

MAD

PROJECT ID:
WITH:

1009-30-16

COUNTY:

DANE

MAY 2019

ORDER OF SHEETS

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

TOTAL SHEETS = 78

STATE OF WISCONSIN

DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

SIGN BRIDGE REPLACEMENT

REGIONWIDE VARIOUS ROUTES SW

VAR HWY

SOUTHWEST REGION WIDE

STATE PROJECT NUMBER

1009-30-16

STATE PROJECT

1009-30-16

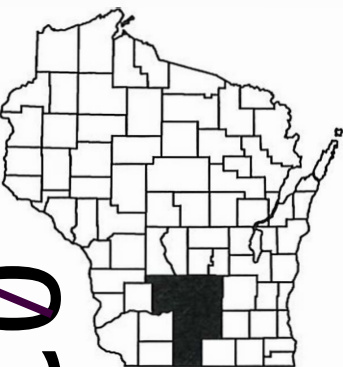
FEDERAL PROJECT

PROJECT

WISC 2019292

CONTRACT

1



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
EXISTING RIGHT OF WAY
PROPOSED OR NEW R/W LINE

SLOPE INTERCEPT

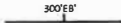
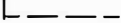
REFERENCE LINE

EXISTING CULVERT
PROPOSED CULVERT
(Box or Pipe)

COMBUSTIBLE FLUIDS

MARSH AREA

WOODED OR SHRUB AREA



PROFILE

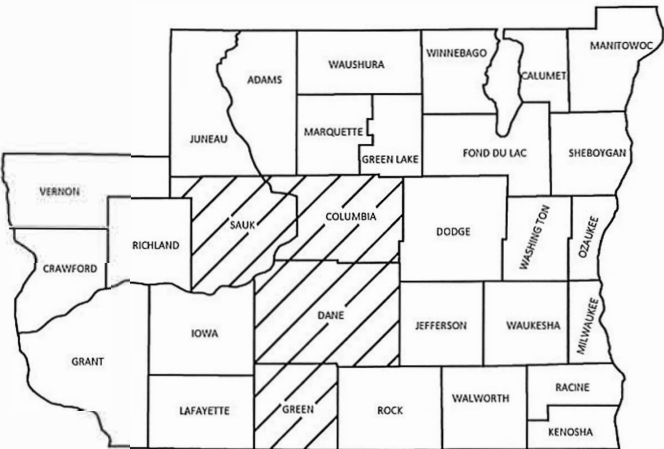
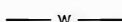
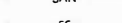
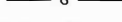
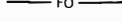
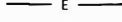
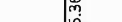
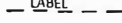
GRADE LINE
ORIGINAL GROUND
MARSH OR ROCK PROFILE
(To be noted as such)
SPECIAL DITCH

GRADE ELEVATION

CULVERT (Profile View)

UTILITIES

ELECTRIC
FIBER OPTIC
GAS
SANITARY SEWER
STORM SEWER
TELEPHONE
WATER
UTILITY PEDESTAL
POWER POLE
TELEPHONE POLE



LAYOUT

SCALE 0 0 MI

TOTAL NET LENGTH OF CENTERLINE = 0 MI

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor SURVEYOR
Designer KYLE WITTE
Project Manager KYLE TREML
Regional Examiner REGIONAL EXAMINER
Regional Supervisor ROB WAGNER

APPROVED FOR THE DEPARTMENT

DATE 1/24/19
(Signature)

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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.

STRUCTURE AS-BUILTS AND INSPECTION REPORTS CAN BE FOUND ON THE WISDOT HIGHWAY STRUCTURES INFORMATION (HSI) WEBSITE OR BY REQUEST THROUGH THE PROJECT MANAGER.

TRAFFIC CONTACTS:

JOE SCHNEIDER COUNTIES:	608-789-5959 SAUK, GREEN	JOSEPH.SCHNEIDER@DOT.WI.GOV
JASON KOSTER COUNTIES:	608-440-1331 COLUMBIA & DANE	JASON.KOSTER@DOT.WI.GOV
JOSH KOEBERNICK COUNTIES:	608-516-6542 DANE (FOR SIGN STRUCTURES ON VERONA RD AND BELTLINE)	JOSHUA.KOEBERNICK@DOT.WI.GOV

DNR LIASON:

ERIC HEGGELUND COUNTIES:	608-228-7927 COLUMBIA & DANE	ERIC.HEGGELUND@WISCONSIN.GOV
ANDY BARTA COUNTIES:	608-235-2955 SAUK, GREEN	ANDREW.BARTA@WISCONSIN.GOV

STRUCTURE MAINTENANCE:

SHIV GUPTA COUNTIES:	608-243-5983 COLUMBIA, DANE, SAUK, GREEN	SHIV.GUPTA@DOT.WI.GOV
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COLUMBIA

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-11-0014	IH 39	SB	IH 39 SB OFF RAMP TO IH 94 0.22 MILES EAST OF IH 94
S-11-0021	USH 51	NB	USH 51 NB 0.40 MILES EAST OF STH 33

GREEN

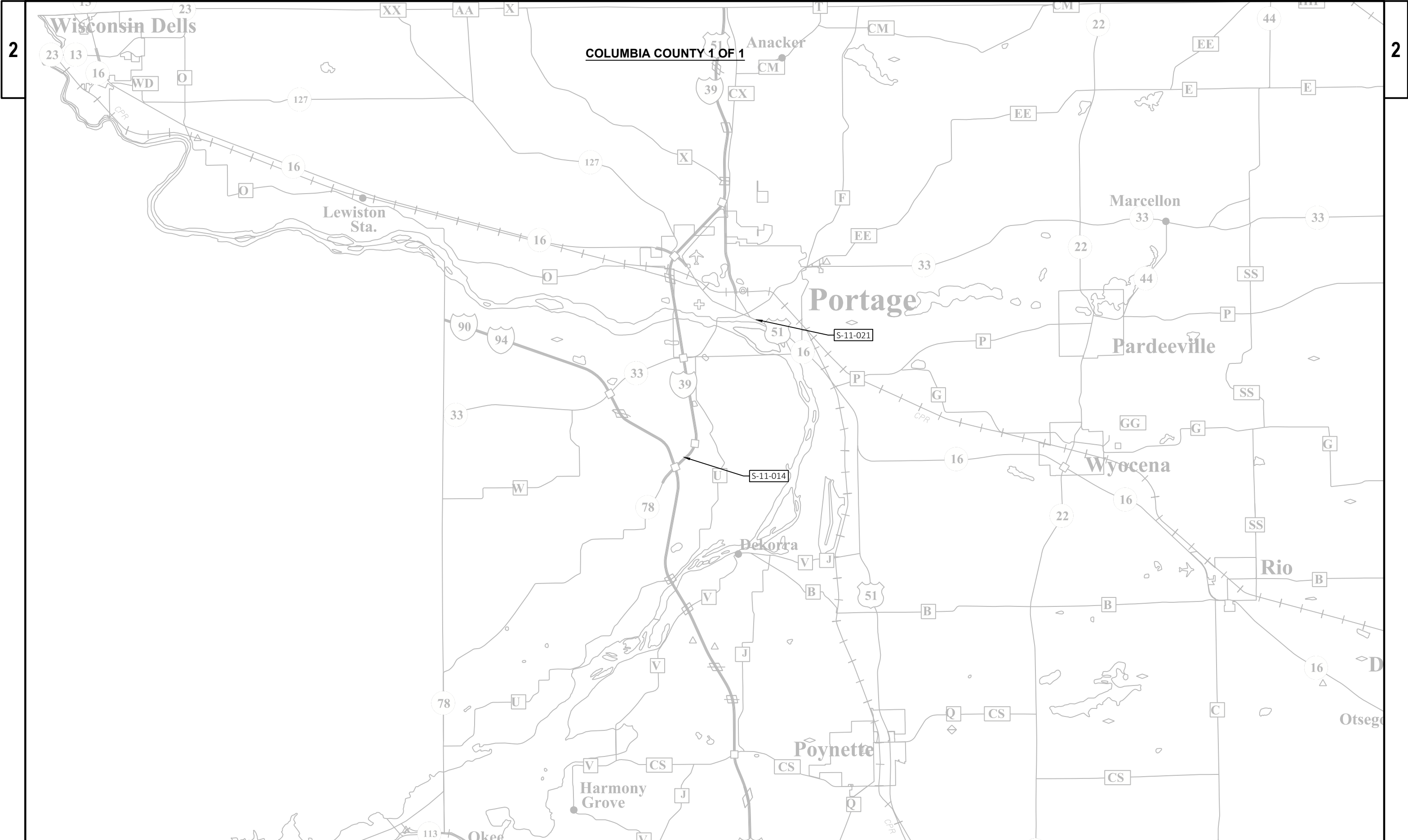
STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-23-0002	STH 11	EB	STH 11 AT USH 81 WB/69 SB EXIT

SAUK

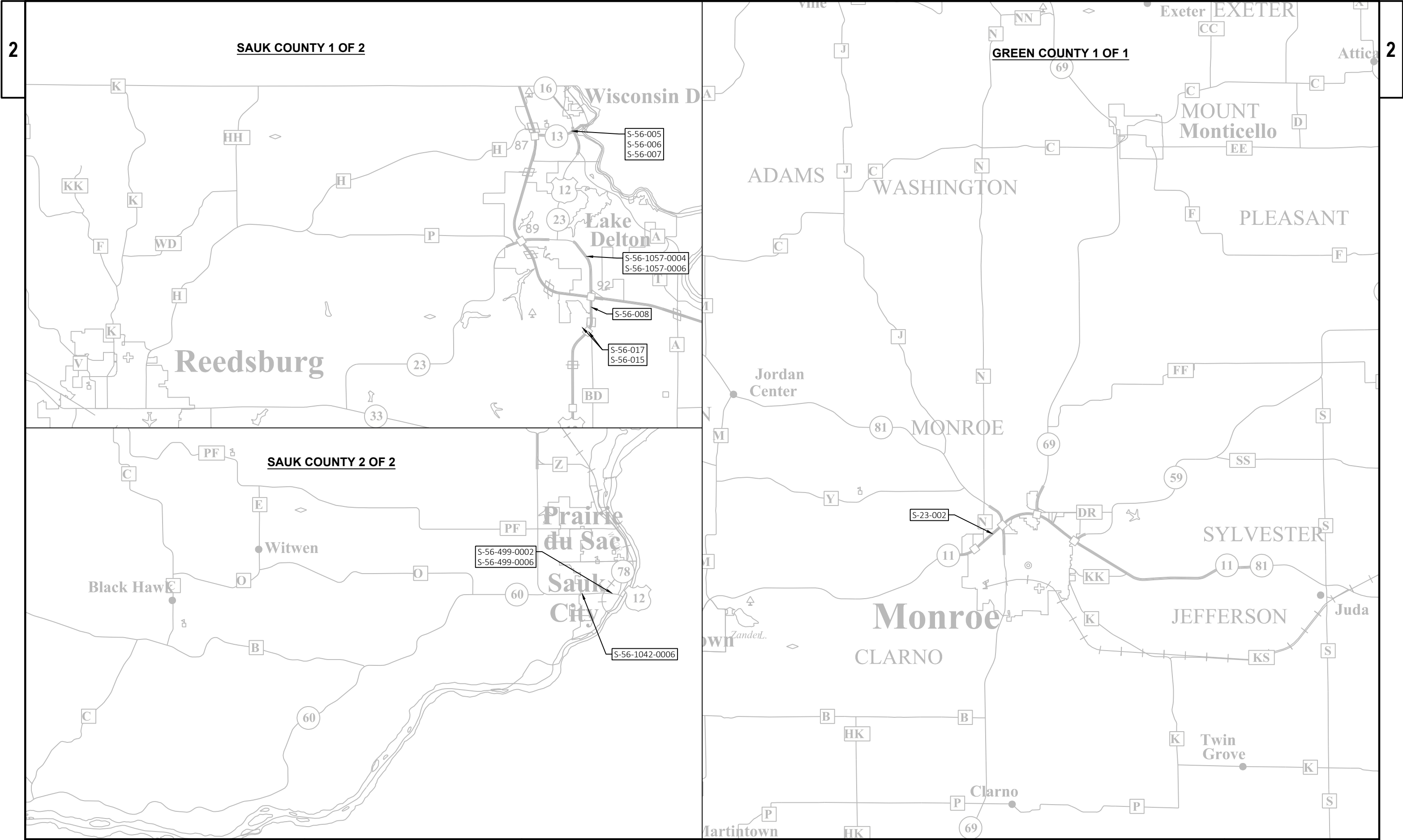
STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-56-0005	STH 13	WB	STH 13 WB AT STH 13/USH 12 INTERSECTION
S-56-0006	STH 13	NB	STH 13 NB AT STH 13/ USH 12 INTERSECTION
S-56-0007	USH 12	WB	USH 12 WB AT USH 12/ STH 13 INTERSECTION
S-56-0008	USH 12	NB	USH 12 NB 0.24 MILES SOUTH OF IH 94
S-56-0015	CTH BD	EB/WB	CTH BD 0.13 MILES SE OF USH 12
S-56-0017	CTH BD	EB/WB	CTH BD 0.13 MILES NW OF USH 12
S-56-0499-0002	USH 12	WB	USH 12 WB AT USH 12/MADISON ST INTERSECTION
S-56-0499-0006	USH 12	EB	USH 12 EB AT USH 12/MADISON ST INTERSECTION
S-56-1042-0006	USH 12	EB	USH 12 EB AT USH 12/LUEDERS RD INTERSECTION
S-56-1057-0004	HILLMAN RD	EB	HILLMAN RD EB AT USH 12/HILLMAN RD INTERSECTION
S-56-1057-0006	USH 12	WB	USH 12 WB AT USH 12/HILLMAN RD INTERSECTION

DANE

STRUCTURE NUMBER	HIGHWAY	DIRECTION	LOCATION
S-13-036	USH 12	WB	USH 12/18 WB EXIT 263
S-13-037	USH 12/18	EB	USH 12/18 EB EXIT 264
S-13-040	USH 12/18	EB	USH 12/18 EB EXIT 264
S-13-060	USH 12/14/18	EB	USH 12/18 EB EXIT 260 A/B
S-13-061	USH 12/14/18	EB	USH 12/18 EB EXIT 260 B
S-13-064	USH 12/18	EB	USH 12/18 EB EXIT 261
S-13-071	USH 12/18	WB	USH 12/18 WB EXIT 262
S-13-153	USH 12	WB	USH 12 WB 1.20 MILES WEST OF CTH AB
S-13-202	SCHROEDER RD	EB	USH 12 OFF RAMP EXIT 257 AT WHITNEY WAY
S-13-205	USH 151	SB	USH 151 SB 1.36 MILES SOUTH OF IH 39
S-13-248	USH 12/14	EB	USH 12/14 EB EXIT 259
S-13-258	USH 12	EB	USH 12 EB OFF RAMP EXIT 253
S-13-279	USH 12	EB	USH 12/18 EB EXIT 261
S-13-280	USH 12/18	EB	USH 12/18 EB EXIT 262
S-13-282	USH 12	WB	USH 12/18 WB EXIT 261
S-13-283	USH 12/18	WB	USH 12/18 WB EXIT 261
S-13-288	STH 113	SB	STH 113 SB 0.17 MILES NORTH OF ABERG AVE.
S-13-377	USH 18/151	WB	USH 18/151 WB 0.45 MILES WEST OF USH 12/14
S-13-900-0001	DEMING WAY	SB	USH 14/DEMING WAY INTERSECTION
S-13-900-0002	DEMING WAY	NB	USH 14/DEMING WAY INTERSECTION
S-13-900-0003	USH 14	EB	USH 14/DEMING WAY INTERSECTION
S-13-900-0004	USH 14	WB	USH 14/DEMING WAY INTERSECTION



PROJECT NO: 1009-30-16	HWY: VAROUS	COUNTY: COLUMBIA	SIGN LOCATIONS	SHEET	E
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PROJECT NO: 1009-30-16	HWY: VAROUS	COUNTY: DANE	SIGN LOCATIONS	SHEET	E
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COUNTY	STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION	TRAFFIC CONTROL	RESTRICTED HOURS	PCMS	NOTES
Columbia	S-11-0014	IH 39	SB	IH 39 SB ON RAMP TO IH 90	Shoulder closure	None		
Columbia	S-11-0021	USH 51	NB	USH 51 BETWEEN BROOKS ST AND BRADY ST	Lane closure	None		
Dane	S-13-0036	USH 12	WB	USH 12 WB EXIT RAMP TO JOHN NOLEN DR	Lane closure	Lane closures (6am-8pm) Shoulder closures (6am-9am, 3pm-6pm)		
Dane	S-13-0037	USH 12	EB	USH 12 BETWEEN JOHN NOLEN DR AND CTH BW	Lane closure	Lane closures (6am-8pm) Shoulder closures (6am-9am, 3pm-6pm)		
Dane	S-13-0040	USH 12	WB	USH 12 JUST WEST OF CTH BW	Shoulder closure	Shoulder closures (6am-9am, 3pm-6pm)		
Dane	S-13-0060	USH 12	EB	USH 12 NEAR THE CTH D EB EXIT RAMP	Ramp and Lane closure	Full ramp closures (5am-11pm) Lane closures (6am-8pm)	X	
Dane	S-13-0061	USH 12	EB	USH 12 JUST WEST OF CTH D	Lane closure	Lane closures (6am-9am, 3pm-6pm)		
Dane	S-13-0064	USH 12	EB	USH 12 EB EXIT RAMP TO PARK ST	Ramp closure	Full ramp closures (5am-11pm)	X	
Dane	S-13-0071	USH 12	WB	USH 12 BETWEEN JOHN NOLEN DR AND CTH MM	Ramp and Lane closure	Full ramp closures (5am-11pm) Shoulder closures (6am-9am, 3pm-6pm)	X	
Dane	S-13-0153	USH 12	WB	USH 12 WB EXIT RAMP TO IH 39	Lane closure	Lane closures (6am-9am)		
Dane	S-13-0202	LRD	EB	SCHROEDER RD WEST OF WHITNEY WAY	Lane closure	Lane closures (3pm-7pm)		
Dane	S-13-0205	USH 151	SB	EAST WASHINGTON AVE BETWEEN PARKSIDE DR AND PORTAGE RD	-	None		Bus Stop (#6 bus) - Do not block
Dane	S-13-0248	USH 12	EB	USH 12 JUST EAST OF SEMINOLE HWY ON FRONTAGE ROAD	Shoulder closure	Shoulder closures (6am-9am, 3pm-6pm)		
Dane	S-13-0258	USH 12	EB	USH 12 SB EXIT RAMP TO OLD SAUK RD	Ramp and Lane closure	Full ramp closures (5am-11pm) Shoulder closures (6am-9am, 3pm-6pm)	X	
Dane	S-13-0279	USH 12	EB	USH 12 BETWEEN CTH D AND PARK ST	Ramp and Lane closure	Full ramp closures (5am-11pm) Shoulder closures (6am-9am, 3pm-6pm)	X	
Dane	S-13-0280	USH 12	EB	USH 12 NEAR PHEASANT RIDGE TRAIL	Lane closure	Lane closures (6am-8pm) Shoulder closures (6am-9am, 3pm-6pm)		
Dane	S-13-0282	USH 12	WB	USH 12 NEAR THE WB EXIT RAMP TO PARK ST	Ramp and Lane closure	Full ramp closures (5am-11pm) Lane closures (6am-8pm)	X	
Dane	S-13-0283	USH 12	WB	USH 12 BETWEEN PARK ST AND CTH MM	Shoulder closure	Shoulder closures (6am-9am, 3pm-6pm)		
Dane	S-13-0288	STH 113	SB	STH 113 NORTH OF ABERG AVE	Lane closure	Lane closures (3pm-7pm)		
Dane	S-13-0377	USH 18	WB	USH 18 BETWEEN RAYMOND RD AND BELTLINE FRONTAGE RD	Lane closure	None		Coordinate with Verona Road Mega Project Team
Dane	S-13-900-0001	LRD	SB	DEMING WAY SOUTH OF USH 14	Shoulder closure	Shoulder closures (10am-7pm)		
Dane	S-13-900-0002	LRD	NB	DEMING WAY NORTH OF USH 14	Lane closure	Lane closures (6am-10pm)		
Dane	S-13-900-0003	USH 14	EB	USH 14 EAST OF DEMING WAY	Lane closure	Lane closures (7am-7pm)		
Dane	S-13-900-0004	USH 14	WB	USH 14 WEST OF DEMING WAY	Lane closure	Lane closures (3pm-7pm)		
Green	S-23-0002	STH 11	EB	USH 11 AT USH 81 WB/69 SB EXIT	Auxiliary lane closure	None		
Sauk	S-56-0005	STH 13	WB	STH 13 EAST OF USH 12	Lane closure	None		No restrictions between Labor Day and Memorial Day. Coordinate with region traffic engineer if closures needed during the summer months.
Sauk	S-56-0006	STH 13	NB	STH 13 WEST OF USH 12	Lane closure	None		No restrictions between Labor Day and Memorial Day. Coordinate with region traffic engineer if closures needed during the summer months.
Sauk	S-56-0007	USH 12	WB	USH 12 SOUTH OF STH 13	Lane closure	None		No restrictions between Labor Day and Memorial Day. Coordinate with region traffic engineer if closures needed during the summer months.
Sauk	S-56-0008	USH 12	NB	USH 12 NEAR THE NB EXIT RAMP TO IH 90	Ramp and Lane closure	Full ramp closures (9am-9pm) Lane closures (6am-8pm)	X	
Sauk	S-56-0015	CTH BD	EB/WB	CTH BD BETWEEN USH 12 AND TIMOTHY LN	Lane closure	None		Avoid weekends. Consider taking it down to one lane through the entire interchange to simplify roundabout operations.
Sauk	S-56-0017	CTH BD	EB/WB	CTH BD BETWEEN MOON RD AND USH 12	Lane closure	None		Avoid weekends. Consider taking it down to one lane through the entire interchange to simplify roundabout operations.
Sauk	S-56-0499-0002	USH 12	WB	USH 12 JUST WEST OF MADISON ST	Lane closure	Lane closures (3pm-5pm)		Avoid weekends
Sauk	S-56-0499-0006	USH 12	EB	USH 12 JUST EAST OF MADISON ST	Lane closure	Lane closures (3pm-5pm)		Avoid weekends
Sauk	S-56-1042-0006	USH 12	EB	USH 12 AT LUEDERS RD	-	None		No restrictions between Labor Day and Memorial Day. Coordinate with region traffic engineer if closures needed during the summer months.
Sauk	S-56-1057-0004	LRD	EB	HILLMAN RD AT USH 12	Lane closure	Fridays between Memorial Day and Labor Day		
Sauk	S-56-1057-0006	USH 12	WB	USH 12 AT HILLMAN RD	Lane closure	Fridays between Memorial Day and Labor Day		

NOTES:

- RESTRICTED HOURS INDICATE THE TIME FRAMES WHEN LANE CLOSURES ARE NOT PERMITTED.
- A THREE DAY ADVANCE NOTICE NEEDED FOR PCMS PLACEMENT. PCMS NEEDED FOR ALL FULL CLOSURES (RAMP, DIRECTION OF TRAVEL, ETC)
- IF AN AUXILIARY LANE IS ADJACENT TO A RIGHT LANE CLOSURE CLOSE BOTH LANES.
- RAMPS SHOULD REMAIN OPEN WHENEVER POSSIBLE
- TRAFFIC CONTROL NEEDS ARE SUBJECT TO CHANGE. MODIFICATION TO THE TYPE OF CLOSURE SHALL BE APPROVED BY THE REGION TRAFFIC CONTROL ENGINEER.

Estimate Of Quantities

1009-30-16

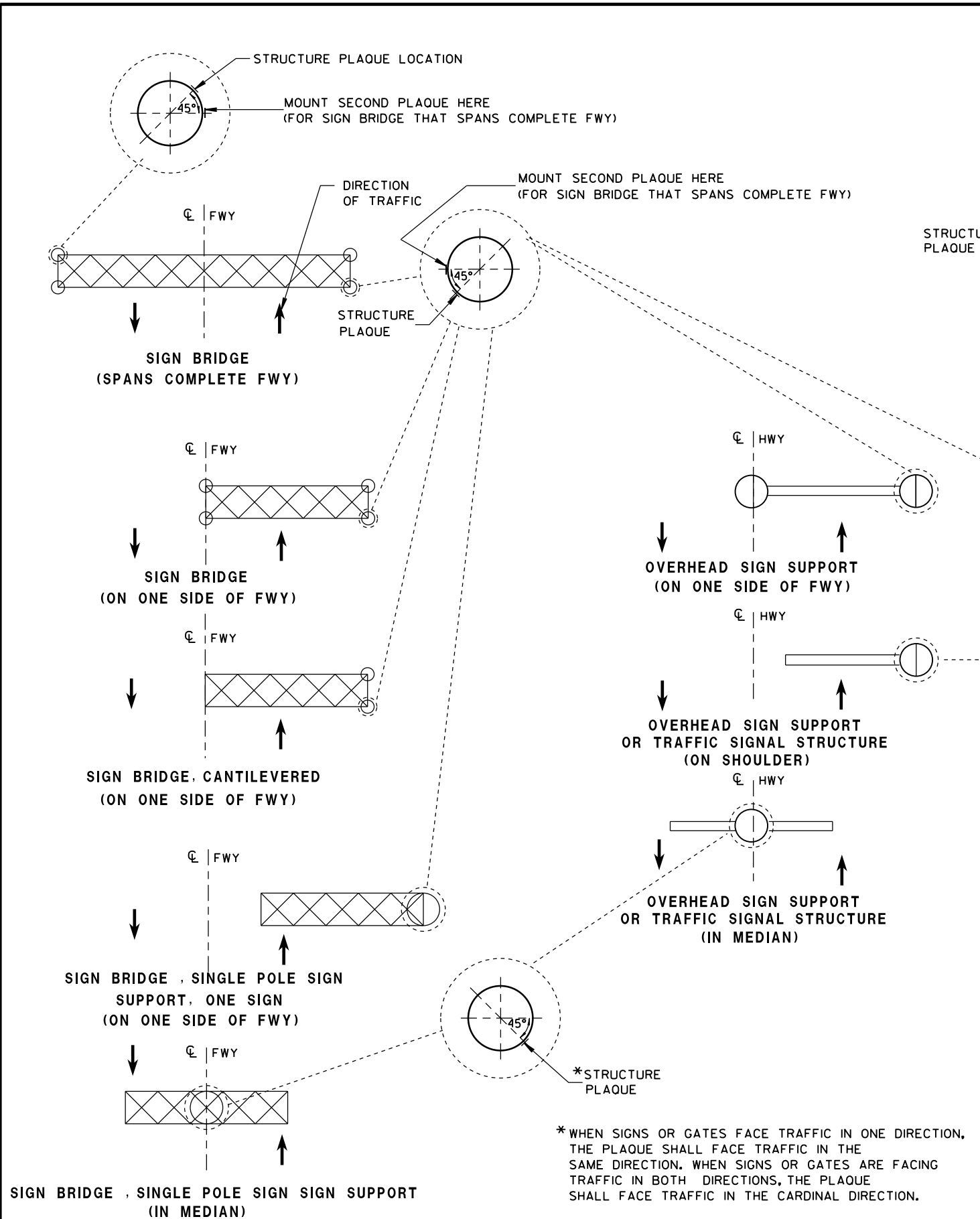
Line	Item	Item Description	Unit	Total	Qty
0002	509.1500	Concrete Surface Repair	SF	2.000	2.000
0004	619.1000	Mobilization	EACH	1.000	1.000
0006	637.2220	Signs Type II Reflective SH	SF	8.000	8.000
0008	643.5000	Traffic Control	EACH	1.000	1.000
0010	SPV.0060	Special 01. Tension Anchor Rods	EACH	95.000	95.000
0012	SPV.0060	Special 02. Remove Debris and Regrade	EACH	2.000	2.000
0014	SPV.0060	Special 03. Replace Foundation	EACH	1.000	1.000
0016	SPV.0060	Special 04. Remove Grout Pad	EACH	16.000	16.000
0018	SPV.0060	Special 05. Tension Structural Connection Bold (Friction)	EACH	71.000	71.000
0020	SPV.0060	Special 06. Secure/Replace Cap	EACH	21.000	21.000
0022	SPV.0060	Special 07. Slotted Hole Repair on Sign Support Bracket	EACH	23.000	23.000
0024	SPV.0060	Special 08. Replace Sign Connection Clamp	EACH	9.000	9.000
0026	SPV.0060	Special 09. Replace U-bolt	EACH	3.000	3.000
0028	SPV.0060	Special 10. Install ID Plaque	EACH	11.000	11.000
0030	SPV.0060	Special 11. Install Sign Panel Connector	EACH	136.000	136.000
0032	SPV.0060	Special 12. Adjust Vertical Clearance	EACH	1.000	1.000
0034	SPV.0060	Special 13. Replace Handrail Hinge Pin	EACH	3.000	3.000
0036	SPV.0060	Special 14. Replace Safety Chain	EACH	4.000	4.000
0038	SPV.0060	Special 15. Install Conduit Plug	EACH	6.000	6.000
0040	SPV.0060	Special 16. Secure/Replace Handhole Cover	EACH	3.000	3.000
0042	SPV.0060	Special 17. Traffic Control - Single Lane Closure	EACH	44.000	44.000
0044	SPV.0060	Special 18. Traffic Control - Double Lane Closure	EACH	2.000	2.000
0046	SPV.0060	Special 19. Traffic Control - Ramp Closure	EACH	7.000	7.000
0048	SPV.0165	Special 01. Repair Galvanized Coating	SF	5.000	5.000

STRUCTURE NUMBER	COUNTY	SIGN CODE	W X H	SIGNS TYPE II REFLECTIVE SH S.F.
S-13-377	DANE	R10-64	30" X 36"	8

STRUCTURE NUMBER	COUNTY	509.1500	SPV.0060.01	SPV.0060.02	SPV.0060.03	SPV.0060.04	SPV.0060.05	SPV.0060.06	SPV.0060.07	SPV.0060.08	SPV.0060.09	SPV.0060.10	SPV.0060.11	SPV.0060.12	SPV.0060.13	SPV.0060.14	SPV.0060.15	SPV.0060.16	SPV.0060.17	SPV.0060.18	SPV.0060.19	SPV.0165.01
		CONCRETE SURFACE REPAIR	TENSION ANCHOR RODS	REMOVE DEBRIS AND REGRADE	REPLACE FOUNDATION	REMOVE GROUT PAD	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	SECURE / REPLACE CAP	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	REPLACE SIGN CONNECTION CLAMP	REPLACE U- BOLT	INSTALL ID PLAQUE	INSTALL SIGN PANEL CONNECTOR	ADJUST VERTICAL CLEARANCE	REPLACE HANDRAIL HINGE PIN	REPLACE SAFETY CHAIN	INSTALL CONDUIT PLUG	SECURE - REPLACE HANDHOLE COVER	TRAFFIC CONTROL - SINGLE LANE CLOSURE	TRAFFIC CONTROL - DOUBLE LANE CLOSURE	TRAFFIC CONTROL - RAMP CLOSURE	REPAIR GALVANIZED COATING
		EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	SF
S-11-0014	COLUMBIA					4						1										
S-11-0021	COLUMBIA						1												1			
S-13-0036	DANE					1									1	1	1		1			
S-13-0037	DANE					1	32								1	2	1		1			
S-13-0040	DANE					1																
S-13-0060	DANE	2				4									1	1	1			1	1	5
S-13-0061	DANE		1			1						1					1	1	1			
S-13-0064	DANE					4		2			2		4				1				1	
S-13-0071	DANE			1			1						1						1		1	
S-13-0153	DANE												84						2			
S-13-0202	DANE		4																1			
S-13-0205	DANE		8																			
S-13-0248	DANE						4											1				
S-13-0258	DANE		6				6												1		1	
S-13-0279	DANE												6						1		1	
S-13-0280	DANE		8										4						1			
S-13-0282	DANE							2					7						1		1	
S-13-0283	DANE		8																			
S-13-0288	DANE						1	1				1		1					1	1		
S-13-0377	DANE																		1			
S-13-900-0001	DANE		6					1				1							1			
S-13-900-0002	DANE		6					3				1							2			
S-13-900-0003	DANE		6					2				1							2			
S-13-900-0004	DANE		6					1				1						1	1			
S-23-002	GREEN		6		1												1		1			
S-56-0005	SAUK			1			6			2		1							2			
S-56-0006	SAUK						6			1		1							2			
S-56-0007	SAUK						6			6		1							2			
S-56-0008	SAUK												30						1		1	
S-56-0015	SAUK								11										4			
S-56-0017	SAUK								12		1								4			
S-56-0499-0002	SAUK		6					3				1							3			
S-56-0499-0006	SAUK		6				8	1											2			
S-56-1042-0006	SAUK		6																			
S-56-1057-0004	SAUK		6					2											1			
S-56-1057-0006	SAUK		6					3											2			5
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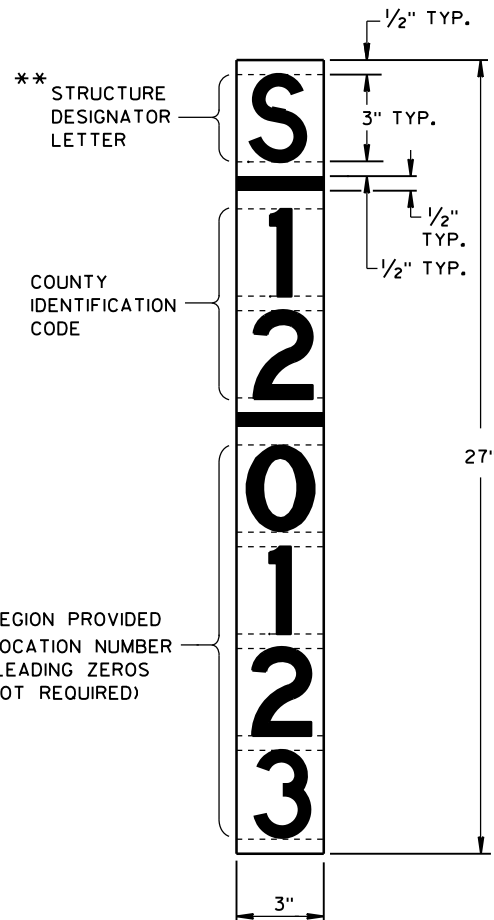
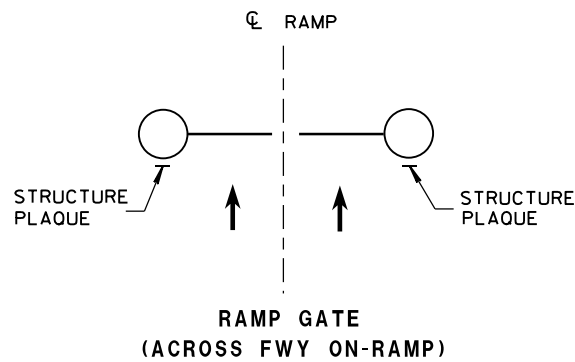
Standard Detail Drawing List

12A04-03	STRUCTURE IDENTIFICATION PLAQUES, RAMP GATES, SIGN BRIDGES & OVERHEAD	SIGN SUPPORTS & TRAFFIC SIGNALS
15C02-07A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES	
15C02-07B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES	
15C02-07D	ON RAMP LANE CLOSURE	
15C02-07E	OFF RAMP LANE CLOSURE	
15C11-07B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS	
15D12-07A	TRAFFIC CONTROL, LANE CLOSURE	
15D12-07B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION	
15D14-03	TRAFFIC CONTROL, TWO LANE CLOSURE ON FREEWAY OR EXPRESSWAY, SHORT-TERM (LESS THAN 24 HOURS)	
15D15-04A	TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE	
15D16-04	TRAFFIC CONTROL, EXIT RAMP CLOSURE	
15D20-04	TRAFFIC CONTROL, SINGLE LANE CLOSURE, NON-FREEWAY/EXPRESSWAY	
15D21-06	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE	
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	
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING	
15D38-02B	ATTACHMENT OF SIGNS TO POSTS	



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.

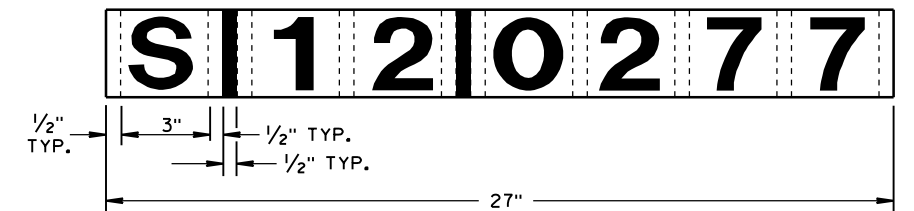
FACE - WHITE, SELF-ADHESIVE VINYL SHEETING, NON-RETROREFLECTIVE

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.

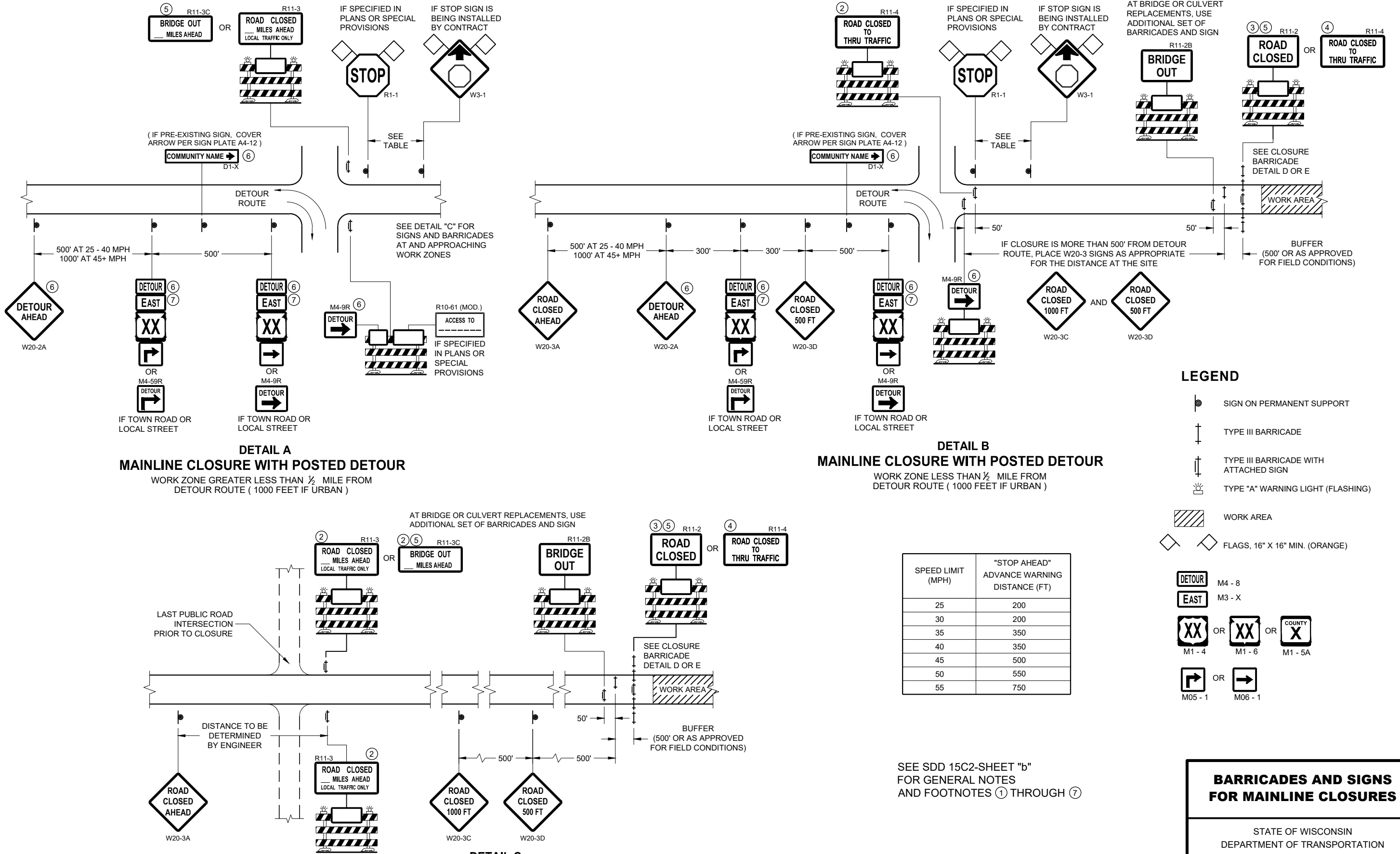
WHERE SIGN BRIDGE ILLUMINATION IS PROVIDED, THE STRUCTURE MUST ALSO HAVE A SIGN BRIDGE CIRCUIT PLAQUE AS SHOWN IN THE ELECTRICAL DETAILS.



IDENTIFICATION PLAQUE FOR SIGN BRIDGE, STRUCTURE MOUNTED

** LETTER "G" UTILIZED FOR RAMP GATES. LETTER "S" UTILIZED FOR SIGN BRIDGES, OVERHEAD SIGN SUPPORTS, AND TRAFFIC SIGNALS.

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	

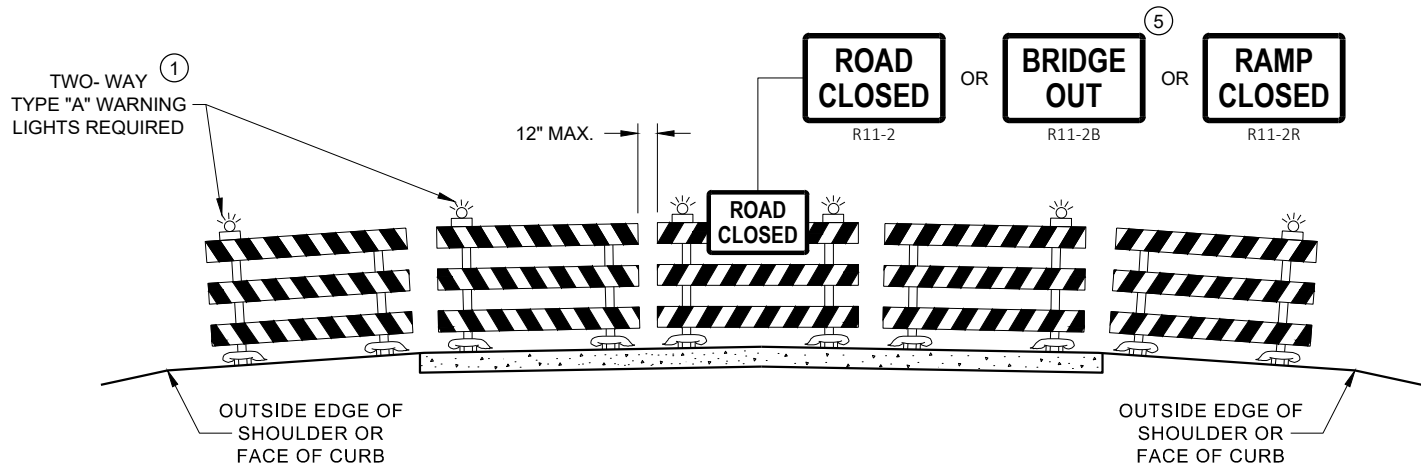


**BARRICADES AND SIGNS
FOR MAINLINE CLOSURES**

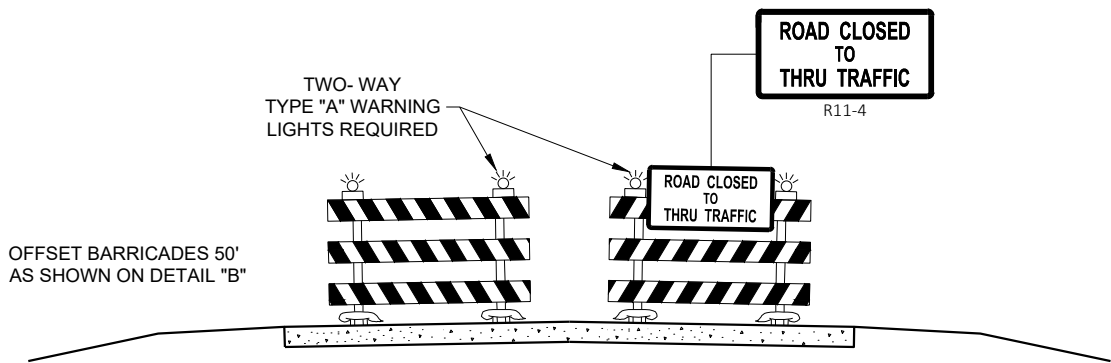
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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 SHALL, 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" (36" 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)
- MO5 - 1 AND MO6 - 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 AN 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 ROAD 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
VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



FHWA









EXIT RAMP
CLOSURE

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

SEE SDD 15D16
FOR RAMP CLOSURE

LEGEND

 SIGN ON PERMANENT SUPPORT
 PORTABLE CHANGEABLE MESSAGE SIGN

 M4 - 5
 M1 - 4 OR  M1 - 6 OR  M1 - 5A
 M05 - 1 OR  M05 - 2 OR  M06 - 1 OR  M06 - 2

GENERAL NOTES

SEE SDD 15D16 "TRAFFIC CONTROL, EXIT RAMP CLOSURE" DETAIL FOR
TRAFFIC CONTROL AT EXIT RAMP CLOSURE.

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

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

THE SPACING BETWEEN TRAFFIC CONTROL AND TO 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 SHALL 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.

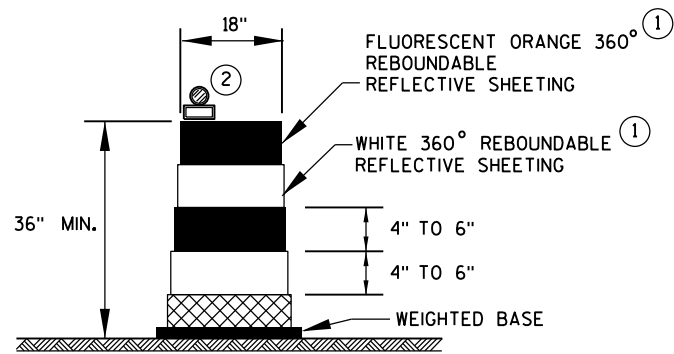
SIGN SIZES SHALL BE AS FOLLOW:
M4 - 5 SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS).
M1 - 4, M1 - 5A, AND M1 - 6 SHALL BE 24" X 24" (36" X 36" IF NEEDED TO MATCH
EXISTING SIGNS).
M05 - 1, M05 - 2, AND M06 - 1, SHALL BE 21" X 21". (30" X 30" IF NEEDED TO
MATCH EXISTING SIGNS).

OFF RAMP
LANE CLOSURE

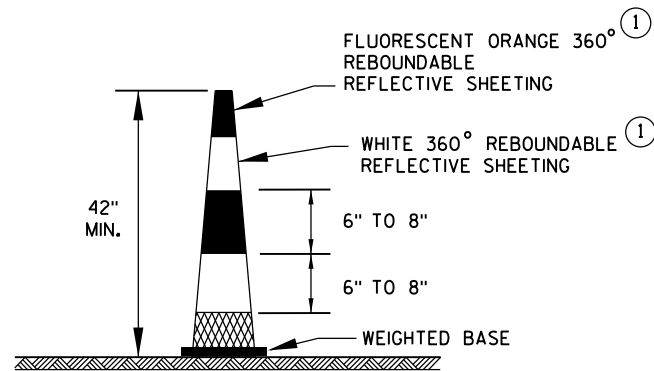
STATE OF WISCONSIN
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APPROVED
November 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA



DRUM

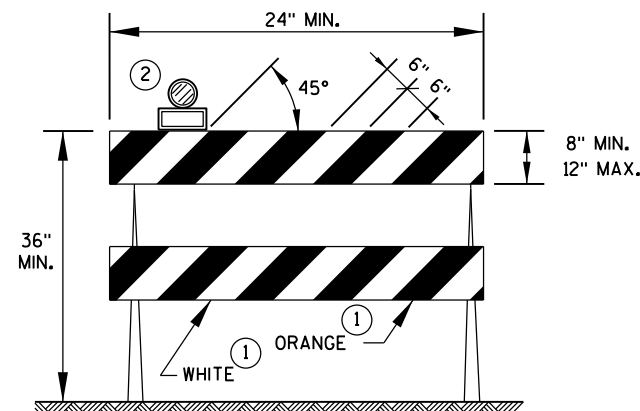


42" CONE

DO NOT USE IN TAPERS
1/2 SPACING OF DRUMS

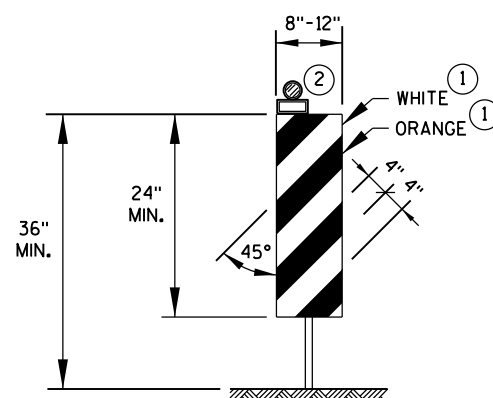
GENERAL NOTES

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



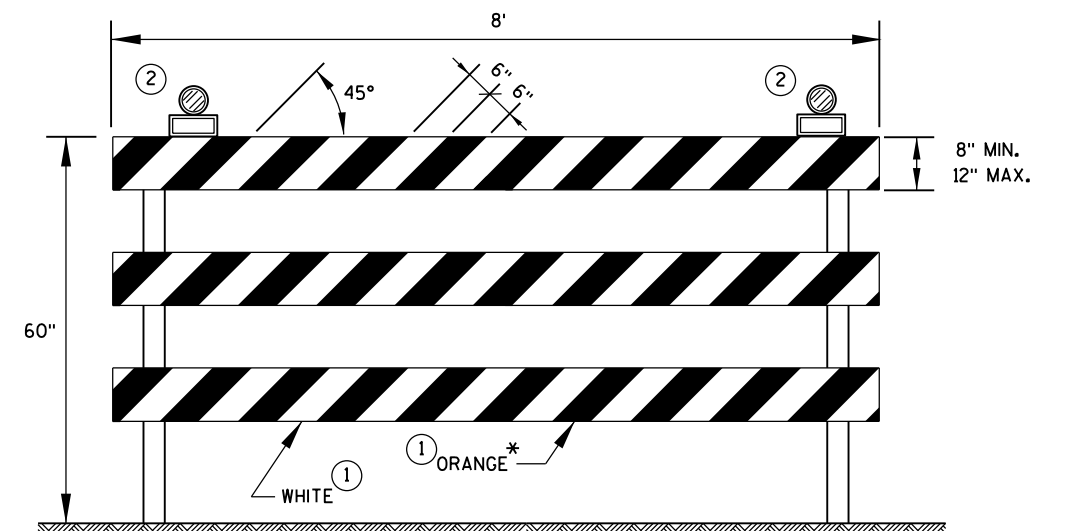
TYPE 2 BARRICADE

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



VERTICAL PANEL

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



TYPE 3 BARRICADE

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

* IF USED FOR A PERMANENT APPLICATION, USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2017
DATE

FHWA

/S/ Andrew Heidtke
WORK ZONE 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.

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

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

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

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

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

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

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

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

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

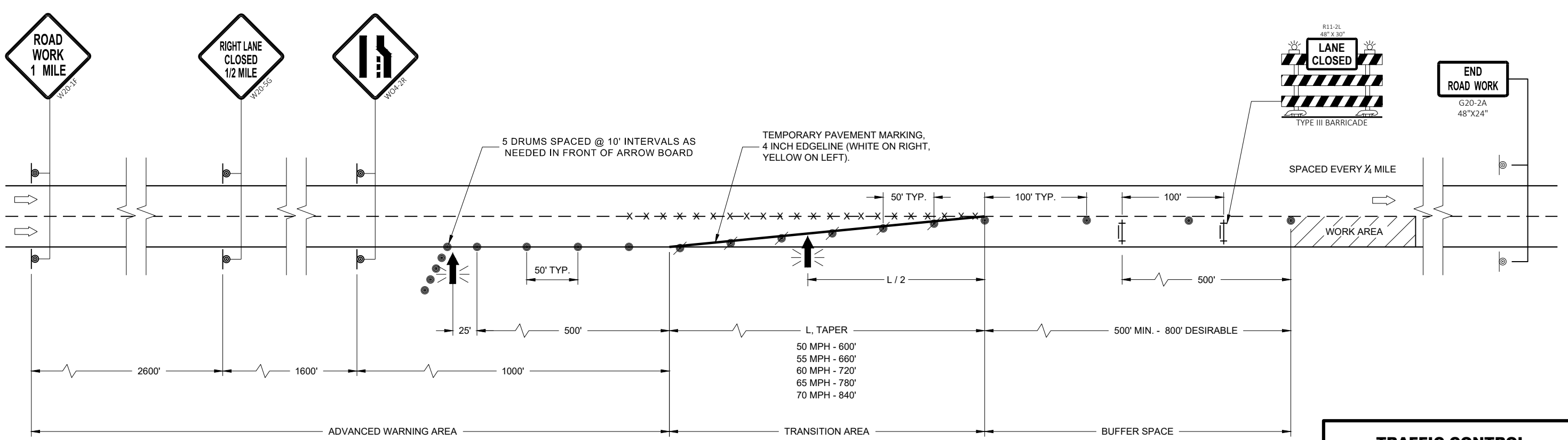
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS

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

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

LEGEND

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



TRAFFIC CONTROL LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED November 2018 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	

GENERAL NOTES

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

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

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

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

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

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

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

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

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.

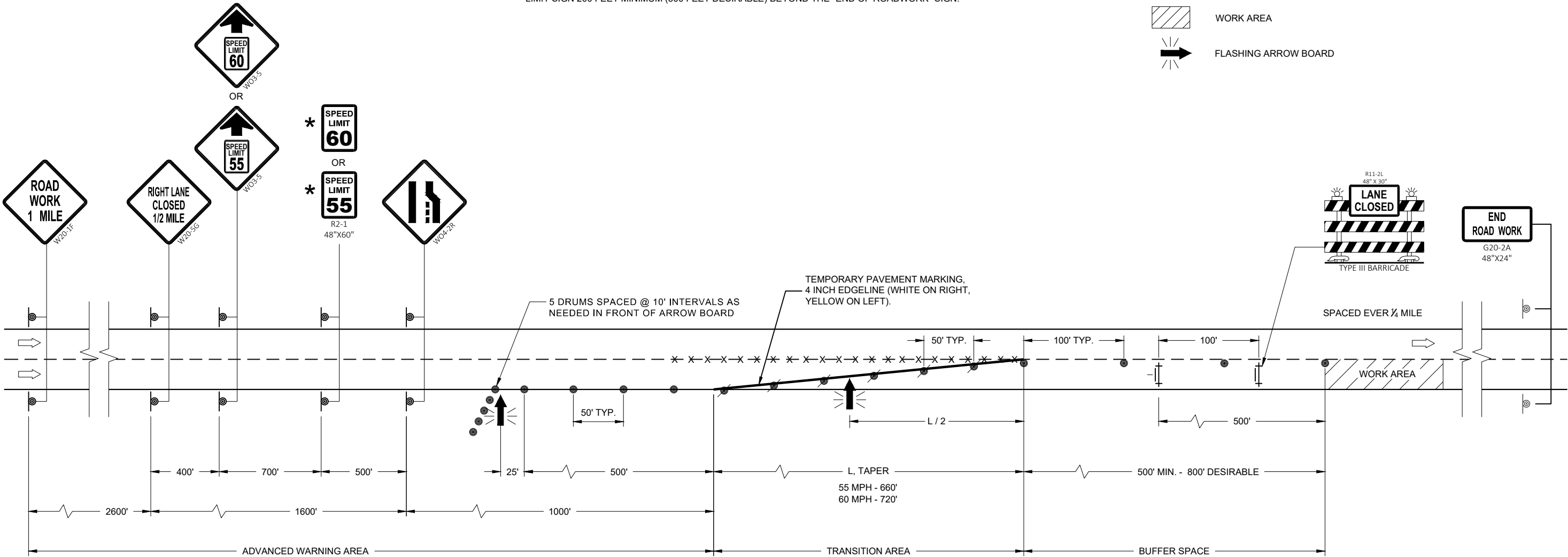
ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE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

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

LEGEND

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

SDD 15D12 - 07b



TRAFFIC CONTROL,
LANE CLOSURE,
SPEED REDUCTION









STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

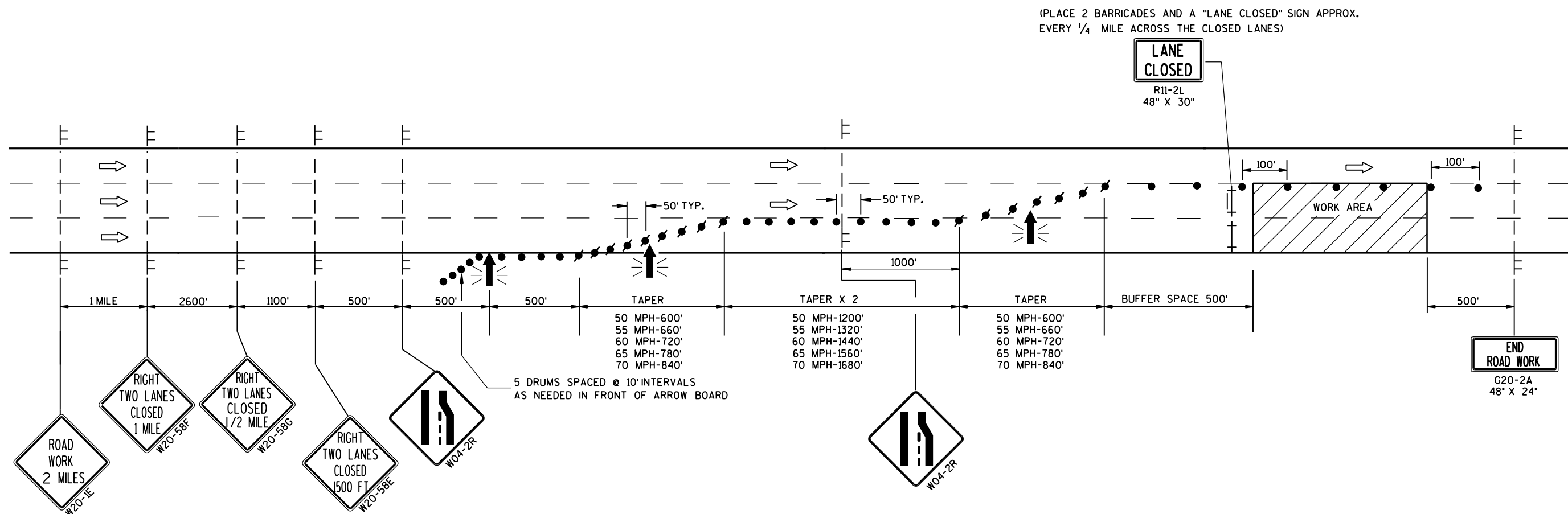
APPROVED
November 2018 /S/ Andrew Heidtke
DATE WORK ZONE ENGINEER

FHWA

SDD 15D12 - 07b

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.

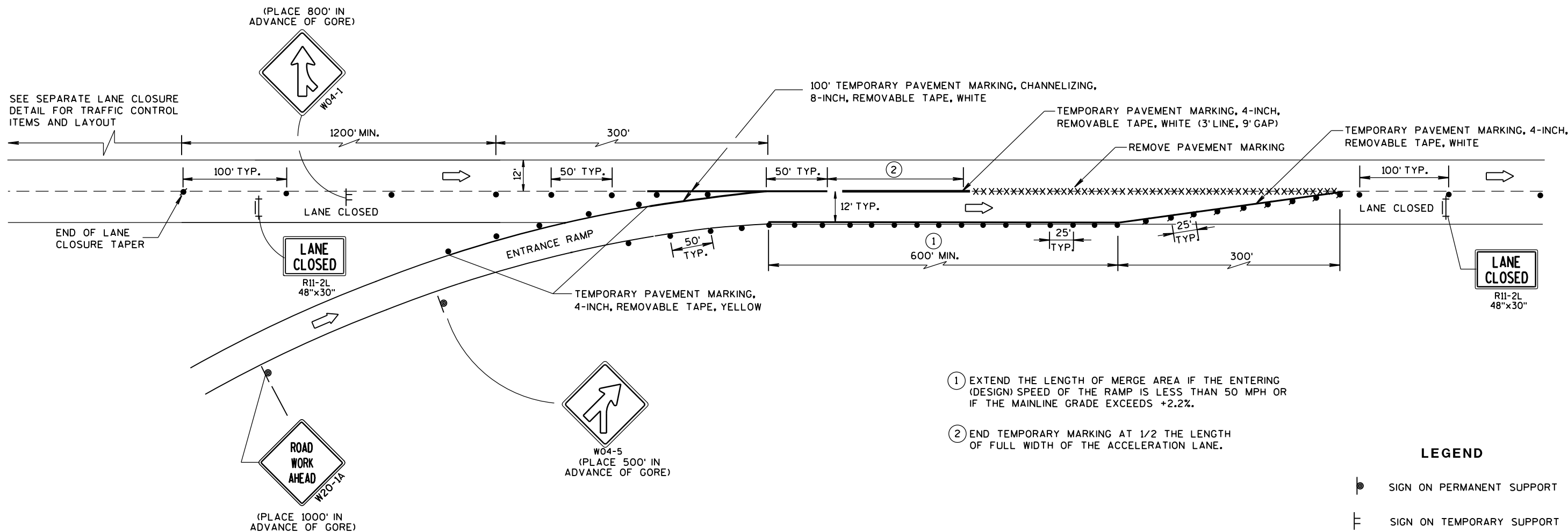
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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	

TRAFFIC CONTROL, ENTRANCE RAMP WITHIN RIGHT LANE CLOSURE



PARALLEL ENTRANCE RAMP

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.

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

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

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

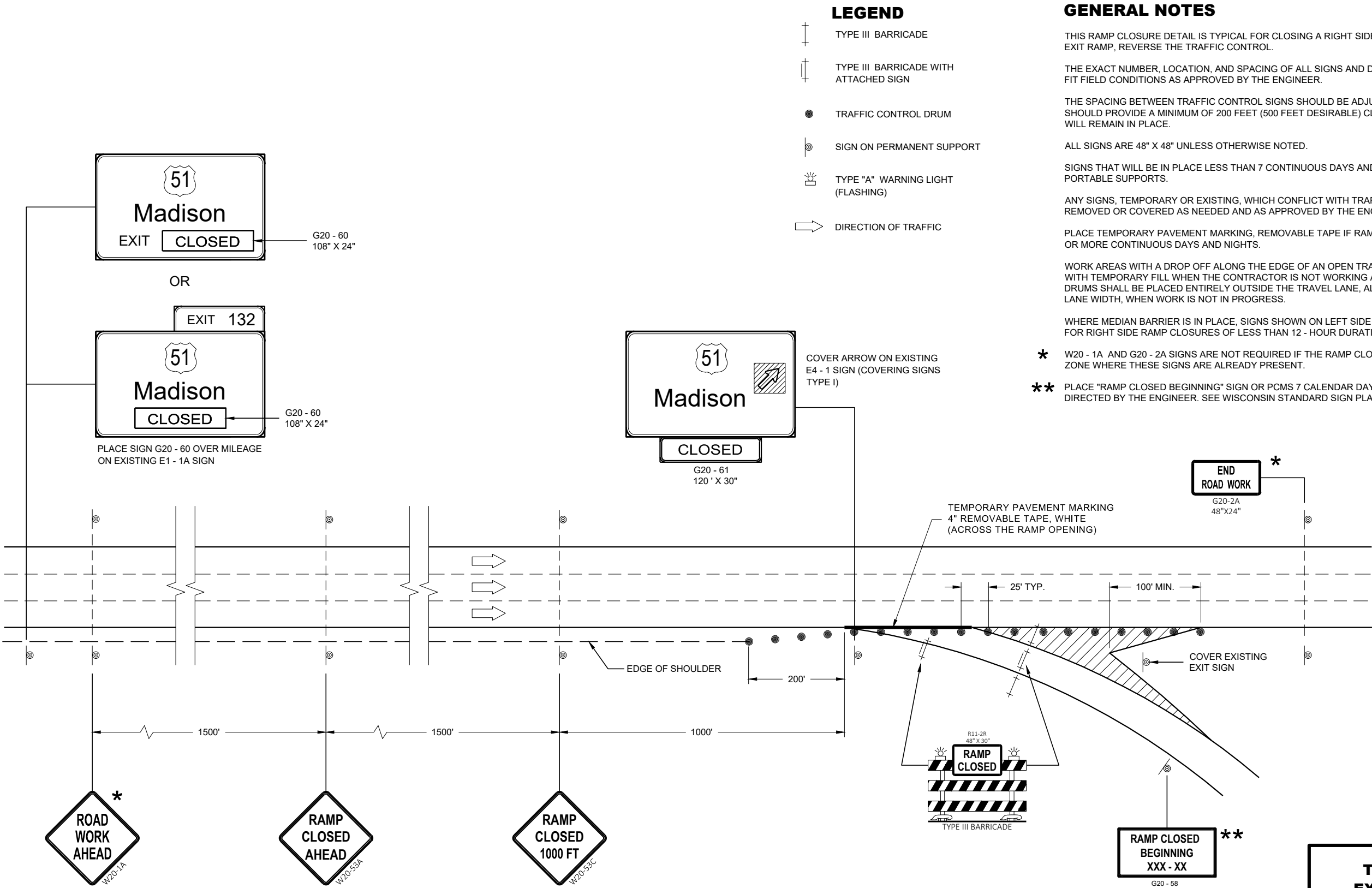
REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKING REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

LEGEND

- SIGN ON PERMANENT SUPPORT
- ├ SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- ├ TYPE III BARRICADE WITH ATTACHED SIGN
- XXXXX REMOVING PAVEMENT MARKING
- ➡ DIRECTION OF TRAFFIC

TRAFFIC CONTROL, PARALLEL ENTRANCE RAMP WITHIN LANE CLOSURE	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept., 2017 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEER
FHWA	



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

GENERAL NOTES

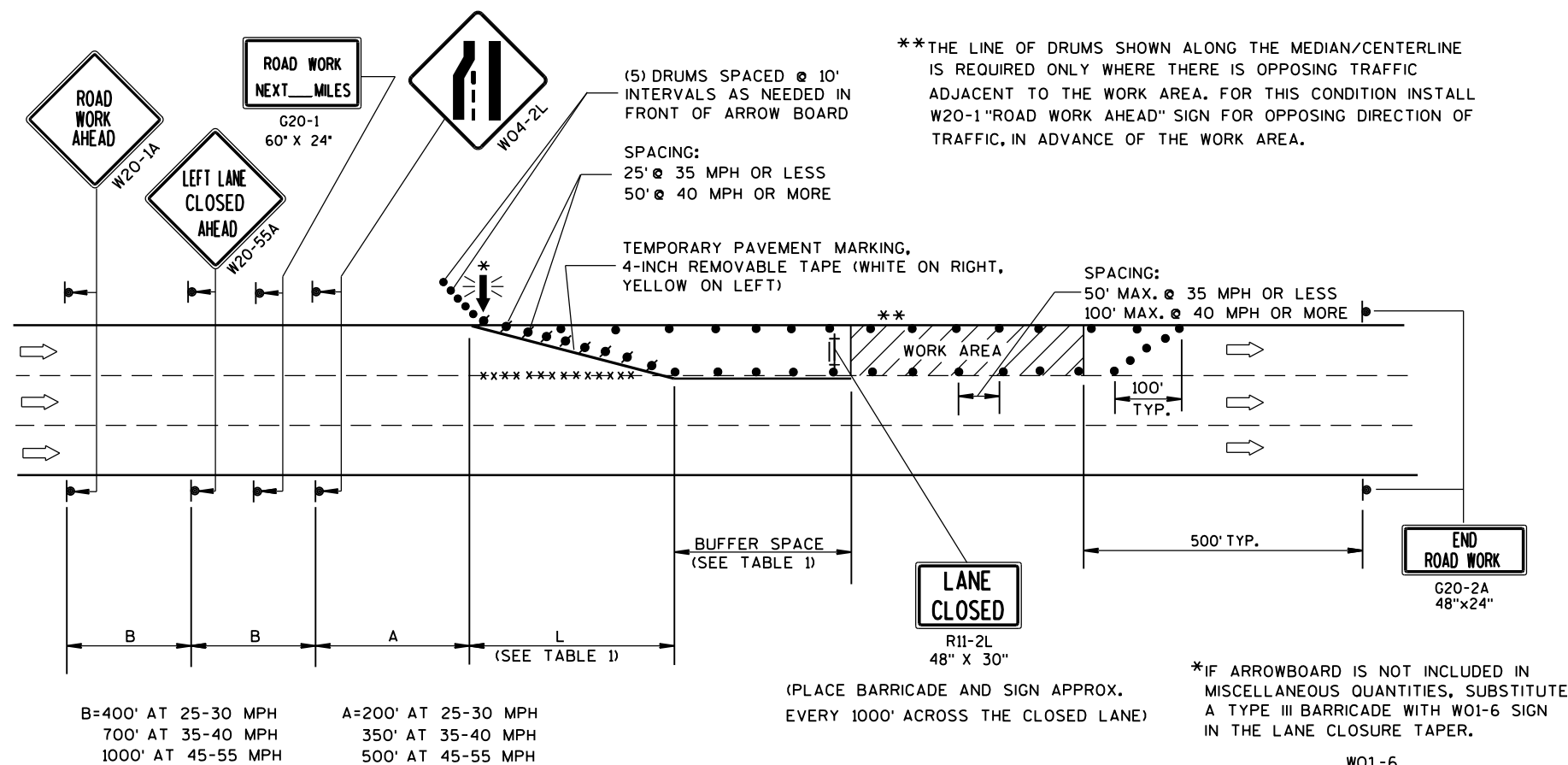
- THIS RAMP CLOSURE DETAIL IS TYPICAL FOR CLOSING A RIGHT SIDE EXIT RAMP. FOR A LEFT SIDE EXIT RAMP, REVERSE THE TRAFFIC CONTROL.
- THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- THE SPACING BETWEEN TRAFFIC CONTROL 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 4 OR MORE CONTINUOUS DAYS AND NIGHTS.
- WORK AREAS WITH A DROP OFF 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 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 - 1A 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 CLOSED BEGINNING" SIGN OR PCMS 7 CALENDAR DAYS PRIOR TO CLOSURE OR AS DIRECTED BY THE ENGINEER. SEE WISCONSIN STANDARD SIGN PLATES FOR SIGN LAYOUT.

TRAFFIC CONTROL
EXIT RAMP CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA



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.

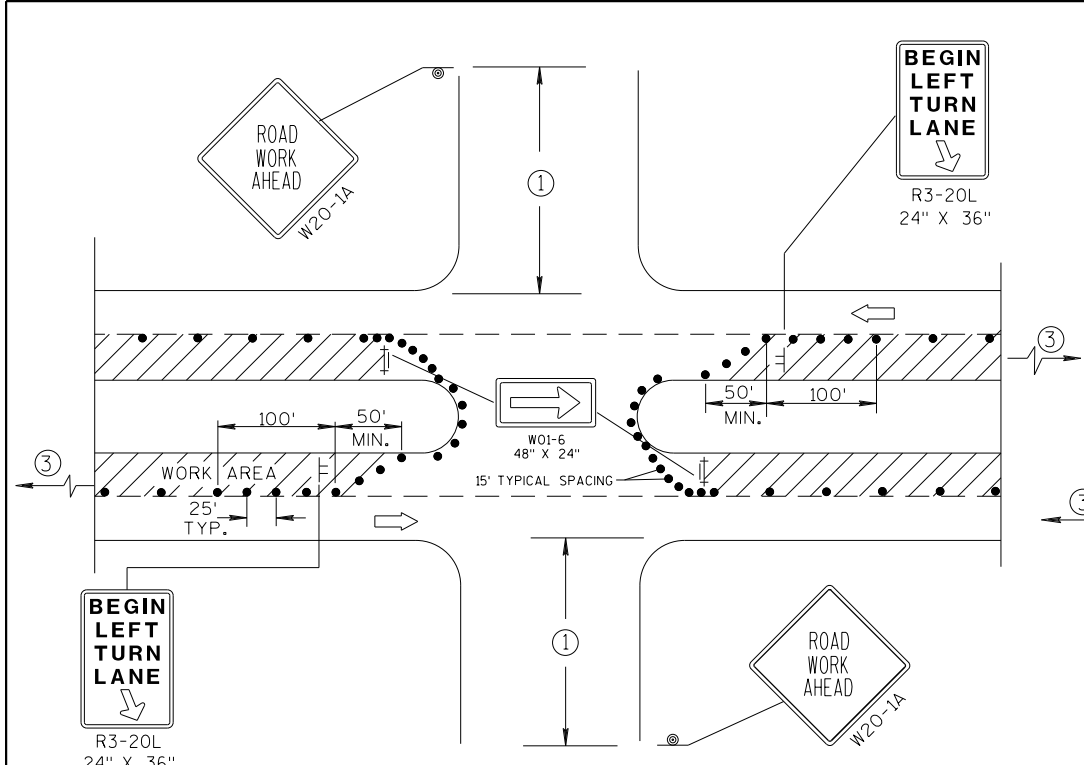
BARRICADES IN A CLOSED LANE THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

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

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

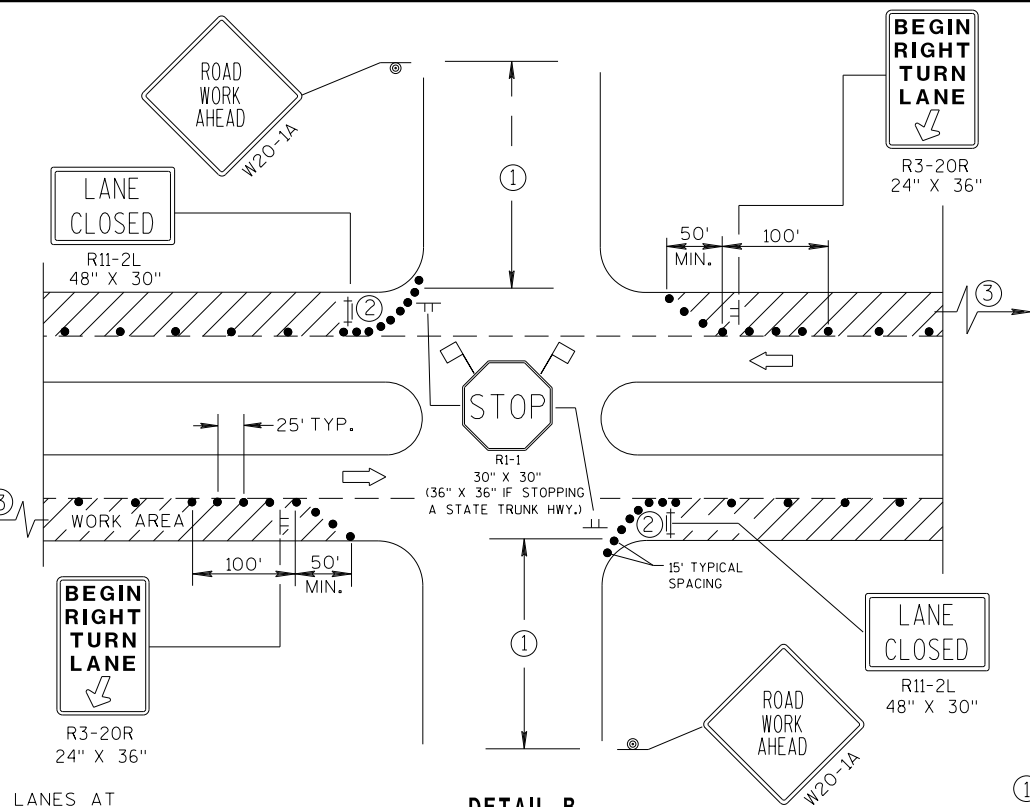
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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



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.

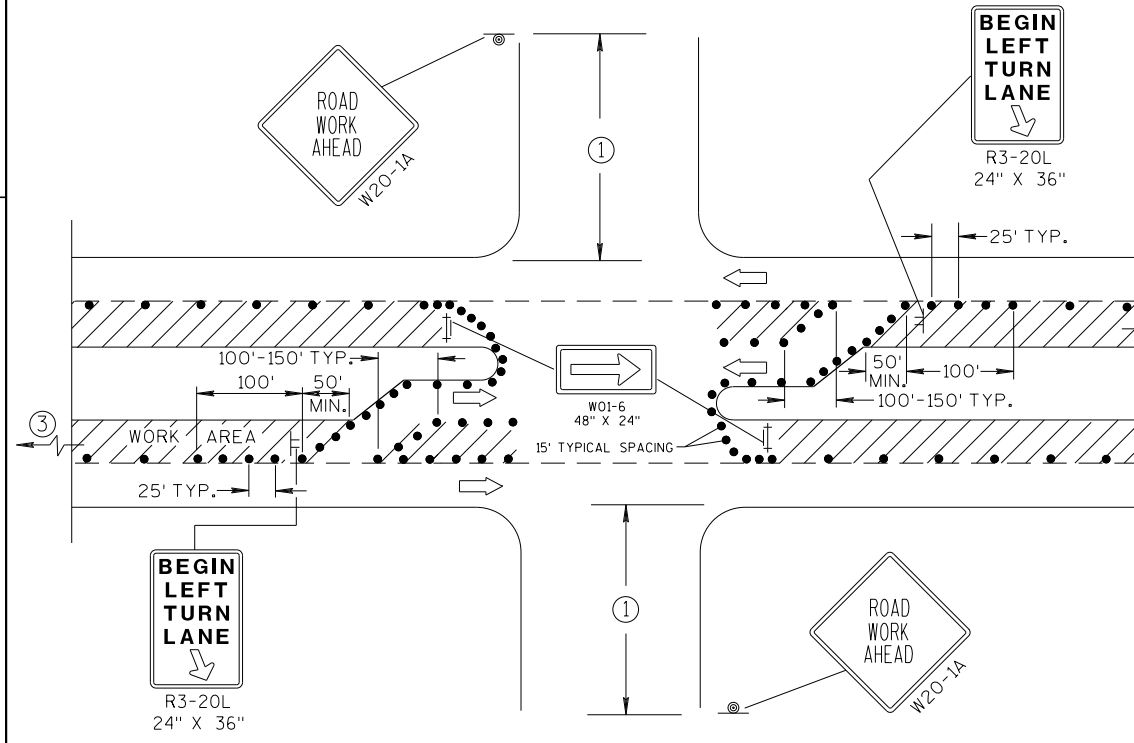
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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.

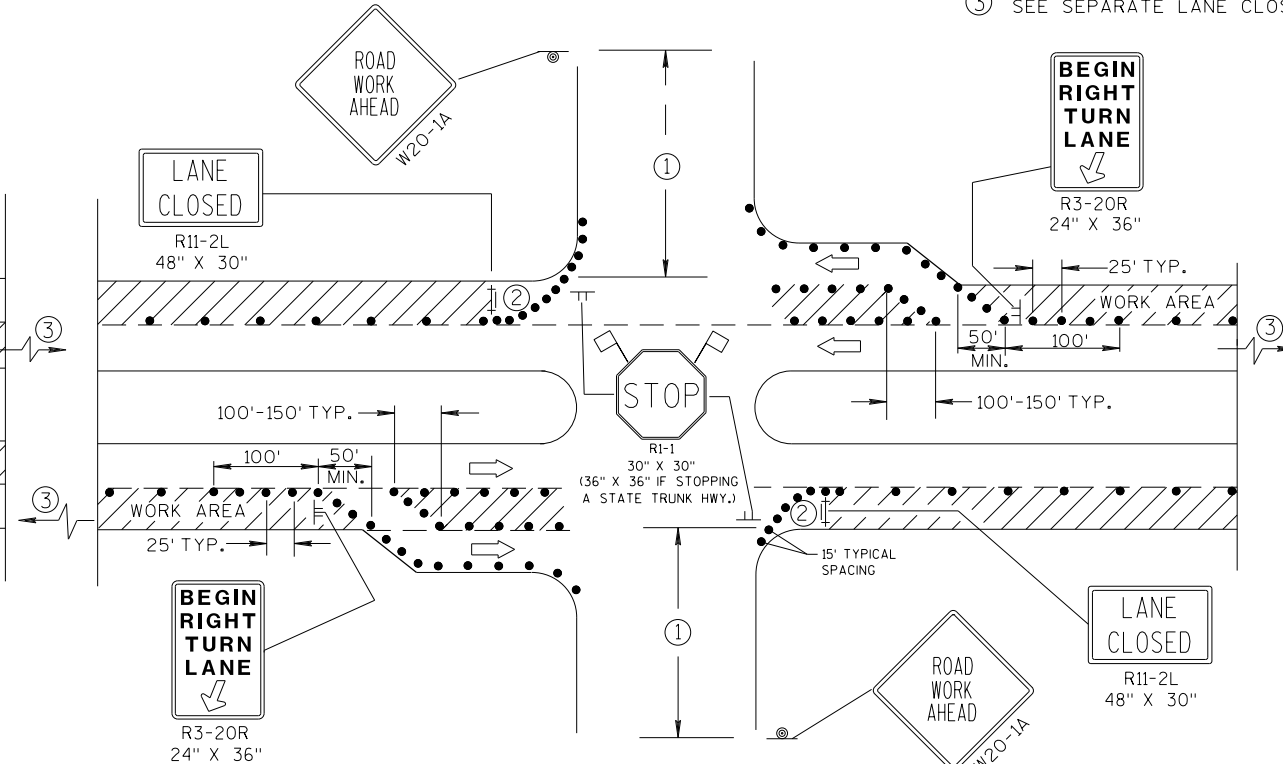
- 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35-40 MPH.
200' IF 25-30 MPH.
- ALSO USE BARRICADE AND 15-FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS.
- SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

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
DATE 7/2018 /S/ Andrew Heidtke
WORK ZONE ENGINEER
FHWA

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.

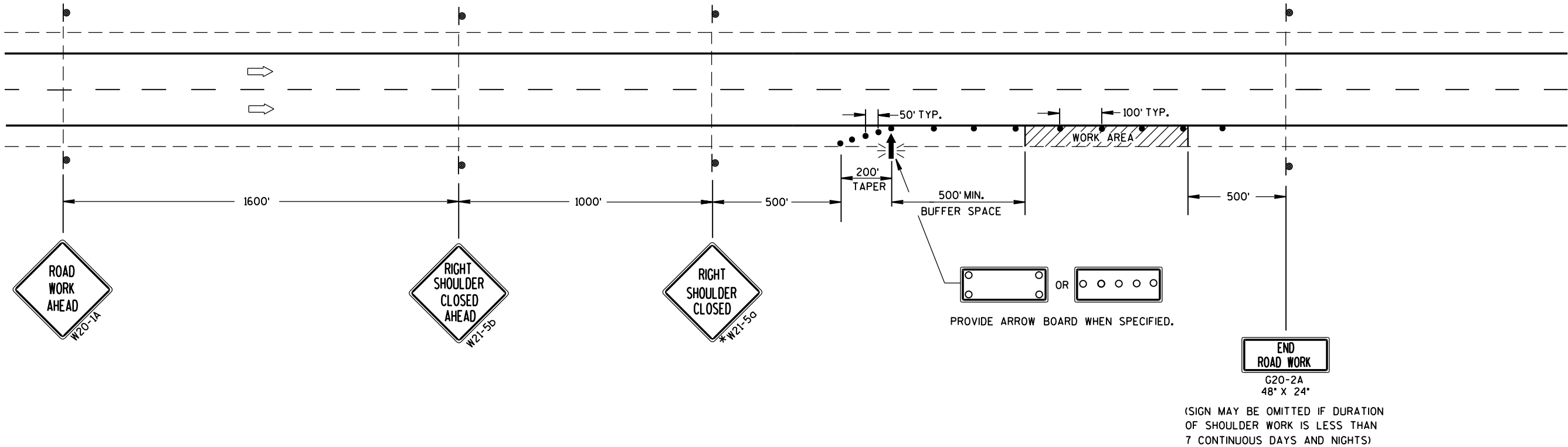
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

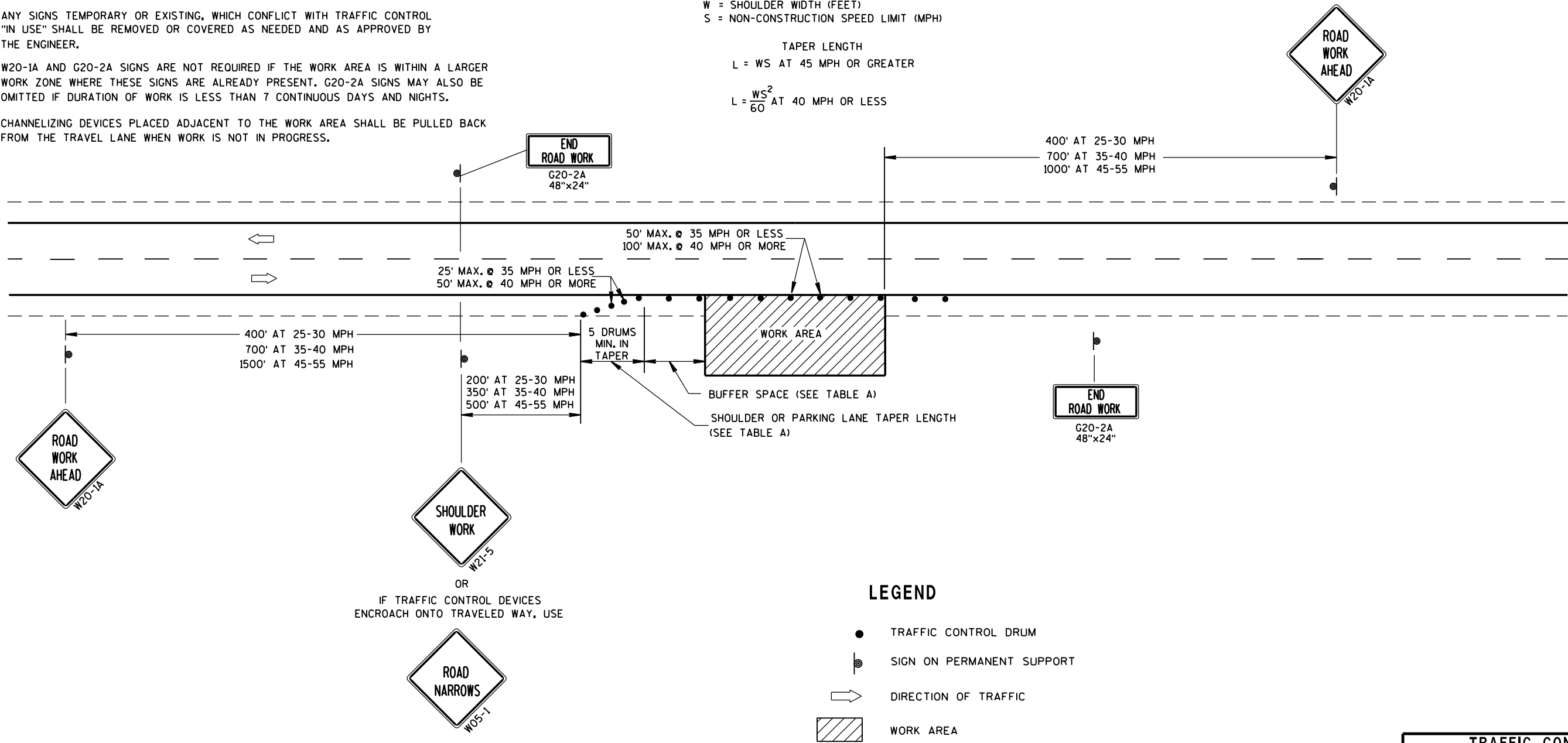
SHOULDER TAPER LENGTH (FEET)					BUFFER SPACE (FEET)
S \ W	4	6	8	10	
30	20	30	40	50	200
35	30	45	55	70	250
40	40	55	75	90	305
45	60	90	120	150	360
50	70	100	135	170	425
55	75	110	150	185	495

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

TAPER LENGTH
L = WS AT 45 MPH OR GREATER

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

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



LEGEND

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

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



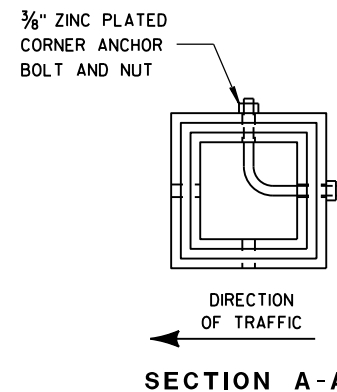
DETAIL OF TUBULAR
STEEL SIGN POST

TUBULAR STEEL POSTS

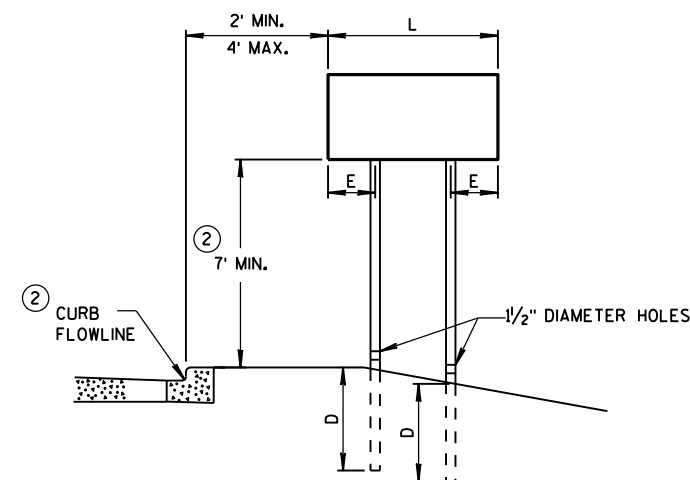
AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL POSTS
9 OR LESS	1
GREATER THAN 9 LESS THAN OR EQUAL TO 18	2
GREATER THAN 18 LESS THAN OR EQUAL TO 27	3

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

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



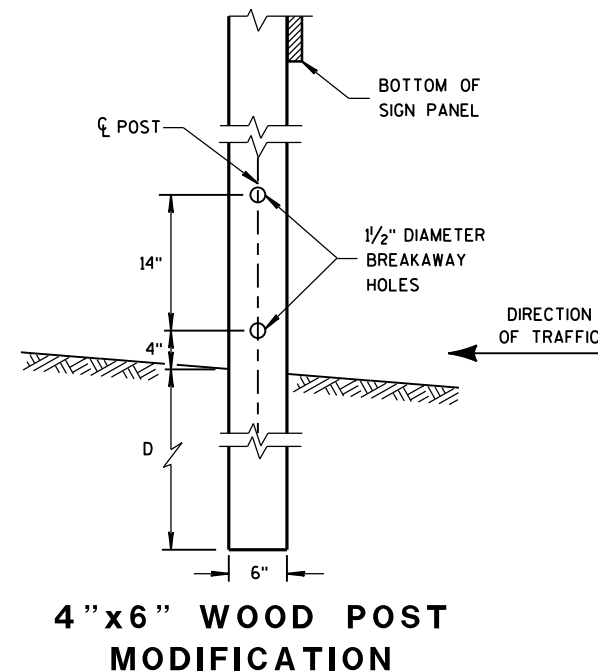
SECTION A-A



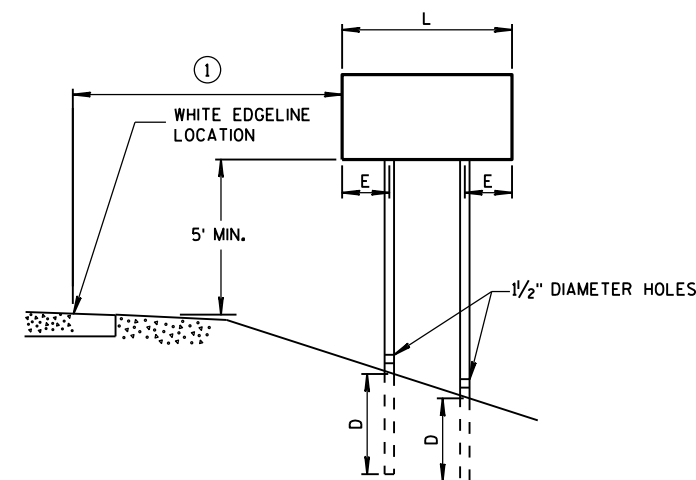
URBAN AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

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



4 "x6 " WOOD POST
MODIFICATION



RURAL AREA

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

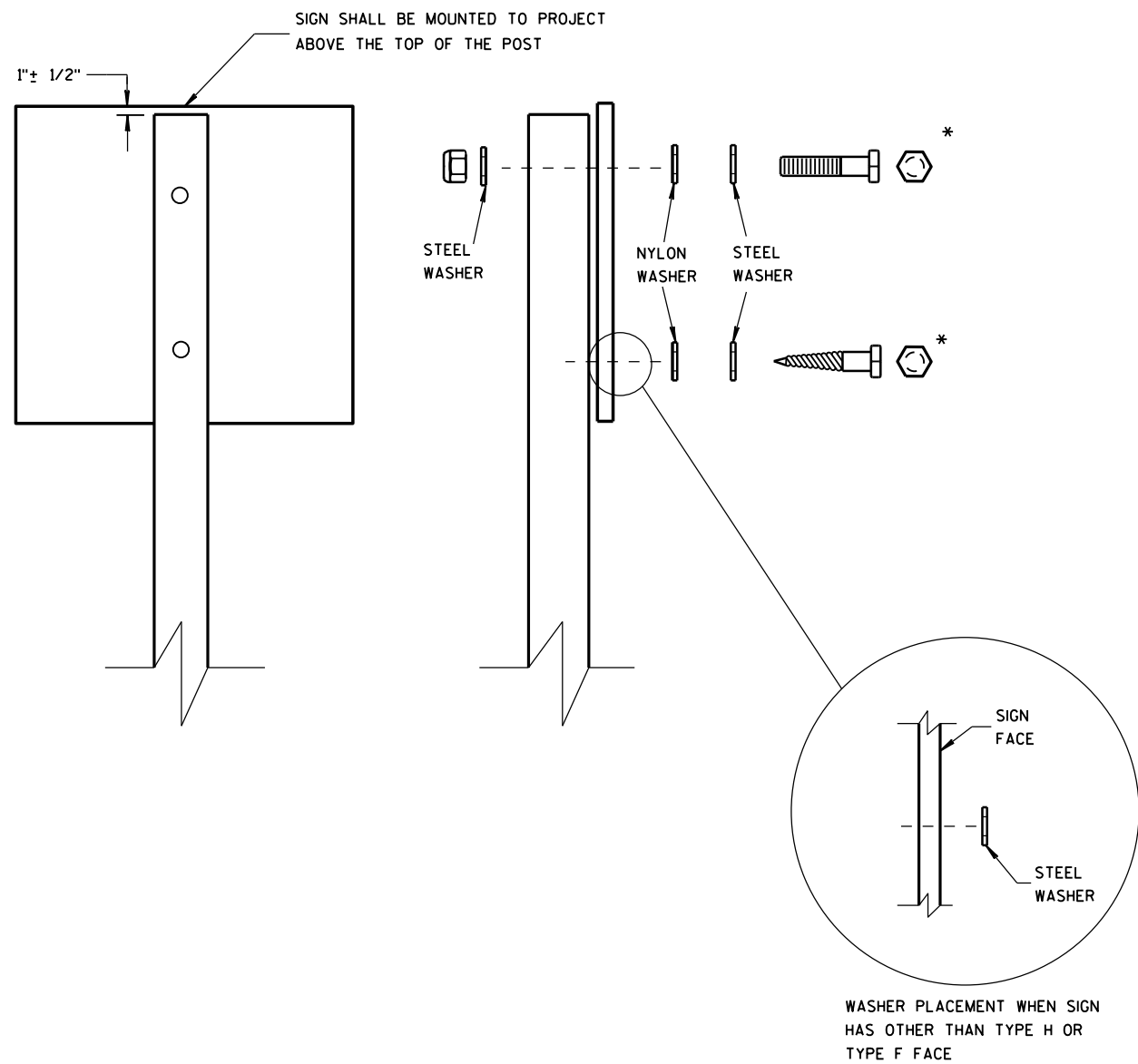
SEE NOTE ③

GENERAL NOTES

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

TEMPORARY TRAFFIC CONTROL
SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



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

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

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

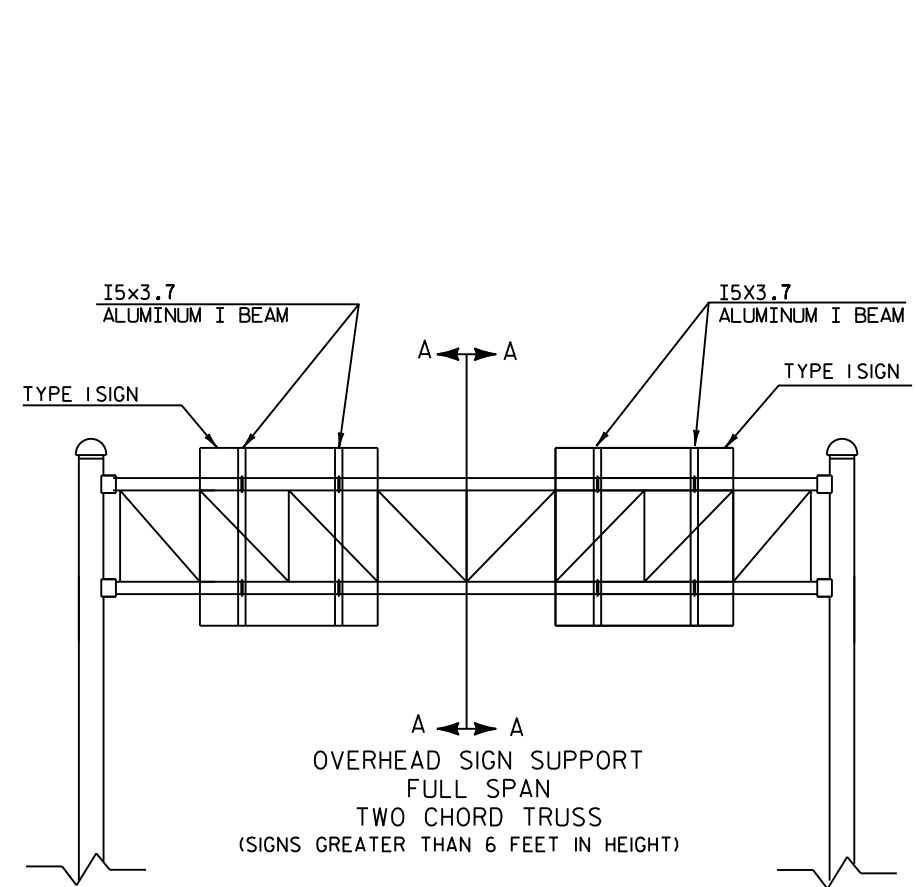
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - 3/8" x 3"
 - MACHINE BOLTS - 5/16" x 6-1/2" OR 7" LENGTH W/ NUTS

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

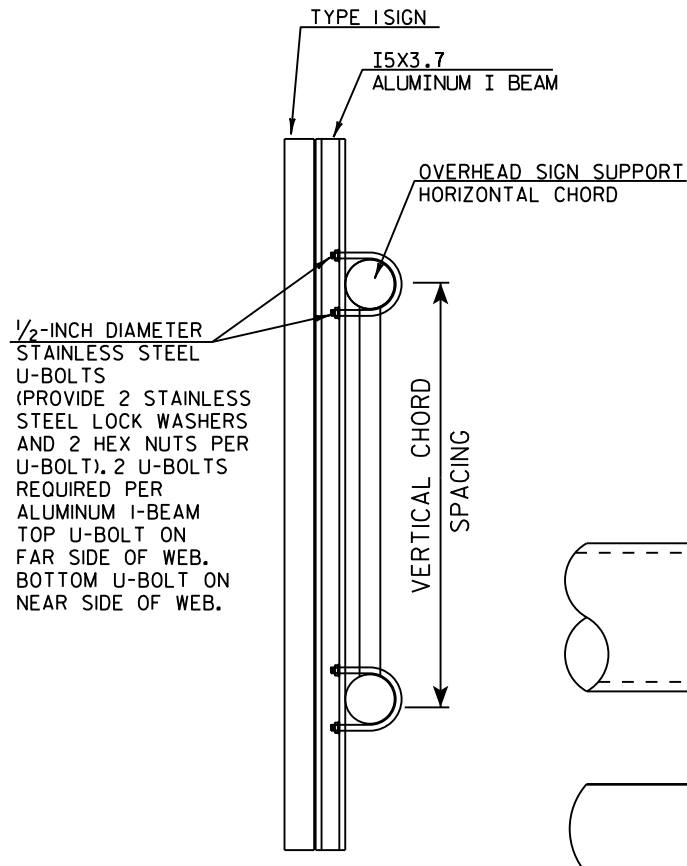
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. x 3/8" I.D. x 1/16" STEEL
 - 1-1/4" O.D. x 3/8" I.D. x .080 NYLON FOR ALL TYPE H SIGNS

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

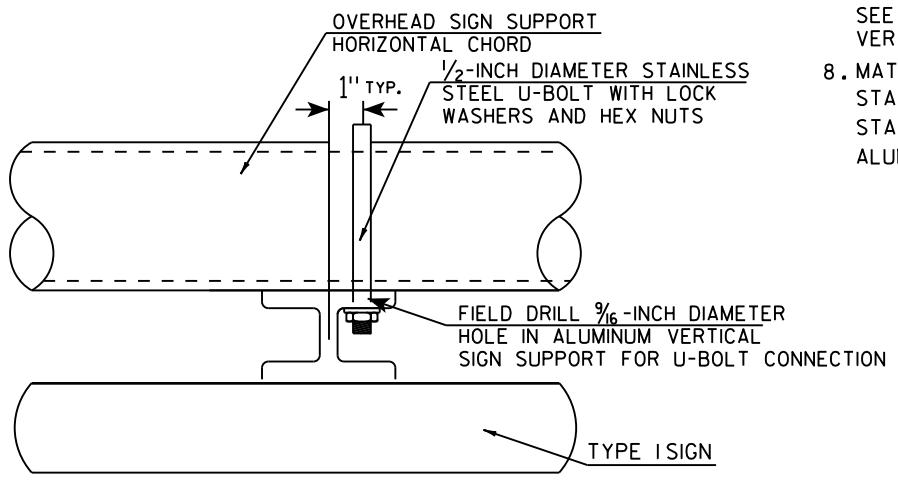
ATTACHMENT OF SIGNS TO POSTS	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Andrew Heldtke WORK ZONE ENGINEER
FHWA	



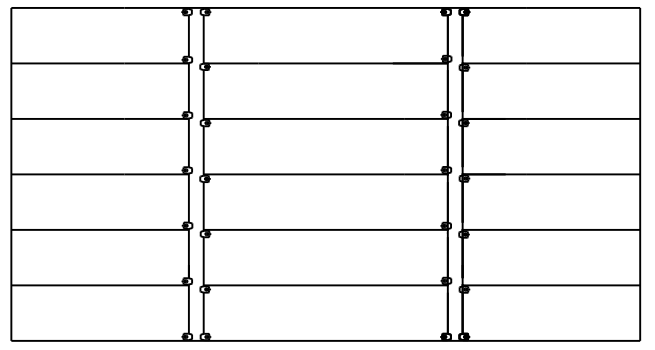
OVERHEAD SIGN SUPPORT
FULL SPAN
TWO CHORD TRUSS
(SIGNS GREATER THAN 6 FEET IN HEIGHT)



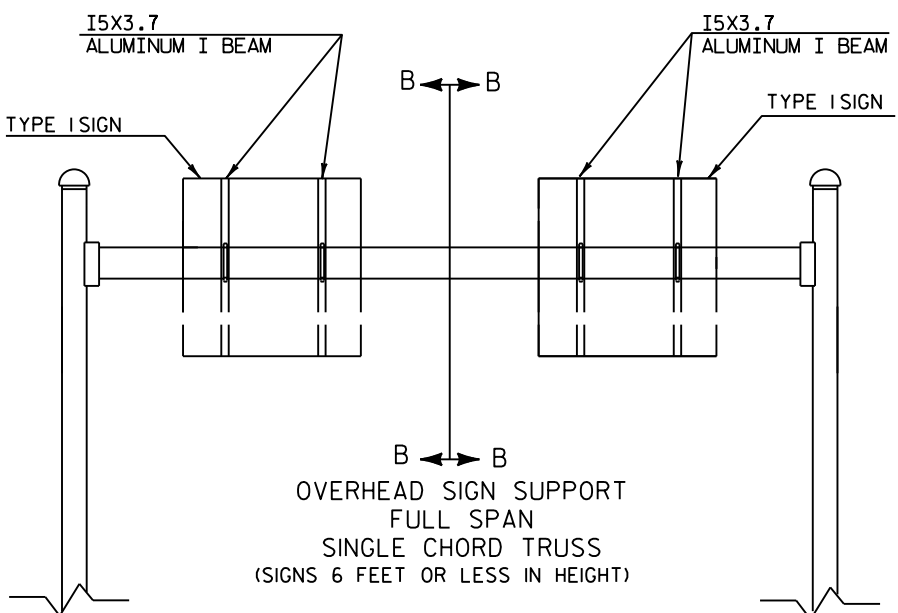
CUT SECTION A-A



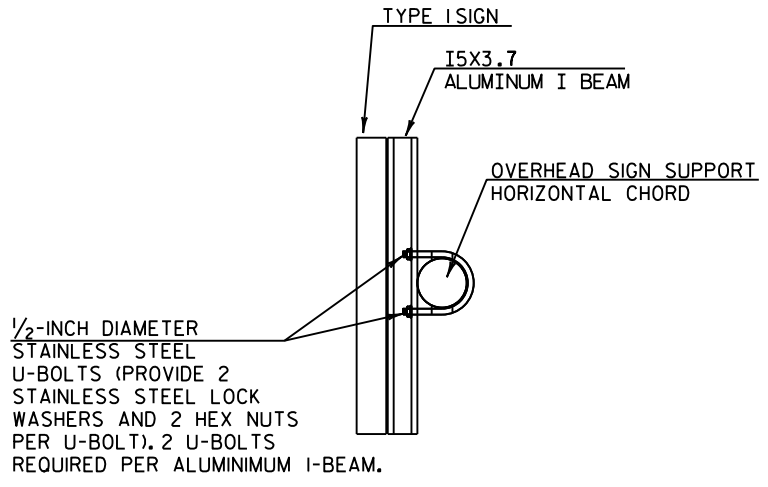
TYPICAL SIGN CONNECTION FOR
TWO CHORD TRUSS
PLAN VIEW



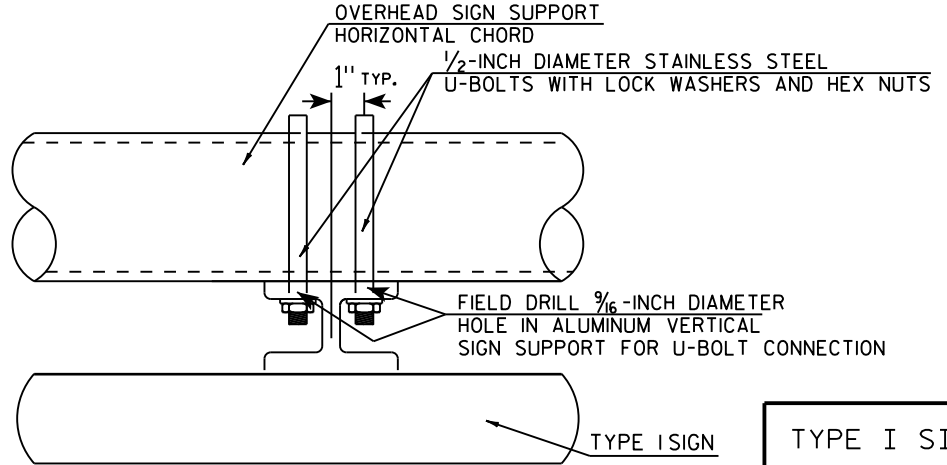
SPACING OF I5X3.7 ALUMINUM
VERTICAL SIGN SUPPORT



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



CUT SECTION B-B



TYPICAL SIGN CONNECTION FOR
SINGLE CHORD TRUSS
PLAN VIEW

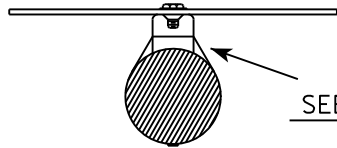
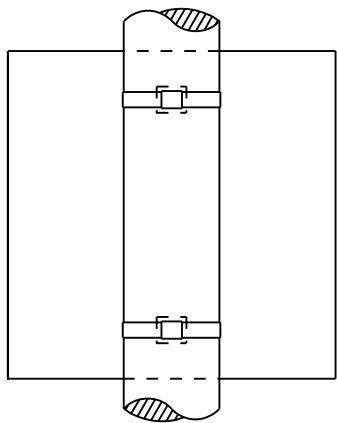
- GENERAL NOTES**
1. USE STAINLESS STEEL U-BOLTS, WASHERS, AND NUTS.
 2. USE CLIPS ON EVERY EXTRUDED PANEL JOINT PER SIGN PLATE A4-6.
 3. USE ALUMINUM VERTICAL SIGN SUPPORT BEAMS HAVING A 5 INCH BEAM DEPTH AND WEIGHT OF 3.7 LBS PER FOOT.
 4. U-BOLTS SHALL BE STAINLESS STEEL AND MANUFACTURED TO THE PROPER SIZE TO FIT THE CHORDS OF THE OVERHEAD SIGN STRUCTURE.
 5. DIAMETER OF U-BOLTS SHALL BE AS SHOWN.
 6. THE LENGTH OF THE ALUMINUM VERTICAL SIGN SUPPORT BEAMS SHALL BE THE SAME AS THE HEIGHT OF THE SIGN THEY ARE SUPPORTING. BEAM LENGTHS MAY BE LONGER FOR PROPER ATTACHMENT TO CHORDS.
 7. MINIMUM NUMBER OF BRACKETS PER SIGN IS TWO. SEE DETAIL BELOW FOR SPACING OF ALUMINUM VERTICAL SIGN SUPPORTS
 8. MATERIAL NOTES:
STAINLESS STEEL U-BOLTS AND LOCKWASHERS ASTM 304.
STAINLESS STEEL HEX NUTS ASTM A276.
ALUMINUM I-BEAMS ARE 6061-T6.

TYPE I SIGN CONNECTION
TO OVERHEAD SIGN SUPPORT

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 11/10/15 PLATE NO. A4-7.4

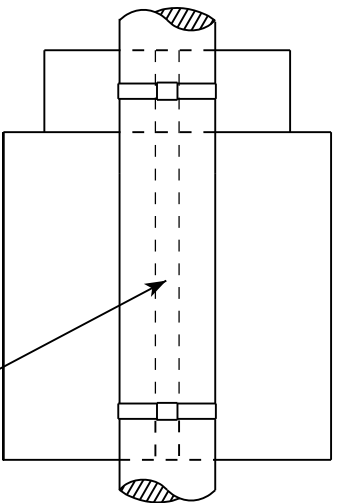
BANDING

SINGLE SIGN

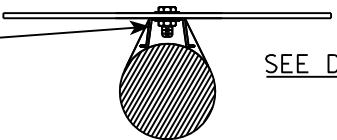


SEE DETAIL A

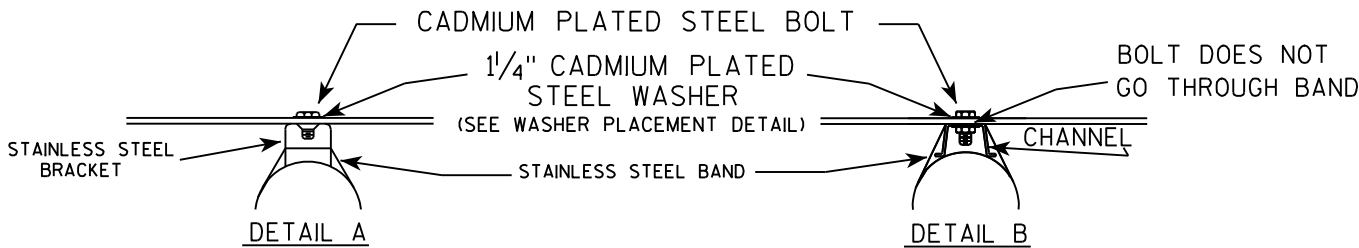
"J" ASSEMBLY



CHANNEL
SEE TYPICAL PANEL
INSTALLATION SHEET



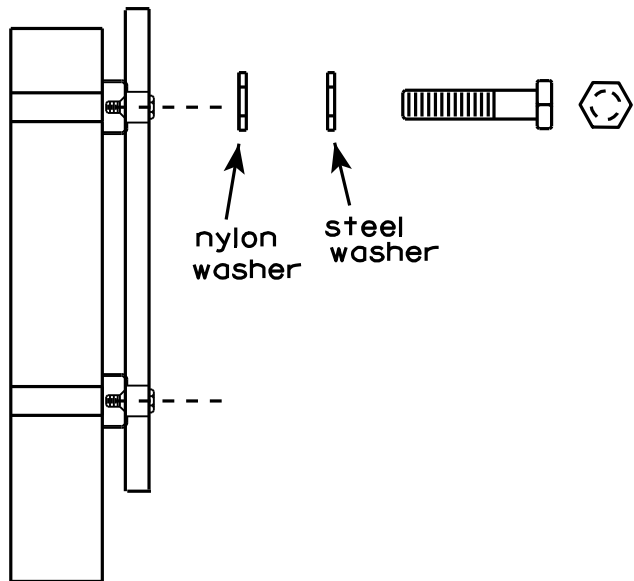
SEE DETAIL B



GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be $\frac{3}{4}$ " in width and 0.025" thickness.

WASHER PLACEMENT



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

STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Matthew R. Rauch
for State Traffic Engineer

DATE 8/16/13

PLATE NO. A5-9.3

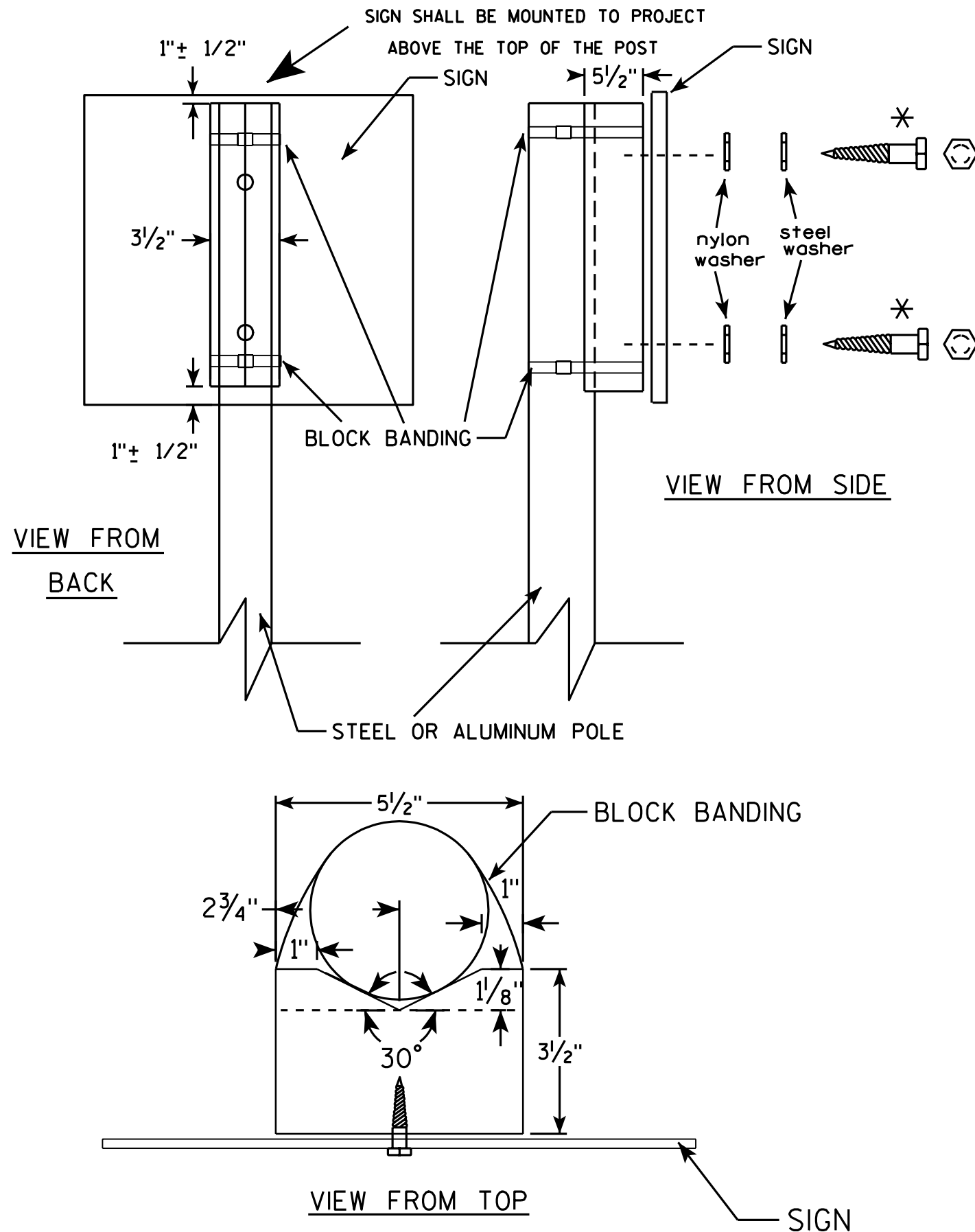
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



GENERAL NOTES

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

* LAG BOLTS SHALL BE 3/8" X 2 1/2"

BLOCK BANDING DETAIL
(V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

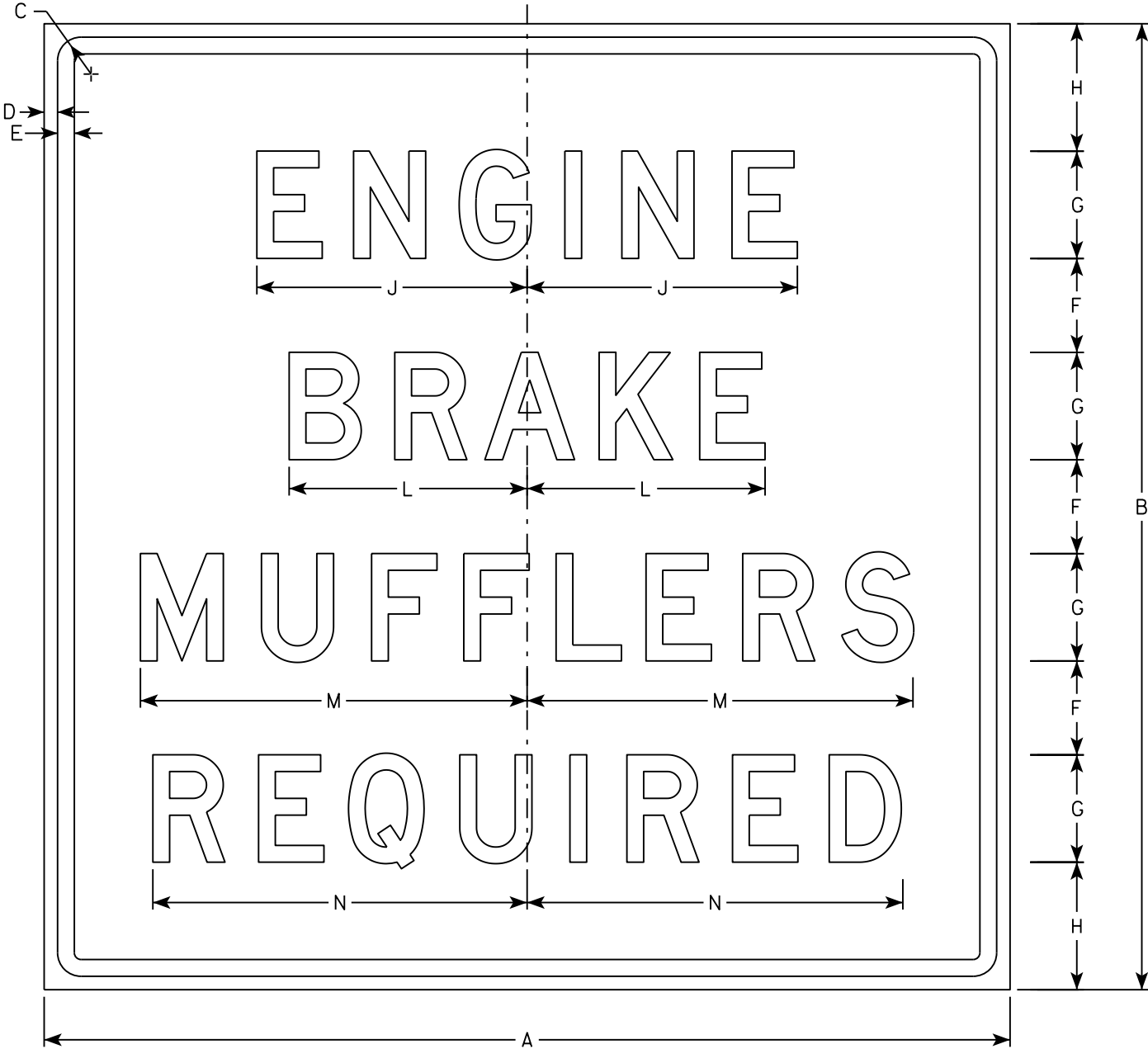
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

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

PROJECT NO:

SHEET NO:

E



R10-64

NOTES

- 1. Signs are Type II - Type H Reflective
- 2. Color:
 - Background - White
 - Message - Black
- 3. Message Series - D See note 5
- 4. Corners shall be rounded when base material is metal

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	36	1 3/8	1/2	5/8	3 1/2	4	4 3/4	2	10 1/8	3 1/2	8 7/8	14 3/8	14													9.0
2S	36	36	1 3/8	1/2	5/8	3 1/2	4	4 3/4	2	10 1/8	3 1/2	8 7/8	14 3/8	14													9.0
2M	36	36	1 3/8	1/2	5/8	3 1/2	4	4 3/4	2	10 1/8	3 1/2	8 7/8	14 3/8	14													9.0
3	42	42	1 3/8	1/2	5/8	4	5	5	3	12 5/8	4	11 1/8	18	17 3/8													12.25
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E

STANDARD SIGN
R10-64

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 1/3/18 PLATE NO. R10-64.8

SIGN REPAIR LOCATIONS - COLUMBIA COUNTY

COUNTY	STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
COLUMBIA	S110014	IH-39 SB	SB	IH-39 SB AT THE IH-39/90/94 SPLIT
	S110021	USH 51 NB	NB	USH 51 NB AT BRADY ST.

SIGN REPAIR LOCATIONS - DANE COUNTY

COUNTY	STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
DANE	S130036	USH 12 WB	WB	USH 12/18 WB AT JOHN NOLEN DRIVE EXIT
	S130037	USH 12/18 EB	EB	USH 12/18 EB¼MILE WEST OF SOUTH TOWN
	S130040	USH 12/18 WB	WB	12/18 WB 1/3 MIEAST OF JOHN NOLEN DR.
	S130060	USH 12/14/18 EB -USH 151 NB	NB	USH 12/14/18 EB AT FISH HATCHERY RD.
	S130061	USH 12/14/18 EB-USH 151 NB	NB	USH 12/14/18 EB AT EXIT TO CTH D NB (FISH HATCHERY RD.)
	S130064	USH 12/18 EB	EB	USH 12/14/18 EB AT USH 14 EXIT
	S130071	USH 12/18 WB	WB	USH 12/18 WB⅔MILE EAST OF RIMROCK ROAD
	S130153	USH 12 WB	WB	US 12/18 WB AT I-39 NB EXIT
	S130202	LRD SCHROEDER RD EB	EB	AT WHITNEY WAY
	S130205	SB EAST WASHINGTON AVE	VE	SB EAST WASHINGTON AVE AT PARKSIDE DR.
	S130248	US 12/14 EB	EB	FRONTAGE RD FROM SEMINOLE HWY
	S130258	US 12 EB	EB	US 12 OLD SAUK RD RAMP
	S130279	USH 12 EB	EB	EB USH 12¼MILES WEST OF PARK ST
	S130280	USH 12/18	18	EB USH 12/USH 18 BETWEEN RIMROCK RD. AND PARK ST.
	S130282	USH 12	12	WB USH 12/USH 18, PARK ST. EXIT RAMP
	S130283	USH 12/18	18	WB USH 12/18 BETWEEN RIMROCK RD. AND PARK ST.
	S130288	STH 113 SB	SB	SB STH 113 AT ABERG AVE.
	S130377	USH 18/151 WB	WB	WB 18/151 (VERONA RD.)⅓MILE NORTH OF RAYMOND RD
	S1309000001	DEMING WAY SB	SB	DEMING WAY SB AT USH 14
	S1309000002	DEMING WAY NB	NB	DEMING WAY NB AT USH 14
	S1309000003	USH 14 EB	EB	USH 14 EB AT DEMING WAY
	S1309000004	USH 14 WB	WB	USH 14 WB AT DEMING WAY

SIGN REPAIR LOCATIONS - GREEN COUNTY

COUNTY	STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
GREEN	S230002	STH 11 EB	EB	STH 11 EB AT USH 81 WB/69 SB EXIT

SIGN REPAIR LOCATIONS - SAUK COUNTY

COUNTY	STRUCTURE NUMBER	HIGHWAY	DIRECTION OF TRAVEL	LOCATION
SAUK	S560005	STH 13 WB	WB	STH 13 WB JUST SOUTH OF USH 12
	S560006	STH 13 NB	NB	STH 13 NB JUST NORTH OF USH 12
	S560007	USH 12 WB	WB	USH 12 WB JUST SOUTH OF STH 13
	S560008	STH 12 NB	NB	STH 12 NB JUST SOUTH OF IH-90/94
	S560015	CTH BD EB/WB	WB	CTH BD AT ROUNDABOUT TO WB USH 12 RAMPS
	S560017	CTH BD EB/WB	WB	CTH BD AT ROUNDABOUT TO USH 12 EB RAMPS
	S5604990002	USH 12 WB	WB	USH 12 WB JUST WEST OF MADISON ST.
	S5604990006	USH 12 EB	EB	USH 12 EB JUST EAST OF MADISON ST.
	S5610420006	USH 12 EB	EB	USH 12 EB JUST EAST OF LUEDERS RD.
	S5610570004	HILLMAN E	E	HILLMAN EB, EAST OF USH 12
	S5610570006	USH 12 WB	WB	JUST WEST OF HILLMAN

STATE PROJECT NUMBER

1009-30-16

LIST OF DRAWINGS


1. 2019 SW REGION SIGN REPAIR
2. FOUNDATION DETAILS
3. FOUNDATION REPLACEMENT DETAILS
4. TRUSS DETAILS 1
5. TRUSS DETAILS 2
6. SIGN PANEL DETAILS 1
7. SIGN PANEL DETAILS 2
8. ELECTRICAL DETAILS
9. CATWALK DETAILS
10. S-11-14
11. S-11-21
12. S-13-36
13. S-13-37
14. S-13-40
15. S-13-60
16. S-13-61
17. S-13-64
18. S-13-71
19. S-13-153
20. S-13-202
21. S-13-205
22. S-13-248
23. S-13-258
24. S-13-279
25. S-13-280
26. S-13-282
27. S-13-283
28. S-13-288
29. S-13-377
30. S-13-900-0001
31. S-13-900-0002
32. S-13-900-0003
33. S-13-900-0004
34. S-23-0002
35. S-56-005
36. S-56-006
37. S-56-007
38. S-56-008
39. S-56-015
40. S-56-17
41. S-56-499-0002
42. S-56-499-0006
43. S-56-1042-0006
44. S-56-1057-0004
45. S-56-1057-0006

STRUCTURE DESIGN CONTACTS:

STEVEN DOOCY (608) 261-6063
AARON BONK (608) 261-0261

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
- THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
- BEVEL EXPOSED EDGES OF CONCRETE ¾" UNLESS OTHERWISE NOTED.
- DIMENSIONS SHOWN ARE BASED ON THE ORIGINAL STRUCTURE PLANS AND AS-BUILT CONDITIONS. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND LOCATIONS FOR PROPOSED REPAIRS.
- ALL FIELD CONNECTIONS SHALL BE MADE WITH ¾" DIAMETER A325 HIGH-TENSILE STRENGTH BOLTS UNLESS OTHERWISE SHOWN OR NOTED.

NO.	DATE	REVISION	BY
		BUREAU OF STRUCTURES	
ACCEPTED <i>William C. Decker</i> 1/30/19		DATE	
CHIEF STRUCTURES DESIGN ENGINEER			
STRUCTURE SW SIGN REPAIRS			
2019 SW SIGN REPAIR			
COUNTY	VARIES		VARIES
DESIGN SPEC. REHABILITATION N/A			
DESIGNED BY	DESIGNED CK'D.	DRAWN BY	PLANS CK'D.
SAD	MJK	DDS/SAD	SAD
2019 SW REGION SIGN REPAIR			SHEET 1 OF 45

**QUANTITIES LISTED IN THIS TABLE ARE FOR INFORMATION ONLY, AND ARE NOT TO BE COUNTED AS ADDITIONAL QUANTITIES TO THOSE LISTED ON THE STRUCTURE ELEVATION SHEETS.

TABLE OF ESTIMATED QUANTITIES FOR FOUNDATIONS **

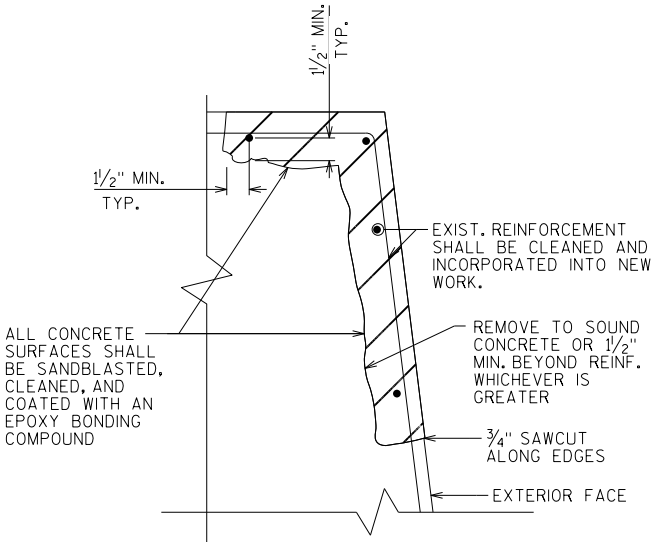
STRUCTURE NUMBER	CONCRETE SURFACE REPAIR	TENSION ANCHOR ROD	REMOVE DEBRIS AND REGRADE	REPLACE FOUNDATION	REMOVE GROUT PAD	REPAIR GALVANIZED COATING
	509.1500	SPV.0060.01	SPV.0060.02	SPV.0060.03	SPV.0060.04	SPV.0165.01
	SF	EA	EA	EA	EA	SF
S110014					4	
S130036					1	
S130037					1	
S130040					1	
S130060	2				4	5
S130061		1			1	
S130064					4	
S130071			1			
S130202		4				
S130205		8				
S130258		6				
S130280		8				
S130283		8				
S1309000001		6				
S1309000002		6				
S1309000003		6				
S1309000004		6				
S230002		6		1		
S560005			1			
S5604990002		6				
S5604990006		6				
S5610420006		6				
S5610570004		6				
S5610570006		6				
TOTAL	2	95	2	1	16	5

FOUNDATION NOTES

STATE PROJECT NUMBER

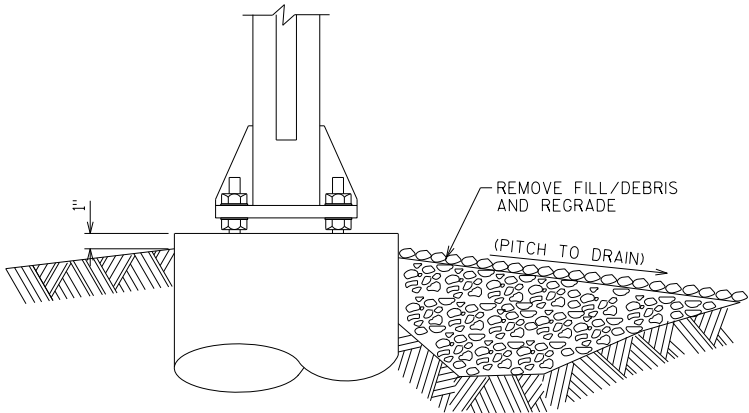
1009-30-16

1. CONCRETE - $f_c' = 3,500$ P.S.I.
2. BAR STEEL REINF.- GRADE 60 $f_y = 60,000$ P.S.I.
3. THE CONTRACTOR SHALL VERIFY EXACT LOCATION 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 "TENSION ANCHOR RODS"
6. STEEL ANCHOR ROD NUTS AND WASHERS ASTM A563A HEAVY HEX NUTS AND ASTM F436 WASHERS.
7. THE TOP OF THE FOOTING SURFACE SHALL BE SMOOTHED AND SLOPED TO DRAIN.



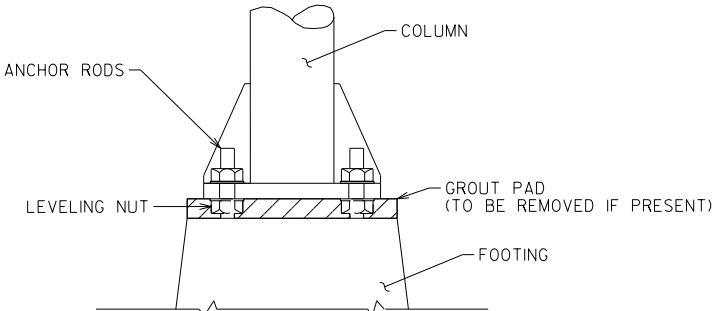
CONCRETE SURFACE REPAIR

TYPICAL DETAILS, ACTUAL LOCATIONS AS DIRECTED BY FIELD ENGINEER AND AS NOTED ON PLANS.

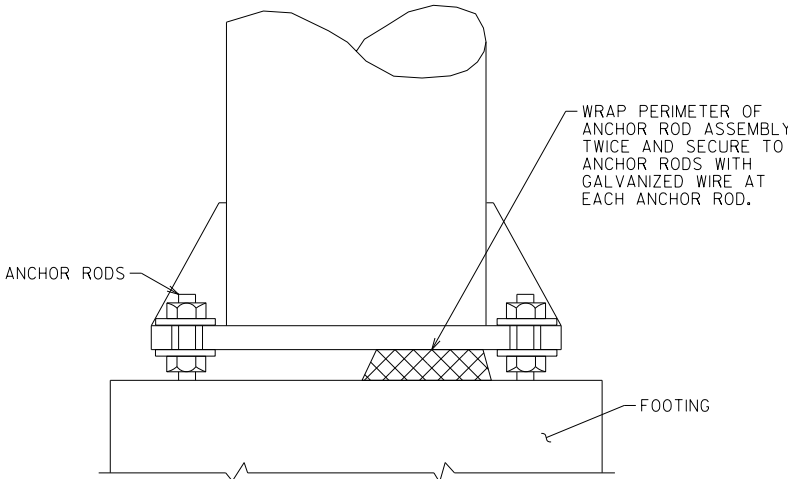


REMOVE DEBRIS AND REGRADE
SINGLE SHAFT FOUNDATION

ENSURE TOP OF CONCRETE IS FREE OF DEBRIS AND WATER WILL NOT COLLECT ON OR NEAR FOUNDATION.



TENSION ANCHOR RODS



REPLACE RODENT SCREEN

REQUIRED ON ALL STRUCTURES WITH ELECTRICAL EQUIPMENT.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
		DDS	
FOUNDATION DETAILS		SHEET 2	

SCALE = 1:00

NOTES

CONTRACTOR SHALL VERIFY UTILITY CONFLICTS PRIOR TO CONSTRUCTION OF FOOTING.
FOOTING BELOW THE WINGS SHALL BE EXCAVATED BY THE USE OF CIRCULAR AUGER.
THE FIRST OR FIRST TWO DIGITS OF THE BAR MARK SIGNIFIES THE BAR SIZE.
BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 3" CLEAR UNLESS DETAILED OTHERWISE.
BENDING DIMENSIONS ARE OUT TO OUT OF BAR.

CONTRACTOR TO VERIFY NUMBER OF ANCHORS, ANCHOR BOLT DIAMETER, BOLT CIRCLE DIAMETER, ORIENTATION AND ELEVATION TO MATCH EXISTING BASE PLATE.

CENTER ANCHOR ROD ASSEMBLY TO MISS BAR STEEL REINFORCEMENT AND MAKE SURE IT IS PLUMB. MAINTAIN ANCHOR ROD PROJECTION ABOVE FOOTING AS DETAILED ON PLAN.
ANCHOR ROD ASSEMBLY SHALL BE RIGIDLY SECURE IN POSITION DURING AND AFTER CONCRETE PLACEMENT. DO NOT WELD THE ANCHOR RODS.

PROVIDE A 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES.

UNLESS NOTED ON PLAN, REMOVE ALL CASING AND FORMS USED TO CONSTRUCT THE FOOTING PRIOR TO BACKFILLING AROUND THE FOOTING. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE IN LAYERS OF 1'-0" OR LESS.

TO BE PAID FOR AS "SPV.0060.03 REPLACE FOUNDATION". EXISTING FOOTING REMOVAL INCIDENTAL TO THIS ITEM.

EXACT LOCATION OF NEW FOUNDATION TO BE DETERMINED BY ENGINEER.

FOUNDATION DATA

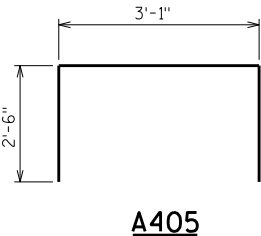
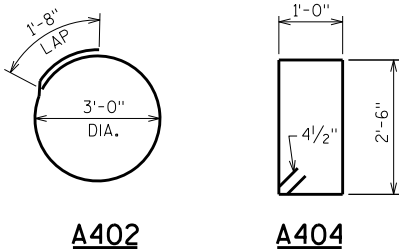
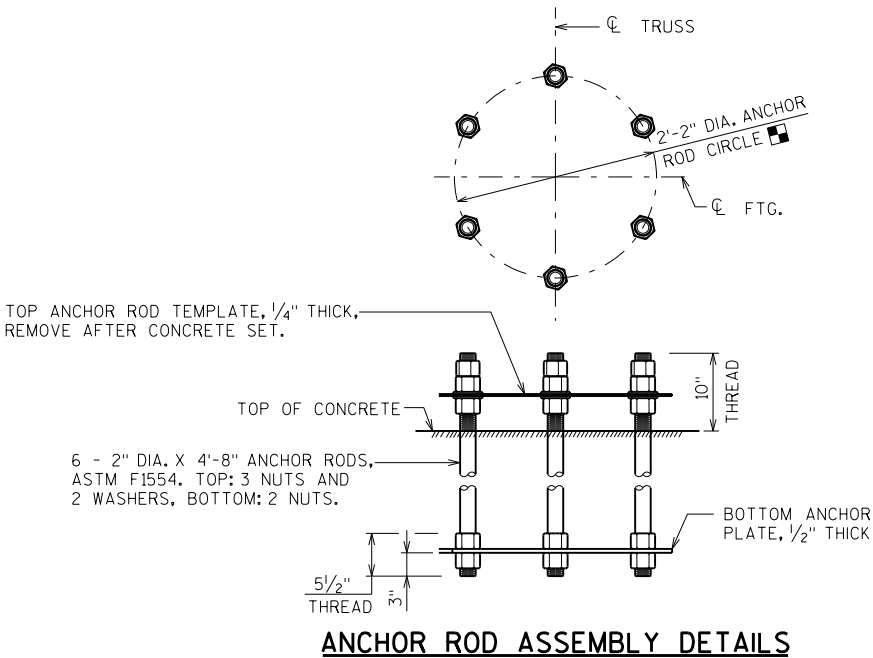
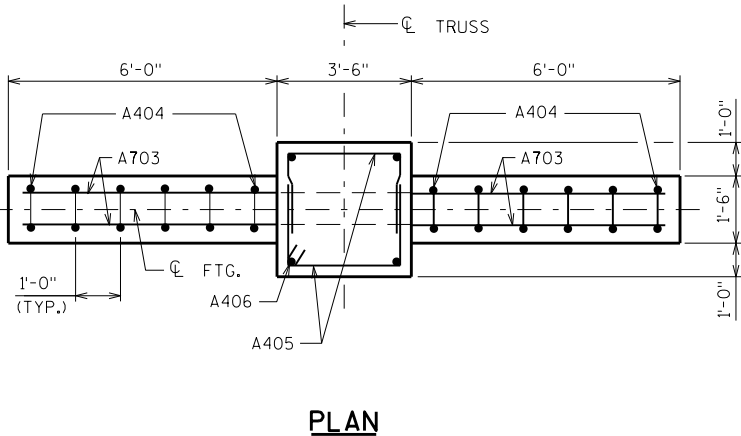
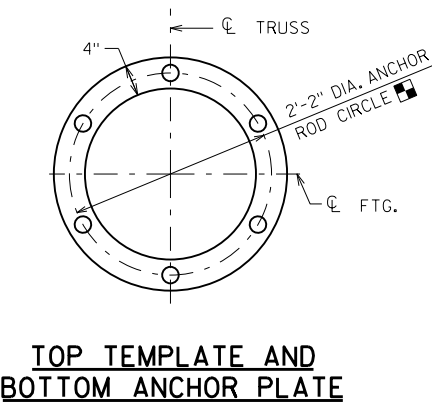
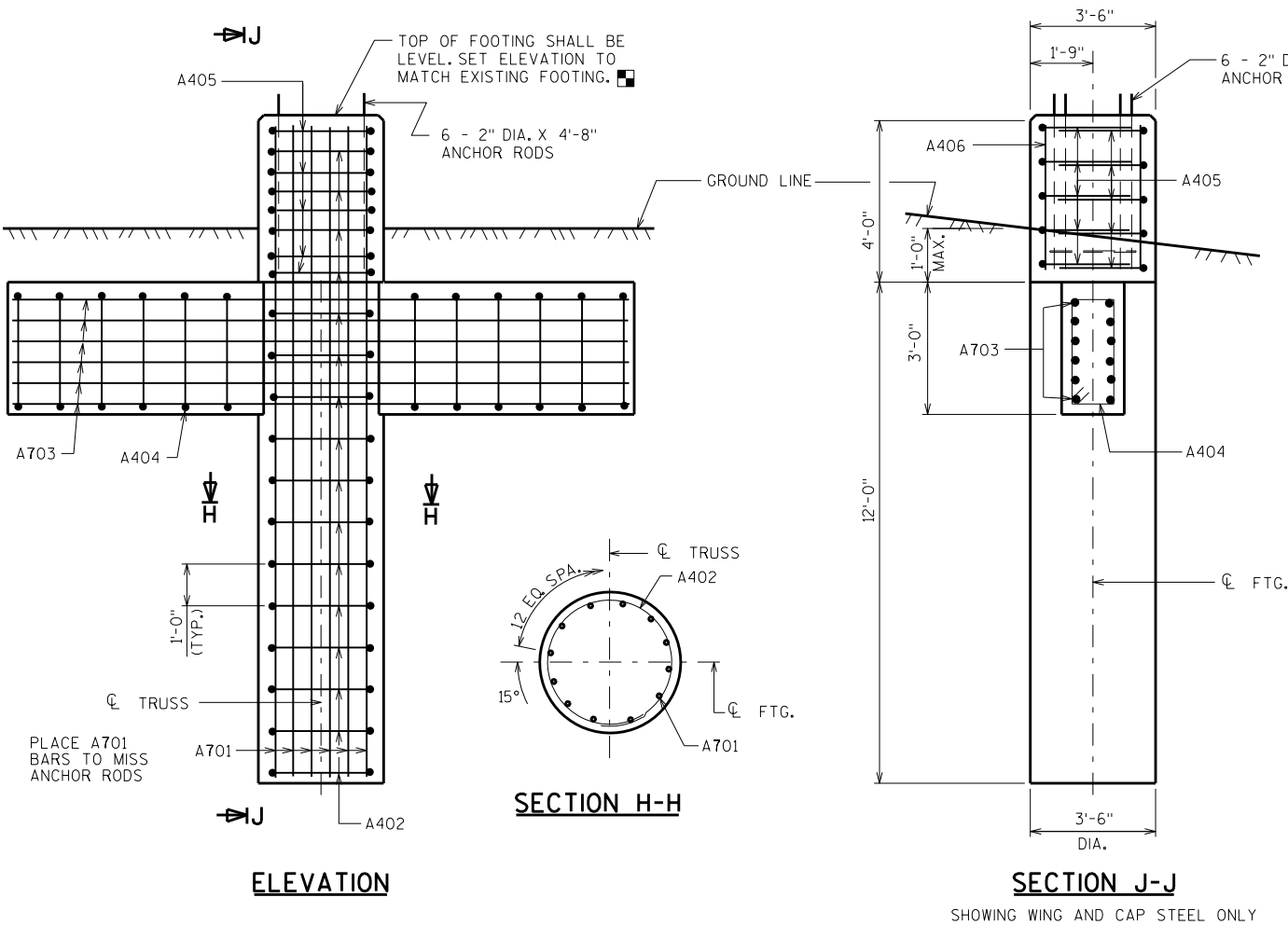
ALLOWABLE Qp = 4,000 P.S.F.

MATERIAL PROPERTIES

CONCRETE MASONRY f'c = 3,500 P.S.I.
BAR STEEL REINFORCEMENT, GRADE 60 fy = 60,000 P.S.I.
ANCHOR BOLTS ASTM F1554 fy = 55,000 P.S.I.

BILL OF BARS

BAR MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
A701	X	12	15'-6"			FOOTING - COLUMN/TOP
A402	X	16	11'-2"	X		FOOTING - COLUMN/TOP
A703	X	12	15'-0"			FOOTING - WINGS
A404	X	12	7'-6"	X		FOOTING - WINGS
A405	X	10	7'-11"	X		FOOTING - TOP
A406	X	4	3'-6"			FOOTING - TOP - COLUMNS



NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
FOUNDATION REPLACEMENT DETAILS		SHEET 3	

**QUANTITIES LISTED IN THIS TABLE ARE FOR INFORMATION ONLY, AND ARE NOT TO BE COUNTED AS ADDITIONAL QUANTITIES TO THOSE LISTED ON THE STRUCTURE ELEVATION SHEETS.

TABLE OF ESTIMATED QUANTITIES FOR TRUSSES **

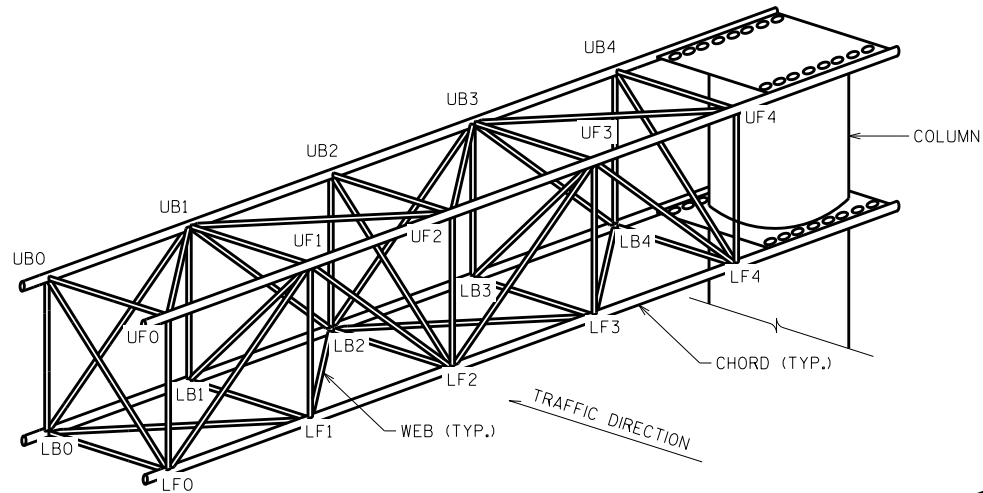
STRUCTURE NUMBER	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	SECURE/ REPLACE CAP
	SPV.0060.05 EA	SPV.0060.06 EA
S110021	1	
S130037	32	
S130064		2
S130071	1	
S130248	4	
S130258	6	
S130282		2
S130288	1	1
S139000001		1
S139000002		3
S139000003		2
S139000004		1
S560005	6	
S560006	6	
S560007	6	
S5604990004		3
S5604990006	8	1
S5610570004		2
S5610570006		3
TOTAL	71	21

STATE PROJECT NUMBER

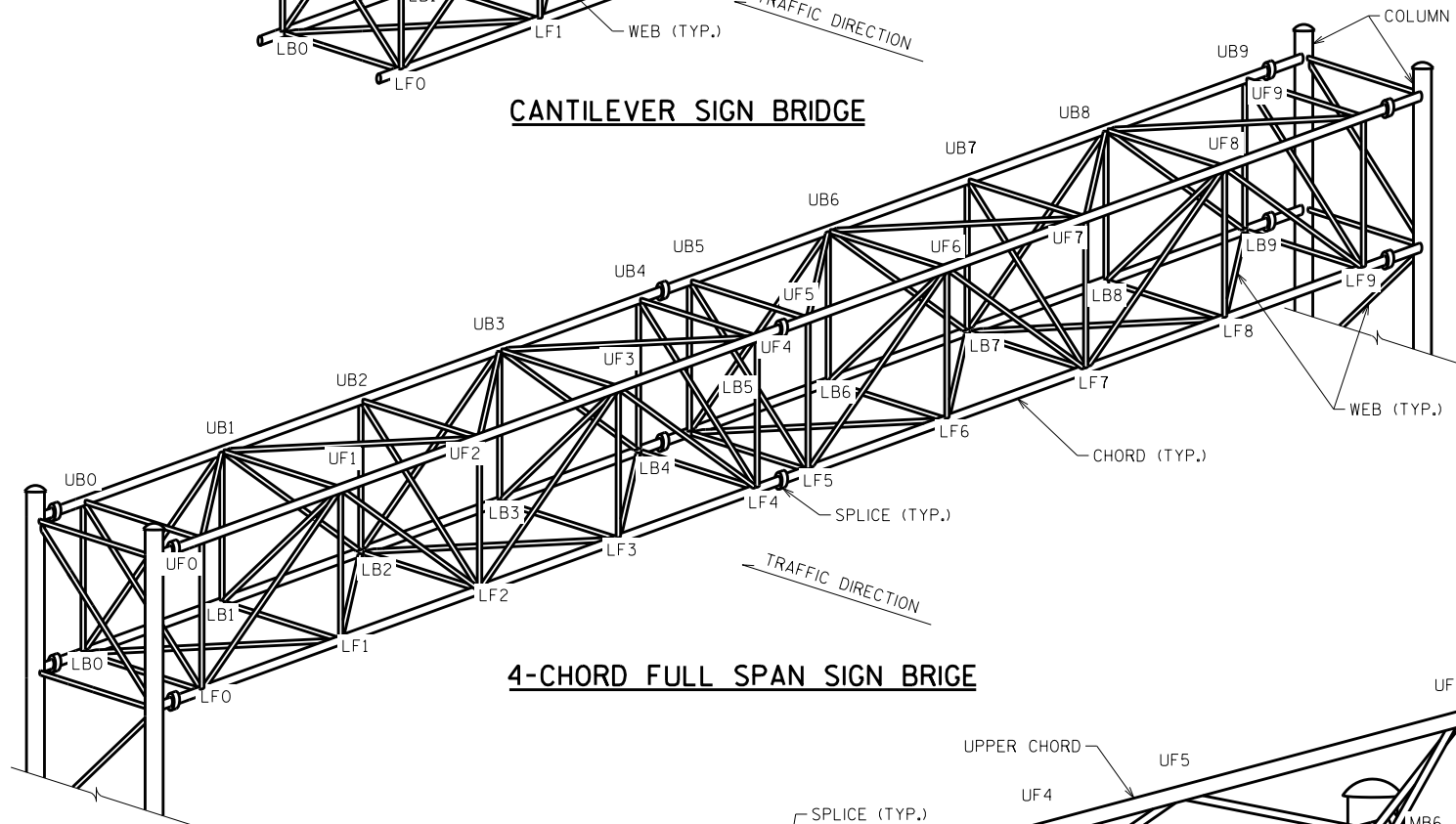
1009-30-16

TRUSS NOTES:

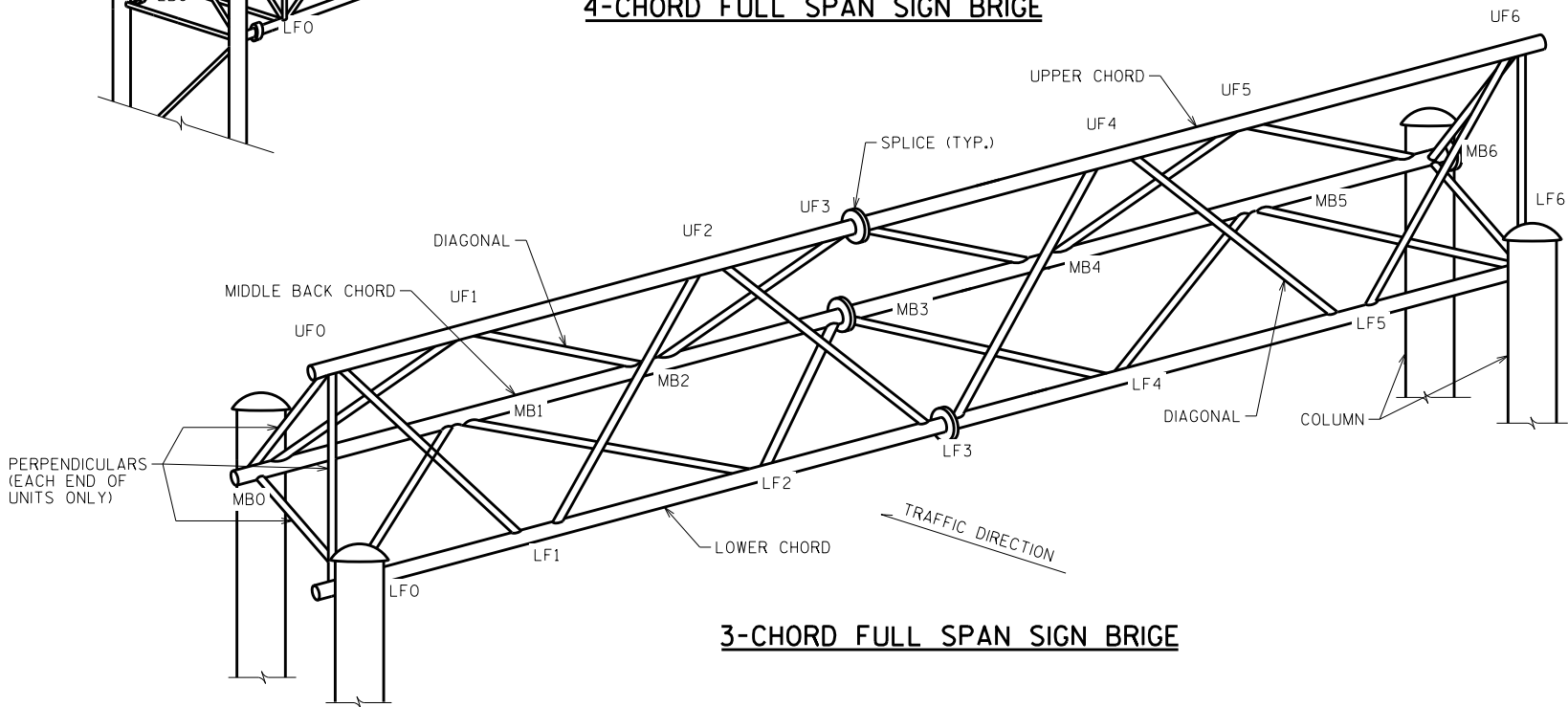
1. WHEN A FULL SPAN SIGN BRIDGE IS OVER BOTH DIRECTIONS AND SIGNS ARE ON STRUCTURE FOR BOTH DIRECTIONS, THEN NORTHBOUND AND EASTBOUND GOVERN THE NUMBERING SYSTEM.
2. THE CANTILEVER SIGN BRIDGE NUMBERING SYSTEM ALWAYS COUNTS UP FROM LEFT TO RIGHT REGARDLESS OF COLUMN LOCATION.
3. TYPICAL SIGN BRIDGE CONFIGURATION FOR INFORMATION ONLY.



CANTILEVER SIGN BRIDGE



4-CHORD FULL SPAN SIGN BRIDGE



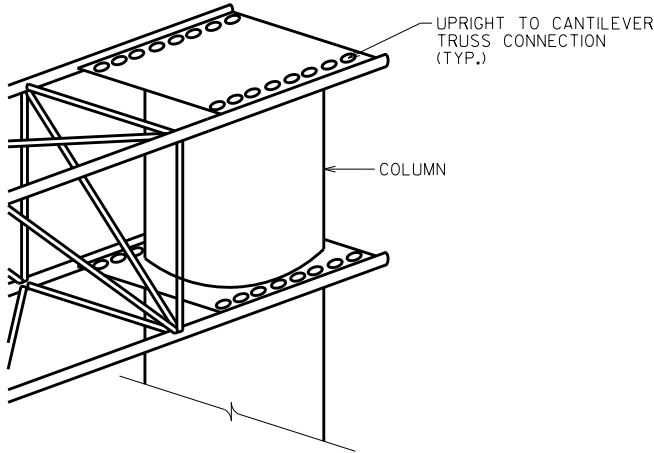
3-CHORD FULL SPAN SIGN BRIDGE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
TRUSS DETAILS 1		SHEET 4	

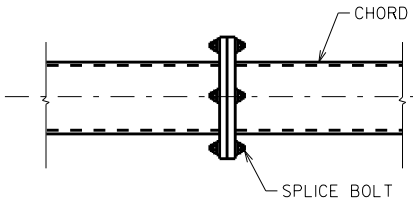
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TRUSS NOTES:

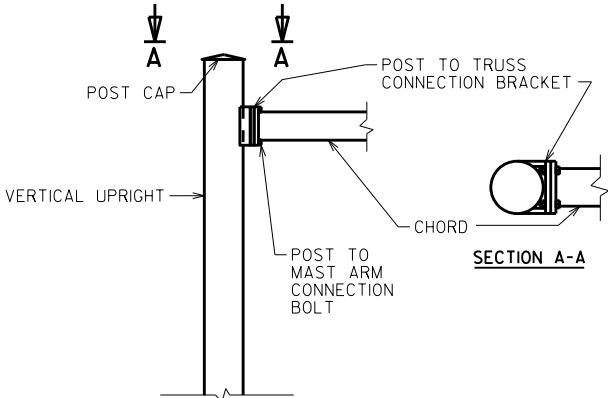
1. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE DIMENSIONS OF THE ITEM REQUIRED. DISCREPANCIES SHALL BE SUBMITTED TO THE ENGINEER FOR CLARIFICATION PRIOR TO BEGINNING WORK.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, AND NUTS SHALL CONFORM TO:
 - ANCHOR BOLTS/HEX BOLTS ASTM F593 ANY ALLOY GROUP 1, 2, OR 3
 - HEX NUTS ASTM F594
 - WASHERS ASTM A240ANY OF THE 300 SERIES WHICH HAVE A MINIMUM YIELD OF 40,000 PSI AND ELONGATION OF 15% FOR OVER 3/4" ϕ AND 12% FOR 3/4" ϕ AND SMALLER.
4. REPLACE MISSING BOLTS ON TOWER CAPS WITH A STAINLESS STEEL BOLT.



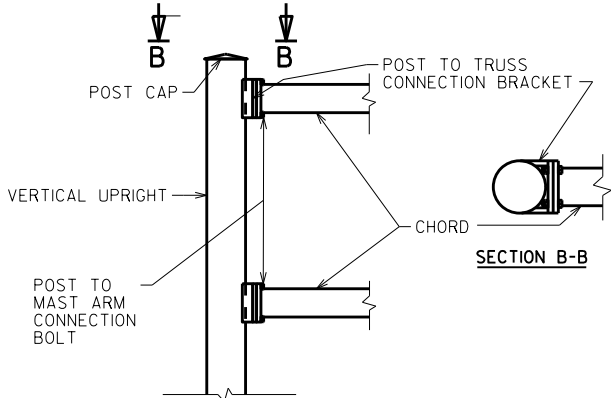
CANTIEVER SIGN BRIDGE
POST TO TRUSS CONNECTION DETAIL



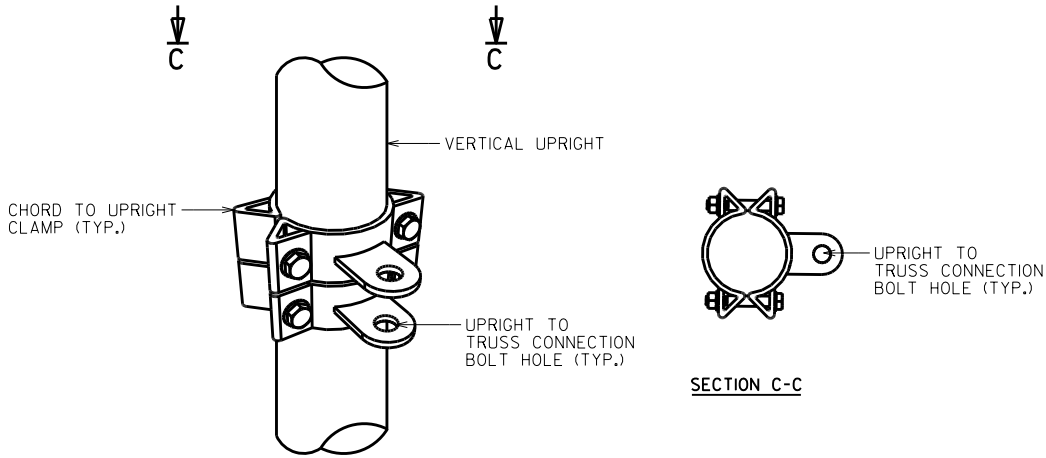
SPLICE CONNECTION BOLT DETAIL



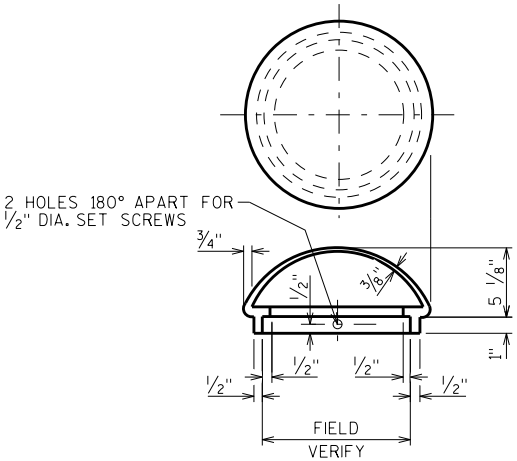
POST TO MAST ARM DETAIL



OVERHEAD POST TO TRUSS CONNECTION DETAIL II



OVERHEAD POST TO TRUSS CONNECTION DETAIL I



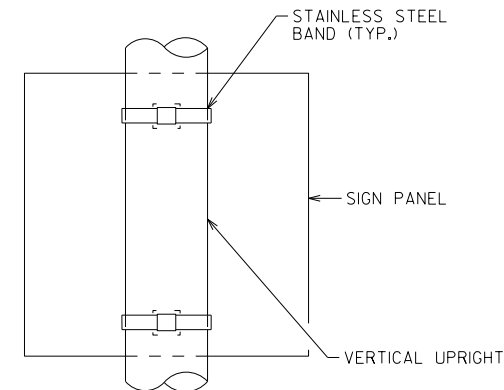
POST CAP DETAIL

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
TRUSS DETAILS 2			SHEET 5

**QUANTITIES LISTED IN THIS TABLE ARE FOR INFORMATION ONLY, AND ARE NOT TO BE COUNTED AS ADDITIONAL QUANTITIES TO THOSE LISTED ON THE STRUCTURE ELEVATION SHEETS.

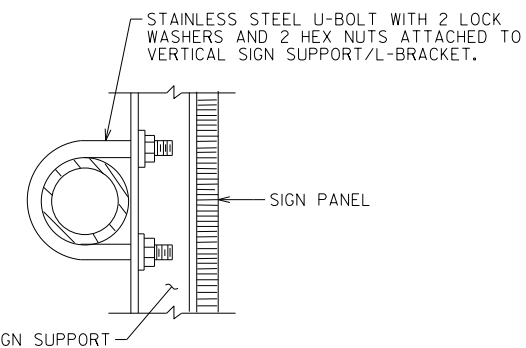
TABLE OF ESTIMATED QUANTITIES FOR SIGNS **

STRUCTURE NUMBER	SIGNS TYPE II REFLECTIVE SH	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	REPLACE SIGN CONNECTION CLAMP	REPLACE U- BOLT	INSTALL ID PLAQUE	INSTALL SIGN PANEL CONNECTOR	ADJUST VERTICAL CLEARANCE
	637.2220	SPV.0060.07	SPV.0060.08	SPV.0060.09	SPV.0060.10	SPV.0060.11	SPV.0060.12
	SF	EA	EA	EA	EA	EA	EA
S110014					1		
S130061					1		
S130064				2		4	
S130071						1	
S130153						84	
S130279						6	
S130280						4	
S130282						7	
S130288					1		1
S130377	8						
S139000001					1		
S139000002					1		
S139000003					1		
S139000004					1		
S560005			2		1		
S560006			1		1		
S560007			6		1		
S560008						30	
S560015		11					
S560017		12		1			
S5604990002					1		
TOTAL	8	23	9	3	11	136	1

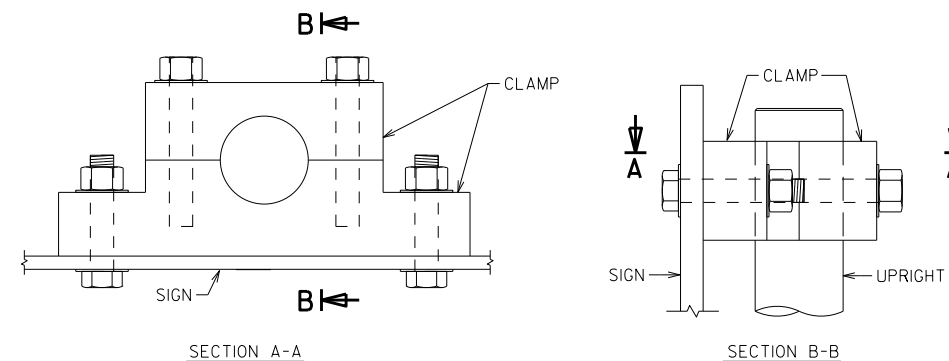


TYPE-II SIGN TO VERTICAL UPRIGHT DETAIL

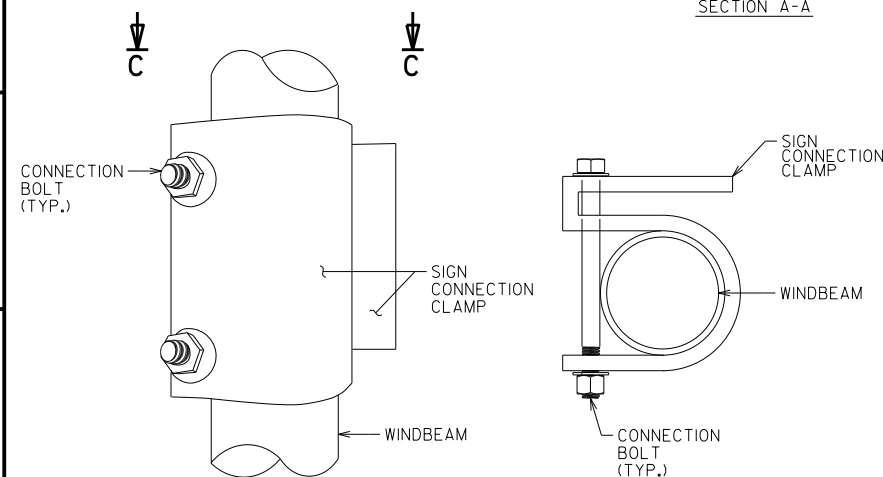
REFER TO SIGN PLATE MANUAL FOR DETAILS (SIGN BANDING DETAILS)



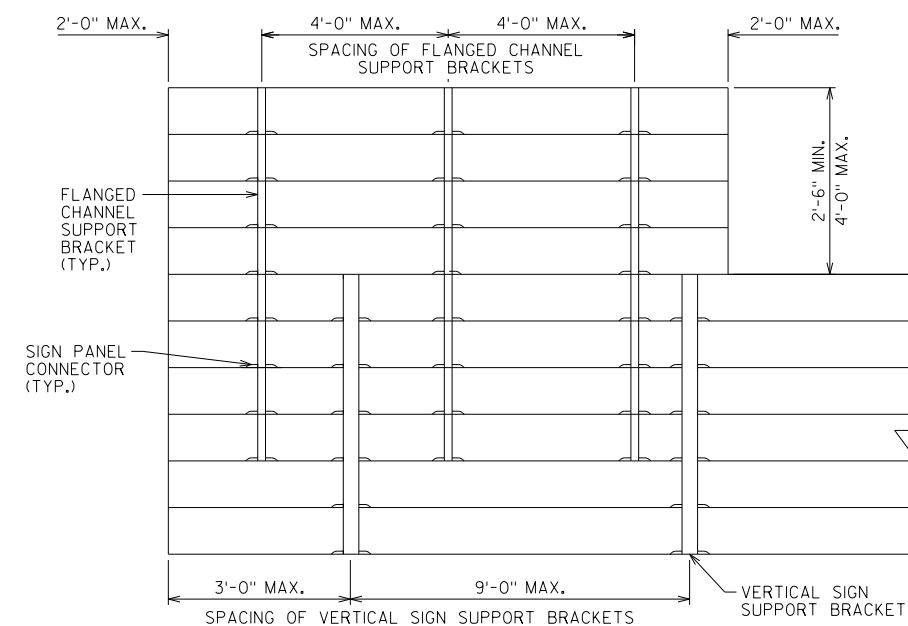
INSTALL U-BOLT & TIGHTEN LOOSE U-BOLT DETAIL



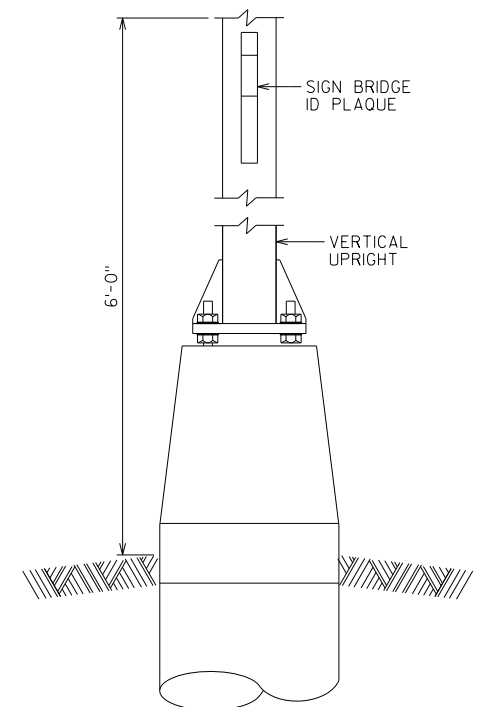
CLAMP DETAILS



SIGN CONNECTION CLAMP DETAIL (TYPE 2)



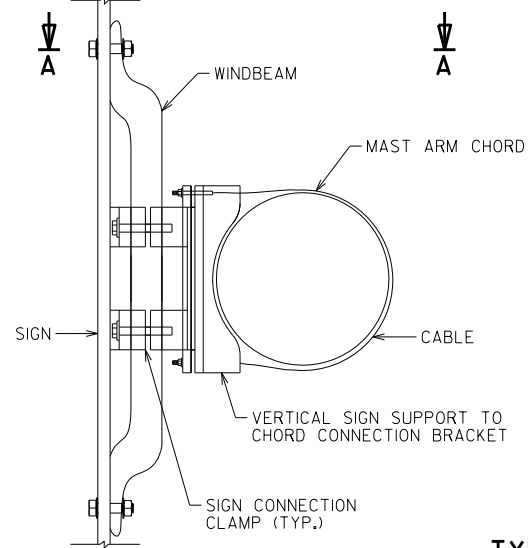
FLANGED CHANNEL SUPPORT/VERTICAL SIGN SUPPORT BRACKET DETAILS



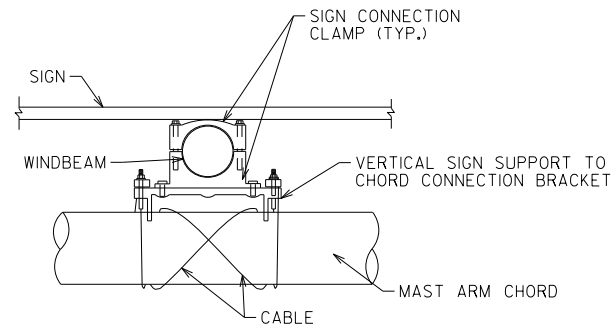
SIGN BRIDGE ID PLAQUE

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
SIGN PANEL DETAILS 1		SHEET 6	

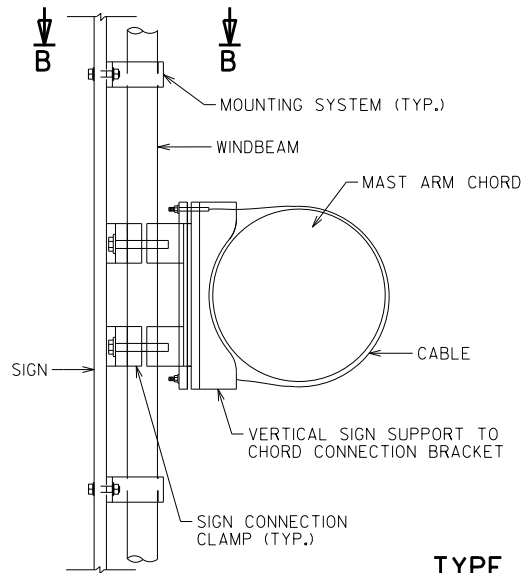
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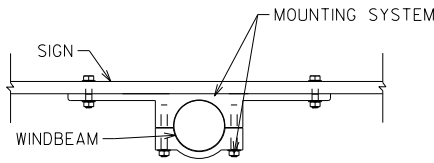
**TYPE 1
CONNECTION**



SECTION A-A



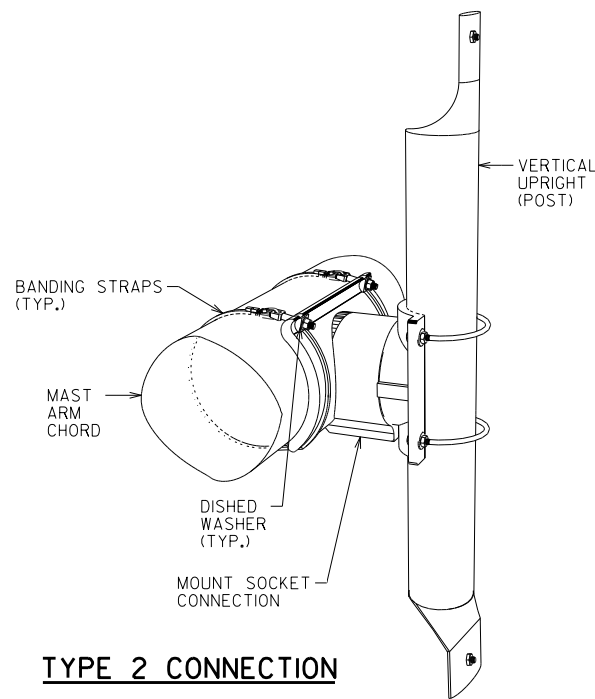
TYPE 3 CONNECTION



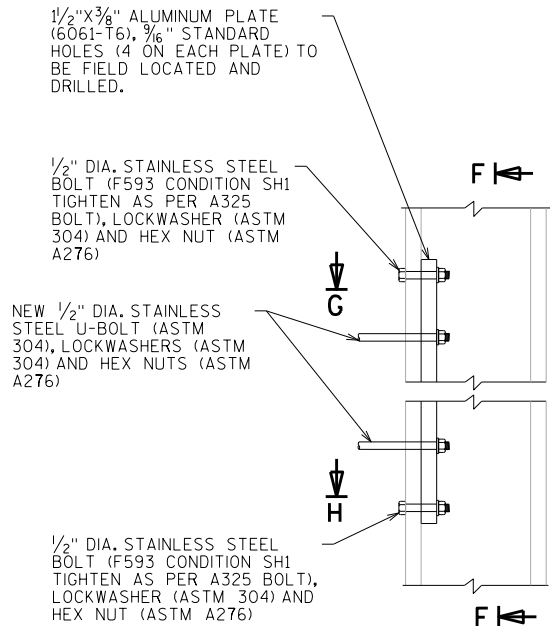
SECTION B-B

SIGN PANEL CONNECTION DETAIL (TYPE II SIGN)

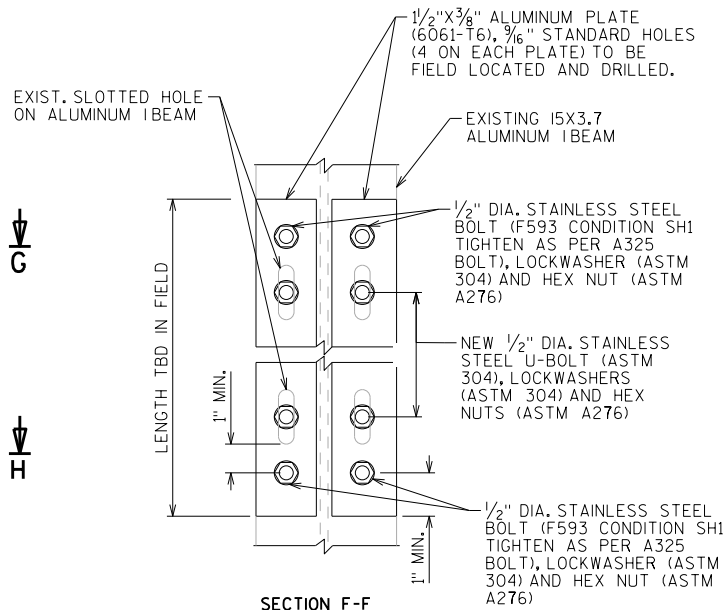
NOTE: SOME TYPE II SIGN PANELS MAY HAVE SIGN TYPE I CONNECTION. REFER TO SHEET "SIGN PANEL DETAILS (1 OF 2)".



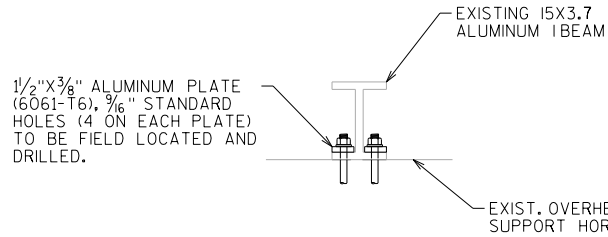
TYPE 2 CONNECTION



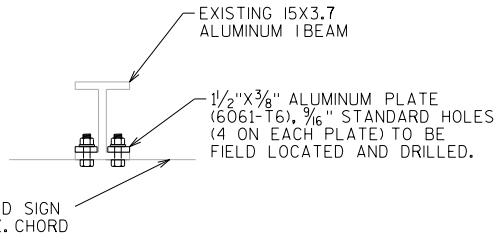
ELEVATION



SECTION F-F



SECTION G-G



SECTION HH

SLOTTED VERTICAL SIGN SUPPORT REPAIR DETAIL

EACH REPAIR INCLUDES ALL BOLT CONNECTIONS PER I-BEAM

STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDSD	PLANS CK'D. SAD
SIGN PANEL DETAILS 2		SHEET 7	

**QUANTITIES LISTED IN THIS TABLE ARE FOR INFORMATION ONLY, AND ARE NOT TO BE COUNTED AS ADDITIONAL QUANTITIES TO THOSE LISTED ON THE STRUCTURE ELEVATION SHEETS.

TABLE OF ESTIMATED QUANTITIES FOR CATWALKS AND ELECTRICAL **

STRUCTURE NUMBER	REPLACE HANDRAIL HINGE PINS	REPLACE SAFETY CHAIN	INSTALL CONDUIT PLUG	SECURE/REPLACE HANDHOLE COVER
	SPV.0060.13	SPV.0060.14	SPV.0060.15	SPV.0060.16
	EA	EA	EA	EA
S130036	1	1	1	
S130037	1	2	1	
S130060	1	1	1	
S130061			1	1
S130064			1	
S13248				1
S139000004				1
S230002			1	
TOTAL	3	4	6	3

STATE PROJECT NUMBER

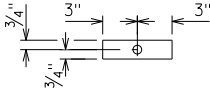
1009-30-16

CATWALK NOTES:

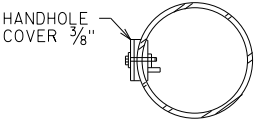
1. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE OF THE ITEM REQUIRED.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, AND NUTS SHALL CONFORM TO:
-ANCHOR BOLTS/HEX BOLTS ASTM F593 ANY ALLOY GROUP 1,2,OR3
-HEX NUTS ASTM F594
-WASHERS ASTM A240
ANY OF THE 300 SERIES WHICH HAVE A MINIMUM YIELD OF 40,000 PSI AND ELONGATION OF 15% FOR OVER 3/4" ϕ AND 12% FOR 3/4" ϕ AND SMALLER.

ELECTRICAL NOTES:

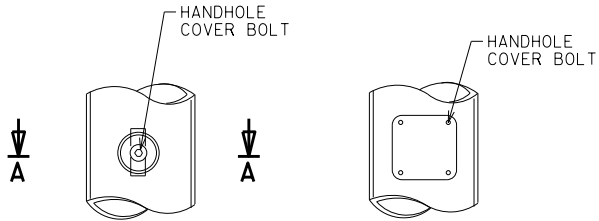
1. THE CONTRACTOR SHALL VERIFY EXACT LOCATION OF ALL REPAIRS.
2. THE CONTRACTOR SHALL FIELD VERIFY THE SIZE OF THE ITEM REQUIRED.
3. ALL STAINLESS STEEL BOLTS, LOCK WASHERS, AND NUTS SHALL CONFORM TO:
-HEX BOLTS ASTM F593 ANY ALLOY GROUP 1, 2, OR 3
-HEX NUTS ASTM F594
-WASHERS ASTM A240
ANY OF THE 300 SERIES WHICH HAVE A MINIMUM YIELD OF 40,000 PSI AND ELONGATION OF 15% FOR OVER 3/4" ϕ AND 12% FOR 3/4" ϕ AND SMALLER.
4. THE CONTRACTOR SHALL USE ANTI-SIEZE COMPOUND ON ELECTRICAL HANDHOLE COVER BOLTS, JUNCTION BOX BOLTS, LUMINAIRE COVER BOLTS, AND CONDUIT PLUGS PER SECTION 651.3.1(5) OF THE WISDOT STANDARD SPECIFICATION.
5. CAP ALL EXPOSED WIRES AND CLOSE THE JUNCTION BOX.
6. REPLACE THE JUNCTION BOX BOLT WITH A STAINLESS STEEL BOLT.



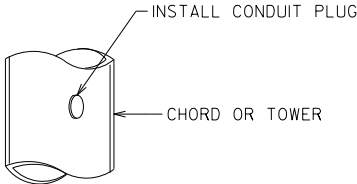
LOCKING PLATE



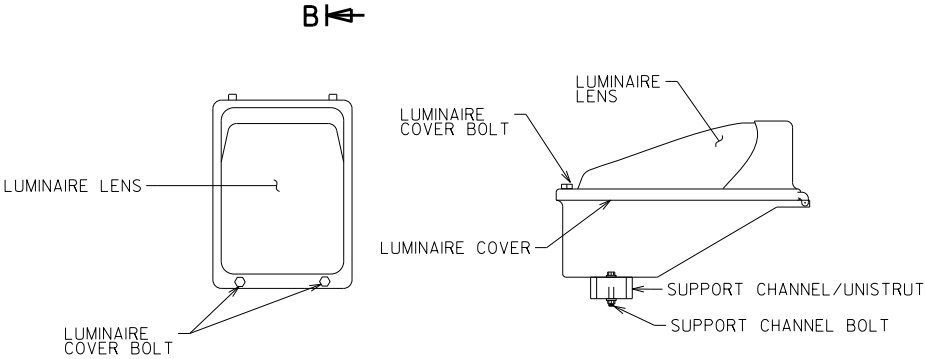
SECTION A-A



HANDHOLE DETAILS



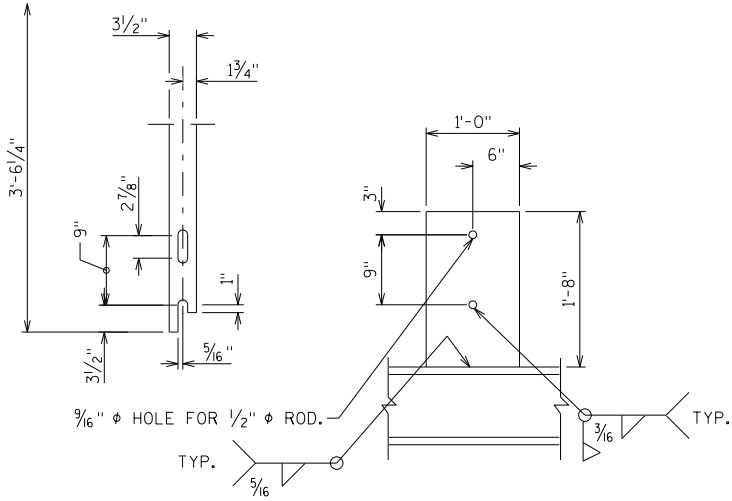
CONDUIT PLUG DETAIL



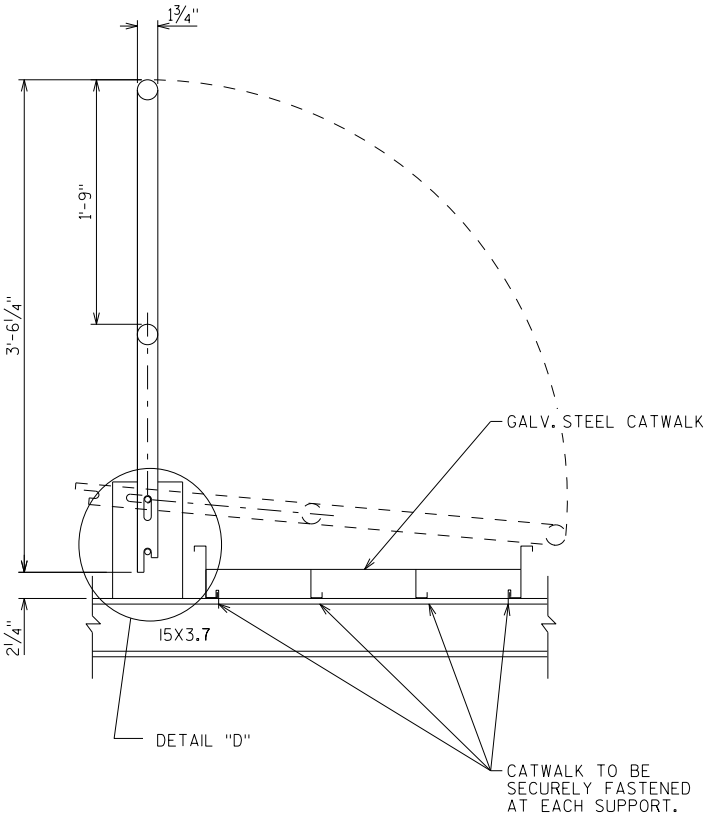
TYPICAL LUMINAIRE DETAILS

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
ELECTRICAL DETAILS		SHEET 8	

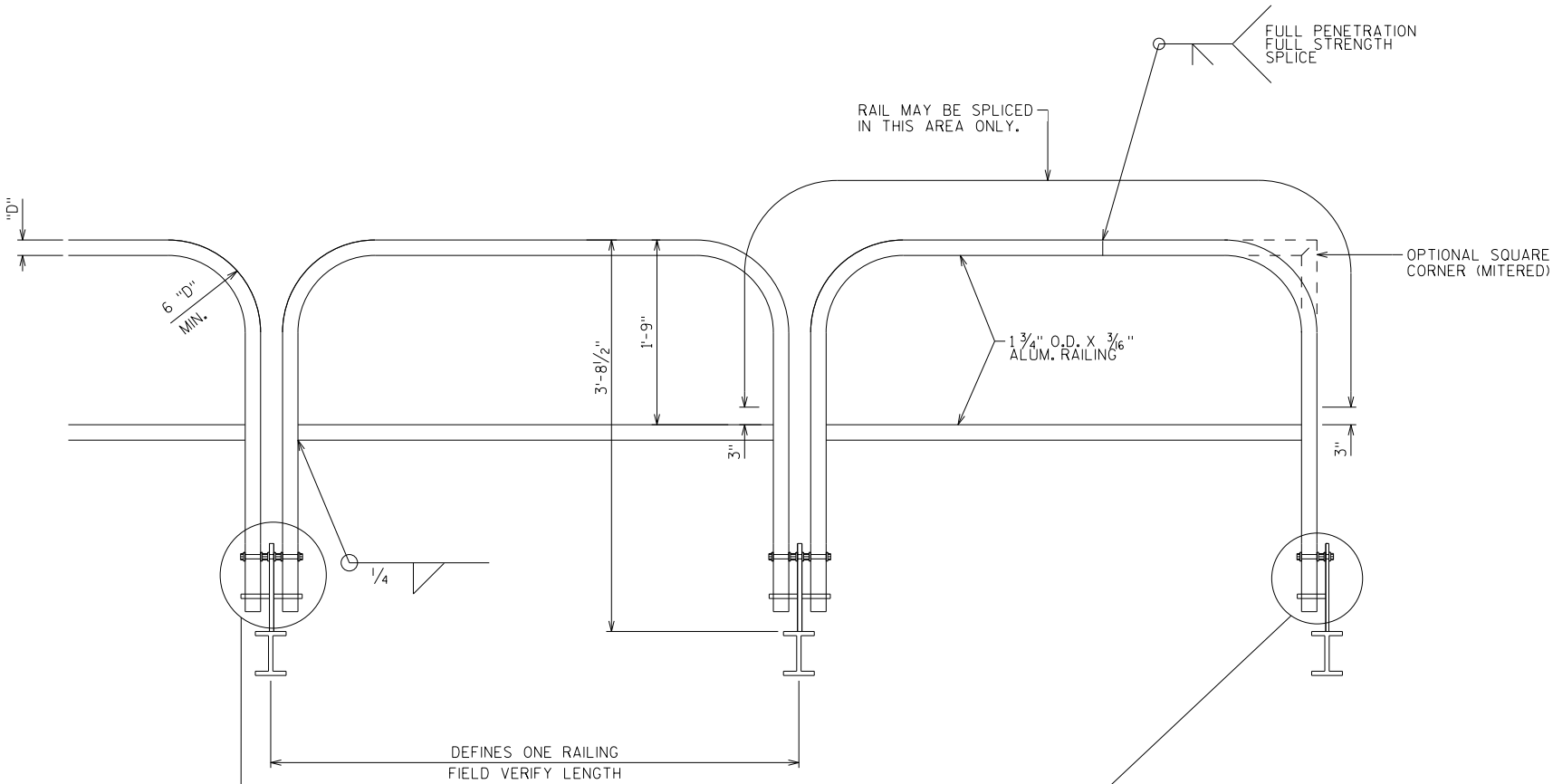
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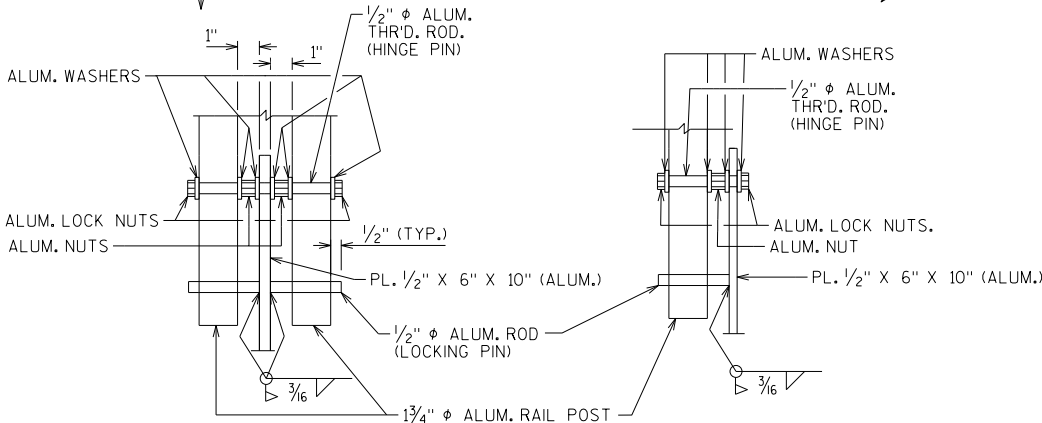
DETAIL "D"



RAIL POST DETAIL



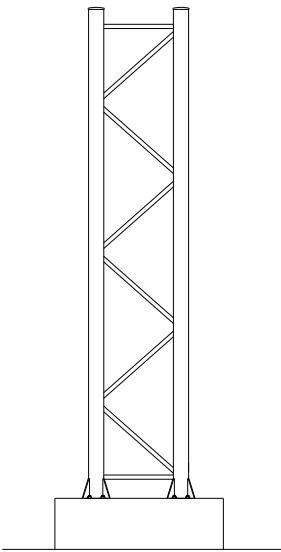
TYPICAL RAILING DETAILS



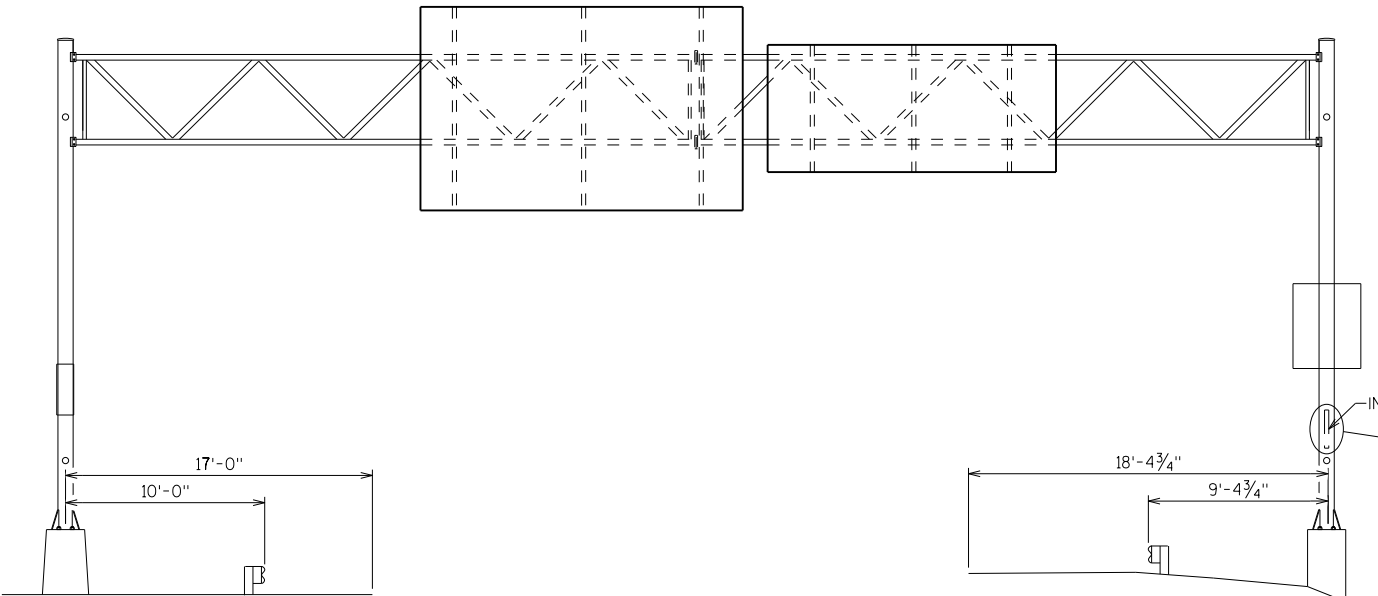
HINGE PIN DETAIL

HINGE PIN END DETAIL

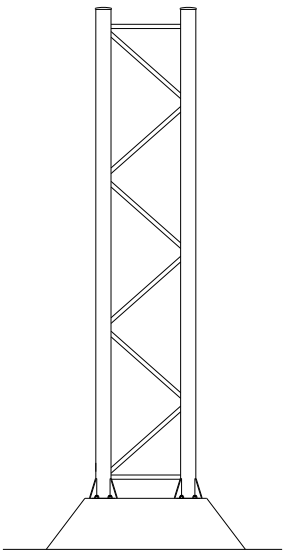
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
CATWALK DETAILS		SHEET 9	



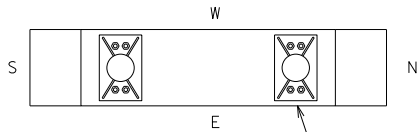
LOOKING WEST



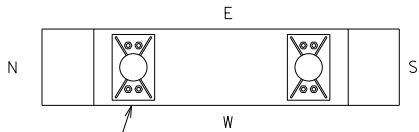
LOOKING SOUTH



LOOKING EAST



WEST FOUNDATION DETAIL

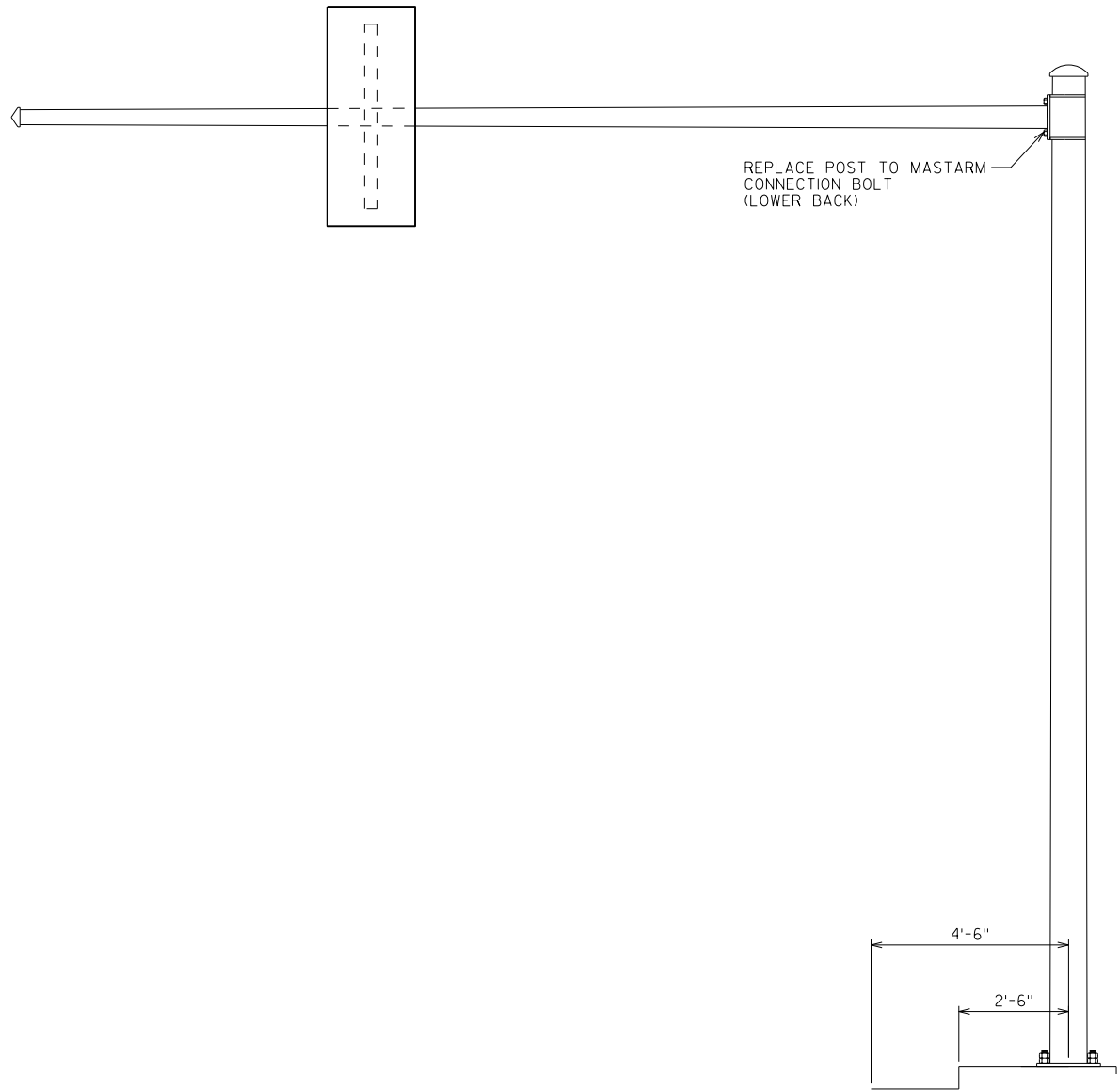


EAST FOUNDATION DETAIL

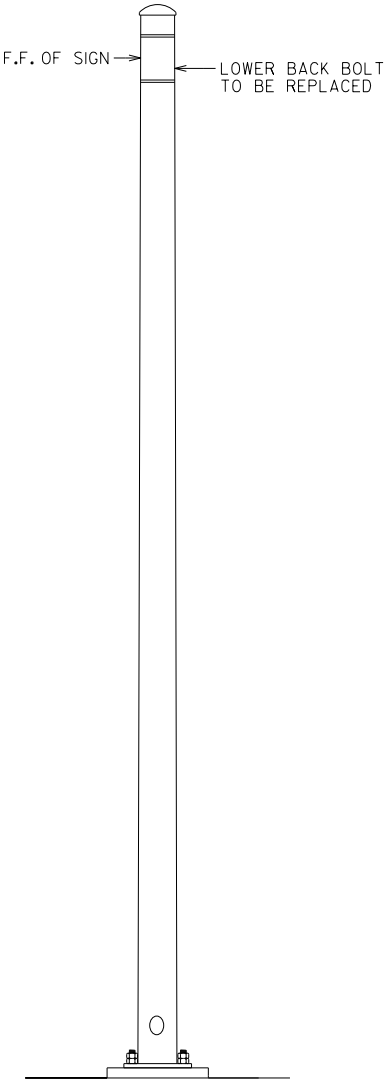
REMOVE GROUT PADS

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.04	REMOVE GROUT PAD	4 EACH	2
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-11-14		SHEET 10	



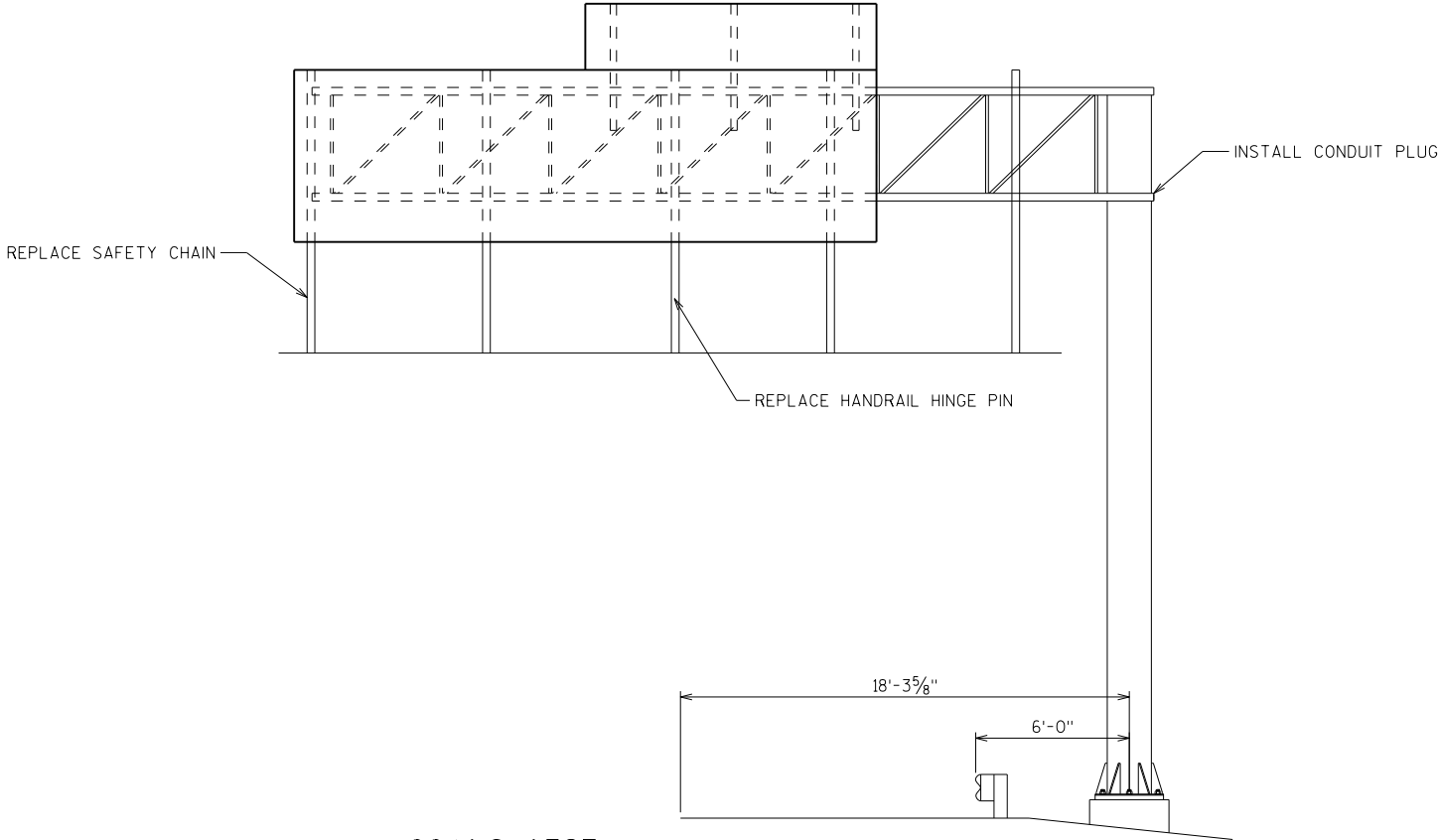
LOOKING NORTH



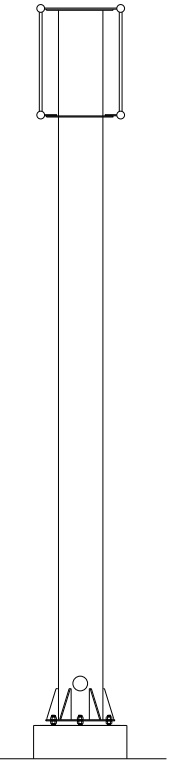
LOOKING WEST

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.05	TIGHTEN STRUCTURAL CONNECTION BOLT (FRICTION)	1 EACH	4

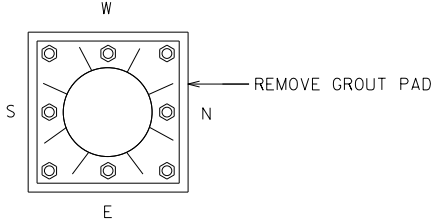
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
S-11-21		SHEET 11	



LOOKING WEST



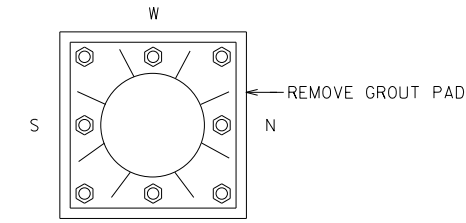
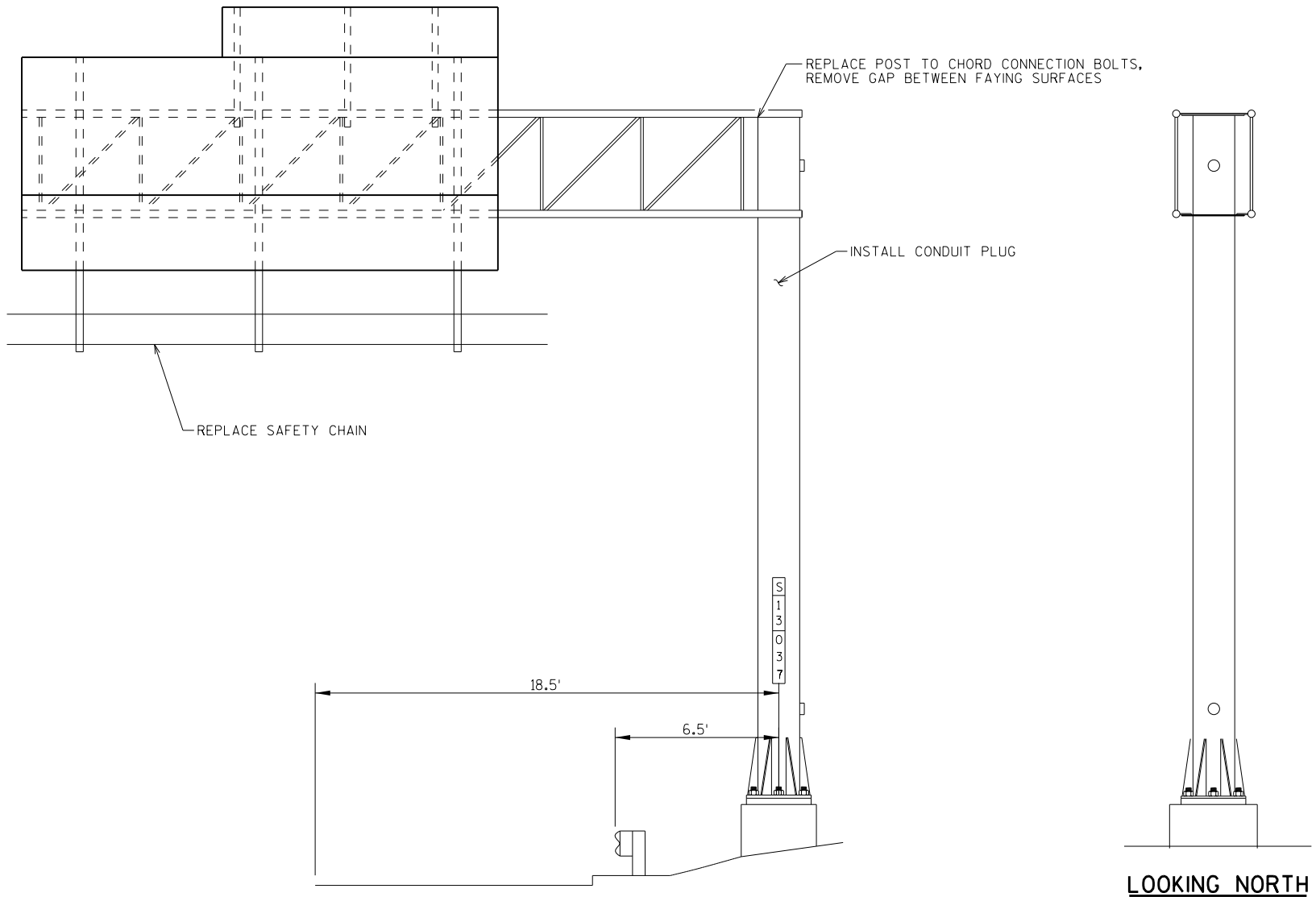
LOOKING SOUTH



FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.04	REMOVE GROUT PAD	1 EACH	2
SPV.0060.13	REPLACE HANDRAIL HINGE PINS	1 EACH	8
SPV.0060.14	REPLACE SAFETY CHAIN	1 EACH	8
SPV.0060.15	INSTALL CONDUIT PLUG	1 EACH	8

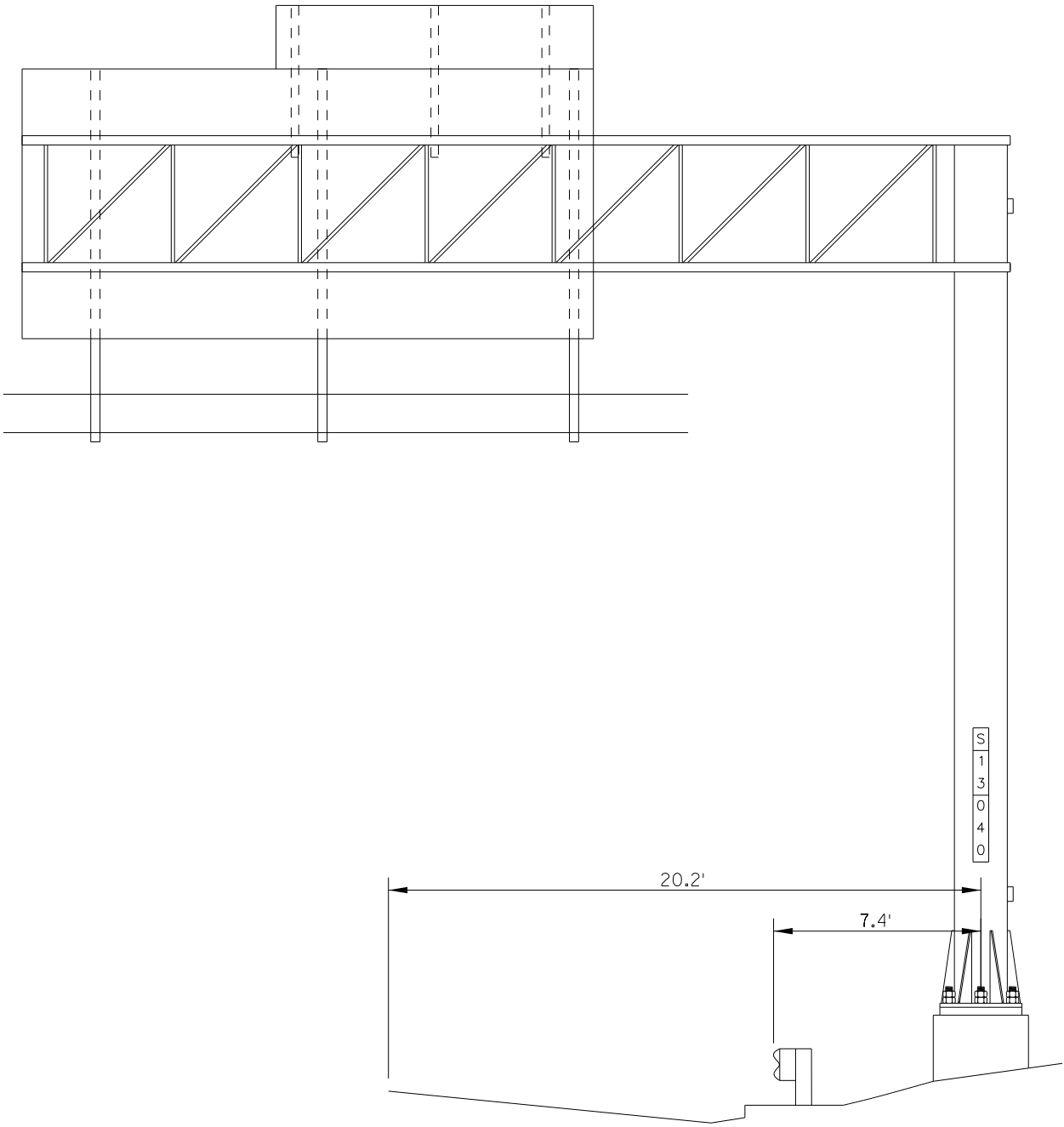
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY DDS	PLANS CK'D. SAD
S-13-36		SHEET 12	



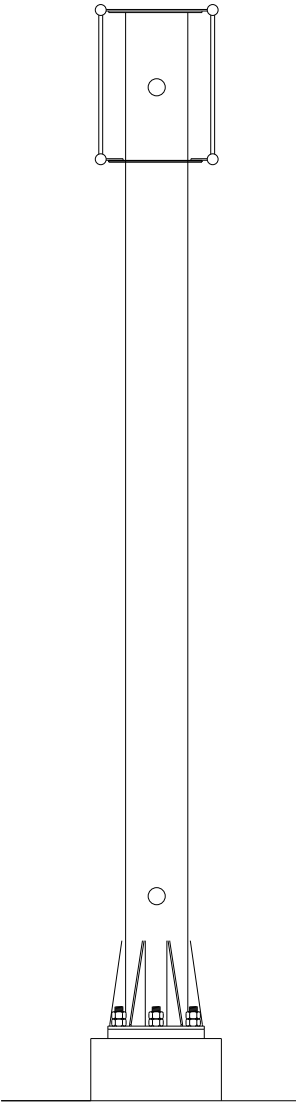
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.04	REMOVE GROUT PAD	1 EACH	2
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	32 EACH	4
SPV.0060.13	REPLACE HANDRAIL HINGE PIN	1 EACH	8
SPV.0060.14	REPLACE SAFETY CHAIN	2 EACH	8
SPV.0060.15	INSTALL CONDUIT PLUG	1 EACH	8

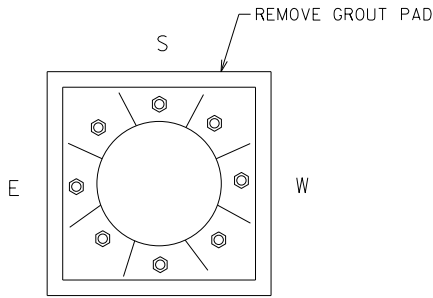
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-13-37		SHEET 13	



LOOKING WEST



LOOKING SOUTH

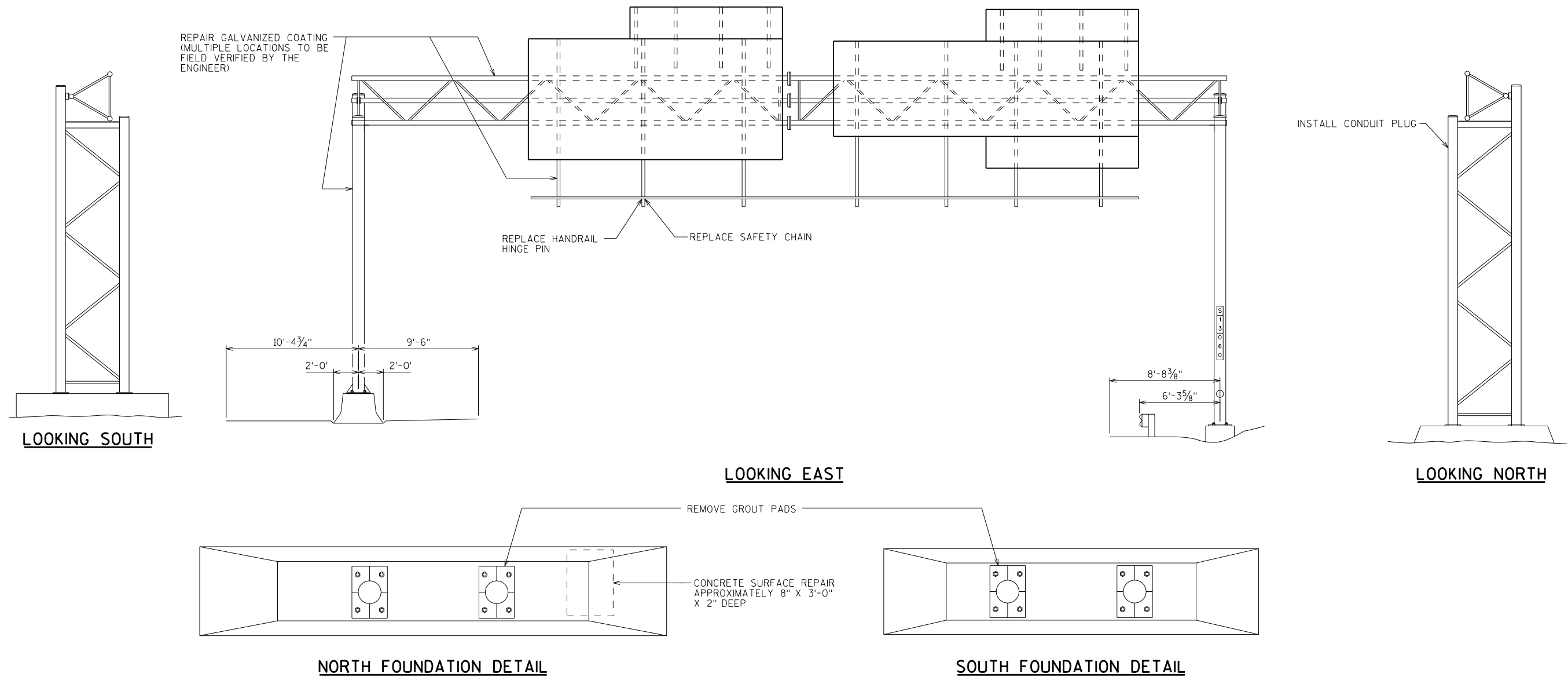


FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.04	REMOVE GROUT PAD	1 EACH	2

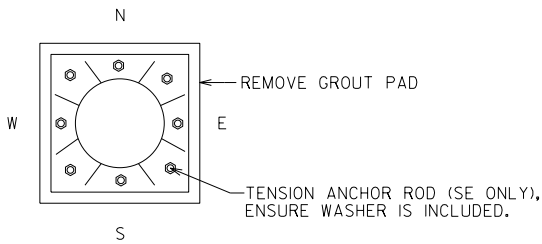
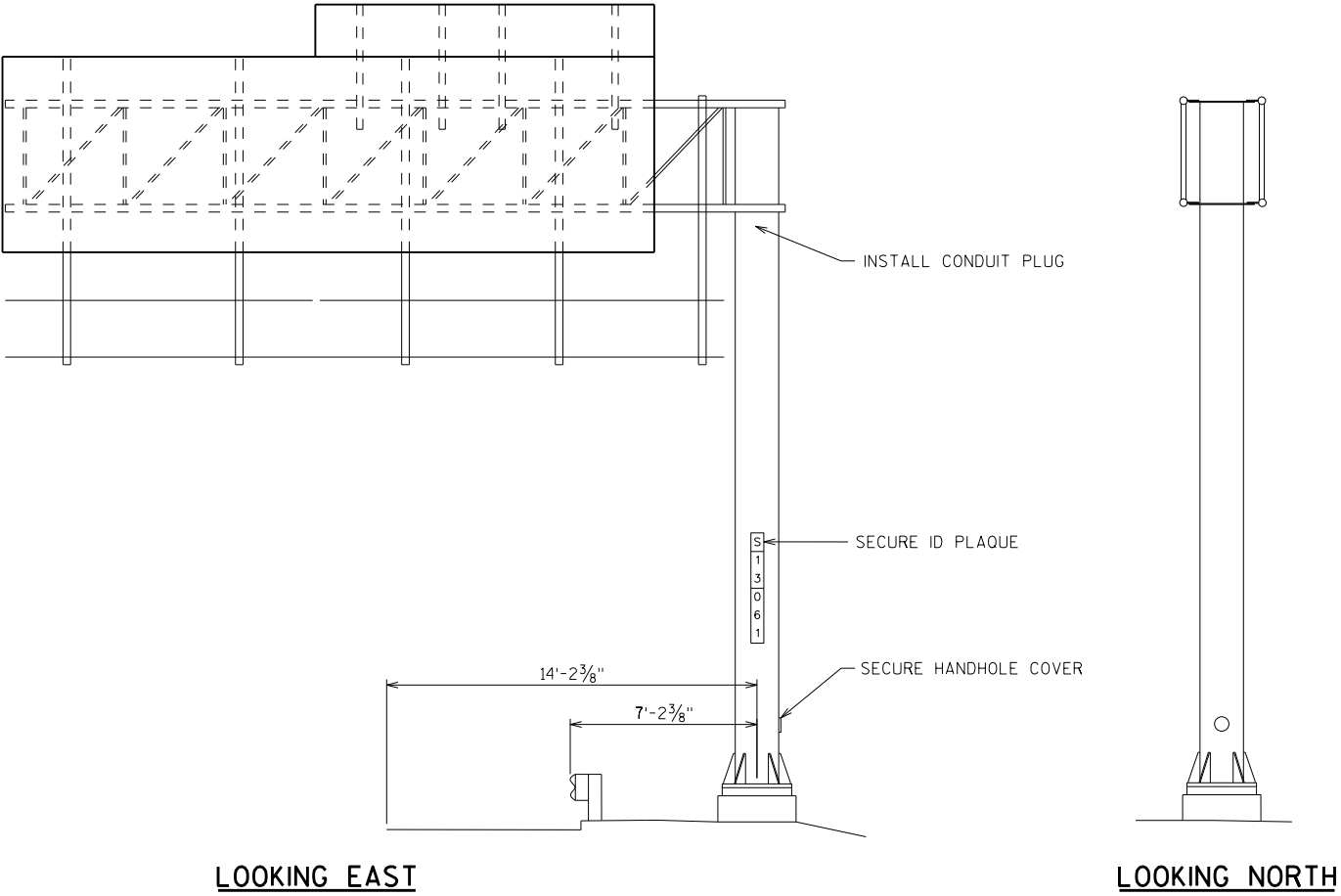
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-13-40			SHEET 14

SCALE = 2.50



ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
509.1500	CONCRETE SURFACE REPAIR	2 SF	2
SPV.0060.04	REMOVE GROUT PAD	4 EACH	2
SPV.0060.13	REPLACE HANDRAIL HINGE PIN	1 EACH	8
SPV.0060.14	REPLACE SAFETY CHAIN	1 EACH	8
SPV.0060.15	INSTALL CONDUIT PLUG	1 EACH	8
SPV.0165.01	REPAIR GALVANIZED COATING	5 SF	2

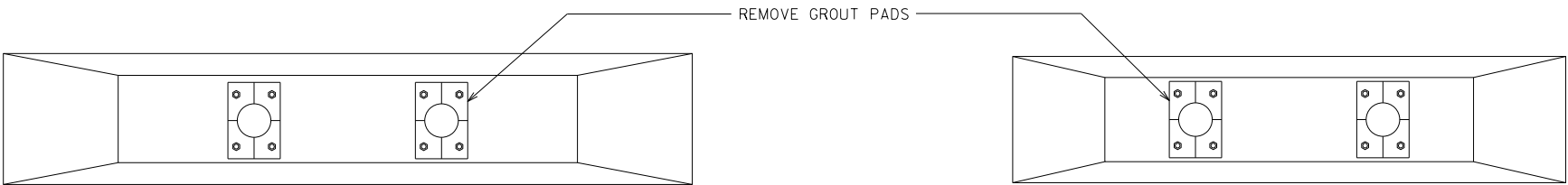
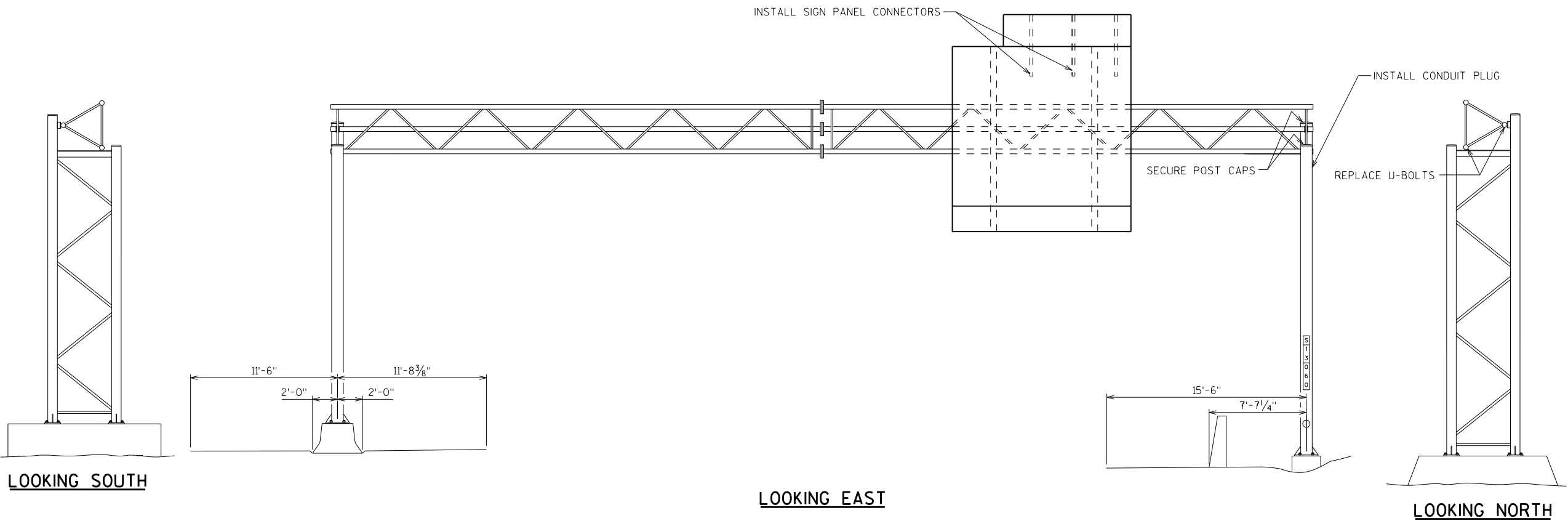
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-13-60		SHEET 15	



FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	1 EACH	2
SPV.0060.04	REMOVE GROUT PAD	1 EACH	2
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6
SPV.0060.15	INSTALL CONDUIT PLUG	1 EACH	8
SPV.0060.16	SECURE/REPLACE HANDHOLE COVER	1 EACH	8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-13-61		SHEET 16	

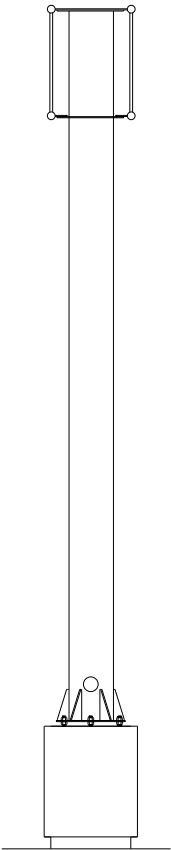
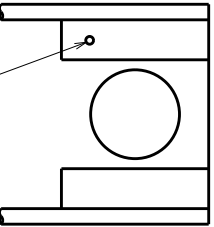
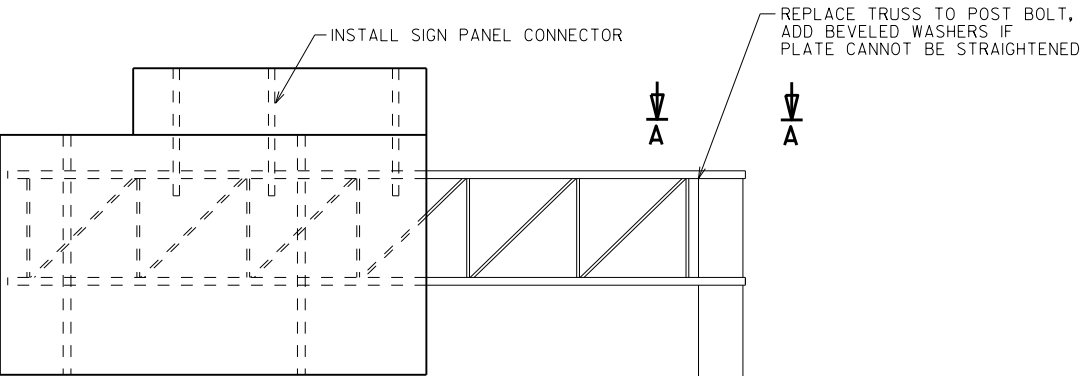


FOUNDATION DETAIL

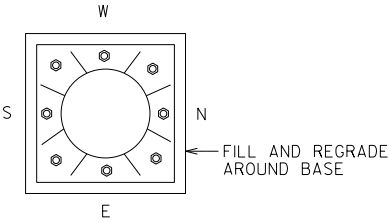
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.04	REMOVE GROUT PAD	4 EACH	2
SPV.0060.06	SECURE/REPLACE CAP	2 EACH	4
SPV.0060.09	REPLACE U-BOLT	2 EACH	6
SPV.0060.11	INSTALL SIGN PANEL CONNECTOR	4 EACH	6
SPV.0060.15	INSTALL CONDUIT PLUG	1 EACH	8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-13-64		SHEET 17	



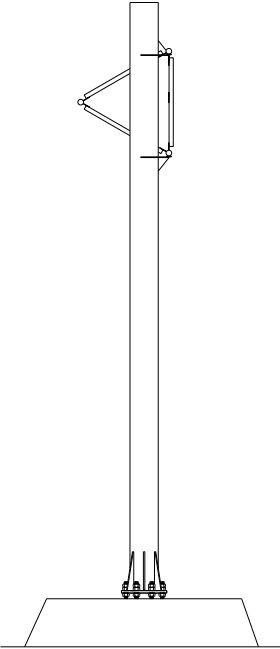
LOOKING WEST



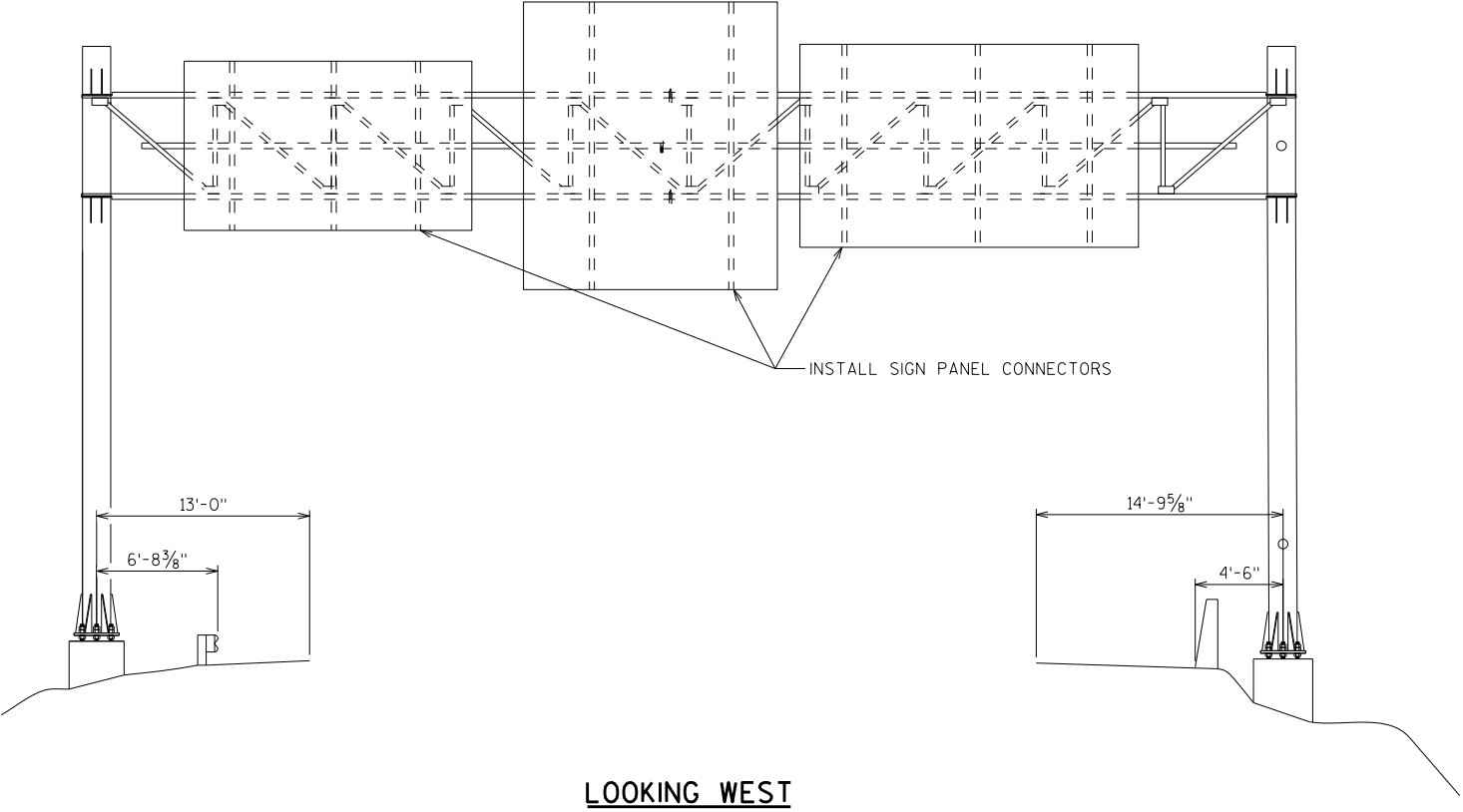
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.02	REMOVE DEBRIS AND REGRADE	1 EACH	2
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	1 EACH	4
SPV.0060.11	INSTALL SIGN PANEL CONNECTOR	1 EACH	6

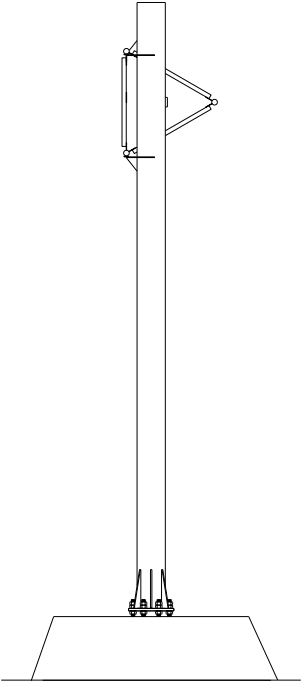
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-13-71		SHEET 18	



LOOKING NORTH



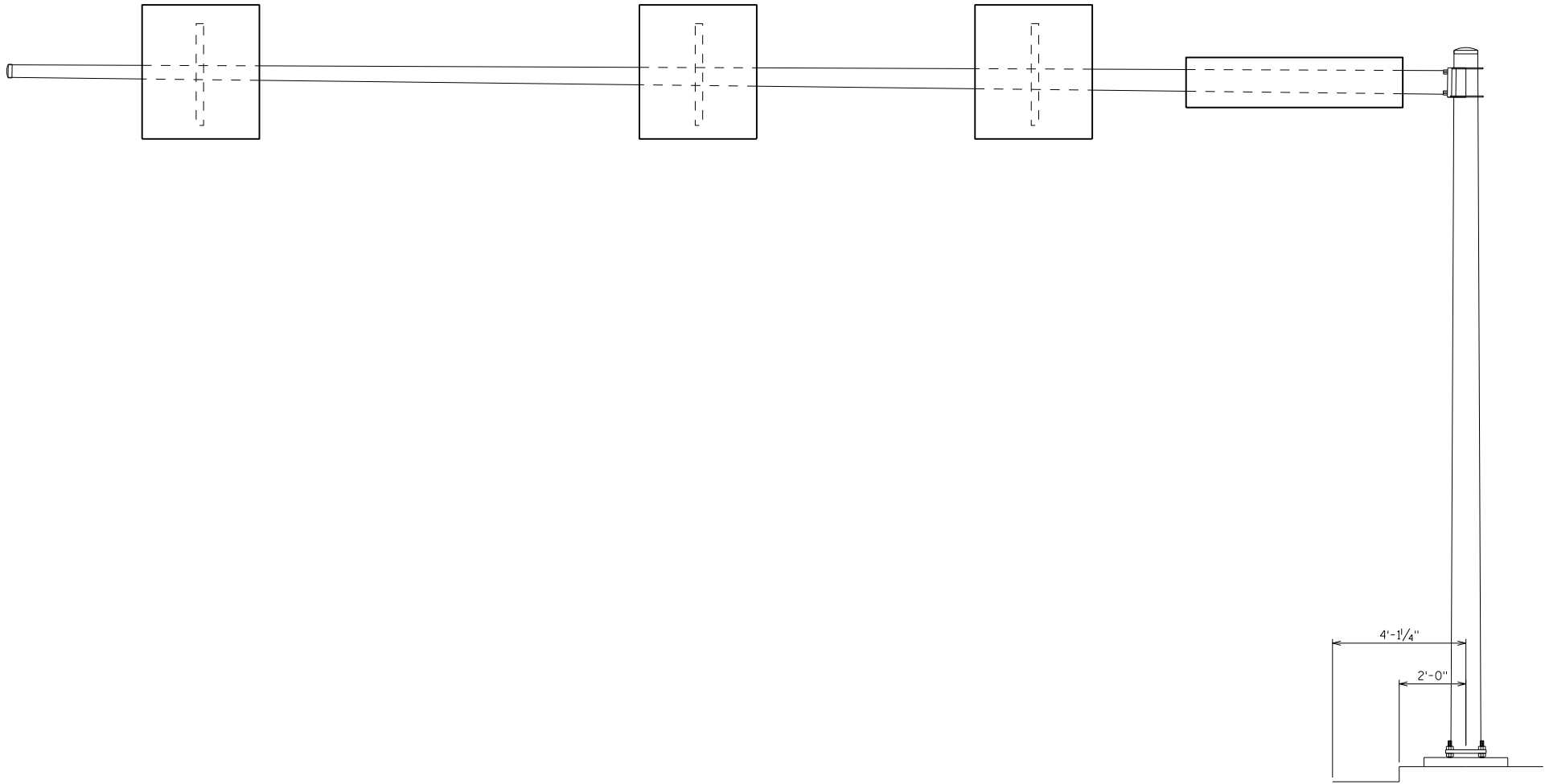
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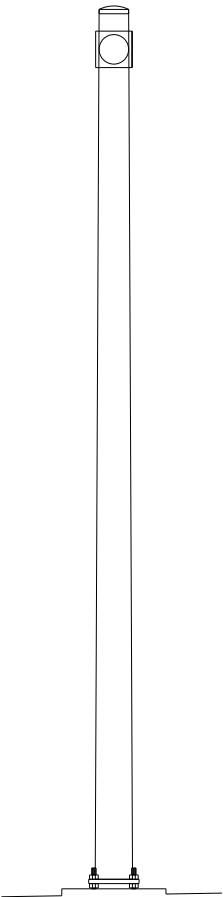
LOOKING SOUTH

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.11	INSTALL SIGN PANEL CONNECTOR	84 EACH	6

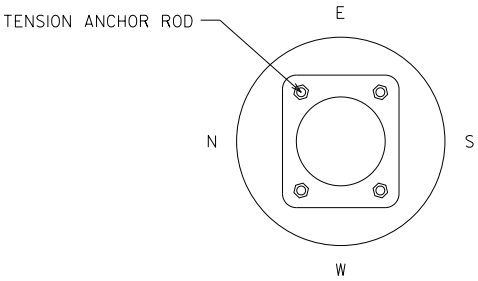
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STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS		DRAWN BY DDS	PLANS CK'D. SAD
S-13-153		SHEET 19	



LOOKING EAST



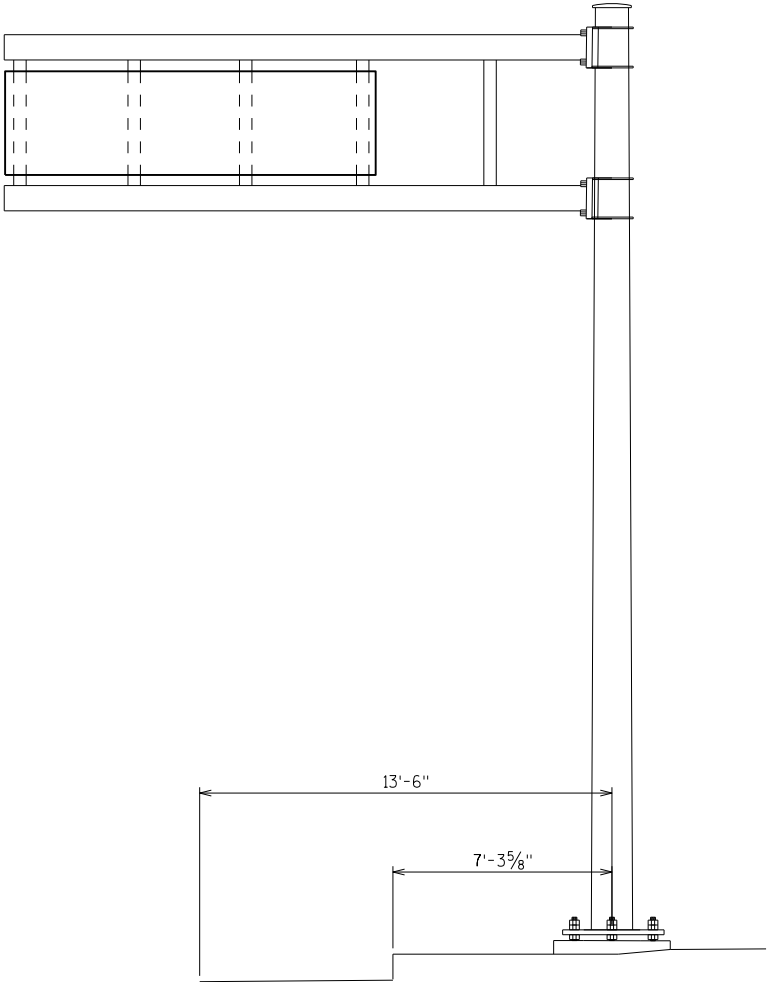
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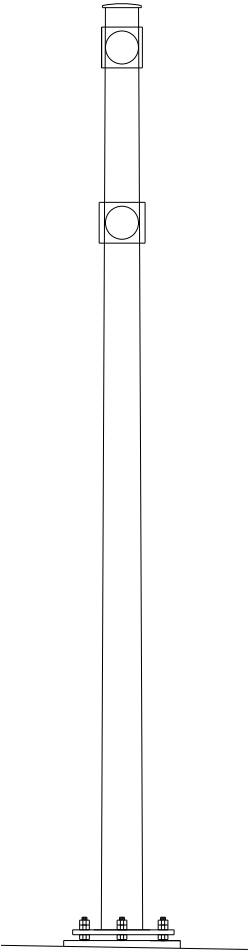
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	4 EACH	2

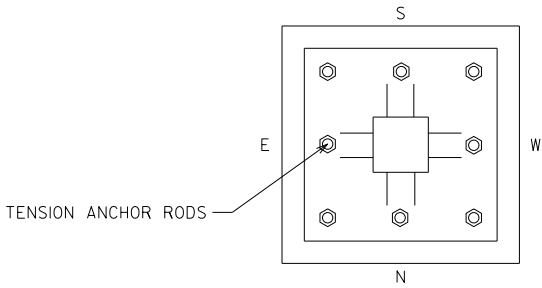
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
		DDS	
S-13-202			SHEET 20



LOOKING SOUTH



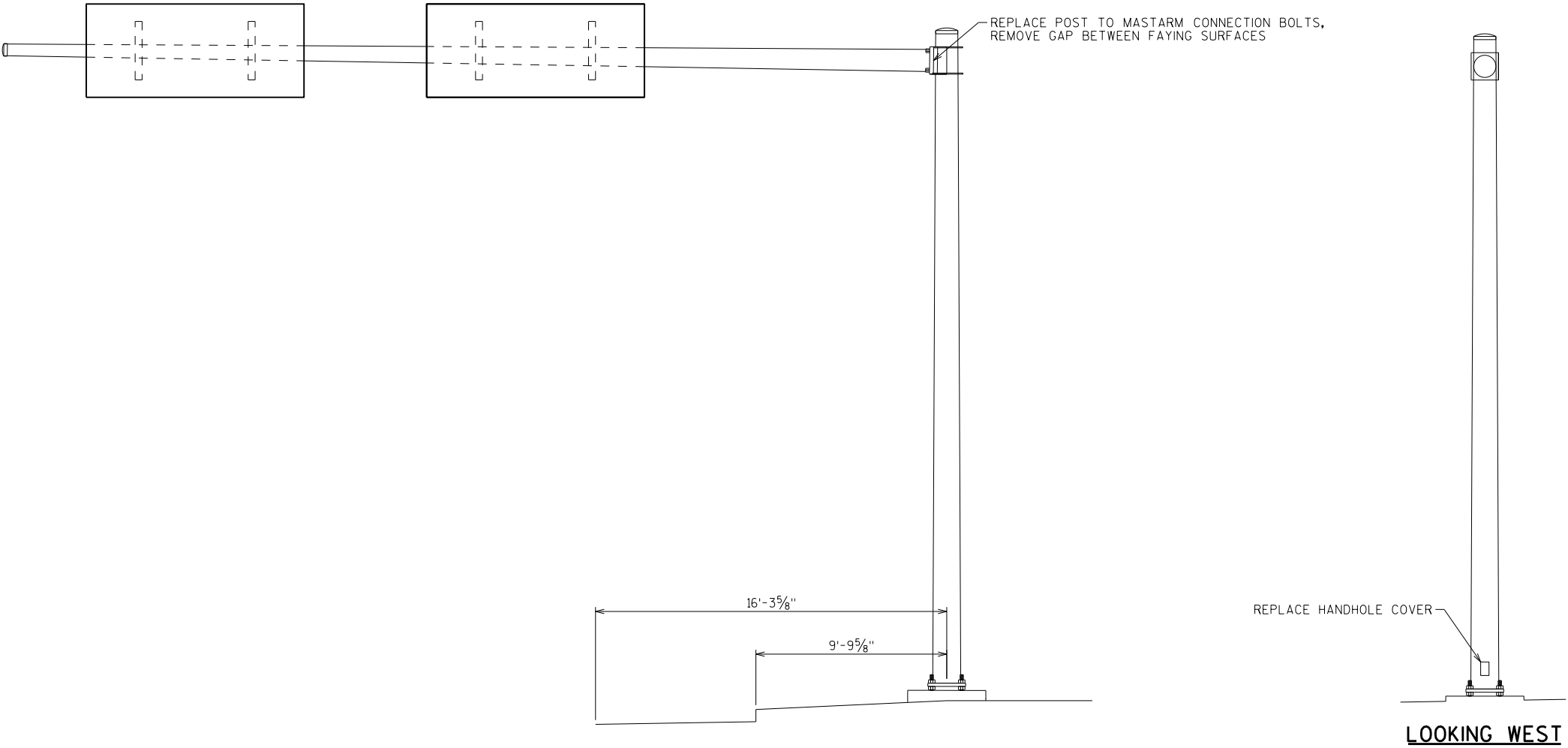
LOOKING EAST



FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	8 EACH	2

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
		DDS	
S-13-205		SHEET 21	

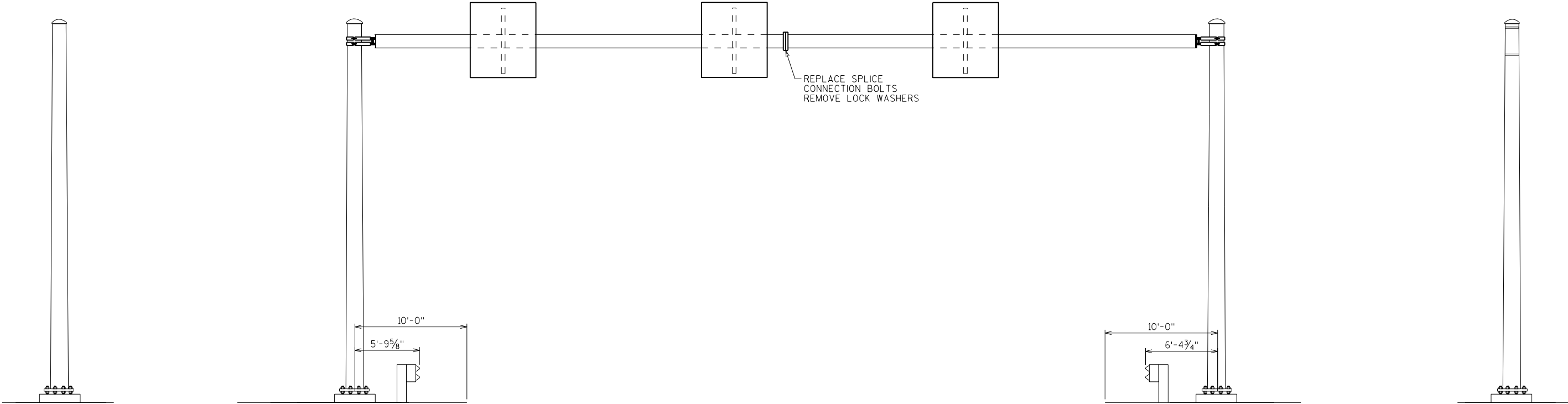


LOOKING SOUTH

LOOKING WEST

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	4 EACH	4
SPV.0060.16	SECURE/REPLACE HANDHOLE COVER	1 EACH	8

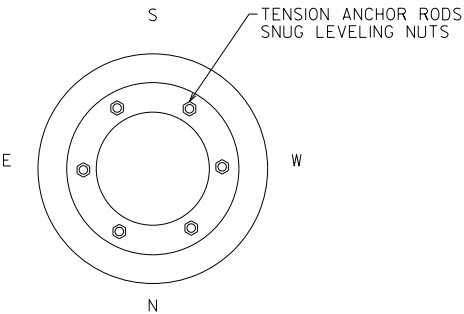
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS		DRAWN BY DDS	PLANS CK'D. SAD
S-13-248		SHEET 22	



LOOKING WEST

LOOKING SOUTH

LOOKING EAST



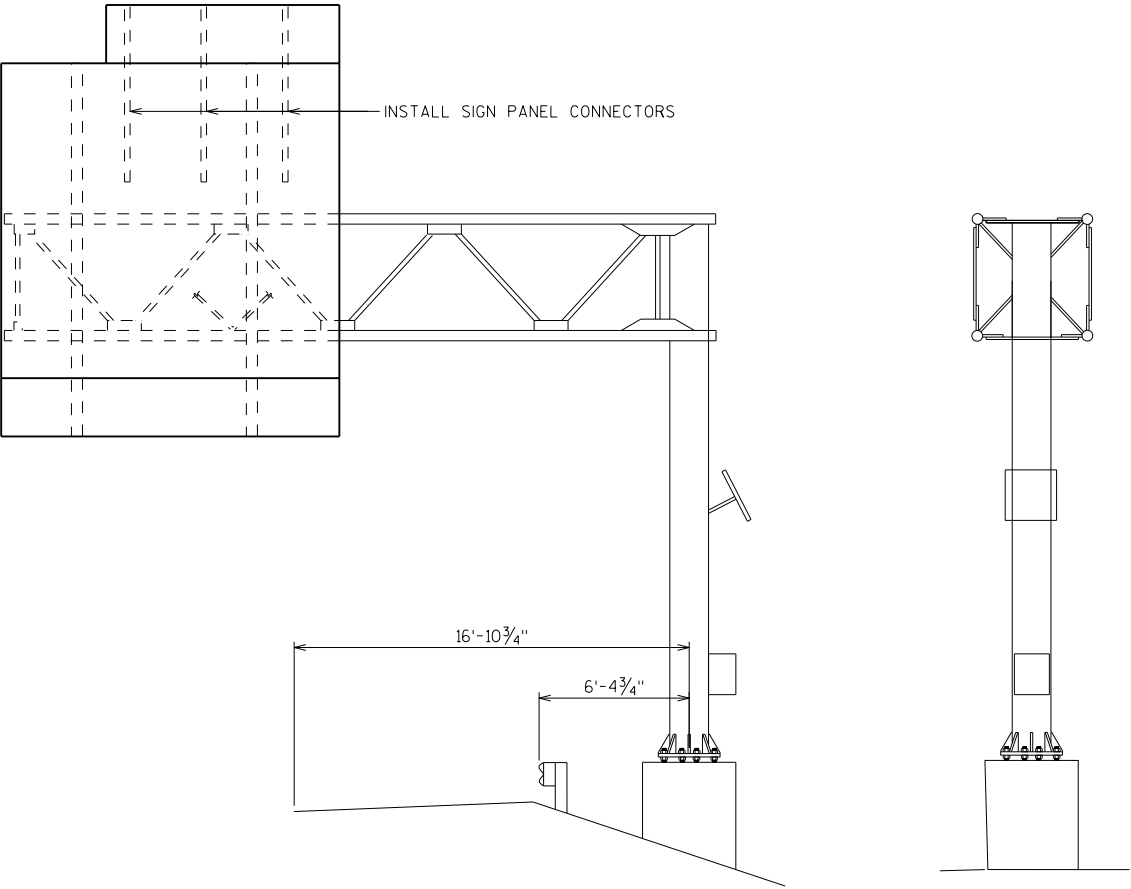
WEST FOUNDATION DETAIL

8

8

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	6 EACH	4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS		DRAWN BY DDS	PLANS CK'D. SAD
S-13-258		SHEET 23	



LOOKING EAST

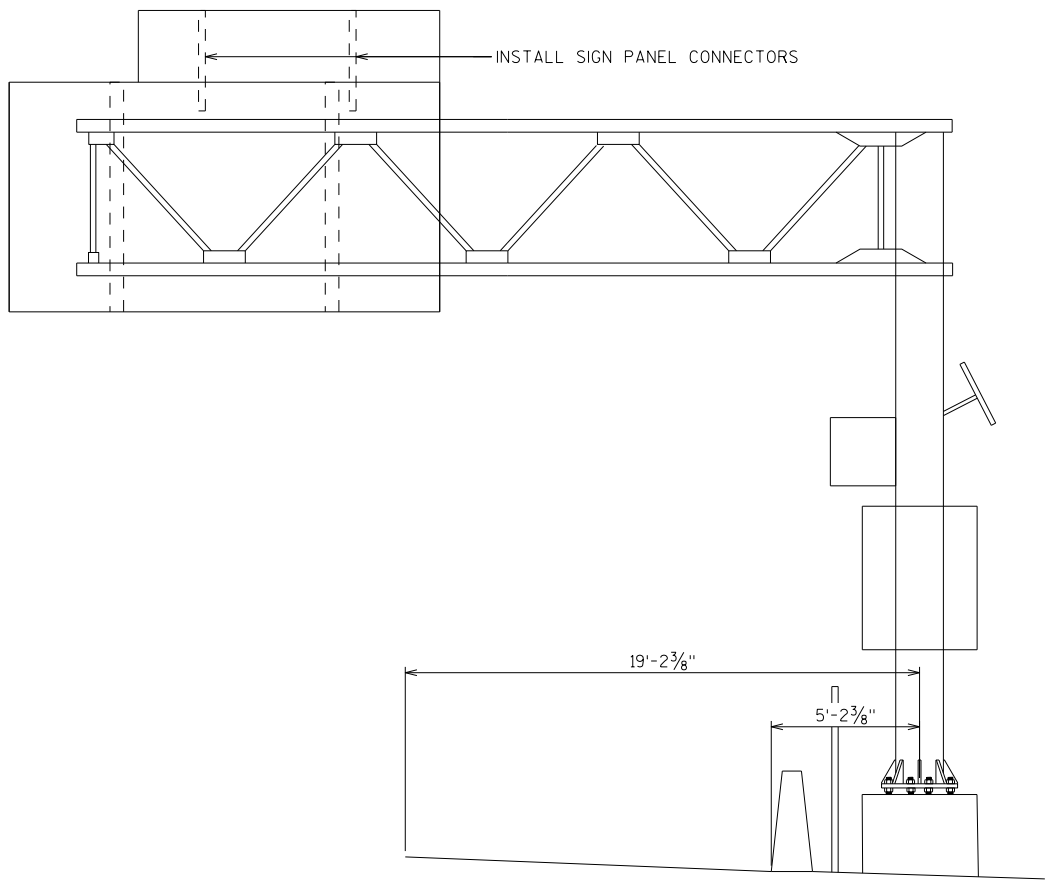
LOOKING NORTH

8

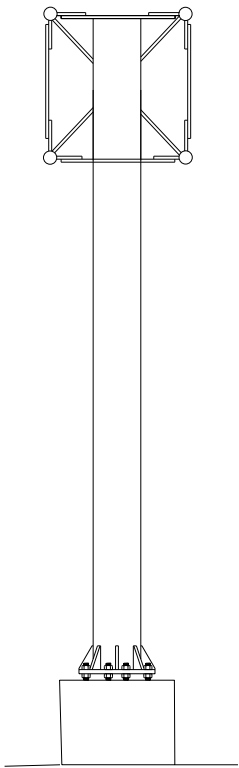
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ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.11	INSTALL SIGN PANEL CONNECTOR	6 EACH	6

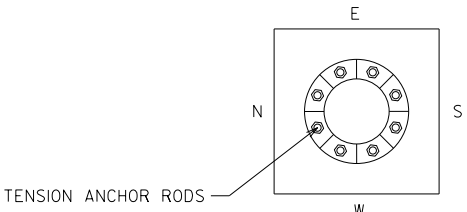
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
S-13-279		SHEET 24	



LOOKING EAST



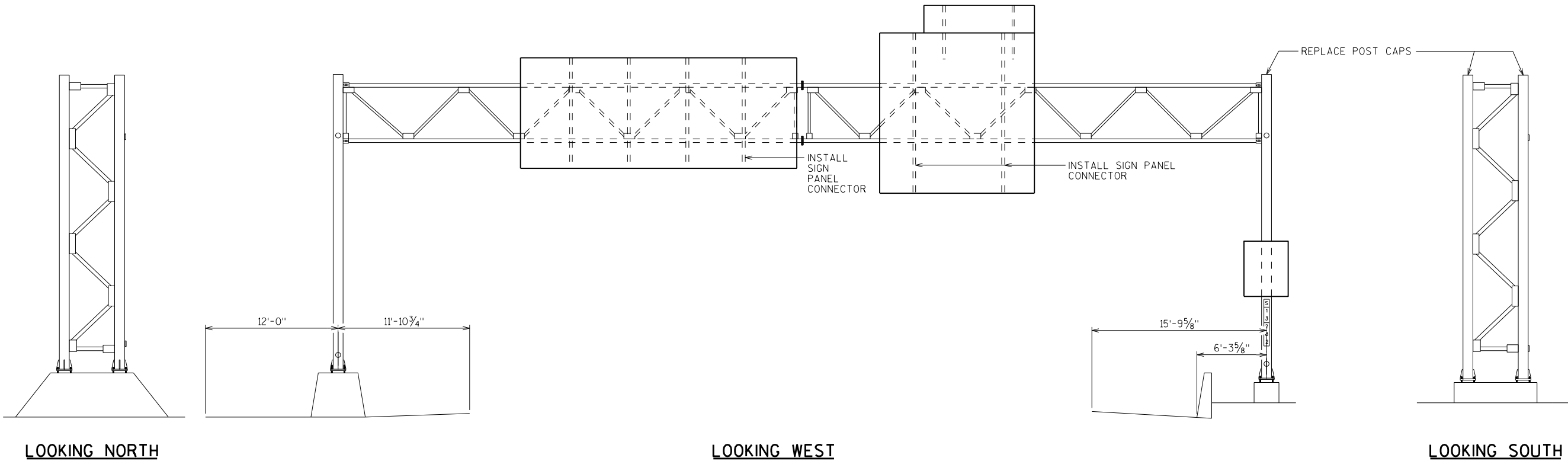
LOOKING NORTH



FOUNDATION DETAIL

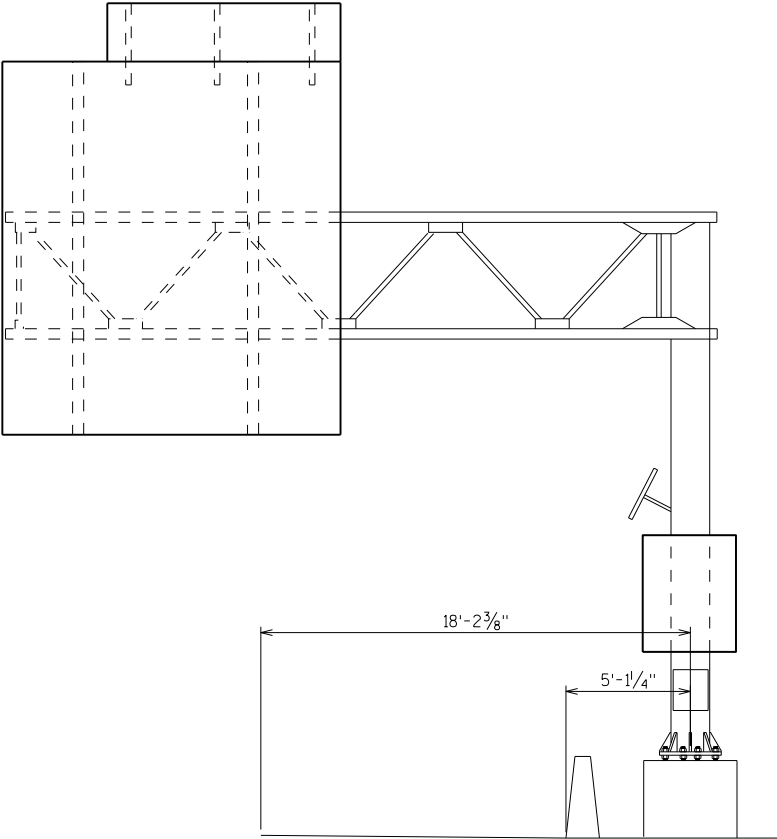
ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	8 EACH	2
SPV.0060.11	INSTALL SIGN PANEL CONNECTOR	4 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
		DDS	
S-13-280			SHEET 25

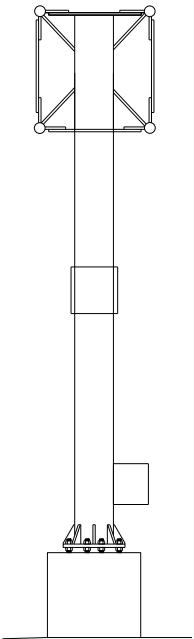


ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.06	SECURE/REPLACE CAP	2 EACH	4
SPV.0060.11	INSTALL SIGN PANEL CONNECTOR	7 EACH	6

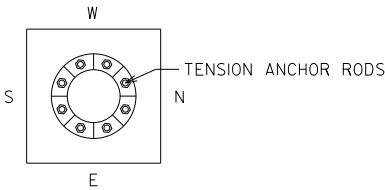
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS		DRAWN BY DDS	PLANS CK'D. SAD
S-13-282		SHEET 26	



LOOKING WEST



LOOKING SOUTH



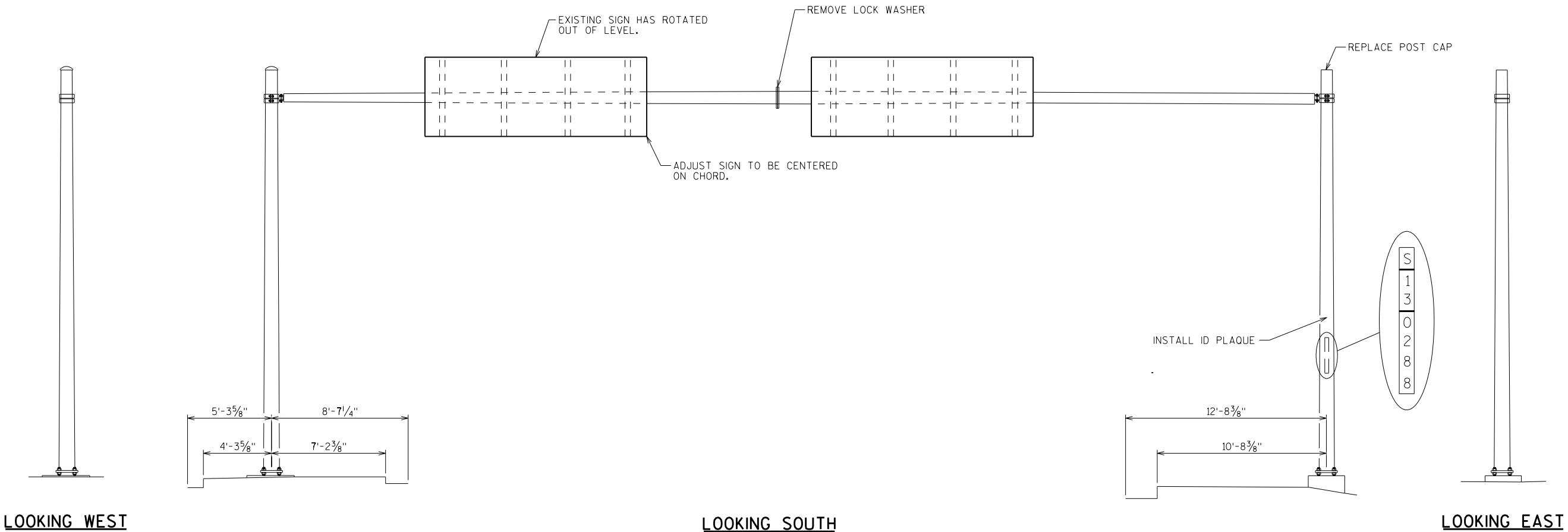
FOUNDATION DETAIL

8

8

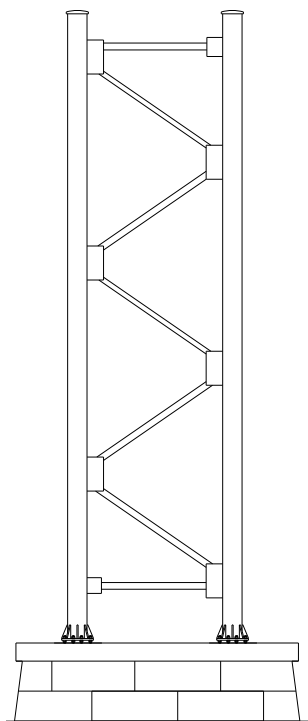
ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	8 EACH	2

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-13-283		SHEET 27	

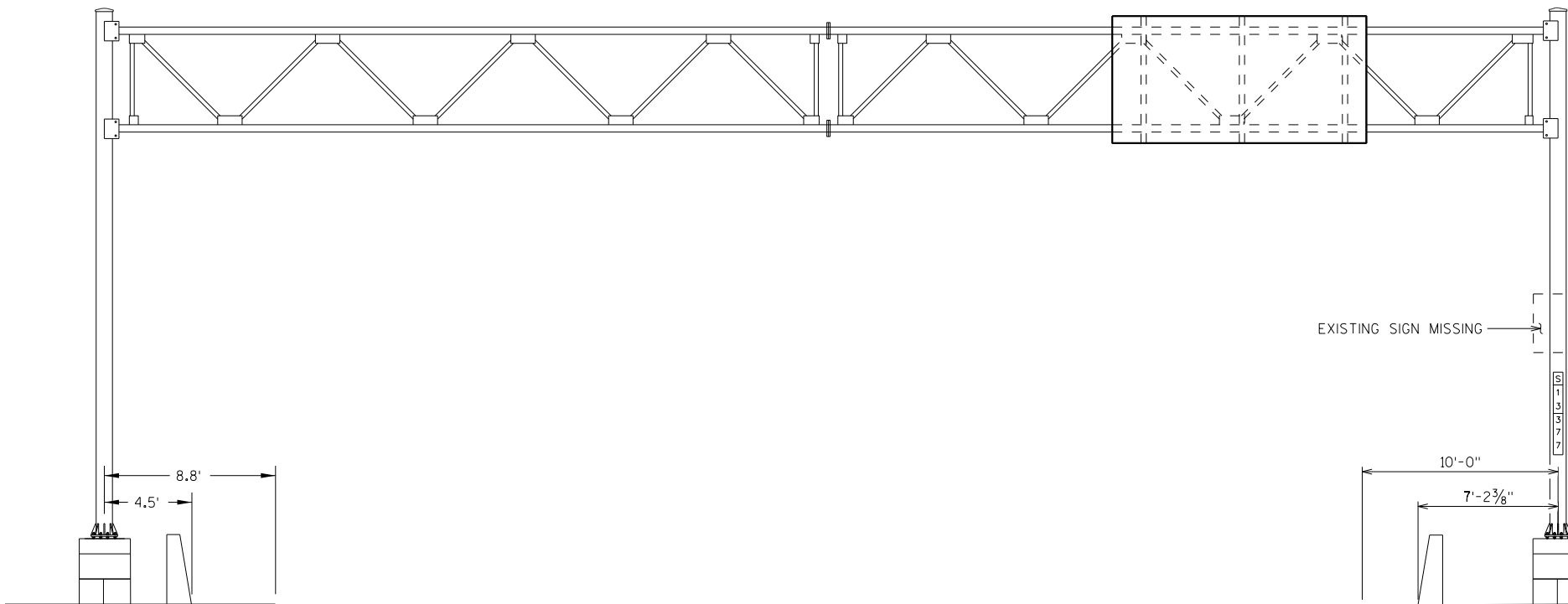


ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	1 EACH	4
SPV.0060.06	SECURE/REPLACE CAP	1 EACH	4
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6
SPV.0060.12	ADJUST VERTICAL CLEARANCE	1 EACH	6

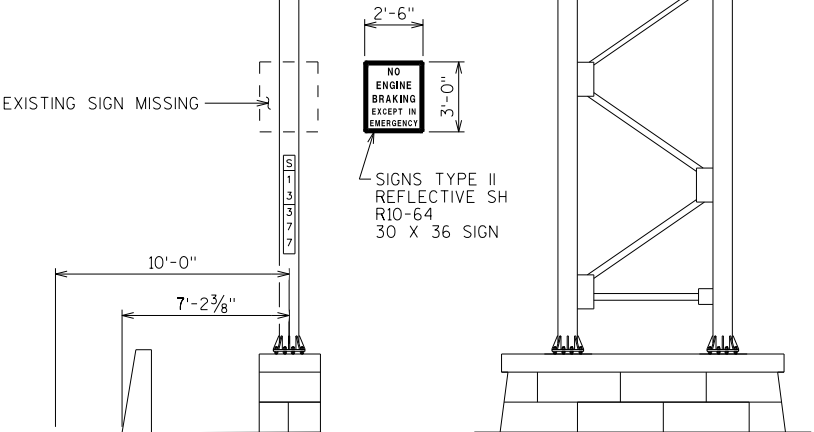
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-13-288		SHEET 28	



LOOKING NORTH



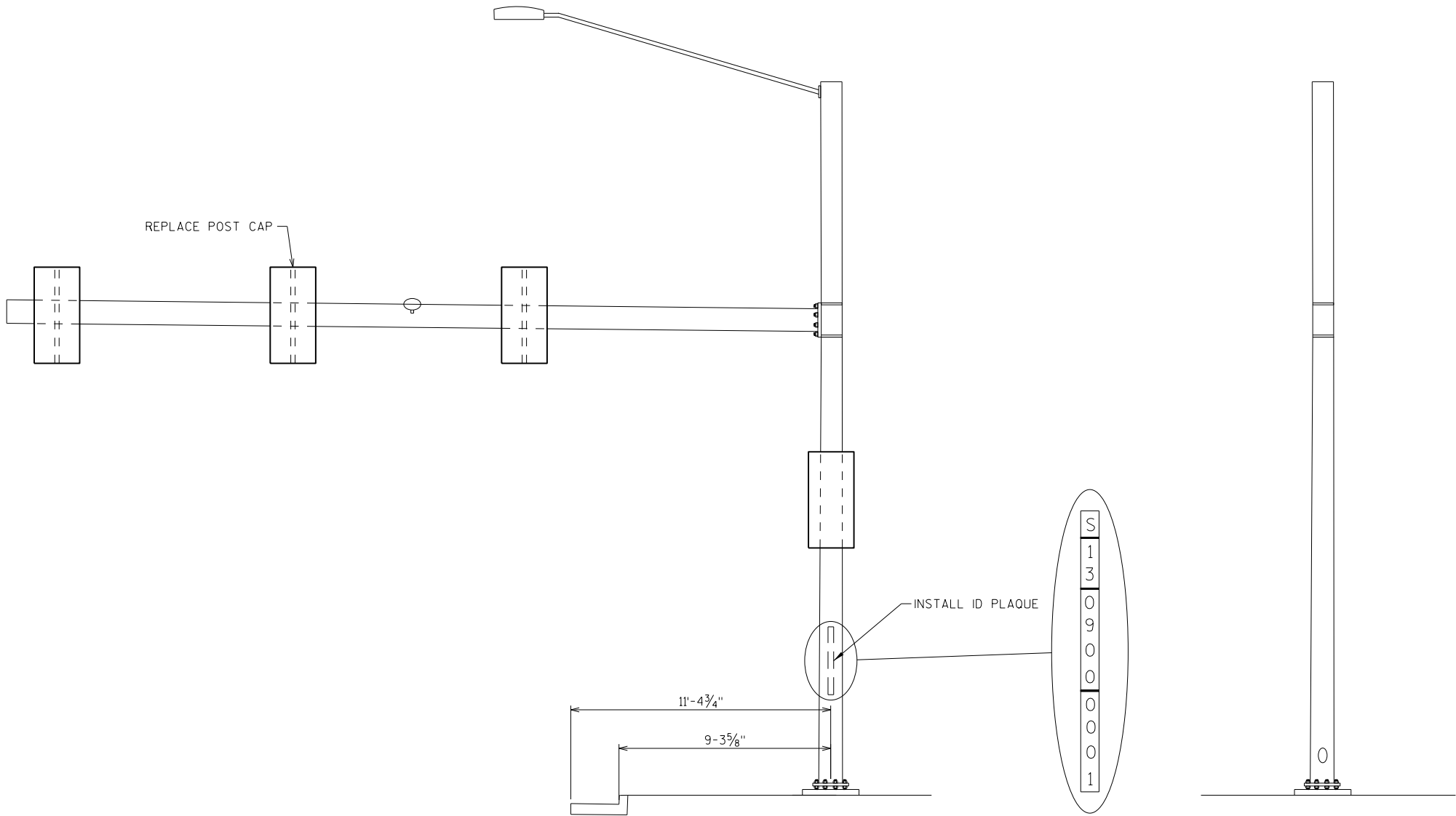
LOOKING WEST



LOOKING SOUTH

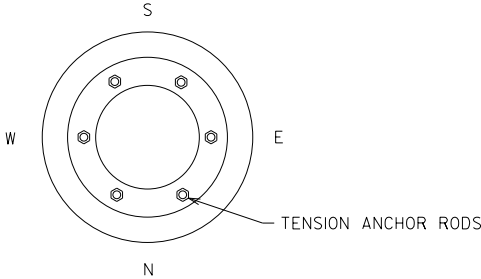
ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
637.2220	SIGN TYPE II REFLECTIVE SH	8 SF	

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-13-377		SHEET 29	



LOOKING SOUTH

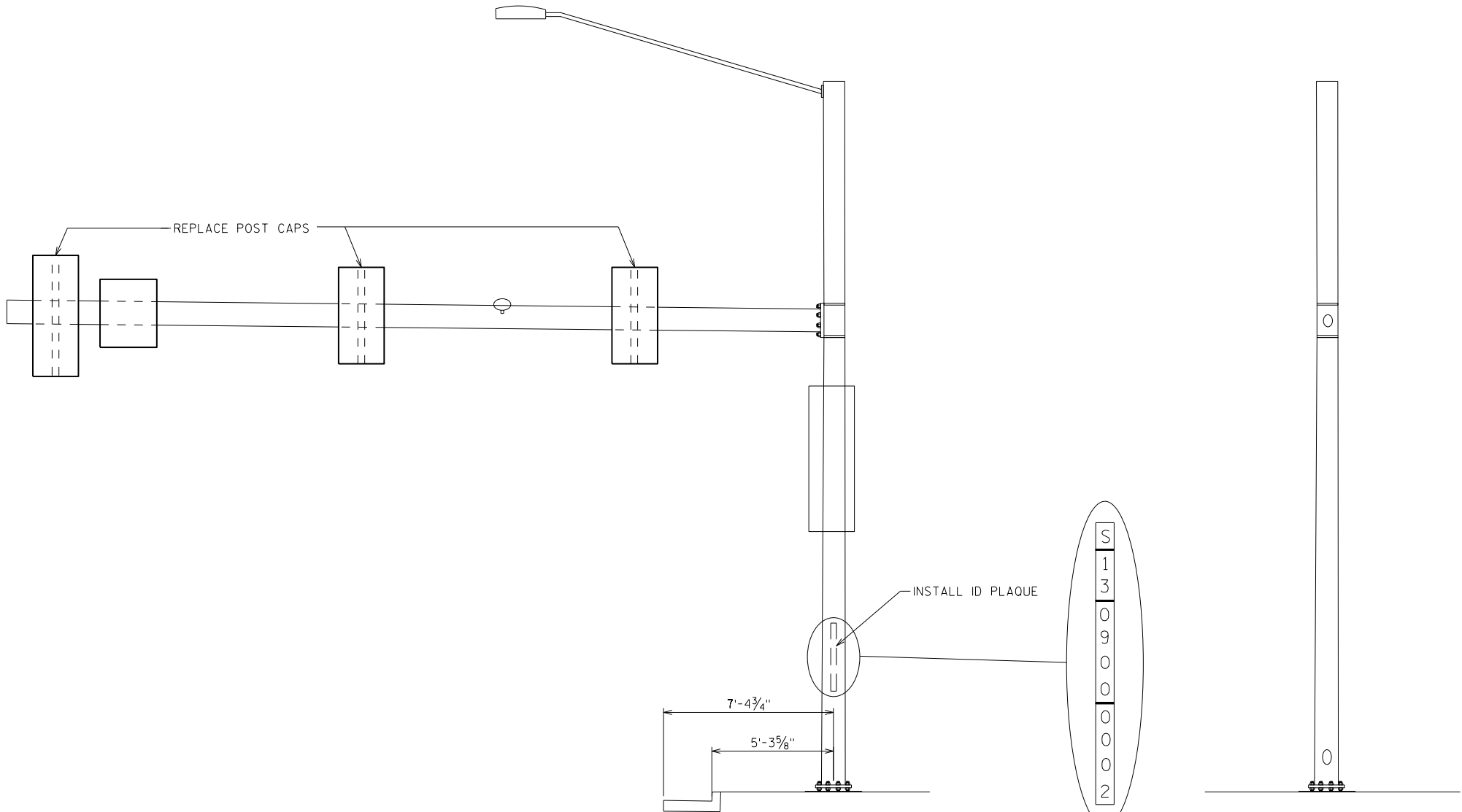
LOOKING EAST



FOUNDATION DETAIL

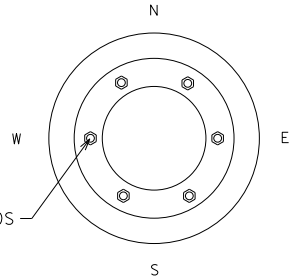
ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.06	SECURE/REPLACE CAP	1 EACH	4
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY DDS	PLANS CK'D. SAD
S-13-900-0001		SHEET 30	



LOOKING NORTH

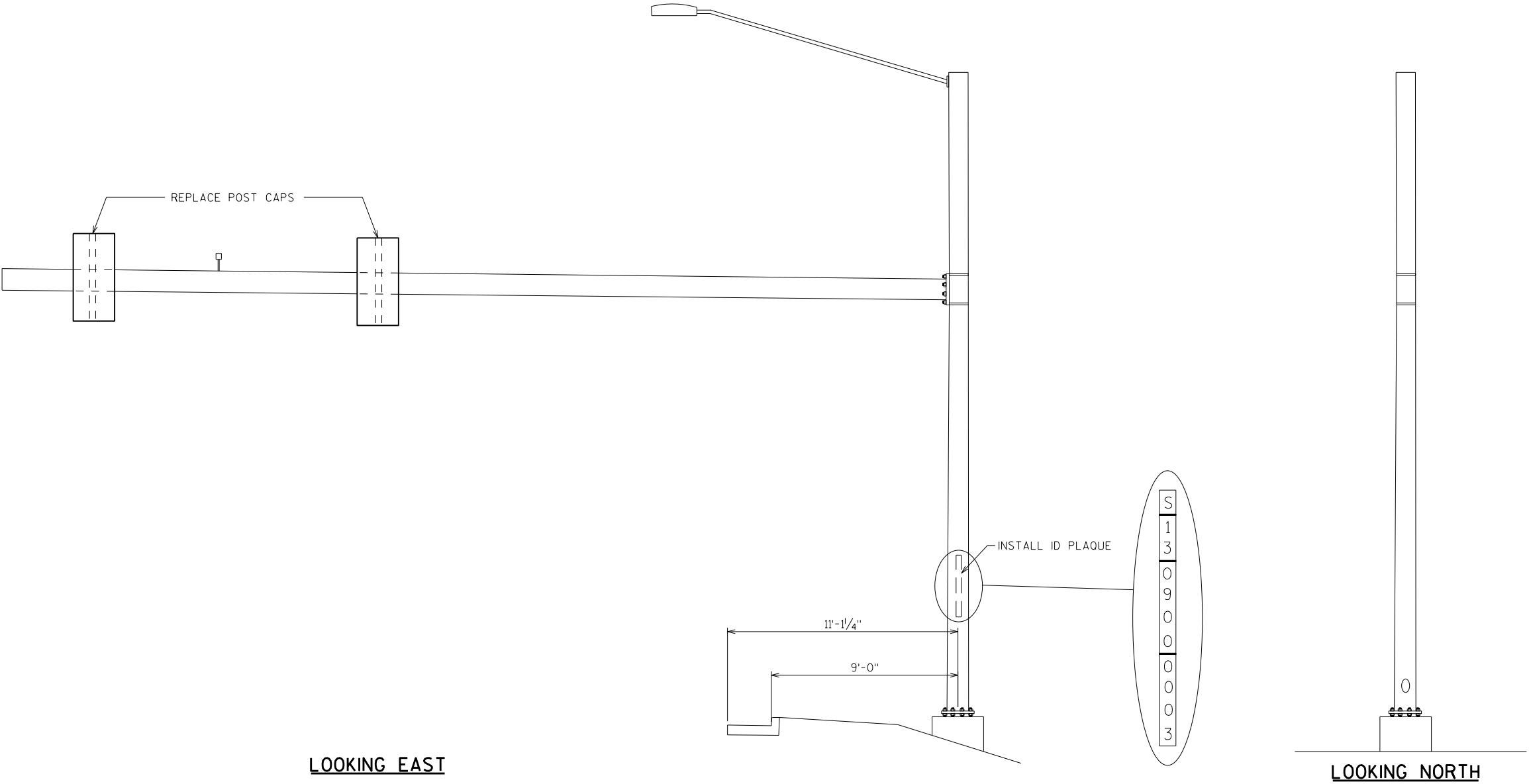
LOOKING WEST



FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.06	SECURE/REPLACE CAP	3 EACH	4
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY DDS	PLANS CK'D. SAD
S-13-900-0002		SHEET 31	



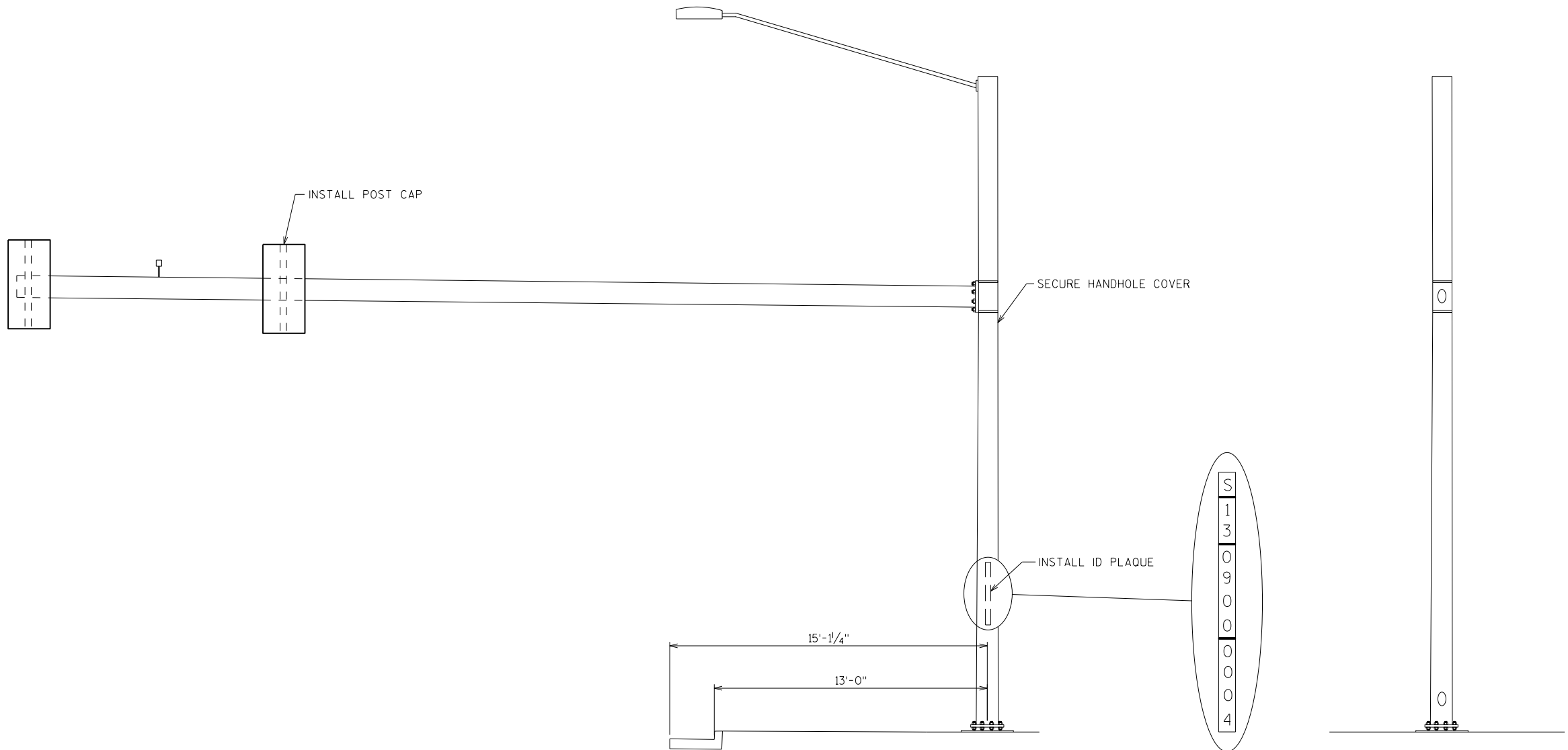
LOOKING EAST

LOOKING NORTH

FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.06	SECURE/REPLACE CAP	2 EACH	4
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-13-900-0003		SHEET 32	



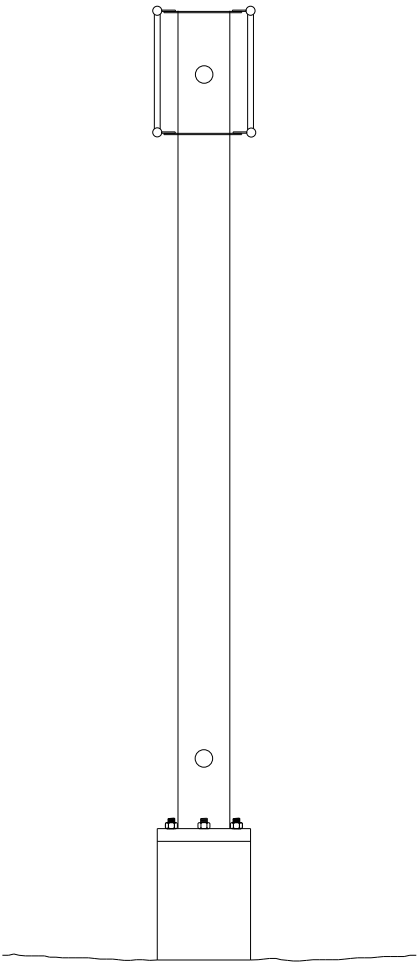
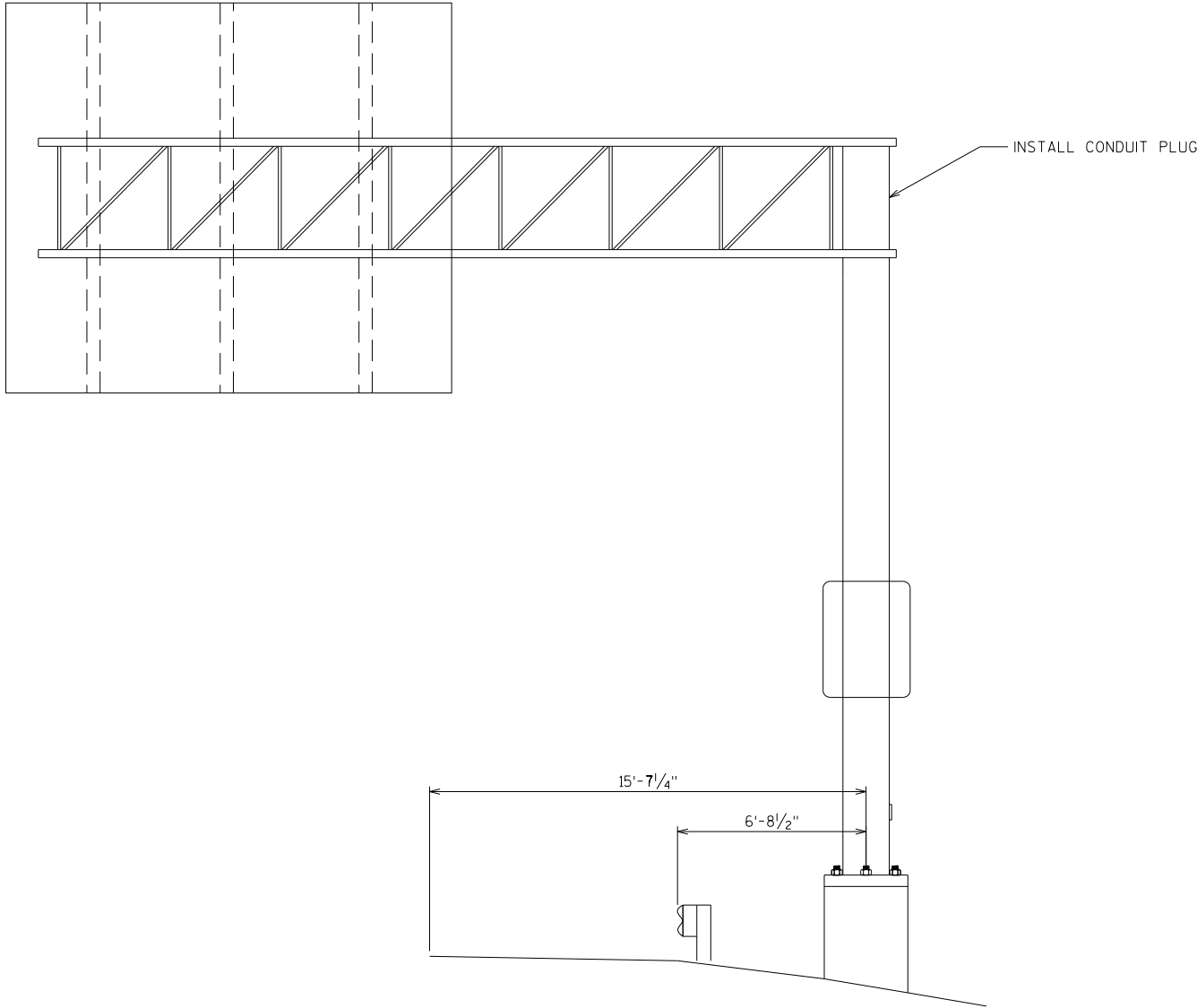
LOOKING WEST

LOOKING SOUTH

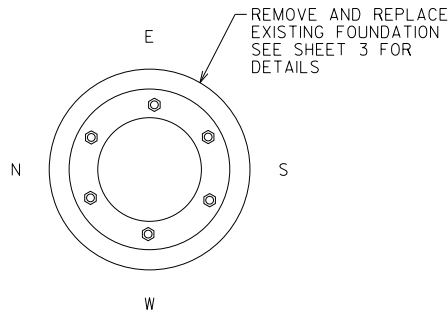
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.06	SECURE/REPLACE CAP	1 EACH	4
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6
SPV.0060.16	SECURE/REPLACE HANDHOLE COVER	1 EACH	8

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-13-900-0004		SHEET 33	



LOOKING NORTH

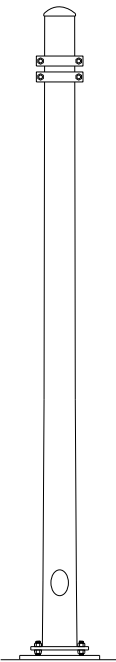


LOOKING EAST

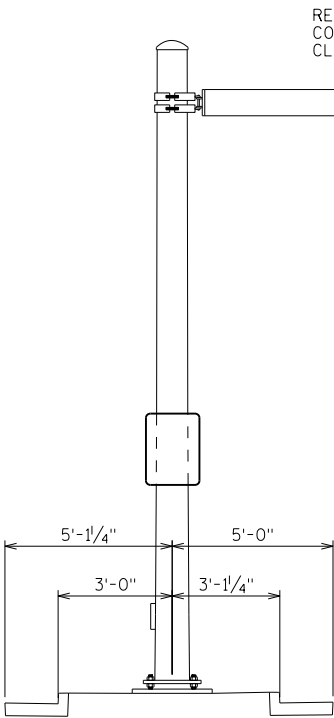
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.03	REPLACE FOUNDATION	1 EACH	3
SPV.0060.15	INSTALL CONDUIT PLUG	1 EACH	8

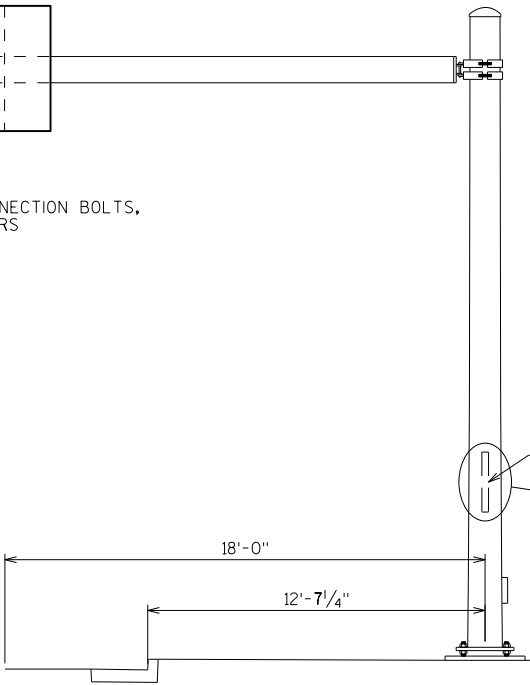
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-23-0002		SHEET 34	



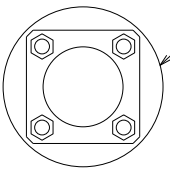
LOOKING NORTH



LOOKING WEST



LOOKING SOUTH

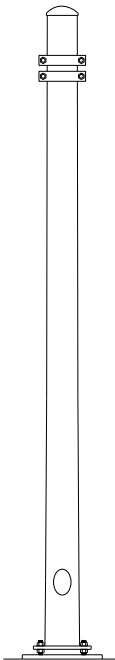


REMOVE FILL AND REGRADE

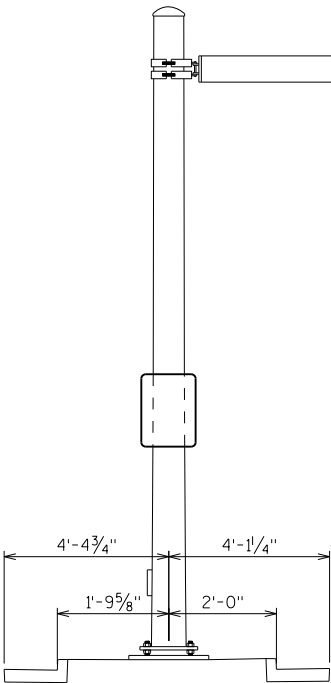
NORTH FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.02	REMOVE DEBRIS AND REGRADE	1 EACH	2
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	6 EACH	4
SPV.0060.08	REPLACE SIGN CONNECTION CLAMP	2 EACH	6
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-56-005		SHEET 35	



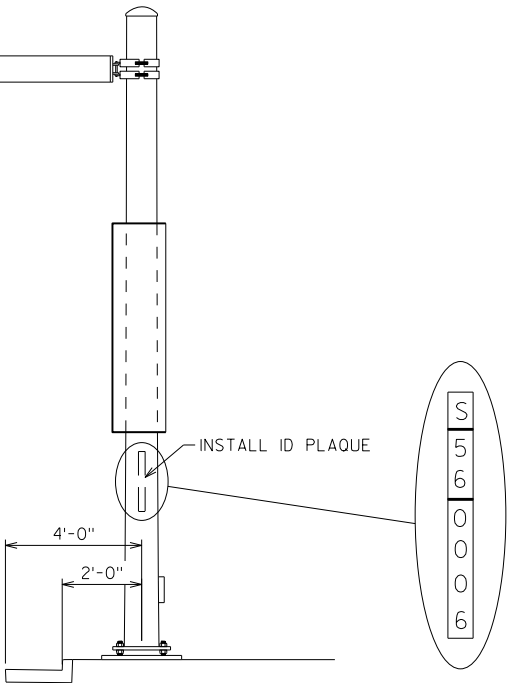
LOOKING SOUTH



LOOKING EAST

REPLACE SIGN
CONNECTION
CLAMP

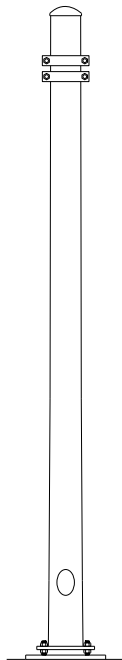
REPLACE SPLICE CONNECTION BOLTS,
REMOVE LOCK WASHERS



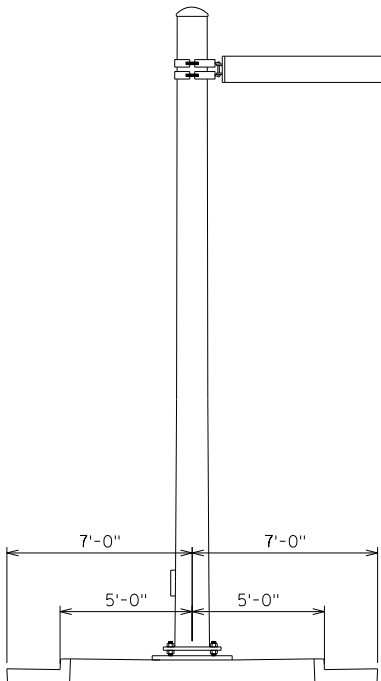
LOOKING NORTH

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	6 EACH	4
SPV.0060.08	REPLACE SIGN CONNCTION CLAMP	1 EACH	6
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-56-006		SHEET 36	



LOOKING EAST



LOOKING NORTH

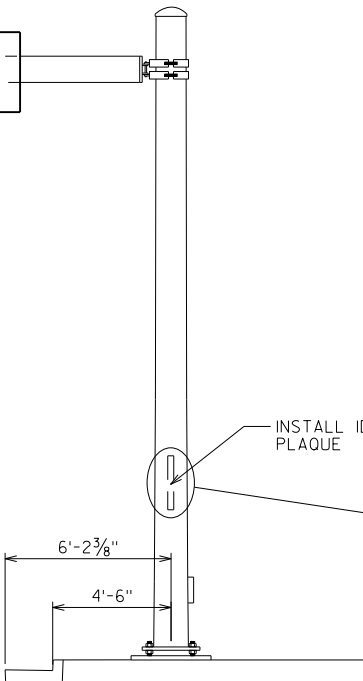
REPLACE THREE OF THE SIGN CONNECTION CLAMPS WERE CRACKED ON THE LEFT POST OF THE MIDDLE RIGHT SIGN.

REPLACE THE TOP RIGHT SIGN CONNECTION CLAMP ON THE MIDDLE RIGHT SIGN

REPLACE THE SECOND FROM THE TOP CONNECTION CLAMP WAS CRACKED ON THE RIGHT POST OF THE MIDDLE RIGHT SIGN

REPLACE THE TOP SIGN CONNECTION CLAMP WAS CRACKED ON THE RIGHT SIGN

REPLACE SPLICE CONNECTION BOLTS, REMOVE LOCK WASHERS



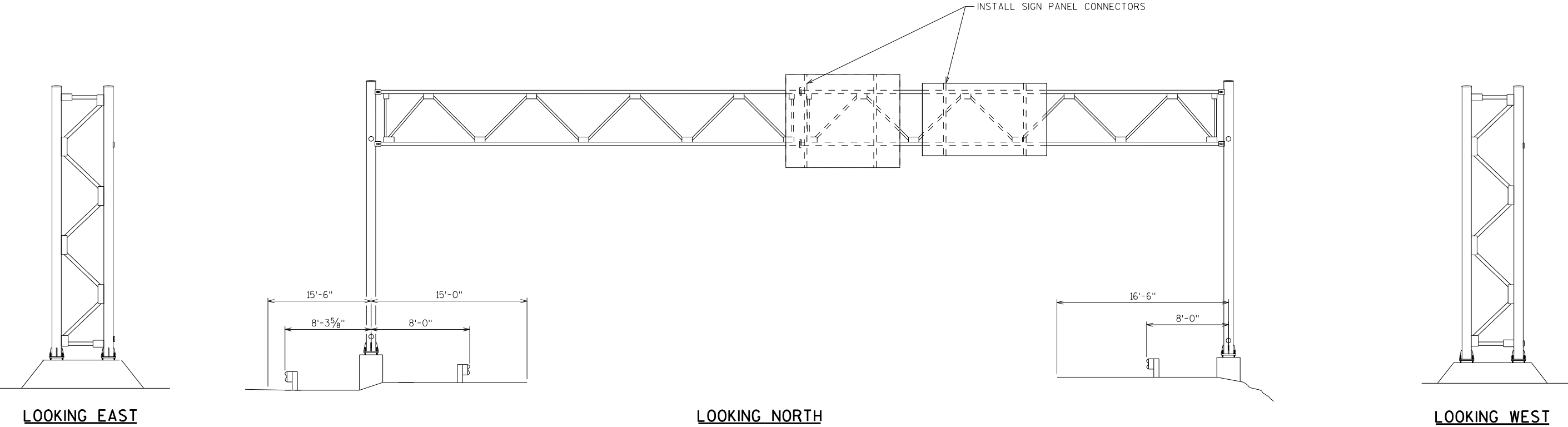
LOOKING WEST

INSTALL ID PLAQUE



ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	6 EACH	4
SPV.0060.08	REPLACE SIGN CONNECTION CLAMP	6 EACH	6
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-56-007		SHEET 37	

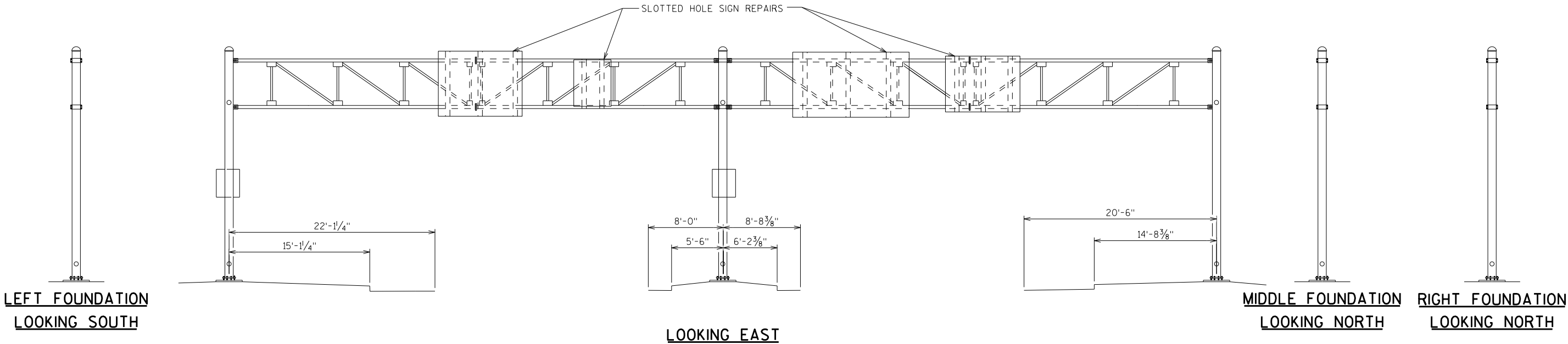


8

8

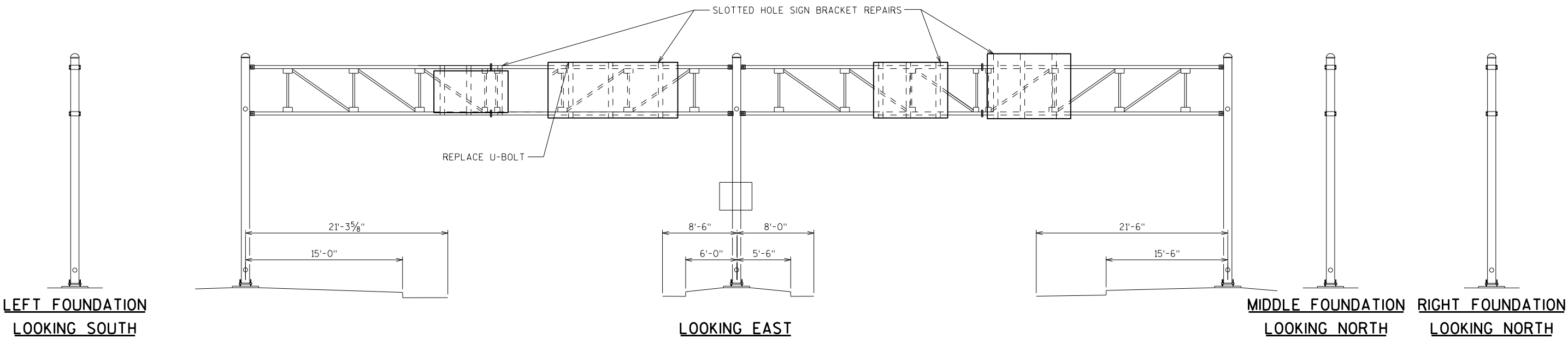
ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.11	INSTALL SIGN PANEL CONNECTOR	30 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY DDS	PLANS CK'D. SAD
S-56-008		SHEET 38	



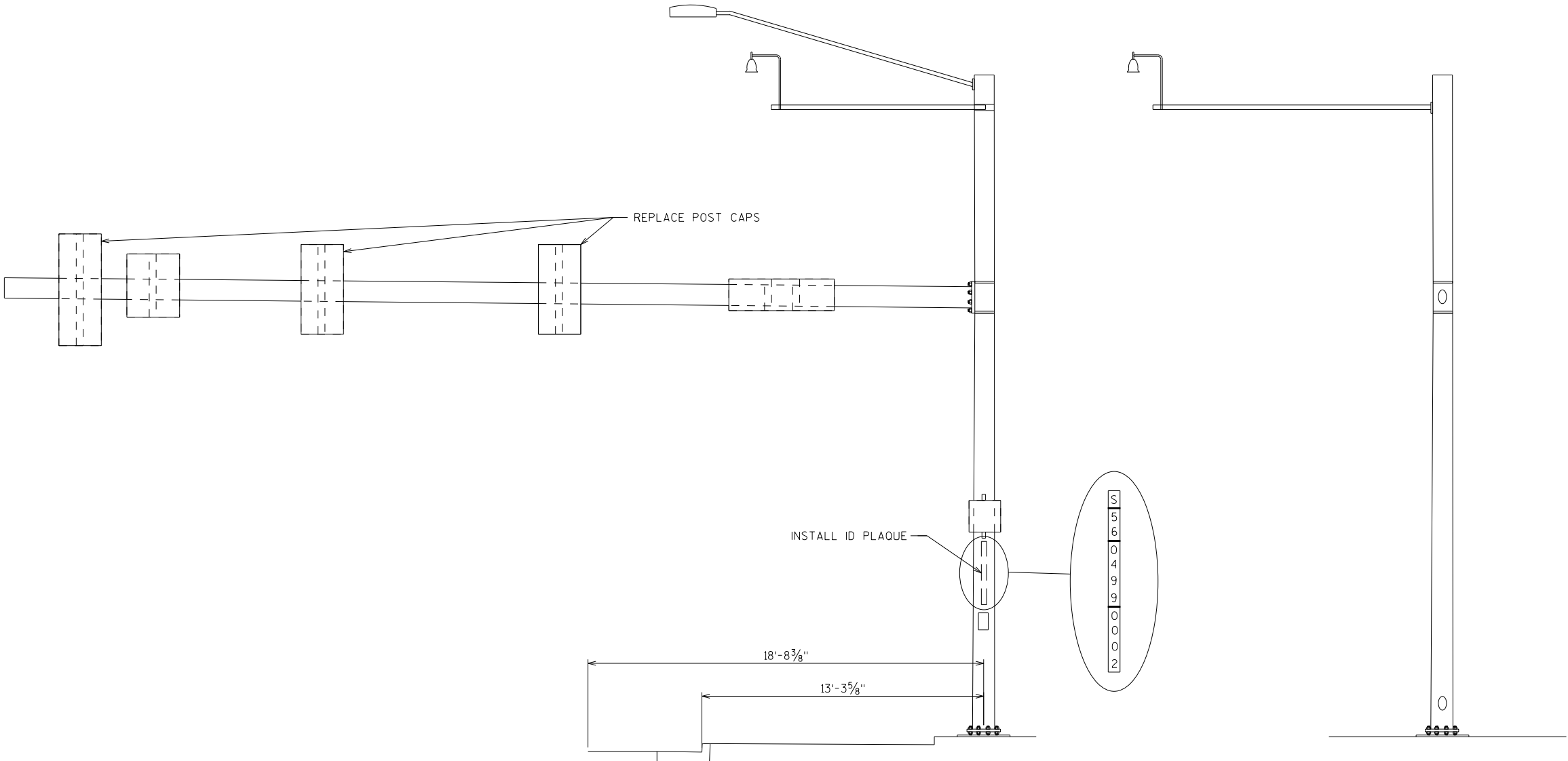
ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.07	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	11 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D.
		DDS	SAD
S-56-015		SHEET 39	



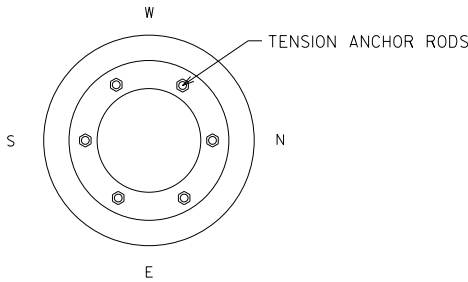
ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.07	SLOTTED HOLE REPAIR ON SIGN SUPPORT BRACKET	12 EACH	6
SPV.0060.09	REPLACE U-BOLT	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS		DRAWN BY DDS	PLANS CK'D. SAD
S-56-17		SHEET 40	



LOOKING WEST

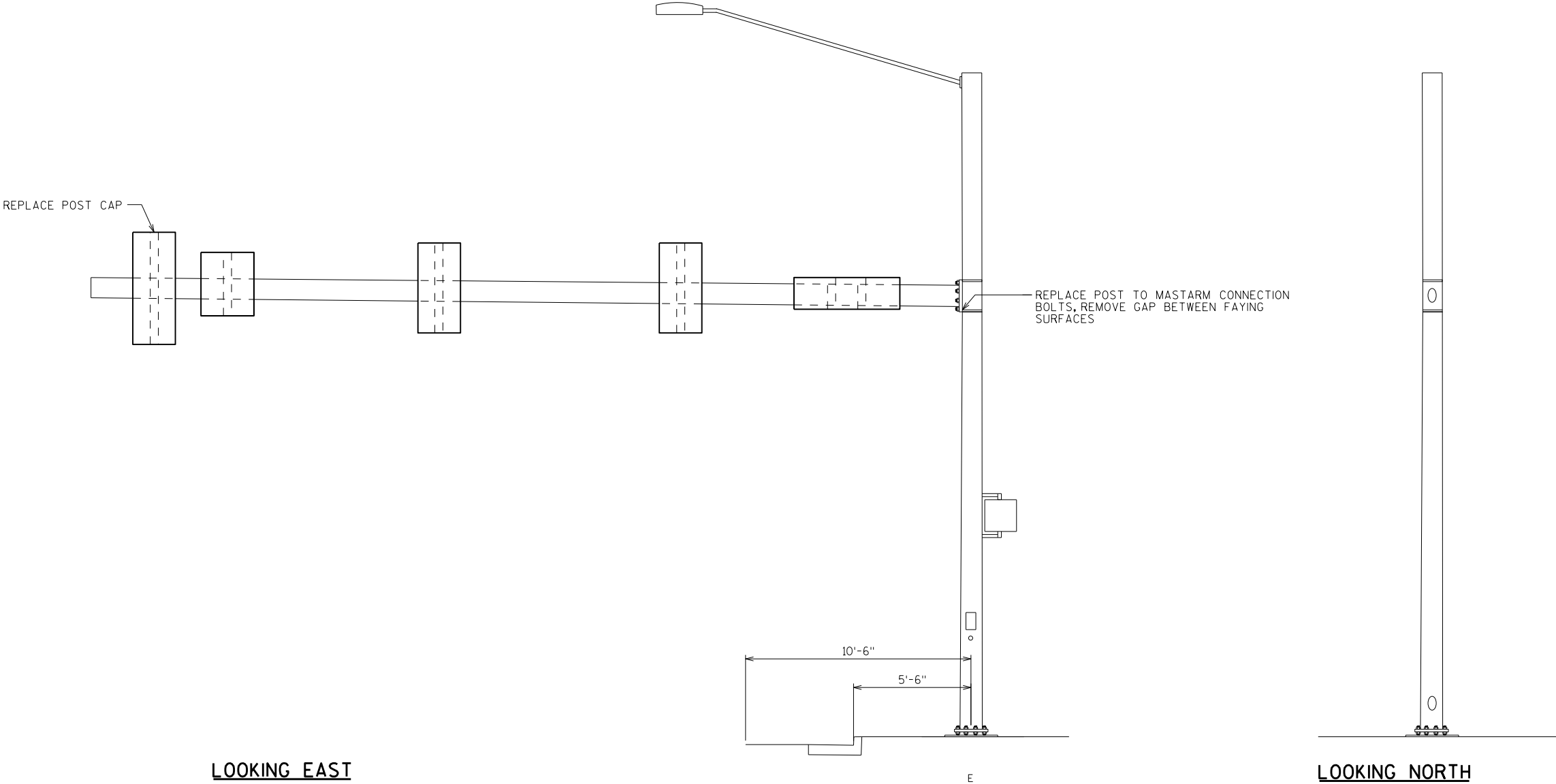
LOOKING SOUTH



FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.06	SECURE/REPLACE CAP	3 EACH	4
SPV.0060.10	INSTALL ID PLAQUE	1 EACH	6

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-56-499-0002			SHEET 41



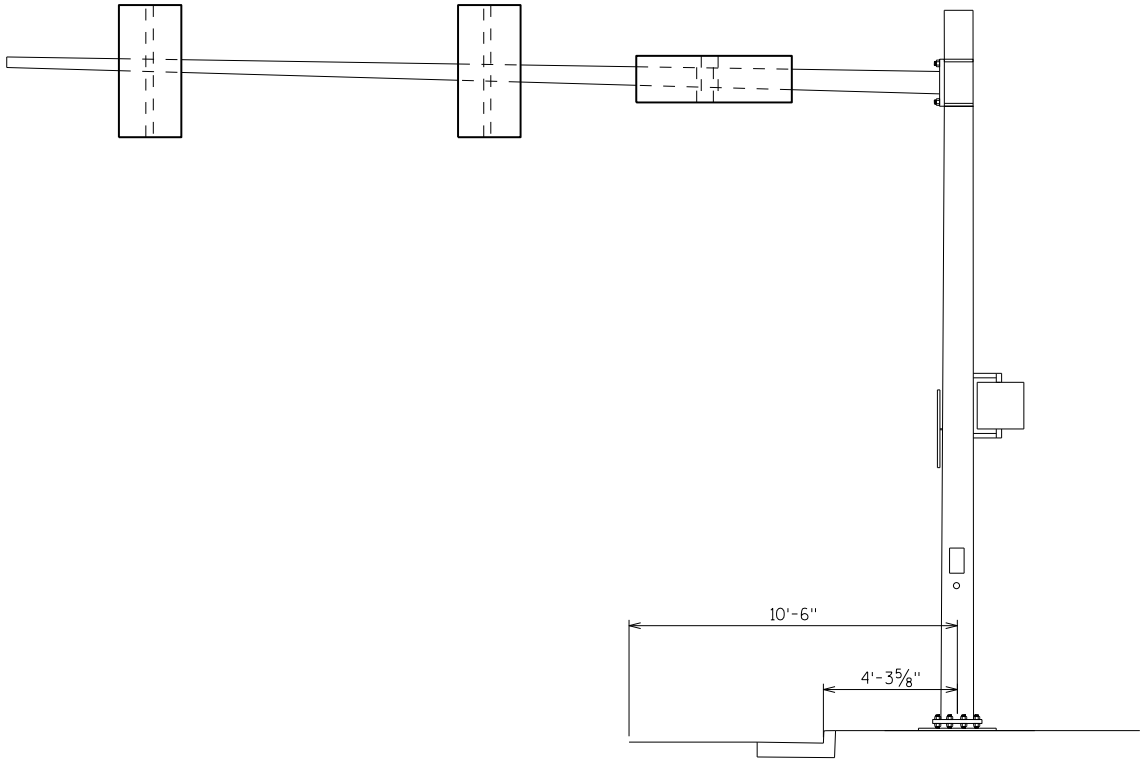
LOOKING EAST

LOOKING NORTH

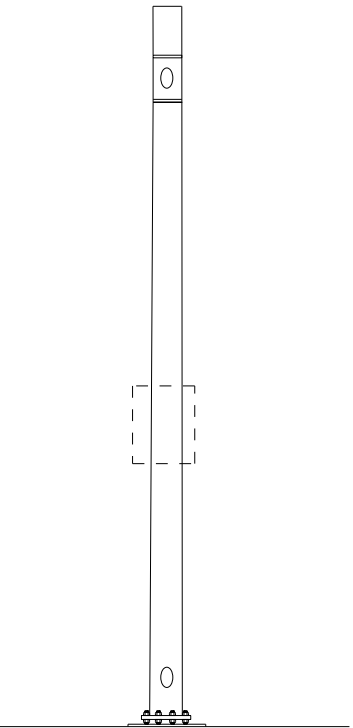
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.05	TENSION STRUCTURAL CONNECTION BOLT (FRICTION)	8 EACH	4
SPV.0060.06	SECURE/REPLACE CAP	1 EACH	4

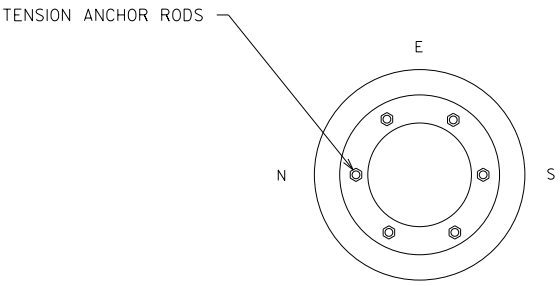
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
DRAWN BY		DDS	PLANS CK'D. SAD
S-56-499-0006		SHEET 42	



LOOKING EAST



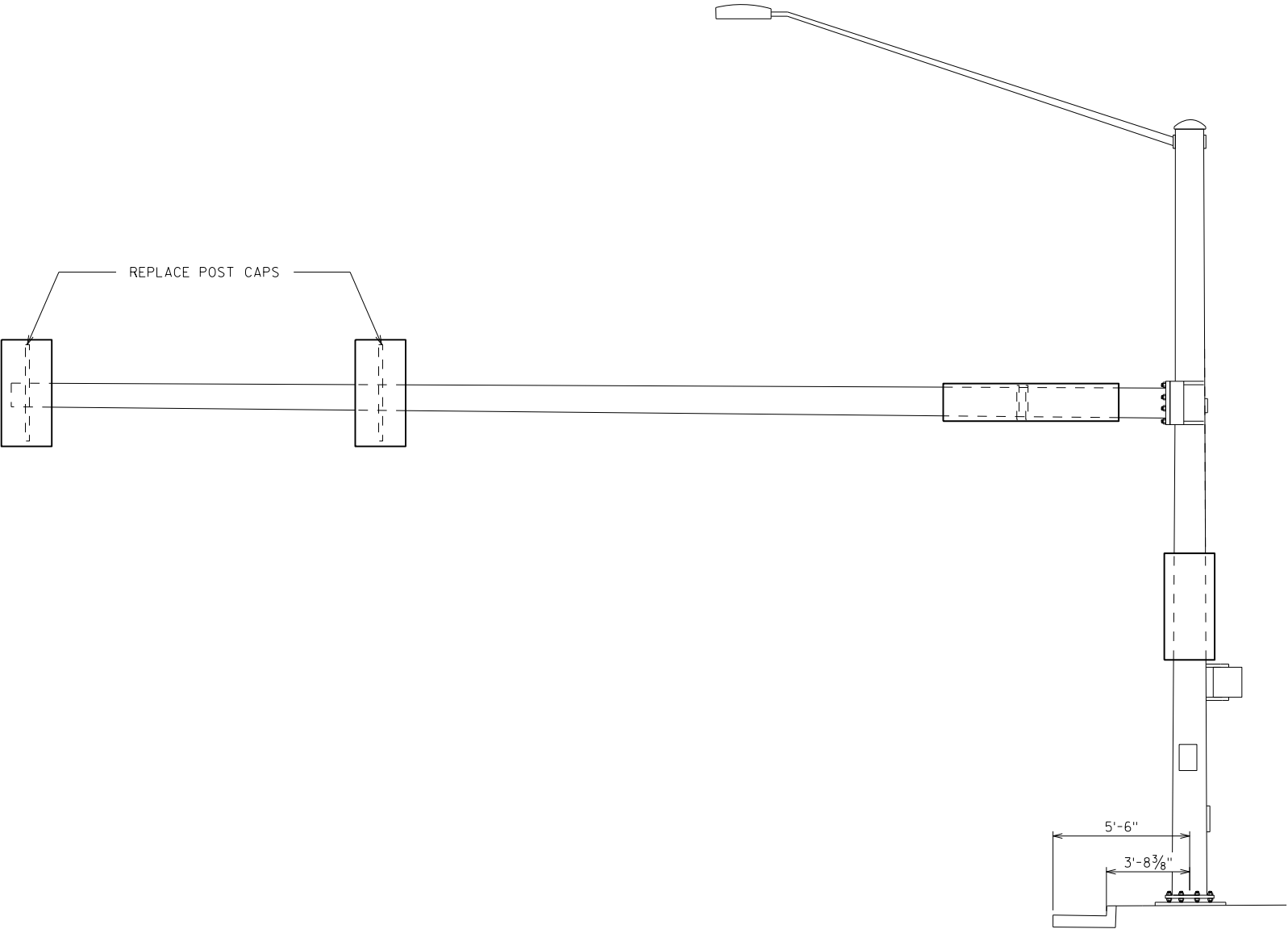
LOOKING NORTH



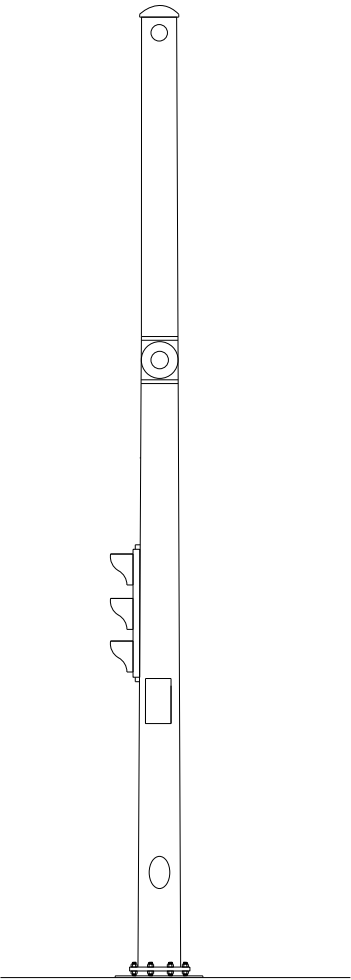
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2

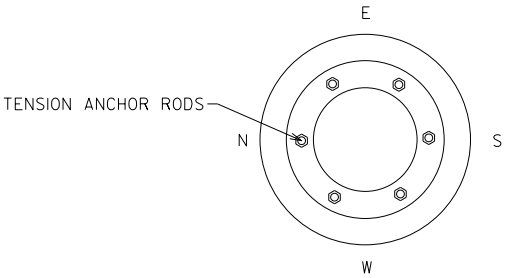
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
		DDS	
S-56-1042-0006		SHEET 43	



LOOKING EAST



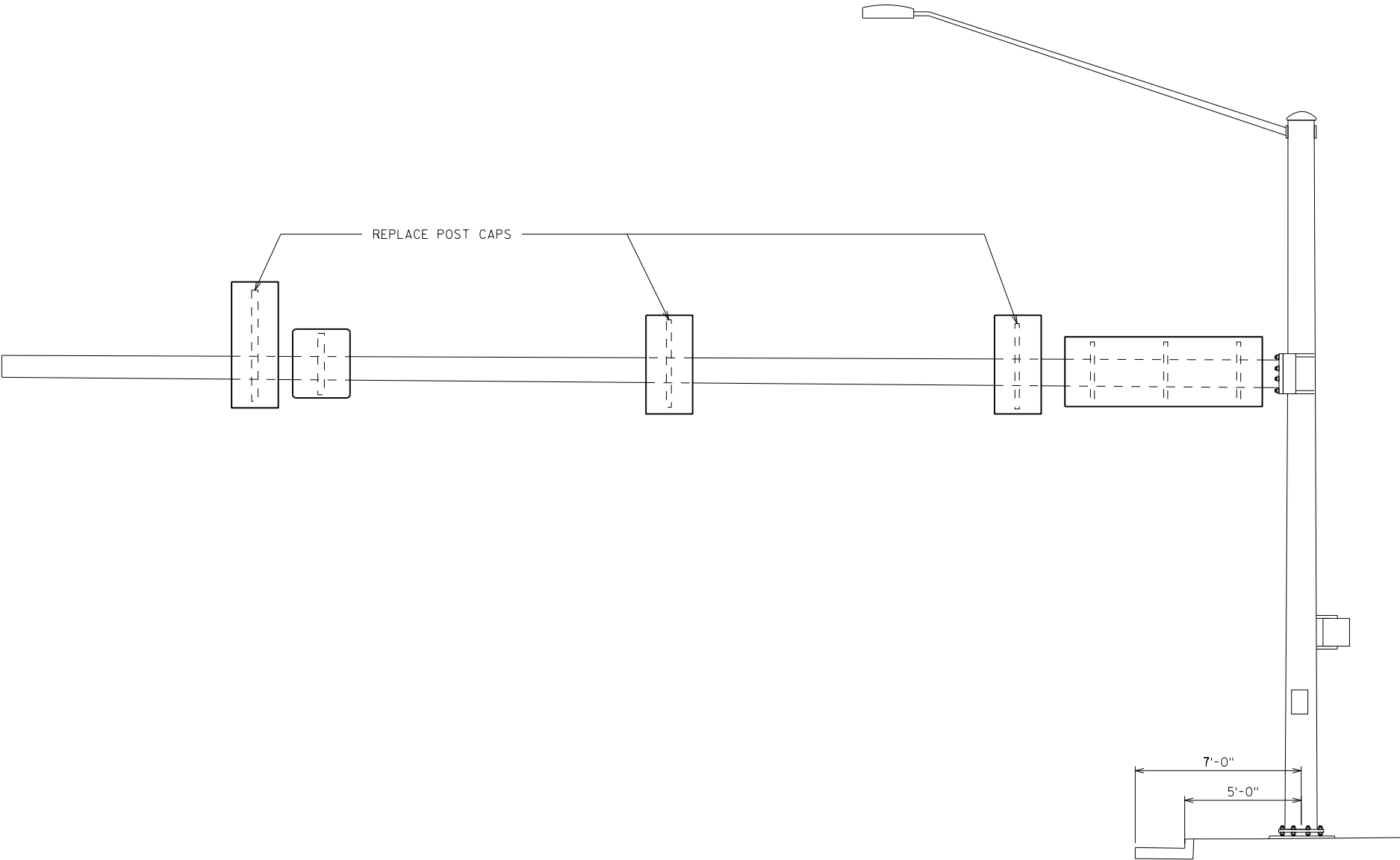
LOOKING NORTH



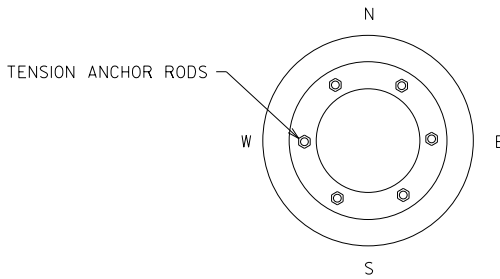
FOUNDATION DETAIL

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.06	SECURE/REPLACE CAP	2 EACH	4

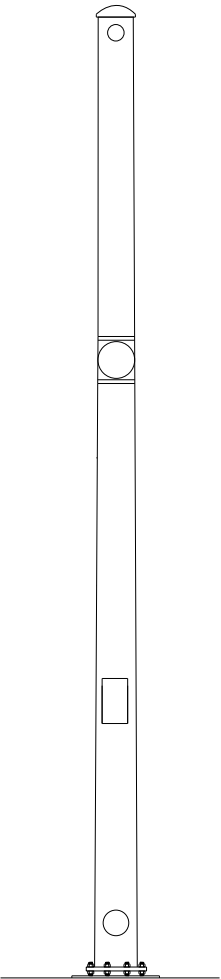
NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
		DDS	
S-56-1057-0004			SHEET 44



LOOKING NORTH



FOUNDATION DETAIL



LOOKING WEST

ITEM NUMBER	BID ITEMS	QUANTITY	REPAIR DETAIL SHEET NO.
SPV.0060.01	TENSION ANCHOR ROD	6 EACH	2
SPV.0060.06	SECURE/REPLACE CAP	3 EACH	4

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE SW SIGN REPAIRS			
		DRAWN BY	PLANS CK'D. SAD
		DDS	
S-56-1057-0006			SHEET 45

Notes



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