SECTION S: PERMANENT SIGNING PLANS



STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
SOUTH DAKOTA	NH 0212(206)313	S1	S23
Plotting Date:	11/04/2024		



INDEX OF SHEETS

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SECTION S – ESTIMATE OF QUANTITIES – PCN 0808

BID ITEM	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	37	Each
110E0135	Remove Delineator	120	Each
110E7150	Remove Sign for Reset	7	Each
632E1320	2.0"x2.0" Perforated Tube Post	752.8	Ft
632E2204	4"x4" White Delineator Reflector	101	Each
632E2220	Guardrail Delineator	16	Each
632E2510	Type 2 Object Marker Back to Back	82	Each
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	246.7	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	191.5	SqFt
632E3500	Reset Sign	7	Each

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.

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.

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".

REMOVE SIGN FOR RESET AND RESET SIGN

Signs that are scheduled for reset will be dismantled and reassembled to the extent needed by the Contractor to properly reset the sign. Signs will be handled with care so that the existing signs, posts, and bases are not damaged during the relocation process. The Contractor will replace and pay for any reset signs damaged in their care. The Contractor will remove and dispose of any existing posts for all reset signs that require use of new posts as shown in the Table of Permanent Signing.

All costs for removing, dismantling, and disposing of any existing posts will be incidental to the contract unit price per each for "Remove Sign for Reset". All costs for resetting the existing signs will be incidental to the contract unit price per each for "Reset Sign". All quantities for Remove Sign for Reset and Reset Sign will be per assembly at the contract unit price per each.

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, temporarily repositioning, and permanently resetting 911 Emergency Number signs will be included in the contract unit price per each for "Remove Sign for Reset" and "Reset Sign".

DIGITALLY PRINTED SIGNS

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 overlaminate 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	Full Sign	Sheeting
Туре	Replacement Term	Replacement Term
	(years)	(years)
Ι	0	7
=	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.

STATE C	F PROJECT	SHEET	TOTAL SHEETS
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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

DIGITALLY PRINTED SIGNS (CONTINUED)

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.
- 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.



MILEAGE REFERENCE MARKERS

SDDOT will be notified to do Mileage Reference Markers (MRMs) locates prior to project completion by calling the Aberdeen Region Traffic Engineer at (605)626-7879. Payment for this work will be incidental to the various signing contract items.

NO PASSING ZONE SIGNS

SDDOT will be notified to do NO PASSING ZONE sign locates prior to project completion by calling the Aberdeen Region Traffic at (605)626-7879. Payment for this work will be incidental to the various signing contract items.

DELINEATION

Delineation installation and spacing will be done according to Standard Plates 632.42 and 632.44. Per the discretion of the Engineer, 101 delineators will be installed starting at Station 10+55 to Station 277+19.

OBJECT MARKERS

At locations shown in the Object Marker Table, where Object Markers will be removed, cost for removing the existing Object Markers will be included in the contract unit price per each for Remove Delineator.

New Type 2 Object Markers and posts will be furnished and installed according to the details of Standard Plates 632.01, 632.03, and 632.04 by the Contractor at the locations shown in the Object Marker Table. Cost for new Type 2 Object Marker and post installation is included in the contract unit price per each for Type 2 Object Marker.

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.

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	NH 0212(206)313	S3	S23

C	bject Marker	Table
Station	Type 2 Object Marker Back-to- Back (Each)	Description
14+97	2	1 Each Side of Road
15+03	2	1 Each Side of Road
35+94	1	1 Right Side of Road
36+88	1	1 Right Side of Road
37+60	2	1 Each Side of Road
46+84	2	1 Each Side of Road
55+45	1	1 Right Side of Road
56+07	1	1 Right Side of Road
75+51	1	1 Left Side of Road
76+11	1	1 Left Side of Road
79+36	2	1 Each Side of Road
79+46	2	1 Each Side of Road
85+70	2	1 Each Side of Road
88+67	1	1 Right Side of Road
89+39	1	1 Right Side of Road
100+89	1	1 Left Side of Road
100+89	1	1 Rignt Side of Road
101+76	1	1 Rignt Side of Road
101+85	1	1 Left Side of Road
103+54	1	1 Rignt Side of Road
103+59	1	1 Left Side of Road
104+23	1	1 Left Side of Road
104+28	1	1 Rignt Side of Road
112+93	2	1 Each Side of Road
112+99	2	1 Each Side of Road
123+13	1	1 Left Side of Road
123+83	1	1 Left Side of Road
132+79	2	1 Each Side of Road
132+91	2	1 Each Side of Road
136+83	1	1 Left Side of Road
137+81	1	1 Left Side of Road

O	bject Marker	Table
Station	Type 2 Object Marker Back-to- Back (Each)	Description
153+36 (4+63 xr151)	1	1 Right Side of Road
154+93 (4+86 xr151)	1	1 Right Side of Road
165+38	1	1 Right Side of Road
165+79	1	1 Left Side of Road
166+18	1	1 Right Side of Road
166+61	1	1 Left Side of Road
181+66	1	1 Right Side of Road
182+45	1	1 Left Side of Road
182+46	1	1 Right Side of Road
183+25	1	1 Left Side of Road
197+22	2	1 Each Side of Road
197+30	2	1 Each Side of Road
(17+13 xr198)	2	1 Each Side of Road
(17+35 xr198)	2	1 Each Side of Road
200+01	2	1 Each Side of Road
200+09	2	1 Each Side of Road
209+64	1	1 Right Side of Road
209+67	1	1 Left Side of Road
210+33	1	1 Left Side of Road
210+36	1	1 Right Side of Road
238+52	1	1 Left Side of Road
238+59	1	1 Rignt Side of Road
239+24	1	1 Left Side of Road
239+25	1	1 Right Side of Road
252+65	2	1 Each Side of Road
252+95	1	1 Left Side of Road
253+89	1	1 Left Side of Road
259+56	1	1 Right Side of Road
260+14	1	1 Right Side of Road
263+90	2	1 Each Side of Road
269+67	2	1 Each Side of Road
Total	82	

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
DAKOTA	NH 0212(206)313	S4	S23
Plotting [)ate: 11/04/2024		

				Chevron Insta	Ilation Tabl	e		
				Sign Coo	de W1-8			
Station	Side of Road	Width (Inches)	Height (Inches)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	Number of Chevrons Number of Chevrons Number of Tube Post 12 Ga. (Ft)		(N.A.B.I.) Square Tube Anchor Sleeve (Each) 1 New 1 New 1 New 1 New 5	
386 (xr151)	Rt.	18	24	3.0	1	7.5	1	Nev
3+06 (xr151)	Rt.	18	24	3.0	2	7.5	1	Nev
2+26 (xr151)	Rt.	18	24	3.0	2	7.5	1	Nev
1+46 (xr151)	Rt.	18	24	3.0	2	7.5	1	Nev
0+66 (xr151)	Rt.	18	24	3.0	1 7.5 1	1	Nev	
			Total	15.0	8	37.5	5	

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
DAKOTA	NH 0212(206)313	S5	S23
Plotting [)ate: 11/04/2024		







	Plotting Date: 11/04/2024															
				Table	ation 7	nstall	t Sign I	rmanen	US 212 Pe							
	Remarks	Current Type of Post	Direction Sign Faces	Reset Sign (Each)	Remove Sign For Reset (Each)	Remove Traffic Sign (Each)	(N.A.B.I.) Square Tube Anchor Sleeve (Each)	2.0"x2.0" Perforated Tube Post 12 ga. (FT)	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity (SQFT)	Flat Aluminum sign, Nonremovable Copy High Intensity (SQFT)	Height (Inches)	Width (Inches)	Sign Code	Description	Side of Road	Station
	Replace Existing Sign with New Sign on New Post at Existing MRM Location	U Channel	E/W			1	1	5.0		1.1	18	4.5	D10-6	Mile Marker 314 (Two Signs)	Rt.	13+47
	Replace Existing Sign with New Sign on New Post	Telespar	W			1	1	12	5.6		8X36	48X4	W14-3	No Passing Zone	Lt.	31+28
											36	36	ADO-5	Adopt A Highway		
	Remove Existing Sign	Telespar	Е			1					12	36	ADO-1	SDHP HURON SQUAD	Lt.	34+51
											36	36	ADO-6	Litter Crew Ahead		
											36	36	ADO-5	Adopt A Highway		
	Remove Existing Sign	Telespar	W			1					18	36	ADO-1	SDHP HURON SQUAD	Rt.	34+63
											30	30	ADO-6	Litter Crew Ahead		
	Replace Existing Sign with New Sign on New Post	Telespar	Ν			1	1	10.5	6.3		30	30	R1-1	Stop	Lt.	36+23
	Replace Existing Sign with New Sign on New Post	Telespar	S			1	1	10.5	6.3		30	30	R1-1	Stop	Rt.	36+62
	Danlage Evisting Cing with New Cing on New Deet	Talaanan	E/W			4	4	10.5		6.0	12	36	D3-1	393 Ave (Two Signs)		20.170
	Replace Existing Sign with New Sign on New Post	Telespar	N/S			Ĩ	I	12.5		8.0	12	48	D3-1	US Hwy 212 (Two Signs)	LI.	30+70
	Reset Existing Sign on New Post	Telespar	W	1	1		1	12			18	24	110-8A	Advance Historical Marker 1000 FT.	Rt.	37+67
	Reset Existing Sign on New Post	Telespar	W	1	1		2	24			48	72	RS-NS1A	Fisher Grove State Park <	Rt.	41+93
	Place New Sign on New Post	Telespar	Ν			1	1	7.7	6.3		30	30	R1-1	Stop	Lt.	49+33
	Reset Existing Sign on Existing Post	Telespar	Ν	1	1						42	44	RG-NS1	HISTORIC MARKER Fisher Grove Park Storv	Rt.	49+59
	Place New Sign on New Post	Telespar	E			1	1	12	5.6		8X36	48X4	W14-3	No Passing Zone	Rt.	52+27
	Reset Existing Sign on New Post	Telespar	E	1	1		2	24			48	72	RS-NS1A	Fisher Grove State Park >	Lt.	57+16
	Reset Existing Sign on New Post	Telespar	E	1	1		1	8.8			18	24	I10-8A	Advance Historical Marker 1000 FT.	Lt.	61+60
1	Replace Existing Sign with New Sign on New Post at Existing MRM Location	U Channel	E/W			1	1	5.0		1.1	18	4.5	D10-6	Mile Marker 315 (Two Signs)	Rt.	66+67

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																DAKOTA Plotting	NH 0212(206)313	S	7 S23	
							US 212 Pe	rmanen	t Sign I	Install	ation 7	Fable								
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)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post		Remarks				
		394 Ave (Two Signs)	D3-1	36	12	6.0							E/W							
89+06	Lt.	US Hwy 212 (Two Signs)	D3-1	48	12	8.0		12.5	1	1			N/S	Telespar	Replace Existing S	Sign with Ne	v Sign on New Post			
89+19	Rt.	STOP	R1-1	30	30		6.3	5	1				S	Telespar	Replace Existing S	Sign with Ne	v Sign on New Post			
98+88	Rt.	James River	I-3C	42	30	8.8		8.7	1				W	Telespar	Replace Existing S	Sign with Ne	v Sign on New Post			
101+38	Rt.	Mile Marker 315.66 (Two Signs)	D10-6	4.5	21	1.3		5.0	1	1			E/W	U Channel	Replace Existing Sign with	New Sign o Location	n New Post at Existing MRM			
101+38	Lt.	James River	I-3C	42	30	8.8		5.8	1				E	Telespar	Replace Existing S	Sign with Ne	v Sign on New Post			
102+85	Rt.	THINK SIGN WHY DIE?								1			W	U Channel	Remove Existing Sign					
118+93	Rt.	Mile Marker 316 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	1			E/W	U Channel	Replace Existing Sign with New Sign on New Post at Existing MRM					
121+10	Lt.	No Passing Zone	W14-3	48X4	48X36		5.6	12	1	1			W	Telespar	Replace Existing S	Sign with Ne	v Sign on New Post			
132+53	Rt.	Left Curve Arrow	W1-2L	36	36		9.0	12.0	1				W	Telespar	Place No.	ew Sign on	New Post			
137+10	Lt.	Stop	R1-1	30	30		6.3	10.5	1	1			N	Telespar	Replace Existing S	Sign with Ne	v Sign on New Post			
137+54	Rt.	Stop	R1-1	30	30		6.3	10.5	1	1			S	Telespar	Replace Existing S	Sign with Ne	v Sign on New Post			
407.74		395 Ave (Two Signs)	D3-1	36	12	6.0		40.5	4	4			E/W	Telesner	Deplese Evisting O		u Cirre en Neus Dest			
137+71	Lt.	US Hwy 212 (Two Signs)	D3-1	48	12	8.0		12.5	1				N/S	Telespar	Replace Existing S	sign with ive	v Sign on New Post			
137+99	Rt.	Left Curve Arrow	W1-2L	36	36					1			W	Telespar	Rem	nove Existing	Sign			
139+67	Rt.	No Passing Zone	W14-3	48X4	48X36		5.6	12	1	1			E	Telespar	Replace Existing S	Sign with Ne	v Sign on New Post			
		Adopt A Highway	ADO-5	36	36															
140+30	Lt.	SDHP HURON SQUAD	ADO-1	36	12					1			E	Telespar	Rem	nove Existing	Sign			
		Litter Crew Ahead	ADO-6	36	36															
142,40	D+	US 212	M1-4	30	24	5.0		10	4				W	Teleoner	Doplage Evisting 9		u Sign on New Dest			
143+40	Rt.	45 Left Arrow	M6-2LA	21	15	2.2		10	1					ı elespar	Replace Existing S	ngn with Ne	v Sign on New Post			
440,000		Frankfort ^	D1-2	96	24								147	T.I	5		Cian			
143+83	Rt.	NO TRUCKS (SYM)	R5-2	20	20								VV	ı eiespar	Rem	iove ⊨xistinę	Sign			

PLOT SCALE - 1:20

															51	ATE OF SOUTH DAKOTA	PROJECT NH 0212(206)313	NO. S8	TOTAL Sheets S23
															PI	otting l	ote: 11/04/2024		
							US 212 Pe	rmanen	t Sign	Install	ation	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)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	R	emarks			
145+92	Rt.	Do Not Enter	R5-1	30	30					1			E	Telespar	Remove	Existing	Sign		
146+10	Rt.	Large Horizontal Arrow	w1-6	48	24		8.0	9.5	1				E	Telespar	Remove	Existing	Sign		
146+18	Rt.	One Way	R6-1							1			N	Telespar	Remove	Existing	Sign		
1/6+37	1.+	US 212	M1-4	30	24					1			0	Telespar	Remove	Evisting	Sign		
140+37	LL.	Horizontal Double Arrow	M6-4	21	15								5	leiespai	Keniove	LAISUNG	Sign		
146+54	Rt.	Stop	R1-1	30	30					1			S	Telespar	Remove	Existing	Sign		
148+76	Rt.	Frankfort>	D1-2	72	18	9.0		12.0	1				W		Place New S	Sign on N	ew Post		
		US 212	M1-4	30	24	5.0													
151+90	Lt.	Horizintal Double Arrow	M6-4	21	15	2.2		25.0	2				SE		Place New S	Sign on N	ew Post		
		Large Horizontal Double Arrow	W1-7	48	24		8.0												
152+18	1.+	173 St (Two Signs)	D3-1	30	12	5.0		12.5	1	1			E/W	Telespar	Replace Evisting Sign	with New	Sign on New Post		
132 10	LL.	US Hwy 212 (Two Signs)	D3-1	48	12	8.0		12.5	I	1			N/S	relespar		with New	Sign of New Fost		
152+25	Rt.	Stop	R1-1	36	36		7.5	12.0	1				S	Telespar	Place New S	Sign on N	ew Post		
155+05	Lt.	< Frankfort	D1-2	72	18	9.0		12.0	1				E		Place New S	Sign on N	ew Post		
171+22	Rt.	Mile Marker 317 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	1			E/W	U Channel	Replace Existing Sign with Nev	v Sign on ocation	New Post at Existing MRM		
186+80	Lt.	Redfield 10	D2-1	72	18	9.0		24	2				E	Telespar	Replace Existing Sign	with New	Sign on New Post		
194+32	Rt.	Frankfort>	D1-1	72	18	9.0		24	2				W	4" X 6" Wood	Replace Existing Sign	with New	Sign on New Post		
108+05	1+	US 212	M1-4	30	24	5.0		12	1				F	Telesnar	Renlace Evisting Sign	with Nov	Sign on New Post		
100100	LL.	WEST	M3-4A	24	12	2.0		12						i cicopai		WITHING			
198+50	Lt.	Stop	R1-1	36	36		7.5	9.2	1				S	Telespar	Replace Existing Sign	with New	Sign on New Post		
199+10	Rt.	Stop	R1-1	36	36		7.5	10	1				Ν	Telespar	Replace Existing Sign	with New	Sign on New Post		

															STATE OF PROJECT SOUTH DAKOTA NH 0212(206)313	- SHEET TOTAL NO. SHEETS S9 S23
															Plotting Date: 11/04/2024	
							US 212 Pe	rmanen	t Sign	Install	ation	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)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	Remarks	
199+63	Lt.	396 Ave (Two Signs) US Hwy 212 (Two Signo)	D3-1 D3-1	36 48	12 12	6.0 8.0		12.5	1	1			E/W E	- Telespar	Replace Existing Sign with New Sign on New Post	
200 : 40		US 212	M1-4	30	24	5.0								Talaanan	Deplese Fuisting Cing with New Cing on New Dest	
200+40	RI.	EAST	M3-2A	24	12	2.0		9.8	1				vv	Telespar	Replace Existing Sign with New Sign on New Post	
204+41	Lt.	< Frankfort	D1-1	72	18	9.0		12	2				E	Telespar	Replace Existing Sign with New Sign on New Post	
209+19	Rt.	Jct SD 37 4 Doland 10	D2-2	66	36	16.5		24	2				W	Telespar	Replace Existing Sign with New Sign on New Post	
223+78	Rt.	Mile Marker 318 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	1			E/W	U Channel	Replace Existing Sign with New Sign on New Post at Existing MRM Location	
253+20	Lt.	Stop	R1-1	36	36		7.5	8.8	1	1			W	Telespar	Replace Existing Sign with New Sign on New Post	
		US 212	M1-4	30	24	5.0									Place Sign on New Post	
253+39	Rt.	Horizintal Double Arrow	M6-4	21	15	2.2		25.0	2				W	Telespar		
		Large Horizontal Double Arrow	W1-7	48	24		8.0								Replace Existing Sign with New Sign on New Post	
253+45	Lt.	Large Left Arrow	W1-6	48	24	8.0		24	2				S	Telespar	Replace Existing Sign with New Sign on New Post	
253+60	Lt.	Large Right Arrow	W1-6	48	24	8.0		24	2				W	Telespar	Replace Existing Sign with New Sign on New Post	
253+70	l t	172 St (Two Signs)	D3-1	30	12	5.0		12.5	1	1			E/W	Telespar	Replace Evicting Sign with New Sign on New Poet	
233+70	L1.	US Hwy 212 (Two Signs)	D3-1	48	12	8.0		12.5	I				N/S	reiespai	Replace Existing Sign with New Sign of New Post	
		US 212	M1-4	30	24	5.0									Diago Sign on Now Doot	
259+90	Lt.	Horizintal Double Arrow	M6-4	21	15	2.2		25.0	2				S	Telespar		
		Large Horizontal Double Arrow	W1-7	48	24		8.0								Replace Existing Sign with New Sign on New Post	
260±07	1+	397 Ave (Two Signs)	D3-1	36	12	6.0		12.5	1	1			E/W	Telespar	Replace Evicting Sign with New Sign on New Post	
200707	L.	US Hwy 212 (Two Signs)	D3-1	48	12	8.0		12.0					N/S	геезраг	Teplace Existing Sign with New Sign On New Fost	
260+13	Rt.	Stop	R1-1	30	30		6.3	12	1				S	Telespar	Replace Existing Sign with New Sign on New Post	
276+55	Rt.	Mile Marker 319 (Two Signs)	D10-6	4.5	18	1.1		5.0	1	1			E/W	U Channel	Replace Existing Sign with New Sign on New Post at Existing MRM Location	
					TOTAL	241.7	137.5	644.8	62	34	5	5				

						173 S	Street (xr15	1) Perm	nanent	Sign l	nstalla	tion 1	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)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	
4+00	Lt.	Stop Ahead	W3-1	36	36		9.0	12.0	1				SE		
5+87	Lt.	Right Curve Arrow	W1-2R	36	36		9.0	12.0	1				E		
					TOTAL	0.0	18.0	24.0	2.0	0.0	0.0	0.0			

						396 A	venue (xr1	98) Perı	manent	Sign	Install	ation	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)	Remove Sign For Reset (Each)	Reset Sign (Each)	Direction Sign Faces	Current Type of Post	
9+31	Rt.	Right Curve Arrow	W1-2R	36	36		9.0	12.0	1				S		
11+31	Lt.	Speed Limit 55	R2-1X	24	30	5.0		12.0	1	1			N	Telespar	Re
17+00	Rt.	Stop Ahead	W3-1	36	36		9.0	12.0	1	1			SE		
17+60	Lt.	Spink County 11						12	1		1	1	N	Telespar	F
21+45	Rt.	Spink County 11						12	1		1	1	S	Telespar	F
21+82	Lt.	Stop Ahead	W3-1	36	36		9.0	12.0	1	1			S		
32+80	Lt.	Right Curve Arrow	W1-2R	36	36		9.0	12.0	1				S		
					TOTAL	5.0	36.0	84.0	7	3	2	2			

STATE OF SOUTH	PROJECT	SHEET	TOTAL SHEETS
DAKOTA	NH 0212(206)313	S10	S23
Plotting [ote: 11/04/2024		

LOT NAME -

Remarks

Place New Sign on New Post

Place New Sign on New Post

Remarks

Place New Sign on New Post

Replace Existing Sign with New Sign on New Post

Place New Sign on New Post

Remove and Reset Existing Sign on New Post

Remove and Reset Existing Sign on New Post

Place New Sign on New Post

Place New Sign on New Post

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	Redfield 10	72	18	9.0	1	9.0		White on Green
D1-2	Jct SD37 4 Doland 10	66	36	16.5	1	16.5		White on Green
D1-2	Frankfort>	72	18	9.0	2	18.0		White on Green
D1-2	< Frankfort	72	18	9.0	2	18.0		White on Green
D3-1	Street Signs US Hwy 212 (Two Signs for Each)	48	12	4.0	14	56.0		White on Green
D3-1	Street Signs 393 Ave - 397 Ave (Two Signs for Each)	36	12	3.0	10	30.0		White on Green
D3-1	Street Signs 172 St 173 St. (Two Signs for Each)	30	12	2.5	4	10.0		White on Green
D10-6	Mile Markers 314 - 319 (Two Signs for Each)	4.5	18	0.55	12	6.6		White on Green
D10-6	Mile Markers 315.66 (Two Signs for Each)	4.5	21	0.66	2	1.3		White on Green
I-3C	James River	42	30	8.8	2	17.5		White on Green
M1-4	US 212	30	24	5.0	6	30.0		Black on White Shield/Black Border
M3-2	East	24	12	2.0	1	2.0		Black on White/Green Border
M3-4	West	24	12	2.0	1	2.0		Black on White/Green Border
M6-2L	45 Left Arrow	21	15	2.2	1	2.2		Black on White/Black Border
M6-4	Horizontal Double Arrow	21	15	2.2	3	6.6		Black on White/Black Border
R1-1	Stop	30	30	6.3	7		44.1	White on Red
R1-1	Stop	36	36	7.5	4		30.0	White on Red
R2-1X	Speed Limit 55	24	30	5.0	1	5.0		Black on White
W1-2L	Left Curve Arrow	36	36	9.0	1		9.0	Black on Fluorescent Yellow
W1-2R	Right Curve Arrow	36	36	9.0	3		27.0	Black on Fluorescent Yellow
W1-6	Large Left Arrow	48	24	8.0	1	8.0		Black on Fluorescent Yellow
W1-6	Large Right Arrow	48	24	8.0	1	8.0		Black on Fluorescent Yellow
W1-6	Large Horizontal Arrow	48	24	8.0	1		8.0	Black on Fluorescent Yellow
W1-7	Large Horizontal Double Arrow	48	24	8.0	3		24.0	Black on Fluorescent Yellow
W1-8	Chevron	18	24	3.0	8		24.0	Black on Fluorescent Yellow
W3-1	Stop Ahead	36	36	9.0	3		27.0	Black on Fluorescent Yellow
W14-3	No Passing Zone	48X4	18X36	5.6	4		22.4	Black on Fluorescent Yellow
					Totals	246 7	01E E	

PLOT SCA

STATE OF	PROJECT	SHEET	TOTAL SHEETS
SOUTH DAKOTA	NH 0212(206)313	S11	S23
Plotting	0ate: 11/04/2024		

PLOT NAME - 1

SPECIAL SIGN LAYOUT



1.0" Radius, 0.5" Border, White on Green; "393 Ave", C 2K;



1.0" Radius, 0.5" Border, White on Green; "394 Ave", C 2K;

395	Ave	3.0 4.0 4.1 3.0 3.0
3.6 - 11.5 - + 6 36	.0 +	5

1.0" Radius, 0.5" Border, White on Green; *395 Ave*, C 2K;



1.0" Radius, 0.5" Border, White on Green; *396 Ave*, C 2K;

397	Ave	1 6.04
3.8 - 11.3 6	.0- # 11.13.8	3

1.0" Radius, 0.5" Border, White on Green; "397 Ave", C 2K;

S

1.0" Radius, 0.5" Border, White on Green;

4.1 - 9.8 - + 6.0 + 5.9 + 4.3

-30.0-

"172 St", C 2K;

73

"173 St", C 2K;

4.1 - 9.8 - 6.0 + 5.9 + 4.3

-30.0



1.0" Radius, 0.5" Border, White on Green; "US Hwy 212", C 2K 90% spacing;





3.0" Radius, 1.0" Border, White on Green; "Redfield", D 2K; "10", D 2K;



3.0" Radius, 1.0* Border, White on Green; "Frankfort", D 2K; Standard Arrow 2.25 9.9" X 6.1" 0°;



3.0" Radius, 1.0" Border, White on Green; Standard Arrow 2.25 9.9" X 6.1" 180"; "Frankfort", D 2K;



3.0" Radius, 1.0" Border, White on Green; "James", D 2K; "River", D 2K;



STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
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"Jct", D 2K; "4", D 2K; "Doland", D 2K; "10", D 2K;

SPECIAL SIGN DETAIL

SIGN BASE DETAILS FOR A 2" SIGN POST



STATE OF	PROJECT	SHEET NO.	TOTAL Sheets
DAKOTA	NH 0212(206)313	S13	S23
Plotting [)ate: 01/26/2024		

DELINEATOR INSTALLATION DETAIL



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH 0212(206)313	(206)313 S14	
Plotting [)ate: 01/26/2024		

PLOT NAME - 1

CHEVRON INSTALLATION DETAIL



WI-8 Chevron		STATE OF SOUTH	PROJECT	SHEET NO.	TOTAL Sheets
WI-8 Chevron		DAKOTA	NH 0212(206)313	S15	S23
WI-8 Chevron		Plotting [ote: 01/26/2024		
WI-8 Chevron					
WI-8 Chevron					
WI-8 Chevron					
WI-8 Chevron					
WI-8 Chevron 6' 4' Edge of driving lane Edge of shoulder					
WI-8 Chevron					
WI-8 Chevron					
WI-8 Chevron					
WI-8 Chevron 6' 4' Edge of driving lane Edge of shoulder					
WI-8 Chevron 6' 4' Edge of driving lane Edge of shoulder					
6' 4' Edge of driving lane Edge of shoulder		WI	-8 Chevron		
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GN	2x 8	18×24	24×30	30×36	36×48
ZE N)	P	OST LE	ENGTH	L (FT)	
6:1	6 ¹ /2	7	7 ¹ /2	8	9
4:1	7	7 ¹ /2	8	8 ¹ /2	9 ¹ /2
3:1	7 /2	8	8 ¹ /2	9	10









PLOT SCALE -

PLOTTED FROM - TRAB17879B

	STATE OF		PRUJECI		SHEETS		
	SOUTH DAKOTA	NH	0212(206)313	S19	S23		
	Plotting [)ate: 11/(04/2024				
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neator							
∕──Wood Guardrail Blockout							
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-2" Pr	x ¼" Lag E e-drill hole	Bolts with s before i	$\frac{1}{16}$ " Washers nstalling lag bolts.				
						PLOT NAME - 5	
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sheeting. dgeline color. ches of sheeting							
e fabricated exible plastic. eators may						-1.DGN	
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			March 31. 2024				
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JULATION COAN	<i>VIIT</i> IL		Sheet 2 of 4				

			STATE OF		PROJECT	SHEET NO.	TOTAL SHEETS	
			DAKOTA	NH	0212(206)313	S20	S23	
			Plotting	Date: 11/0	04/2024			
						1		
GENERAL NOTES:								
The delineation of high tension cable guardrail will be reflective sheeting placed back to back on every third post cap or cable spacer. Maximum spacing of delineation will not exceed 35 feet. The sheeting will be type XI in conformance with ASTM D4956. The color of the reflective sheeting will be the same as the nearest pavement marking.								NAME - 6
The delineators for steel beam guardrail and sheeting on 3 cable guardrail (low tension) posts will be covered with a minimum of 16 square inches of reflective sheeting. The reflective sheeting will be type XI in conformance with ASTM D4956. Along two-way roadways the sheeting will be on both sides of the delineators and guardrail posts and will 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.								PLOT
When steel beam guardrail is attach bridge.	ed to	a bridge the first delineator will b	e attached	to the pos	t nearest the			
At bridges with guardrail less than 2 the end terminal yellow object marke of the length of the guardrail.	00 fe er. Th	et in length, a minimum of 4 deline e spacing between the delineator	eators will t s will be ap	pe placed	in addition to ely one third			
At bridges with guardrail 200 feet an transitioning to 3 cable guardrail (lov 50 feet. Delineation will extend throu	id gre v tens ighou	ater in length, including bridges t ion), the delineators will be place t the length of the guardrail syste	hat have st d at a spac m.	eel beam ing of app	guardrail proximately			JGN
Steel beam guardrail that is not attached to a bridge and is less than 200 feet in length, a minimum of 4 delineators will be placed in addition to the end terminal yellow object markers. The spacing between the delineators will be approximately one third of the length of the guardrail.								TES 40_2.C
Steel beam guardrail that is not attached to a bridge and is 200 feet and greater in length, including steel beam guardrail transitioning to 3 cable guardrail (low tension), the delineators will be placed at a spacing of approximately 50 feet. Delineation will extend throughout the length of the guardrail system.							S\STD PLA	
All costs for furnishing and installing single or back to back guardrail delineation on 3 cable guardrail and steel beam guardrail will be included in the contract unit price per each for "Guardrail Delineator".						ECTION		
All costs for furnishing and installing the reflective sheeting on the cable spacers or post caps for the high tension cable guardrail will be incidental to the respective high tension cable guardrail contract item.						>		
An adhesive object marker will be placed on the end of the W beam guardrail or MGS 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 on end terminals with sufficient surface area. Other end terminals (SoftStop) will require an adhesive object marker with a minimum size of 6" x 12". The reflective sheeting will be fluorescent yellow type XI sheeting in conformance with ASTM D4956. All costs for furnishing and installing the adhesive object marker will be incidental to various contract items.					FILE			
A type 2 object marker will be placed adjacent to the 3 cable guardrail (low tension) anchor, high tension cable guardrail anchor, and trailing end terminal at the location noted on sheet 1 of this standard plate. The type 2 object marker (6" x 12") will have fluorescent yellow type XI sheeting in conformance with ASTM D4956. All costs for furnishing and installing the type 2 object marker including the steel post, 6" x 12" reflective panel, and hardware will 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.								
					Hand 71 000 f			
	c				March 31, 2024	1		
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Dublished Deter ADAR	D 0	DELINEATION OF GU	AKUKAIL			-		
Published Date: 2025	Ť				Sheet 4 of 4	J		

GENERAL NOTES: Delineators will be located from 2 to 8 feet outside o roadside barrier or other obstruction intrudes into the and the extension of the line of delineators, the delin or in line with the innermost edge of the obstruction. When normal spacing is interrupted by driveways, cr falling within such areas may be moved in either dire one-quarter of the standard spacing. Delineators still eliminated. The spacing for specific radii may be interpolated fro spacing should be 20 feet. The spacing on curves sh In advance of or beyond a curve, and proceeding aw the spacing of the first delineator is 2S, the second 3 to exceed 300 feet. S refers to the delineator spacing the formula $S = 3\sqrt{R - 50}$. The distances for S show nearest 5 feet. Curve approach delineation is not required if curve Back-to-back delineation is required for two-way tra-DELINEATOR OUTSIDE C Radius Curve Delineator of Curve (Ft.) Spacing (Ft. 50 20 115 25 150 30 180 35 250 40 300 45 400 55 500 65 600 70 700 75 800 80 85 900 1000 90

Published Date: 2025	S D D O T	DELINEAT

	STATE OF		PROJECT		SHEETS	
	SOUTH DAKOTA	NH	0212(206)313	S21	S23	1
	Plotting	1 Date: 11/(04/2024	-		1
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STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
DAKOTA	NH 0212(206)313	S23	S23
Plotting [Date: 11/04/2024		

PLOT NAME - 9