

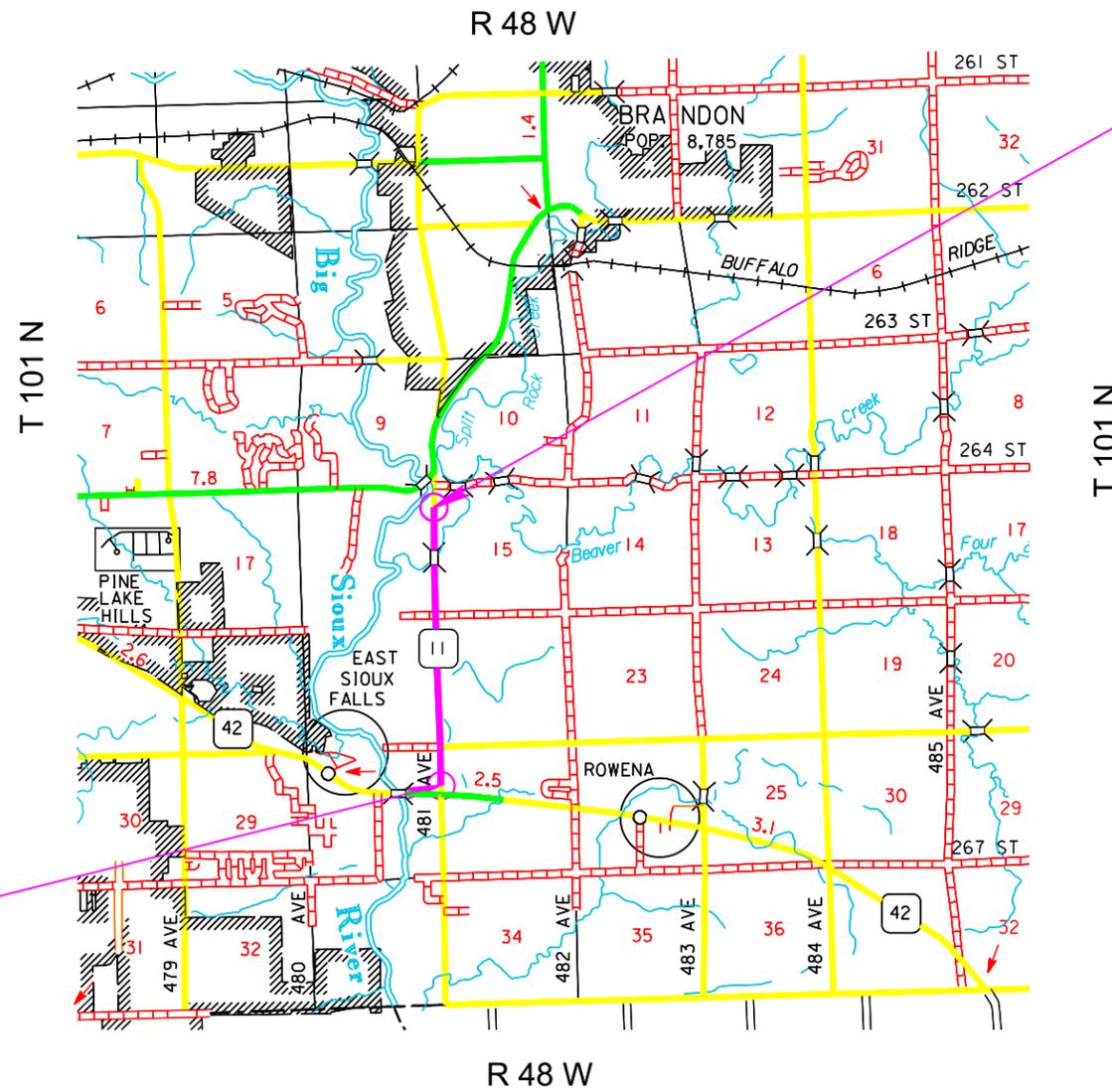
Section S: Permanent Signing

STATE OF SOUTH DAKOTA	PROJECT P-PH 0011(74)74	SHEET S1	TOTAL SHEETS S26
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Plotting Date: mmm-ddd-yyy

INDEX OF SHEETS

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Begin P-PH 0011(74)74
Station 15+05.62

End P-PH 0011(74)74
Station 130+46.64



SECTION S ESTIMATE OF QUANTITIES

Bid Item Number	Item	Quantity	Unit
110E5010	Salvage Delineator	2	Each
110E5020	Salvage Traffic Sign	20	Each
632E1320	2.0"x2.0" Perforated Tube Post	165.7	Ft
632E1340	2.5"x2.5" Perforated Tube Post	25.7	Ft
632E1505	4"x6" Wood Post	53.0	Ft
632E2022	4"x4" White Delineator Back to Back with 1.12 Lb/Ft Post	43	Each
632E2207	4" Tubular White Delineator Reflector	6	Each
632E2220	Guardrail Delineator	16	Each
632E2510	Type 2 Object Marker Back to Back	6	Each
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	86.3	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	80.7	SqFt
632E3520	Remove, Salvage, Relocate, and Reset Traffic Sign	18	Each
900E0030	Remove and Reset Historical Marker	1	Each

SCOPE OF PERMANENT SIGN WORK

The permanent sign work includes, but is not limited to, the following:

- A. Items to be removed by the Contractor:
- Existing permanent signs, delineators and object markers.
 - Existing fixed and breakaway sign posts and anchors.
 - Fixed and breakaway concrete sign footings.
 - Historical marker, support, and concrete sign footing.
- B. Items to be reset or furnished and installed by the Contractor:
- Breakaway and fixed steel post sign supports with concrete footings.
 - Breakaway wood and steel post sign supports and anchors.
 - Flat sheet aluminum signs.
 - Historical marker, rural address, and rural street signs.
 - Delineators and object markers.

SIGN NUMBERING CONVENTION

All sign removals and new installations in these plans are numbered with prefixes that correspond to the following general locations:

SD 11 Signs and Stationing:
SD-1XX

REMOVAL AND SALVAGE OF EXISTING SIGNS**1. Removal and Salvage of Existing Signs:**

The Contractor shall remove and salvage the existing signs listed in the Permanent Signing Tables. Stationing shown is approximate. The signs are flat aluminum signs with nonremovable copy.

For single post sign assemblies, the Contractor may remove and salvage the flat aluminum sign(s), post, and footing (if present), as one unit. For multiple post assemblies, the Contractor shall remove the sign(s) first, and remove the posts and footings (if present), separate.

2. Miscellaneous Sign Related Items:

The existing footings for fixed base sign posts shall be removed entirely or broken down a minimum of 1 foot below the surface of the final grade at topsoil elevation.

The Contractor shall separate signs from supports prior to stockpiling. Salvaged signs and supports shall be neatly stockpiled at a site designated by the Project Engineer. Salvaged galvanized steel posts shall be adequately labeled with the Station from which they were removed, and neatly stockpiled. Salvaged mounting hardware shall be returned to the SDDOT.

Salvaged posts, signs, sign materials, overlays, delineators and object markers shall be returned to the SDDOT Maintenance Yard at the junction of I-29 and I-229, or the Sioux Falls SD Dept. of Transportation Maintenance Complex, 5316 W. 60th St. N., Sioux Falls, SD 57107.

Stockpiling of salvaged material shall be coordinated with the Engineer and Ken Bennett, Lead Highway Maintenance Worker, at the SDDOT Maintenance Yard. Mr. Bennett may be contacted at (605)367-5680.

Signs or posts for reset that are damaged due to improper handling shall be replaced in-kind at the Contractor's expense.

All nuts, bolts, and miscellaneous mounting hardware salvaged from existing signs shall not be reused.

3. Payment for Sign Related Work:

The cost for removal and salvage of flat aluminum sign assemblies, including posts and footings, utility or light pole mounted signs, overhead mounted signs, miscellaneous hardware, landscaping and reseeding, shall be incidental to the contract unit price per each for Salvage Traffic Sign.

The cost for removal and salvage of delineators, object markers, mileage reference markers (MRMs), and posts shall be incidental to the contract unit price per each for Salvage Delineator. MRMs will be reset by the State upon project completion.

SIGN LEGEND, BORDER AND BACKGROUND

All sign materials shall comply with Section 982 of the Specifications. All flat aluminum signs shall be 0.100" sheet aluminum.

All sign legend, border and background sheeting material shall meet or exceed standards for ASTM D 4956 classified Type IV high intensity prismatic sheeting or Type XI super/very high intensity microprismatic sheeting, as indicated in the plans. Sheeting material on all yellow object markers and delineation, and warning signs designated DG shall be fluorescent yellow in color and meet or exceed standards for ASTM D 4956 classified Type XI super/very high intensity microprismatic sheeting.

All delineator sheeting material shall meet or exceed standards for ASTM D 4956 classified Type XI super/very high intensity microprismatic sheeting.

All auxiliary signs for M1-5 State Route Marker signs shall have green borders with black legend and symbols on white background.

All sign sheeting shall conform to AASHTO M 268.

SIGN POSTS

The plan post lengths shall be field verified by the Contractor prior to installation. Wood post and direct drive post lengths listed in the Post Sizes and Quantities section of the Sign Installation tables include 3 or 4 ft./post buried length, and shall be cut to the proper sign height where necessary.

2", 2 ¼" and 2 ½" square perforated tube post shall be fabricated from 12 gauge or 10 gauge galvanized steel. Anchor posts shall be 4 ft in length. Two-piece anchor post systems are required for 2" and 2 ¼" square steel perforated tube post anchor stub posts. Heavy duty 7 gauge galvanized steel anchor stub posts that do not require stiffener sleeves are required for 2 ½" square steel perforated tube post non slip base post installations. Anchor wings are required for signs greater than 6 sq. ft. in total size.

The Contractor shall provide block-outs or shall core holes 6"-9" in diameter, or as specified by the Engineer, in concrete where sign posts are to be installed. The Contractor shall backfill each hole with cold mix asphalt concrete after the sign post has been installed, to the satisfaction of the Engineer.

Multi-directional surface mount sign bases shall be Kleen Break type or equivalent.

All breakaway sign supports shall comply with FHWA NCHRP 350 or MASH crash-worthy requirements.

Costs for sign supports shall be included in the respective contract unit price per foot for the post and footing size indicated. Costs for telescoped reinforced square steel perforated tube posts and anchor stub posts shall be incidental to the respective contract unit price per foot for the post size indicated, and are not included in the Estimate of Quantities.

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HISTORICAL MARKER

The Contractor shall remove and salvage the Iverson Crossing historical marker and support, including anchor, as detailed in these plans. The Contractor shall reset the historical marker upon grade completion.

The Contractor shall take great care in handling the historical marker. Damage to the historical marker due to improper handling shall be repaired by the historical marker fabricator Sewah Studios, to the satisfaction of the Engineer, at the Contractor's expense.

If necessary, the Sewah Studios may be contacted at:

Sewah Studios, Inc
 Millcreek Road - PO Box 298
 Marietta, OH 45750
 Phone: (740)373-2087
 Fax: (740)373-3733
 TOLL FREE: (888) 557-3924 or (888) 55-SEWAH

Cost to remove, salvage and reset the historical marker, including concrete footing, shall be incidental to the contract unit price per each for Remove and Reset Historical Marker.

RURAL STREET SIGNING

The Contractor shall remove and salvage rural street signing as indicated in the plans. The rural street signing should be relocated to temporary locations. Upon project completion, the Contractor shall reinstall the rural street signing.

Cost to remove, relocate, temporarily reset and permanently reset the rural street signs, shall be incidental to the contract unit price per each for Remove, Salvage, Relocate, and Reset Traffic Sign

RURAL ADDRESS SIGNING

The Contractor shall remove and salvage blue rural address signing that encroach on the work limits. The rural address signing should be relocated to temporary locations where they remain visible.

Upon project completion, the Contractor shall reinstall the rural address signing. The 7' galvanized U-channel delineator post support shall be located within thirty (30) feet of the driveway and within 1 ½ feet of the right-of-way line or fence, as close to its original location as possible, with the right hand side given first preference where geographical features allow. The building address sign and galvanized u-channel post for an active farmstead should be placed between 15'-30' from the edge of the driveway. The galvanized delineator post shall be driven into the ground 2 ½ to 3 feet. The location should be free of sight obstructions. The sign shall be attached to the u-channel post at least 4 feet above grade.

Cost to remove, relocate, temporarily reset and permanently reset the rural address signs, shall be incidental to the contract unit price per each for Remove, Salvage, Relocate, and Reset Traffic Sign.

TYPE 2 OBJECT MARKERS

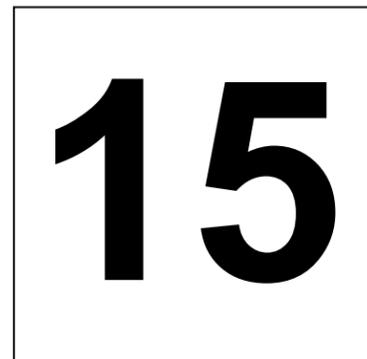
Cost for yellow 6" x 12" Type 2 Object Markers back-to-back with 1.12 lb/ft post shall be incidental to the contract unit price per each for Type 2 Object Marker Back to Back.

NO PASSING ZONE PENNANTS

Exact locations of permanent W14-3 No Passing Zone pennants shall be verified by the State prior to installation by the Contractor.

DATE DECALS

The Contractor shall furnish and affix a date decal to each new sign installed. Date decals shall be self-adhesive weather resistant labels with removable paper backing, approximately 2" X 2" in size. The date decal shall display the last two digits of the year the sign was manufactured (as illustrated) with black numerals on a white background.



One decal shall be placed in the extreme lower left corner of the front of each extruded aluminum panel sign, or the extreme lower left corner of the back of each flat aluminum sign.

Sign supports or other obstructions shall not block the view of the date decal upon completion of the sign installation.

All costs for furnishing and installing of date decals on new signs shall be incidental to the contract unit price per square foot for Flat Aluminum Sign, Nonremovable Copy, High Intensity or Super/Very High Intensity.

SIGN AND SUPPORT SHOP DRAWINGS

The Contractor shall provide sign and support shop drawings to the Engineer for review by the Mitchell Region Traffic Office and Bridge Design Office, prior to fabrication. Adobe PDF electronic files are preferred.

CONCRETE FOOTINGS

The exposed portion of fixed base concrete footings shall be formed to provide a uniform diameter section and half-inch chamfer on the grout pad as shown on the footing details. The amount of exposed concrete footings on the up-slope side of the footing shall not be greater than 3 inches as shown on the footing details.

Footings for breakaway signs shall be below ground as shown on the footing details and need not be formed.

New concrete footings shall be installed a minimum of 10 ft from old footings greater than 4 ft in depth that have been completely removed, or 5 ft from old footings that have been broken down approximately 1 ft below ground level. New concrete footings may be installed a minimum of 5 ft from old footings 4 ft or less in depth that have been completely removed. The Contractor may adjust new footing locations to comply with the indicated minimum distances if lateral plan offset is maintained, with the approval of the Engineer.

Extreme care should be used to make certain that the footings are constructed in accordance with the plan sheets, and the finished ground line at all footings are per the details shown on the plan sheets. Disturbed areas within the grading project limits shall be seeded in accordance with Section D – Erosion Control Plans. Disturbed areas outside the grading project limits shall be seeded to the satisfaction of the Engineer. The cost of seeding outside the grading project limits shall be incidental to the contract unit price per foot for the various Concrete Footing items.

ACCEPTANCE OF SIGN INSTALLATIONS

Final acceptance of completed signs will be considered on a sign by sign basis in accordance with Section 5.16 of the Specifications.

PERMANENT SIGNING TABLE

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SIGN DATA										POST DATA						REMOVAL DATA				WORK DESCRIPTION	
SIGN #	STATION	DESCRIPTION	SIGN CODE	SIGN SIZE (FT)	SIGN AREA (SQ FT)			DIR FAC-ING	OFFSET* RIGHT/LEFT OVERHEAD	POST LENGTHS (ABOVE GROUND)		FIXED or BREAK-AWAY**	(N)EW or (R)EUSE POST	SIZES & QUANTITIES (FT)			SALVAGE DELIN (EA)	SALVAGE TRAFFIC SIGN (EA)	REMOVE & RESET SIGN (EA)		REMOVE & RESET HIST MKR (EA)
					FA	DG	FDG			INSIDE	OUTSIDE			2" SQ. STEEL	2 1/2" SQ. STEEL	4" X 6" WOOD					
SD 11					632E3203	632E3205								632E1320	632E1340	632E1505	100E5010	110E5020	632E3520	900E0030	
SD - 101	15+45 R		R2-1	2 X 2.5	5.0			S	14' R	9'-04"	A	N	9.4				1			REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.	
SD - 102	16+45 R		SPECIAL	1.5 X 0.50	RESET			N/S	45.5' R	7'-00"	D	R					1			REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXISTING SUPPORT ASSEMBLY.	
			SPECIAL	1.5 X 0.50	RESET			N/S													
SD - 103	17+50 L		M2-1	1.75 X 1.25	2.2			N	14' R	10'-00"	A	N	10.0				1			REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.	
			M1-5	2 X 2	4.0																
SD - 104	20+25 R		SPECIAL	1.5 X 0.50	RESET			N/S	45.5' R	7'-00"	D	R					1			REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXISTING SUPPORT ASSEMBLY.	
SD - 105	21+75 L		R1-1	2.5 X 2.5		5.2		W	12' R	10'-06"	A	N	10.5				1			REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.	
SD - 106	22+30 L		D3-1	VAR X 0.75	RESET			E/W	30' R	10'-00"	D	R					1			REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXISTING SUPPORT ASSEMBLY.	
			D3-1	VAR X 0.75	RESET			N/S													
SD - 107	22+55 L		W3-1	3 X 3				N	14' R	12'-05"	W						1			REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. RELOCATE AND INSTALL NEW SIGN ON NEW SUPPORT ASSEMBLY.	
	23+35 L		W3-1	3 X 3		9.0		N	14' R	12'-08"	A	N		12.7							
SD - 108	23+40 R		SPECIAL	1.5 X 0.50	RESET			N/S	45.5' R	7'-00"	D	R					1			REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXISTING SUPPORT ASSEMBLY.	
SD - 109	24+75 R		SPECIAL	1.5 X 0.50	RESET			N/S	45.5' R	7'-00"	D	R					1			REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXISTING SUPPORT ASSEMBLY.	
SD - 110	25+55 R		SPECIAL	1.5 X 0.50	RESET			N/S	30' R	7'-00"	D	R					1			REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXISTING SUPPORT ASSEMBLY.	
SD - 111	25+60 R		MRM	0.33 X 1.0				N/S	3' R	9'-00"	D						1			REMOVE AND SALVAGE EXISTING MILEAGE REFERENCE MARKER AND STEEL U-CHANNEL SUPPORT.	
SD - 112	19+10 R		SPECIAL	2 X 2				S	9' R	9'-08"	A						1			REMOVE AND SALVAGE EXISTING SIGN AND STEEL U-CHANNEL SUPPORT. INSTALL RELOCATED NEW SIGN ON NEW SUPPORT ASSEMBLY.	
	25+65 R		SPECIAL	2 X 2	4.0			S	14' R	8'-09"	A	N	8.8								
SUBTOTALS					15.2	14.2								38.7	12.7	0.0	1	5	6	0	

* - Distance from White or Yellow Edgeline, or Back of Curb, to Edge of Sign. DG = Flat Aluminum Signs w/Nonremovable Copy - Very High Intensity Sheeting FA = Flat Aluminum Signs w/Non-Removable Copy - High Intensity Sheeting
 ** - (F)ixed Base, or Breakaway (S)lip Base, (A)nchor Stub Post, (D)irect drive, or (W)ood Post. FDG = Flat Aluminum Signs w/Nonremovable Copy - Fluorescent Yellow Very High Intensity Sheeting
 *** - Need and exact location of W14-3 No Passing Zone pennants to be determined by State prior to installation.

PERMANENT SIGNING TABLE

SIGN DATA										POST DATA						REMOVAL DATA				WORK DESCRIPTION			
SIGN #	STATION	DESCRIPTION	SIGN CODE	SIGN SIZE (FT)	SIGN AREA (SQ FT)			DIR FAC-ING	OFFSET* RIGHT/LEFT OVERHEAD	POST LENGTHS (ABOVE GROUND)		FIXED or BREAK-AWAY**	(N)EW or (R)EUSE POST	SIZES & QUANTITIES (FT)			SALVAGE DELIN (EA)	SALVAGE TRAFFIC SIGN (EA)	REMOVE & RESET SIGN (EA)		REMOVE & RESET HIST MKR (EA)		
					FA	DG	FDG			INSIDE	OUTSIDE			2" SQ. STEEL	2 1/2" SQ. STEEL	4" X 6" WOOD							
SD 11																							
SD - 113	25+75 L		R13-1	6.5 X 6.5	42.3			N	14' R	15'-10"	14'-10"	W	N	N			38.7					INSTALL NEW SIGNS AND SUPPORT ASSEMBLY.	
			R13-1 SUPP	6.5 X 1.5	9.8																		
SD - 114	29+40 L		D3-1	VAR X 0.75	RESET			E/W	22' R	10'-00"		D	R					1				REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.	
			D3-1	VAR X 0.75	RESET			N/S															
SD - 115	29+45 L		R1-1	2.5 X 2.5		5.2		W	12' R	10'-06"		A	N					1				REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.	
SD - 116	29+85 L		W14-1	2.5 X 2.5				E	6' R	9'-10"		D						1				REMOVE AND SALVAGE EXISTING SIGNS AND STEEL U-CHANNEL SUPPORT.	
			SPECIAL	2 X 2																			
			R2-1	2 X 2.5																			
			W14-1	2.5 X 2.5		6.3		E	6' R	9'-10"		A	N			9.9						INSTALL NEW SIGN AND SUPPORT ASSEMBLY ON IVERSON CROSSING ROAD 80 FT LEFT OF SD 11 CENTERLINE.	
SD - 117	29+85 L		R2-1	2 X 2.5	5.0			E	6' R	9'-04"		A	N			9.4						INSTALL NEW SIGN AND SUPPORT ASSEMBLY ON IVERSON CROSSING ROAD 230 FT LEFT OF SD 11 CENTERLINE.	
SD - 118	29+90 R		R1-1	3 X 3		7.5		E	12' R	10'-10"		A	N			10.9		1				REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.	
SD - 119	30+00 R		D3-1	VAR X 0.75	RESET			E/W	38' R	10'-00"		D	R					1				REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.	
			D3-1	VAR X 0.75	RESET			N/S															
SD - 120	32+60 L		R13-1	7 X 7				N	11' R	13'-00"	14'-00"	W						1				REMOVE AND SALVAGE EXISTING SIGNS AND WOOD POSTS.	
			R13-1 SUPP	7 X 1																			
SUBTOTALS					57.1	19.0											40.7	0.0	38.7	0	4	2	0

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 ** - (F)ixed Base, or Breakaway (S)lip Base, (A)nchor Stub Post, (D)irect drive, or (W)ood Post. FDG = Flat Aluminum Signs w/Nonremovable Copy - Fluorescent Yellow Very High Intensity Sheeting
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					FA	DG	FDG			INSIDE	OUTSIDE			2" SQ.	2 1/2" SQ.	4" X 6"								
SD 11																								
SD - 121	28+40 L		HIST MARKER	3.5 X 2.5	RESET			N/S	20' R	4'-00"	F	R							1		REMOVE AND SALVAGE EXISTING CAST METAL HISTORICAL MARKER SIGN AND SUPPORT. REMOVE EXISTING CONCRETE FOOTING. RELOCATE AND REINSTALL EXISTING HISTORICAL MARKER ON EXISTING SUPPORT AND NEW FOOTING.			
	38+50 L																							
SD - 122	42+50 R		SPECIAL	2 X 2				N/S	40' R ROW LINE	6'-06"	D						1				REMOVE AND SALVAGE EXISTING SIGN AND STEEL U-CHANNEL POST.			
SD - 123	31+15 R		W14-3	4 X 4 X 3				N	14' L	10'-00"	W						1				REMOVE EXISTING SIGN AND WOOD POST. RELOCATE AND INSTALL NEW SIGN AND SUPPORT ASSEMBLY.			
	44+50 R ***						5.6				9'-04"	A	N	9.4										
SD - 124	37+00 L		SPECIAL	2 X 2	4.0			N	14' R	8'-07"	A	N	8.6								REMOVE AND SALVAGE EXISTING SIGN AND STEEL U-CHANNEL SUPPORT. INSTALL RELOCATED NEW SIGN ON NEW SUPPORT ASSEMBLY.			
	48+50 L			SPECIAL	2 X 2				N	9' R	10'-00"	D												
SD - 125	52+30 R		SPECIAL	2.5 X 2.5				S	7' R	10'-04"	W						1				REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT.			
SD - 126	58+05 L		SPECIAL	1.5 X 0.50	RESET			N/S	51.5' R	7'-00"	D	R					1				REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.			
SD - 127	61+40 L		SPECIAL	1.5 X 0.50	RESET			N/S	51.5' R	7'-00"	D	R					1				REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.			
SD - 128	61+75 L		SPECIAL	1.5 X 0.50	RESET			N/S	51.5' R	7'-00"	D	R					1				REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.			
SD - 129	63+90 R		ADOPT A HIWAY	3 X 2.5	RESET			S	14' R	10'-03"	W	N					1				REMOVE AND SALVAGE EXISTING SIGNS AND WOOD SUPPORT. RESET EXISTING SIGNS ON NEW WOOD SUPPORT ASSEMBLY.			
				CLUB NAME	3 X 1																			
				LITTER CREW	2.5 X 2.5									14.3										
SD - 130	65+60 L		SPECIAL	1.5 X 0.50	RESET			N/S	51.5' R	7'-00"	D	R					1				REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.			
SD - 131	67+70 R		D3-1	VAR X 0.75	RESET			E/W	10' R	10'-00"	D	R					1				REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.			
				D3-1	VAR X 0.75	RESET			N/S															
SUBTOTALS					4.0	5.6								18.0	0.0	14.3	0	3	6	1				

* - Distance from White or Yellow Edgeline, or Back of Curb, to Edge of Sign. DG = Flat Aluminum Signs w/Nonremovable Copy - Very High Intensity Sheeting FA = Flat Aluminum Signs w/Non-Removable Copy - High Intensity Sheeting
 ** - (F)ixed Base, or Breakaway (S)lip Base, (A)nchor Stub Post, (D)irect drive, or (W)ood Post. FDG = Flat Aluminum Signs w/Nonremovable Copy - Fluorescent Yellow Very High Intensity Sheeting
 *** - Need and exact location of W14-3 No Passing Zone pennants to be determined by State prior to installation.

PERMANENT SIGNING TABLE

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SIGN DATA										POST DATA						REMOVAL DATA				WORK DESCRIPTION				
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					FA	DG	FDG			INSIDE	OUTSIDE			2" SQ. STEEL	2 1/2" SQ. STEEL	4" X 6" WOOD								
SD 11																								
SD - 132	72+80 L ***		W14-3	4 X 4 X 3			5.6	S	14' L	9'-04"	A	N	9.4				1			REMOVE AND SALVAGE EXISTING SIGNS AND WOOD SUPPORT. INSTALL NEW W14-3 NO PASSING SIGN AND SUPPORT ASSEMBLY, THE "WATCH FOR CHILDREN" SIGN IS A REMOVAL ONLY.				
			SPECIAL	2.5 X 2.5																				
SD - 133	73+00 R	 	W11-3 W16-4P	3 X 3 2.5 X 2			9.0 5.0	S	14' R	13'-00"	S	N		13.0		1			REMOVE AND SALVAGE EXISTING SIGNS AND WOOD SUPPORT. INSTALL NEW SIGNS ON STEEL PERFORATED TUBE SUPPORT ASSEMBLY WITH SLIP BASE DRIVEN ANCHOR.					
SD - 134	74+70 L		SPECIAL	1.5 X 0.50	RESET			N/S	61.5' R	7'-00"	D	R					1		REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.					
SD - 135	78+05 L		R2-1	2 X 2.5	5.0			N	14' R	9'-01"	A	N	9.1			1			REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.					
SD - 136	78+05 R		R2-1 MRM MRM	2 X 2.5 0.33 X 1.0 0.33 X 1.0	5.0			S N/S	14' R	9'-01"	A	N	9.1			1			REMOVE AND SALVAGE EXISTING SIGNS AND WOOD SUPPORT. INSTALL NEW R2-1 SPEED LIMIT SIGN AND SUPPORT ASSEMBLY, MRMs ARE REMOVAL ONLY.					
SD - 137	82+95 L		R1-1	2.5 X 2.5		5.2		W	12' R	10'-06"	A	N	10.5			1			REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.					
SD - 138	83+30 R		R1-1	2.5 X 2.5		5.2		E	12' R	10'-06"	A	N	10.5			1			REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.					
SD - 139	83+45 R		D3-1 D3-1	VAR X 0.75 VAR X 0.75	RESET			E/W N/S	61' R	10'-00"	D	R					1		REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.					
SD - 140	89+20 L 89+40 L		SPECIAL	1.5 X 0.50	RESET			N/S	51.5' R	7'-00"	D	R					1		REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RELOCATE AND RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.					
SD - 141	96+20 R ***		W14-3	4 X 4 X 3			5.6	N	14' L	9'-04"	A	N	9.4			1			REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW SIGN AND SUPPORT ASSEMBLY.					
SD - 142	108+75 R		MRM	0.33 X 1.0				S	3' R	9'-00"	D					1			REMOVE AND SALVAGE EXISTING MILEAGE REFERENCE MARKER AND STEEL U-CHANNEL SUPPORT.					
SUBTOTALS					10.0	35.6								58.0	13.0	0.0	1	7	3	0				

* - Distance from White or Yellow Edgeline, or Back of Curb, to Edge of Sign. DG = Flat Aluminum Signs w/Nonremovable Copy - Very High Intensity Sheeting FA = Flat Aluminum Signs w/Non-Removable Copy - High Intensity Sheeting
 ** - (F)ixed Base, or Breakaway (S)lip Base, (A)nchor Stub Post, (D)irect drive, or (W)ood Post. FDG = Flat Aluminum Signs w/Nonremovable Copy - Fluorescent Yellow Very High Intensity Sheeting
 *** - Need and exact location of W14-3 No Passing Zone pennants to be determined by State prior to installation.

PERMANENT SIGNING TABLE

SIGN DATA							POST DATA						REMOVAL DATA				WORK DESCRIPTION						
SIGN #	STATION	DESCRIPTION	SIGN CODE	SIGN SIZE (FT)	SIGN AREA (SQ FT)			DIR FAC-ING	OFFSET* RIGHT/LEFT OVERHEAD	POST LENGTHS (ABOVE GROUND)		FIXED or BREAK-AWAY**	(N)EW or (R)EUSE POST	SIZES & QUANTITIES (FT)				SALVAGE DELIN (EA)	SALVAGE TRAFFIC SIGN (EA)	REMOVE & RESET SIGN (EA)	REMOVE & RESET HIST MKR (EA)		
					FA	DG	FDG			INSIDE	OUTSIDE			2" SQ.	2 1/2" SQ.	4" X 6"							
SD 11							632E3203	632E3205			INSIDE	OUTSIDE		IN	OUT	632E1320	632E1340	632E1505	100E5010	110E5020	632E3520	900E0030	
SD - 143	118+10 L		SPECIAL	1.5 X 0.50	RESET			N/S	51.5' R	7'-00"		D	R							1			REMOVE AND SALVAGE EXISTING RURAL ADDRESS SIGN AND STEEL SUPPORT. RESET EXISTING SIGN ON EXITING SUPPORT ASSEMBLY.
			SPECIAL	1.5 X 0.50	RESET			N/S															
SD - 144	130+45 R		W1-2L	2.5 X 2.5			6.3	S	14' R	10'-03"		A	N	10.3					1				REMOVE AND SALVAGE EXISTING SIGN AND WOOD SUPPORT. INSTALL NEW W1-2L CURVE SIGN AND SUPPORT ASSEMBLY, MRMs ARE REMOVAL ONLY.
			MRM	0.33 X 1.0																			
			MRM	0.33 X 1.0																			
SUBTOTALS					0.0	6.3									10.3	0.0	0.0	0	1	1	0		
TOTALS ALL SHEETS					86.3	80.7									165.7	25.7	53.0	2	20	18	1		

* - Distance from White or Yellow Edgeline, or Back of Curb, to Edge of Sign. DG = Flat Aluminum Signs w/Nonremovable Copy - Very High Intensity Sheeting FA = Flat Aluminum Signs w/Non-Removable Copy - High Intensity Sheeting
 ** - (F)ixed Base, or Breakaway (S)lip Base, (A)nchor Stub Post, (D)irect drive, or (W)ood Post. FDG = Flat Aluminum Signs w/Nonremovable Copy - Fluorescent Yellow Very High Intensity Sheeting
 *** - Need and exact location of W14-3 No Passing Zone pennants to be determined by State prior to installation.

PERMANENT SIGNING

SD HIGHWAY 11

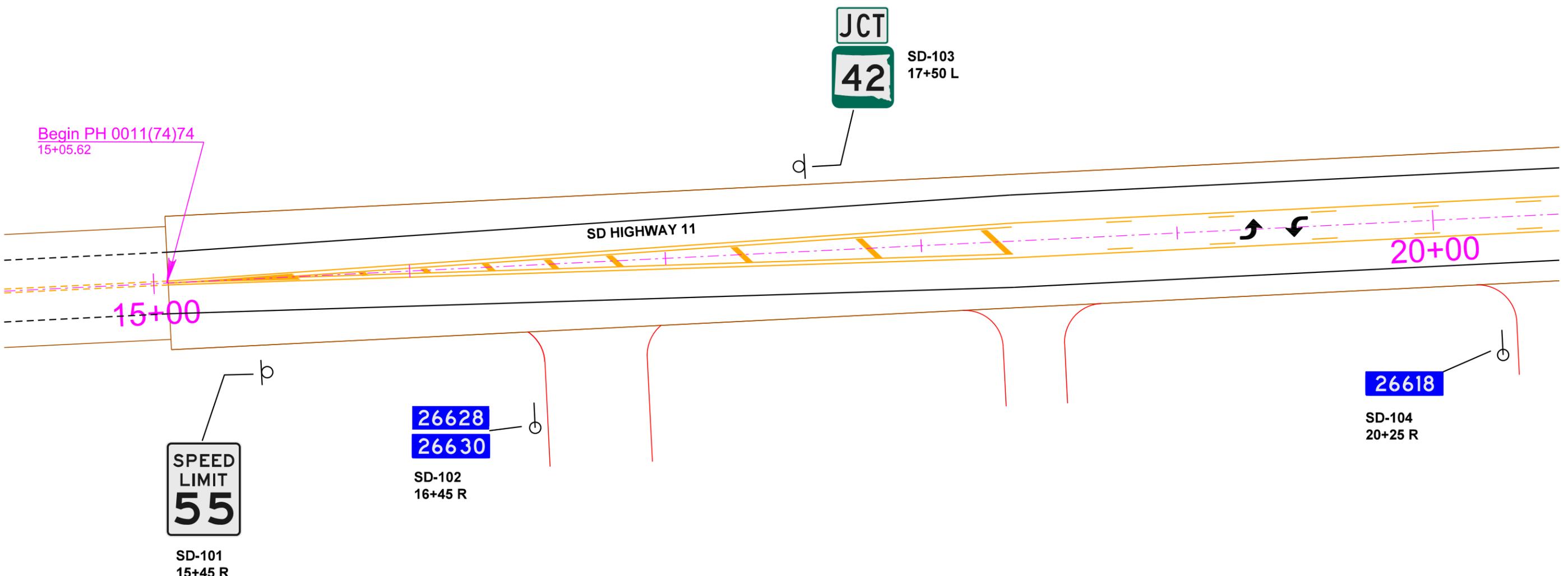
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-PH 0011(74)74	S9	S26



SCALE: 1" = 40'

PLOT SCALE - \$\$SCALE\$\$

PLOT NAME - \$\$PLOTNAME\$\$



- - Rural County Address Signing.
- ⊕ - Rural County Street Signing.
- * - Locations shown for W14-3 NO PASSING ZONE pennants are approximate, need and exact locations will be determined by the State upon pavement completion.

PLOTTED FROM - \$\$USERNAME\$\$

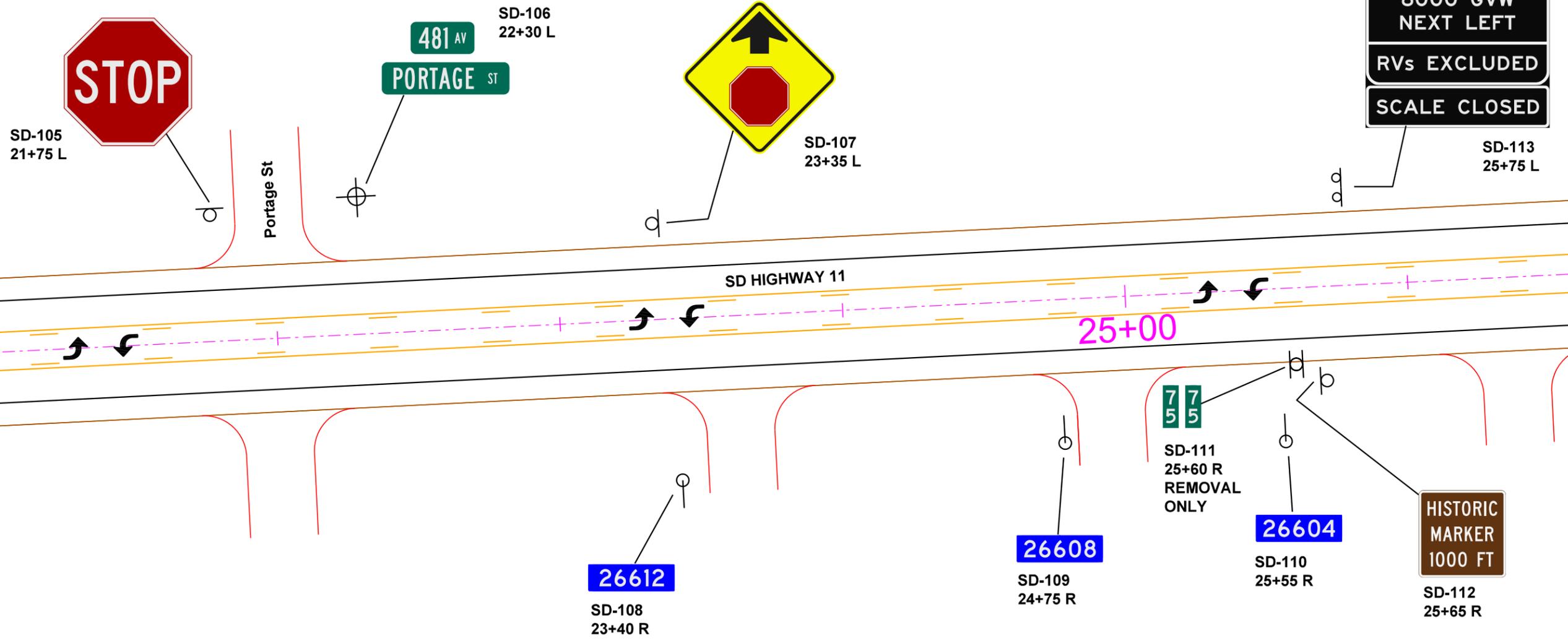
FILE - \$\$FILENAME\$\$

PERMANENT SIGNING

SD HIGHWAY 11



SCALE: 1" = 40'



- - Rural County Address Signing.
- ⊕ - Rural County Street Signing.
- * - Locations shown for W14-3 NO PASSING ZONE pennants are approximate, need and exact locations will be determined by the State upon pavement completion.

PLOT SCALE - \$\$SCALE\$\$

PLOTTED FROM - \$\$USERNAME\$\$

PLOT NAME - \$\$PLOTNAME\$\$

FILE - \$\$FILENAME\$\$

PERMANENT SIGNING

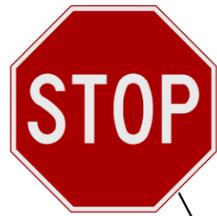
SD HIGHWAY 11



SCALE: 1" = 40'



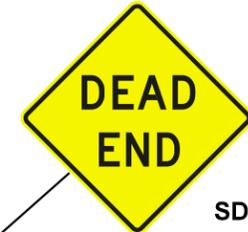
SD-117
29+85 L



SD-115
29+45 L



SD-114
29+40 L



SD-116
29+85 L



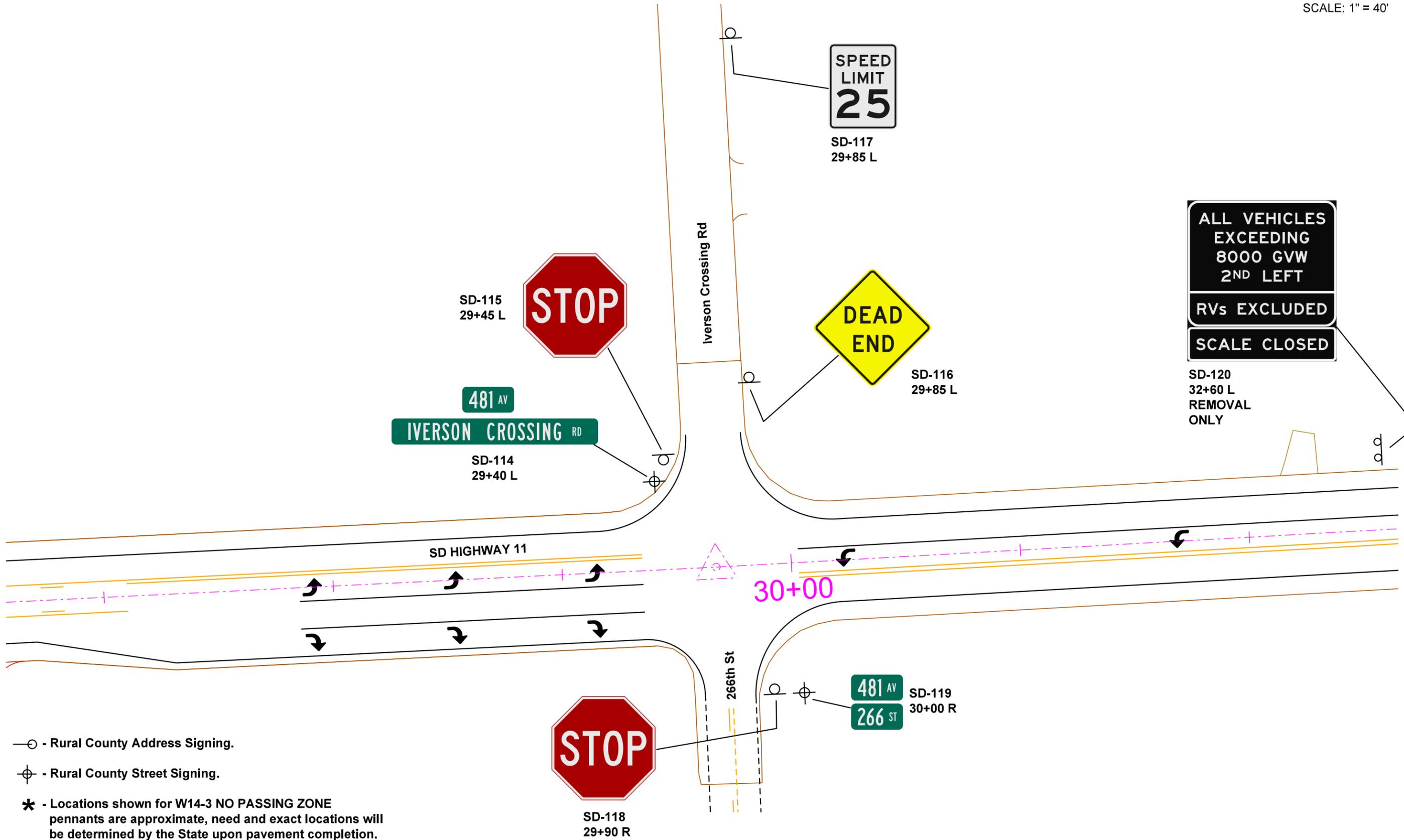
SD-120
32+60 L
REMOVAL
ONLY



SD-118
29+90 R



SD-119
30+00 R



⊙ - Rural County Address Signing.

⊕ - Rural County Street Signing.

* - Locations shown for W14-3 NO PASSING ZONE pennants are approximate, need and exact locations will be determined by the State upon pavement completion.

PLOT SCALE - \$\$SCALE\$\$

PLOTTED FROM - \$\$USERNAME\$\$

PLOT NAME - \$\$PLOTNAME\$\$

FILE - \$\$FILENAME\$\$

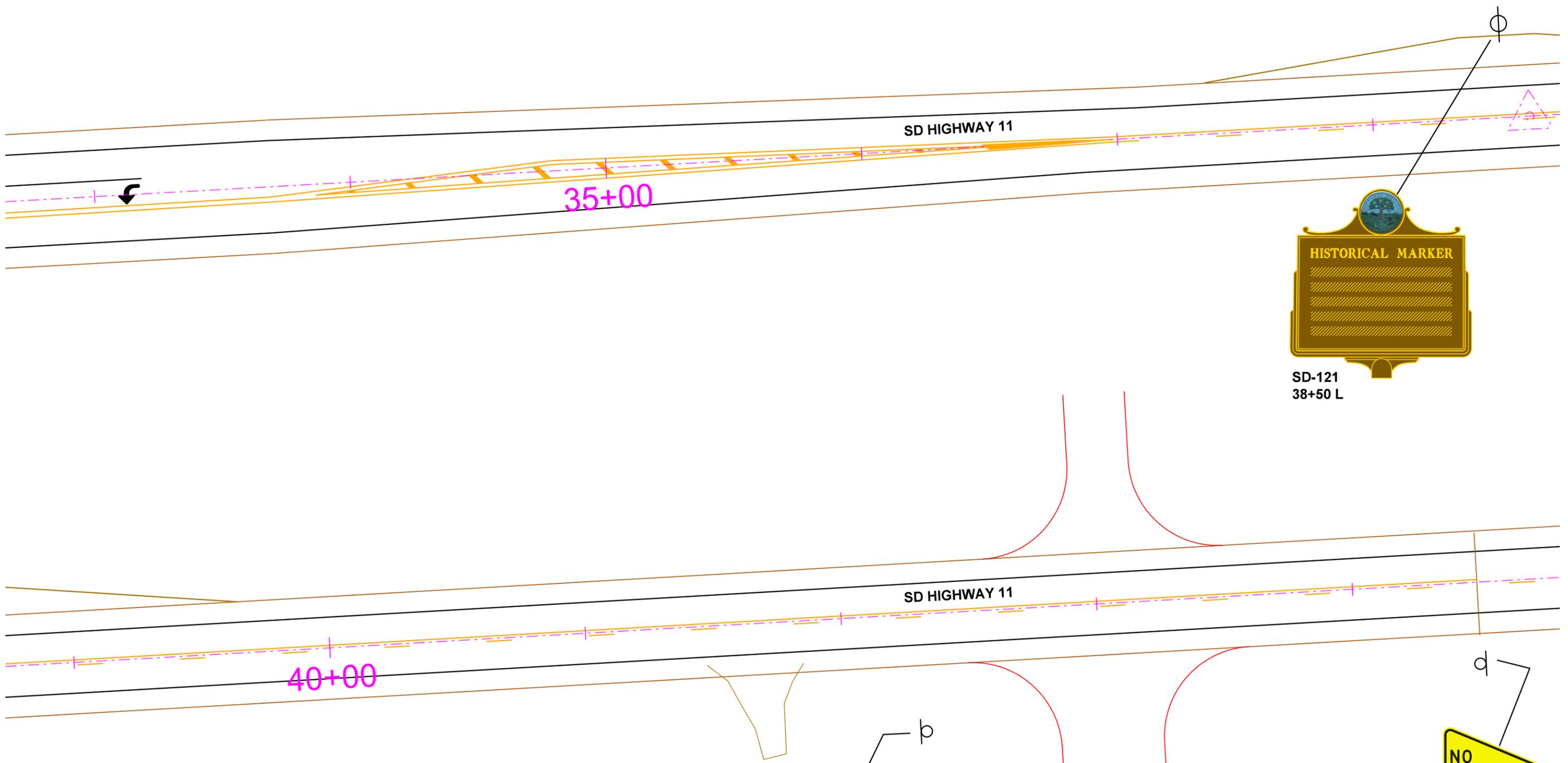
PERMANENT SIGNING

SD HIGHWAY 11

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-PH 0011(74)74	S12	S26



SCALE: 1" = 40'



⊙ - Rural County Address Signing.

⊕ - Rural County Street Signing.

* - Locations shown for W14-3 NO PASSING ZONE pennants are approximate, need and exact locations will be determined by the State upon pavement completion.

SD-122
42+50 R
REMOVAL
ONLY



*SD-123
44+50 R

PLOT SCALE - \$\$SCALE\$\$

PLOTTED FROM - \$\$USERNAME\$\$

PLOT NAME - \$\$PLOTNAME\$\$

FILE - \$\$FILENAME\$\$

PERMANENT SIGNING

SD HIGHWAY 11

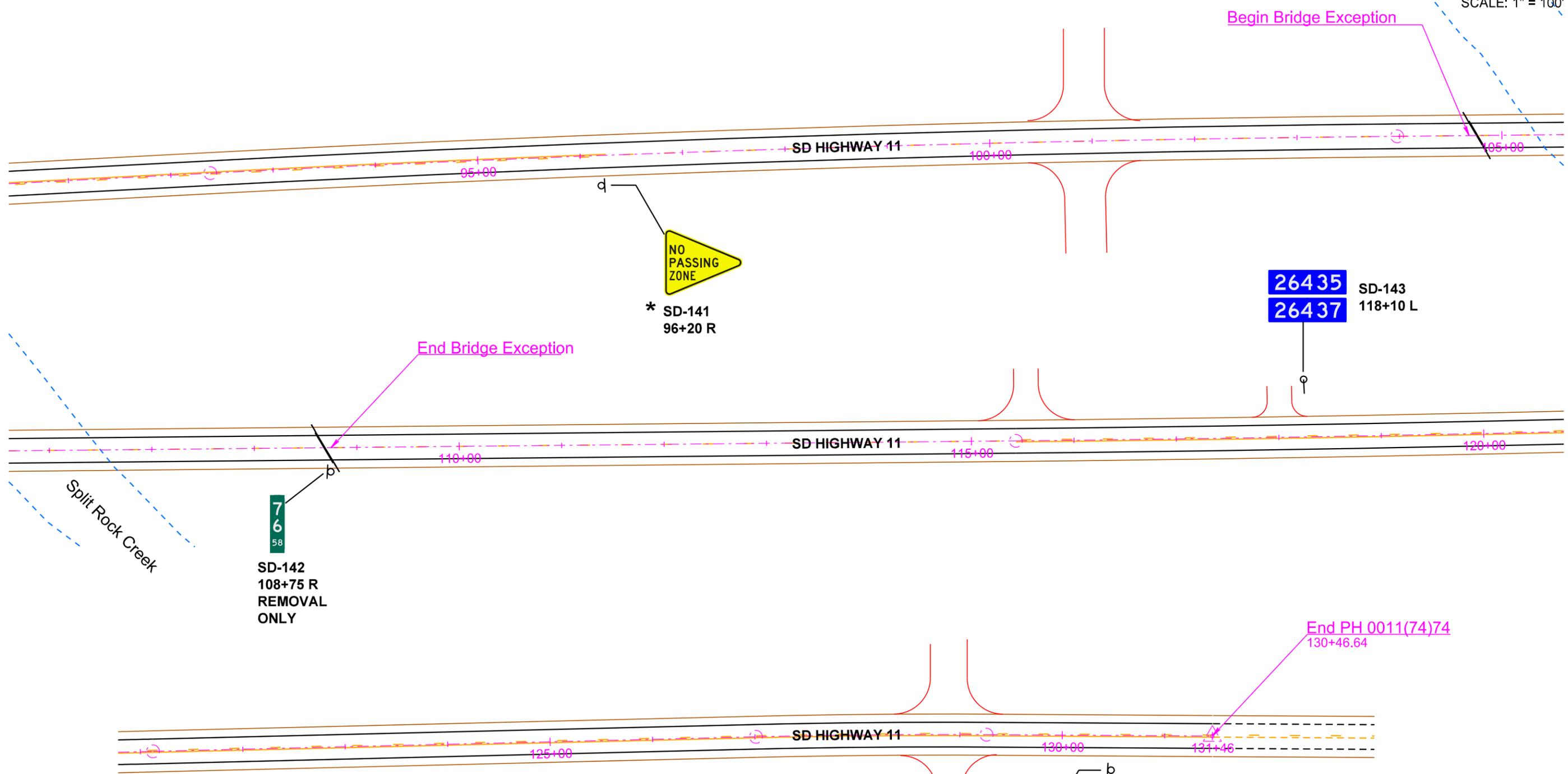
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-PH 0011(74)74	S14	S26



SCALE: 1" = 100'

PLOT SCALE - \$\$SCALE\$\$

PLOT NAME - \$\$PLOTNAME\$\$



NO
PASSING
ZONE
* SD-141
96+20 R

26435 SD-143
26437 118+10 L

7
6
58
SD-142
108+75 R
REMOVAL
ONLY

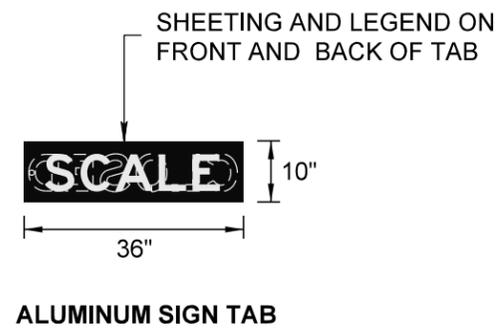
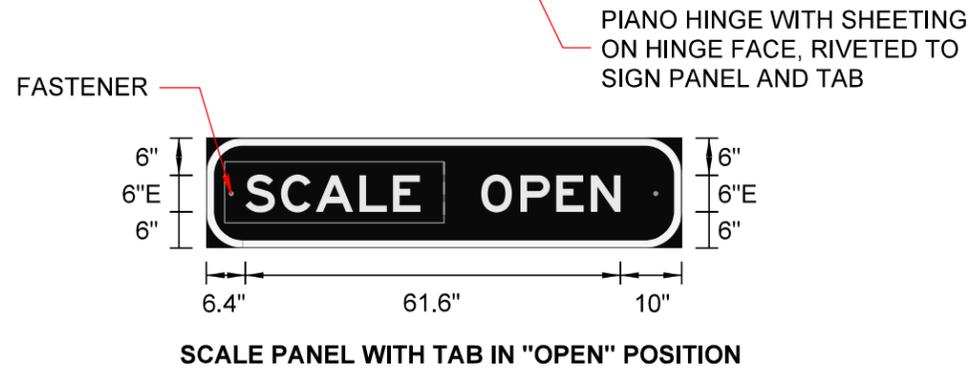
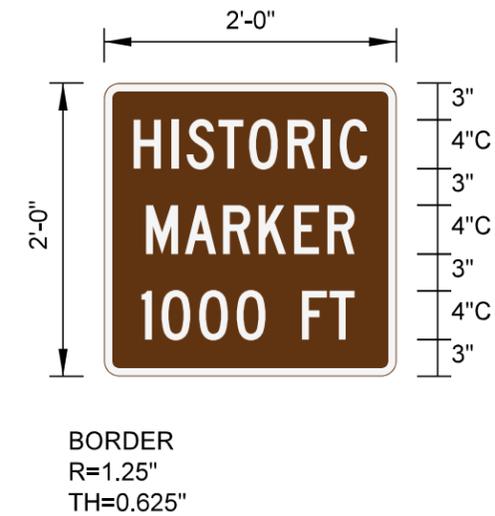
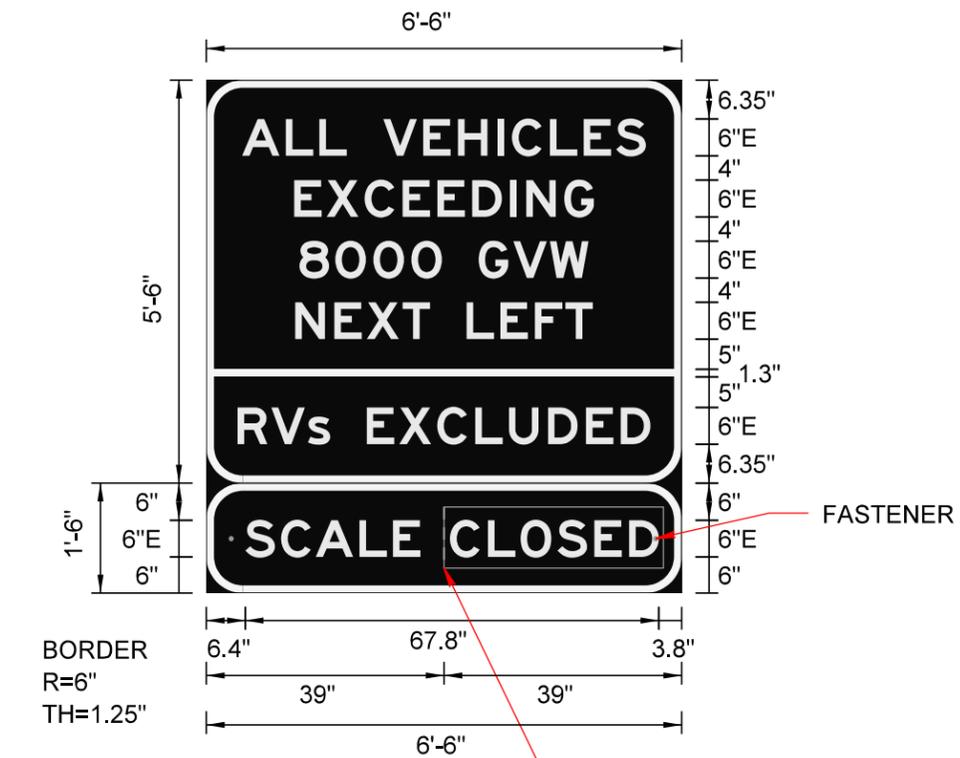
SD-144
130+45 R

- - Rural County Address Signing.
- ⊕ - Rural County Street Signing.
- * - Locations shown for W14-3 NO PASSING ZONE pennants are approximate, need and exact locations will be determined by the State upon pavement completion.

PLOTTED FROM - \$\$USERNAME\$\$

FILE - \$\$FILENAME\$\$

REGULATORY & GUIDE SIGNS



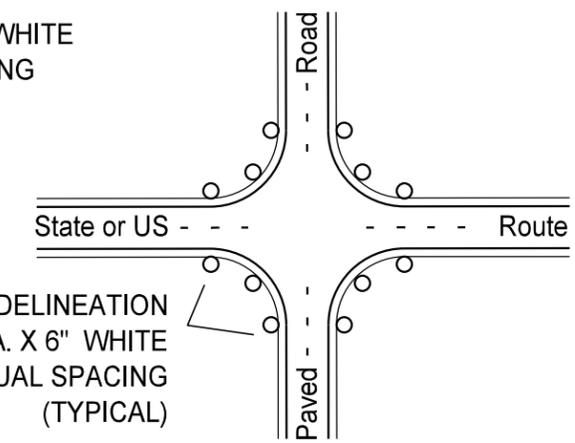
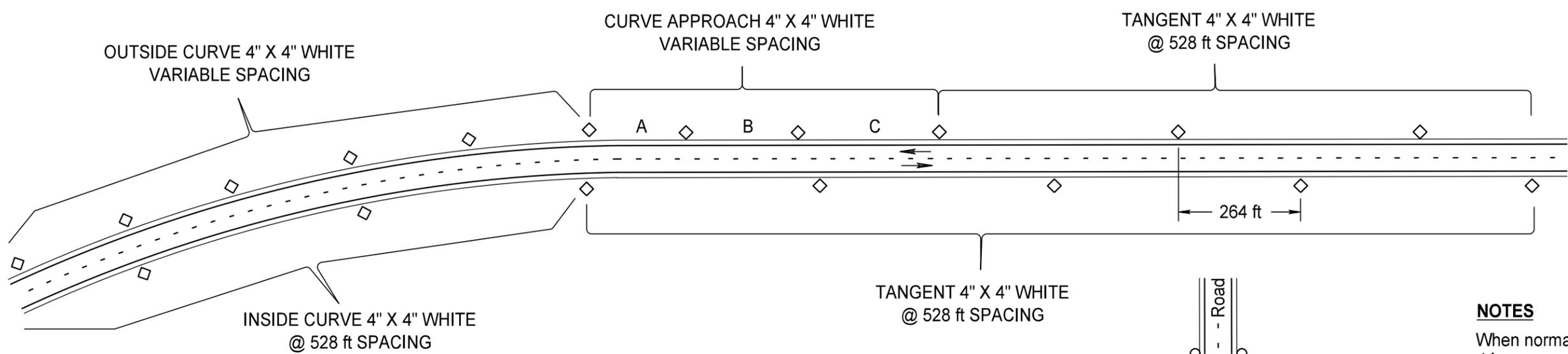
SIGN NUMBER	SD-112 & SD-124
WIDTH x HGHT.	2'-0" x 2'-0"
BORDER WIDTH	5 / 8"
CORNER RADIUS	1 1/4"
MOUNTING	Ground
BACKGROUND	TYPE: Type IV High Intensity COLOR: Brown
LEGEND/BORDER	TYPE: Type IV High Intensity COLOR: White

SIGN NUMBER	SD-113
WIDTH x HGHT.	6'-6" x 5'-6" / 6'-6" x 1'-6"
BORDER WIDTH	1 1/4"
CORNER RADIUS	6"
MOUNTING	Ground
BACKGROUND	TYPE: Type IV High Intensity COLOR: Black
LEGEND/BORDER	TYPE: Type IV High Intensity COLOR: White

DELINEATOR LAYOUT

TWO-LANE STATE or US ROUTE (TYPICAL)

Curve Delineator Spacing (ft)	Curve Approach Spacing (ft)		
	A	B	C
20	40	65	125
30	60	90	180
35	70	110	215
40	85	125	250
45	95	145	290
50	110	170	300
55	110	170	300
65	125	190	300
70	140	210	300
75	150	230	300
80	165	245	300
85	175	260	300
90	185	275	300



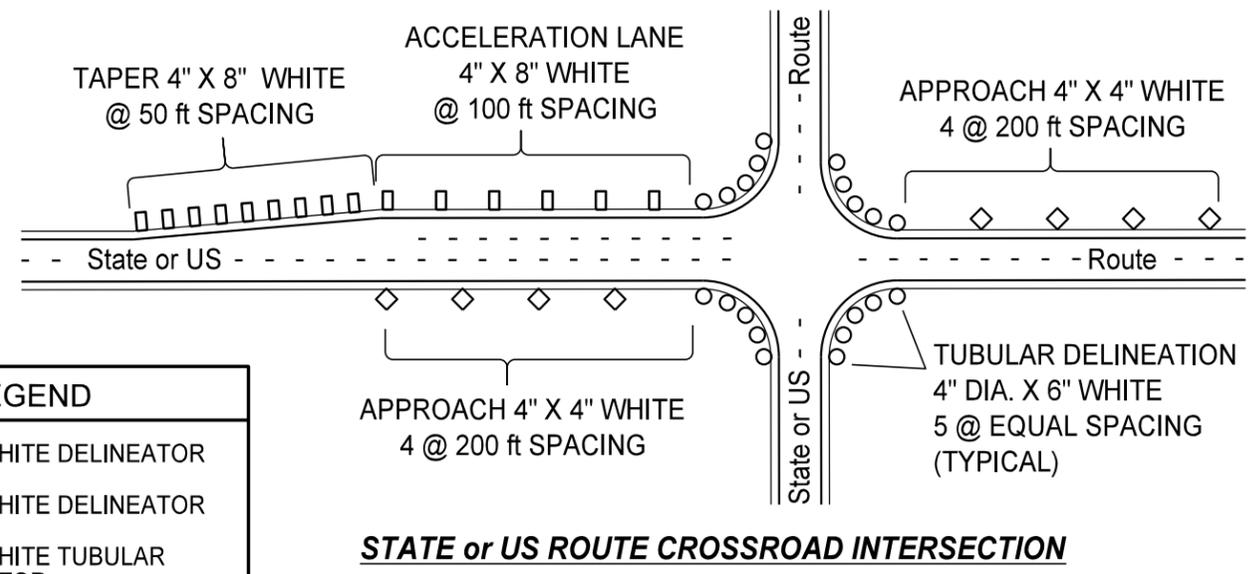
NOTES

When normal spacing is interrupted by driveways, crossroads, or approaches, delineators falling within such areas may be moved in either direction a distance not exceeding one-quarter of the standard spacing. Delineators still falling within such areas should be eliminated.

Curve approach delineation is not required if curve delineation spacing exceeds 100 ft.

DELINEATION TABLE											
STATION	SPACING	QUANTITY (EACH)									
		HIGHWAY					GUARD RAIL				
		SALVAGE DELIN. OR TYPE 2 OBJECT MARKER	4" x 4" Bk-to-Bk	4" Dia. TUBULAR	TYPE 2 OBJECT MARKER 6" x 12" BK-TO-BK	TYPE 2 OM Bk-to-Bk	TERMINAL END MARKER	4" x 6" GUARDRAIL			
								BEAM RAIL		CABLE RAIL	
	WHITE	WHITE	YELLOW	YELLOW	YELLOW	WHITE	YELLOW	WHITE	YELLOW		
	110E5010	632E2022	632E2207	632E2510	632E2510	**	632E2220				
SD 11											
15+05 R to 130+47 R	528'	6	21								
15+05 L to 130+47 L	528'	6	22								
29+35 R to 39+55 R	15'			3							
29+85 R to 30+20 R	25'			3							
SD 11 GUARDRAIL											
103+57 R to 104+76 R	50'					1	4				
104+20 L to 104+76 L	50'						4				
108+68 R to 109+24 R	50'						4				
108+68 L to 109+87 L	50'					1	4				
SD 11 PIPE ENDS											
25+37 R/L	PIPE ENDS	2		2							
29+34 R/L	PIPE ENDS	2		2							
29+40 R/L	PIPE ENDS	2		2							
TOTALS		18	43	6	6	0	2	16			

LEGEND	
◇	4" X 4" WHITE DELINEATOR
▭	4" X 8" WHITE DELINEATOR
○	4" X 6" WHITE TUBULAR DELINEATOR



PLOT SCALE - \$\$SCALE\$\$

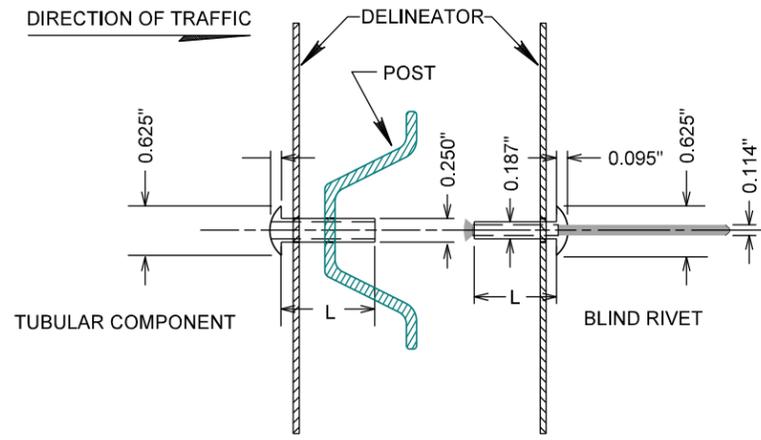
PLOT NAME - \$\$PLOTNAME\$\$

FILE - \$\$FILENAME\$\$

* - See Standard Plate 632.40 Sheet 1 of 4 for symbol definitions.
 ** - For Information Only.

DELINEATOR ERECTION DETAILS

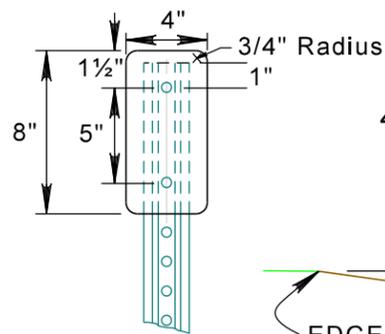
4" X 4" DELINEATORS MOUNTED BACK-TO-BACK



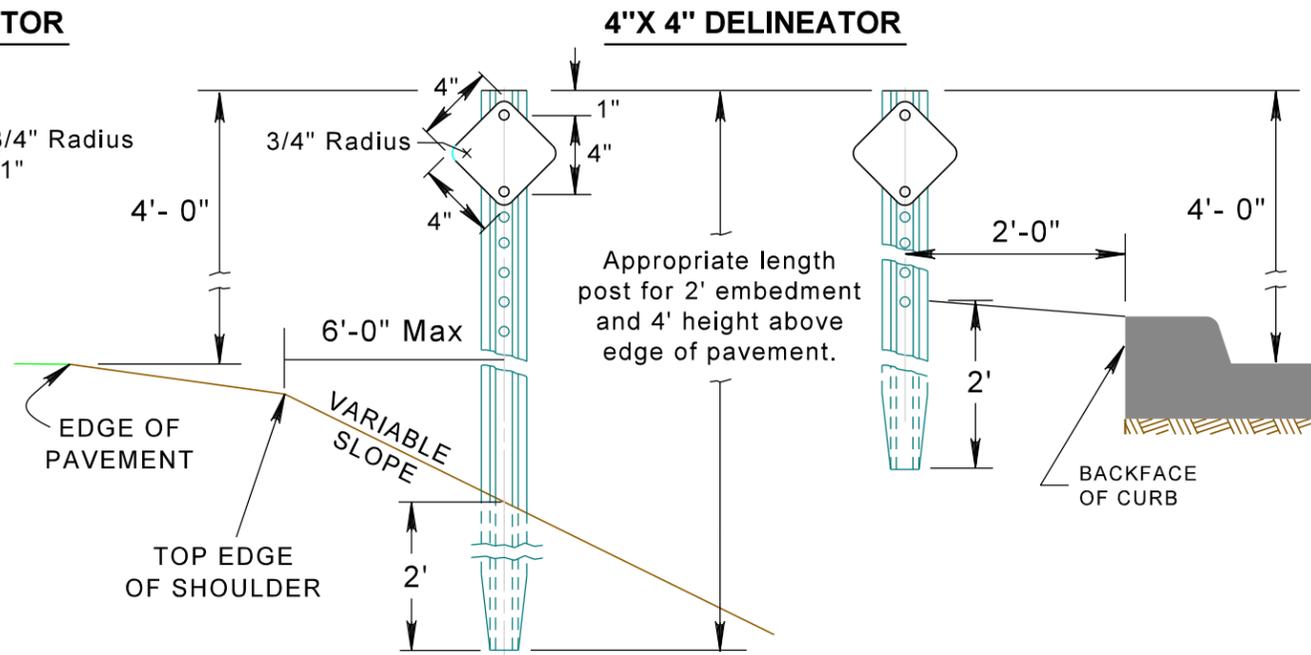
(L)ength varies with Grip Range of Rivet

1/4" Two Piece Oval Head Blind Rivet with Aluminum Sleeve, Aluminum Mandrel, and Aluminum Tubular Component is shown. An alternative method of fastening, such as a two piece 3/16 rivet lock bolt, may be used if approved by the Engineer.

4" X 8" DELINEATOR



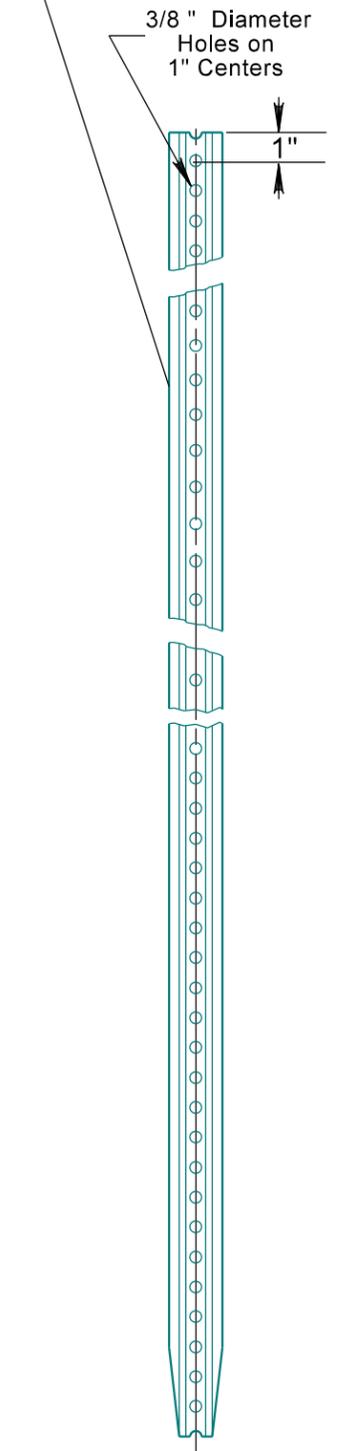
4" X 4" and 4" X 8" DELINEATORS



1/4" Diameter Mounting Holes in all Delineators

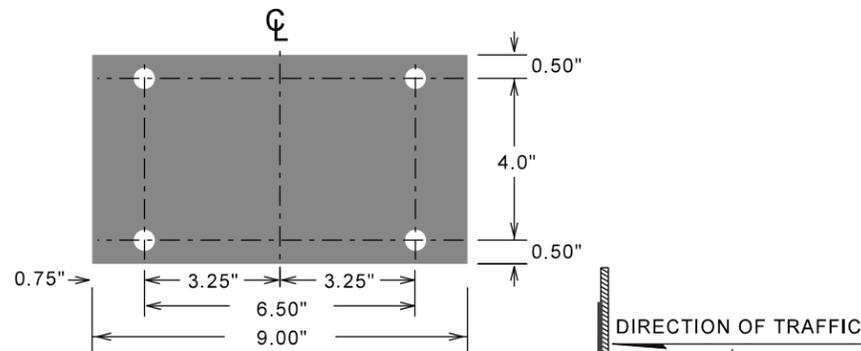
POST DETAIL

NHCRP350 compliant 1.12 Lbs/Ft flanged channel section post with baked on high quality green enamel paint

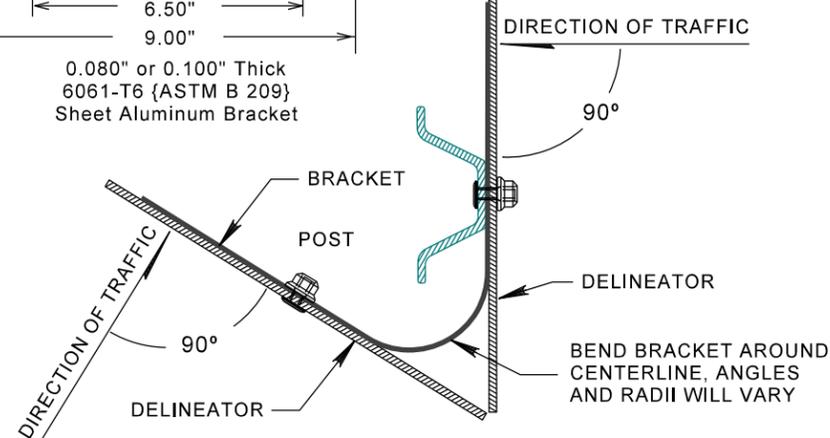


(TYPICAL)

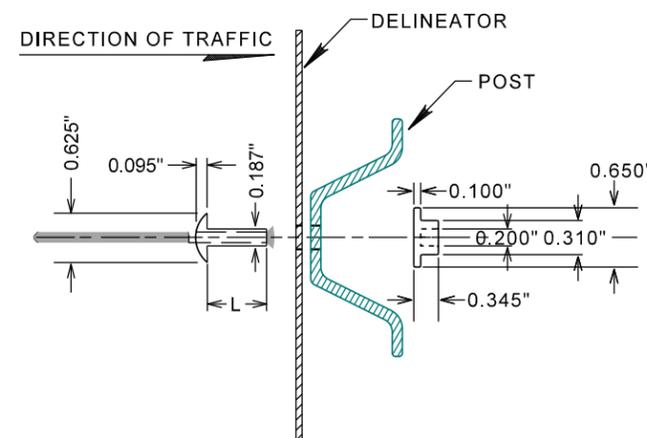
4" X 4" DELINEATORS MOUNTED ON BRACKET



0.080" or 0.100" Thick 6061-T6 {ASTM B 209} Sheet Aluminum Bracket



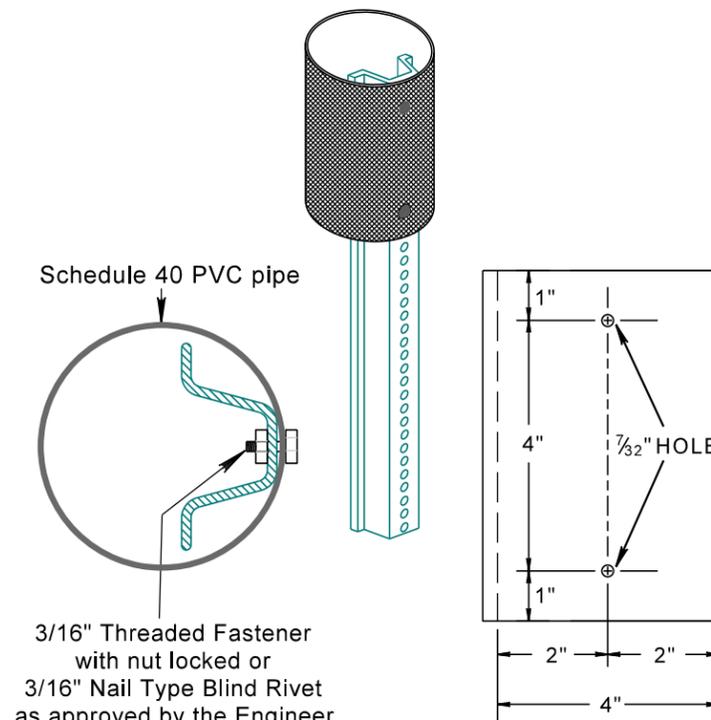
SINGLE 4" X 4" DELINEATOR MOUNTED ON POST



(L)ength varies with Grip Range of Rivet

3/16" Nail Type Blind Rivet with Large Flange Aluminum Rivet and Aluminum Mandrel is shown. An alternative method of fastening, such as two piece 3/16 rivet lock bolt, may be approved by the Engineer.

4" TUBULAR DELINEATOR MOUNTED ON POST



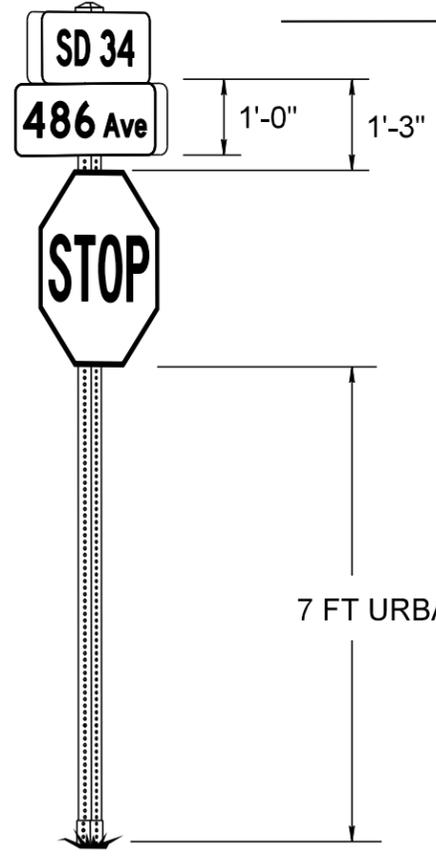
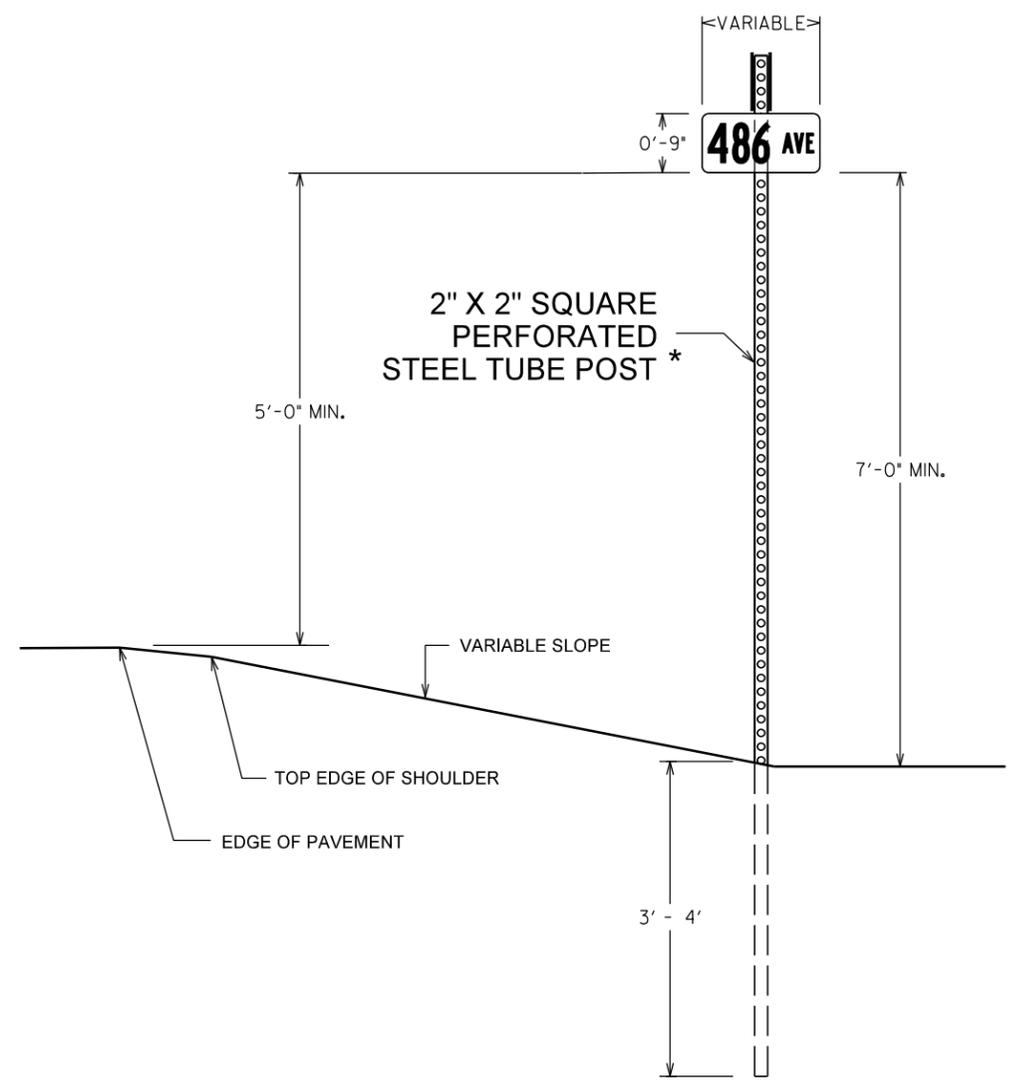
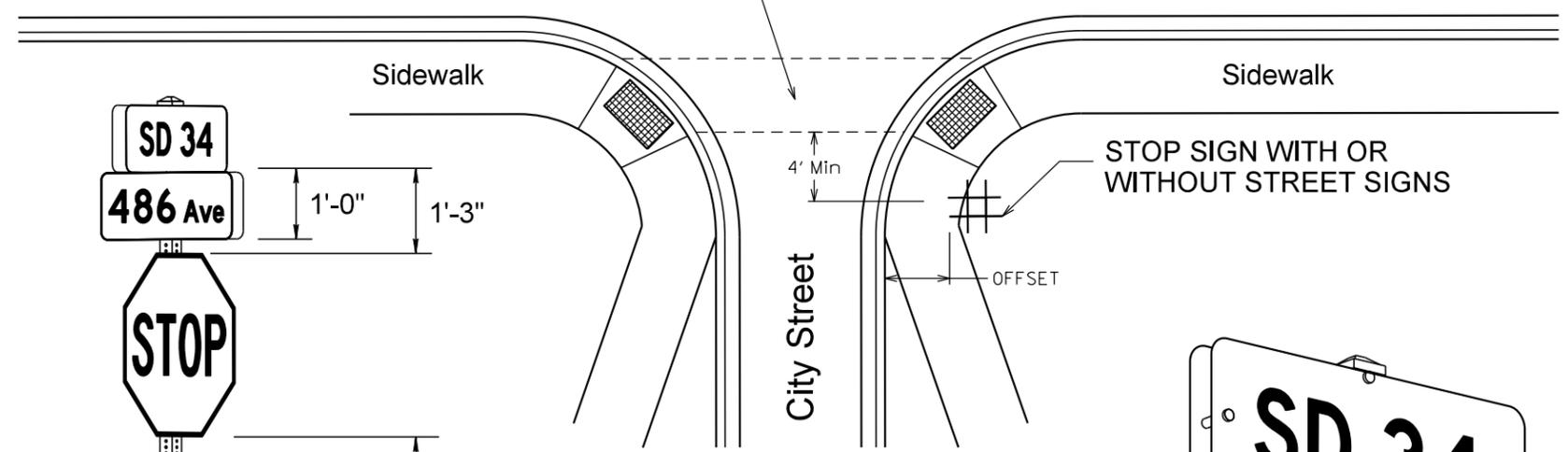
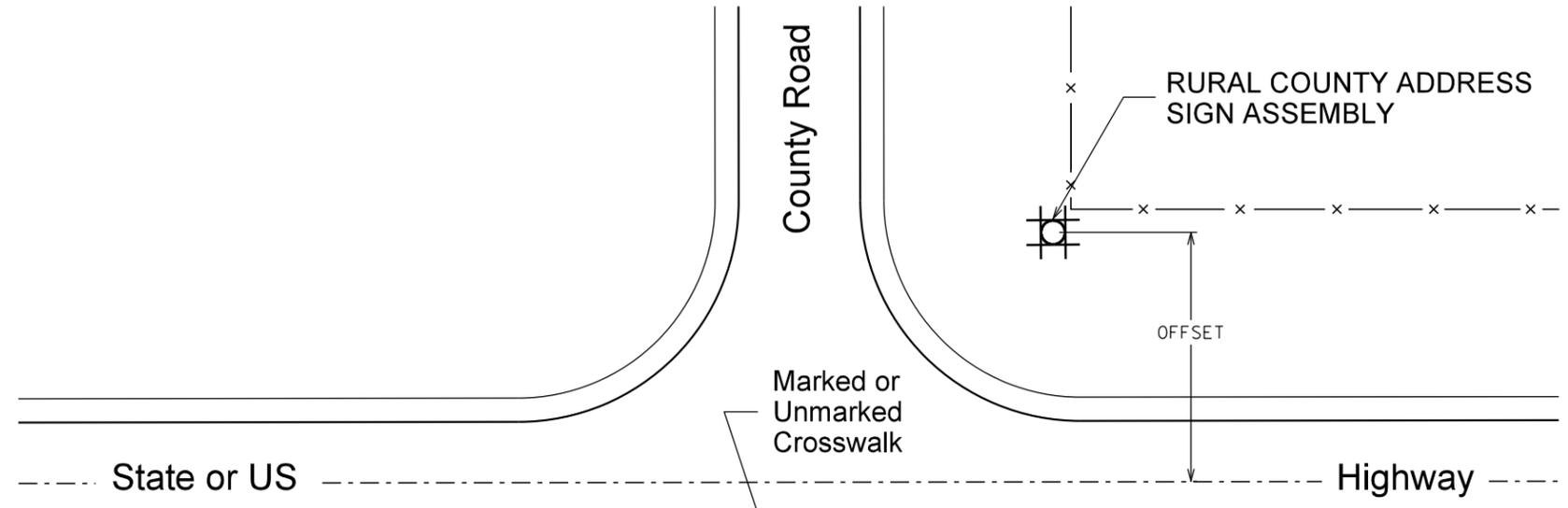
URBAN AND RURAL STREET SIGN INSTALLATION

(TYPICAL)

STATE OF SOUTH DAKOTA	PROJECT P-PH 0011(74)74	SHEET S18	TOTAL SHEETS S26
-----------------------	----------------------------	--------------	---------------------

PLOT SCALE - \$\$SCALE\$\$

PLOT NAME - \$\$PLOTNAME\$\$



URBAN STREET and STOP SIGN ASSEMBLY

TYPICAL INSTALLATION

RURAL COUNTY ADDRESS SIGNING ASSEMBLY

* - Post types and sizes may vary.

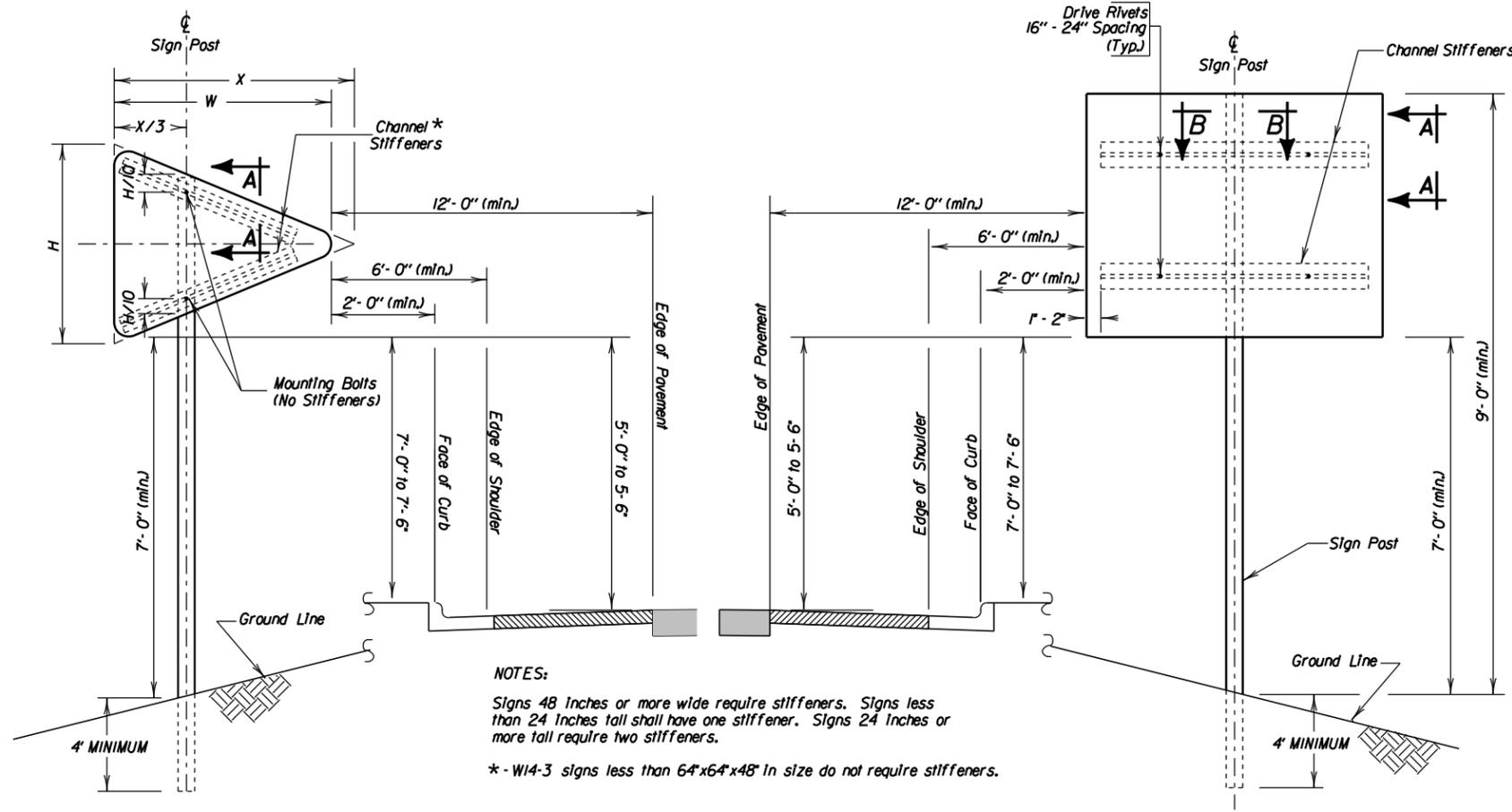
PLOTTED FROM - \$\$USERNAME\$\$

FILE - \$\$FILENAME\$\$

TYPICAL SIGN AND STIFFENER DETAILS

STATE OF SOUTH DAKOTA	PROJECT P-PH 0011(74)74	SHEET S19	TOTAL SHEETS S26
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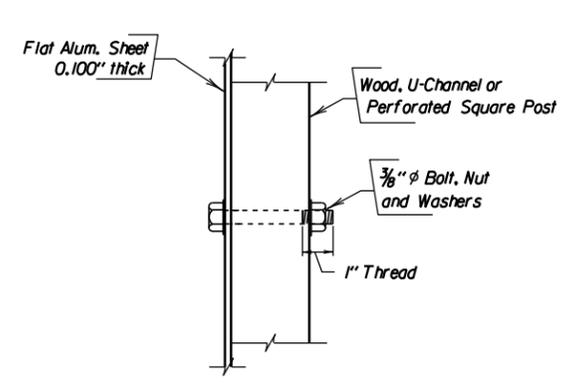
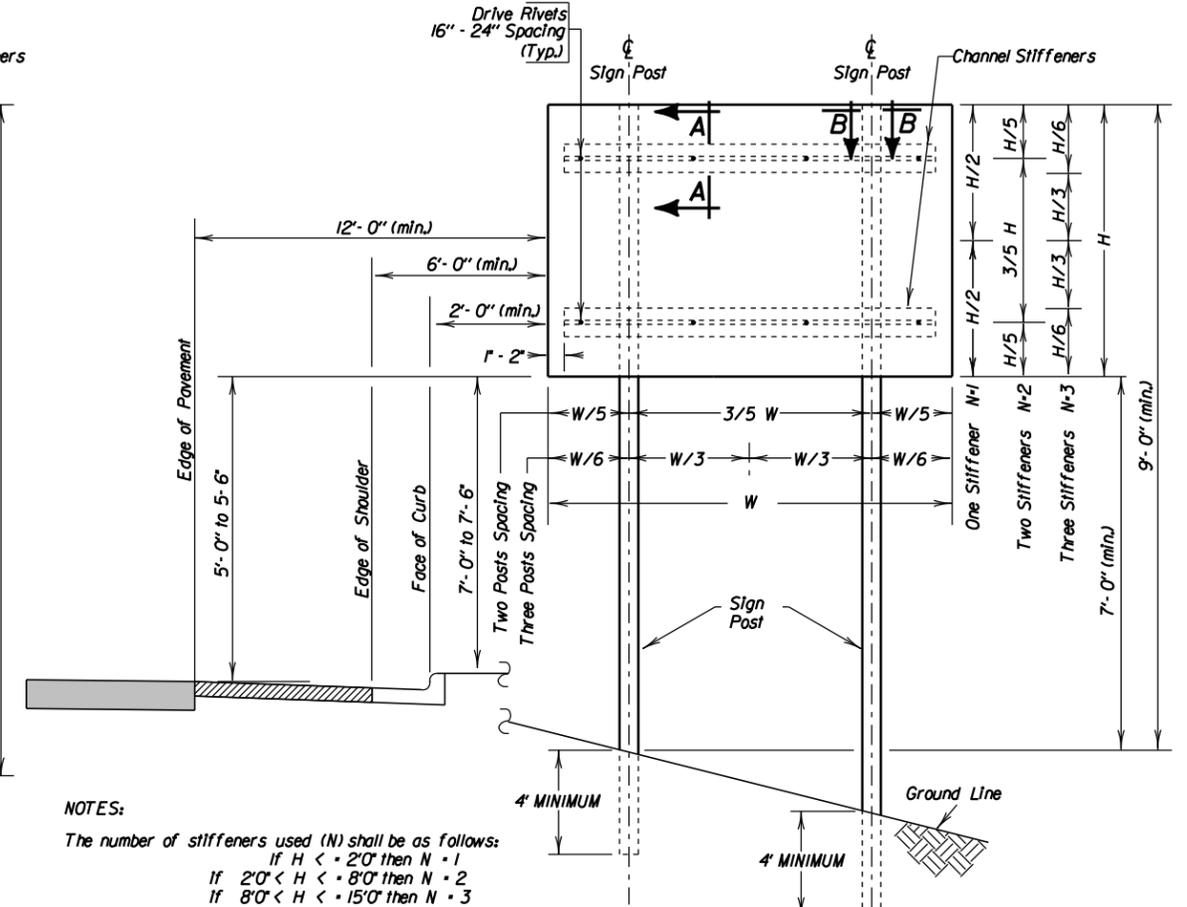
SINGLE POST BREAKAWAY SIGN SUPPORT



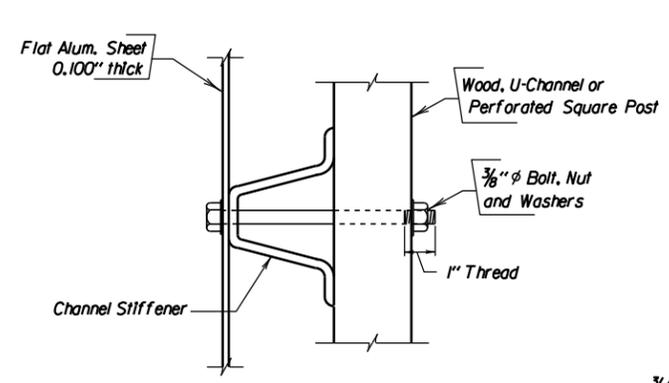
W14-3*

DIRECT DRIVE OR ANCHOR STUB POST

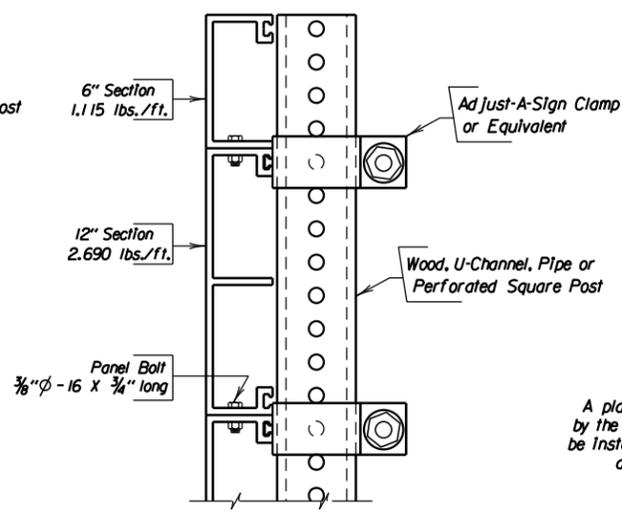
TWO POST BREAKAWAY SIGN SUPPORTS



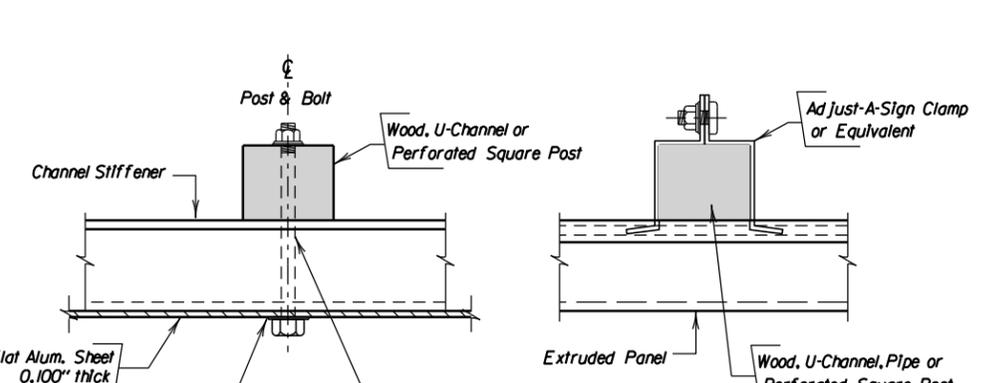
FLAT ALUMINUM



SEC. A-A



EXTRUDED PANEL



FLAT ALUMINUM

EXTRUDED PANEL

SEC. B-B

Alternate sign connection methods may be used if approved by the Engineer.

Sign installations must meet or exceed NCHRP 350 breakaway requirements and be FHWA approved.

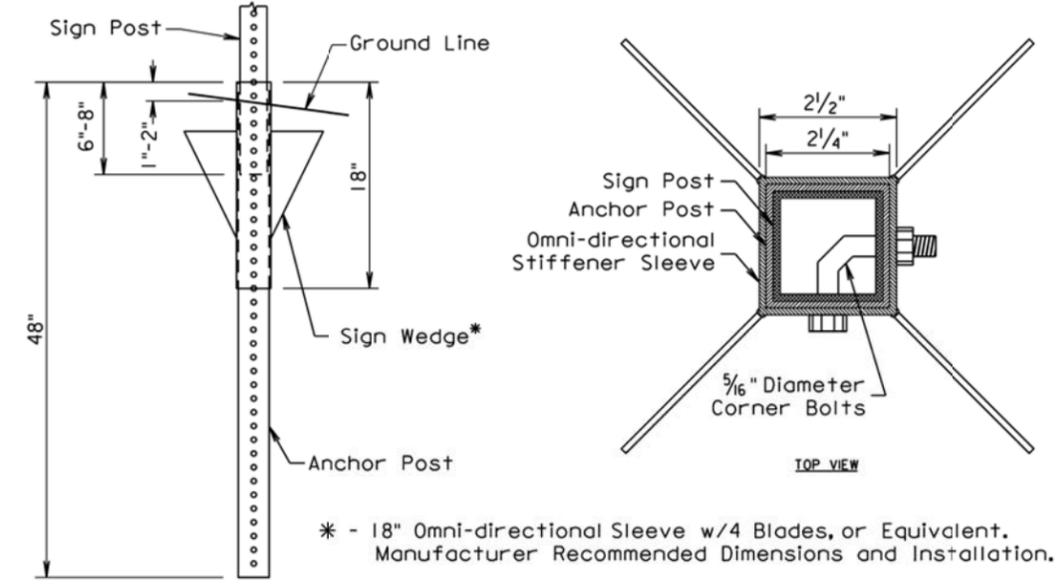
PLOTTED FROM - \$\$SCALE\$\$

PLOTTED FROM - \$\$SCALE\$\$

PLOT NAME - \$\$PLOTNAME\$\$

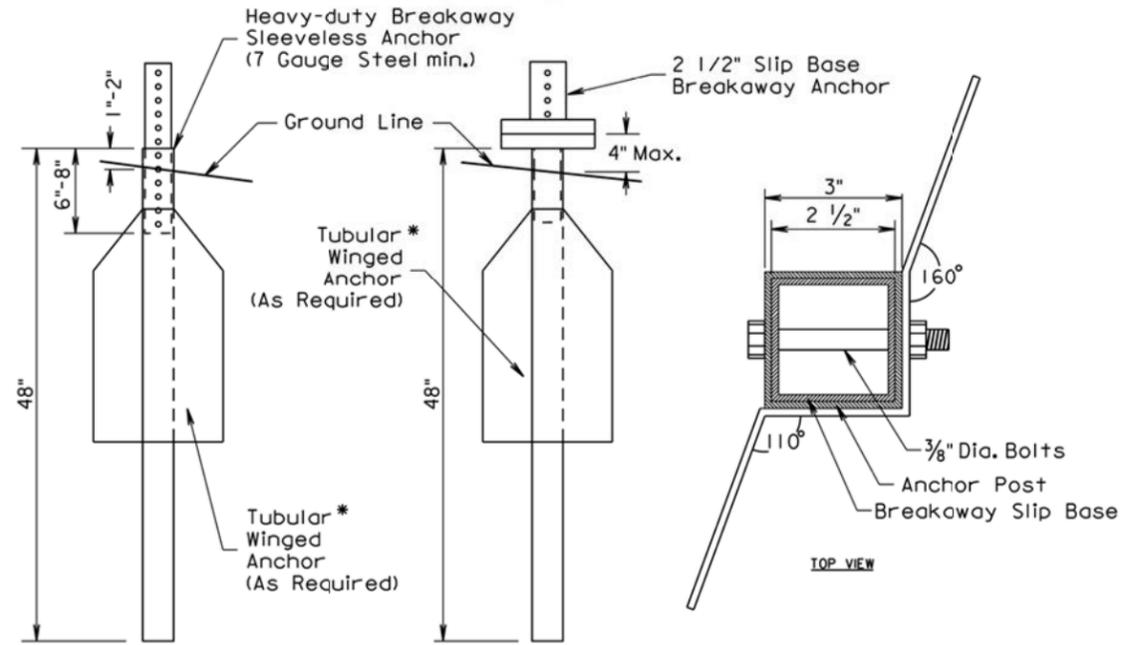
FILE - \$\$FILENAME\$\$

**2" and 2 1/2" SQUARE STEEL PERFORATED TUBE POST
BREAKAWAY WINGED ANCHOR BASE DETAILS
(Typical)**



* - 18" Omni-directional Sleeve w/4 Blades, or Equivalent.
Manufacturer Recommended Dimensions and Installation.

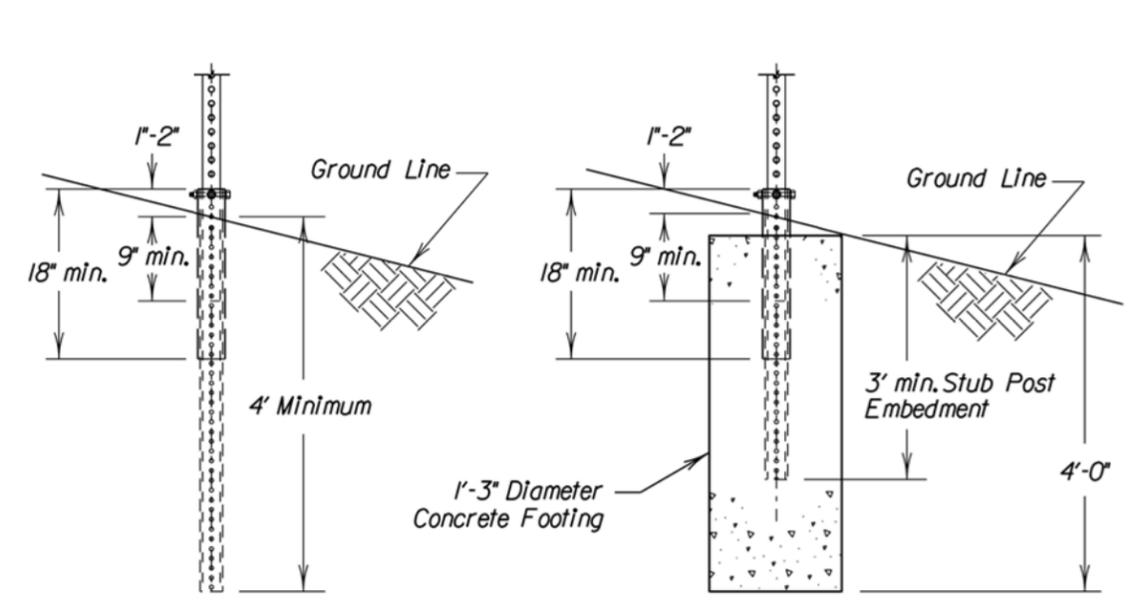
SIGN BASE DETAILS FOR A 2" SIGN POST



* - 7 ga. Tubular Winged Anchor, or Equivalent.
Manufacturer Recommended Dimensions and Installation.

SIGN BASE DETAILS FOR A 2 1/2" SIGN POST

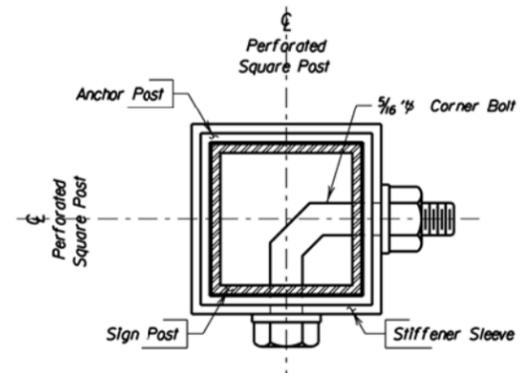
**2" and 2 1/4" SQUARE STEEL PERFORATED TUBE POST
BREAKAWAY TWO-PIECE ANCHOR BASE DETAILS
(Typical)**



DRIVEN ANCHOR

CONCRETE FOOTING ANCHOR

ELEVATION VIEWS



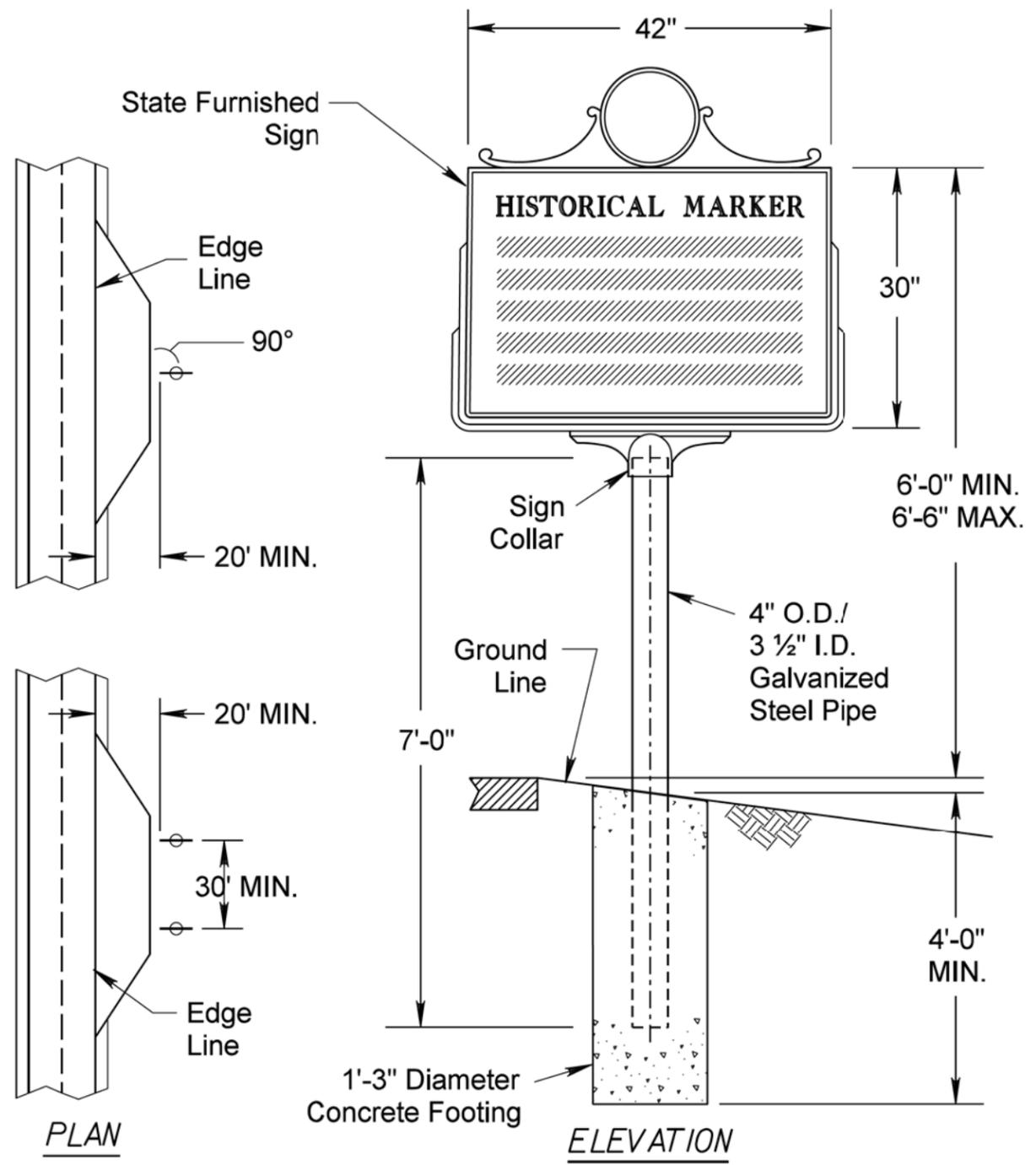
POST X-SECTION VIEW

POST SIZES		
Sign Post	2"	2 1/4"
Anchor Post	2 1/4"	2 1/2"
Stiffener Sleeve	2 1/2"	* 3"

* - 7 Gauge Steel

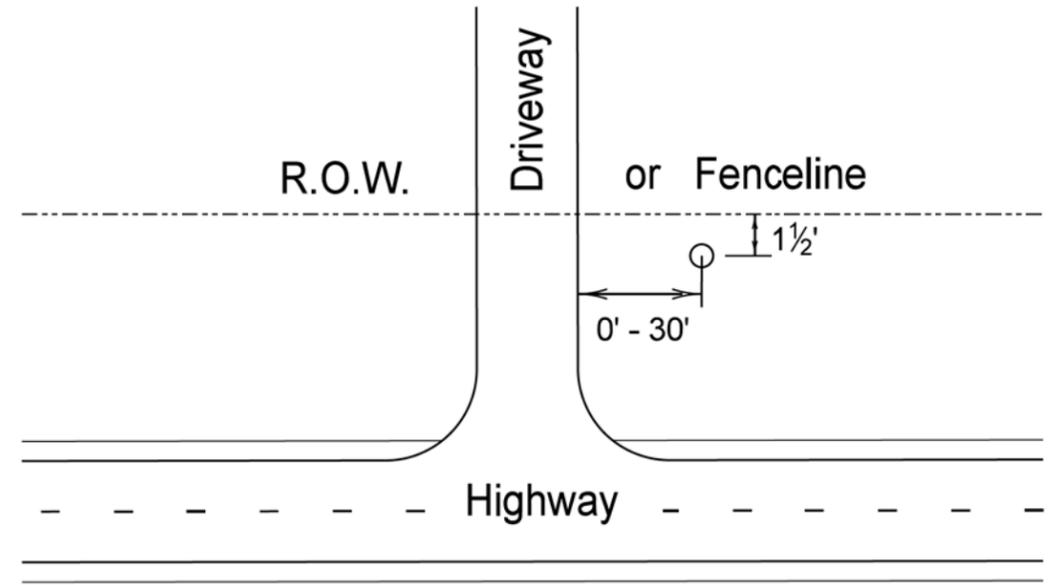
NOTE: Square perforated tube post with breakaway anchor base shall be 12 gauge steel, unless otherwise specified in the plans. Sign installations must meet or exceed NCHRP 350 breakaway requirements and be FHWA approved.

HISTORICAL MARKER INSTALLATION
Single Round Steel Post
with Concrete Footing Details

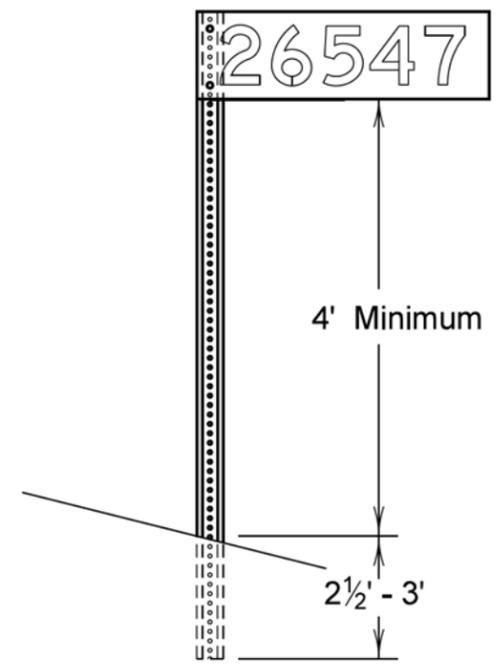


1. All posts shall be galvanized in accordance with ASTM A653, Des. G-90.
2. All hardware shall be galvanized in accordance with ASTM A153.
3. The Historical Marker sign collar hex bolts shall be securely tightened to the post with the sign face at a 90° angle to the edgeline.

DETAILS FOR RURAL ADDRESS SIGN INSTALLATION



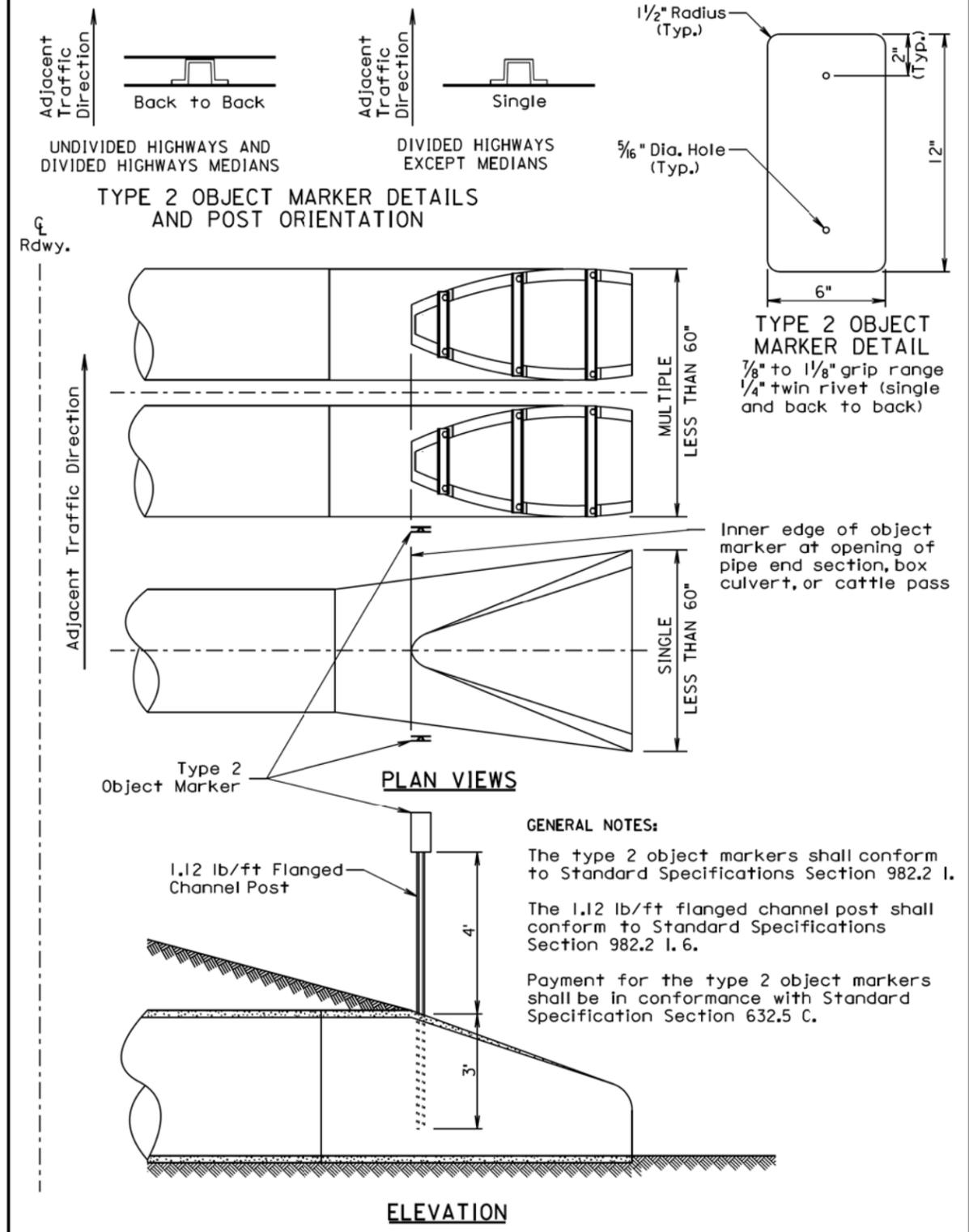
PLAN VIEW



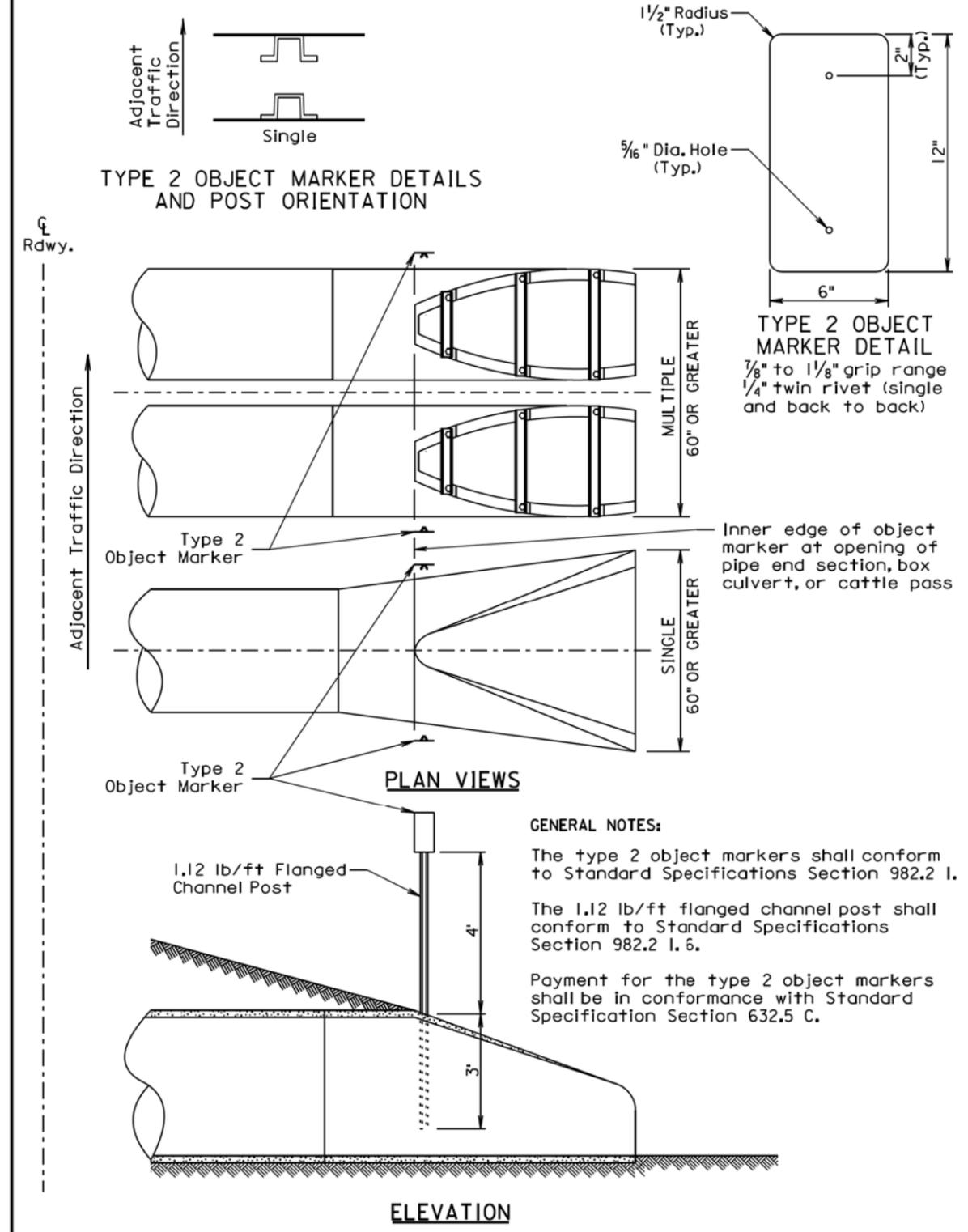
ELEVATION

Plot Scale - \$\$\$scale\$\$\$
Plotted From - \$\$\$username\$\$\$
File - \$\$\$filename\$\$\$

TYPE 2 OBJECT MARKER INSTALLATION AT PIPE CULVERTS, BOX CULVERTS, & CATTLE PASSES – LESS THAN 60" WIDTH



TYPE 2 OBJECT MARKER INSTALLATION AT PIPE CULVERTS, BOX CULVERTS, & CATTLE PASSES – 60" OR GREATER WIDTH

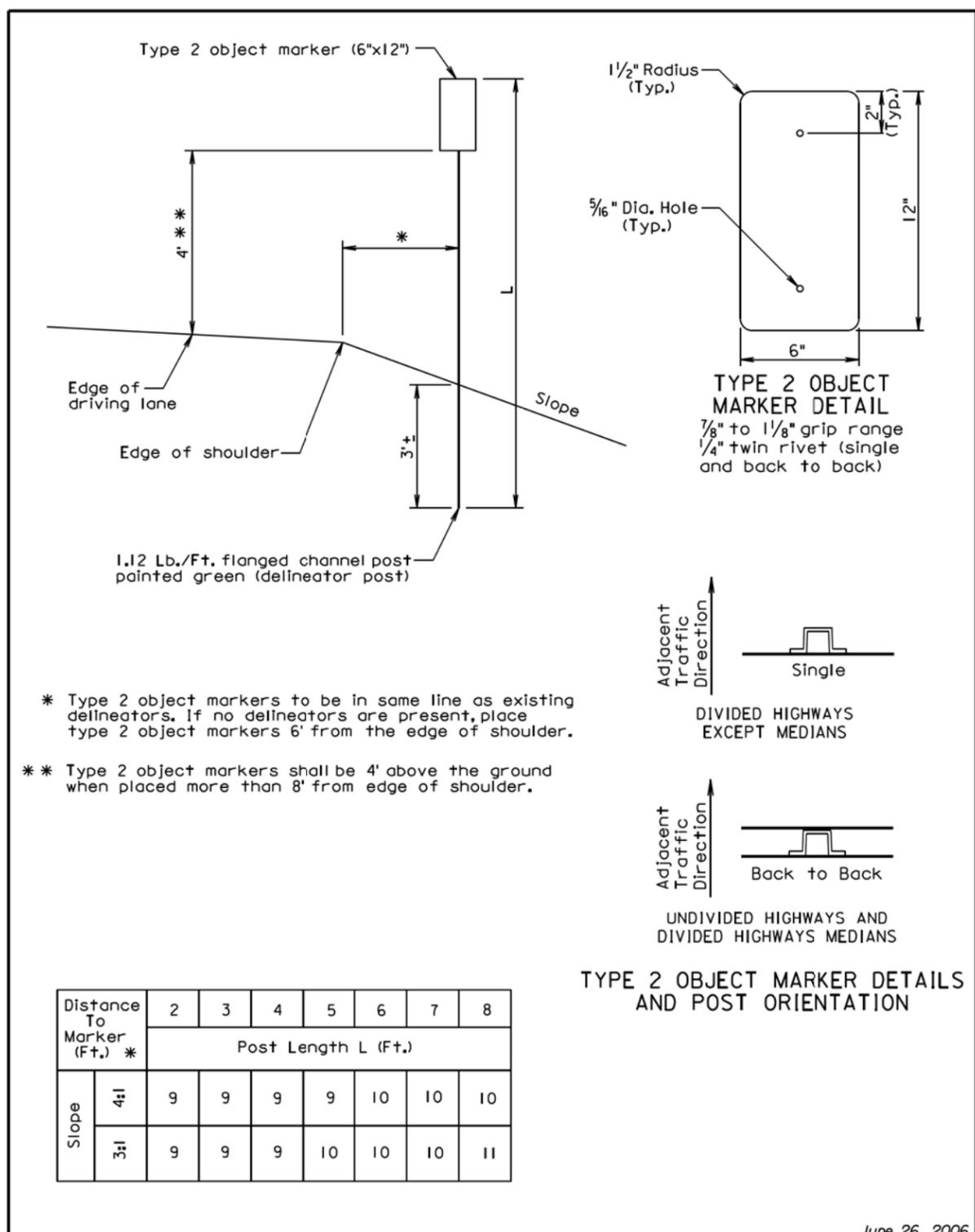


Plot Scale - \$\$\$scale\$\$\$

Plotted From - \$\$\$user\$\$\$

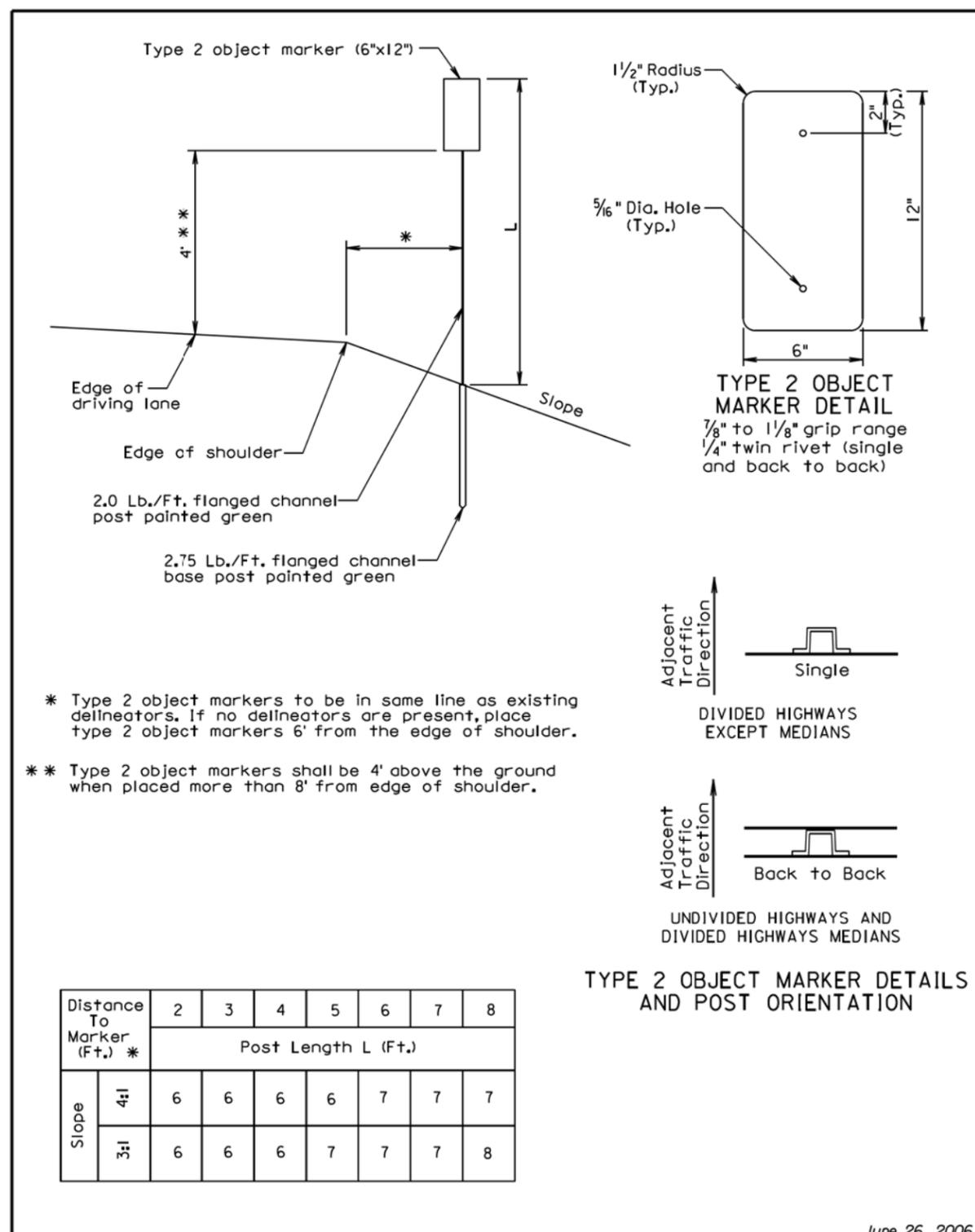
File - \$\$\$filename\$\$\$

Plot Scale - \$\$\$scale\$\$\$
Plotted From - \$\$\$username\$\$\$



June 26, 2006

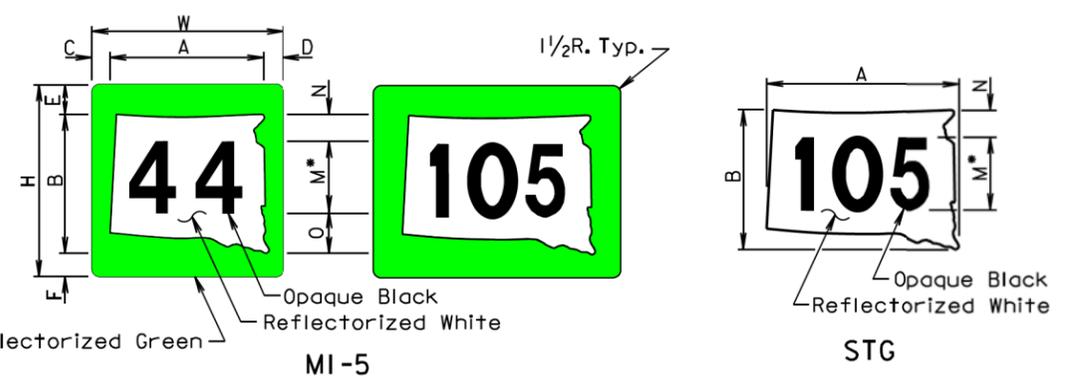
S D D O T	TYPE 2 OBJECT MARKER (DIRECT DRIVE)	PLATE NUMBER 632.01
	Published Date: 4th Qtr. 2014	Sheet 1 of 1



June 26, 2006

S D D O T	TYPE 2 OBJECT MARKER (BREAKAWAY SIGN SUPPORT)	PLATE NUMBER 632.02
	Published Date: 4th Qtr. 2014	Sheet 1 of 1

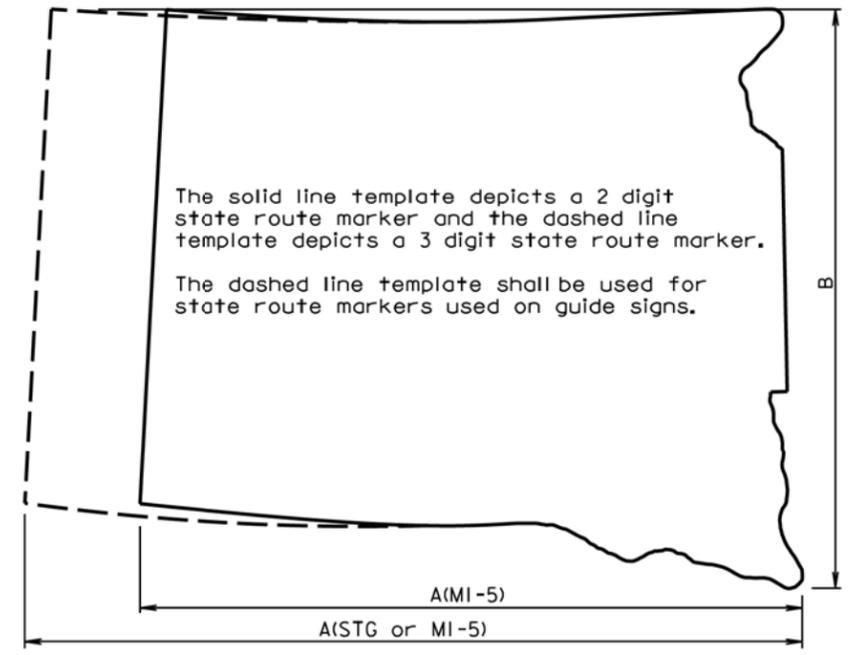
File - \$\$\$filename\$\$\$



SIGN CODE	WxH	A	B	C	D	E	F	M*	N	O
MI-5	24x24	20 1/2	18	2	1 1/2	3 1/2	2 1/2	12D	2	4
MI-5**	30x24	24	18	2 1/4	1 3/4	3 1/2	2 1/2	12D	2	4
MI-5	30x30	25 5/8	22 1/2	2 1/2	1 7/8	4 3/8	3 1/8	15D	2 1/2	5
MI-5	36x36	30 3/4	27	3	2 1/4	5 1/4	3 3/4	18D	3	6

SIGN CODE	AxB	M*	N
STG-24	24x18	10D	4
STG-32	32x24	12D	4 3/4
STG-48	48x36	18D	7
STG-64	64x48	24D	9 1/2

*In the few cases where there is not enough space for the numerals, the standard "D" series font may be replaced with "C" series font if approved by the Engineer.
 ** 3 Digits



TEMPLATE FOR STATE ROUTE MARKER

GENERAL NOTES:
 The unit for all dimensions shown is inches.
 Numerals shall be "D" series font for all state route markers except as noted above.

December 23, 2003

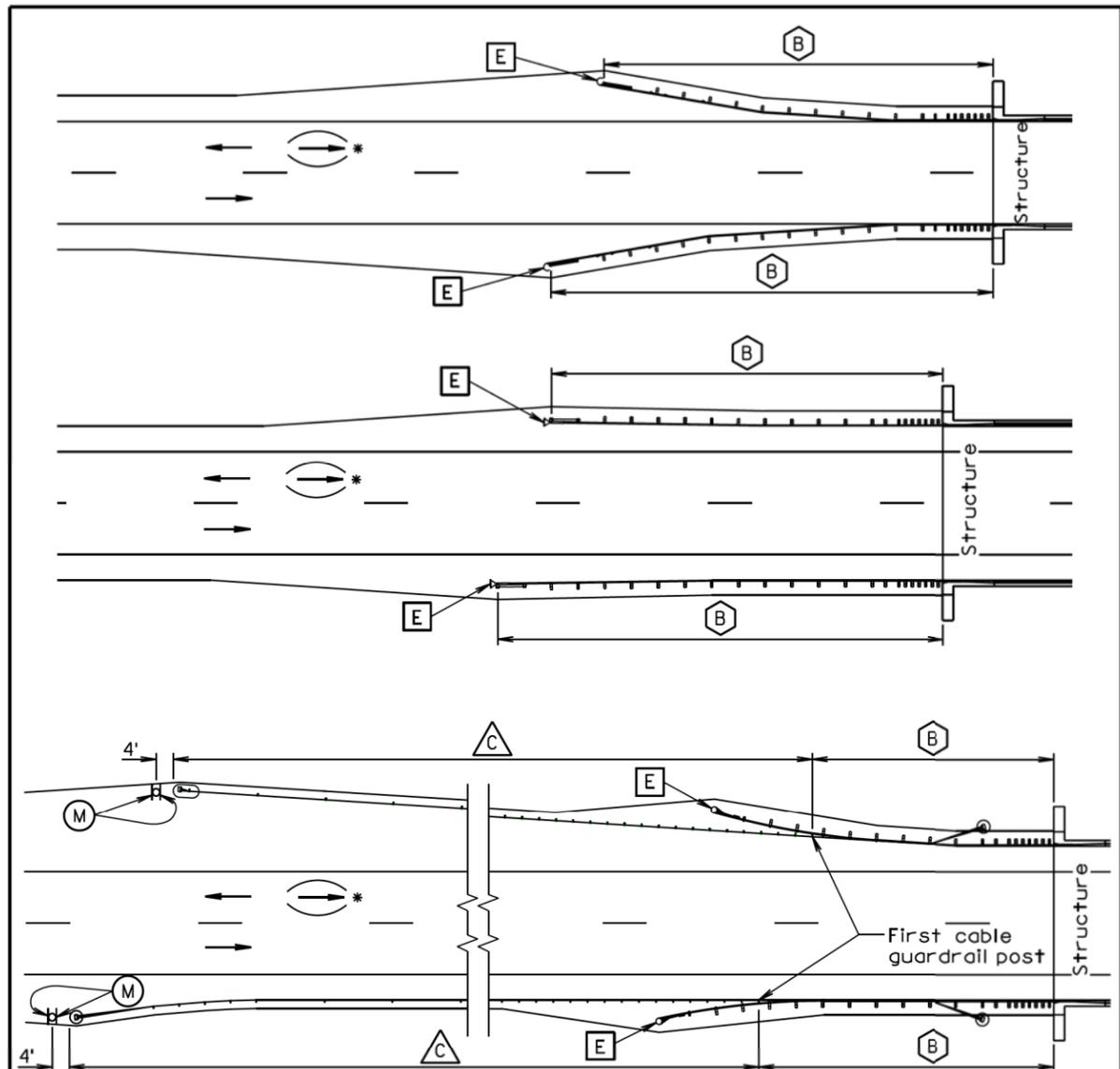
S D D O T	STATE ROUTE MARKERS	PLATE NUMBER 632.20
		Sheet 1 of 1

Published Date: 4th Qtr. 2014

Plot Scale - \$\$scale\$\$

Plotted From - \$\$username\$\$

File - \$\$filename\$\$



TYPICAL GUARDRAIL LAYOUTS

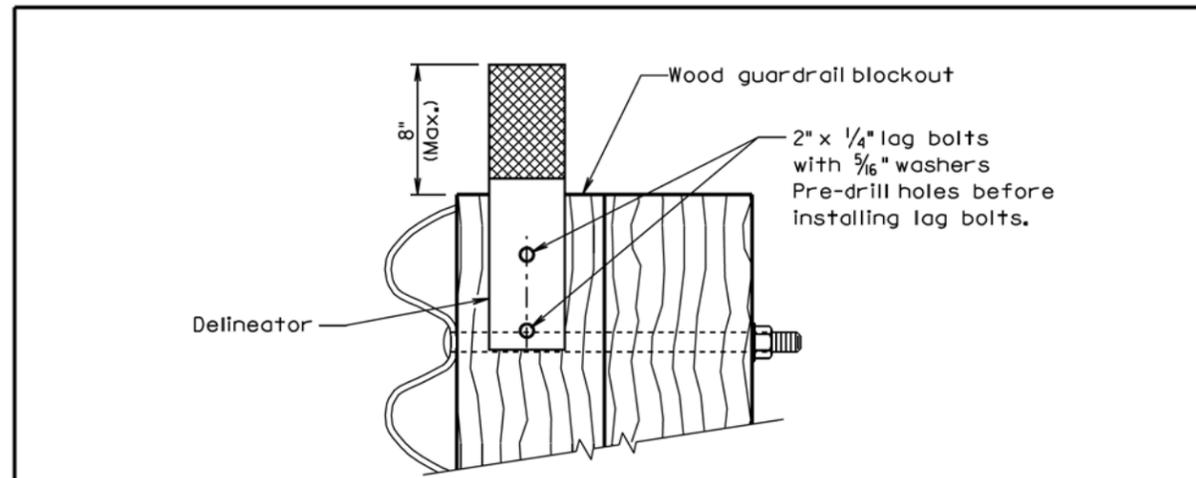
- Steel Beam Guardrail Delineation
- Guardrail Terminal End Object Marker
- 3 Cable Guardrail Delineation
- Type 2 Object Marker

*For two-way traffic, install delineation at the opposite end of structure the same as shown. Back-to-back delineation is required for two-way traffic, single-sided delineation for one-way traffic.

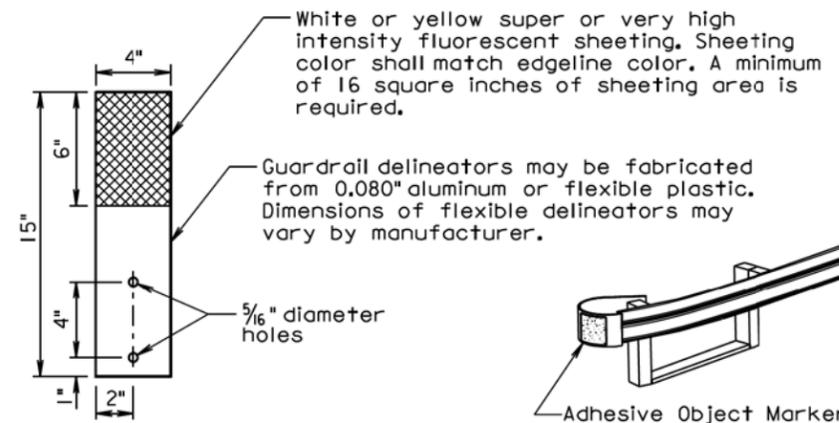
June 26, 2011

S D D O T	DELINEATION OF GUARDRAIL AT BRIDGES	PLATE NUMBER 632.40
		Sheet 1 of 4

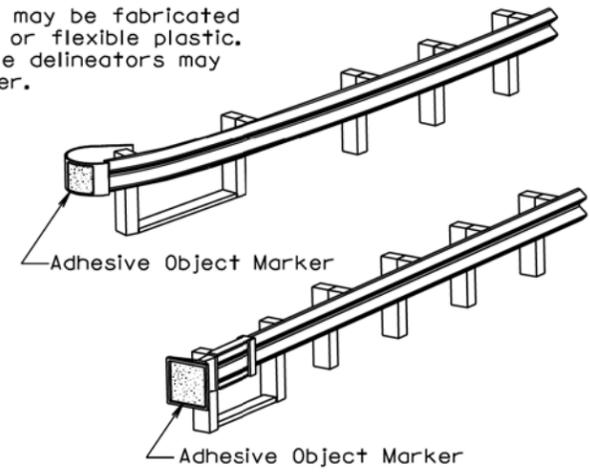
Published Date: 4th Qtr. 2014



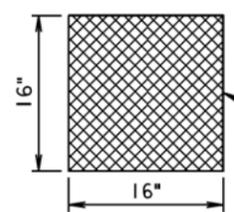
STEEL BEAM GUARDRAIL DELINEATION



DELINEATOR
(For Steel Beam Guardrail)



GUARDRAIL TERMINAL END OBJECT MARKER



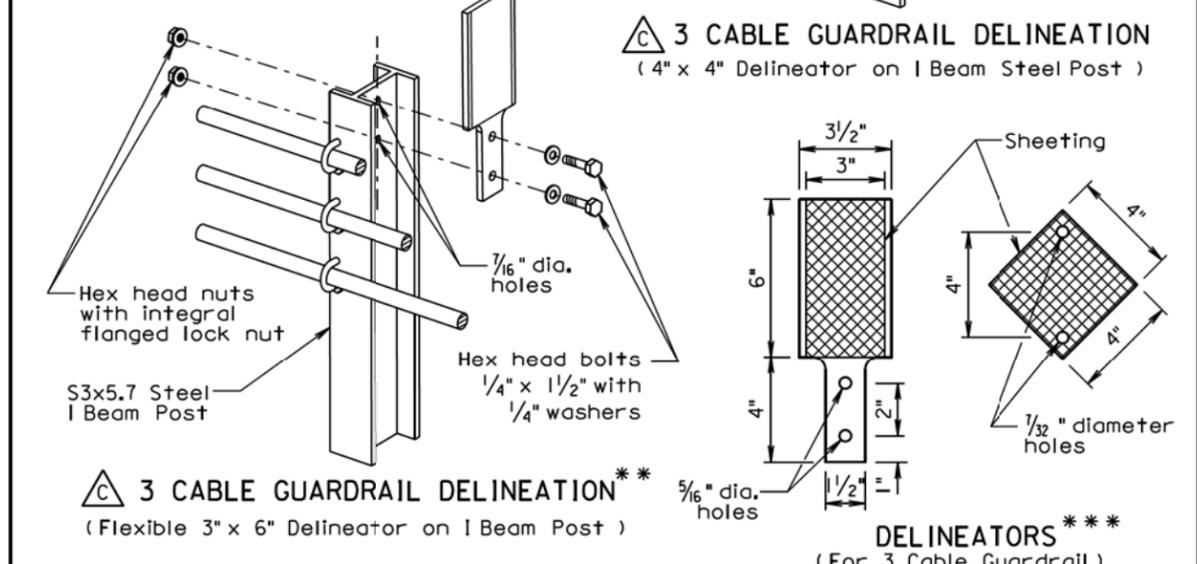
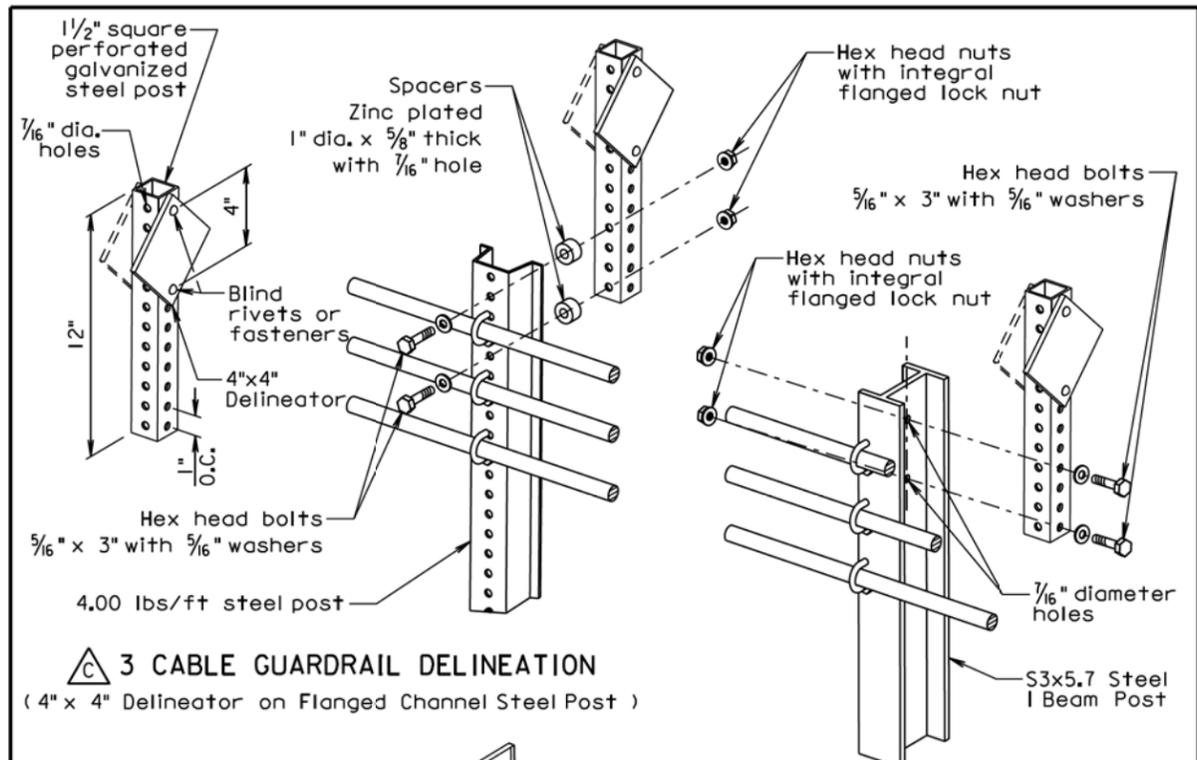
ADHESIVE OBJECT MARKER

Adhesive object marker dimensions may vary due to shape of terminal end. A minimum of 256 square inches of object marker sheeting area is required. The sheeting shall be fluorescent yellow super or very high intensity.

June 26, 2011

S D D O T	DELINEATION OF GUARDRAIL AT BRIDGES	PLATE NUMBER 632.40
		Sheet 2 of 4

Published Date: 2nd Qtr. 2014



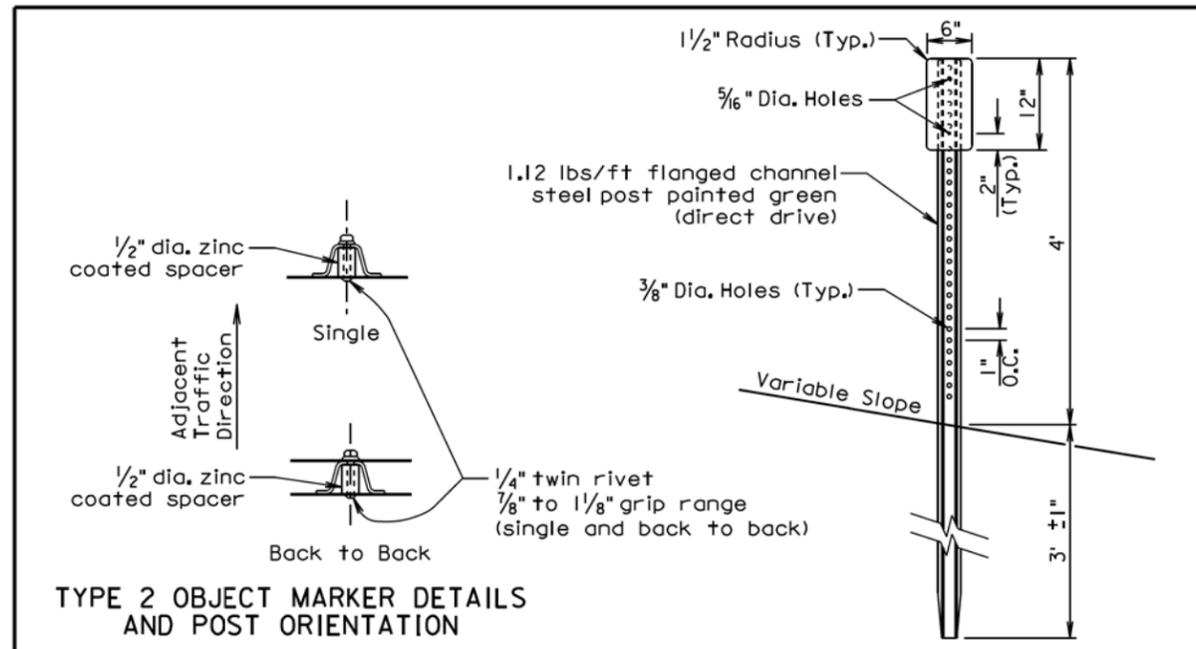
** Flexible delineators may be attached to post with manufacturer approved adhesive instead of bolts.

*** Dimensions of flexible delineators may vary by manufacturer. A minimum of 16 square inches of sheeting area is required. The sheeting shall be white or yellow super or very high intensity fluorescent sheeting. The sheeting color shall match the edgeline color.

June 26, 2011

S D D O T	DELINEATION OF GUARDRAIL AT BRIDGES	PLATE NUMBER 632.40
		Sheet 3 of 4

Published Date: 2nd Qtr. 2014



TYPE 2 OBJECT MARKER DETAILS AND POST ORIENTATION

GENERAL NOTES:

The delineators shall be covered with a minimum of 16 square inches of reflective sheeting. The reflective sheeting shall be of either very high intensity or super high intensity material. For bridges along two-way roadways the sheeting shall be on both sides of the delineator and shall be white in color. For one-way roadways the sheeting will only be required on the side facing traffic and the color will be the same as the nearest pavement marking, yellow on the left side of the roadway and white on the right side.

The first delineator shall be attached to the post nearest the bridge with additional delineators spaced in advance of the bridge at approximately 50 foot intervals. At bridges with short lengths of guardrail, less than 200 feet, a minimum of 4 delineators shall be placed in addition to the yellow object marker. The spacing between the delineators shall be approximately one third of the length of the guardrail. This will provide for a shorter spacing. At bridges with longer lengths of guardrail, greater than 200 feet, including bridges that have cable guardrail transitioning into the steel beam guardrail, the delineators will be placed at a spacing of approximately 50 feet. Delineation shall extend throughout the length of the guardrail system.

All costs for furnishing and installing single or back to back guardrail delineation shall be included in the contract unit price per each for "Guardrail Delineator".

An adhesive object marker shall be placed on the end of the W beam guardrail end terminal. The adhesive object marker dimensions may vary due to the shape of the terminal end. A minimum of 256 square inches of object marker reflective sheeting area is required. The reflective sheeting shall be fluorescent yellow super or very high intensity. All costs for furnishing and installing the adhesive object marker shall be incidental to various contract items.

A type 2 object marker shall be placed adjacent to the 3 cable guardrail anchor at the location noted on sheet 1 of this standard plate. The type 2 object marker (6" x 12") shall have a fluorescent yellow very high or super high intensity reflective sheeting. All costs for furnishing and installing the type 2 object marker including the steel post, 6" x 12" reflective panel, and hardware shall be included in the contract unit price per each for "Type 2 Object Marker" for single-sided and "Type 2 Object Marker Back to Back" for back to back type 2 object markers.

June 26, 2011

S D D O T	DELINEATION OF GUARDRAIL AT BRIDGES	PLATE NUMBER 632.40
		Sheet 4 of 4

Published Date: 2nd Qtr. 2014