

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	S1	S21

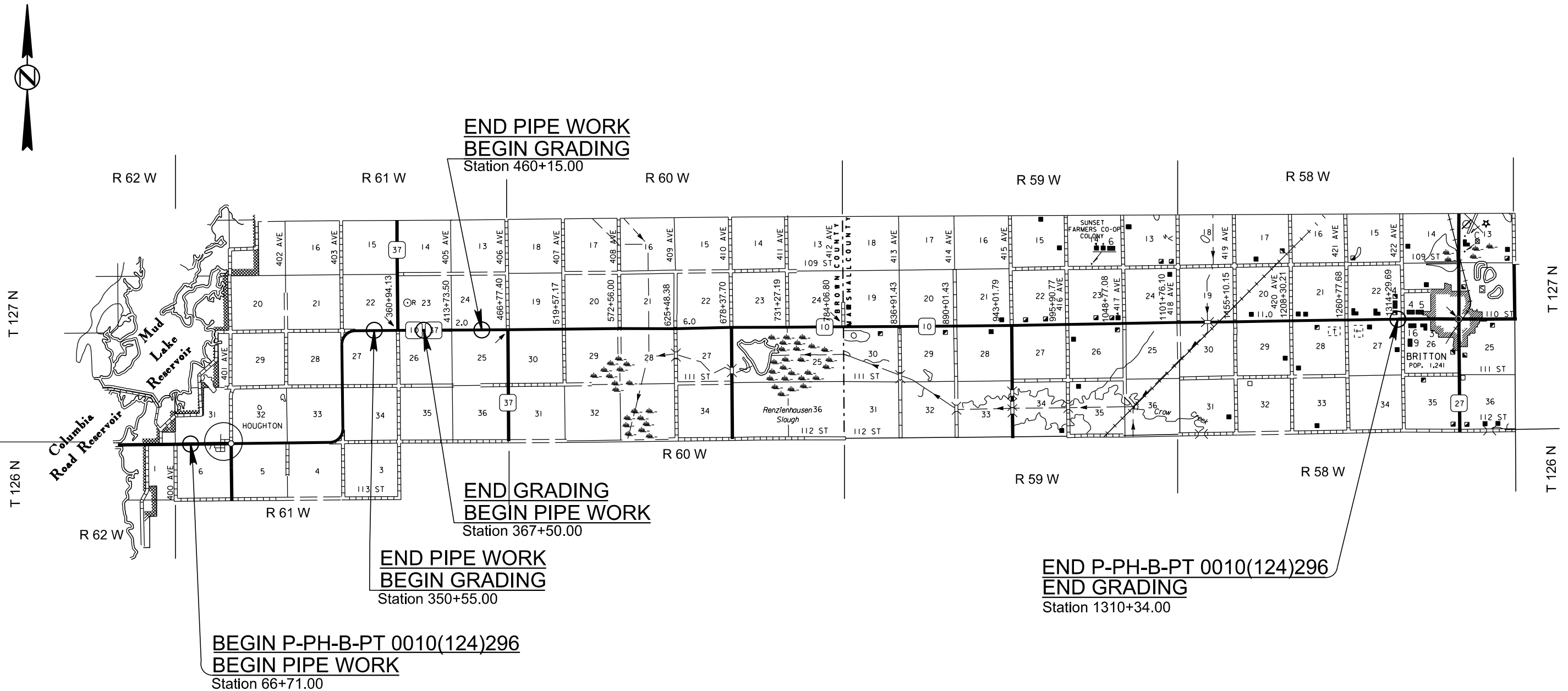
Plotting Date: 01/05/2024

Revised 01/05/2024 AT

Section S: PERMANENT SIGN PLANS

INDEX OF SHEETS

- S1 General Layout with Index
- S2-S3 Estimate of Quantities and Plan Notes
- S4 Delineation Table
- S5-S11 Permanent Sign Installation
- S12 Sign Summary
- S13-15 Special Sign Design
- S16 Sign Installation Details
- S17-S21 Standard Plates



PLOT SCALE - 1:200

PLOTTED FROM - TRAB10100

PLOT NAME - 1

FILE - ... \SECTION S\05F4_TITLES.DGN

SECTION S – ESTIMATE OF QUANTITIES – PCN 05F4

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	S2	S21

Revised 01/22/2024 AT

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	237	Each
632E1320	2.0"x2.0" Perforated Tube Post	1,497.5	Ft
632E2510	Type 2 Object Marker Back to Back	194	Each
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	514.7	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	340.1	SqFt

All costs associated with the removal of existing signs, posts, hardware, and backfilled holes will be incidental to the contract unit price per each for "Remove Traffic Sign". Quantities will be per assembly at the contract unit price per each.

REMOVE SIGN FOR RESET AND RESET SIGN

Any 911 Emergency Number signs within the project work limits will not be stockpiled but temporarily repositioned at a location outside the work limits but within the immediate proximity of the existing location. To complete the project sign work, the 911 Emergency Number signs will be permanently installed at their original locations, or as near as practicable where entrances have been reconfigured by the project. The existing supports will be reused. Cost for removing and temporarily repositioning 911 Emergency Number signs will be incidental to various contract items.

NEW PERMANENT SIGNING

All signs will be manufactured in accordance with the sheeting manufacturer's recommendations utilizing a matched component system, including inks, electronic cuttable films, and protective overlay films.

All Flat Aluminum Signs, Nonremovable Copy High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type IV. All Flat Aluminum Signs, Nonremovable Copy Super/Very High Intensity will have sheeting in conformance with the requirements of ASTM D4956 Type XI.

All costs associated with furnishing and installing the new permanent signs, and with furnishing and installing stiffeners and hardware will be incidental to the contract unit price per square foot for "Flat Aluminum Sign, Nonremovable Copy High Intensity" or "Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity".

DIGITALLY PRINTED SIGNS

Digitally printed signs will be allowed on this project. If the Contractor elects to provide digitally printed signs, such signs will adhere to the following specifications.

PROTECTIVE OVERLAY FILM

Permanent traffic signs printed with digital ink systems will be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlaminates will comply with the retroreflective sheeting manufacturer's recommendations to ensure proper adhesion and transparency and will also meet the reflective film durability as identified in Table 1.

Table 1: Retroreflective Film Minimum Durability Requirements

ASTM D4956 Type	Full Sign Replacement Term (years)	Sheeting Replacement Term (years)
I	0	7
III	7	10
IV	7	10
VIII	7	10
IX	7	12
XI	7	12

FABRICATION

Retroreflective sheeting will be applied to a properly cleaned and prepared aluminum sign blank in accordance with the retroreflective sheeting manufacturer's recommendations. Sign legend will be applied using digital print technologies and systems in accordance with the retroreflective sheeting manufacturer's recommendations and the requirements of these plans.

Finished signs will be free of ragged edges and must be supplied clean and free of scratches, grease, oil, lubricants or other contaminants. Minor blemishes (dirt speck, dust, etc.) may settle on the fresh ink surface or become entrapped between the sheeting surface and transparent overlay film due to static charge within the sign shop environment. Any blemish must be minor and not interfere with the communication of the sign message to the motorist. The blemish must not be visible to the naked eye when viewed from 30 feet or greater.

After application of the retroreflective sheeting, sign blanks will be stacked and packaged face to face, back to back, and protected in accordance with the sheeting manufacturer's recommendations. Finished signs will be securely packaged to prevent damage during transit or storage according to the sheeting manufacturer's recommendations.

TRAFFIC SIGN PERFORMANCE WARRANTY PROVISIONS

Based on the ASTM Type of sheeting specified, traffic control signs will be warranted for the duration shown in Table 1. Full product terms and conditions are as established by each sheeting manufacturer and may contain certain limitations based on sheeting and ink colors, and geographic exposure of the sign. A copy of the warranty document with complete details of terms and conditions will be supplied if requested by the Engineer.

CERTIFIED DIGITAL SIGN FABRICATOR

Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

DATE TAGGING SIGNS WITH PERTINENT INFORMATION

All digitally printed signs are required to be date-tagged with the following 2 components:

1. Date tags on the back of signs
Tags will have the following information and be fabricated with material and printing system that are as durable as the warranted sign.
 - Name of Sign Fabricator
 - Date the sign was fabricated (month and year)
 - Process that was used for sign fabrication (digitally printed)
 - Supplier of sheeting that was used for fabricating the sign.

GENERAL PERMANENT SIGNING

New sign installations will be staked in the field by the Contractor and checked by the Engineer. The Contractor will give the Engineer a minimum of one week to check staked locations prior to signpost installation. Lateral offset of signs will be as shown in the plans or as directed by the Engineer.

The Contractor will be responsible for contacting South Dakota One Call to locate the utilities at the staked sign installation locations.

When signs are mounted in an assembly, they will be 1-2 inches apart vertically and horizontally.

The height of the post must not exceed the minimum height needed by more than 0.5 feet. Any portion that extends above the sign will be cut off. No separate payment will be made for cutting the post or for that length cut off.

Aluminum U-Channel stiffeners will be used on all signs 36 inches or greater in width and will conform to ASTM B221 Alloy 6063-T6 or 6061-T6. The U-Channel will be 2 inches in width and free of holes. The U-Channel stiffeners will also be used to connect various signs together so that an entire sign assembly can be erected on a single installation. Stiffeners may be fastened to signs by use of 1/4-inch diameter drive rivets.

The Contractor will use 3/8-inch diameter rust proof machine sign bolts, flat metal washers, neoprene washers (against the sign sheeting), lock washers, and nuts to fasten the sign to the channel aluminum and posts. A minimum of two bolts will extend through each post.

Prior to ordering signs, the Contractor will verify dimensions, background, border, and legend of the signs.

Prior to use, the Contractor will provide documentation for the sign support devices showing they meet the applicable NCHRP 350 or MASH requirements.

REMOVE TRAFFIC SIGN

Existing signs that are shown as being removed in the Permanent Signing Table will become the property of the Contractor. Existing signposts and bases will be removed in their entirety. All existing signs, posts, and/or hardware removed will not be reused. Holes remaining from the removal of wood posts will be backfilled and compacted with material placed in layers not to exceed 6 inches in depth.

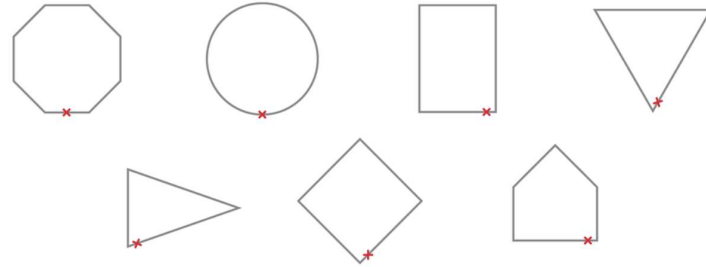
DIGITALLY PRINTED SIGNS (CONTINUED)

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	S3	S21

Revised 01/05/2024 AT

DATE TAGGING SIGNS WITH PERTINENT INFORMATION (CONTINUED)

2. Border date
The month and year (mm/yyyy) of sign fabrication will be printed in the border of the sign in 3/8" sans serif font. Border date will be printed with the same warranted printed system as the sign face. The date should be printed in the locations indicated below.



SQUARE TUBE ANCHOR SLEEVE

The Contractor will furnish and install new 2.5" x 2.5" x 18", 12 Gauge square tube anchor sleeve or equivalent components as approved by the Engineer for 2.0" x 2.0" perforated tube posts. A 2.25" x 2.25" x 4", 12 Gauge perforated tube post will be used as the anchor post for installation with the square tube anchor sleeve.

MILEAGE REFERENCE MARKERS

Mileage Reference Markers (MRMs) are not to be disturbed. If an MRM is attached to a sign listed for replacement it will be salvaged and reattached to the new sign in the same location. Payment for this work will be incidental to the various signing contract items.

Object Marker Table

Station	Type 2 Object Marker Back-to-Back (Each)	Description	Station	Type 2 Object Marker Back-to-Back (Each)	Description	Station	Type 2 Object Marker Back-to-Back (Each)	Description	Station	Type 2 Object Marker Back-to-Back (Each)	Description
358+38	2	1 Each Side of Road	650+10	1	1 Left Side of Road	862+84	2	1 Each Side of Road	1158+15	2	1 Each Side of Road
360+54	1	1 Left Side of Road	650+74	1	1 Left Side of Road	884+19	2	1 Each Side of Road	1169+50	1	1 Right Side of Road
360+66	1	1 Right Side of Road	651+51	1	1 Right Side of Road	889+73	1	1 Left Side of Road	1169+52	1	1 Left Side of Road
361+20	1	1 Right Side of Road	651+75	1	1 Left Side of Road	889+73	1	1 Right Side of Road	1170+14	1	1 Left Side of Road
361+34	1	1 Left Side of Road	652+27	1	1 Right Side of Road	890+29	1	1 Left Side of Road	1170+16	1	1 Right Side of Road
464+42	1	1 Left Side of Road	652+41	1	1 Left Side of Road	890+29	1	1 Right Side of Road	1192+42	2	1 Each Side of Road
465+16	1	1 Left Side of Road	659+07	2	1 Each Side of Road	919+21	2	1 Each Side of Road	1207+97	1	1 Left Side of Road
481+87	2	1 Each Side of Road	676+34	2	1 Each Side of Road	931+63	2	1 Each Side of Road	1208+59	1	1 Left Side of Road
484+36	1	1 Right Side of Road	678+97	2	1 Each Side of Road	939+39	2	1 Each Side of Road	1210+45	1	1 Left Side of Road
485+14	1	1 Right Side of Road	693+34	2	1 Each Side of Road	942+69	1	1 Left Side of Road	1210+91	1	1 Left Side of Road
509+63	1	1 Right Side of Road	697+81	1	1 Left Side of Road	943+35	1	1 Left Side of Road	1222+51	1	1 Left Side of Road
509+91	1	1 Right Side of Road	698+49	1	1 Left Side of Road	957+49	1	1 Left Side of Road	1223+15	1	1 Left Side of Road
510+33	1	1 Right Side of Road	705+35	2	1 Each Side of Road	958+09	1	1 Left Side of Road	1229+61	1	1 Right Side of Road
510+43	1	1 Right Side of Road	710+66	2	1 Each Side of Road	965+02	1	1 Right Side of Road	1230+65	1	1 Right Side of Road
514+18	2	1 Each Side of Road	723+29	1	1 Left Side of Road	965+52	1	1 Right Side of Road	1231+69	1	1 Right Side of Road
522+31	2	1 Each Side of Road	724+03	1	1 Left Side of Road	968+04	2	1 Each Side of Road	1232+73	1	1 Right Side of Road
522+91	2	1 Each Side of Road	730+67	2	1 Each Side of Road	980+03	2	1 Each Side of Road	1234+26	1	1 Right Side of Road
559+55	2	1 Each Side of Road	731+87	2	1 Each Side of Road	987+04	2	1 Each Side of Road	1234+45	1	1 Left Side of Road
572+19	1	1 Right Side of Road	742+73	2	1 Each Side of Road	995+64	1	1 Right Side of Road	1235+17	1	1 Left Side of Road
572+58	1	1 Left Side of Road	743+33	2	1 Each Side of Road	996+20	1	1 Right Side of Road	1235+30	1	1 Right Side of Road
572+87	1	1 Right Side of Road	765+33	2	1 Each Side of Road	1020+25	1	1 Left Side of Road	1256+12	2	1 Each Side of Road
573+22	1	1 Left Side of Road	765+83	2	1 Each Side of Road	1020+93	1	1 Left Side of Road	1257+17	1	1 Right Side of Road
578+86	2	1 Each Side of Road	778+33	2	1 Each Side of Road	1032+27	2	1 Each Side of Road	1257+75	1	1 Right Side of Road
598+57	1	1 Right Side of Road	791+16	2	1 Each Side of Road	1046+00	1	1 Right Side of Road	1260+44	1	1 Left Side of Road
599+49	1	1 Right Side of Road	810+07	1	1 Right Side of Road	1046+56	1	1 Left Side of Road	1260+46	1	1 Right Side of Road
599+84	2	1 Each Side of Road	810+11	1	1 Left Side of Road	1046+64	1	1 Right Side of Road	1261+08	1	1 Right Side of Road
607+47	1	1 Left Side of Road	810+81	1	1 Left Side of Road	1047+20	1	1 Left Side of Road	1261+14	1	1 Left Side of Road
608+05	1	1 Left Side of Road	810+85	1	1 Right Side of Road	1048+46	1	1 Right Side of Road	1266+82	2	1 Each Side of Road
611+80	2	1 Each Side of Road	819+95	1	1 Left Side of Road	1049+08	1	1 Right Side of Road	1277+51	2	1 Each Side of Road
618+58	1	1 Left Side of Road	819+96	1	1 Right Side of Road	1051+32	2	1 Each Side of Road	1295+80	2	1 Each Side of Road
618+59	1	1 Right Side of Road	820+60	1	1 Right Side of Road	1074+86	1	1 Left Side of Road	1300+87	1	1 Left Side of Road
619+23	1	1 Right Side of Road	820+61	1	1 Left Side of Road	1075+64	1	1 Left Side of Road	1301+51	1	1 Left Side of Road
619+36	1	1 Left Side of Road	829+09	2	1 Each Side of Road	1100+94	1	1 Left Side of Road	1306+79	1	1 Left Side of Road
622+11	1	1 Right Side of Road	829+49	2	1 Each Side of Road	1102+58	1	1 Left Side of Road	1307+49	1	1 Left Side of Road
622+77	1	1 Right Side of Road	836+58	1	1 Left Side of Road	1109+01	2	1 Each Side of Road	Total	194	
624+98	2	1 Each Side of Road	836+62	1	1 Right Side of Road	1127+79	1	1 Right Side of Road			
626+06	2	1 Each Side of Road	837+22	1	1 Right Side of Road	1128+35	1	1 Right Side of Road			
640+33	2	1 Each Side of Road	837+26	1	1 Left Side of Road	1144+05	2	1 Each Side of Road			

PLOT SCALE - 1:200

PLOT NAME - 1

FILE - ... \095F4_SPEC1AL_SIGNS.DGN

PLOTTED FROM - TRAB10100

SD 10 Permanent Sign Installation Table

Station	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	Flat Aluminum sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	Remove Traffic Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
352+54	Rt.	JCT	M2-1	21	15	2.2		12.5	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		SD 37	M1-5	24	24	4.0				1	W		
356+50	Rt.	^ Britton 19 <-- Hecla 6	D1-2	60	30	12.5		24.5	2	1	W	Telespar	Replace Existing Sign with New Sign on New Post
357+55	Rt.	Mile Marker 302 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
357+55	Lt.	West	M3-4	24	12	2.0		12.0	1	1	E	Telespar	Replace Existing Sign with New Signs on New Post
		SD 37	M1-5	24	24	4.0				1			
360+44	Rt.	SD 37	M1-5	24	24	4.0		25.0	2	1	W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
		Vertical / Left Double Arrow	M6-6	21	15	2.2				1	W		
		SD 10	M1-5	24	24	4.0				1	W		
		Vertical Arrow	M6-3	21	15	2.2				1	W		
		Mile Marker 302.14 (Two Signs)	D10-6	4.5	21	1.3				2	E/W		
360+62	Lt.	Stop	R1-1	36	36		7.5	10.5	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
360+65	Rt.	SD 37	M1-5	24	24	4.0		25.0	2	1	N	Wood	Replace Existing Signs with New Signs on New Post
		Horizontal Left Arrow	M6-1	21	15	2.2				1	N		
		SD 10	M1-5	24	24	4.0				1	N		
		Horizontal Double Arrow	M6-4	21	15	2.2				1	N		
361+06	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
361+59	Lt.	SD 37 (Two Signs)	D3-1	30	12	5.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
362+78	Rt.	East	M3-2	24	12	2.0		24.0	2	1	W	Wood	Replace Existing Signs with New Signs on New Post
		SD 10	M1-5	24	24	4.0				1			
		South	M3-3	24	12	2.0				1			
		SD 37	M1-5	24	24	4.0				1			
363+63	Lt.	SD 10	M1-5	24	24	4.0		25.0	2	1	E	Telespar	Replace Existing Signs with New Signs on New Post
		Vertical Arrow	M6-3	21	15	2.2				1			
		SD 37	M1-5	24	24	4.0				1			
		Advance 90 Degree Right Arrow	M5-1R	21	15	2.2				1			
365+93	Lt.	^ Jct US 281 20 Hecla 6 -->	D1-2	66	30	13.8		24.5	2	1	E	Telespar	Replace Existing Sign with New Sign on New Post
461+92	Rt.	^ Britton 17 Groton 23 -->	D1-2	60	30	12.5		24.5	2	1	W	Telespar	Replace Existing Sign with New Sign on New Post

SD 10 Permanent Sign Installation Table

Station	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	Flat Aluminum sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	Remove Traffic Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
462+84	Rt.	Mile Marker 304 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
463+06	Lt.	West	M3-4	24	12	2.0		24.0	2	1	E	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10	M1-5	24	24	4.0	1						
		North	M3-1	24	12	2.0	1						
		SD 37	M1-5	24	24	4.0	1						
464+07	Rt.	SD 10	M1-5	24	24	4.0		25.0	2	1	W	Telespar	Replace Existing Signs with New Signs at Existing MRM Location
		Vertical Arrow	M6-3	21	15	2.2	1						
		SD 37	M1-5	24	24	4.0	1						
		Horizontal Right Arrow	M6-1	21	15	2.2	1						
465+49	Rt.	Mile Marker 304.15 (Two Signs)	D10-6	4.5	21	1.3		5.0		2	E/W		Place New Signs on New Post
466+49	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
466+99	Lt.	SD 37	M1-5	24	24	4.0		25.0	2	1	S	Wood	Replace Existing Signs with New Signs on New Post
		Horizontal Left Arrow	M6-1	21	15	2.2	1						
		SD 10	M1-5	24	24	4.0	1						
		Horizontal Double Arrow	M6-4	21	15	2.2	1						
467+03	Lt.	SD 37 (Two Signs)	D3-1	30	12	5.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0	2			N/S			
467+11	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
		Mile Marker 231.5 (Two Signs)	D10-6	4.5	21	1.3	2			N/S			
467+91	Lt.	SD 37	M1-5	24	24	4.0		25.0	2	1	E	Telespar	Replace Existing Signs with New Signs on New Post
		Vertical / Left Double Arrow	M6-6	21	15	2.2	1						
		SD 10	M1-5	24	24	4.0	1						
		Vertical Arrow	M6-3	21	15	2.2	1						
468+31	Rt.	East	M3-2	24	12	2.0		12.0	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10	M1-5	24	24	4.0	1						
471+46	Lt.	^ Jct US 281 22 ← Groton 23	D1-2	66	30	13.8		24.5	2	1	E	Wood	Replace Existing Sign with New Sign on New Post
475+30	Lt.	JCT	M2-1	21	15	2.2		12.5	1	1	E	Telespar	Replace Existing Sign with New Signs on New Post
		SD 37	M1-5	24	24	4.0	1			E			
479+74	Rt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post

SD 10 Permanent Sign Installation Table

Station	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	Flat Aluminum sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	Remove Traffic Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
516+41	Rt.	Mile Marker 305 (Two Signs)	D10-6	4.5	18	1.1		5.0		2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
519+36	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
519+70	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
519+84	Lt.	407 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0	2			N/S			
520+38	Rt.	East	M3-2	24	12	2.0		12.0	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10	M1-5	24	24	4.0	1						
567+78	Rt.	Brown County 20	M1-6	24	24	3.0		12.5	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		Vertical/Left Double Arrow	M6-6	21	15	2.2	1						
569+48	Rt.	Mile Marker 306 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
572+24	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Wood	Replace Existing Sign with New Sign on New Post
572+71	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
572+96	Lt.	408 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0	2			N/S			
577+19	Lt.	Brown County 20	M1-6	24	24	3.0		12.5	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		Horizontal Right Arrow	M6-1	21	15	2.2	1						
622+23	Rt.	Mile Marker 307 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
625+27	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
625+59	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
625+76	Lt.	409 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0	2			N/S			
662+62	Lt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
674+40	Rt.	Claremont 8 -->	D1-2	72	18	9.0		24.0	2	1	E	Wood	Replace Existing Sign with New Sign on New Post
675+24	Rt.	Mile Marker 308 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
675+45	Rt.	Brown County 20	M1-6	24	24	3.0		12.5	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		Horizontal Right Arrow	M6-1	21	15	2.2	1						
677+15	Lt.	West	M3-4	24	12	2.0		12.0	1	1	E	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10	M1-5	24	24	4.0	1						
678+11	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post

SD 10 Permanent Sign Installation Table

Station	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	Flat Aluminum sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	Remove Traffic Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
678+62	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
678+73	Lt.	410 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
679+53	Rt.	East	M3-2	24	12	2.0		12.0	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10	M1-5	24	24	4.0				1			
681+79	Lt.	Brown County 20	M1-6	24	24	3.0		12.5	1	1	E	Telespar	Replace Existing Sign with New Signs on New Post
		Vertical/Left Double Arrow	M6-6	21	15	2.2				1			
682+36	Lt.	Claremont 8 <--	D1-2	72	18	9.0		24.0	2	1	E	Telespar	Replace Existing Sign with New Sign on New Post
683+70	Rt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post
728+17	Rt.	Mile Marker 309 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
731+08	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
731+61	Lt.	411 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
781+27	Rt.	Mile Marker 310 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
783+67	Lt.	Brown County	I2-1	30	24	5.0		12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post
783+88	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
784+37	Rt.	Marshall County	I2-1	30	24	5.0		12.0	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
784+40	Lt.	412 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
808+81	Lt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
826+32	Rt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post
833+59	Lt.	No Passing Zone	W14-3	48X48X37			5.6	12.0	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
834+42	Rt.	Mile Marker 311 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
836+73	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
837+08	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
837+14	Rt.	413 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
850+56	Rt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post
887+31	Rt.	Mile Marker 312 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location

SD 10 Permanent Sign Installation Table

Station	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	Flat Aluminum sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	Remove Traffic Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
889+84	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
890+16	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
890+26	Lt.	414 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0	2			N/S			
939+88	Rt.	Amherst 4 -->	D1-2	66	18	8.3		12.0	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
940+35	Rt.	Mile Marker 313 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
942+06	Lt.	West	M3-4	24	12	2.0		12.0	1	1	E	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10	M1-5	24	24	4.0	1						
942+81	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
943+27	Lt.	415 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0	2			N/S			
943+28	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
943+94	Rt.	East	M3-2	24	12	2.0		12.0	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10	M1-5	24	24	4.0	1						
946+19	Lt.	<-- Amherst 4	D1-2	66	18	8.3		12.0	2	1	E	Telespar	Replace Existing Sign with New Sign on New Post
993+25	Rt.	Mile Marker 314 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
995+63	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
996+08	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Wood	Replace Existing Sign with New Sign on New Post
996+33	Lt.	416 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0	2			N/S			
1046+92	Rt.	Mile Marker 315 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
1048+53	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
1048+92	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
1048+99	Lt.	417 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0	2			N/S			
1062+60	Lt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
1076+81	Rt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post
1099+68	Rt.	Mile Marker 316 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
1101+59	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post

SD 10 Permanent Sign Installation Table

Station	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	Flat Aluminum sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	Remove Traffic Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
1101+89	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
1102+11	Lt.	418 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
1128+99	Rt.	Mile Marker 316.7 (Two Signs)	D10-6	4.5	21	1.3		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
1132+27	Rt.	Railroad Warning (Round)	W10-1	36 Diameter			7.1	12.0	1	1	W	Wood	Replace Existing Sign with New Sign on New Post
1134+65	Lt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
1145+63	Rt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post
1148+20	Lt.	Railroad Warning (Round)	W10-1	36 Diameter			7.1	12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post
1152+47	Rt.	Mile Marker 317 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
1154+89	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
1155+24	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
1155+35	Lt.	419 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Signs with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
1205+50	Rt.	Mile Marker 318 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
1207+29	Lt.	West	M3-4	24	12	2.0		12.0	1	1	E	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10	M1-5	24	24	4.0				1			
1208+07	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
1208+46	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
1208+57	Lt.	420 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W		New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
1209+30	Rt.	East	M3-2	24	12	2.0		12.0	1	1	W	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10	M1-5	24	24	4.0				1			
1253+45	Lt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
1258+47	Rt.	Mile Marker 319 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	2	E/W	Telespar	Replace Existing Sign with New Sign on New Post at Existing MRM Location
1260+56	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
1260+92	Rt.	Stop	R1-1	36	36		7.5	12.0	1	1	S	Telespar	Replace Existing Sign with New Sign on New Post
1261+03	Lt.	421 Ave (Two Signs)	D3-1	36	12	6.0		12.0	1	2	E/W	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
1271+45	Rt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post

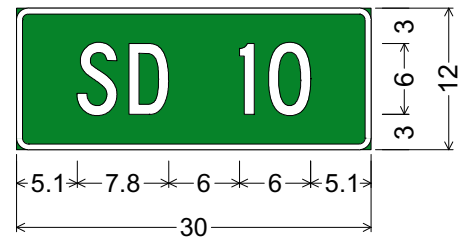
SD 10 Permanent Sign Installation Table

Station	Side of Road	Description	Sign Code	Width (Inches)	Height (Inches)	Flat Aluminum sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	Remove Traffic Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks
1287+35	Lt.	Stop	R1-1	36	36		7.5	12.0	1	1	N	Telespar	Replace Existing Sign with New Sign on New Post
1287+83	Lt.	Prairie Hills PI (Two Signs)	D3-1	48	12	8.0		12.0	1	2	E/W	Telespar	Replace Existing Sign with New Signs on New Post
		SD 10 (Two Signs)	D3-1	30	12	5.0				2	N/S		
1304+03	Lt.	Speed Limit 65	R2-1X	24	30	5.0		12.5	1	1	E	Telespar	Replace Existing Sign with New Sign on New Post
1304+29	Rt.	Speed Limit 55	R2-1X	24	30	5.0		12.5	1	1	W	Telespar	Replace Existing Sign with New Sign on New Post
1308+60	Lt.	No Passing Zone	W14-3	48X48X36			5.6	12.0	1	1	W	Wood	Replace Existing Sign with New Sign on New Post
TOTAL						514.7	340.1	1497.5	134	237			

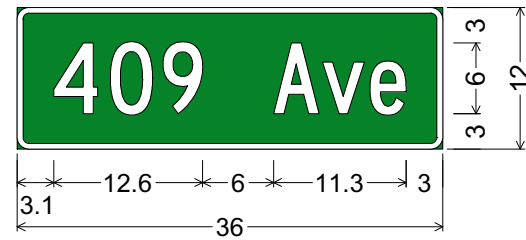
Sign Summary SD 10

Sign Code	Description	Width (Inches)	Height (Inches)	Sq. Ft.	No.	Flat Aluminum Sign, Nonremovable Copy High Intensity (SQFT)	Flat Aluminum Sign, Nonremovable Copy Super or Very High Intensity (SQFT)	Text / Background
D1-2	^ Britton 19 <-- Hecla 6	60	30	12.5	1	12.5		White on Green
D1-2	^ Jct US 281 20 Hecla 6 -->	66	30	13.8	1	13.8		White on Green
D1-2	^ Britton 17 Groton 23 -->	60	30	12.5	1	12.5		White on Green
D1-2	^ Jct US 281 22 <-- Groton 23	66	30	13.8	1	13.8		White on Green
D1-2	Claremont 8 -->	72	18	9.0	1	9.0		White on Green
D1-2	<-- Claremont 8	72	18	9.0	1	9.0		White on Green
D1-2	Amherst 4 -->	66	18	8.3	1	8.3		White on Green
D1-2	<-- Amherst 4	66	18	8.3	1	8.3		White on Green
D3-1	Street Signs SD 10 (Two Signs for Each)	30	12	2.5	36	90.0		White on Green
D3-1	Street Signs SD 37 (Two Signs for Each)	30	12	2.5	4	10.0		White on Green
D3-1	Street Signs 407 Ave - 421 Ave (Two Signs for Each)	36	12	3.0	30	90.0		White on Green
D3-1	Street Sign Prairie Hills Pl (Two Signs for Each)	48	12	4.0	2	8.0		White on Green
D10-6	Mile Markers 302, 304-319 (Two Signs for Each)	4.5	18	0.55	34	18.7		White on Green
D10-6	Mile Markers 231.5, 302.14, 304.15, 316.7 (Two Signs for Each)	4.5	21	0.65	8	5.2		White on Green
I2-1	Brown County	30	24	5.0	1	5.0		White on Green
I2-1	Marshall County	30	24	5.0	1	5.0		White on Green
M1-5	SD 10	24	24	4.0	16	64.0		See Standard Plate 632.20
M1-5	SD 37	24	24	4.0	11	44.0		See Standard Plate 632.20
M1-6	Brown County 20	24	24	3.0	4	12.0		Yellow on Blue
M2-1	Junction Marker	21	15	2.2	2	4.4		Black on White/Green Border
M3-2	East	24	12	2.0	6	12.0		Black on White/Green Border
M3-4	West	24	12	2.0	5	10.0		Black on White/Green Border
M3-1	North	24	12	2.0	1	2.0		Black on White/Green Border
M3-3	South	24	12	2.0	1	2.0		Black on White/Green Border
M5-1R	Advance 90 Degree Right	21	15	2.2	1	2.2		Black on White/Green Border
M6-1	Horizontal Single Arrow	21	15	2.2	5	11.0		Black on White/Green Border
M6-3	Vertical Arrow	21	15	2.2	4	8.8		Black on White/Green Border
M6-4	Horizontal Double Arrow	21	15	2.2	2	4.4		Black on White/Green Border
M6-6L	Vertical Left Double Arrow	21	15	2.2	4	8.8		Black on White/Green Border
R1-1	Stop	36	36	7.5	33		247.5	White on Red
R2-1X	Speed Limit 65	24	30	5.0	1	5.0		Black on White
R2-1X	Speed Limit 55	24	30	5.0	1	5.0		Black on White
W10-1	Railroad Advance Warning	36 Diameter		7.1	2		14.2	Black on Fluorescent Yellow
W14-3	No Passing Zone	48X48X36		5.6	14		78.4	Black on Fluorescent Yellow
Totals						514.7	340.1	

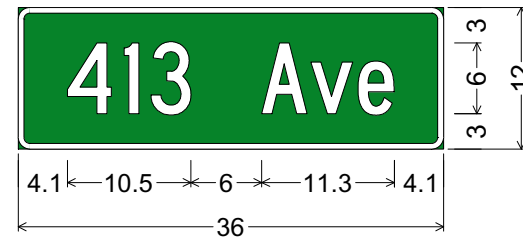
SPECIAL SIGN LAYOUT



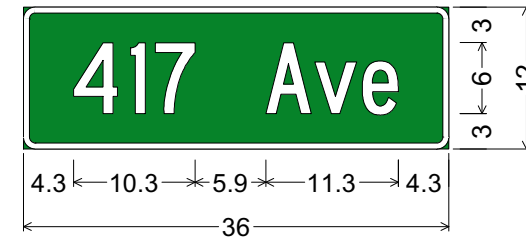
1.0" Radius, 0.5" Border, White on Green;
"SD 10", C 2K;



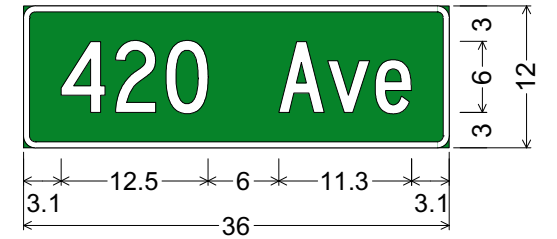
1.0" Radius, 0.5" Border, White on Green;
"409 Ave", C 2K;



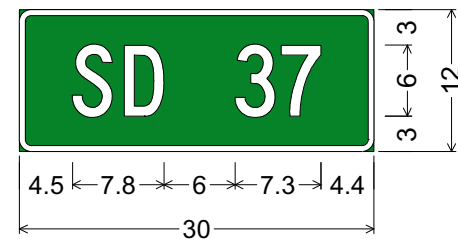
1.0" Radius, 0.5" Border, White on Green;
"413 Ave", C 2K;



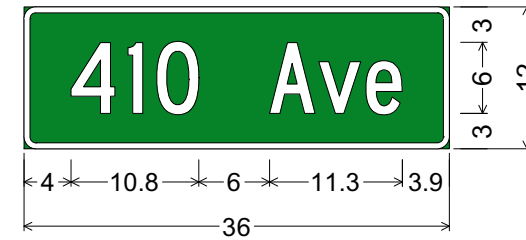
1.0" Radius, 0.5" Border, White on Green;
"417 Ave", C 2K;



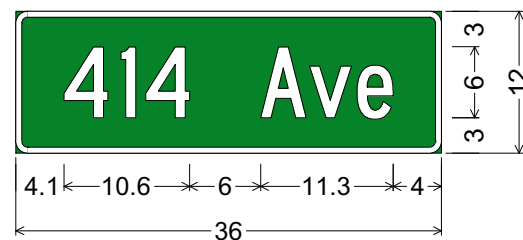
1.0" Radius, 0.5" Border, White on Green;
"420 Ave", C 2K;



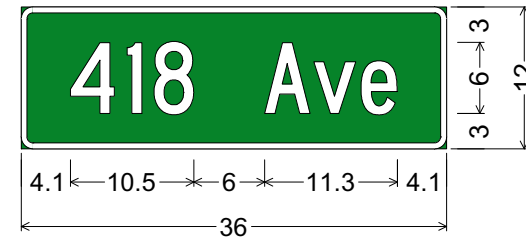
1.0" Radius, 0.5" Border, White on Green;
"SD 37", C 2K;



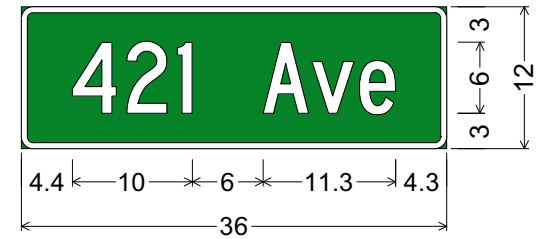
1.0" Radius, 0.5" Border, White on Green;
"410 Ave", C 2K;



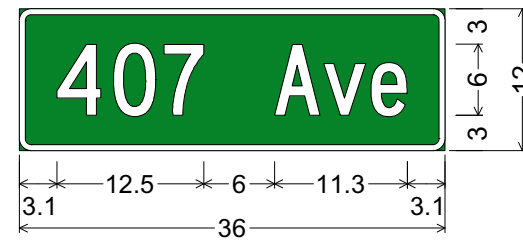
1.0" Radius, 0.5" Border, White on Green;
"414 Ave", C 2K;



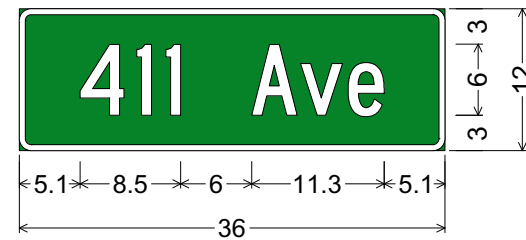
1.0" Radius, 0.5" Border, White on Green;
"418 Ave", C 2K;



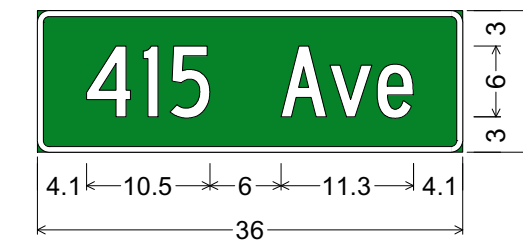
1.0" Radius, 0.5" Border, White on Green;
"421 Ave", C 2K;



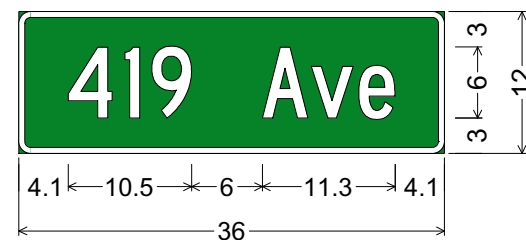
1.0" Radius, 0.5" Border, White on Green;
"407 Ave", C 2K;



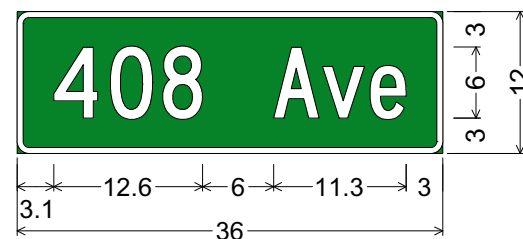
1.0" Radius, 0.5" Border, White on Green;
"411 Ave", C 2K;



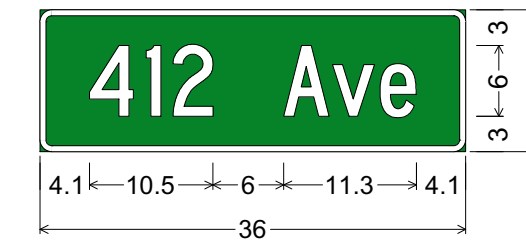
1.0" Radius, 0.5" Border, White on Green;
"415 Ave", C 2K;



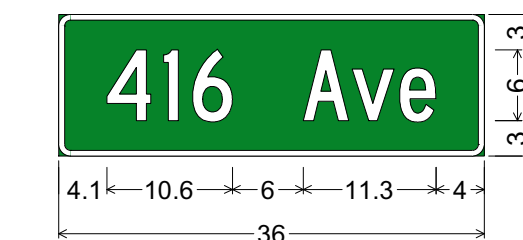
1.0" Radius, 0.5" Border, White on Green;
"419 Ave", C 2K;



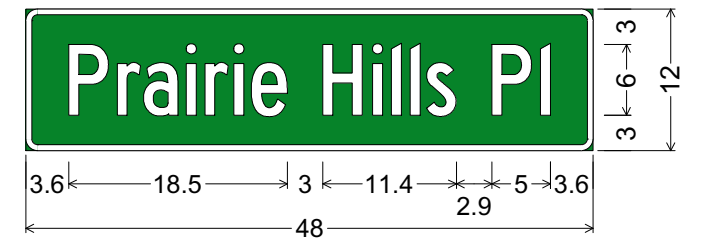
1.0" Radius, 0.5" Border, White on Green;
"408 Ave", C 2K;



1.0" Radius, 0.5" Border, White on Green;
"412 Ave", C 2K;

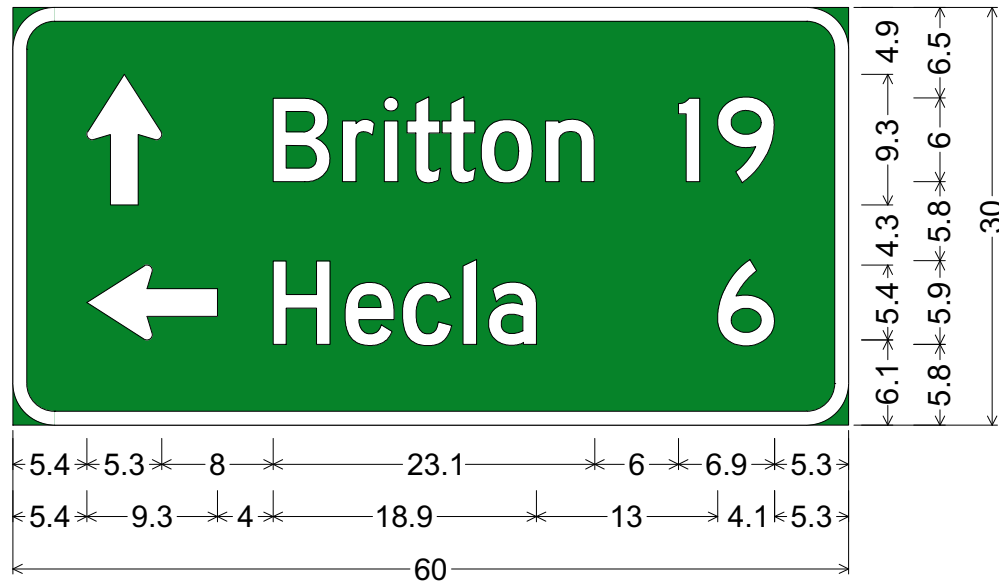


1.0" Radius, 0.5" Border, White on Green;
"416 Ave", C 2K;

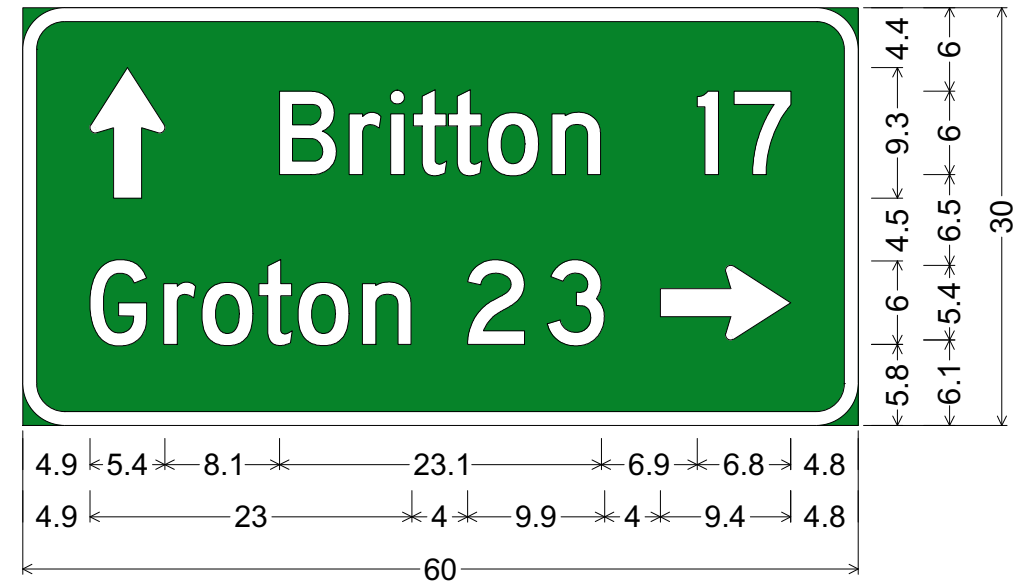


1.0" Radius, 0.5" Border, White on Green;
"Prairie", C 2K 70% spacing;
"Hills", C 2K 70% spacing;
"Pl", C 2K 70% spacing;

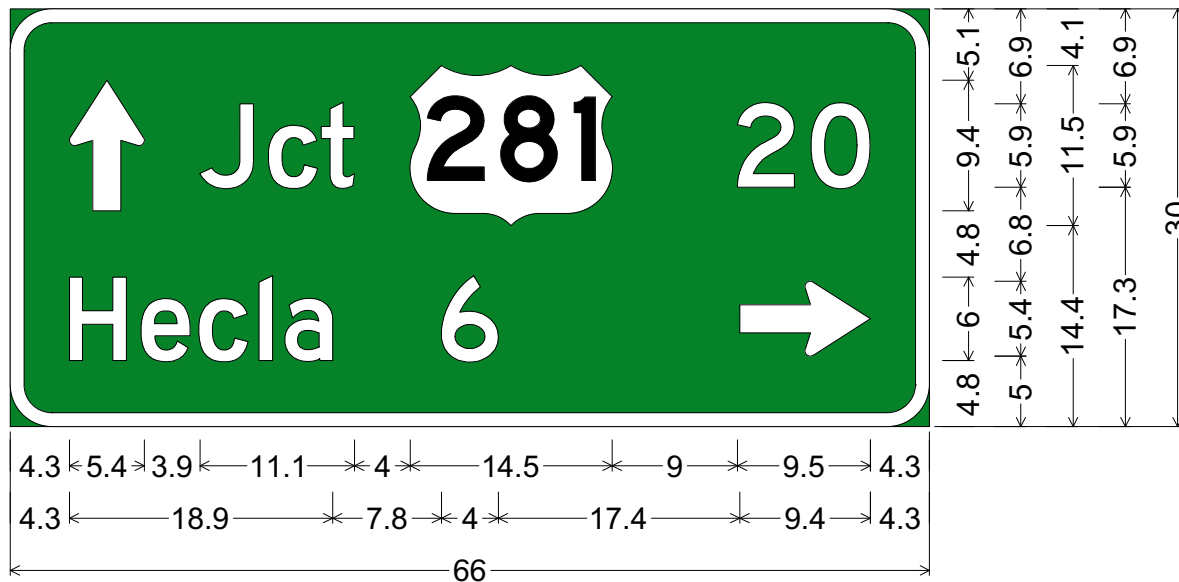
SPECIAL SIGN LAYOUT



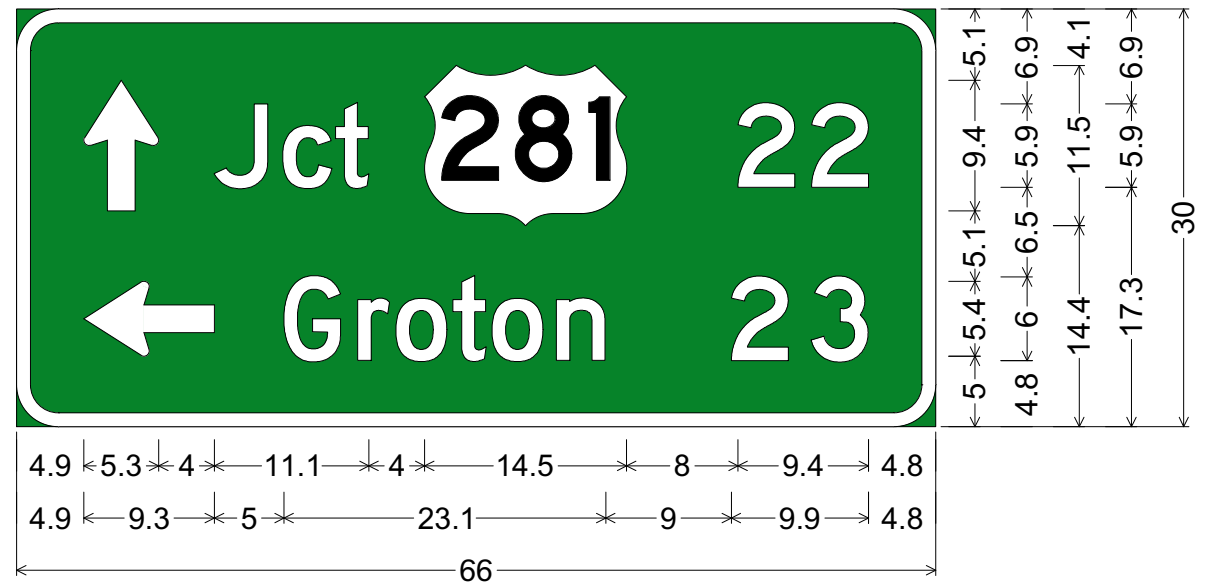
3.0" Radius, 1.0" Border, White on Green;
 Standard Arrow Custom 9.4" X 5.4" 90°; "Britton", D 2K;
 "19", D 2K; Standard Arrow Custom 9.4" X 5.4" 180°;
 "Hecla", D 2K; "6", D 2K;



3.0" Radius, 1.0" Border, White on Green;
 Standard Arrow Custom 9.4" X 5.4" 90°; "Britton", D 2K;
 "17", D 2K; "Groton", D 2K; "23", D 2K;
 Standard Arrow Custom 9.4" X 5.4" 0°;



3.0" Radius, 1.0" Border, White on Green;
 Standard Arrow Custom 9.4" X 5.4" 90°; "Jct", D 2K;
 "20", D 2K; "Hecla", D 2K; "6", D 2K;
 Standard Arrow Custom 9.4" X 5.4" 0°;



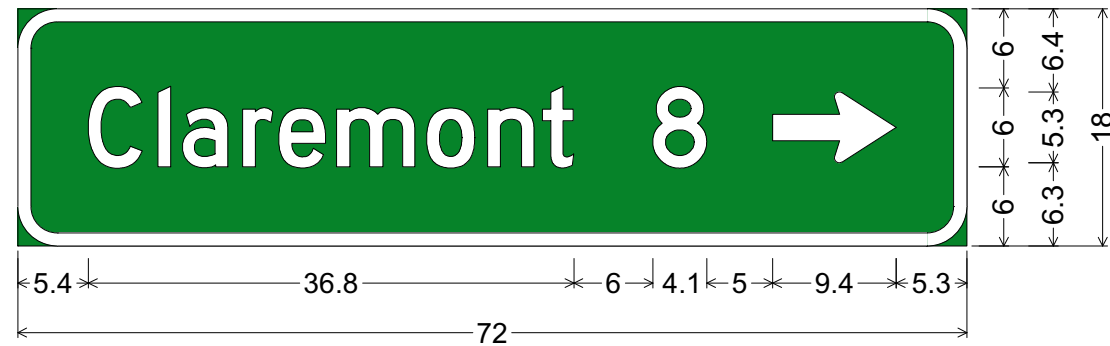
3.0" Radius, 1.0" Border, White on Green;
 Standard Arrow Custom 9.4" X 5.4" 90°; "Jct", D 2K;
 "22", D 2K; Standard Arrow Custom 9.4" X 5.4" 180°;
 "Groton", D 2K; "23", D 2K;

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	S15	S21

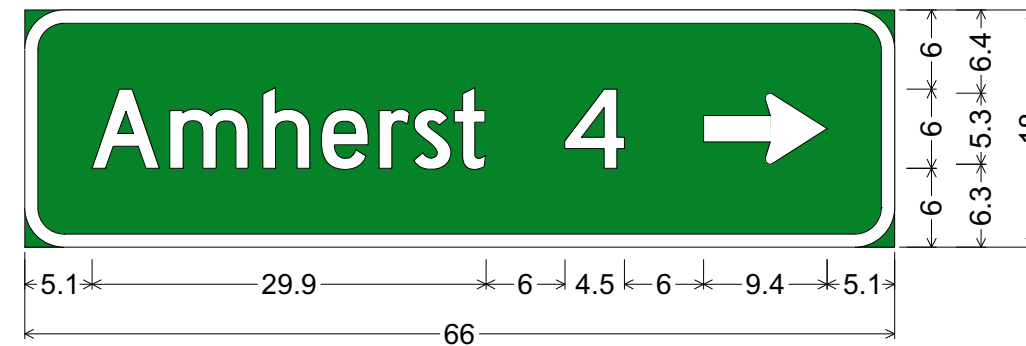
Plotting Date: 04/28/2023

Revised 01/04/2024 AT

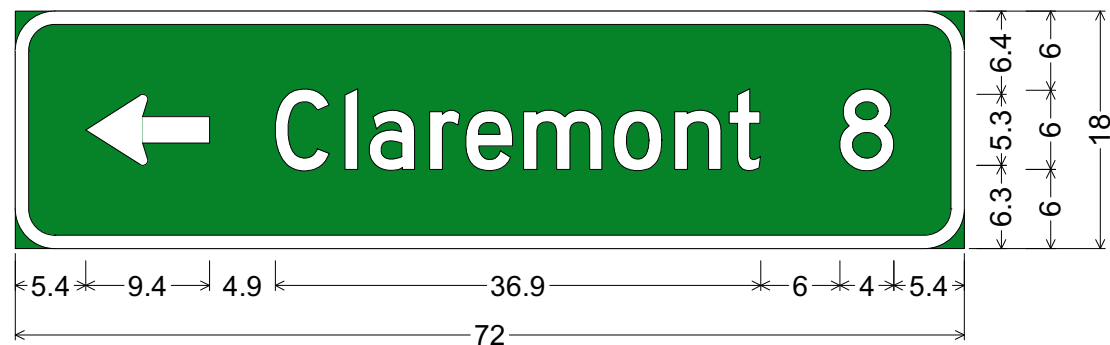
SPECIAL SIGN LAYOUT



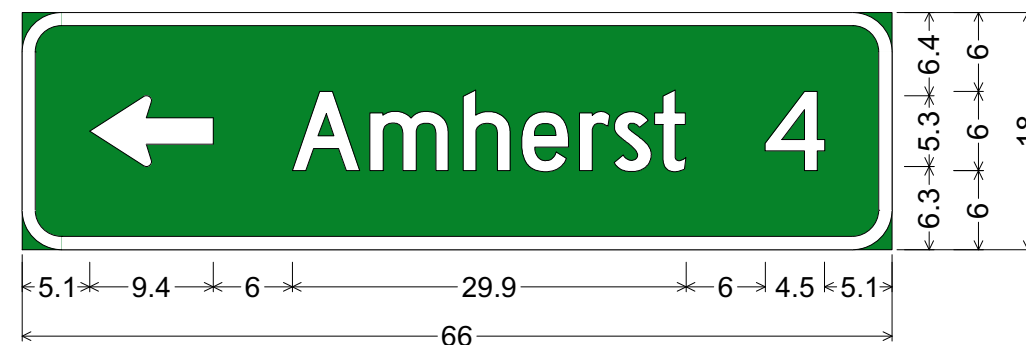
3.0" Radius, 1.0" Border, White on Green;
"Claremont 8", D 2K; Standard Arrow Custom 9.4" X 5.4" 0°;



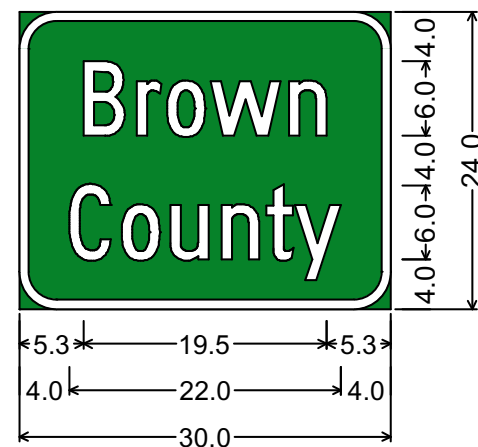
3.0" Radius, 1.0" Border, White on Green;
"Amherst 4", D 2K; Standard Arrow Custom 9.4" X 5.4" 0°;



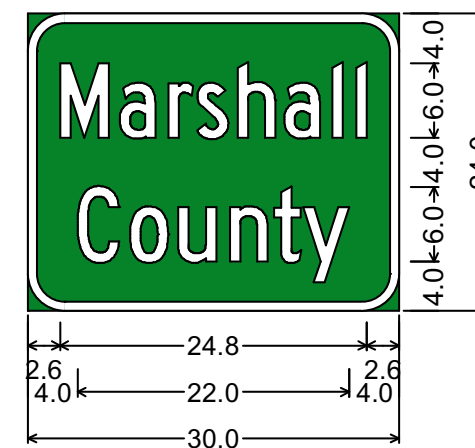
3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.4" X 5.4" 180°; "Claremont 8", D 2K;



3.0" Radius, 1.0" Border, White on Green;
Standard Arrow Custom 9.4" X 5.4" 180°; "Amherst 4", D 2K;



3.0" Radius, 0.8" Border, White on Green;
"Brown", C 2K;
"County", C 2K;



3.0" Radius, 0.8" Border, White on Green;
"Marshall", C 2K;
"County", C 2K;

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	P-PH-B-PT 0010(124)296	S16	S21
Plotting Date: 04/25/2023			

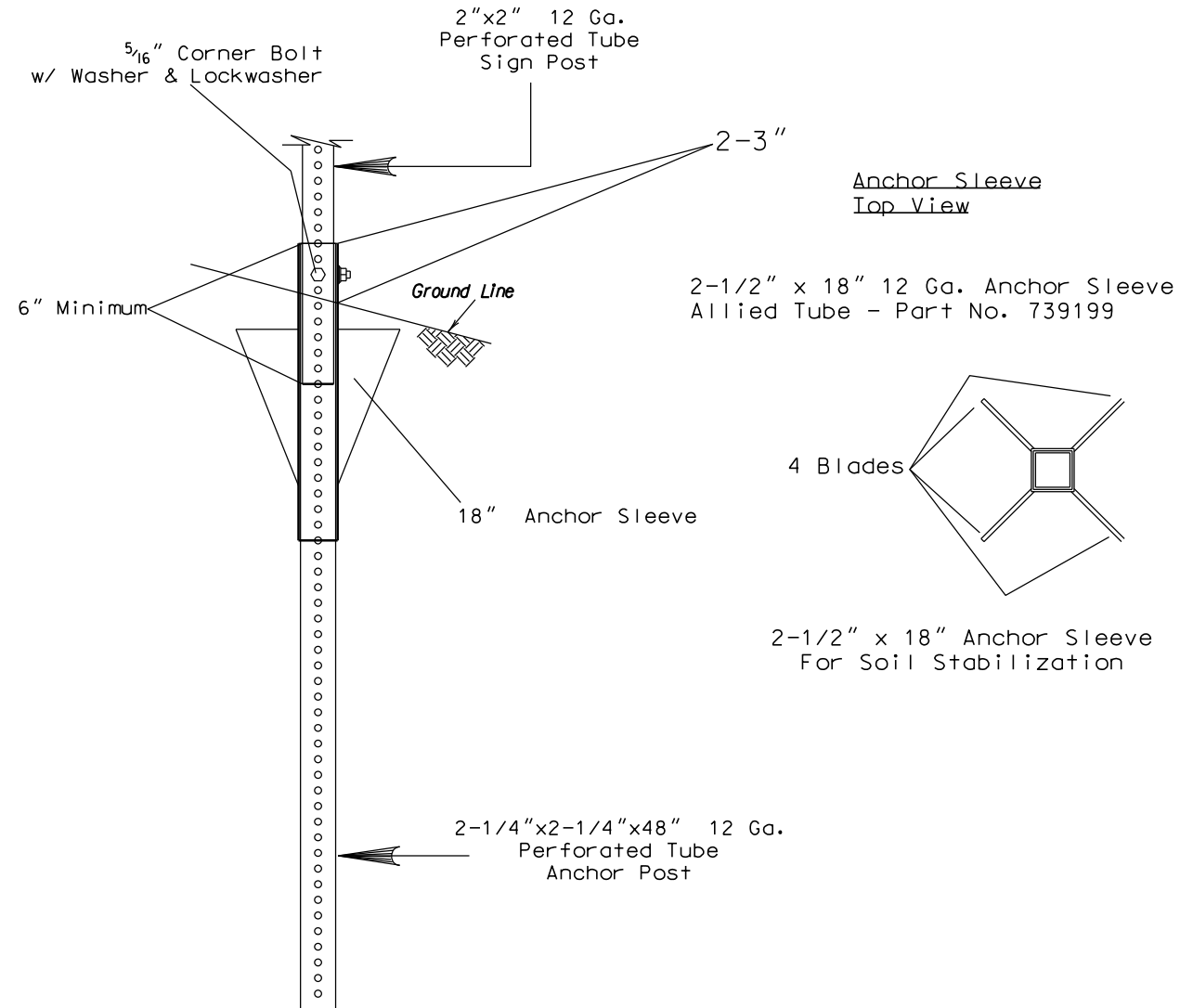
PLOT SCALE - 1:240

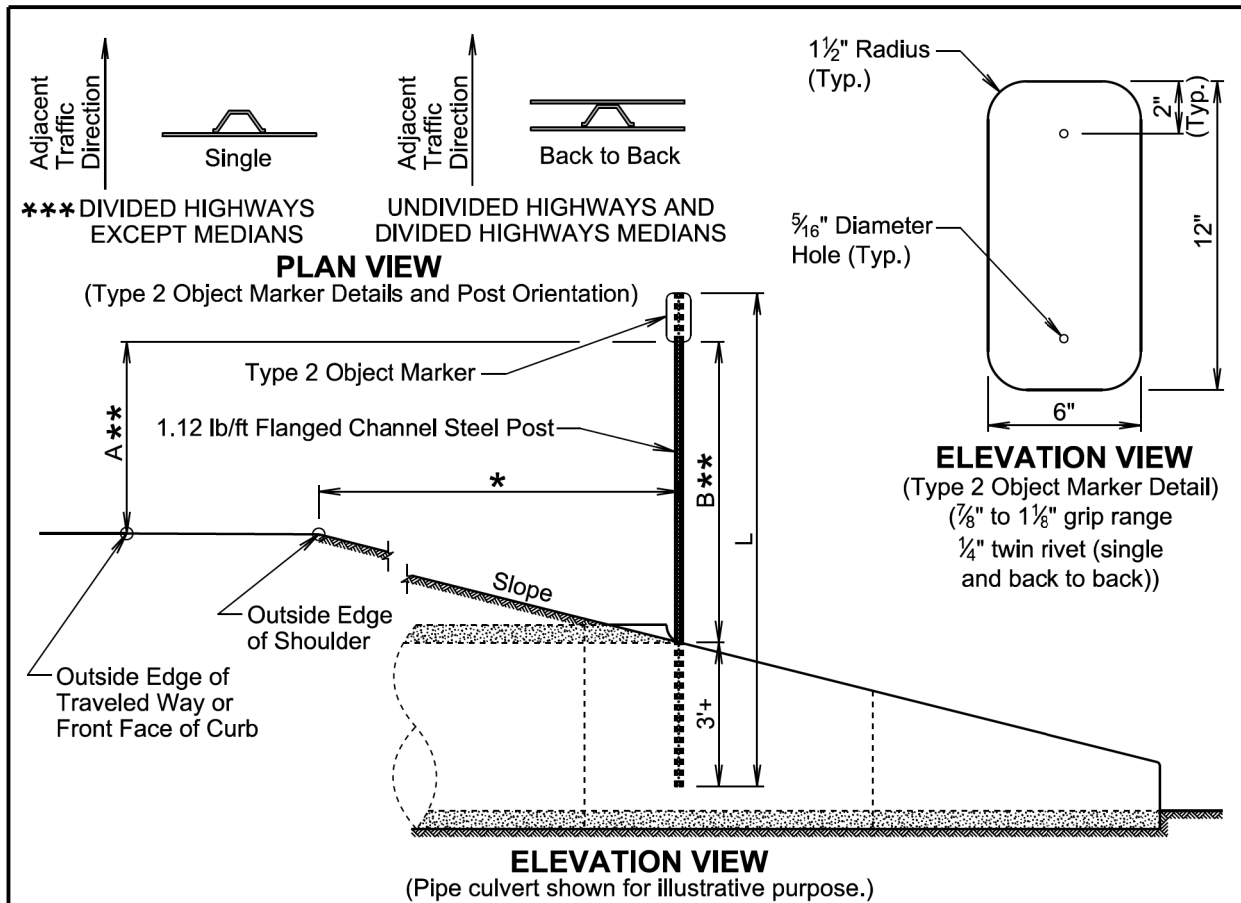
PLOTTED FROM - TRAB17879

PLOT NAME - 1

FILE - ... \SIGNSUPPORTSTANDARDS.DGN

SIGN BASE DETAILS FOR A 2" SIGN POST





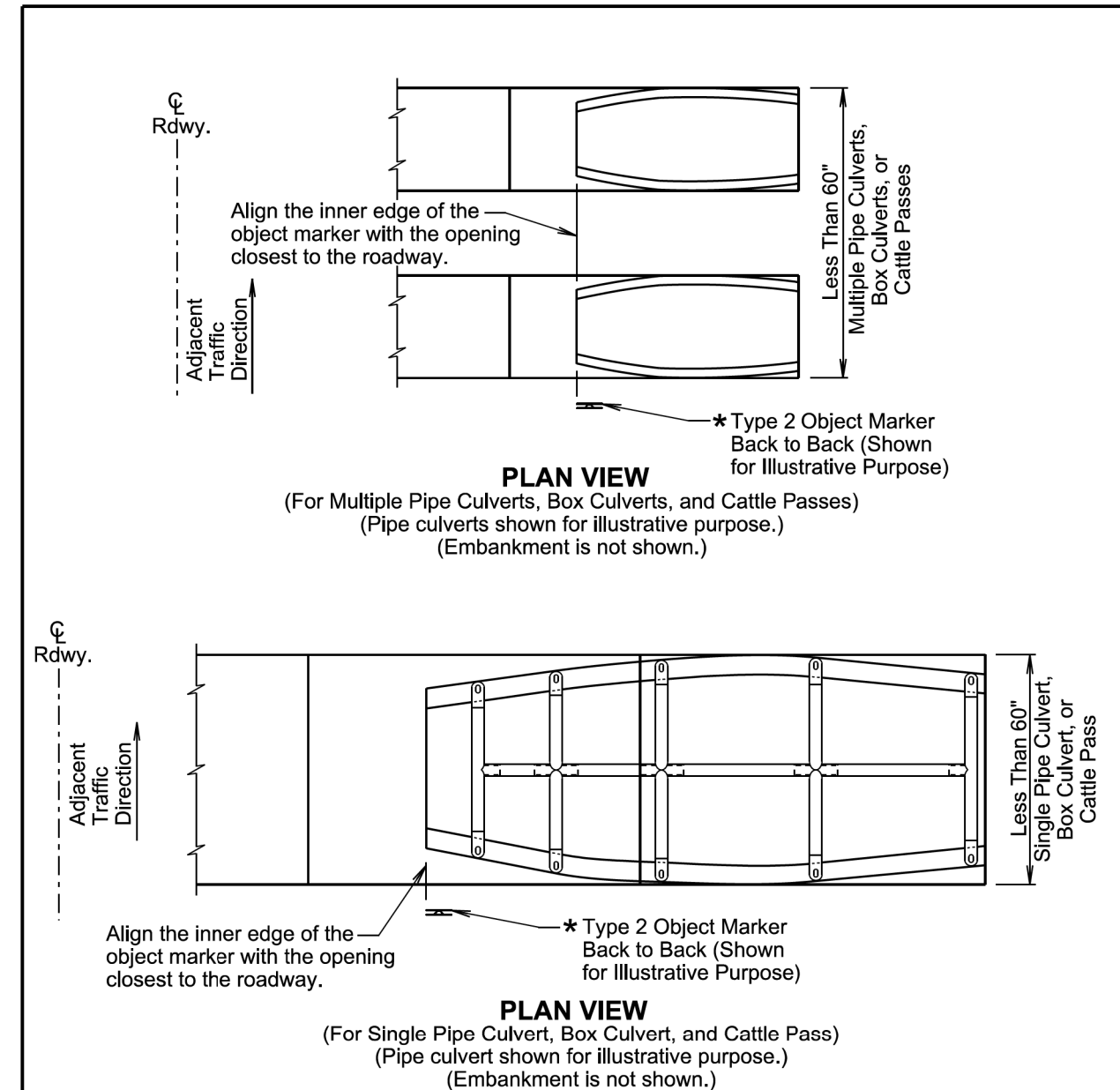
TYPE 2 OBJECT MARKER POST LENGTHS										
OFFSET (*)	1'	2'	3'	4'	5'	6'	7'	8'	Greater Than 8'	
POST LENGTH (L)										
SLOPE	3:1	8'-6"	8'-9"	9'-3"	9'-6"	9'-9"	10'-3"	10'-6"	10'-9"	8'-0"
	4:1	8'-6"	8'-9"	9'-0"	9'-3"	9'-9"	9'-9"	10'-0"	10'-3"	8'-0"
	5:1	8'-3"	8'-6"	8'-9"	9'-0"	9'-3"	9'-3"	9'-6"	9'-9"	8'-0"
	6:1	8'-3"	8'-6"	8'-9"	8'-9"	9'-0"	9'-3"	9'-3"	9'-6"	8'-0"

GENERAL NOTES:

- *** The type 2 object marker may be installed back to back when specified in the plans.
Post Length L was calculated based on a shoulder width of 6 feet at a crossslope of 4 percent and L was rounded up to the nearest 3 inches.
- ** Dimension A is 4 feet when the Offset * is 8 feet and less. Dimension B is 4 feet when Offset * is greater than 8 feet.
The type 2 object marker and the 1.12 lb/ft flanged channel steel post will be in conformance with Specifications Section 982.2 J.
Payment for the type 2 object marker will be in conformance with Specification Section 632.5 B.

December 23, 2019

S D D O T	TYPE 2 OBJECT MARKER (DIRECT DRIVE)	PLATE NUMBER 632.01
	Published Date: 2024	Sheet 1 of 1



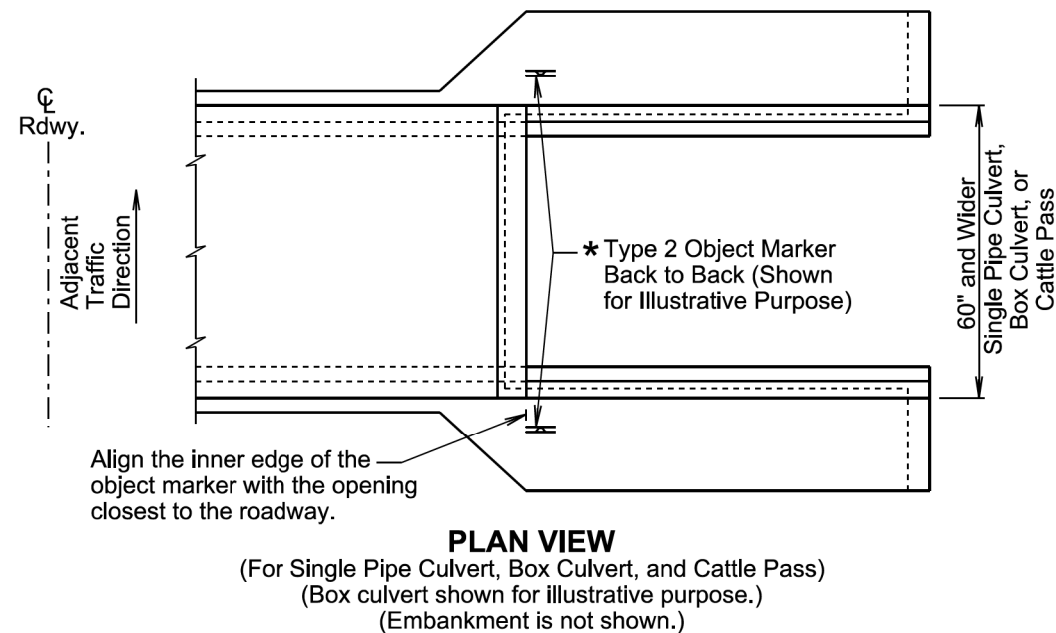
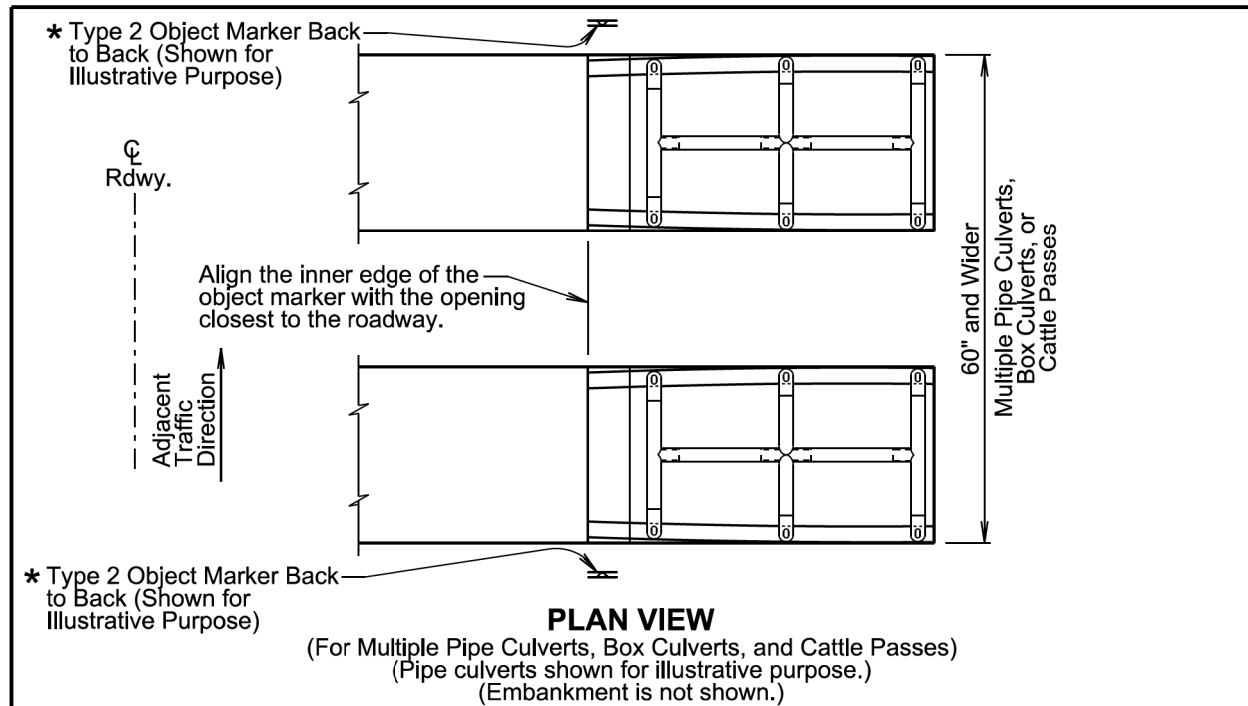
GENERAL NOTES:

- This standard plate will be used in conjunction with standard plate 632.01.
- * The type 2 object markers will be installed at the locations shown above. The type 2 object markers, single faced or back to back, will be as specified in the plans.

December 23, 2019

S D D O T	TYPE 2 OBJECT MARKER AT PIPE CULVERTS, BOX CULVERTS, AND CATTLE PASSES (Less than 60" Overall Width)	PLATE NUMBER 632.03
	Published Date: 2024	Sheet 1 of 1

PLOT SCALE - 1:200



GENERAL NOTES:

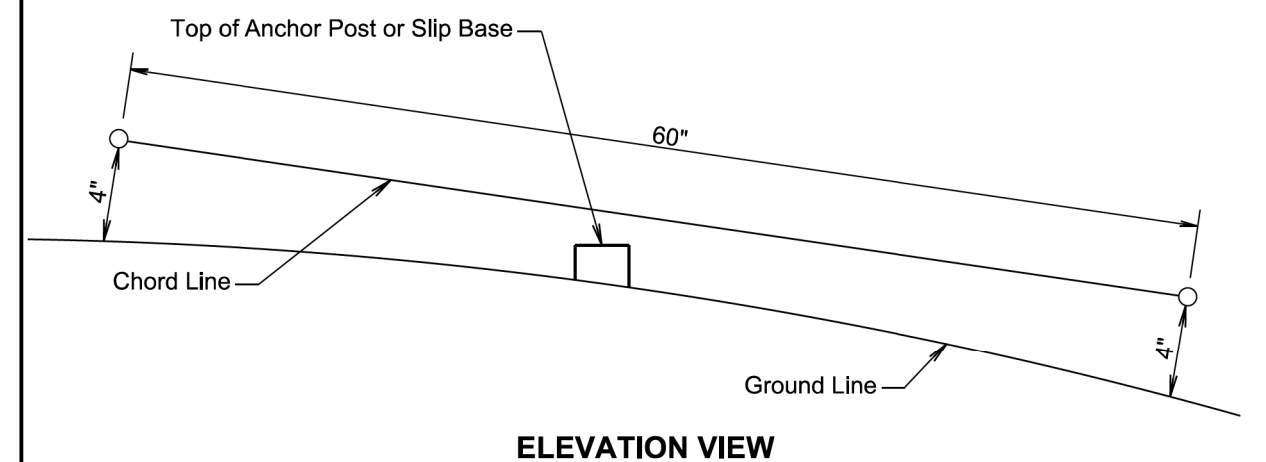
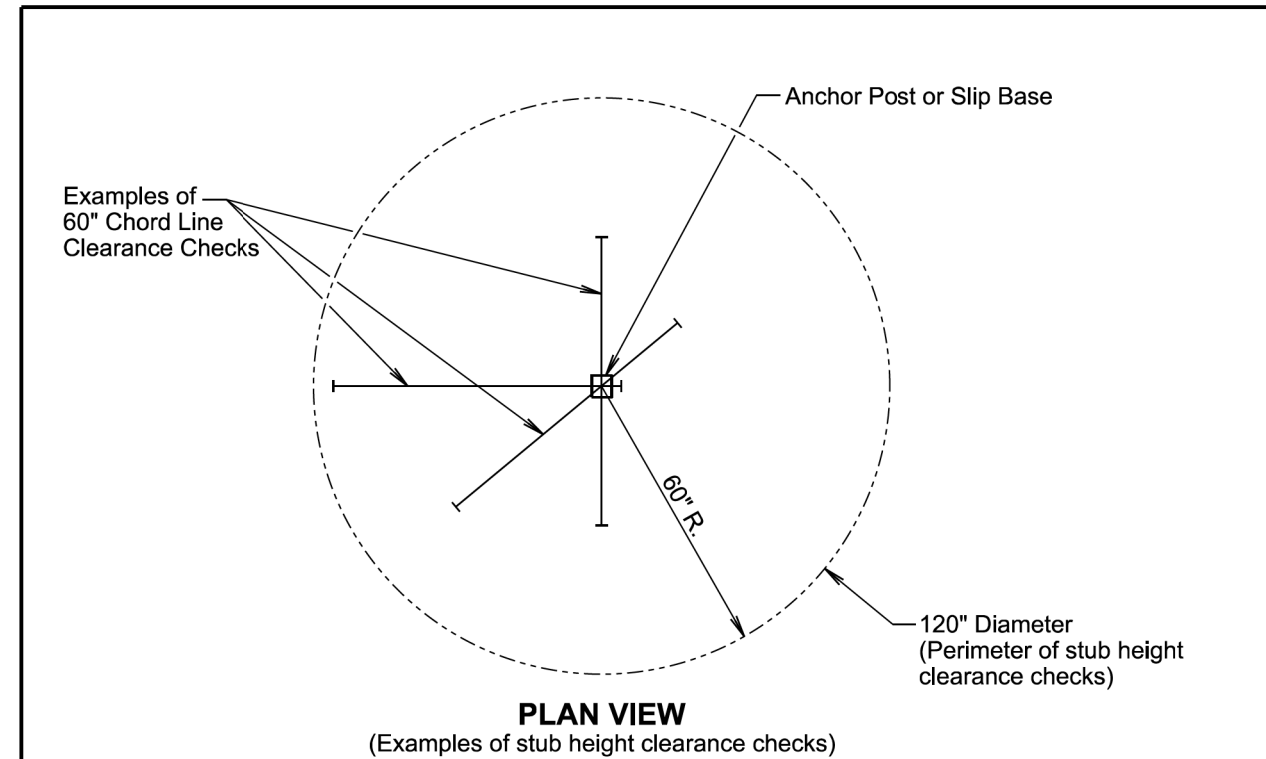
This standard plate will be used in conjunction with standard plate 632.01.

* The type 2 object markers will be installed at the locations shown above. The type 2 object markers, single faced or back to back, will be as specified in the plans.

December 23, 2019

Published Date: 2024	S D D O T	TYPE 2 OBJECT MARKER AT PIPE CULVERTS, BOX CULVERTS, AND CATTLE PASSES (60" and Greater Overall Width)	PLATE NUMBER 632.04
			Sheet 1 of 1

PLOT NAME - 2



GENERAL NOTES:

The top of anchor posts and slip bases WILL NOT extend above a 60" chord line within a 120" diameter circle around the post with ends 4" above the ground.

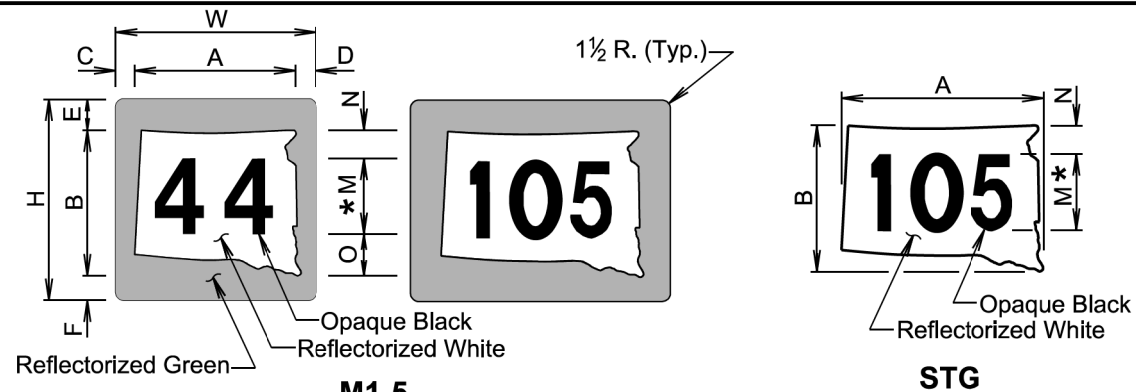
At locations where there is curb and gutter adjacent to the breakaway sign support, the stub height will be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

January 22, 2021

Published Date: 2024	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 632.18
			Sheet 1 of 1

PLOTTED FROM - TRAB10100

FILE - ... \05F4_STANDARD PLATES.DGN

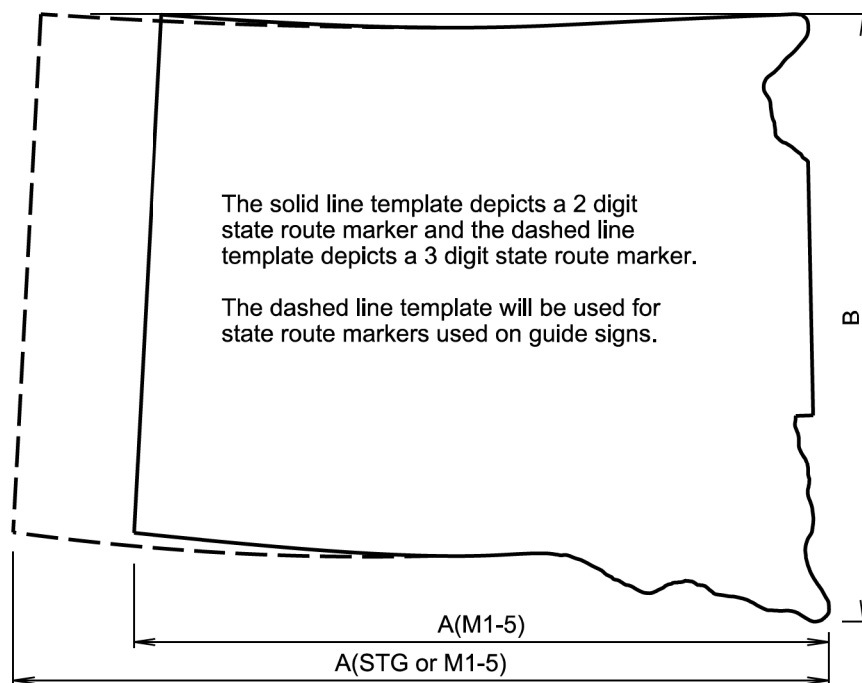


SIGN CODE	WxH	A	B	C	D	E	F	M*	N	O
M1-5	24x24	20½	18	2	1½	3½	2½	12D	2	4
M1-5 **	30x24	24	18	2¼	1¾	3½	2½	12D	2	4
M1-5	30x30	25⅞	22½	2½	1⅞	4⅜	3⅞	15D	2½	5
M1-5	36x36	30¾	27	3	2¼	5¼	3¾	18D	3	6

SIGN CODE	AxB	M*	N
STG-24	24x18	10D	4
STG-32	32x24	12D	4¾
STG-48	48x36	18D	7
STG-64	64x48	24D	9½

* 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

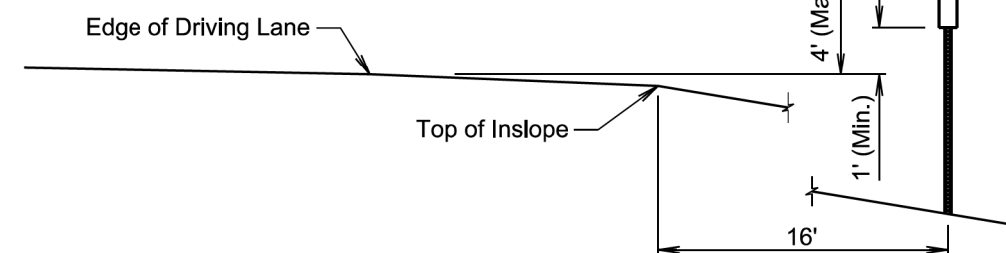
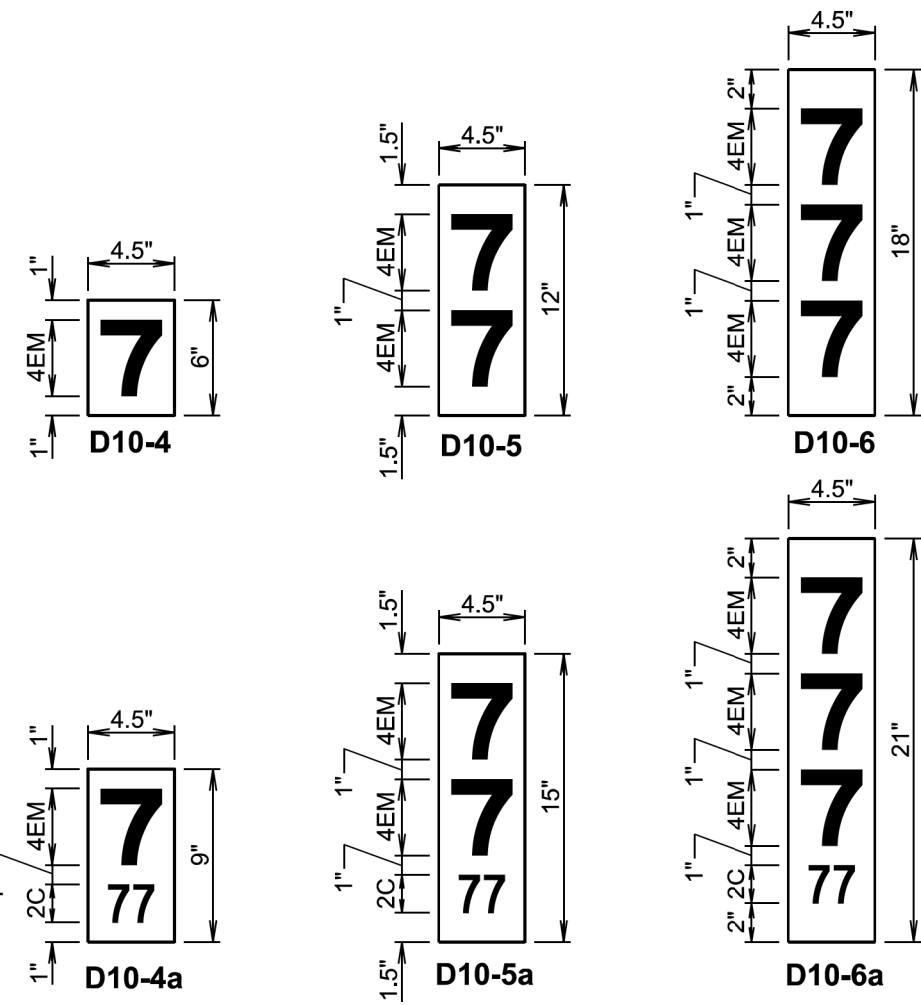
GENERAL NOTES:

The unit for all dimensions shown is inches.

Numerals will be D series font for all state route markers except as noted above.

December 23, 2019

Published Date: 2024	S D D O T	STATE ROUTE MARKERS	PLATE NUMBER 632.20
			Sheet 1 of 1



ELEVATION VIEW

GENERAL NOTES:

Background will be high intensity green.

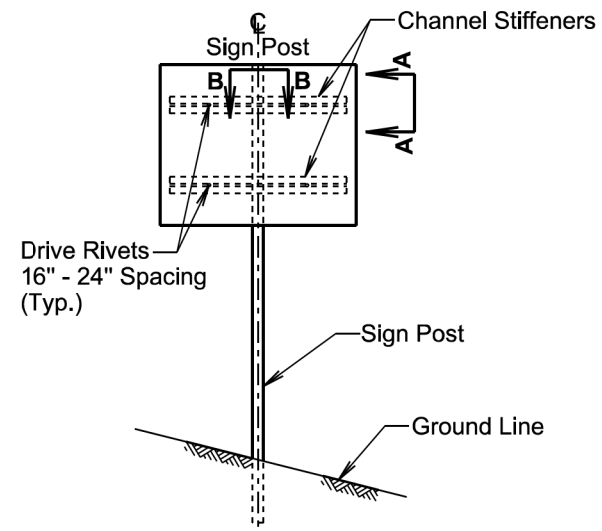
Legend will be high intensity white.

Signs will have squared corners with no border.

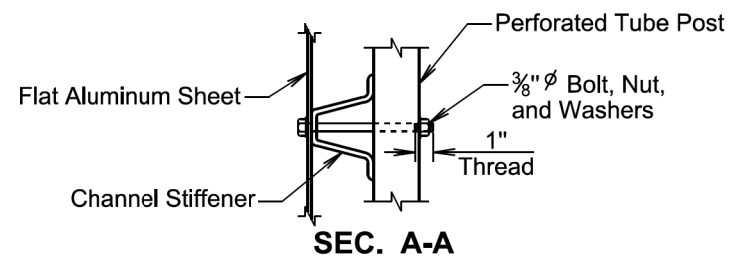
Sign locations will be staked by the Engineer.

December 23, 2019

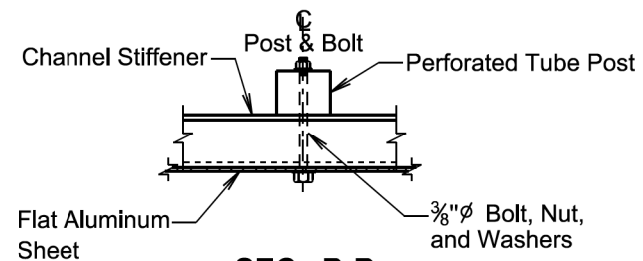
Published Date: 2024	S D D O T	NON-INTERSTATE MILEAGE REFERENCE MARKERS	PLATE NUMBER 632.30
			Sheet 1 of 1



ELEVATION VIEW
(One post breakaway sign supports.)



SEC. A-A



SEC. B-B

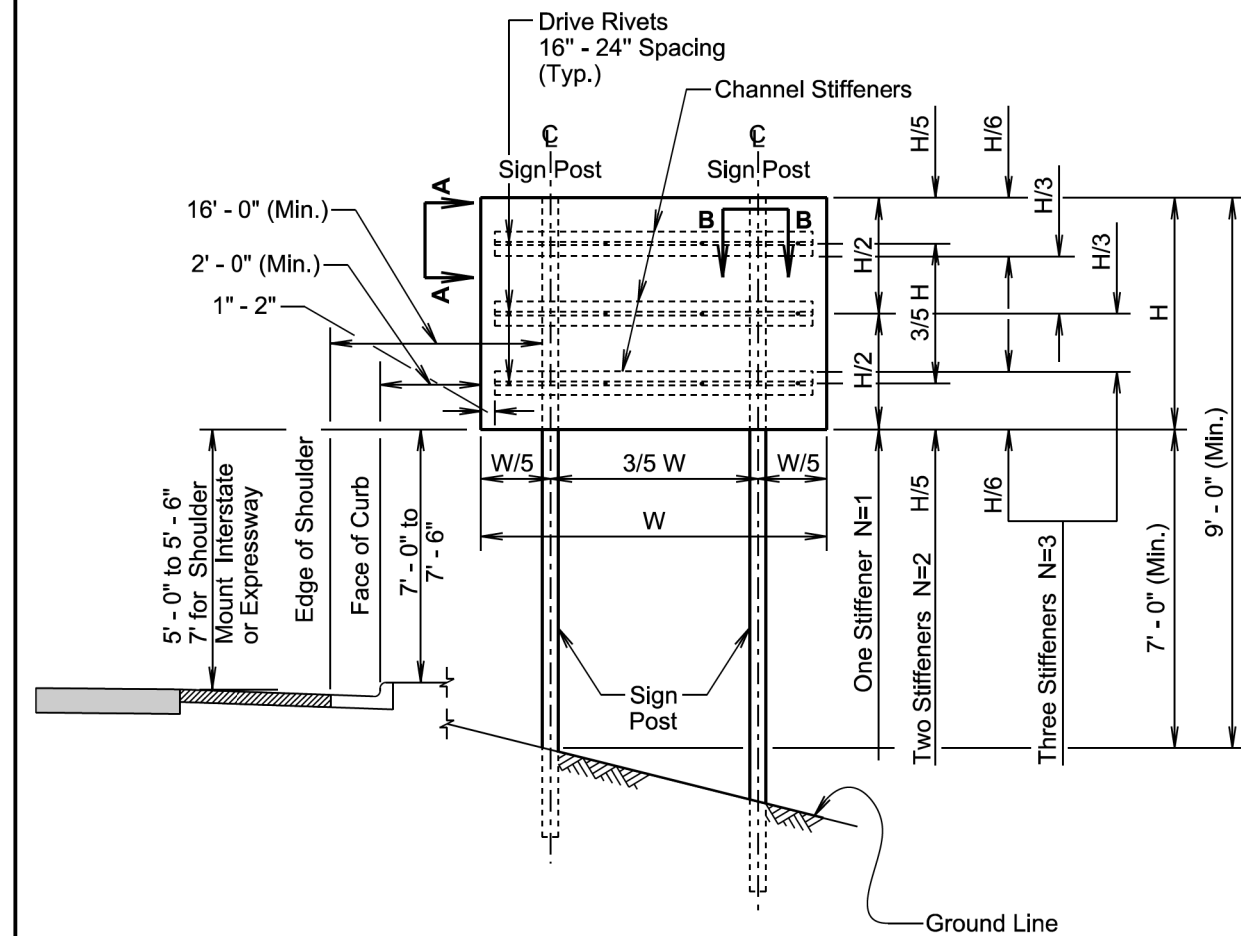
(Typical sign and stiffener details.)

∅ A plastic washer, as recommended by the sheeting manufacturer, will be installed between the sign face and the metal washer shown.

November 19, 2020

S D D O T	SIGN STIFFENER DETAILS	PLATE NUMBER 632.60
		Sheet 1 of 2

Published Date: 2024



TWO POST BREAKAWAY SIGN SUPPORTS

GENERAL NOTES:

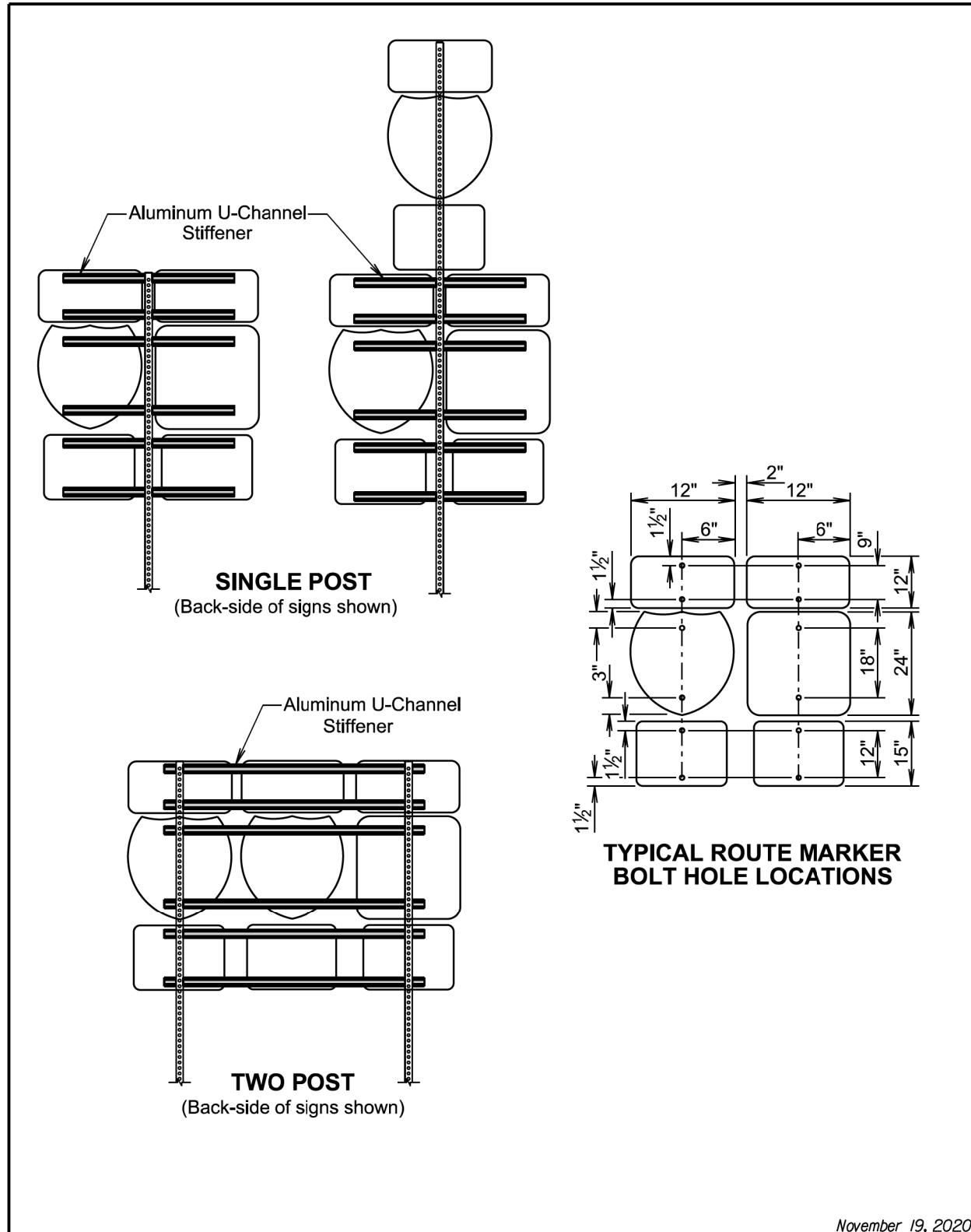
The number of stiffeners used (N) will be as follows:
 If $H \leq 2' - 0''$ then $N = 1$
 if $2' - 0'' < H \leq 8' - 0''$ then $N = 2$
 if $8' - 0'' < H \leq 15' - 0''$ then $N = 3$
 where H is the vertical dimension of the sign.

A minimum of two bolts will be required to fasten the sign to each post.

November 19, 2020

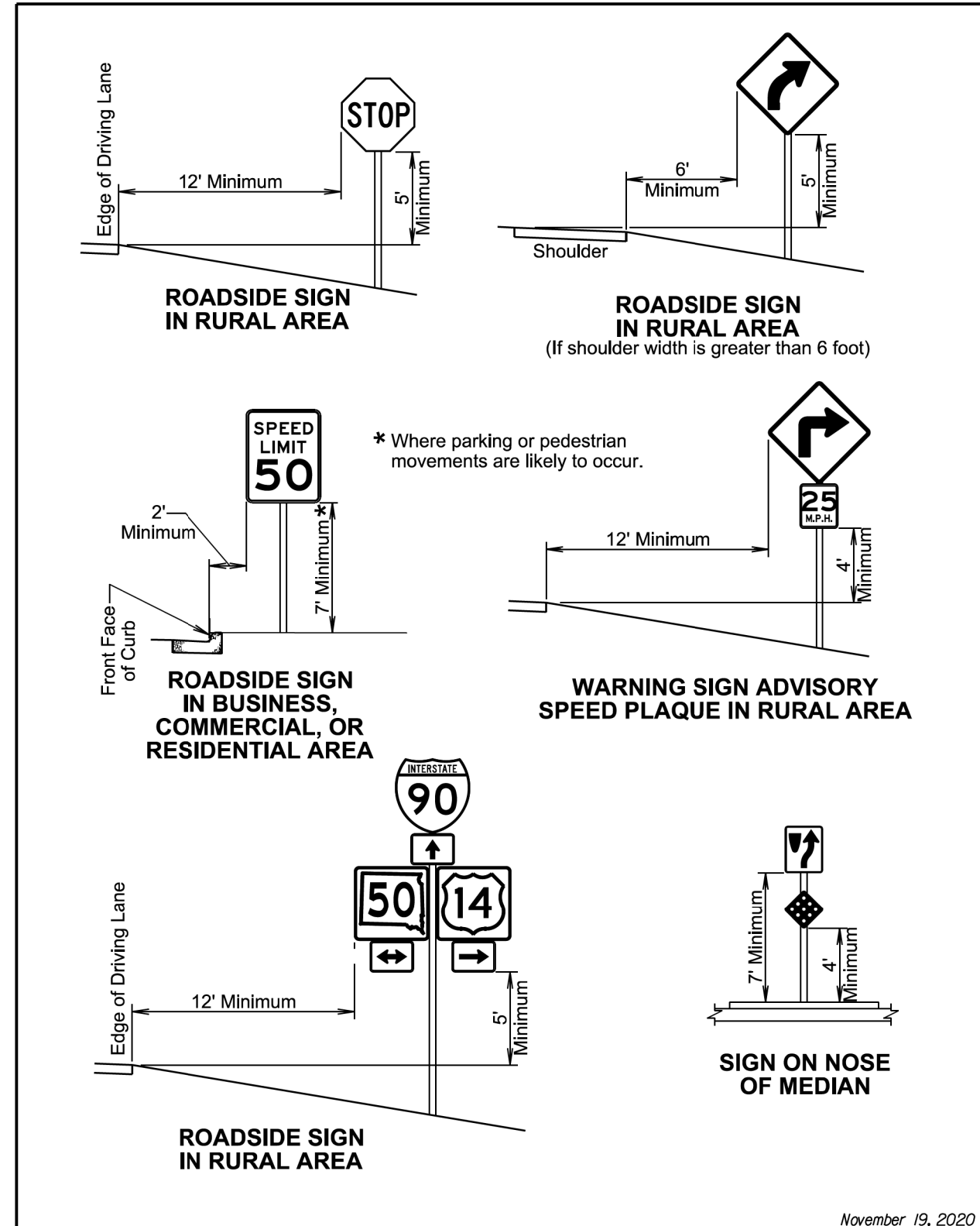
S D D O T	SIGN STIFFENER DETAILS	PLATE NUMBER 632.60
		Sheet 2 of 2

Published Date: 2024



S D D O T	MULTIPLE ROUTE MARKER SIGN STIFFENER INSTALLATION DETAILS	November 19, 2020
	PLATE NUMBER 632.62	
	Sheet 1 of 1	

Published Date: 2024



S D D O T	OFFSETS FOR SIGN INSTALLATION	November 19, 2020
	PLATE NUMBER 632.90	
	Sheet 1 of 1	

Published Date: 2024