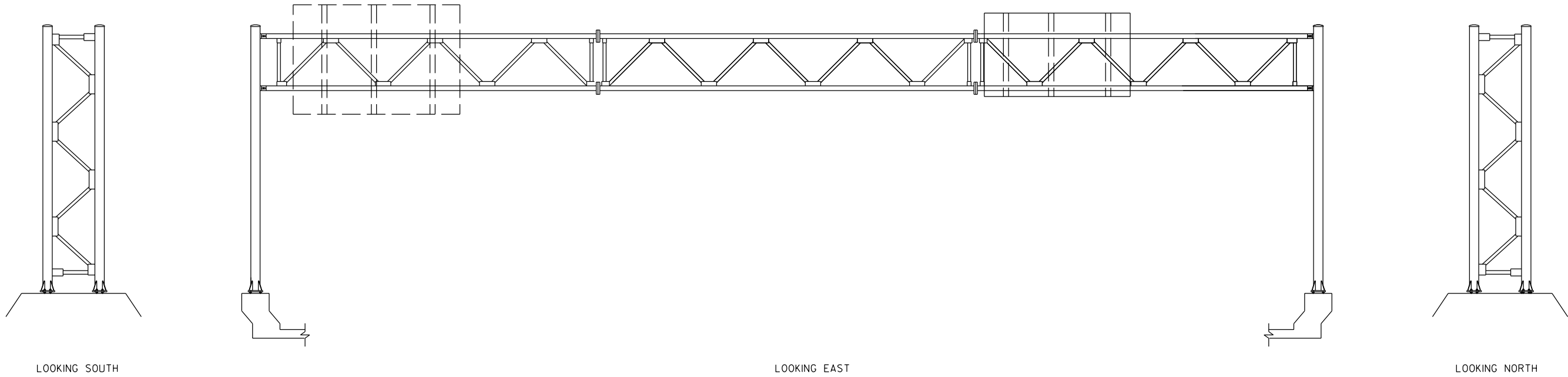
TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12  
NOTE 3 FROM TRAFFIC CONTROL SHEET

STATE PROJECT NUMBER

1009-30-11



Madison St  
Downtown  
EXIT 1/2 MILE



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0055			
DRAWN BY RS		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 14 OF 41
			04/11/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

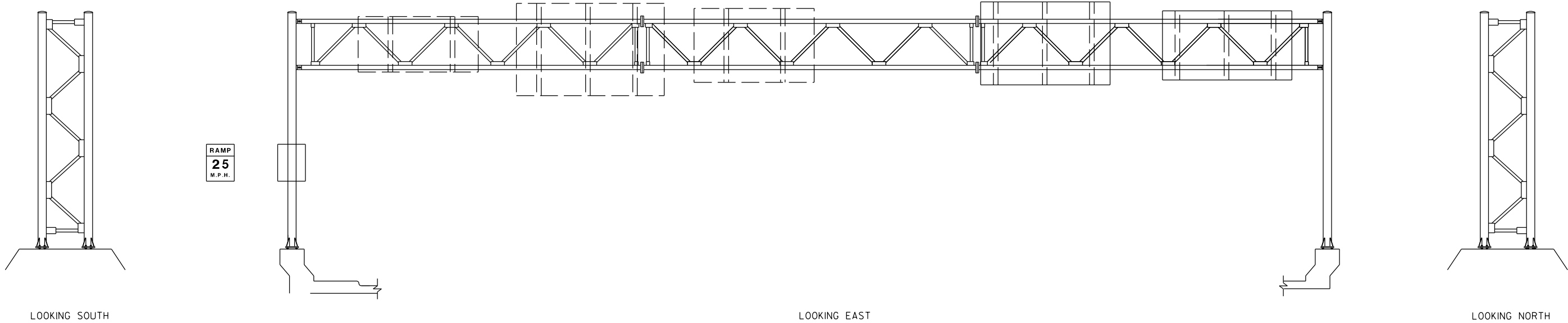
HIGHWAY: STH 54

WORK RESTRICTIONS:  
7:00 AM TO 6:00 PM

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12  
NOTE 3 FROM TRAFFIC CONTROL SHEET

STATE PROJECT NUMBER

1009-30-11



REMOVE GROUT PAD (2 EA)



REMOVE GROUT PAD (2 EA)



REPAIR FOUNDATION (1 EA)

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.04	REPAIR FOUNDATION	1 EA	
SPV.0060.06	REMOVE GROUT PAD	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0056			
DRAWN BY		RS	PLANS CK'D. TD
MAINTENANCE ITEMS			SHEET 15 OF 41
			04/11/2016



STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: STH 54

WORK RESTRICTIONS:  
7:00 AM TO 6:00 PM

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12  
NOTE 3 FROM TRAFFIC CONTROL SHEET

STATE PROJECT NUMBER

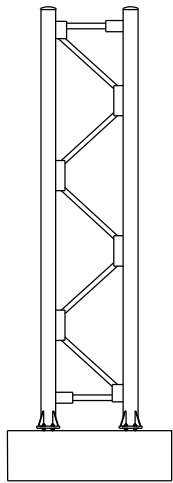
1009-30-11

Broadway  
NEXT RIGHT

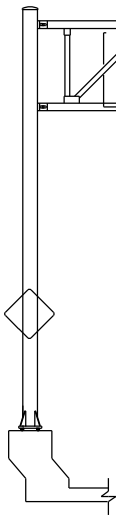
32 SOUTH  
Ashland Ave  
EXIT 1/2 MILE

54 57  
Monroe Ave  
EXIT ONLY

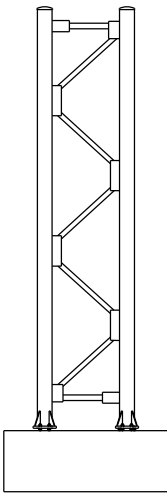
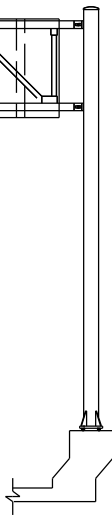
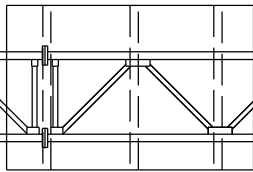
Madison St  
Downtown



LOOKING SOUTH



LOOKING EAST



LOOKING NORTH

REMOVE GROUT PAD (2 EA)



REMOVE GROUT PAD (2 EA)



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0057			
DRAWN BY		RS	PLANS CK'D. TD
MAINTENANCE ITEMS			SHEET 16 OF 41
			04/11/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: STH 54

WORK RESTRICTIONS:  
7:00 AM TO 6:00 PM

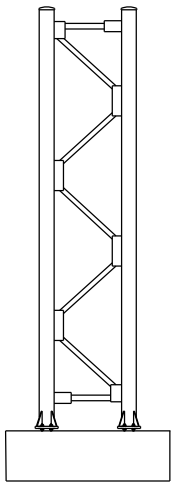
TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12  
NOTE 3 FROM TRAFFIC CONTROL SHEET

STATE PROJECT NUMBER

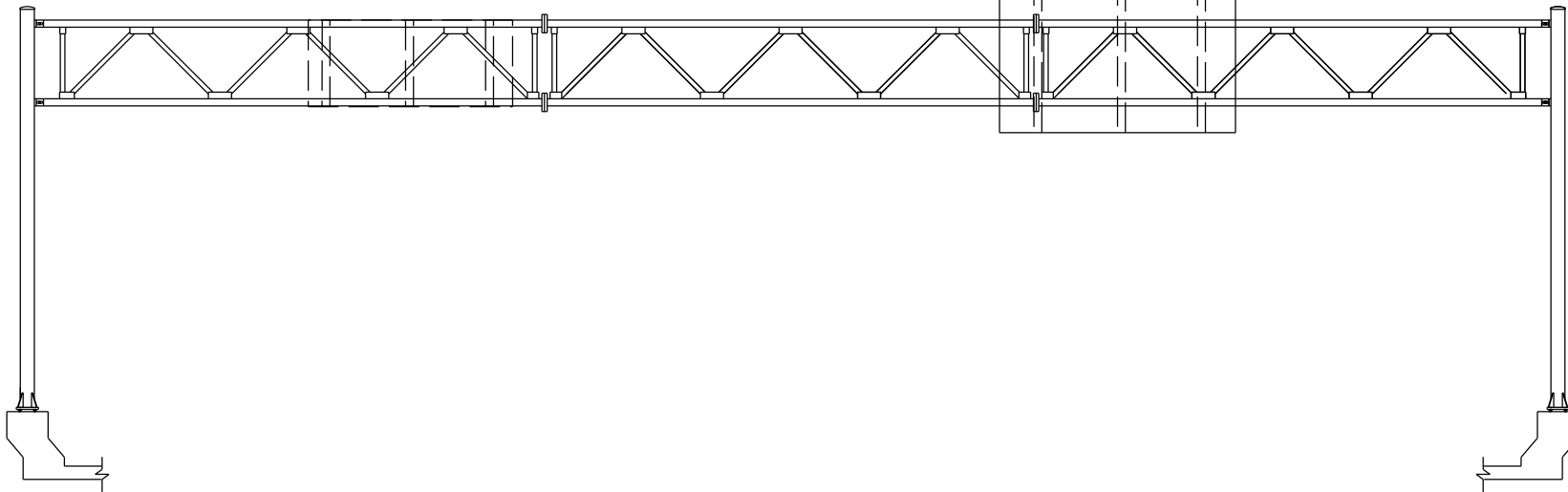
1009-30-11

Broadway  
EXIT 1/2 MILE

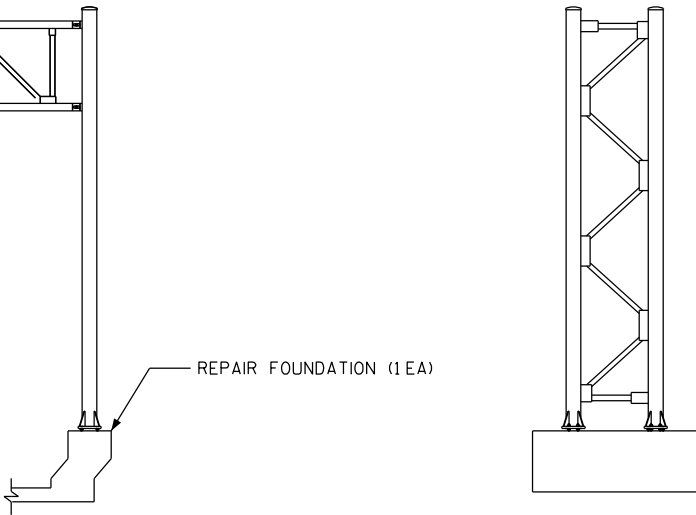
54 57  
Monroe Ave  
EXIT ONLY



LOOKING SOUTH



LOOKING EAST



LOOKING NORTH

REMOVE GROUT PAD (2 EA)



REMOVE GROUT PAD (2 EA)



REPAIR FOUNDATION (1 EA)

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.04	REPAIR FOUNDATION	1 EA	
SPV.0060.06	REMOVE GROUT PAD	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0058			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 17 OF 41
			04/11/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: STH 172

WORK RESTRICTIONS:  
7:00 AM TO 8:00 PM

TRAFFIC CONTROL:  
RIGHT AND CENTER LANE CLOSURE PER  
SDD 15D12

STATE PROJECT NUMBER

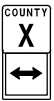
1009-30-11



REPLACE SIGN CONNECTION CLAMP (2 EA)

REPLACE SIGN CONNECTION CLAMP (1 EA)

WRONG  
WAY

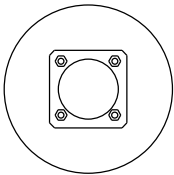
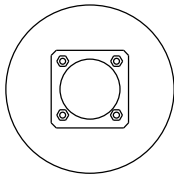


LOOKING SOUTH

LOOKING EAST

LOOKING NORTH

8



8

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.24	REPLACE SIGN CONNECTION CLAMP	3 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0064			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 18 OF 41
			04/26/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

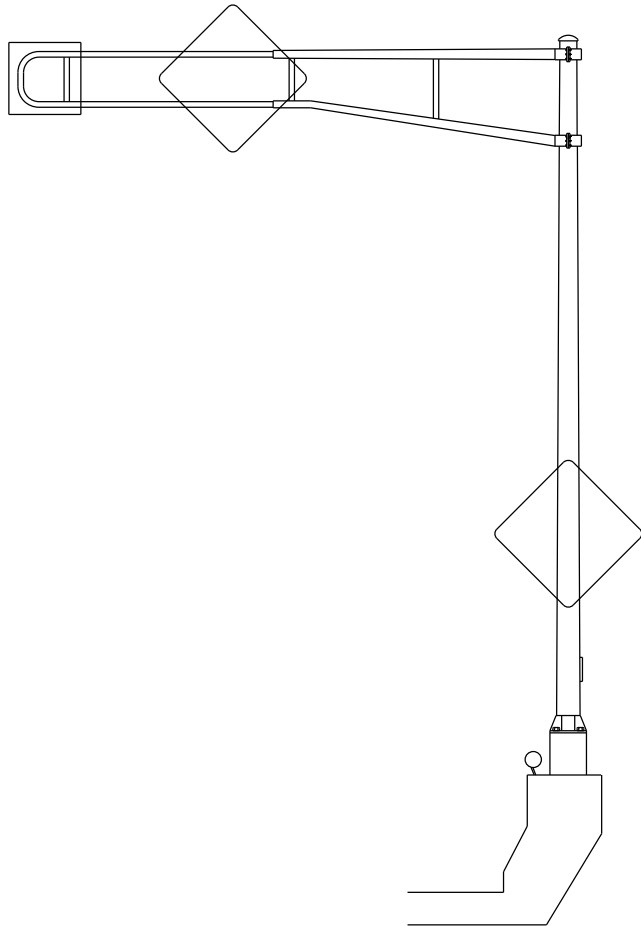
HIGHWAY: STH 54

WORK RESTRICTIONS:  
7:00 AM TO 6:00 PM

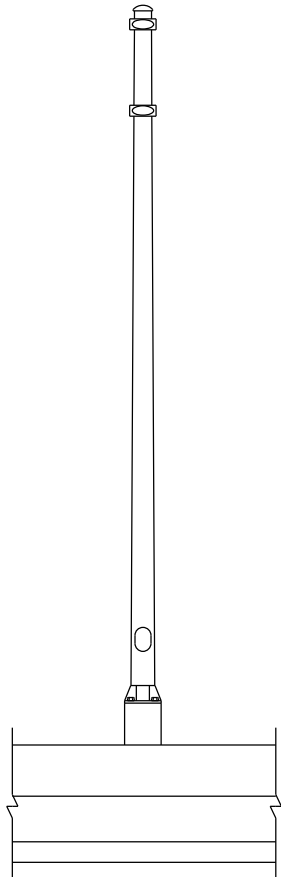
TRAFFIC CONTROL:  
RIGHT LANE CLOSURE PER SDD 15D12  
NOTE 3 FROM TRAFFIC CONTROL SHEET

STATE PROJECT NUMBER

1009-30-11

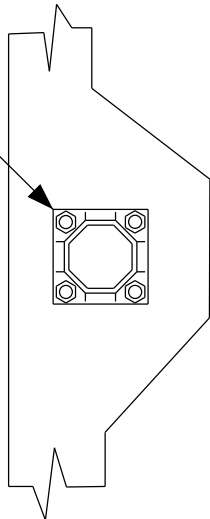


LOOKING WEST



LOOKING SOUTH

REMOVE GROUT PAD (1EA)



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.06	REMOVE GROUT PAD	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0067			
DRAWN BY RS		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 19 OF 41
			05/02/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

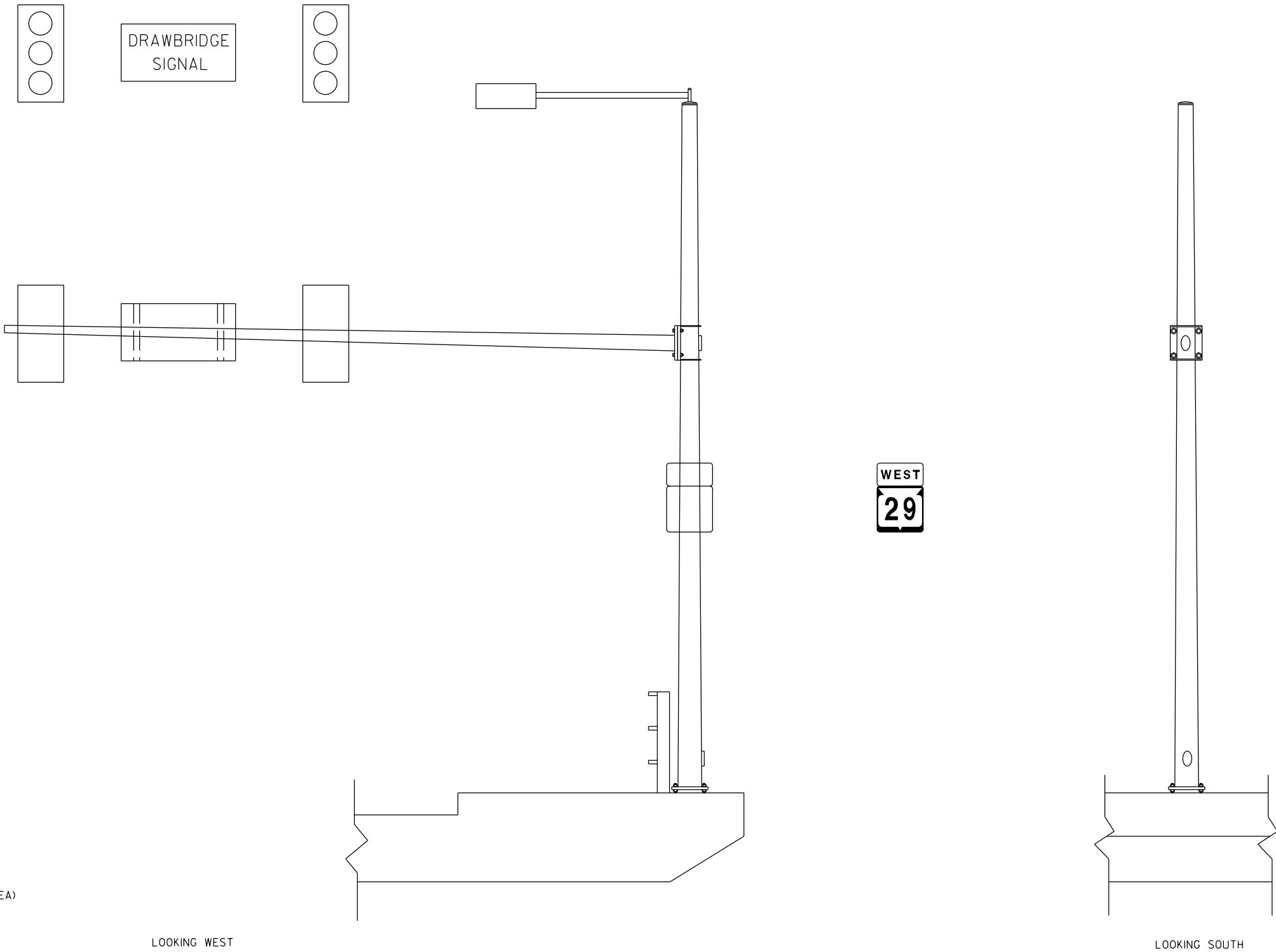
HIGHWAY: WALNUT ST.

WORK RESTRICTIONS:  
7:00 AM TO 6:00 PM

TRAFFIC CONTROL:  
RIGHT LANE CLOSURE PER SDD 15D12  
NOTE 3 FROM TRAFFIC CONTROL SHEET

STATE PROJECT NUMBER

1009-30-11



8

8

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
SPV.0060.06	REMOVE GROUT PAD	1 EA		STRUCTURE S-05-0077			
				DRAWN BY RS		PLANS CK'D. TD	
				MAINTENANCE ITEMS		SHEET 20 OF 41	
						05/02/2016	

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

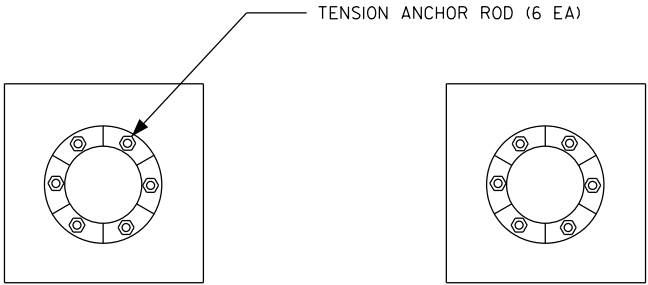
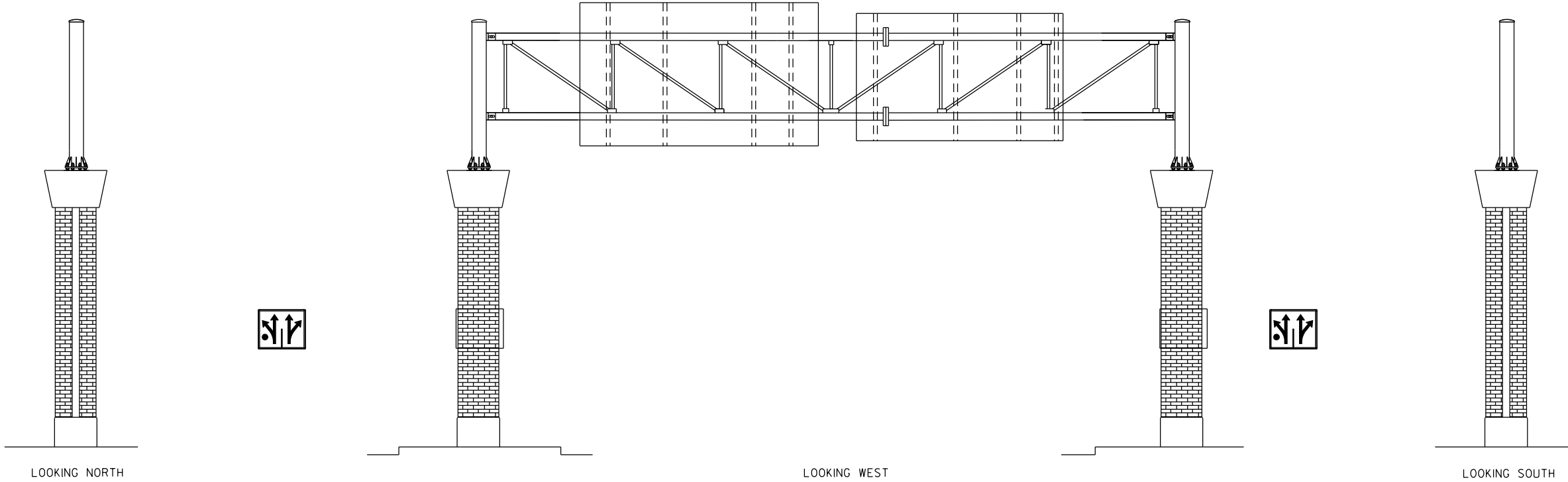
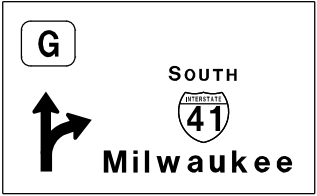
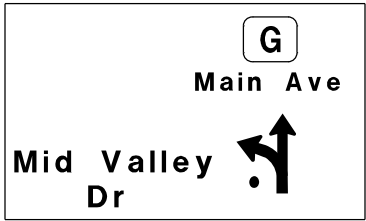
HIGHWAY: CTH G

WORK RESTRICTIONS:  
7:00 AM TO 6:00 PM

TRAFFIC CONTROL:  
LEFT LANE CLOSURE PER SDD 15D12

STATE PROJECT NUMBER

1009-30-11



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	6 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0222			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 21 OF 41
			05/18/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

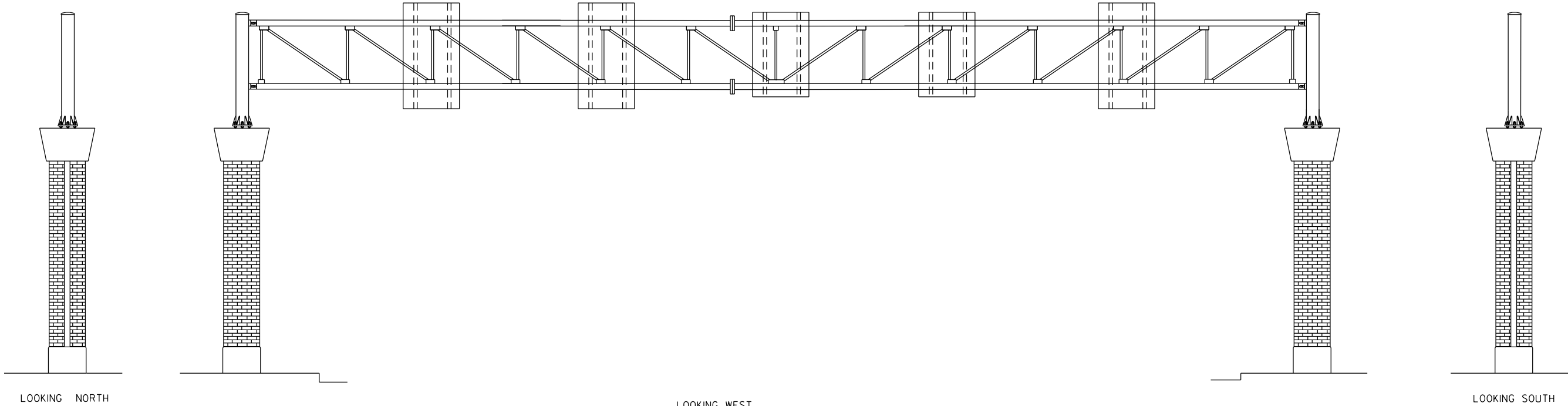
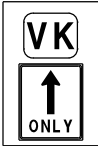
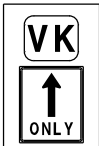
HIGHWAY: CTH VK

WORK RESTRICTIONS:  
3:00 PM TO 7:00 PM

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12

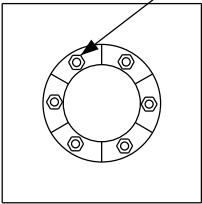
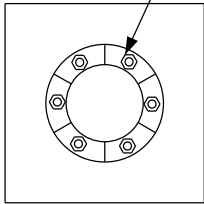
STATE PROJECT NUMBER

1009-30-11



TENSION ANCHOR ROD (6 EA)

TENSION ANCHOR ROD (6 EA)



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	12 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-05-0236			
DRAWN BY ZW		PLANS CK'D.	BS
MAINTENANCE ITEMS			SHEET 22 OF 41
			05/05/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

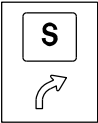
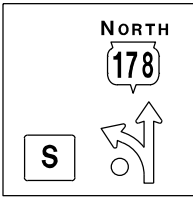
HIGHWAY: STH 178

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12

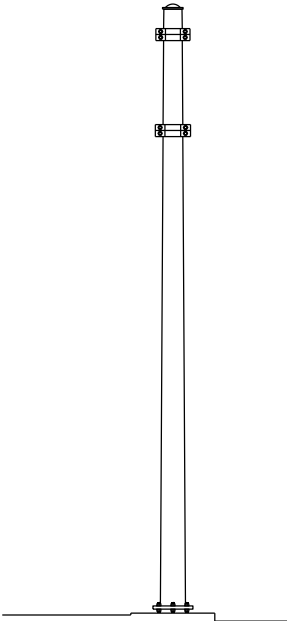
STATE PROJECT NUMBER

1009-30-11

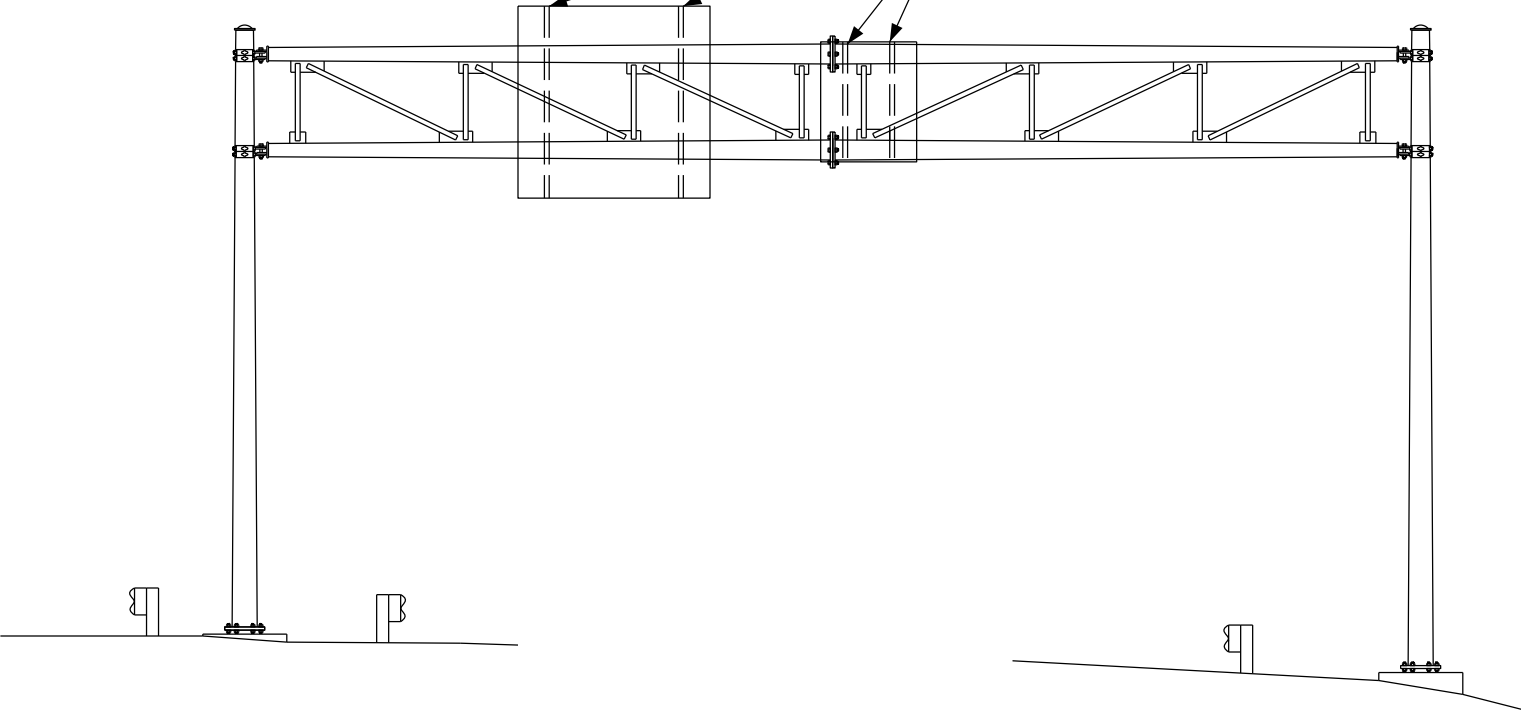


SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET (2 EA)

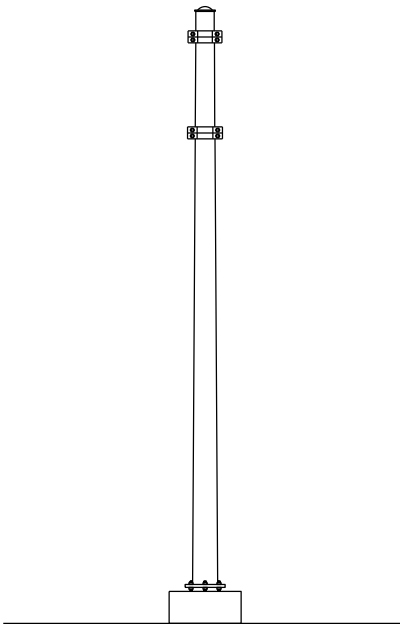
SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET (2 EA)



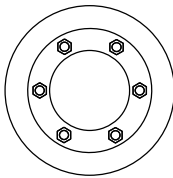
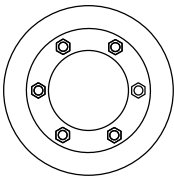
LOOKING EAST



LOOKING NORTH



LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.22	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-09-0027			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 23 OF 41
			09/17/2015



STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

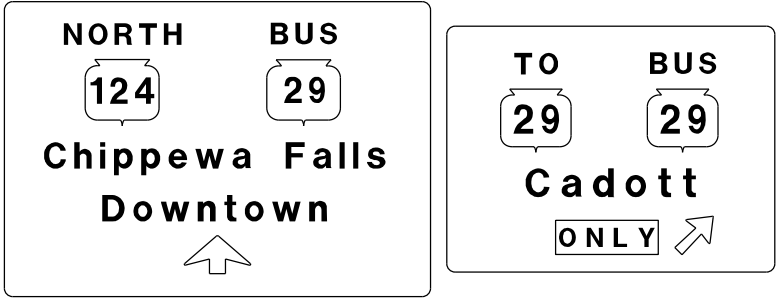
HIGHWAY: STH 124

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12

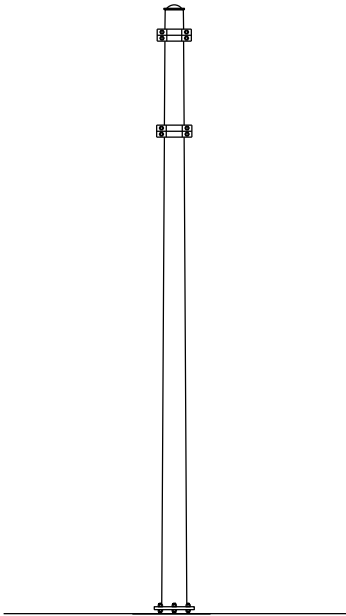
STATE PROJECT NUMBER

1009-30-11

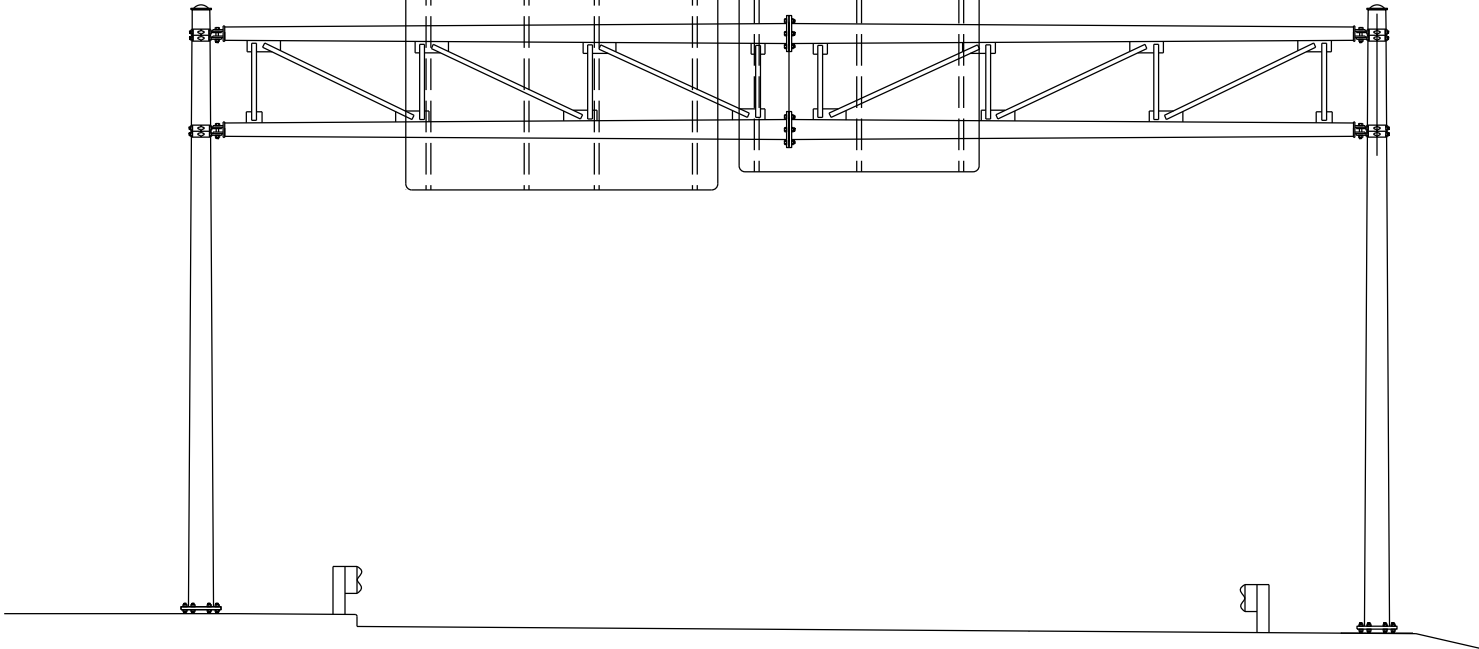


SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET (4 EA)

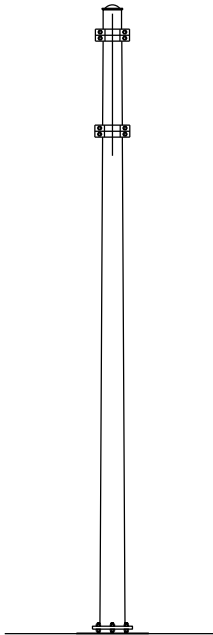
SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET (3 EA)



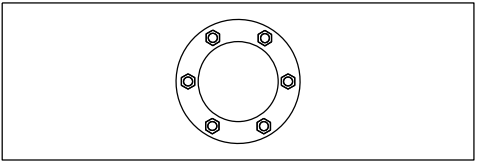
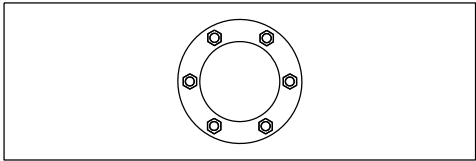
LOOKING EAST



LOOKING NORTH



LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.22	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	7 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-09-0028			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 24 OF 41
			09/17/2015

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

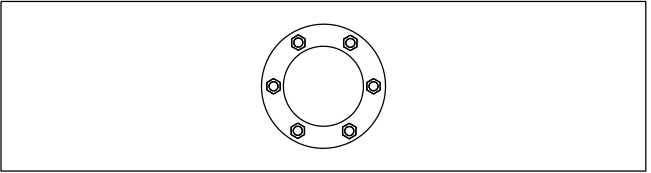
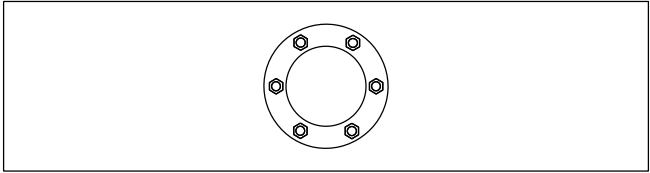
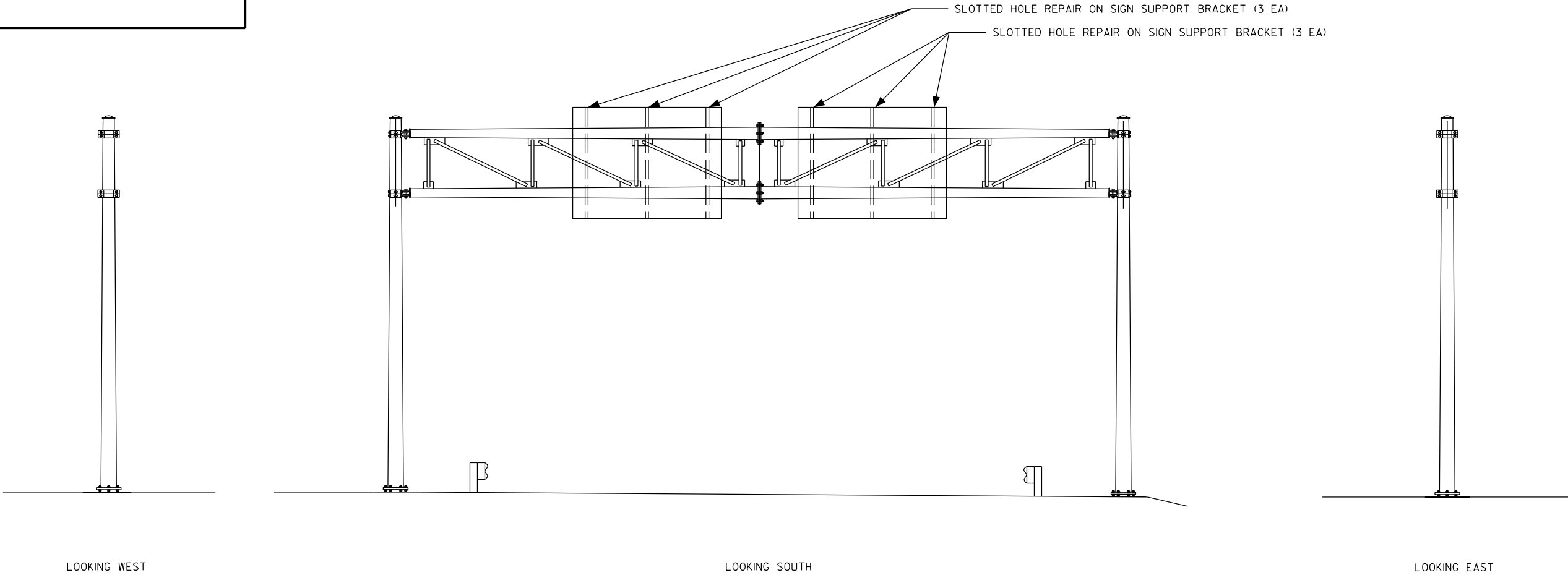
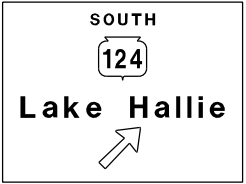
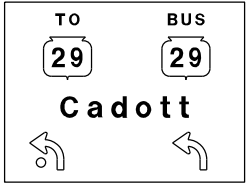
HIGHWAY: STH 124

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12

STATE PROJECT NUMBER

1009-30-11



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.22	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	6 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-09-0029			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 25 OF 41
			08/27/2015

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

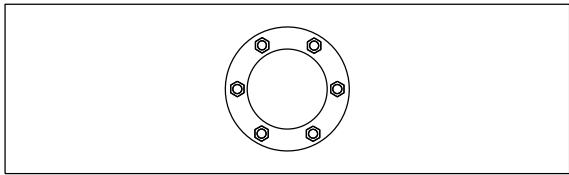
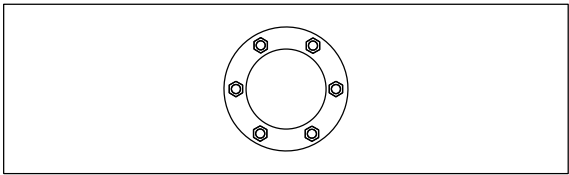
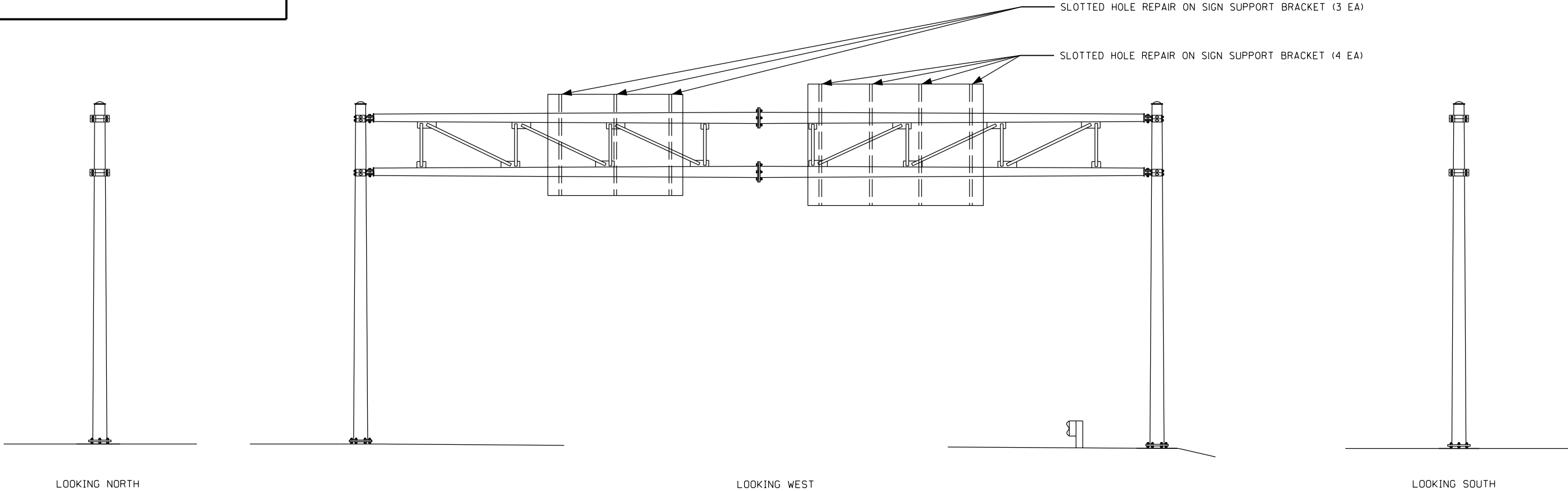
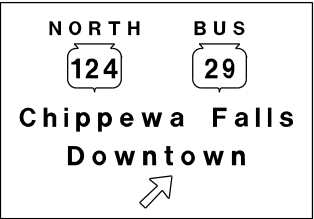
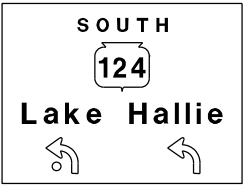
HIGHWAY: STH 29 - BUS

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12

STATE PROJECT NUMBER

1009-30-11



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.22	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	7 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-09-0030			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 26 OF 41
			08/27/2015

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: IH-535

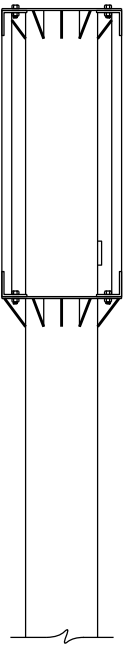
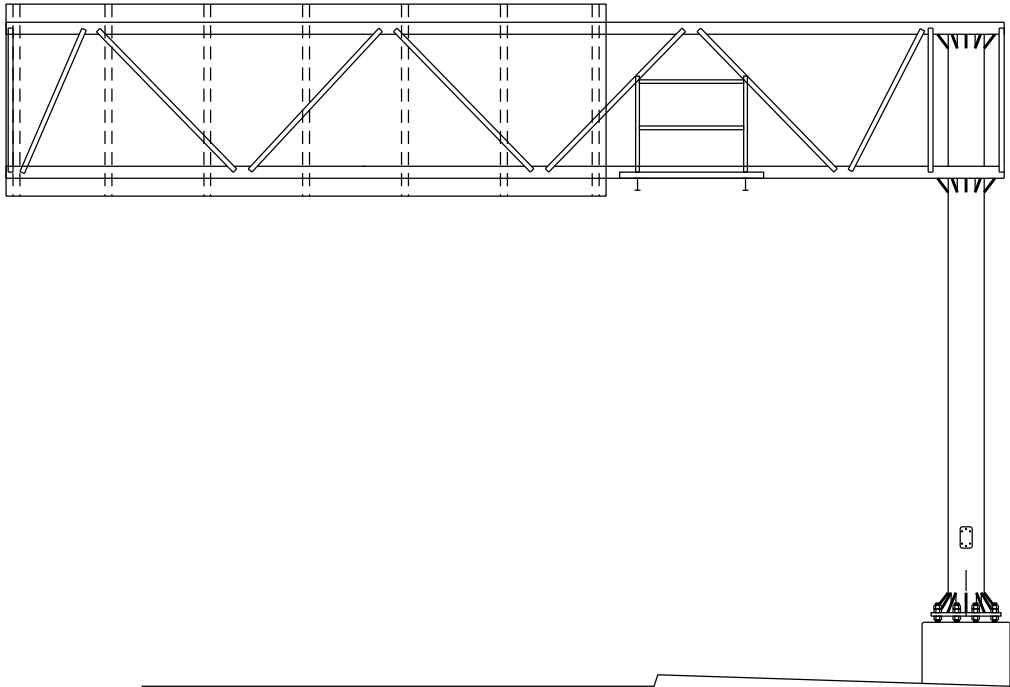
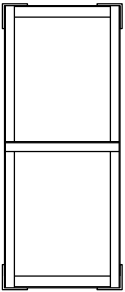
WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D27

STATE PROJECT NUMBER

1009-30-11

VARIABLE  
MESSAGE  
SIGN

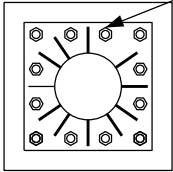


LOOKING NORTH

LOOKING WEST

8

8



TENSION ANCHOR ROD (12 EA)

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	12 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-16-0004			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 27 OF 41
			10/14/2015

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

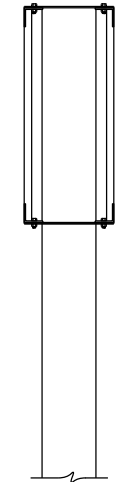
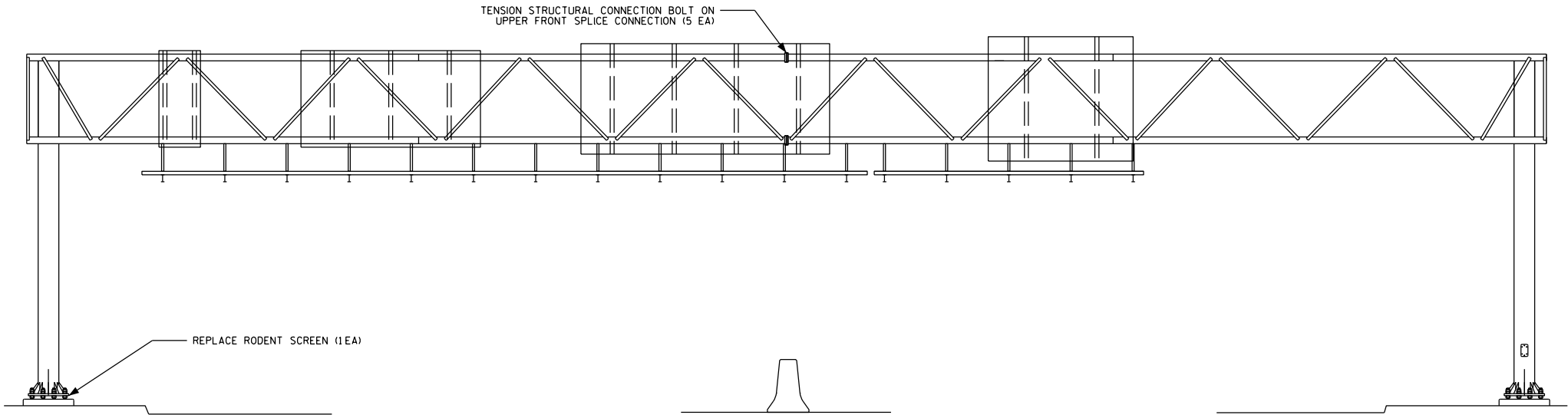
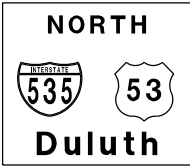
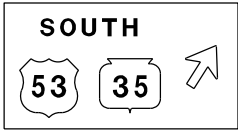
HIGHWAY: IH-535

WORK RESTRICTIONS:  
6:00 AM TO 10:00 PM

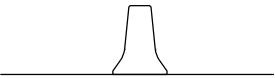
TRAFFIC CONTROL:  
SOUTHBOUND LEFT LANE CLOSURE PER  
SDD 15D12

STATE PROJECT NUMBER

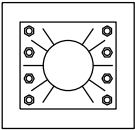
1009-30-11



LOOKING WEST



LOOKING NORTH



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.05	REPLACE RODENT SCREEN	2 EA	
SPV.0060.10	TENSION STRUCTURAL CONNECTION BOLT	5 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-16-0010			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 28 OF 41
			10/14/2015

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: IH-94

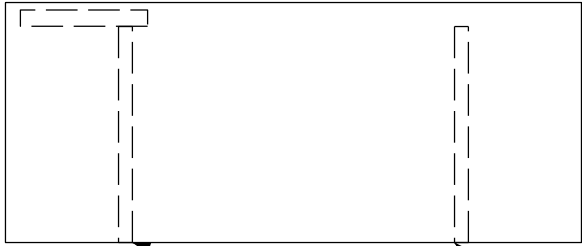
WORK RESTRICTIONS:  
ALL DAY, FRIDAY THROUGH SUNDAY  
7:00 AM TO 7:00 PM

TRAFFIC CONTROL:  
RIGHT LANE CLOSURE PER SDD 15D12

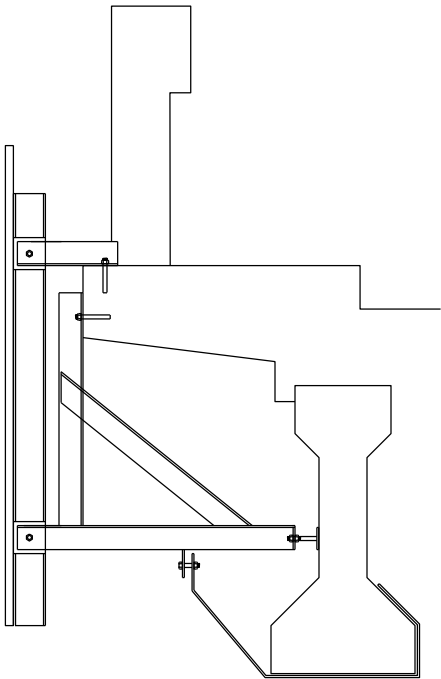
STATE PROJECT NUMBER

1009-30-11

REST AREA  
1/2 MILE



REPLACE SIGN PANEL CONNECTOR (10 EA)



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.20	REPLACE SIGN PANEL CONNECTOR	10 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-17-0004			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 29 OF 41
			10/02/2015

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: USH 51

WORK RESTRICTIONS:  
ALL DAY, THURSDAY THROUGH SUNDAY  
12:00 AM TO 9:00 AM AND 3:00 PM TO  
12:00 AM MONDAY THROUGH WEDNESDAY

TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D27

STATE PROJECT NUMBER


1009-30-11

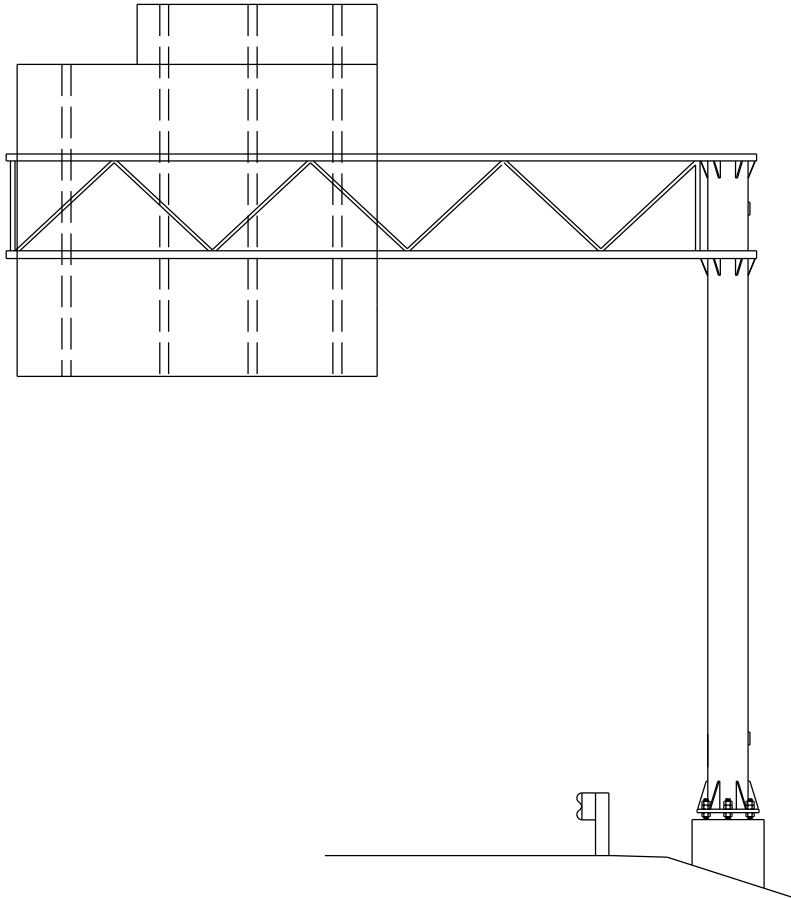
EXIT 187

29

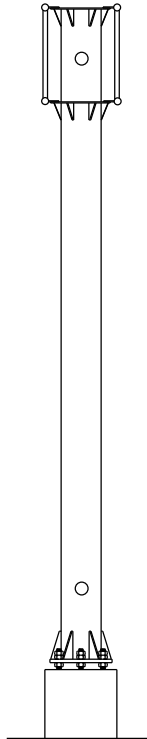
East

Weston  
Green Bay

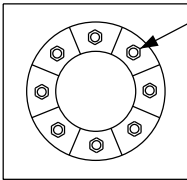
EXIT  ONLY



LOOKING SOUTH



LOOKING EAST



TENSION ANCHOR ROD (8 EA)

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SVP.0060.01	TENSION ANCHOR ROD	8 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-37-0042			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 30 OF 41
			11/14/2012

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: USH 51

WORK RESTRICTIONS:  
ALL DAY, THURSDAY THROUGH SUNDAY  
12:00 AM TO 9:00 AM AND 3:00 PM TO  
12:00 AM, MONDAY THROUGH WEDNESDAY

TRAFFIC CONTROL:  
LEFT LANE CLOSURE PER SDD 15D12

STATE PROJECT NUMBER

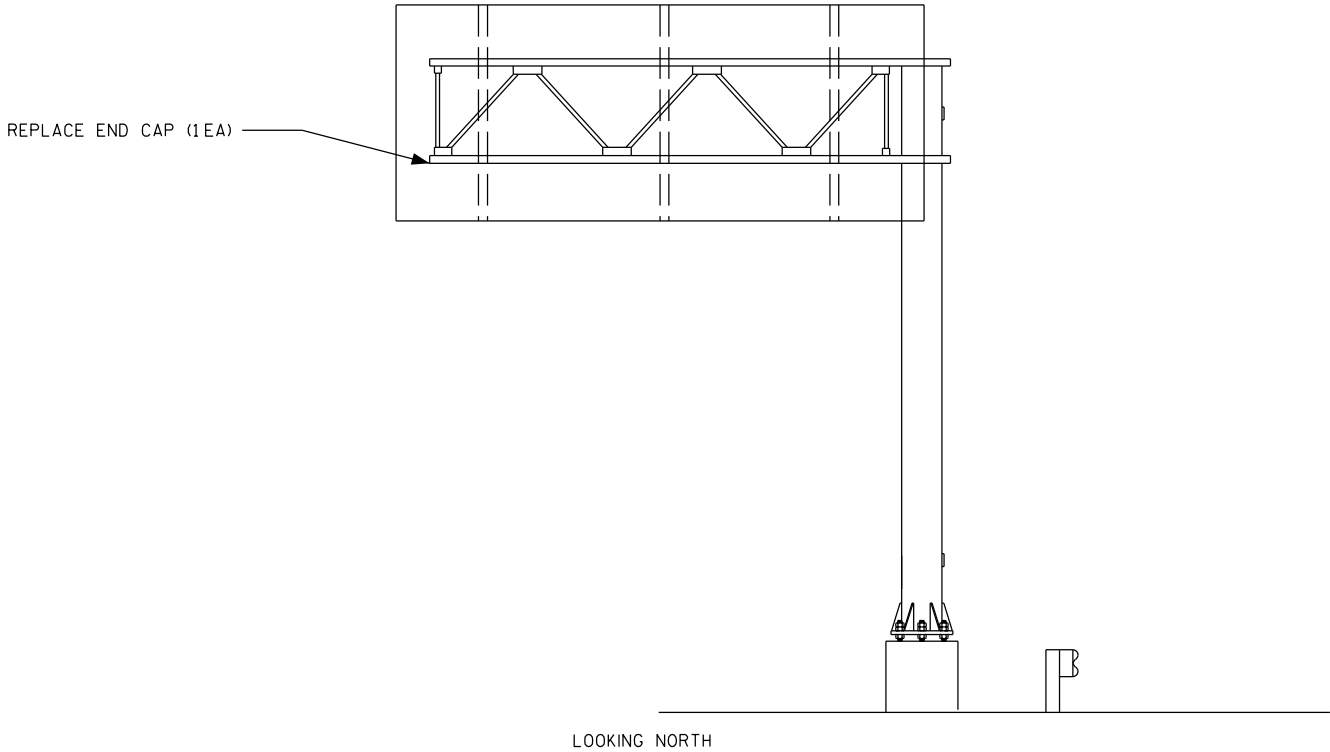
1009-30-11

<b>NN</b>	<b>North Mtn Road</b>	<b>1/2</b>
<b>29</b>	<b>West</b>	<b>1 1/2</b>
	<b>Sherman St</b>	<b>1 3/4</b>

LOOKING NORTH

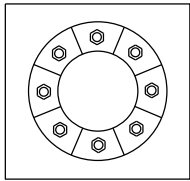
<b>N</b>	<b>Rib Mtn Rd</b>	<b>1/2</b>
<b>29</b>	<b>East</b>	<b>1 1/2</b>
<b>51</b>	<b>Business</b>	<b>4 1/2</b>

LOOKING SOUTH



LOOKING NORTH

LOOKING WEST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SVP.0060.12	REPLACE END CAP	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-37-0055			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 31 OF 41
			11/14/2012



STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

HIGHWAY: USH 51

WORK RESTRICTIONS:  
ALL DAY THURSDAY THROUGH SUNDAY  
12:00 AM TO 9:00 AM AND 3:00 PM TO  
12:00 AM, MONDAY THROUGH WEDNESDAY

TRAFFIC CONTROL:  
LEFT LANE CLOSURE PER SDD 15D12

STATE PROJECT NUMBER

1009-30-11



North Mtn Road

1/4



Rib Mtn Rd

2



West

2 3/4



West

1/4



Sherman St

1/2

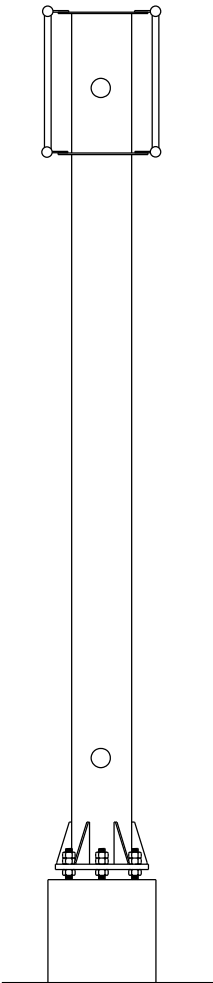


Stewart Ave

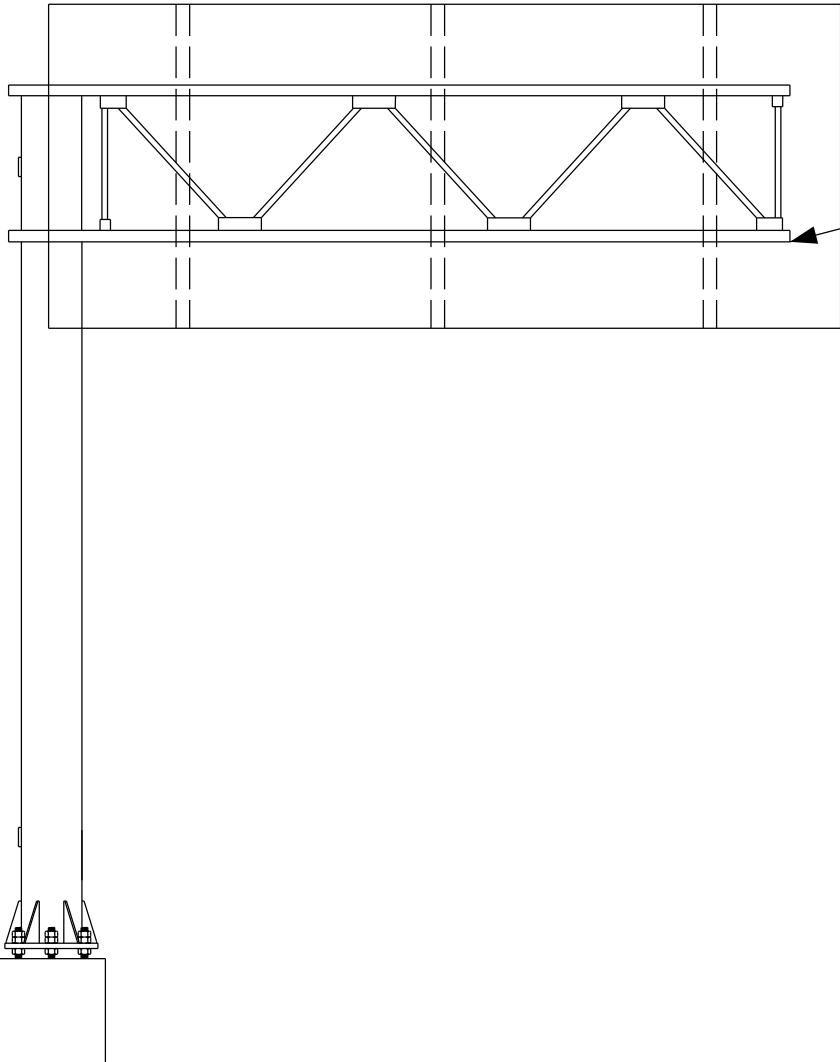
1

LOOKING SOUTH

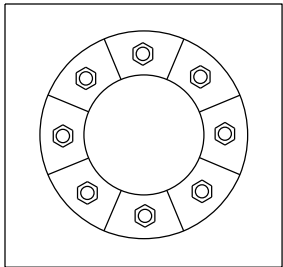
LOOKING NORTH



LOOKING WEST



REPLACE END CAP (4 EA)



LOOKING SOUTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SVP.0060.12	REPLACE END CAP	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-37-0058			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 32 OF 41
			11/14/2012

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

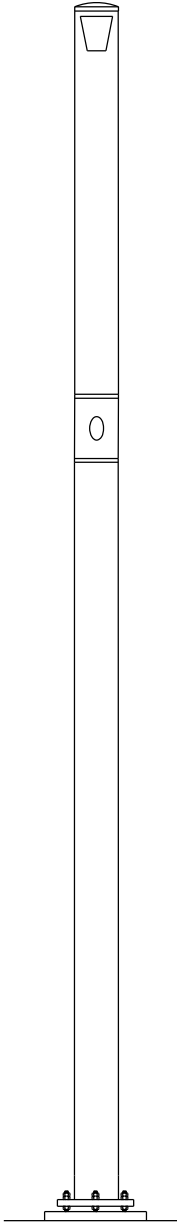
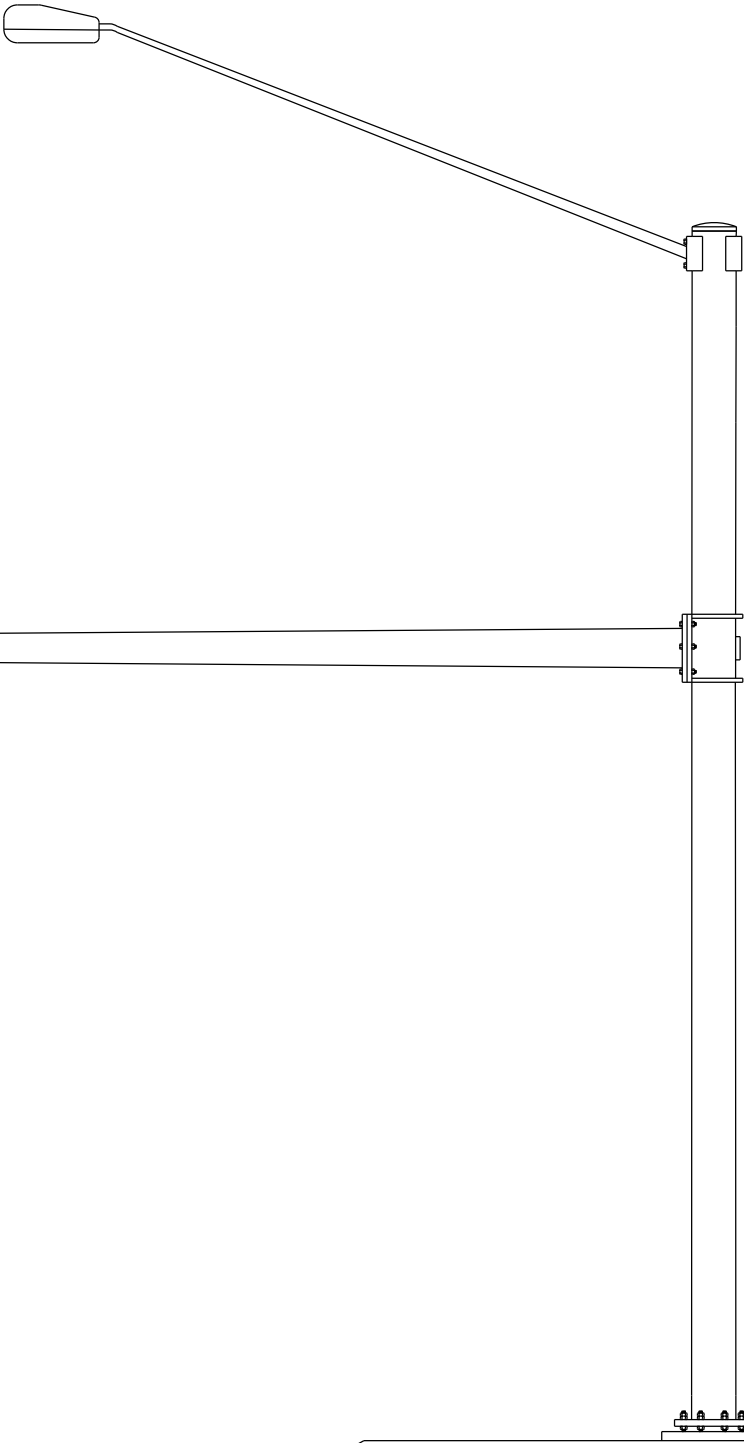
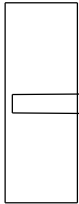
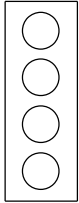
HIGHWAY: STH 13

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D28

STATE PROJECT NUMBER

1009-30-11



LOOKING EAST

LOOKING NORTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SVP.0060.05	REPLACE RODENT SCREEN	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-37-0098			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 33 OF 41
			12/05/2012

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

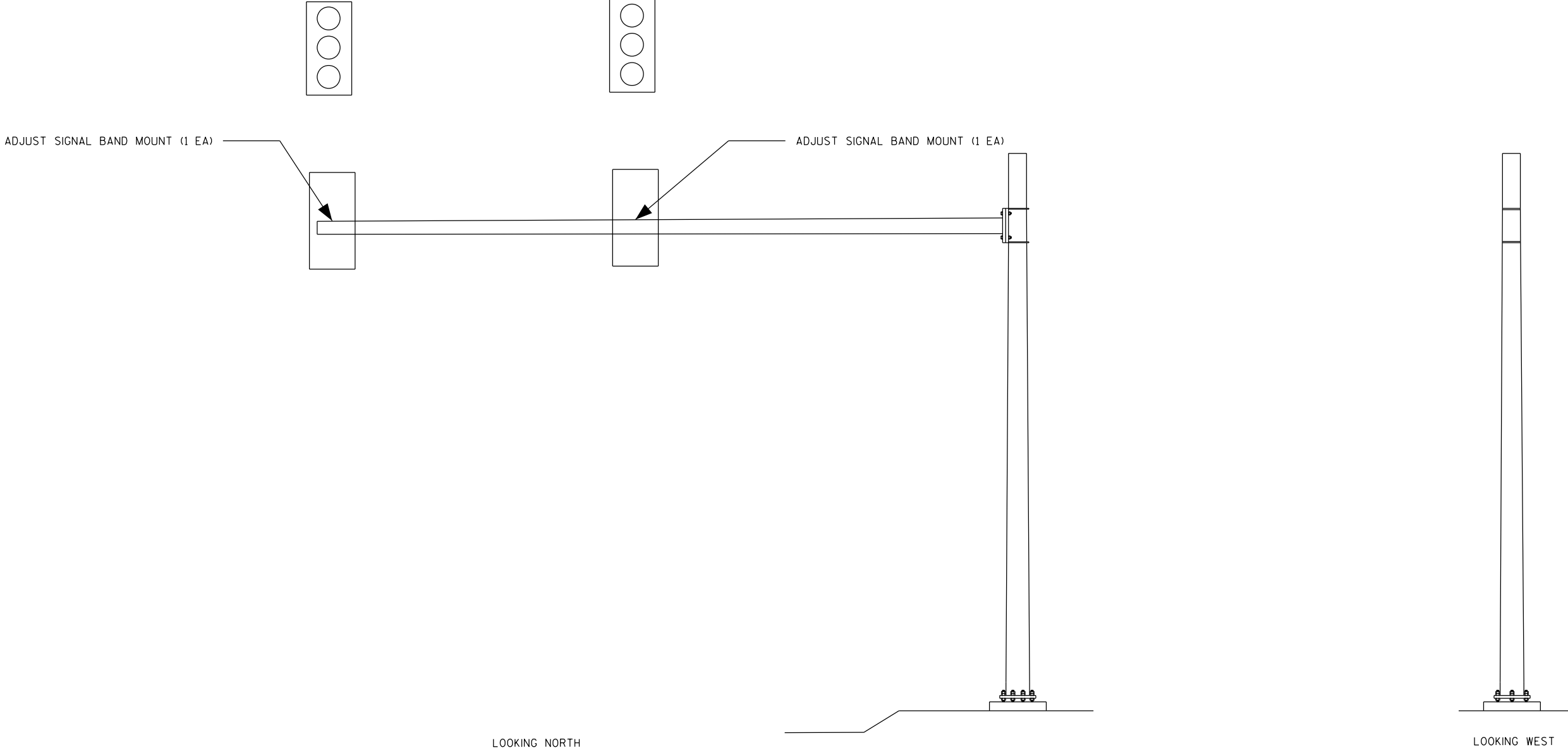
HIGHWAY: STH 13

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURES PER SDD  
15D21

STATE PROJECT NUMBER

1009-30-11



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SVP.0060.29	ADJUST SIGNAL BAND MOUNT	2 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-37-0099			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 34 OF 41
			12/05/2012

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

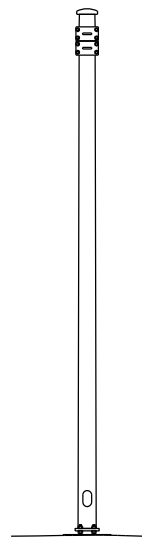
HIGHWAY: USH 10

WORK RESTRICTIONS:  
NONE

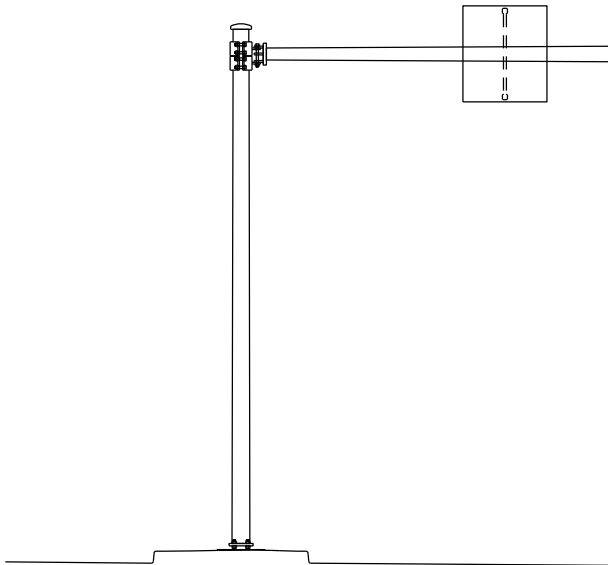
TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D28

STATE PROJECT NUMBER

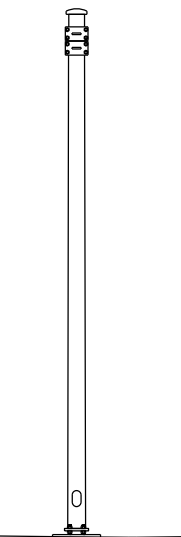
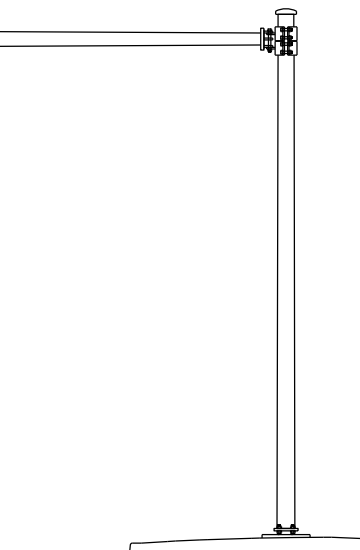
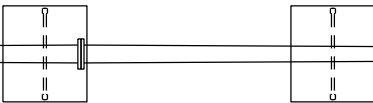
1009-30-11



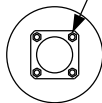
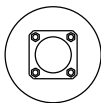
LOOKING SOUTH



LOOKING EAST



LOOKING NORTH



TENSION ANCHOR ROD (4 EA)

8

8

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.01	TENSION ANCHOR ROD	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-47-0007			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 35 OF 41
			10/08/2015

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

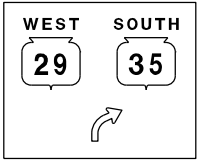
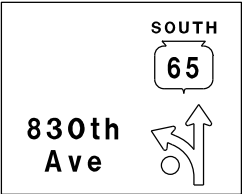
HIGHWAY: STH 35

WORK RESTRICTIONS:  
NONE

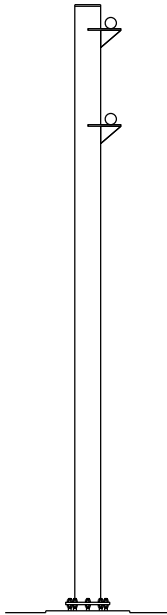
TRAFFIC CONTROL:  
SEE TRAFFIC CONTROL PLAN  
FULL CLOSURE AND DETOUR PER SDD  
15C02-06

STATE PROJECT NUMBER

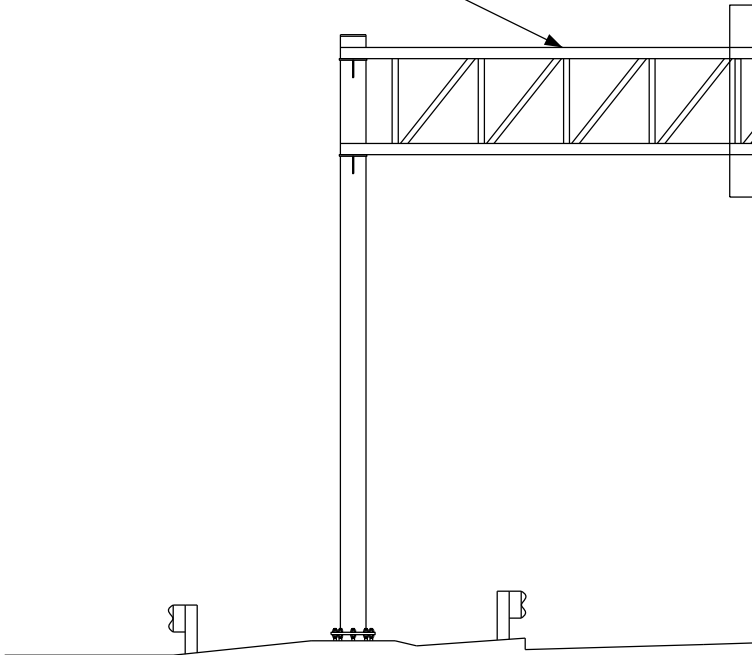
1009-30-11



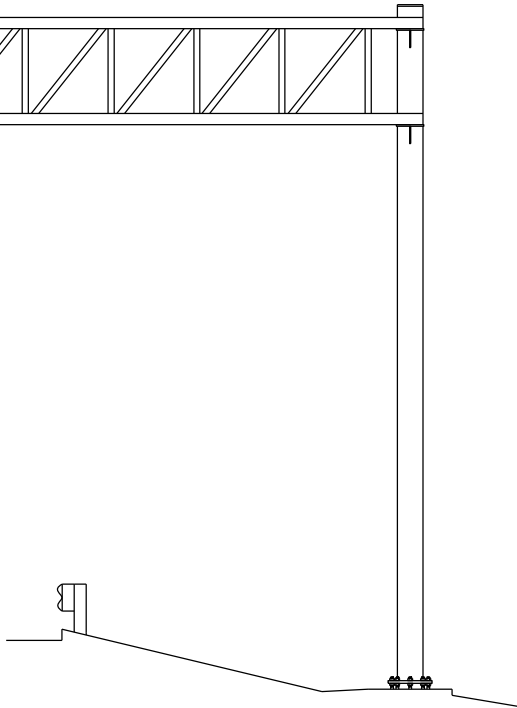
REINSTALL TRUSS (1EA)



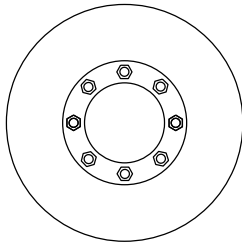
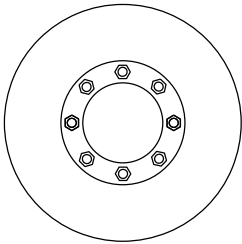
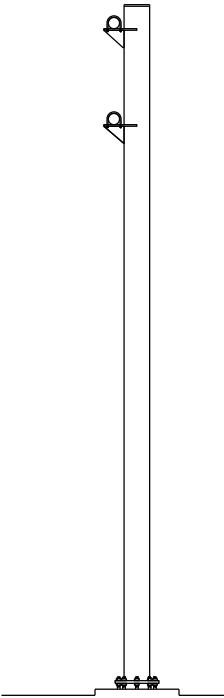
LOOKING WEST



LOOKING SOUTH



LOOKING EAST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.18	REINSTALL TRUSS	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-47-0009			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 36 OF 41
			10/09/2015

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

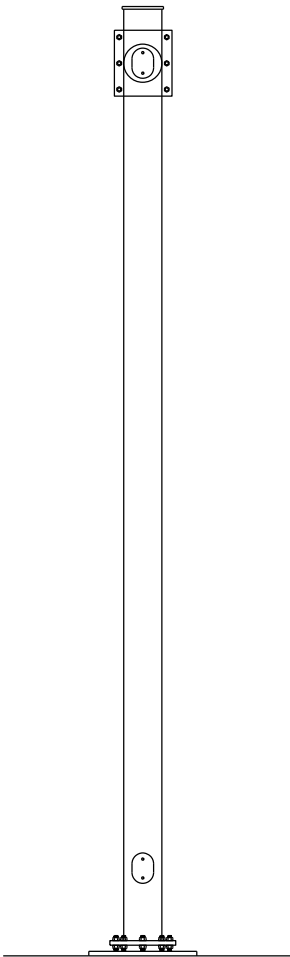
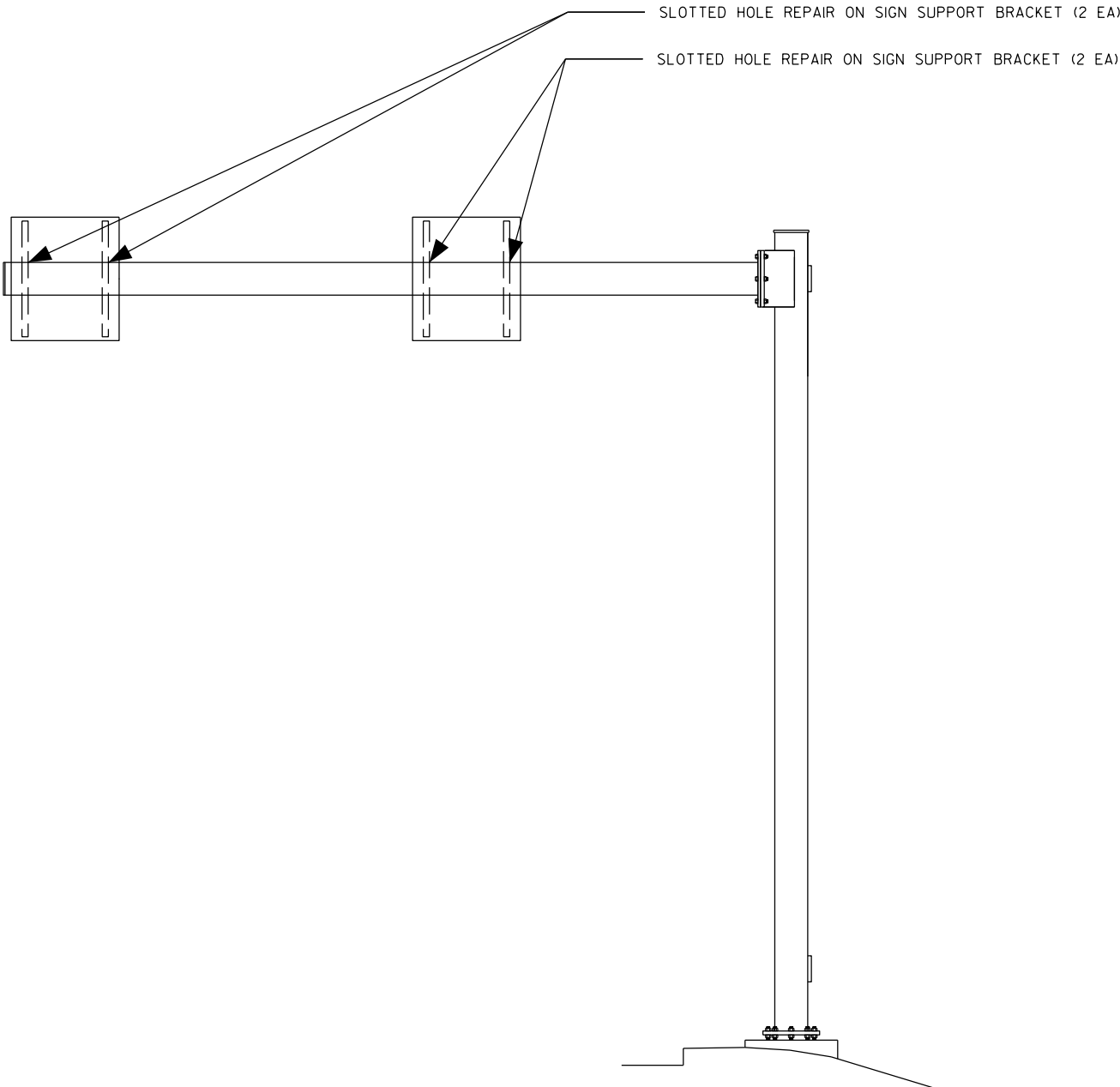
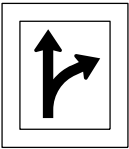
HIGHWAY: USH 8

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD 15D12

STATE PROJECT NUMBER

1009-30-11



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.22	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-48-0003			
DRAWN BY ZW		PLANS CK'D. BS	
MAINTENANCE ITEMS			SHEET 37 OF 41
			09/15/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

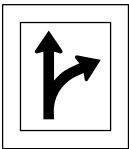
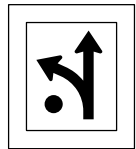
HIGHWAY: USH 8

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT AND LEFT LANE CLOSURE PER SDD  
15D12

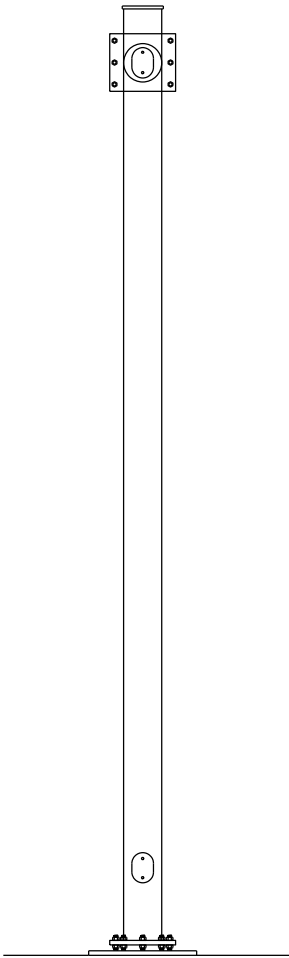
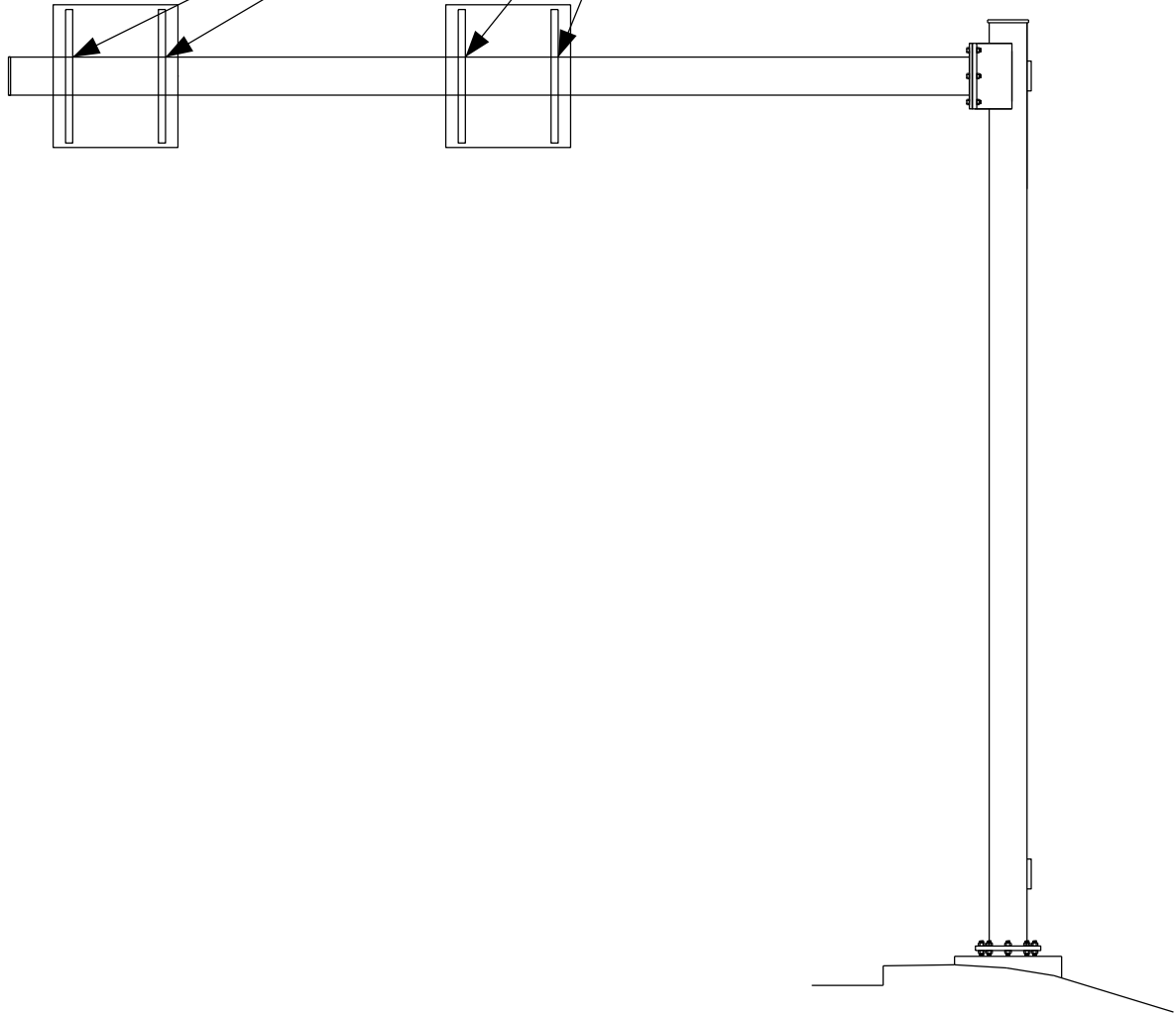
STATE PROJECT NUMBER

1009-30-11



SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET (2 EA)

SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET (2 EA)



LOOKING WEST

LOOKING SOUTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SPV.0060.22	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-48-0004			
DRAWN BY		ZW	PLANS CK'D. BS
MAINTENANCE ITEMS			SHEET 38 OF 41
			09/15/2016

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

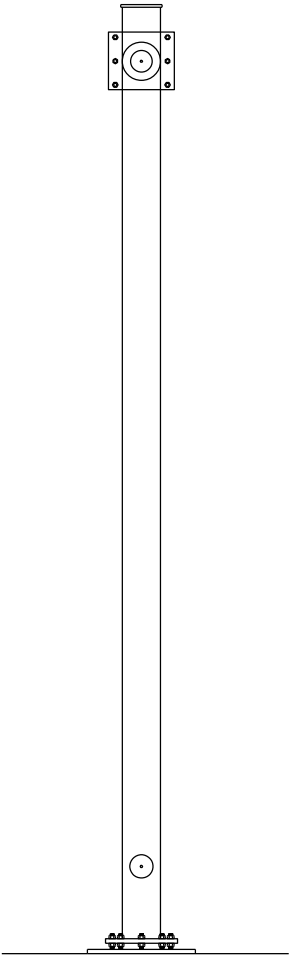
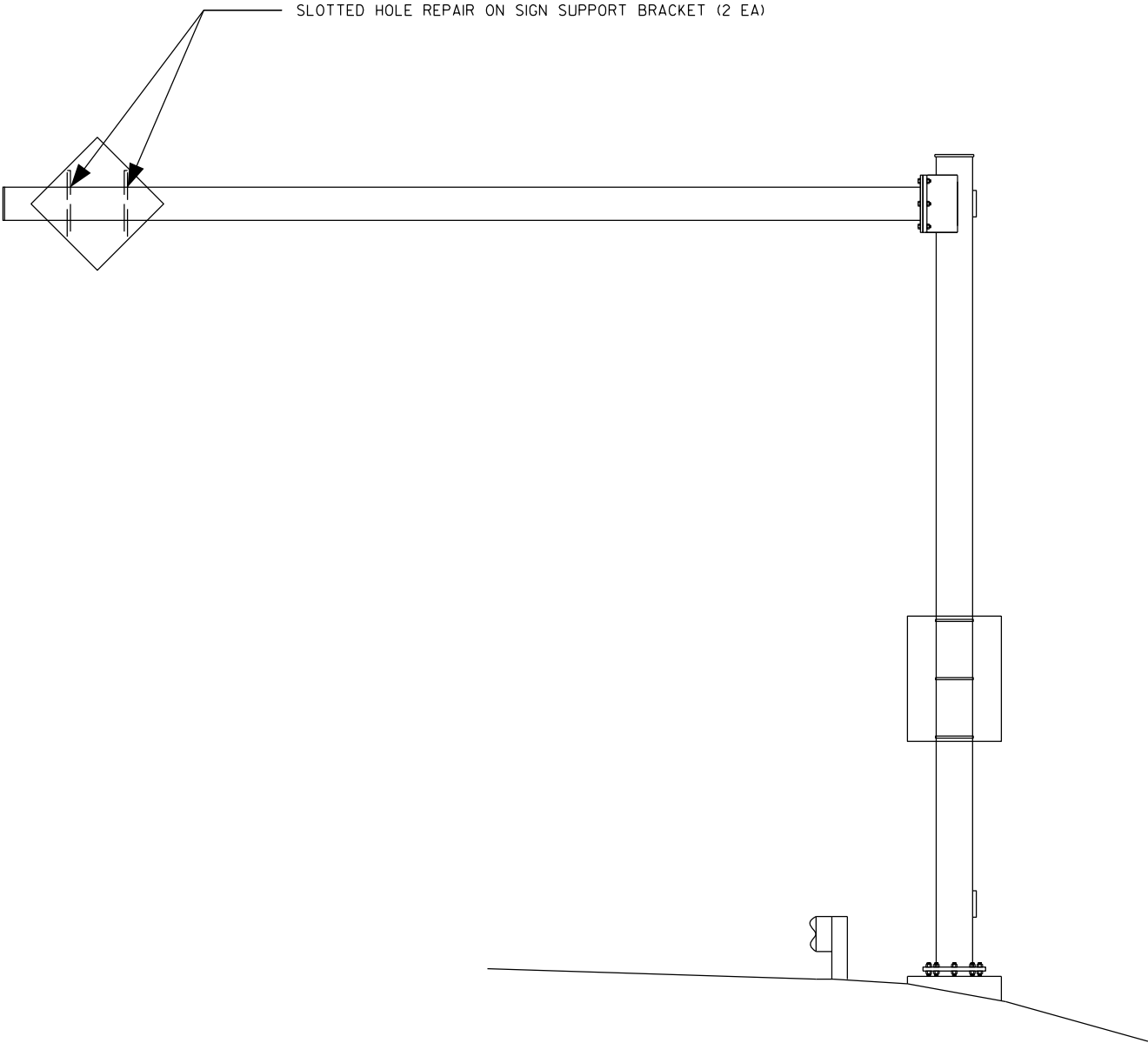
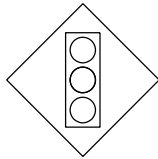
HIGHWAY: USH 8

WORK RESTRICTIONS:  
NONE

TRAFFIC CONTROL:  
RIGHT LANE CLOSURE PER SDD 15D12

STATE PROJECT NUMBER

1009-30-11



LOOKING WEST

LOOKING SOUTH

ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET	NO.	DATE	REVISION	BY
SPV.0060.22	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	2 EA		STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
				STRUCTURE S-48-0006			
				DRAWN BY ZW		PLANS CK'D. BS	
				MAINTENANCE ITEMS			SHEET 39 OF 41
							09/15/2016



STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

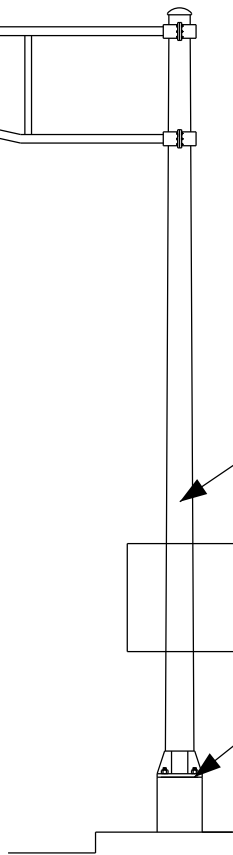
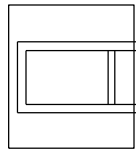
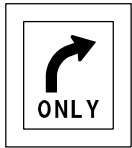
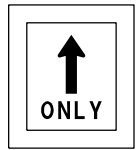
HIGHWAY: STH 110

WORK RESTRICTIONS:  
NONE

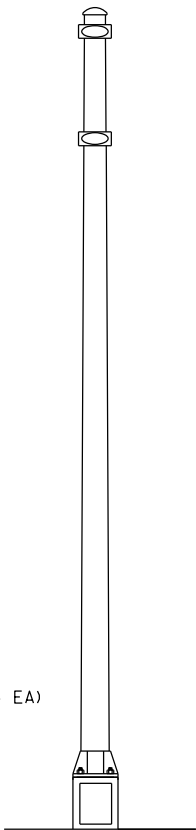
TRAFFIC CONTROL:  
RIGHT SHOULDER CLOSURE PER SDD 15D28

STATE PROJECT NUMBER

1009-30-11

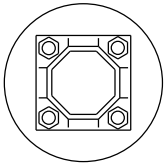


RIGHT LANE  
**MUST**  
TURN RIGHT



LOOKING WEST

LOOKING SOUTH



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SVP.0060.26	REPLACE SIGN BRIDGE ID PLAQUE	1 EA	
SVP.0060.32	REPLACE WASHERS AT PEDESTAL CONNECTION	4 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-68-0002			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS			SHEET 40 OF 41
			11/26/2012

STRUCTURE SPECIFIC TRAFFIC CONTROL NOTES

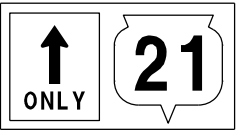
HIGHWAY: STH 21

WORK RESTRICTIONS:  
NONE

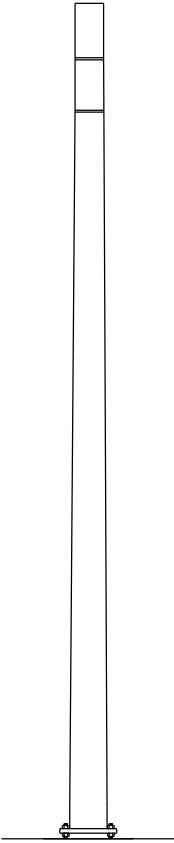
TRAFFIC CONTROL:  
LEFT LANE CLOSURE PER SDD 15D20

STATE PROJECT NUMBER

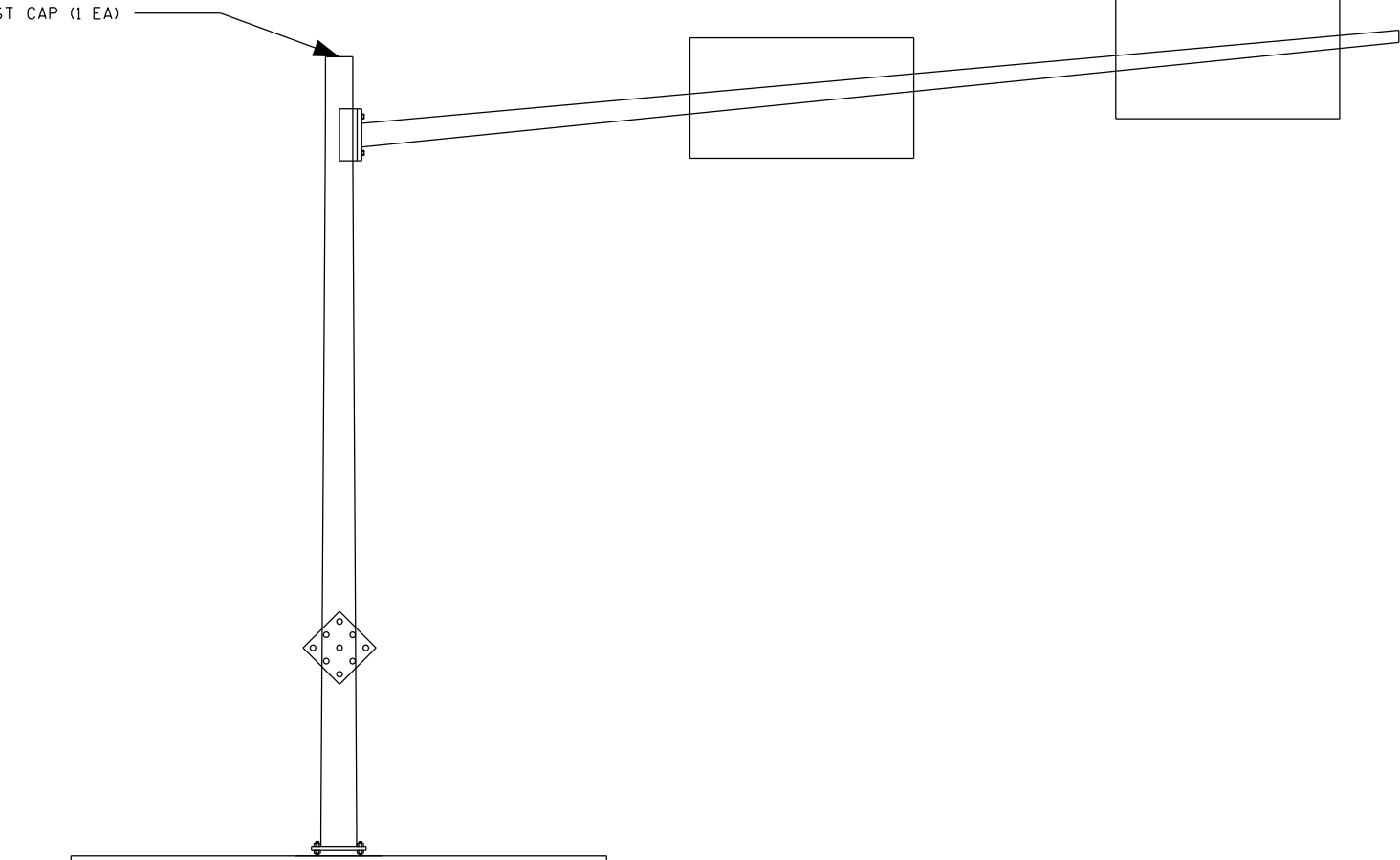
1009-30-11



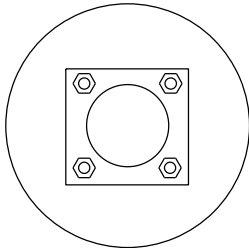
SECURE/REPLACE POST CAP (1 EA)



LOOKING SOUTH



LOOKING EAST



ITEM NO.	DESCRIPTION	QTY	DETAIL SHEET
SVP.0060.13	SECURE/REPLACE POST CAP	1 EA	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE S-69-0003			
DRAWN BY ZW		PLANS CK'D. TD	
MAINTENANCE ITEMS		SHEET 41 OF 41	
		11/26/2012	

## Notes



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

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through innovation and exceptional service.

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