

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 N-291	1	25

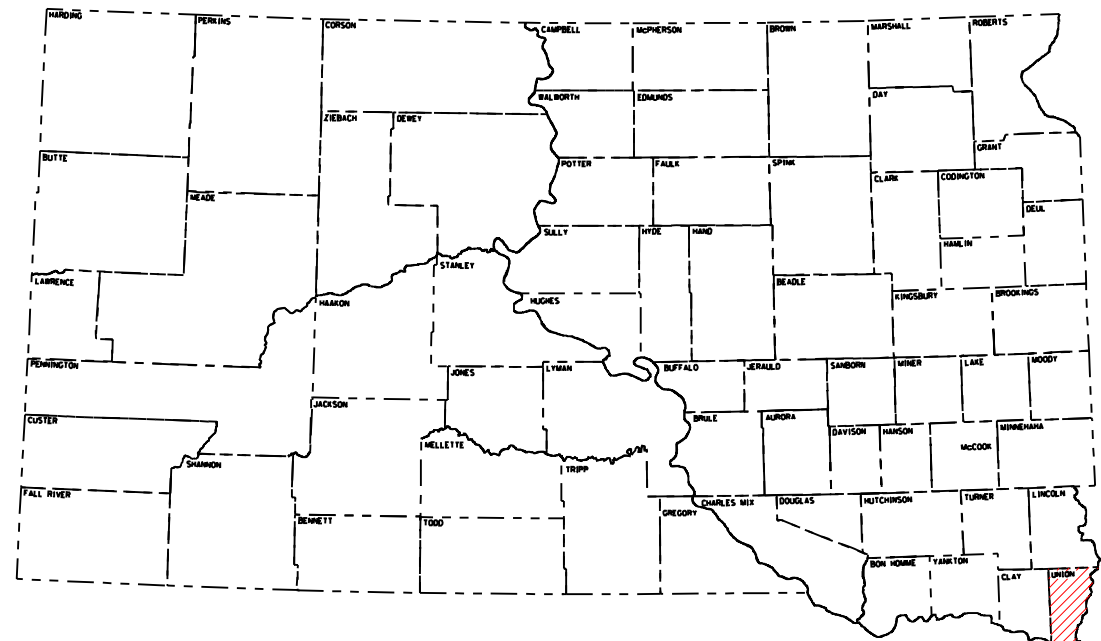
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT 029 N-291
INTERSTATE 29
UNION COUNTY

CANTILEVER SIGNING, SIGNING
MODIFICATION & GUARDRAIL
PCN IONV

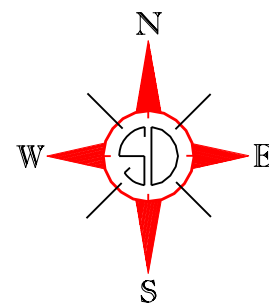
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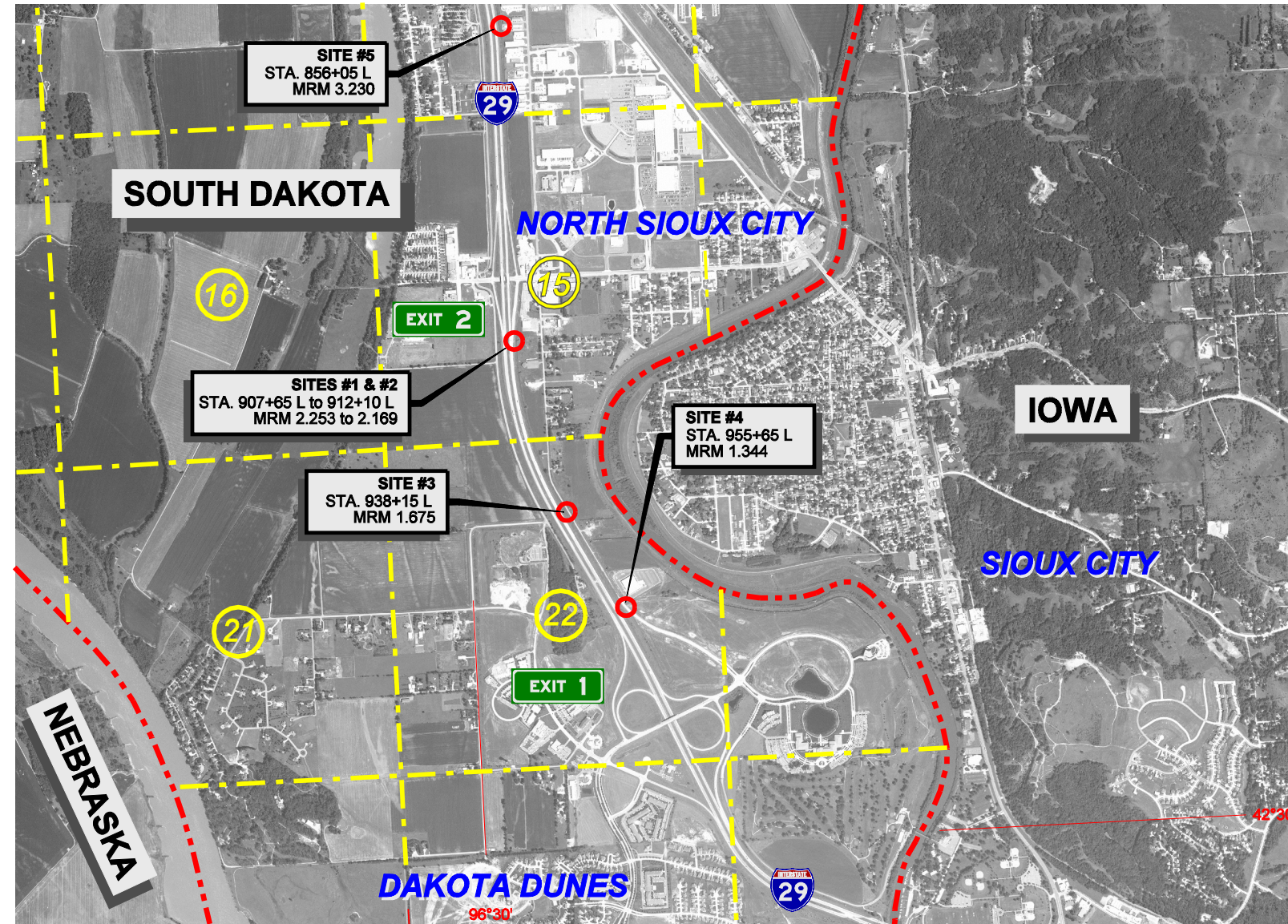


PROJECT

R 48 W



T 89 N



DESIGN DESIGNATION

ADT (1996)	14945
ADT (2016)	20385
DHV	281.3
D	50%
T DHV	7.9%
T ADT	17.3%
V	70 MPH

LEGEND

STATE AND NATIONAL LINE	
COUNTY LINE	
SECTION LINE	

PLANS PREPARED BY:



MITCHELL, SOUTH DAKOTA

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

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

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

FILE - \$\$FILENAME\$\$

ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
110E0100	Remove Concrete Footing(s)	Lump Sum	LS
110E0700	Remove 3 Cable Guardrail	270	Ft
110E0740	Remove 3 Cable Guardrail Anchor Assembly	2	Each
110E5020	Salvage Traffic Sign	1	Each
110E6010	Remove 3 Cable Guardrail Anchor Assembly for Reset	1	Each
629E0100	3 Cable Guardrail	302	Ft
629E0400	3 Cable Guardrail Anchor Assembly	2	Each
629E0420	3 Cable Guardrail Anchor Assembly w/New Anchor and Salvaged Hardware	1	Each
629E1102	3 Cable Guardrail Intermediate Post	5	Each
632E0014	1.75' Diameter Breakaway Support Concrete	8.0	Ft
632E0072	4' Diameter Fixed Support Concrete Footing	32.0	Ft
632E1225	W6x12 Steel Post	30.4	Ft
632E3105	Extruded Aluminum Sign, Removable Copy Super/Very High Intensity	339.0	Sq Ft
632E3520	Remove, Salvage, Relocate, and Reset Traffic Sign	2	Each
632E5020	Overhead Cantilever Sign Support	2	Each
634E0010	Flagging	20	Hour
634E0100	Traffic Control	673	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0420	Type C Advance Warning Arrow Panel	2	Each

SPECIFICATIONS

South Dakota Standard Specifications for Roads and Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and/or Special Provisions as included in the Proposal.

SCOPE OF WORK

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

A. Items to be removed by the Contractor:

- Existing permanent signs and posts.
- Existing sign bridge concrete footings.
- Existing three cable guardrail and anchor assemblies.

B. Items to be furnished and installed by the Contractor:

- Overhead cantilever sign supports with concrete footings.
- Single direction breakaway sign supports with concrete footings.
- Extruded aluminum signs, removable legend, side trim moldings and border.
- Three cable guardrail and anchor assemblies, and three cable guardrail modifications.

COMPLETION DATE

Work on this project shall be completed by October 26, 2007. After this date, working days will be counted and liquidated damages assessed in accordance with Section 8.7 of the Standard Specifications.

REMOVE, SALVAGE, RELOCATE AND RESET TRAFFIC SIGN

The Contractor shall remove, salvage, relocate and reset existing signs to existing sign supports, as detailed in the plans. The relocated signs shall be installed on the existing sign supports with new mounting hardware. All costs for relocating signs, new mounting hardware, and miscellaneous hardware shall be incidental to the contract unit price per each for Remove, Salvage, Relocate and Reset Traffic Sign.

SIGN LEGEND, BORDER AND BACKGROUND

All sign materials shall comply with Section 982 of the Standard Specifications.

All sign legend, border and background sheeting material shall meet or exceed standards for ASTM D 4956 classified Type III high intensity sheeting or Type IX super/very high intensity microprismatic sheeting, as indicated in the plans. Removable copy sheeting material on overhead mounted signs shall meet or exceed standards for ASTM D 4956 classified Type IX super/very high intensity microprismatic sheeting. E11-1 "EXIT ONLY" background sheeting on overhead signs shall be fluorescent yellow in color and shall meet or exceed standards for ASTM D 4956 classified Type IX super/very high intensity microprismatic sheeting. All sign sheeting shall conform to AASHTO DESIGNATION:M 268.

Unless otherwise specified in the plans:

- All upper case letters, lower case letters and all numerals shall be Series "E" Modified.
- The border on all signs 3 feet or less in height shall be 1 inch wide. The border on all signs 4 feet or more in height shall be 2 inches wide.
- The corner radii on all signs 3 feet or less in height shall be 3 inches. The corner radii on all signs greater than 3 feet and less than 6 feet in height shall be 6 inches. The corner radii on all signs 6 feet or more in height shall be 12 inches. The sign height, sign width, legend height and symbol sizes are specified herein.

The side trim moldings shall be painted with a color that matches the color of the sign background sheeting. The color coat shall be preceded by a zinc chromatic primer. Paints shall be approved by the Engineer prior to use.

The finish-coat color required on new Extruded Aluminum guide signs is interstate green, and yellow for exit only warning panels. The finish-coat color required on new Extruded Aluminum motorist service (logo) signs is interstate blue.

REMOVAL AND SALVAGE OF EXISTING SIGNS

1. Removal and Salvage of Existing Signs:

The Contractor shall remove and salvage the existing signs listed in the Permanent Signing Table. The signs are extruded aluminum signs with removable copy legend or a 0.063" aluminum overlay riveted to extruded aluminum panels, or flat aluminum signs with nonremovable copy.

Extruded Aluminum Panel Signs

The Contractor shall securely support the sign and remove the clips holding the extruded aluminum sign to the supports. The aluminum overlay and extruded aluminum panels shall be removed and handled as one unit. All salvaged signs that are not immediately relocated and reset shall be neatly stockpiled, so they are not damaged.

Flat Aluminum Signs

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

2. Miscellaneous Sign Related Items:

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

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

Salvaged posts, signs, sign materials and overlays shall be returned to the SDDOT Maintenance Yard at the junction of I-29 and I-229, or the Junction City SD Dept. of Transportation Maintenance Complex, I-29 Exit 26. Stockpiling of salvaged material shall be coordinated with the Project Engineer and Gerald Hansen, Highway Maintenance Supervisor, at the SDDOT Maintenance Yard. Mr. Hansen may be contacted at (605) 677-6797.

Extruded aluminum sign panels, sign overlays, sign sheeting or posts damaged due to improper handling shall be replaced in-kind at the Contractor's expense.

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

3. Payment for Sign Related Work:

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

CANTILEVER SIGNS

- The Contractor shall design, furnish and install new cantilever signs and sign support structures in accordance with these plans and specifications.
- The cantilever sign support structures, including anchor bolts, shall be designed in accordance with the Standard Specifications for Highway Signs, Luminaires and Traffic Signals, 2001, with Interims thru 2006, using Fatigue Category I with galloping, natural wind gusts and truck induced gusts.
- Cantilever sign supports shall incorporate a minimum of 6 anchor bolts.
- The cantilever sign support structures shall be galvanized steel. Galvanizing shall be in accordance with AASHTO M111 (ASTM123). Steel material shall be in accordance with ASTM A36, A242, A570, A572, A607 or A595, Grade A or B. A595 material shall be limited to a 3/8 in maximum thickness. Steel material with a thickness of 1/2 inch to 2 inches shall satisfy Charpy V-Notch toughness test requirements of 15 ft. lb. at 40 degrees F. The SDDOT Office of Bridge Design shall be contacted for Charpy impact requirements for steel material thickness greater than 2 inches.
- See Special Provision for Anchor Bolt Tightening.

DATE DECALS

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



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

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

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

SIGN POSTS

The plan post lengths shall be field verified by the Contractor prior to installation.

SIGN NUMBERING CONVENTION

Sign installations in these plans are numbered with prefixes that correspond to the following general locations:

NB-1XX - Northbound Lane I-29 Mainline Signs and Stationing

ACCEPTANCE OF SIGN INSTALLATIONS

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

CONCRETE FOOTINGS (CLASS M6)

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

Extreme care should be used to make certain that the footings are constructed in accordance with the plan sheets, and the finished ground line at all footings are per the details shown on the plan sheets. Disturbed areas within the grading project limits shall be seeded to the satisfaction of the Engineer. The cost of seeding shall be incidental to the various Concrete Footing and Removal items.

The soils at the proposed footing locations consisted predominantly of a silt-clay to a depth of 15' and then a fine silt-sand down to 40'. The holes caved during the site investigation at approximately 25' which would indicate the presence of water. The footing excavation should stay open for a short period of time, assuming groundwater is not encountered at the time of sign footing placement. The contractor shall place concrete for the cylindrical footing immediately after excavation to help alleviate any potential caving issues.

TWO-POST BREAKAWAY SIGN SUPPORT FOOTINGS TABLE

SIGN NUMBER	SIGN DESCRIPTION	SITE LOCATION	POST SIZE	FOOTING DIMENSIONS		STUB POST LENGTH	LONGITUDINAL STEEL		SPIRAL STEEL	
				DIA.	DEPTH		QTY - SIZE	LENGTH	DIA.	LENGTH
NB-105	South Dakota Traveler Information Dial	I-29 Exit 2 Mainline	W 6 x 12	1' - 9"	4' - 0"	2' - 0"	8 - #6 Bars	3' - 8"	1' - 5"	29'

OVERHEAD SIGN SUPPORT FOOTINGS TABLE

SIGN NUMBER	SIGN DESCRIPTION	SITE LOCATION	SUPPORT DESCRIPTION	FOOTING DIMENSIONS		LONGITUDINAL STEEL			SPIRAL STEEL		
				DIA.	DEPTH	NO.	SIZE	DEPTH	SIZE	DIA.	LENGTH
NB-102	N Sioux City Exit Only (Exit Directional)	I-29 NB Mainline	Cantilever Support	4' - 0"	16' - 0"	20	#9	15' - 3"	#3	3' - 8"	226'
NB-104	N Sioux City Exit Only (Advance)	I-29 NB Mainline	Cantilever Support	4' - 0"	16' - 0"	20	#9	15' - 3"	#3	3' - 8"	226'

TABLE FOR REMOVAL AND INSTALLATION OF GUARDRAIL AND RELATED ITEMS

LOCATION	LANE-SHOULDER	110E0700 REMOVE 3 CABLE GUARDRAIL	110E0740 REMOVE 3 CABLE GUARDRAIL ANCHOR ASSEMBLY	110E6010 REMOVE 3 CABLE GUARDRAIL ANCHOR ASSEMBLY FOR RESET*	629E0100 3 CABLE GUARDRAIL	629E0400 3 CABLE GUARDRAIL ANCHOR ASSEMBLY	629E0420 3 CABLE GUARDRAIL ANCHOR ASSEMBLY W/ NEW ANCHOR AND SALVAGED HARDWARE	629E1102 3 CABLE GUARDRAIL INTER-MEDIATE POST
		Ft	Each	Each	Ft	Each	Each	Each
CANTILEVER SIGN SUPPORT AT STA. 907+85								
	NBL OUTSIDE	42	-	1	58	-	1	5
	NBL MEDIAN	228	2	-	-	-	-	-
CANTILEVER SIGN SUPPORT AT STA. 938+15								
	NBL OUTSIDE	-	-	-	244	2	-	-
	NBL MEDIAN	-	-	-	-	-	-	-
GRAND TOTALS:		270	2	1	302	2	1	5

* - The concrete anchor portion shall be removed and not reset.

GENERAL MAINTENANCE OF TRAFFIC

Removing, relocating, covering, salvaging and resetting of permanent traffic control devices, including delineation, shall be the responsibility of the Contractor. Cost for this work shall be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.

Storage of vehicles and equipment shall be outside the clear zone and as near as possible to the right-of-way line. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work sites in a minimum number of vehicles necessary to perform the work.

Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage to the vegetation, surfacing, embankment, delineators and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.

The Contractor shall provide documentation that all breakaway sign supports comply with FHWA NCHRP 350 crash-worthy requirements. The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.

Sufficient traffic control devices for one work area are included in the Itemized List for Traffic Control. Additional concurrent work areas may be established if approved by the Engineer, and at Contractor expense.

The Contractor shall close the right two lanes of I-29 when installing the cantilever mast arms and signs. Closure of the right two lanes of I-29 shall not be permitted before 9:00 AM, and traffic shall be restored to all lanes during non daylight hours.








STATE FURNISHED CHANGEABLE MESSAGE SIGN

The need for the State furnished changeable message sign shall be determined by the Engineer. If needed, the Engineer shall contact the Mitchell Region Traffic Office at least two weeks in advance to arrange for delivery and set up of the changeable message sign. The changeable message sign shall be set up and operational prior to closure of the right two lanes. The State furnished changeable message sign will be set up, operated and maintained by the State.

ITEMIZED LIST FOR TRAFFIC CONTROL

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
E5-1	36" x 32"	EXIT GORE SIGN		24	
G20-2	36" x 18"	END ROAD WORK	1	17	17
R1-1	48" x 48"	STOP		34	
R1-2	48" x 48"	YIELD		34	
R2-1	30" x 36"	SPEED LIMIT __		23	
R2-5a	30" x 36"	REDUCED SPEED AHEAD		23	
R4-7	24" x 30"	KEEP RIGHT (SYMBOL)		18	
R5-1	48" x 48"	DO NOT ENTER		34	
R5-1a	48" x 36"	WRONG WAY		29	
R10-6	24" x 36"	STOP HERE ON RED		20	
R11-2	48" x 30"	ROAD CLOSED		27	
R11-3a	60" x 30"	ROAD CLOSED __ MILES AHEAD LOCAL TRAFFIC ONLY		30	
R11-4	60" x 30"	ROAD CLOSED TO THRU TRAFFIC		30	
SW12-1b	120" x 60"	HIGHWAY WORKERS GIVE'EM A BRAKE		80	
W1-1	48" x 48"	LEFT OR RIGHT TURN ARROW		34	
W1-2	48" x 48"	LEFT OR RIGHT CURVE ARROW		34	
W1-3	48" x 48"	REVERSE TURN SIGN (LEFT OR RIGHT)		34	
W1-4a	48" x 48"	REVERSE CURVE SIGN (LEFT OR RIGHT)		34	
W3-1a	48" x 48"	STOP AHEAD (SYMBOL)		34	
W3-2a	48" x 48"	YIELD AHEAD (SYMBOL)		34	
W3-3	48" x 48"	SIGNAL AHEAD (SYMBOL)		34	
W3-5	48" x 48"	SPEED REDUCTION (__ MPH)		34	
W4-1	48" x 48"	MERGE (SYMBOL)		34	
W4-2	48" x 48"	LEFT OR RIGHT LANE ENDS (SYMBOL)	4	34	136
W5-2	48" x 48"	NARROW BRIDGE		34	
W5-3	48" x 48"	ONE LANE BRIDGE		34	
W7-3a	30" x 24"	NEXT __ MILES		18	
W8-1	36" x 36"	BUMP		27	
W8-6	48" x 48"	TRUCK CROSSING		34	
W8-7	36" x 36"	LOOSE GRAVEL		27	
W8-9a	48" x 48"	SHOULDER DROP-OFF		34	
W8-11	48" x 48"	UNEVEN LANES		34	
W13-1	24" x 24"	ADVISORY SPEED PLATE	2	16	32
W20-1	48" x 48"	ROAD WORK 1 MILE OR AHEAD	2	34	68
W20-2	48" x 48"	DETOUR AHEAD		34	
W20-3	48" x 48"	ROAD CLOSED AHEAD		34	
W20-4	48" x 48"	ONE LANE ROAD AHEAD		34	
W20-5	48" x 48"	LT. OR RT. LANE CLOSED AHEAD	2	34	68
W20-7a	48" x 48"	FLAGGER	2	34	68
W20-7b	48" x 48"	BE PREPARED TO STOP		34	
W21-1a	48" x 48"	WORKERS (SYMBOL)		34	
W21-2	36" x 36"	FRESH OIL		27	
W21-3	48" x 48"	ROAD MACHINERY AHEAD		34	
W21-5	48" x 48"	SHOULDER WORK		34	
W21-5a	48" x 48"	RIGHT SHOULDER CLOSED	2	34	68
W21-5b	48" x 48"	RIGHT SHOULDER CLOSED AHEAD	2	34	68
SPECIAL	30" x 24"	FINES DOUBLED		18	
W20-5a	48" x 48"	RIGHT TWO LANES CLOSED AHEAD	2	34	68
****	12" x 36"	TYPE III OBJECT MARKER		15	
****	****	TYPE III BARRICADE - 8 FT. SINGLE SIDED	2	40	80
****	****	TYPE III BARRICADE - 8 FT. DOUBLE SIDED		56	
TOTAL UNITS				673	

PERMANENT SIGNING TABLE

SIGN DATA				POST DATA								CONCRETE FOOTING DATA				REMOVAL		COMMENTS		
SITE	STATION	SIGN NUMBER	DESCRIPTION	SIGN CODE	SIGN SIZE WIDTH X HEIGHT (FT)	SIGN AREA (SQ. FT.)	OFFSET* RIGHT/LEFT OVERHEAD	POST LENGTHS (FT)		TYPE OF POST**	(N)EW or (R)EUSE POST		QUANTITY		QUANTITY (FT)		FOOTING DEPTH		QUANTITY (EA)	
								INSIDE	OUTSIDE		IN	OUT	W6x12 STEEL (FT)	CANTILEVER (EA)	BREAKAWAY 1'-9" DIA	FIXED 4'-0" DIA			REMOVE SIGN	RELOCATE SIGN
I-29 Mainline Northbound Lanes							632E3105													
#1	912+10 L	NB-101		D8-3	10 X 6		30' R	14'-0" **	14'-6" **	4"x 6" WOOD								1		REMOVE AND SALVAGE EXISTING SIGN AND POSTS.
#2	907+85 L	NB-102		E1-5 E1-2	9 X 2.5 21 X 7	22.5 147.0	OVERHEAD	***		CANTILEVER	N		1		16.0	16'-0"			NEW INSTALLATION. REMOVE EXISTING SIGN BRIDGE FOOTINGS AT STA 907+65.	
#3	938+15 L	NB-103		LOGO	10 X 6		30' R	15'-0" **	15'-6" **	4"x 6" WOOD								1	REMOVE AND SALVAGE EXISTING SIGN AND POSTS. RELOCATE LOGO SIGN TO EXISTING SUPPORTS AT STA 955+65 L.	
		NB-104		E1-5 E1-2	9 X 2.5 21 X 7	22.5 147.0	OVERHEAD	***		CANTILEVER	N		1		16.0	16'-0"			NEW INSTALLATION.	
#4	955+65 L	NB-105		D12-5	11 X 5		55' R	17'-0" **	17'-8" **	W6X15 I-BEAM	R	R							1	REMOVE AND SALVAGE EXISTING EXTRUDED ALUMINUM SIGN WITH OVERLAY AND REUSE POSTS. INSTALL SALVAGED CAMPING LOGO SIGN ON THE EXISTING SUPPORTS.
		NB-103		LOGO	10 X 6															
#5	856+05 L	NB-105		D12-5	11 X 5		30' R	14'-4"	16'-0"	W6x12 I-BEAM	N	N	30.4		8.0	4'-0"				INSTALL SALVAGED EXTRUDED ALUMINUM SIGN WITH OVERLAY ON NEW POSTS AND FOOTINGS.
TOTALS						339.0							30.4	2	8.0	32.0		1	2	

* - Distance from White or Yellow Edgeline, or Back of Curb, to Edge of Sign.

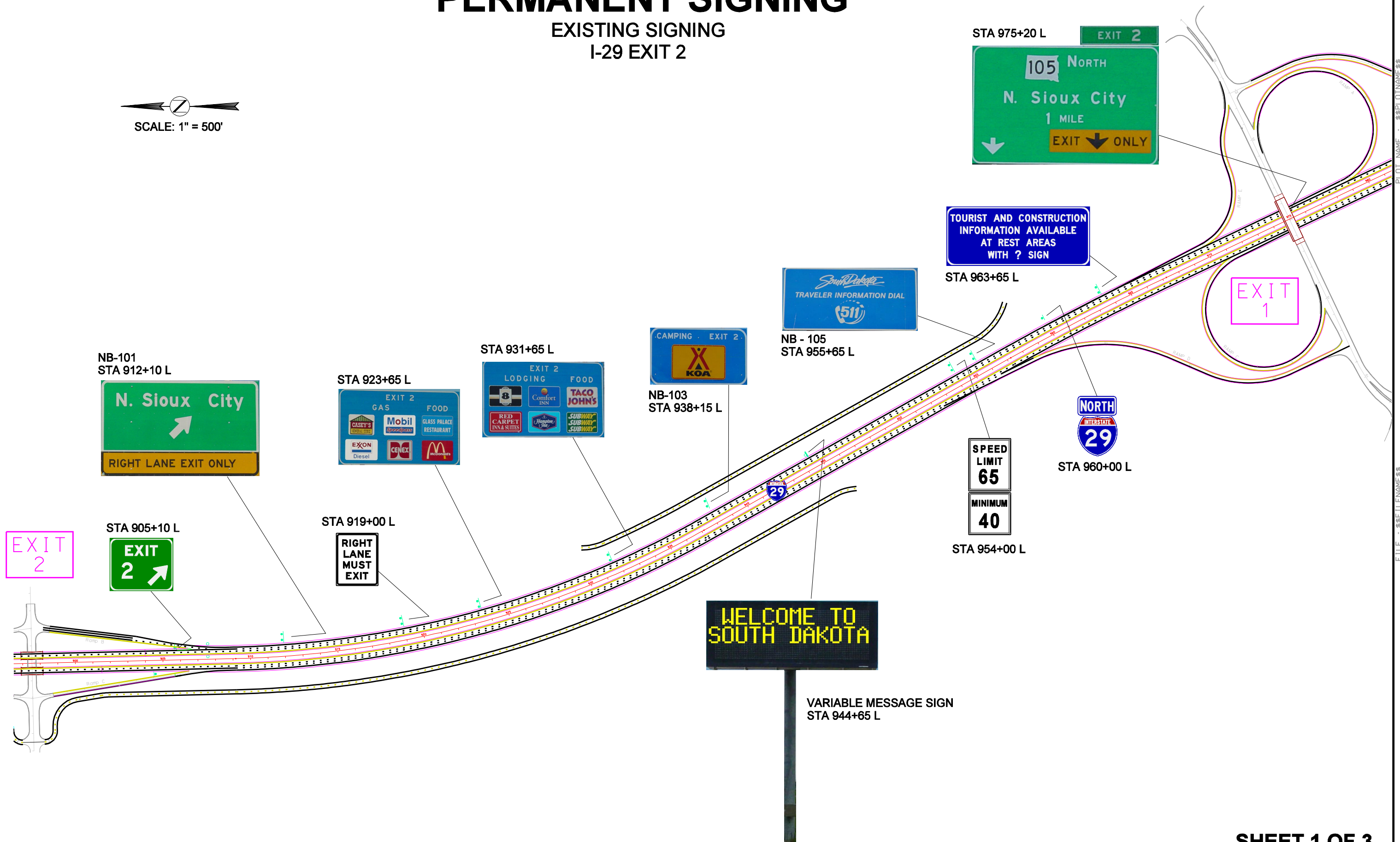
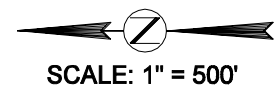
EA = Extruded Aluminum Panel Signs w/Removable Copy.

** - Post lengths are approximate, does not include in-ground length.

*** - Contractor shall determine length.

PERMANENT SIGNING

EXISTING SIGNING I-29 EXIT 2



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

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

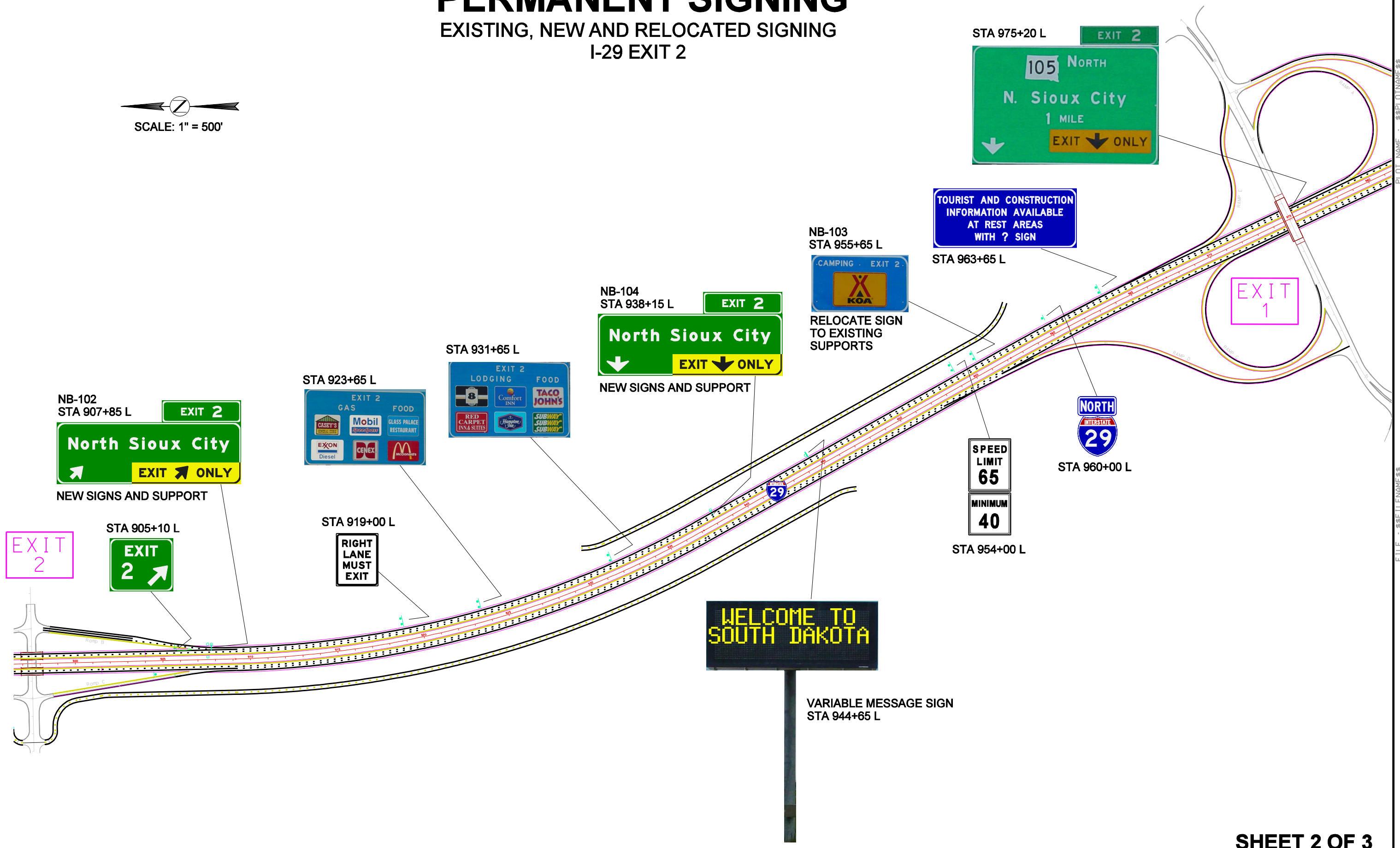
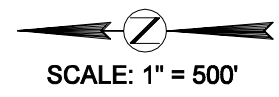
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FILE - \$\$FILENAME\$\$

PERMANENT SIGNING

EXISTING, NEW AND RELOCATED SIGNING

I-29 EXIT 2

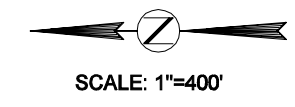


STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 N-291	8	25

PERMANENT SIGNING

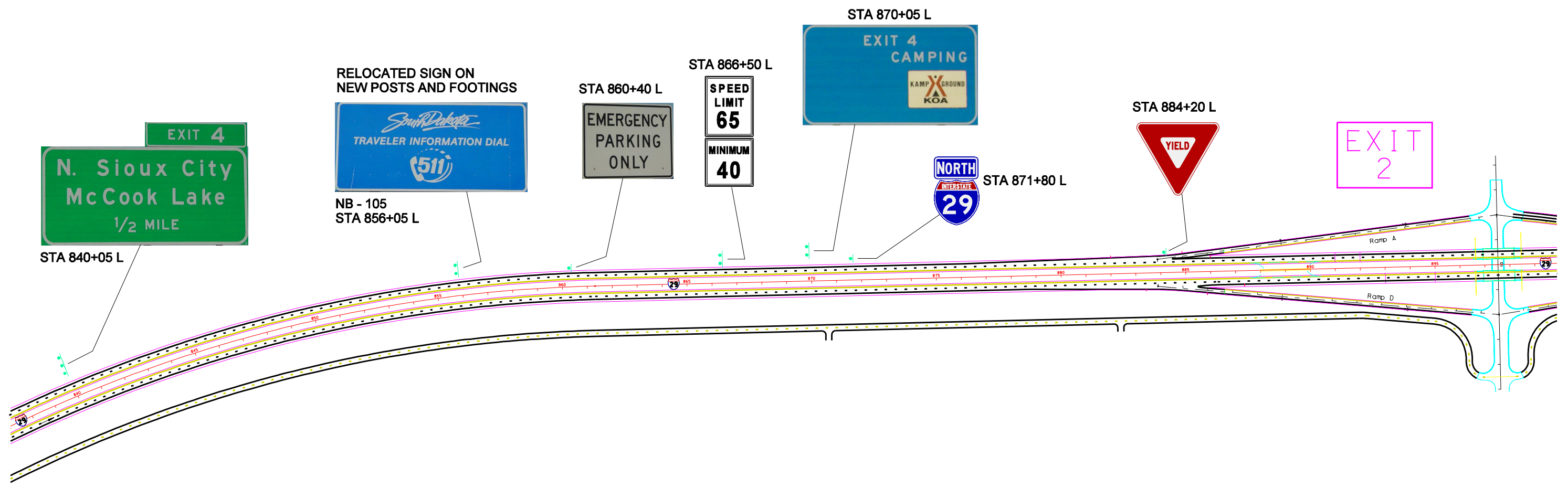
EXISTING AND NEW SIGNING

I-29 EXIT 2



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

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



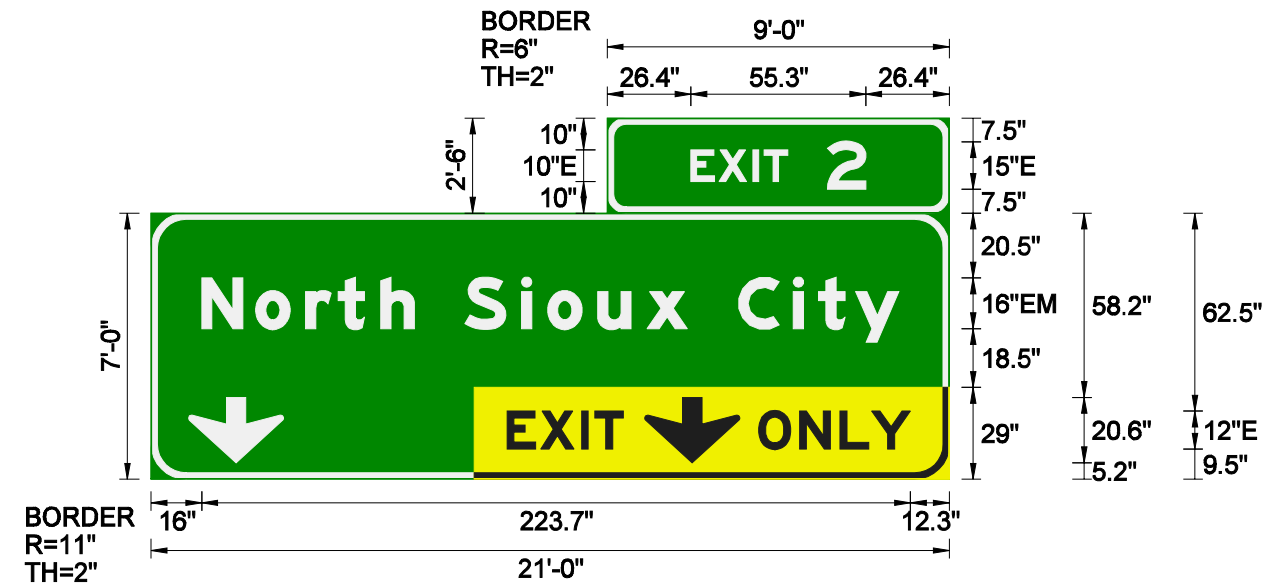
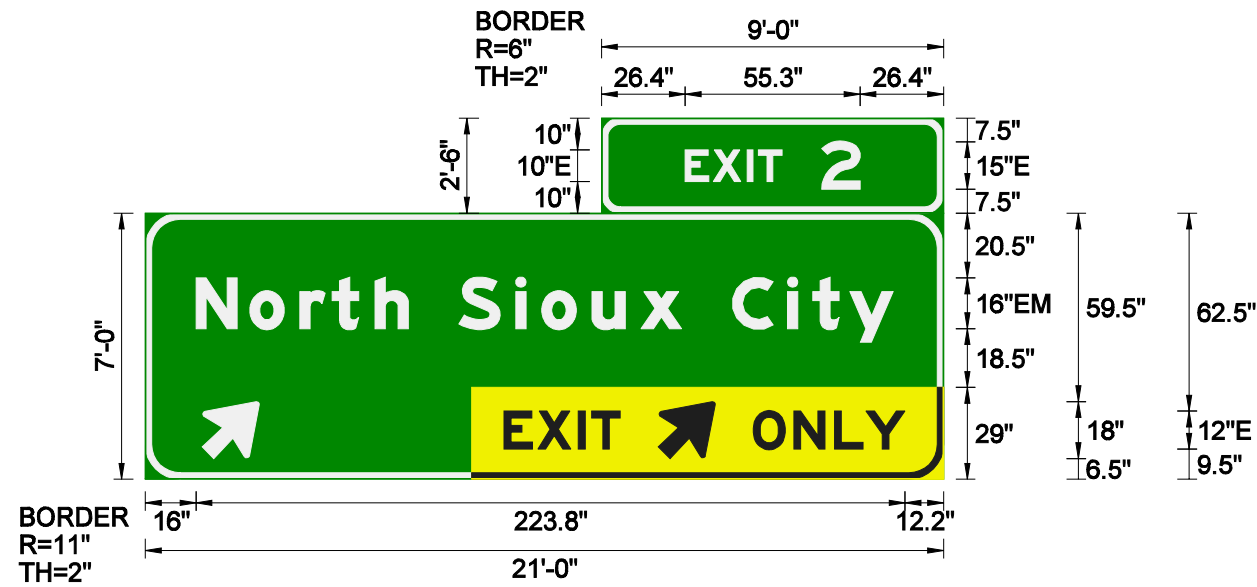
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FILE - \$\$FILENAME\$\$

EXTRUDED ALUMINUM SIGNS WITH REMOVABLE COPY HIGH INTENSITY

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 N-291	9	25

GUIDE SIGNS



SIGN NUMBER	NB-102
WIDTH x HEIGHT	9'-0" x 2'-6" / 21'-0" x 7'-0"
BORDER WIDTH	2"
CORNER RADIUS	6" / 11"
MOUNTING	Overhead Cantilever
BACKGROUND	TYPE: High Intensity Green Super / Very High Intensity Fluorescent Yellow
	COLOR: Green & Fluorescent Yellow
LEGEND/BORDER	TYPE: Super / Very High Intensity White
	COLOR: White / Opaque Black

SYMBOL	ROTATE	WIDTH	LENGTH
ARROWS	45°	20"	22.5"

SIGN NUMBER	NB-104
WIDTH x HEIGHT	9'-0" x 2'-6" / 21'-0" x 7'-0"
BORDER WIDTH	2"
CORNER RADIUS	6" / 11"
MOUNTING	Overhead Cantilever
BACKGROUND	TYPE: High Intensity Green Super / Very High Intensity Fluorescent Yellow
	COLOR: Green & Fluorescent Yellow
LEGEND/BORDER	TYPE: Super / Very High Intensity White
	COLOR: White / Opaque Black

SYMBOL	ROTATE	WIDTH	LENGTH
ARROWS	0°	30"	20.6"

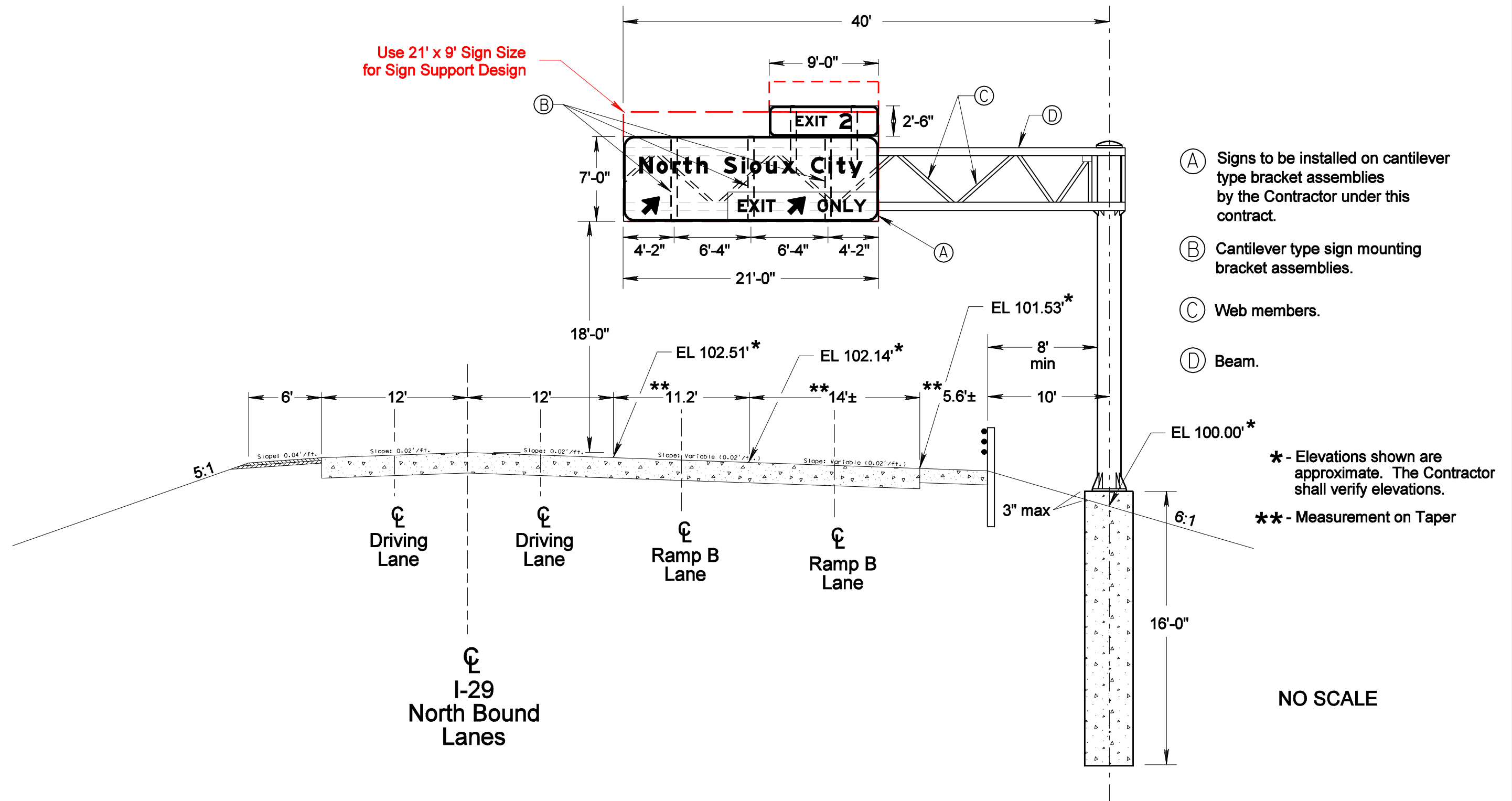
OVERHEAD SIGN SUPPORT DETAILS

CANTILEVER SIGN SUPPORT

Sign #NB-102

NBL I-29 Mainline - Station 907+85 L

Use 21' x 9' Sign Size
for Sign Support Design



- (A) Signs to be installed on cantilever type bracket assemblies by the Contractor under this contract.
- (B) Cantilever type sign mounting bracket assemblies.
- (C) Web members.
- (D) Beam.

* - Elevations shown are approximate. The Contractor shall verify elevations.

** - Measurement on Taper

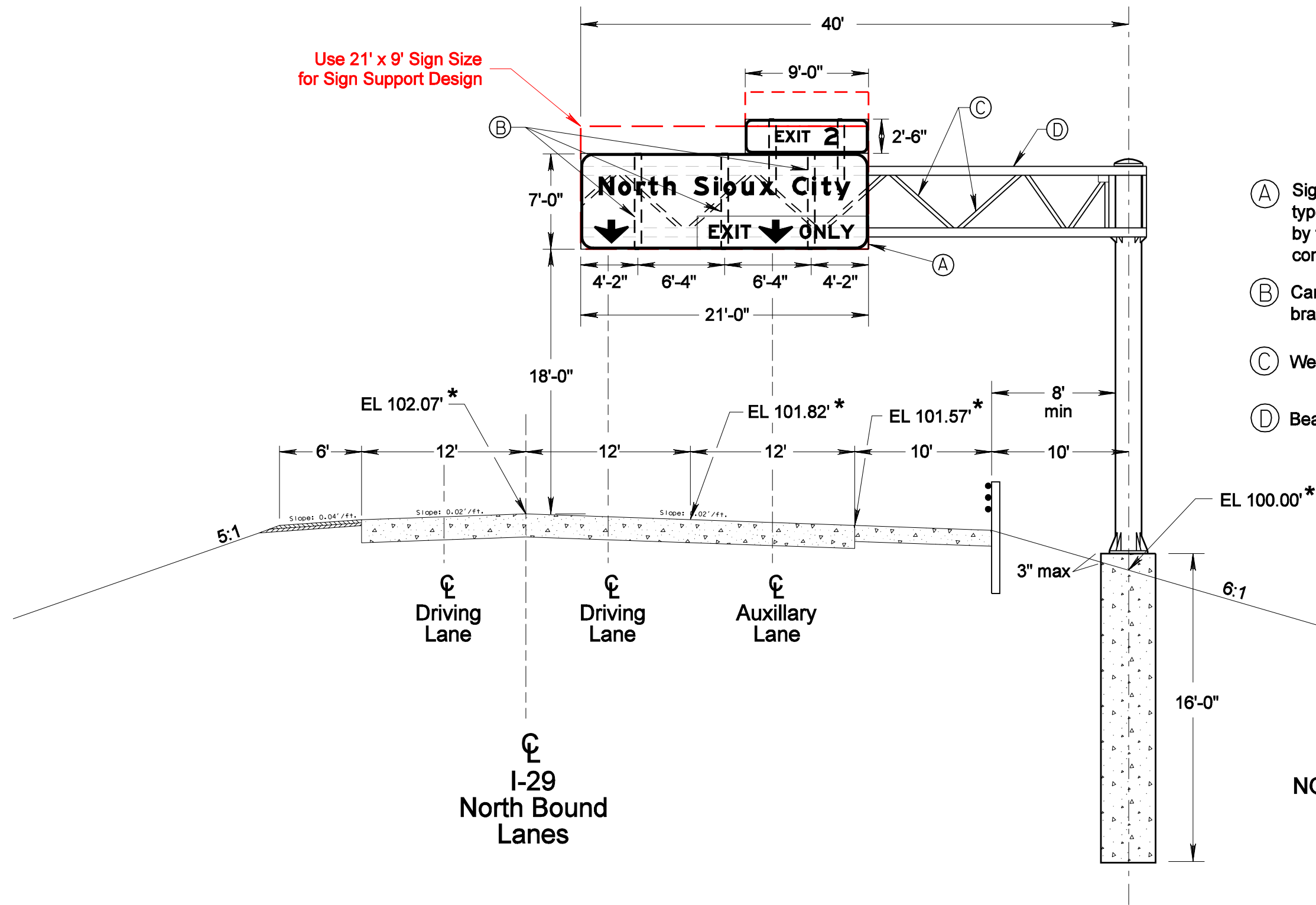
NO SCALE

OVERHEAD SIGN SUPPORT DETAILS

CANTILEVER SIGN SUPPORT

Sign #NB-104

NBL I-29 Mainline - Station 938+15 L



- (A) Signs to be installed on cantilever type bracket assemblies by the Contractor under this contract.
- (B) Cantilever type sign mounting bracket assemblies.
- (C) Web members.
- (D) Beam.

* - Elevations shown are approximate. The Contractor shall verify elevations.

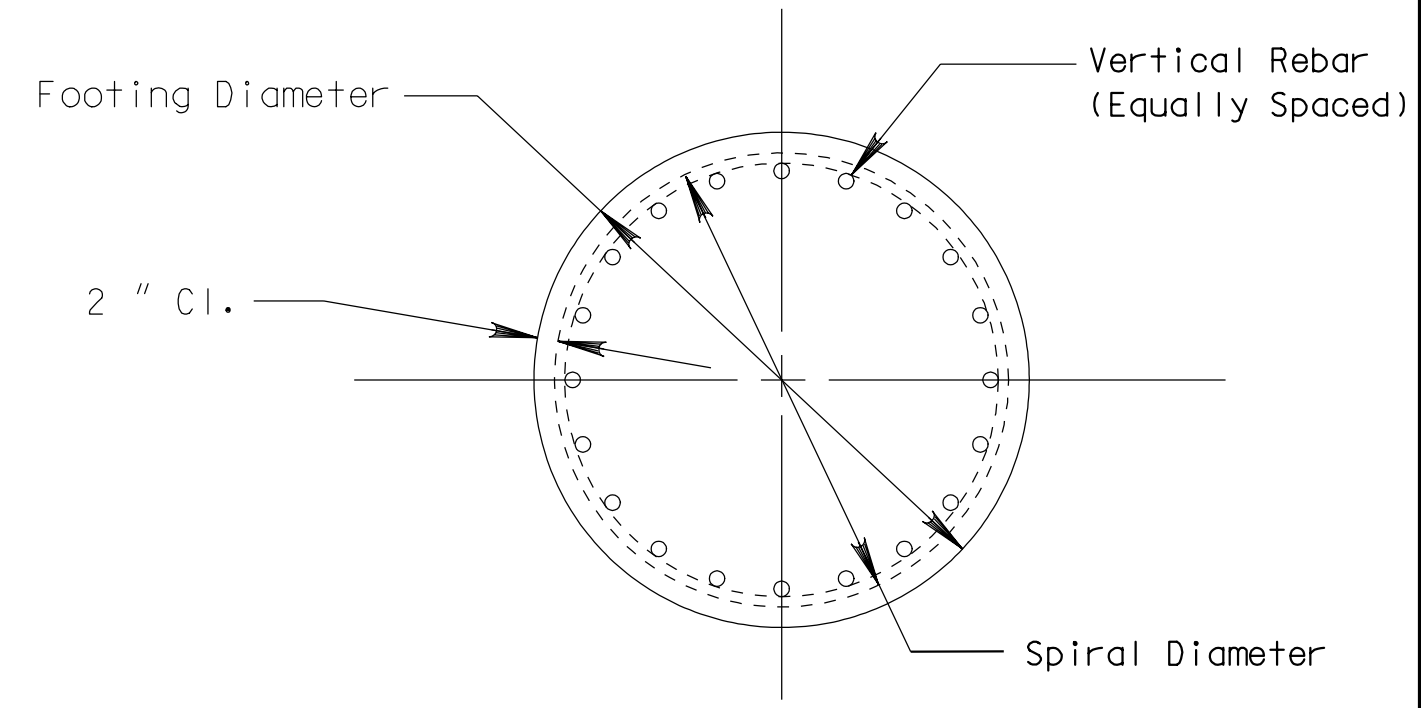
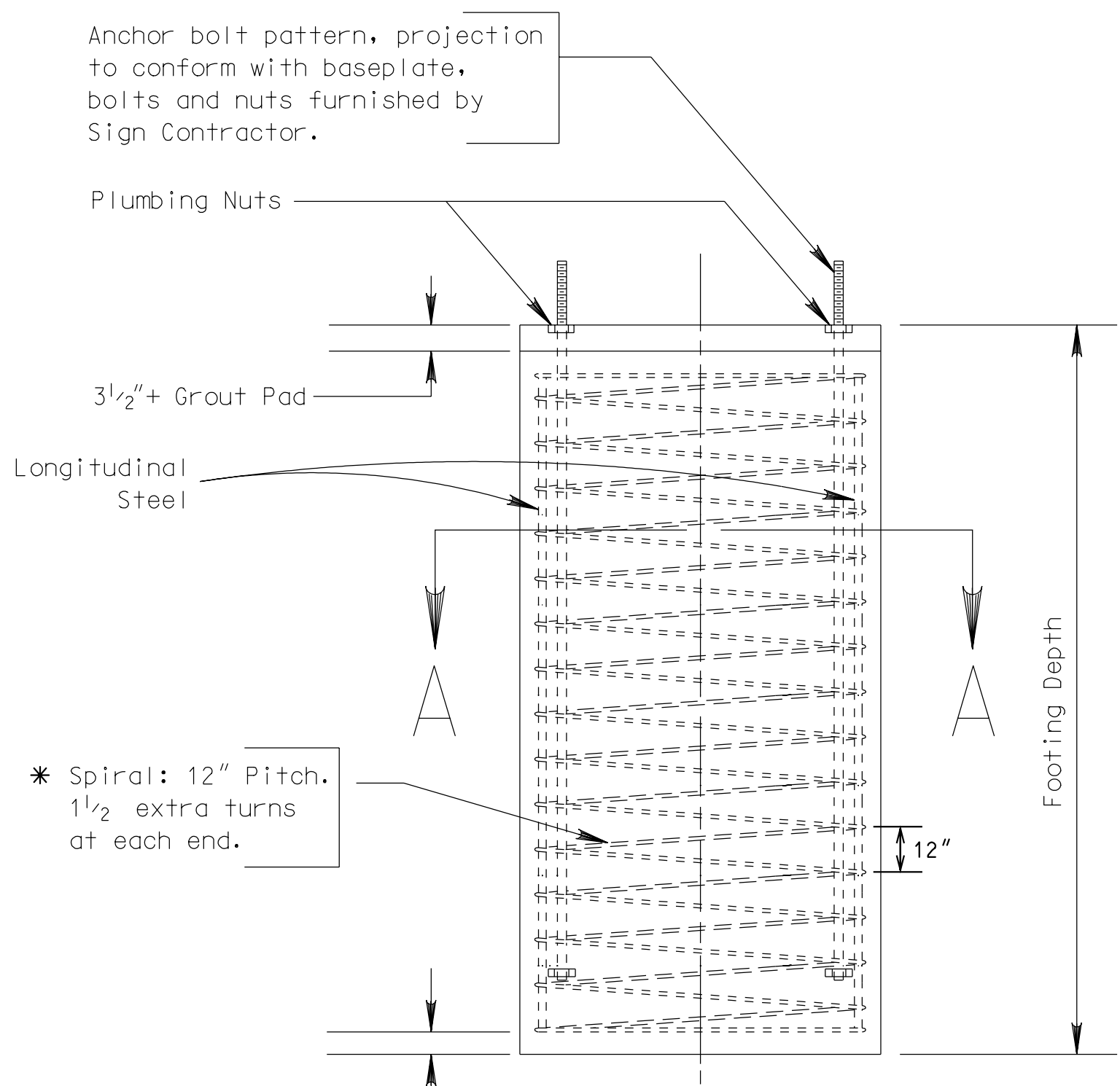
NO SCALE

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

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

CANTILEVER SUPPORT FOOTING DETAILS

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 N-291	13	25



SECTION A-A
(Less Anchor Bolts)

SEE CANTILEVER SUPPORT FOOTINGS TABLE ON SHEET 3 FOR FOOTING STEEL DETAILS AND QUANTITIES.

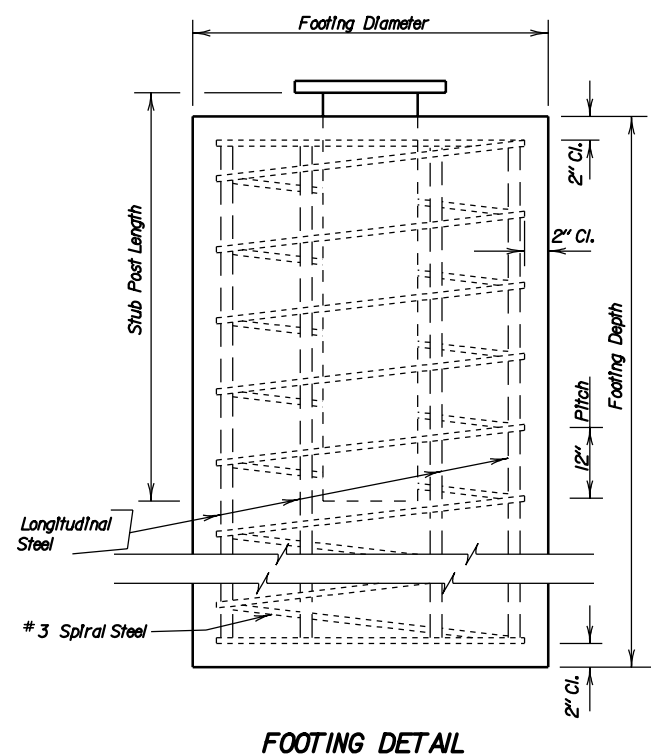
* Spiral: 12" Pitch. 1 1/2 extra turns at each end.

* - Circular Ties may be used in lieu of the Spiral Ties. The ties shall be spaced 12" apart except for the top two which shall be spaced 6" apart. The ties shall be lapped 20" which will be staggered around the cage. Spiral ties shall have 1-1/2 extra turns at each end. The ties shall be the size specified in the table on Sheet 3.

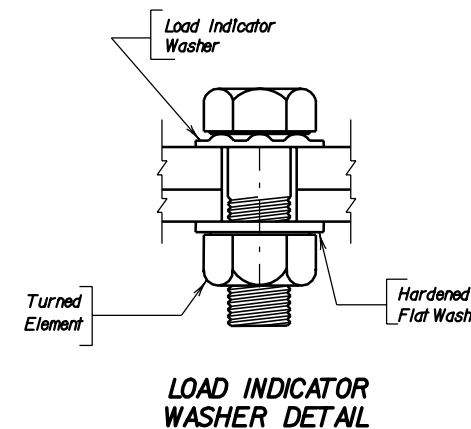
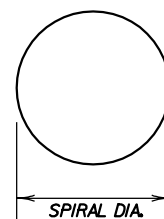
SITE LOCATION	POST SIZE	FOOTING DIMENSIONS		STUB POST LENGTH	LONGITUDINAL STEEL QUANTITIES			# SPIRAL STEEL QUANTITIES	
		DIA.	DEPTH		NO.	SIZE	LENGTH	DIA.	LENGTH
SEE SHEET 3									

Spirals - Use 6" pitch and 1 1/2 extra turns at each end. Use 1/2 turns for lap at splice as required, or weld as approved by the Office of Bridge Design. Spirals may be smooth bars. Bar length shown does not include splices. Dimensions are out to out of bars.

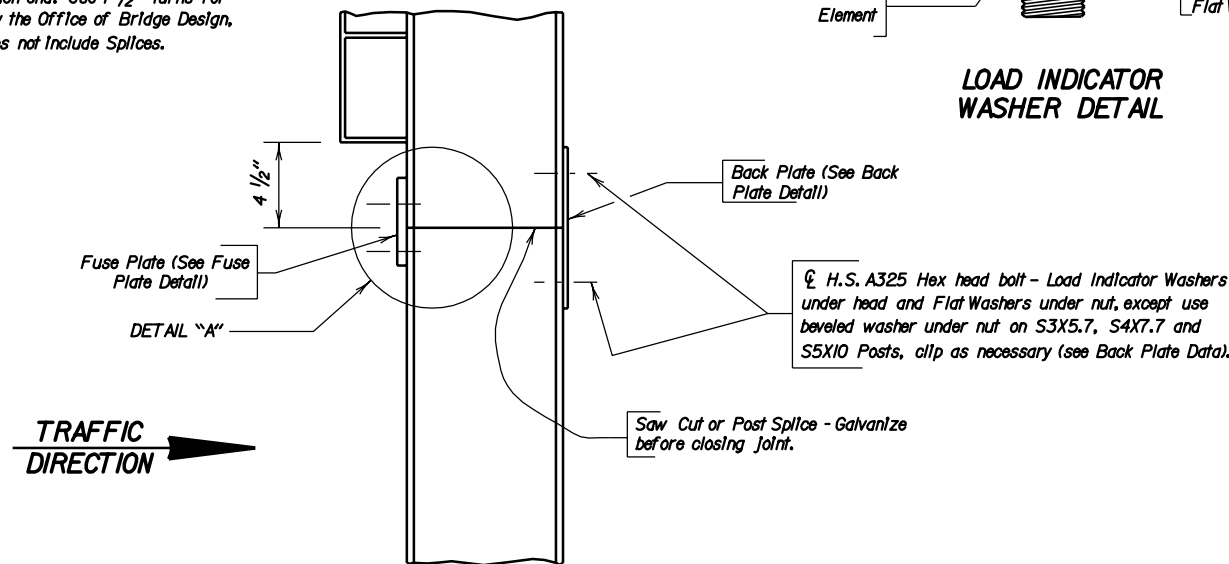
NOTE: The above is a Site Specific data entry table and the inserted information is the responsibility of the Region Traffic Engineer.



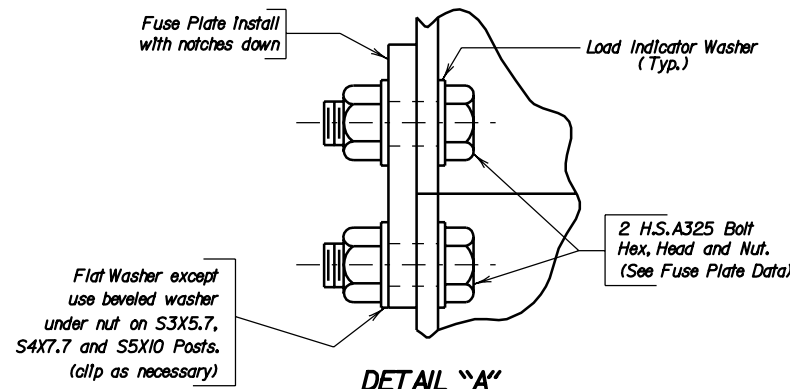
FOOTING DETAIL



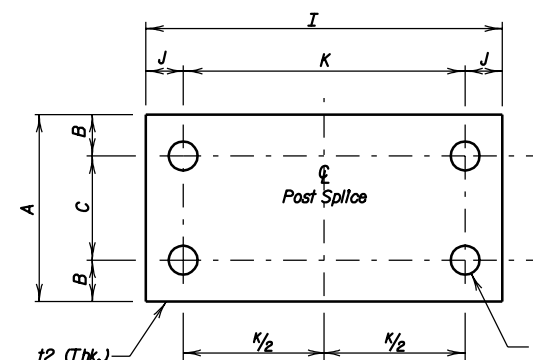
LOAD INDICATOR WASHER DETAIL



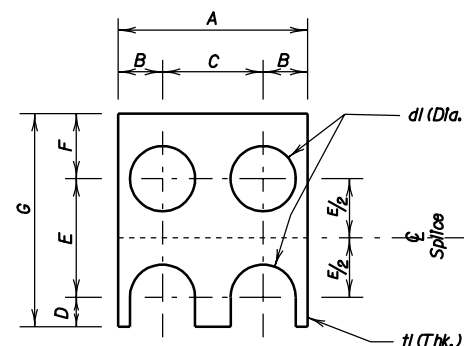
FUSE & BACK PLATE INSTALLATION



DETAIL "A"



BACK PLATE DETAIL



FUSE PLATE DETAIL

Post Size	A	B	C	D	E	F	G	dl	t1	Bolt Size
S3X5.7	2 5/8"	9/16"	1 1/2"	1/2"	1 1/2"	1 1/8"	3 1/8"	5/8" φ	1/4"	1/2" φ
S4X7.7	2 7/8"	9/16"	1 1/2"	1/2"	1 1/2"	1 1/8"	3 1/8"	7/8" φ	1/4"	1/2" φ
S5X10	3"	1 1/16"	1 5/8"	5/8"	2 1/4"	1 1/8"	4"	3/4" φ	3/8"	5/8" φ
W6X12	4"	15/16"	2 1/8"	5/8"	2 1/2"	1 3/8"	4 1/2"	3/4" φ	3/8"	5/8" φ
W6X15	6"	1 3/8"	3 1/4"	5/8"	2 1/2"	1 3/8"	4 1/2"	3/4" φ	3/8"	5/8" φ
W6X20	6"	1 3/8"	3 1/4"	5/8"	2 1/2"	1 3/8"	4 1/2"	3/4" φ	3/8"	5/8" φ
W8X18	5 1/4"	1 7/16"	2 5/8"	3/4"	2 1/2"	1 3/8"	4 5/8"	7/8" φ	1/2"	3/4" φ
W8X21	5 1/4"	1 9/16"	2 5/8"	3/4"	2 1/2"	1 3/8"	4 5/8"	7/8" φ	1/2"	3/4" φ
W8X24	6 1/2"	1 1/2"	3 1/2"	1/2"	3"	1 5/8"	5 1/2"	1" φ	9/16"	7/8" φ
W8X28	6 1/2"	1 9/16"	3 3/8"	7/8"	3"	1 3/4"	5 3/8"	1" φ	1/2"	7/8" φ
W8X31	8"	1 5/8"	4 3/4"	1"	3 1/2"	2"	6 1/2"	1 1/8" φ	5/8"	1" φ
W10X33	8"	1 7/8"	4 1/4"	1 1/8"	4 1/2"	2 1/4"	7 1/8"	1 1/4" φ	3/4"	1 1/8" φ

Post Size	A	B	C	J	K	I	dl	t2	Bolt Size
S3X5.7	2 5/8"	9/16"	1 1/2"	1 1/4"	4 1/2"	7"	5/8" φ	1/4"	1/2" φ
S4X7.7	2 7/8"	9/16"	1 1/2"	1 1/4"	4 1/2"	7"	5/8" φ	1/4"	1/2" φ
S5X10	3"	1 1/16"	1 5/8"	1 1/4"	4 3/4"	7 1/4"	3/4" φ	3/8"	5/8" φ
W6X12	4"	15/16"	2 1/8"	1 1/4"	4 3/4"	7 1/4"	3/4" φ	3/8"	5/8" φ
W6X15	6"	1 3/8"	3 1/4"	1 1/4"	5 1/4"	7 3/4"	3/4" φ	3/8"	5/8" φ
W6X20	6"	1 3/8"	3 1/4"	1 1/4"	5 1/4"	7 3/4"	3/4" φ	3/8"	5/8" φ
W8X18	5 1/4"	1 7/16"	2 5/8"	1 3/8"	5 3/4"	8 1/2"	7/8" φ	1/4"	3/4" φ
W8X21	5 1/4"	1 9/16"	2 5/8"	1 3/8"	5 3/4"	8 1/2"	7/8" φ	1/4"	3/4" φ
W8X24	6 1/2"	1 1/2"	3 1/2"	1 3/8"	6"	9 1/4"	1" φ	5/16"	7/8" φ
W8X28	6 1/2"	1 9/16"	3 3/8"	1 3/8"	6"	9 1/2"	1" φ	3/8"	7/8" φ
W8X31	8"	1 5/8"	4 3/4"	2"	6 1/2"	10 1/2"	1 1/8" φ	5/8"	1" φ
W10X33	8"	1 7/8"	4 1/4"	2 1/2"	7"	11-0"	1 1/4" φ	3/4"	1 1/8" φ

NOTES-

- Design Specification: AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, 2001 Edition with 2003 Interims.
- Concrete Footings shall be Class M6 - f_c = 4000 p.s.i.
- Structural Steel shall conform to ASTM A36.
- All Reinforcing Steel, except spirals, shall conform to ASTM 615 Grade 60.
- Spiral Reinforcing Steel may be fabricated from cold drawn wire ASTM A82, or hot rolled plain or deformed bars conforming to the strength requirements of ASTM A615, Grade 60.
- All Bolts and Nuts shall conform to ASTM A325 except that 1/2" diameter bolts may conform to either ASTM A325 or ASTM A449. Washers shall conform to ASTM F436. All hardware shall be galvanized in accordance with ASTM A153.
- All structural steel including Posts and Post Stubs shall be galvanized in accordance with ASTM A123.
- All Bolt Holes shall be drilled. All plate cuts shall preferably be saw cuts. However, Flame Cutting will be permitted providing all edges are ground smooth (metal projecting beyond the plane of the plate face will NOT be allowed).
- All welding and weld inspection shall be in accordance with the latest edition of AWS D 1.1 Structural Welding Code.

PROCEDURE FOR ASSEMBLING SLIP BASE-

- Place galvanized Sheet Metal Diaphragms on top of the lower slip plate.
- Connect main post to Stub Post with clean unlubricated bolts and nuts with one Hardened Washer on each bolt between slip plates.
- Plumb post by adding shims between slip plates.
- Tighten bolts to a practical maximum, using a 12"-15" wrench in order to bed surfaces and clean threads. DO NOT TIGHTEN TO PROOF LOAD.
- Loosen all bolts and retighten in increments, using a systematic order, until each bolt has been tightened to the specified torque corresponding to the post size used (See Slip Base Plate Data). Tighten bolts only to the torque specified. DO NOT OVERTIGHTEN. Check torque on each bolt after entire sign has been erected.

ASSEMBLY OF FRICTION FUSE PLATES, BACK PLATES AND STIFFENERS-

- High strength bolts shall be tightened so as to obtain a residual tension by the use of load indicator washers.
- High strength bolts may be tightened by the "Turn of the Nut" method as provided in Section 11.5.6.4.4 of the AASHTO Standard Specifications for Highway Bridges in lieu of #1 above.

SHOP PLANS-

The fabricator shall initially submit two (2) copies of the shop plans to the Office of Bridge Design for review. One reviewed copy will be sent back to the fabricator who will then make changes, if any, and then send the Office of Bridge Design six (6) final approved copies for distribution.

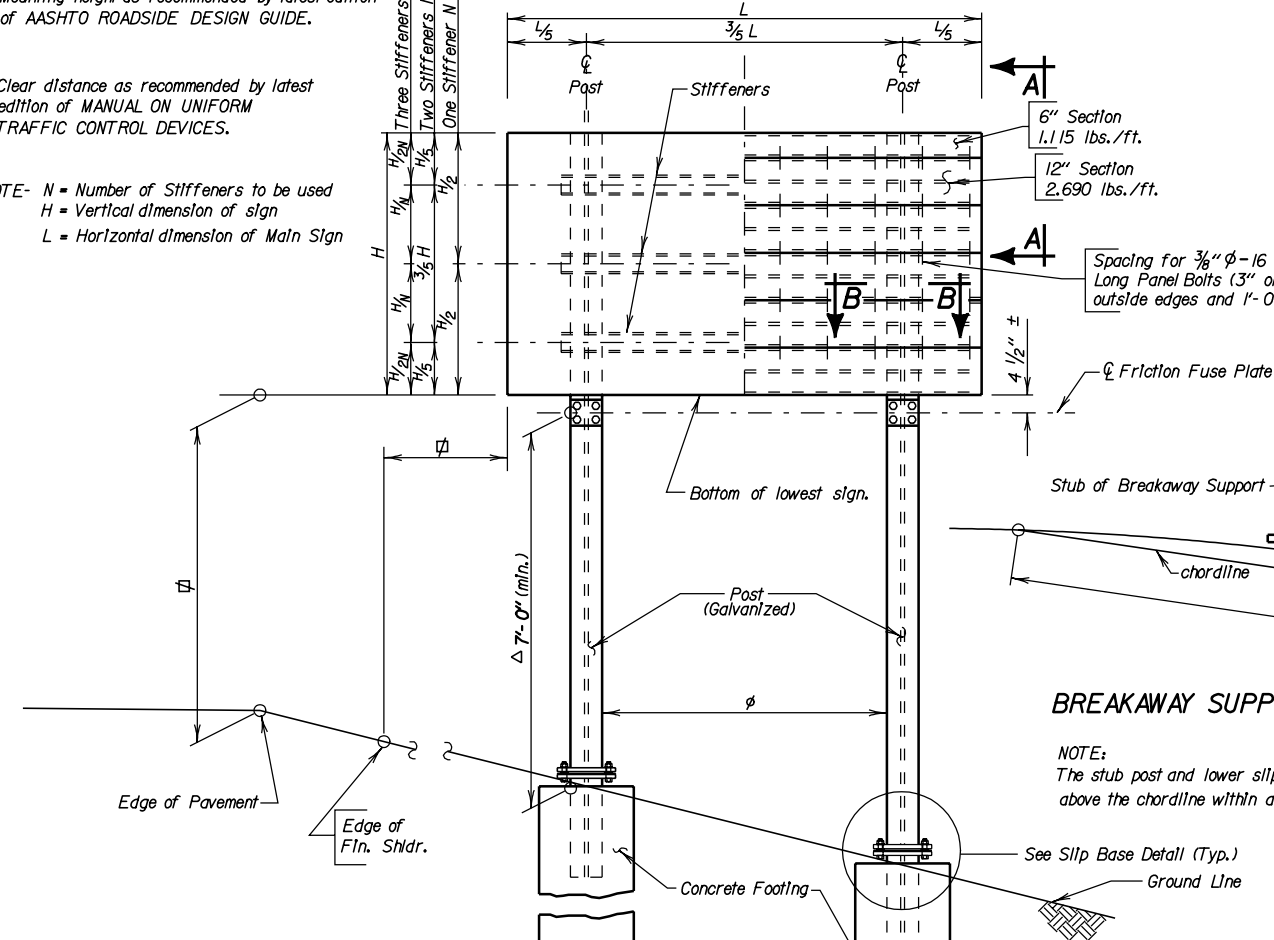
ERECTION DETAILS
FOR
**TWO-POST ONE-DIRECTION
BREAKAWAY SIGN SUPPORTS**
S. D. DEPT. OF TRANSPORTATION
DECEMBER 1994 (1) OF (2)

DESIGNED BY	DRAWN BY	CHECKED BY	APPROVED
RH/DM	TB	RH/DM	John C. Cole
CNTYPEM	PCMDSPG	BSTDBS2A	BRIDGE ENGINEER
* Specification Update		7/11/05	AV
MK	REVISION	DATED	BY

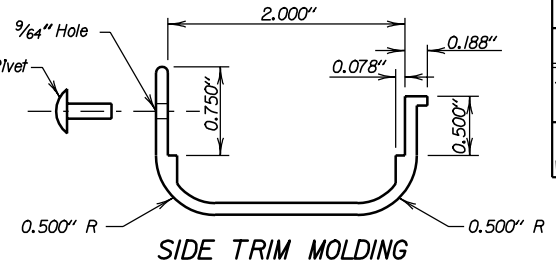
△ Mounting height as recommended by latest edition of AASHTO ROADSIDE DESIGN GUIDE.
 ▢ Clear distance as recommended by latest edition of MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

NOTE- N = Number of Stiffeners to be used
 H = Vertical dimension of sign
 L = Horizontal dimension of Main Sign

NOTE- Sign face details shown are those for extruded aluminum panels. See Erection Details for SHEET ALUMINUM SIGNS for mounting flat sheet sign face.



ELEVATION



SIDE TRIM MOLDING

Side Trim Molding is required on all vertical edges of extruded panels. They shall be fastened at a minimum of one (1) rivet per panel.

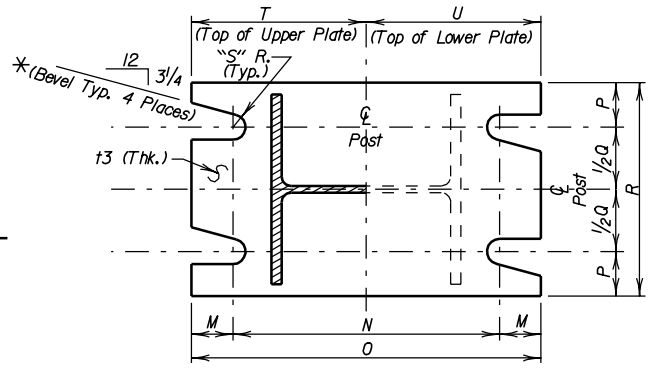
Post	Stiffener	a	b	c	d	Bolt (A325)	Plate Thk.
S3X5.7 thru WBX21	C3X5	10 1/2"	5"	1 1/4"	8"	5/8" φ	5/16"
WBX24 thru W10X33	C5X6.7	13 1/2"	6"	1 1/2"	10 1/2"	7/8" φ	3/8"

STIFFENER NOTES-

- Stiffeners must always be used on Two Post Breakaway signs regardless of type of sign face employed.
- Number of stiffeners used, N, shall 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 equals the vertical dimension of the sign panel of sign cluster.

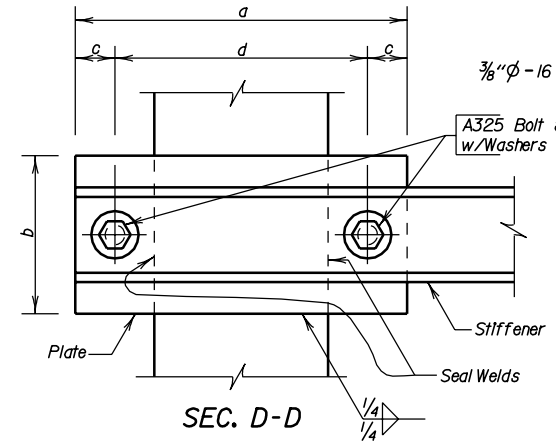
BREAKAWAY SUPPORT STUB CLEARANCE DIAGRAM

NOTE: The stub post and lower slip plate shall NOT extend more than 4" max. above the chord line within a 60" chord.

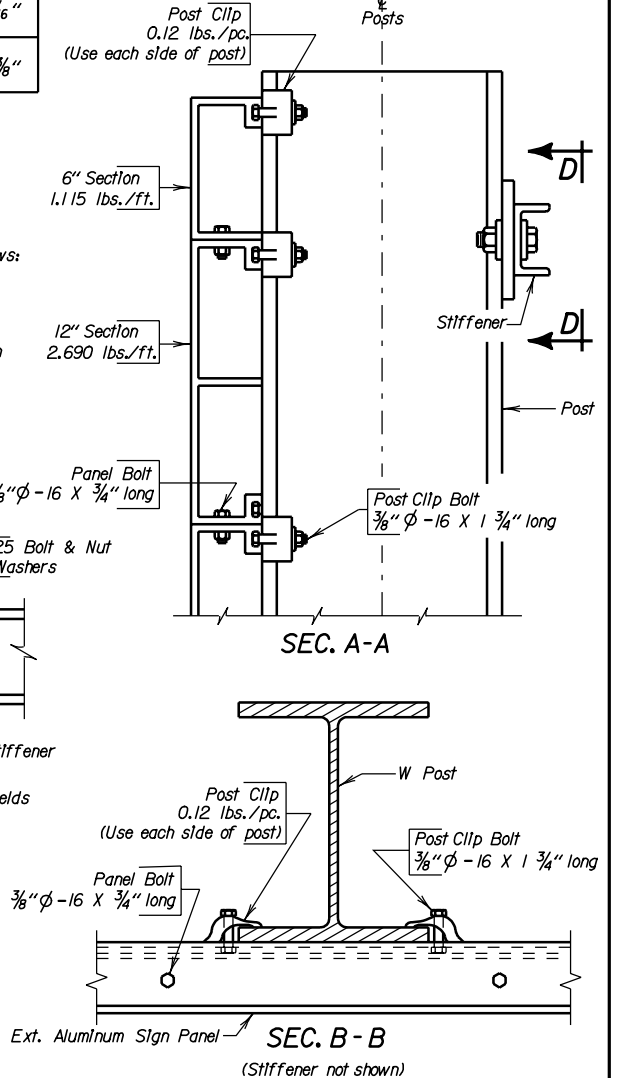


SEC. C-C

* NOTE: Above Bevel Is for Sign on Right Shoulder. Plate Bevels are Opposite hand for Sign on Left Shoulder.



SEC. D-D



SEC. A-A

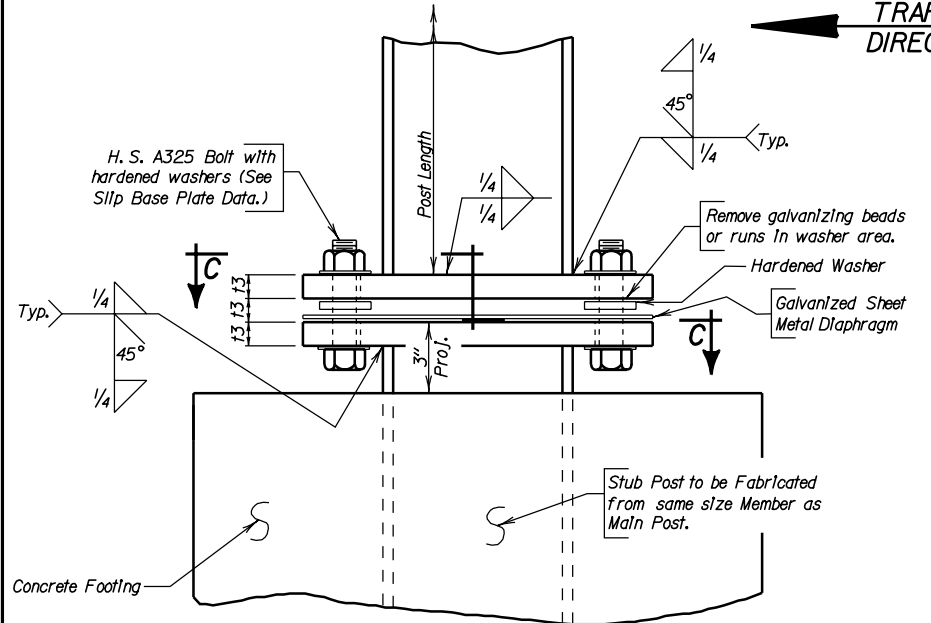
SEC. B-B

TABLE 3 - SHEET METAL DIAPHRAGM DATA

Post Size	M	N	O	P	Q	R	V
S3X5.7	3/4"	6"	7 1/2"	3/4"	1 1/2"	3"	5/8"
S4X7.7	3/4"	6"	7 1/2"	3/4"	1 1/2"	3"	5/8"
S5X10	7/8"	7 1/4"	9"	3/4"	2"	3 1/2"	3/4"
W6X12	7/8"	8 1/4"	10"	1 1/8"	2 3/4"	4 1/2"	3/4"
W6X15	1 1/8"	8 1/2"	10 3/4"	1 1/4"	4"	6 1/2"	1/8"
W6X20	1 1/8"	10"	1'-0 1/4"	1 1/4"	4"	6 1/2"	1/8"
W8X18	1 1/8"	10 1/2"	1'-0 3/4"	1 1/4"	3 1/2"	6"	1/8"
W8X21	1 1/4"	11 1/4"	1'-1 3/4"	1 1/4"	3 1/2"	6"	"
W8X24	1 1/2"	11"	1'-2"	1 5/8"	4 1/4"	7 1/2"	1"
W8X28	1 5/8"	11 1/4"	1'-2 1/2"	1 5/8"	4 1/4"	7 1/2"	1 1/8"
W8X31	1 3/4"	11 1/4"	1'-2 3/4"	1 7/8"	5 1/4"	9"	1 1/8"
W10X33	1 3/4"	1'-2"	1'-5 1/2"	1 7/8"	5 1/4"	9"	1 1/8"

NOTE: Diaphragm need not be regalvanized after cutting to size and drilling of holes.

* See Erection Details for SLIP BASE ALTERNATE.



* SLIP BASE DETAIL

TABLE 4 - SLIP BASE PLATE DATA

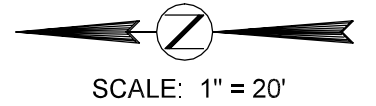
Post Size	M	N	O	P	Q	R	S	T	U	t3	Bolt Size	Bolt Torque
S3X5.7	3/4"	6"	7 1/2"	3/4"	1 1/2"	3"	9/32"	3 3/4"	3 3/4"	5/8"	1/2" φ	142" - #
S4X7.7	3/4"	6"	7 1/2"	3/4"	1 1/2"	3"	9/32"	3 3/4"	3 3/4"	5/8"	1/2" φ	142" - #
S5X10	7/8"	7 1/4"	9"	3/4"	2"	3 1/2"	11/32"	4 1/2"	4 1/2"	7/8"	5/8" φ	345" - #
W6X12	7/8"	8 1/4"	10"	1 1/8"	2 3/4"	4 1/2"	11/32"	5"	5"	7/8"	5/8" φ	345" - #
W6X15	1 1/8"	8 1/2"	10 3/4"	1 1/4"	4"	6 1/2"	13/32"	5 3/8"	5 3/8"	1"	3/4" φ	554" - #
W6X20	1 1/8"	10"	1'-0 1/4"	1 1/4"	4"	6 1/2"	13/32"	6 1/8"	6 1/8"	1"	3/4" φ	554" - #
W8X18	1 1/8"	10 1/2"	1'-0 3/4"	1 1/4"	3 1/2"	6"	13/32"	6 3/8"	6 3/8"	1"	3/4" φ	554" - #
W8X21	1 1/4"	11 1/4"	1'-1 3/4"	1 1/4"	3 1/2"	6"	15/32"	6 7/8"	6 7/8"	1"	7/8" φ	645" - #
W8X24	1 1/2"	11"	1'-2"	1 5/8"	4 1/4"	7 1/2"	15/32"	7"	7"	1"	7/8" φ	645" - #
W8X28	1 5/8"	11 1/4"	1'-2 1/2"	1 5/8"	4 1/4"	7 1/2"	17/32"	7 1/4"	7 1/4"	1 1/8"	1" φ	735" - #
W8X31	1 3/4"	11 1/4"	1'-2 3/4"	1 7/8"	5 1/4"	9"	17/32"	7 3/8"	7 3/8"	1 1/8"	1" φ	735" - #
W10X33	1 3/4"	1'-2"	1'-5 1/2"	1 7/8"	5 1/4"	9"	17/32"	8 3/4"	8 3/4"	1 1/4"	1" φ	735" - #

ERECTION DETAILS FOR TWO-POST ONE-DIRECTION BREAKAWAY SIGN SUPPORTS
 S. D. DEPT. OF TRANSPORTATION
 DECEMBER 1994

GUARDRAIL AND FOOTING REMOVAL DETAILS

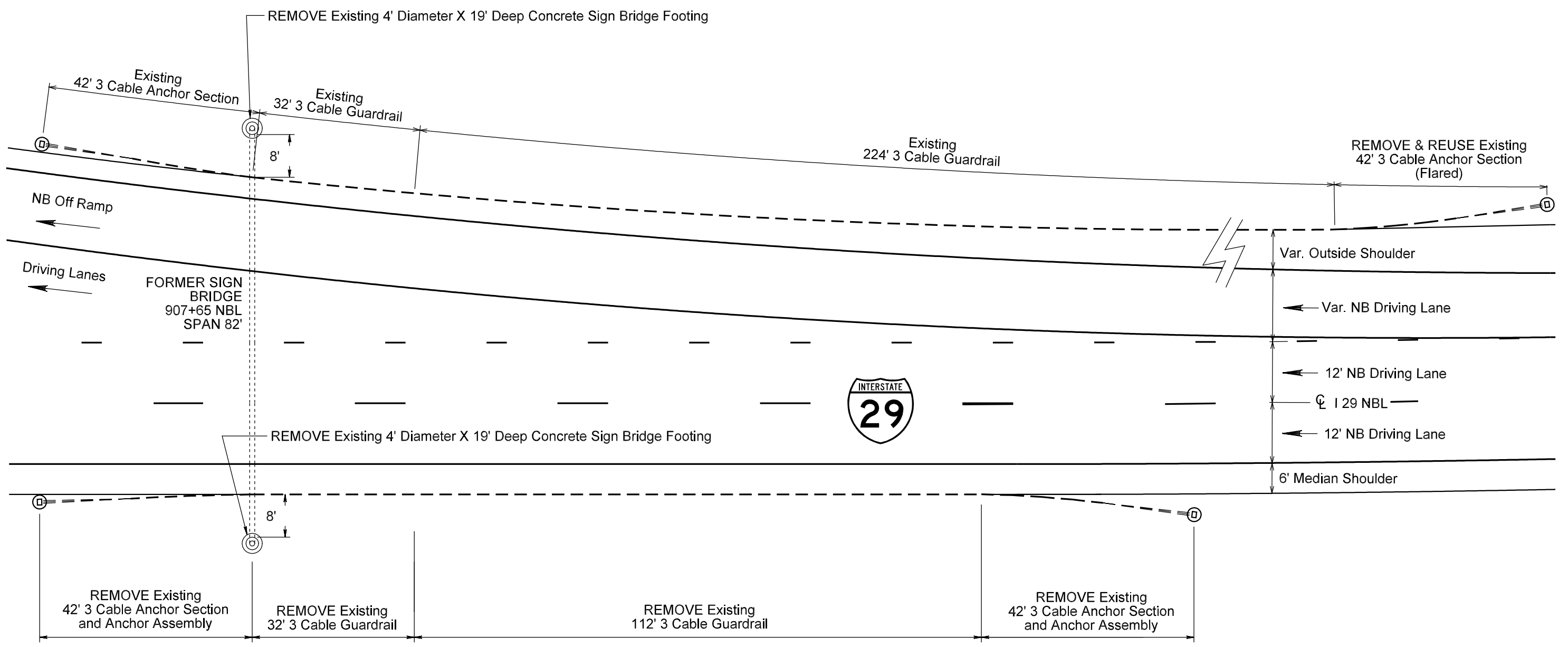
NBL I-29 Mainline - Station 907+65 L
Exit 2 Ramp B - Station 10+22 L

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	029 N-291	16	25



PLOT SCALE - 20.0000001.000000

PLOT NAME - EXIT2PLAN
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






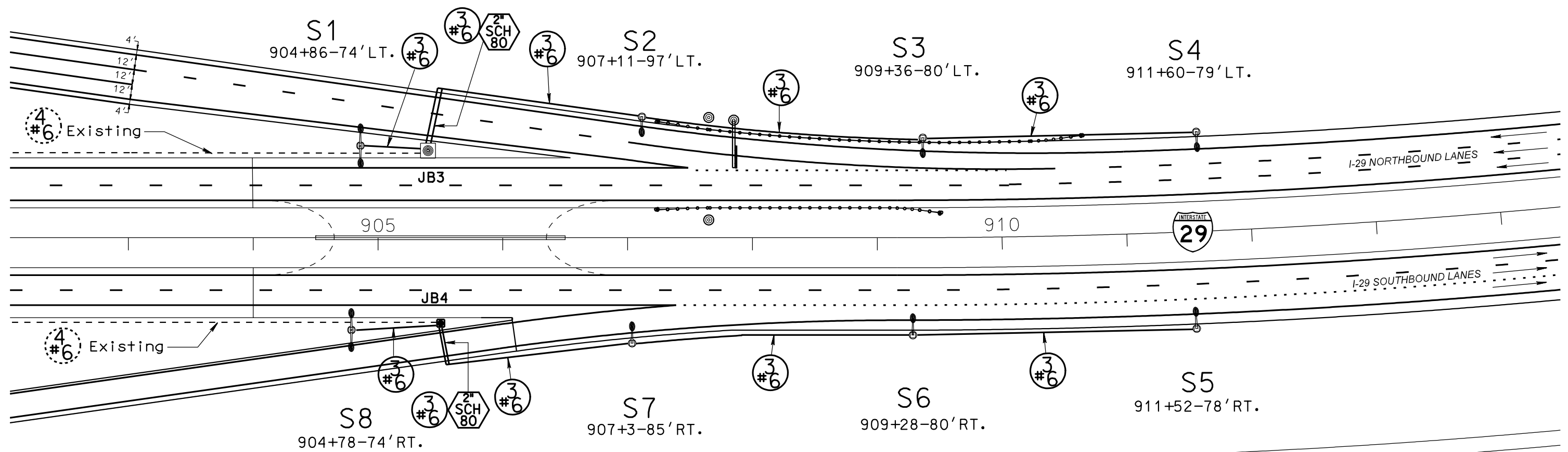
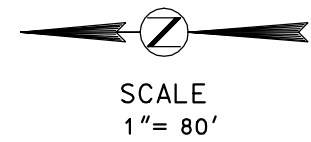
PLOTTED FROM - TRM111126

LUMINAIRE LAYOUT

(EXIT 2)

FOR INFORMATION ONLY

LEGEND	
ITEM	
	FOOTINGS 2'-DIAMETER
	18" DIAMETER JUNCTION BOX
	2" RIGID CONDUIT SCH 80
	1/C #6 AWG COPPER DIRECT BURIAL
	2/C #10 AWG COPPER POLE & BKT
	40' POLE-BRKY BASE 1-8' ARM
	40' POLE-BRKY BASE TWIN 8' ARMS (S1,S8)
	RDY LUMINAIRE 250 WATT W/ P.E.



PLOT SCALE - 80.0000001.000000

PLOTTED FROM - TRM11126

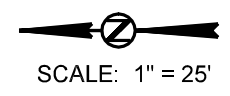
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STATE OF SOUTH DAKOTA	PROJECT 029 N-291	SHEET 18	TOTAL SHEETS 25
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Plotting Date: 30-MAY-2007

INSTALLATION OF GUARDRAIL

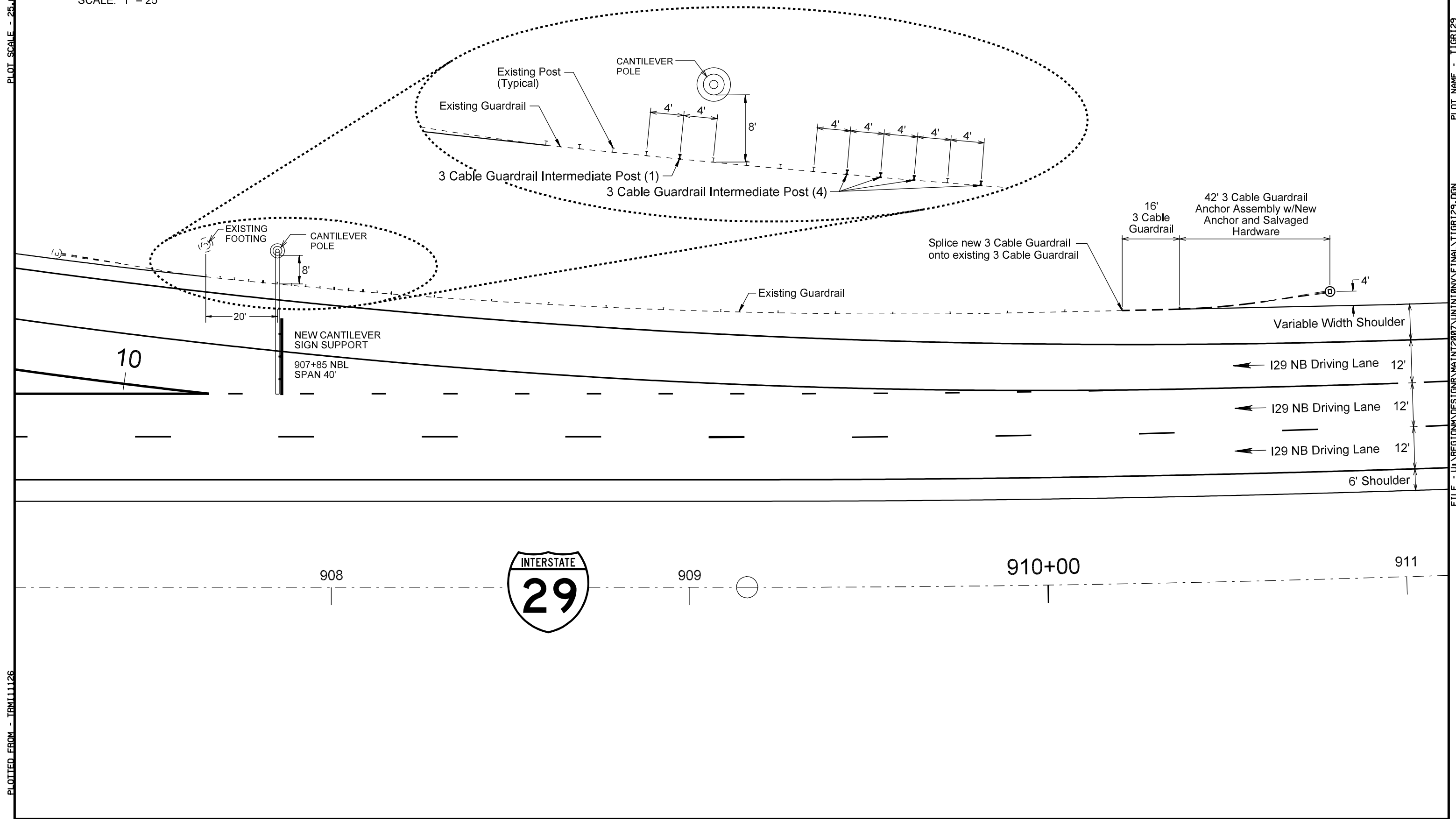
CANTILEVER SIGN SUPPORT AT STA. 907+85 L



PLOT SCALE - 25.0000001.000000

PLOT NAME - TIGR129

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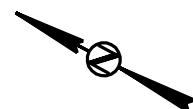
PLOTTED FROM - TRM111126

INSTALLATION OF GUARDRAIL

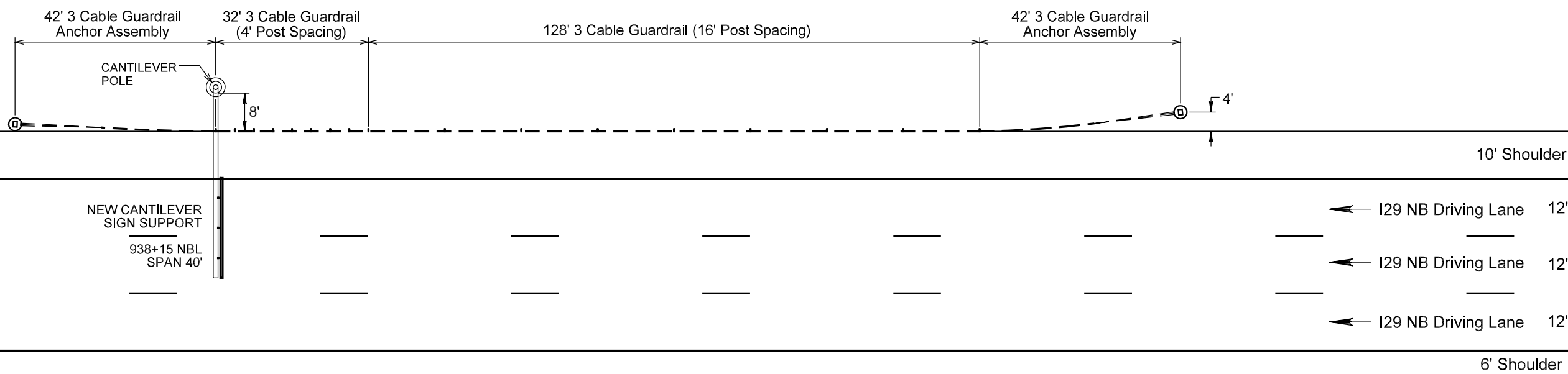
CANTILEVER SIGN SUPPORT AT STA. 938+15 L

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	029 N-291	19	25

Plotting Date: 30-MAY-2007



SCALE: 1" = 25'



938

939

940+00

941

PLOT SCALE - 25.0000001.000000

PLOTTED FROM - TRM11126

PLOT NAME - TIGR1291

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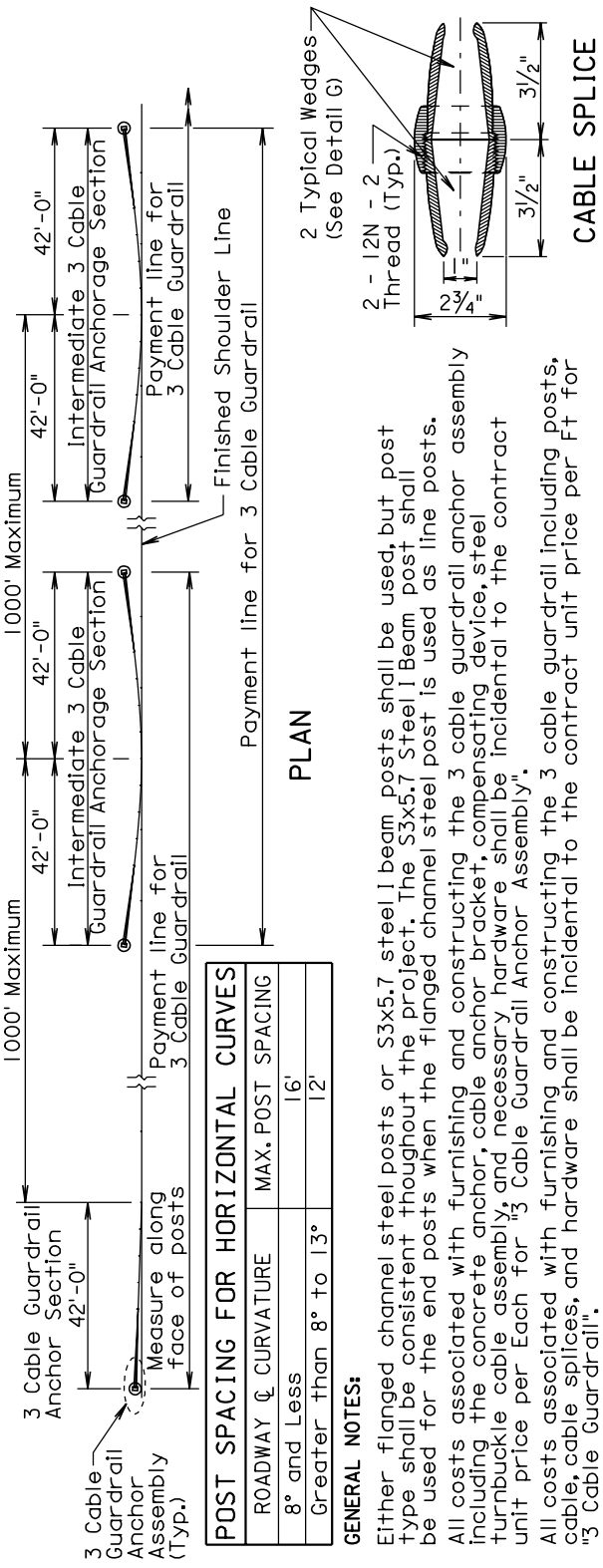
Published Date: 2nd Qtr. 2007

TODDS

3 CABLE GUARDRAIL

PLATE NUMBER
629.01

Sheet 1 of 6



GENERAL NOTES:
Either flanged channel steel posts or S3x5.7 steel I beam posts shall be used, but post type shall be consistent throughout the project. The S3x5.7 Steel I Beam post shall be used for the end posts when the flanged channel steel post is used as line posts. All costs associated with furnishing and constructing the 3 cable guardrail anchor assembly including the concrete anchor, cable anchor bracket, compensating device, steel turnbuckle cable assembly, and necessary hardware shall be incidental to the contract unit price per Each for "3 Cable Guardrail Anchor Assembly". All costs associated with furnishing and constructing the 3 cable guardrail including posts, cable, cable splices, and hardware shall be incidental to the contract unit price per Ft for "3 Cable Guardrail".

LENGTH OF CABLE RUN	CRITERIA FOR ARRANGEMENT OF THE SPRING CABLE END ASSEMBLIES (COMPENSATION DEVICES) AND TURNBUCKLE CABLE END ASSEMBLIES	
To 500'	Use turnbuckle on the approaching traffic end and compensating device on the other end of each individual cable, except in the W Beam to 3 Cable Transition where all compensating devices shall be provided at the bridge ends.	
Greater than 500' to 1000'	Use compensating device on each end of each individual cable.	
Greater than 1000'	Start new run by interlacing at last parallel post as shown above.	

All Compensating Devices shall be attached to the cable anchor bracket when one end of the run is attached to a bridge. Compensating Devices must have a spring rate of 450 ± 50 Lbs. per inch and shall have a total available travel of 6" minimum.

The cable shall be retensioned after the initial 2 week pretension period in accordance with the following table:

Temperature Range (Deg.)	120 to 110	109 to 100	99 to 90	89 to 80	79 to 70	69 to 60	59 to 50	49 to 40	39 to 30	29 to 20	19 to 10	9 to 0	-1 to -10	-11 to -20
Spring Compression (In.)	1	1 1/4	1 1/2	1 3/4	2	2 1/4	2 1/2	2 3/4	3	3 1/4	3 1/2	3 3/4	4	4 1/4

March 28, 2001

Plotting Date: 30-MAY-2007

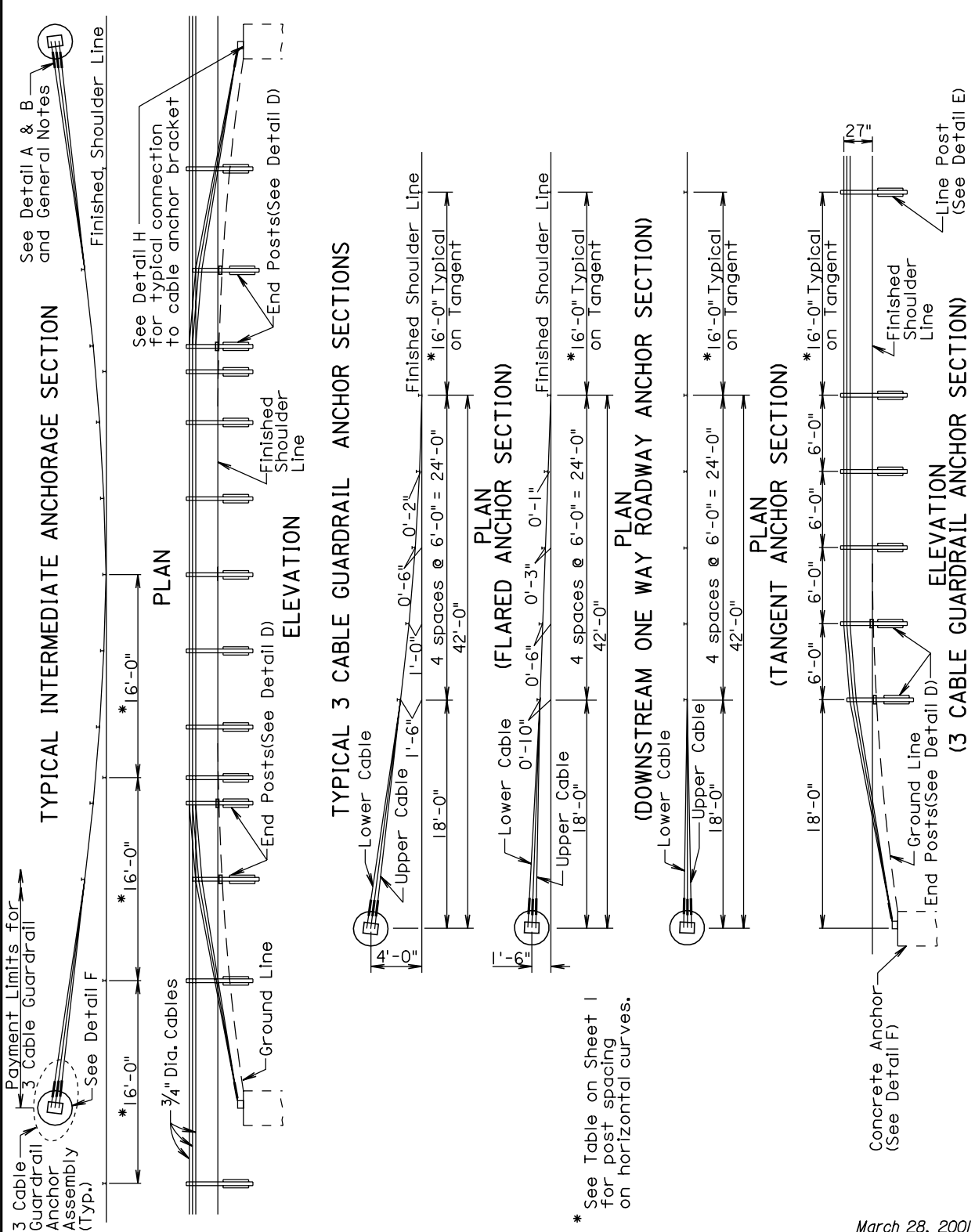
Published Date: 2nd Qtr. 2007

TODDS

3 CABLE GUARDRAIL

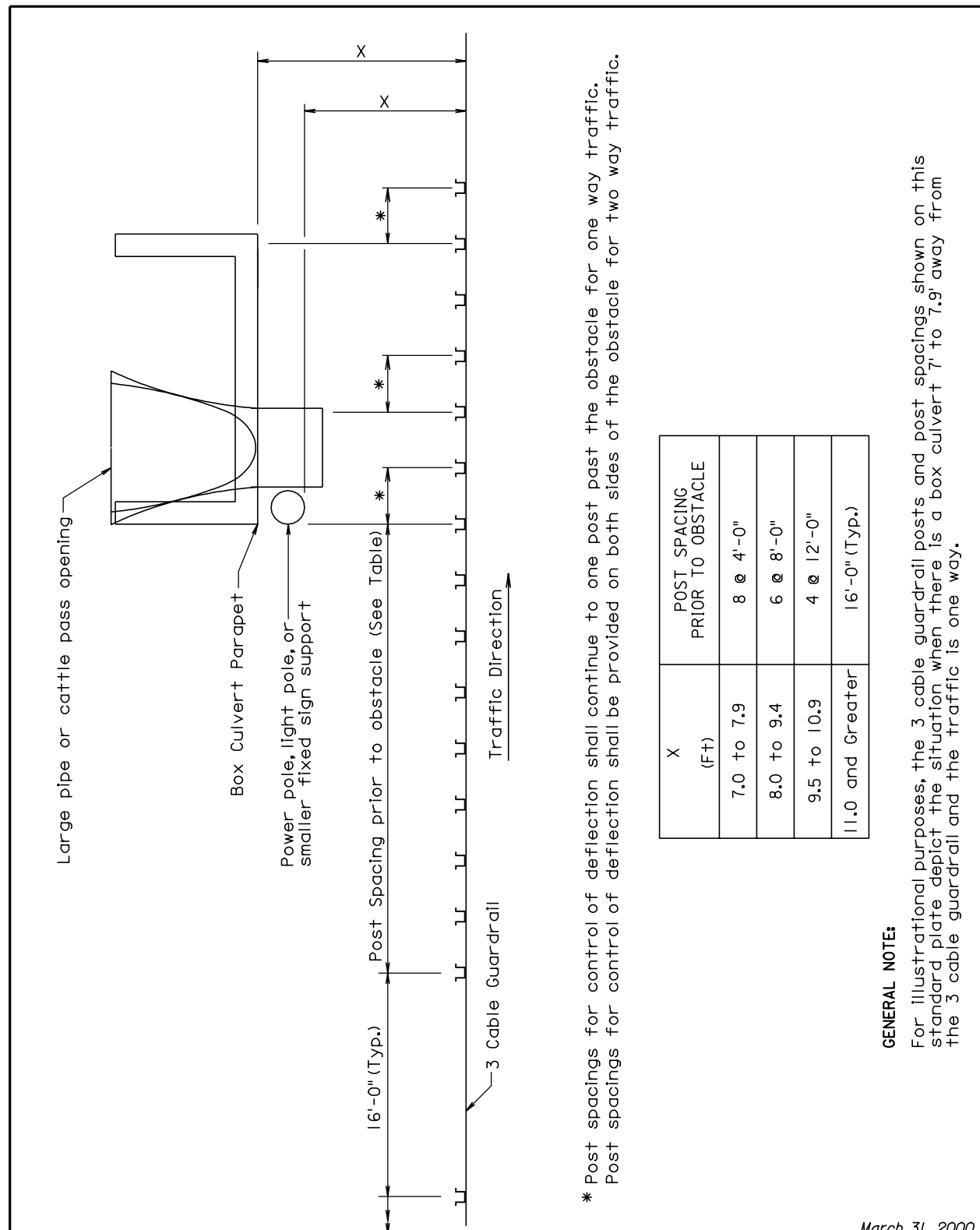
PLATE NUMBER
629.01

Sheet 2 of 6



* See Table on Sheet 1 for post spacing on horizontal curves.

March 28, 2001



* Post spacings for control of deflection shall continue to one post past the obstacle for one way traffic.
 Post spacings for control of deflection shall be provided on both sides of the obstacle for two way traffic.

GENERAL NOTE:
 For illustrational purposes, the 3 cable guardrail posts and post spacings shown on this standard plate depict the situation when there is a box culvert 7' to 7.9' away from the 3 cable guardrail and the traffic is one way.

March 31, 2000

SDOT	3 CABLE GUARDRAIL POST SPACING FOR DEFLECTION CONTROL	PLATE NUMBER 629.02
		Sheet 1 of 1

Published Date: 2nd Qtr. 2007

TWO LANE CLOSURE ON MULTILANE DIVIDED HIGHWAY

- ** W13-1 sign is not required for posted speeds of 45 MPH or less.
- Reflectorized Drums
- Ⓞ 4" Yellow temporary pavement marking
- Ⓢ 4" White temporary pavement marking
- ← Direction of Traffic
- ▣ State Furnished Changeable Message Sign (Optional)

The need for the changeable message sign shall be determined by the Engineer. The changeable message sign shall display the following alternating messages: RIGHT TWO LANES CLOSED and SLOW TRAFFIC AHEAD. The messages may be changed if approved by the Engineer.

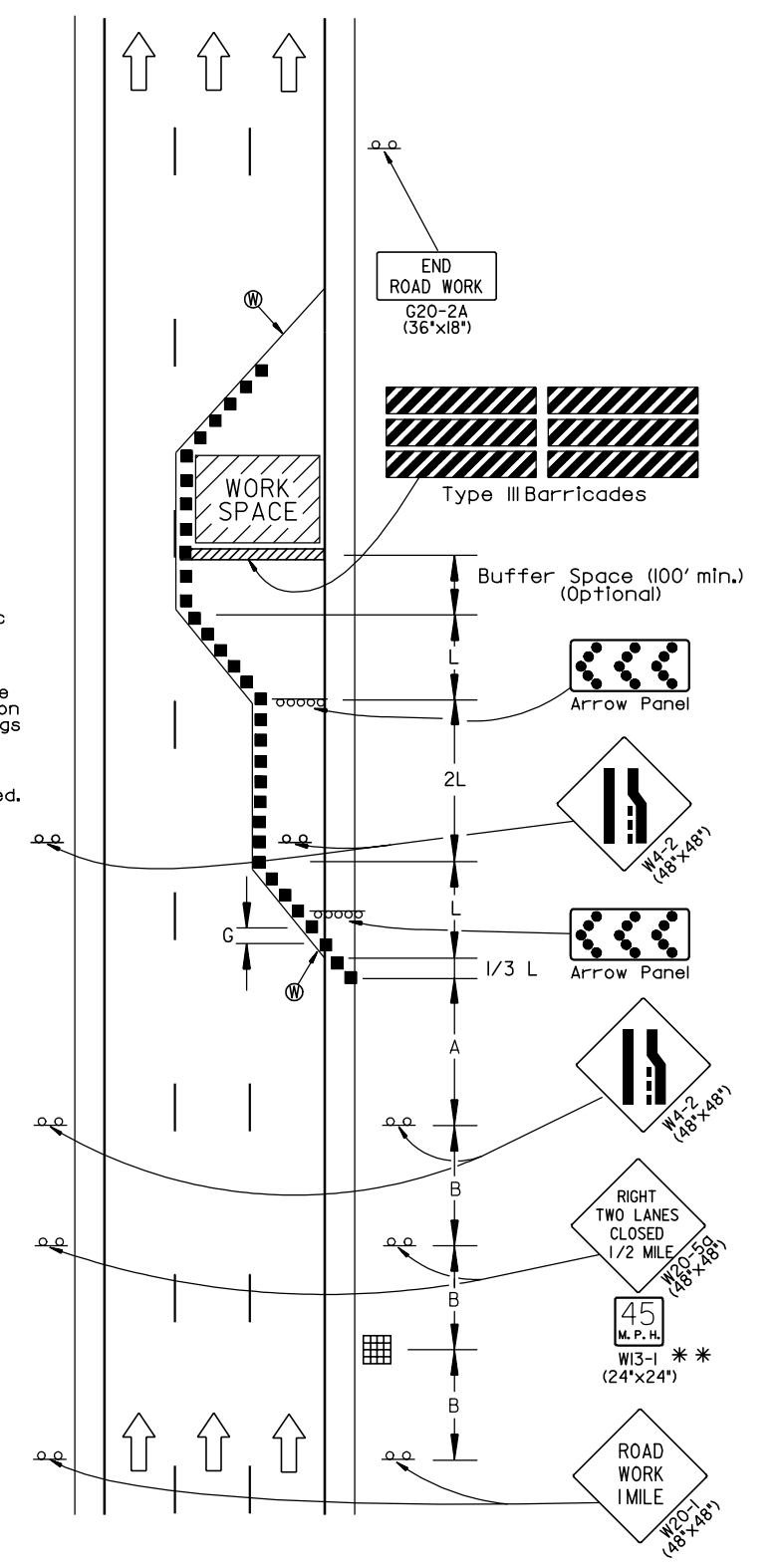
Temporary pavement marking is not required if the work area and traffic control devices are removed during night-time hours.

Pavement markings no longer applicable shall be removed or obliterated as soon as practicable when temporary markings are used.

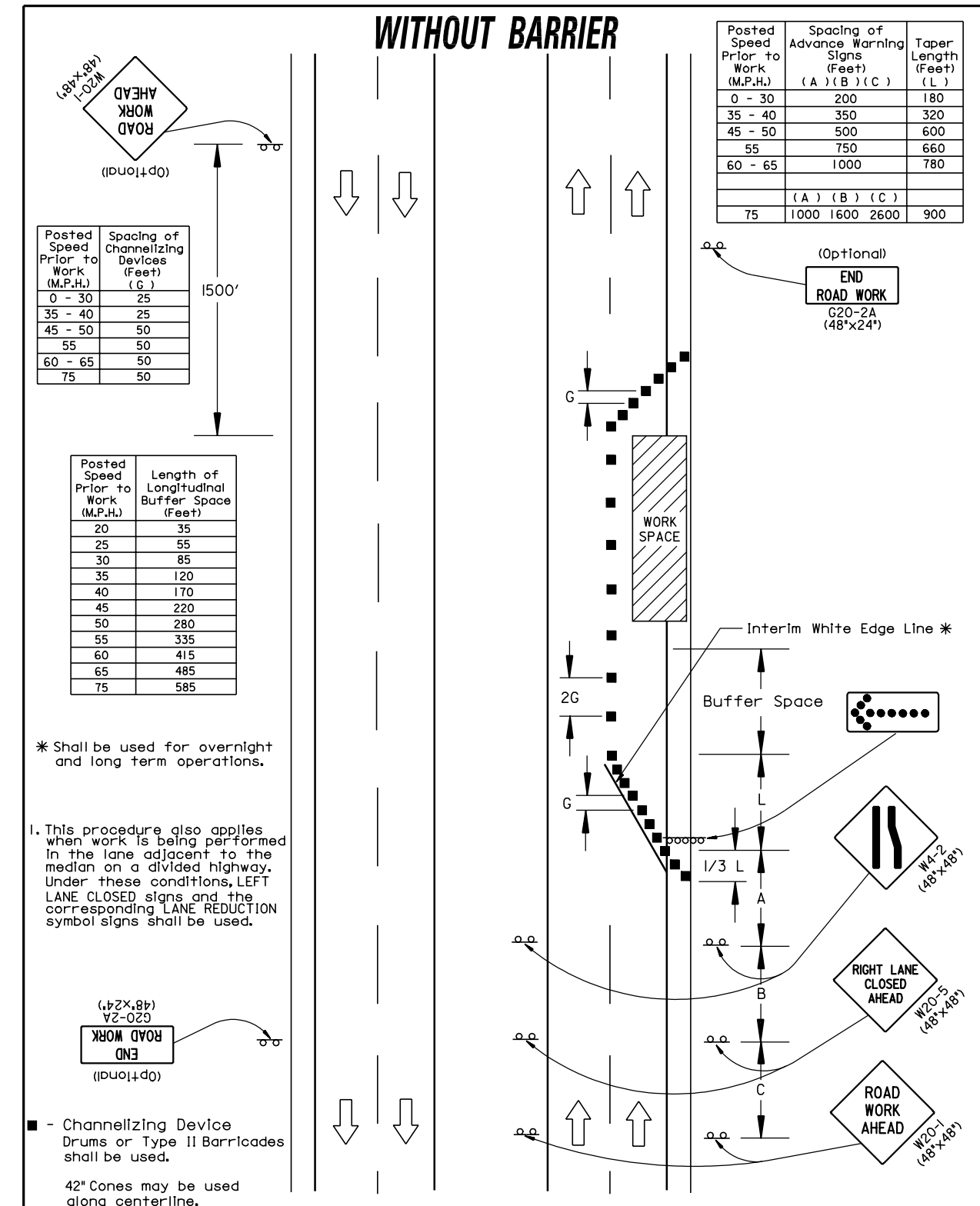
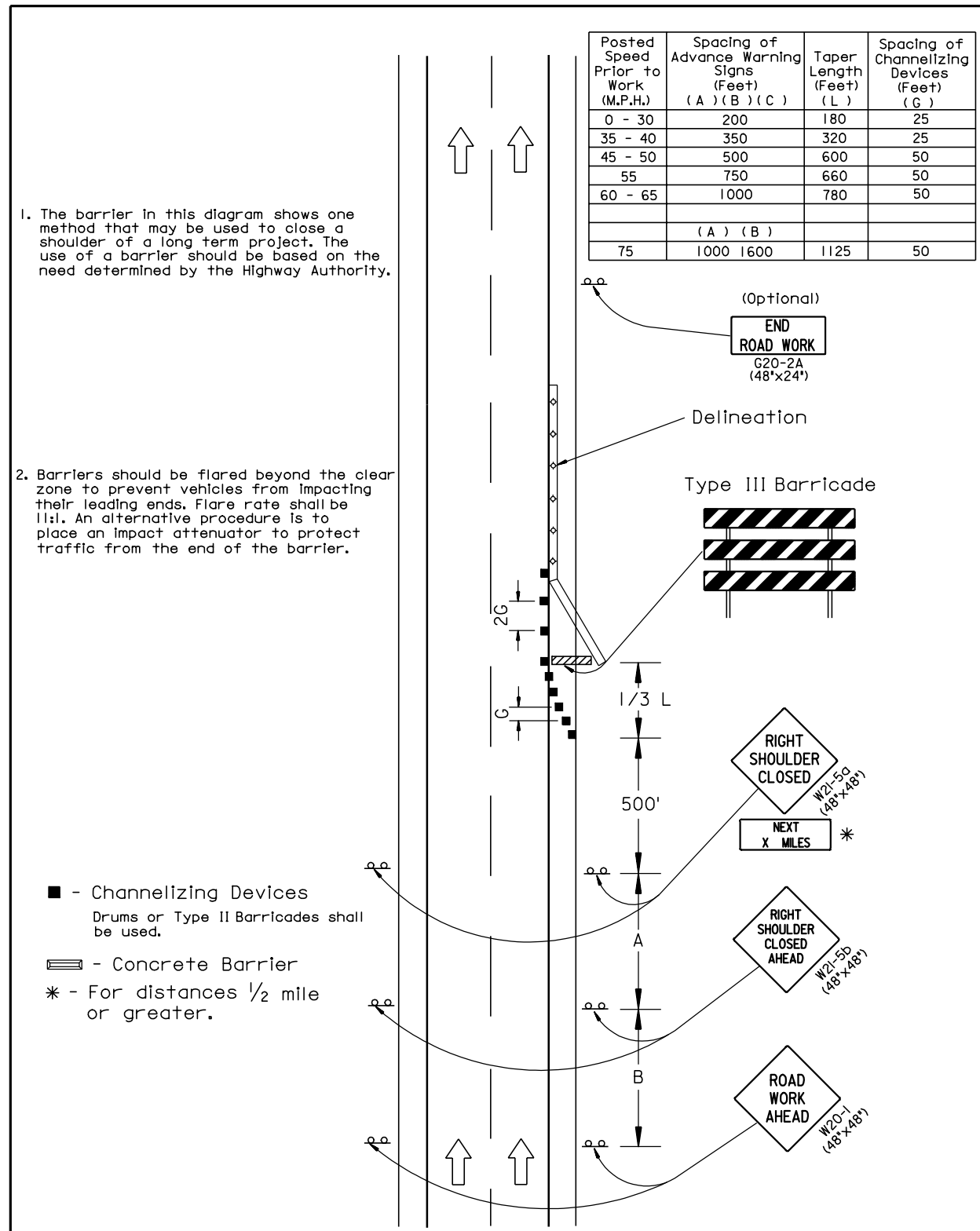
Warning lights may be used to mark channelizing devices at night as needed.

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)			Taper Length (Feet) (L)
	(A)	(B)	(C)	
0 - 30	100	2500	2640	180
35 - 40	100	2500	2640	320
45 - 50	350	2300	2640	600
55	750	1900	2640	660
60 - 65	1000	1500	2640	780

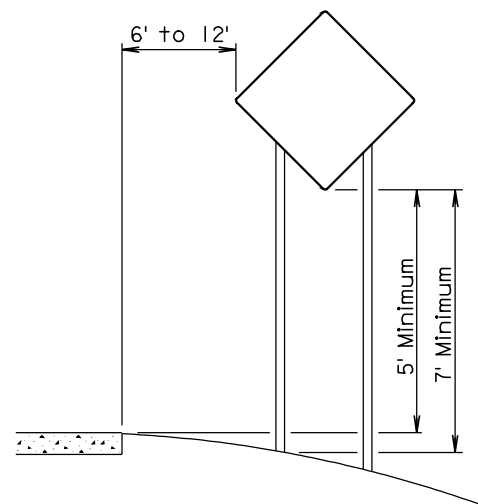
Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	25
35 - 40	25
45 - 50	50
55	50
60 - 65	50



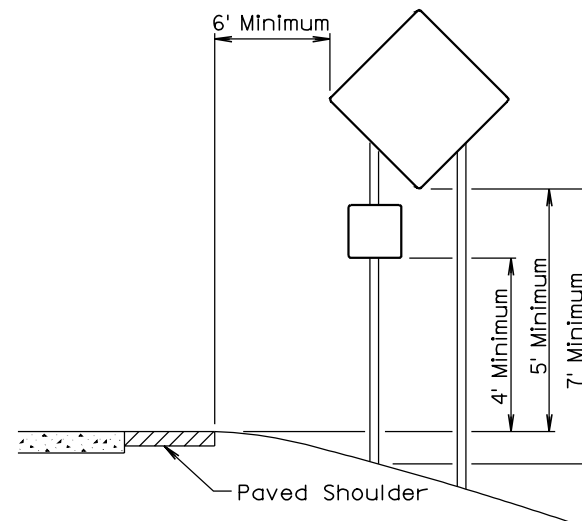
Plotting Date: 30-MAY-2007



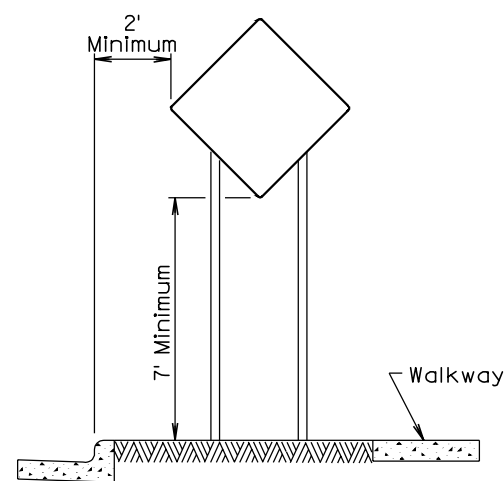
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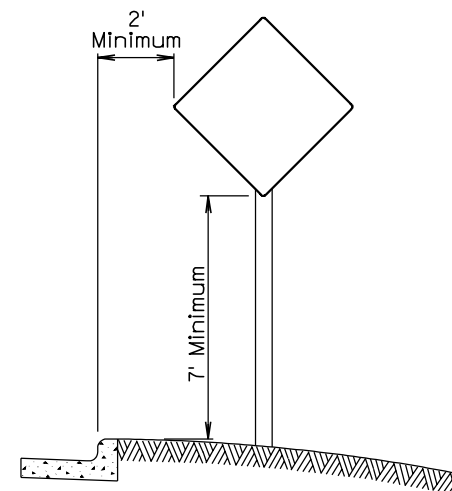
RURAL DISTRICT



RURAL DISTRICT WITH
SUPPLEMENTAL PLATE



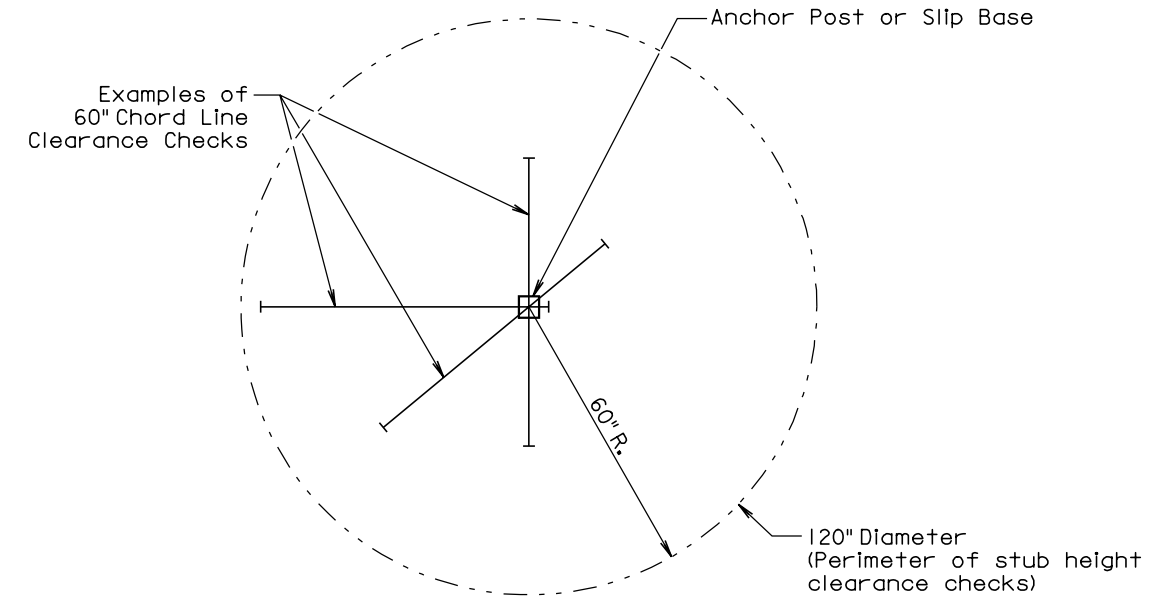
URBAN DISTRICT



URBAN DISTRICT

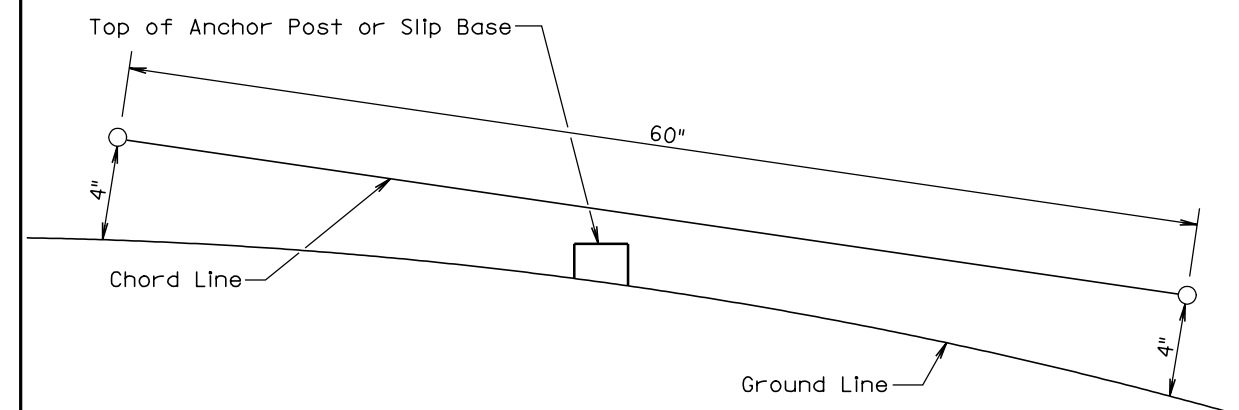
December 23, 2003

Published Date: 2nd Qtr. 2007	S D D O T	BREAKAWAY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1



PLAN VIEW

(Examples of stub height clearance checks)



ELEVATION VIEW

GENERAL NOTES:

The top of anchor posts and slip bases SHALL 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 shall be a maximum of 4" above the ground line at the localized area adjacent to the breakaway support stub.

The 4" stub height clearance is not necessary for U-channel lap splices where the support is designed to yield (bend) at the base.

July 1, 2005

Published Date: 2nd Qtr. 2007	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1