

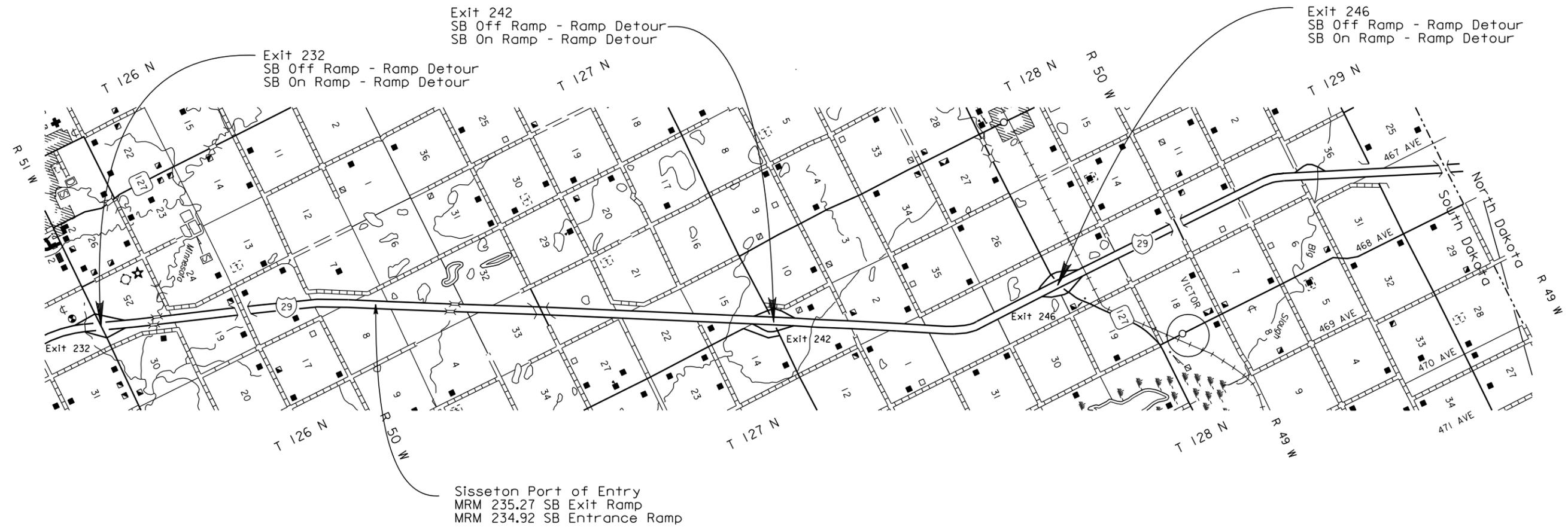
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0299(76)231	C1	C7

Plotting Date: 02/04/2016

# SECTION C: TRAFFIC CONTROL

## INDEX OF SHEETS

- C1 General Layout with Index
- C2 - C3 Estimate w/ General Notes and Tables
- C4 - C7 Standard Plates



PLOT SCALE - 1:8639.98

PLOTTED FROM - TRWAINT14

PLOT NAME - 1

FILE - ...SECTION C\SECTION C TITLE.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0299(76)231	C2	C7
Plotting Date: 12/17/2015			

## SECTION C ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	40.0	Hour
634E0110	Traffic Control Signs	1,208.8	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0280	Type 3 Barricade, 8' Single Sided	4	Each
634E0420	Type C Advance Warning Arrow Board	4	Each
634E0600	4" Temporary Pavement Marking Tape Type I	7,200	Ft
634E1002	Detour Signing	32.0	SqFt

### SCOPE OF WORK

Work on this project includes, but is not limited to construction of ramp detours along Interstate 29.

### MAINTENANCE OF TRAFFIC

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

Work activities during non-daylight hours are subject to prior approval.

One lane of traffic shall be maintained in each direction at all times.

Locations of signs on traffic control layouts are diagrammatic. Portable stands may be used on the shoulders or on driving lanes closed to traffic, if the duration is not more than 3 days. If the duration is more than 3 days, the signing shall be mounted on fixed location, ground mounted, breakaway supports.

All operations shall be confined to a 12 ft lane plus the shoulder, leaving the adjoining 12 ft lane open for thru traffic.

A maximum of four closures for divided highway will be measured and paid for. If more closures are utilized, additional cost of signing shall be at the Contractor's expense.

Not more than 4 Type C Advanced Arrow Panels will be measured and paid for. Payment will be made for actual number of arrow panels utilized on the project. No payment will be made for panels being reused at different areas as determined by the Engineer.

Maintenance of existing delineators shall be the Contractor's responsibility.

If interchange on-ramp traffic will encounter construction activity before reaching the "ROAD WORK AHEAD" and "RT or LT LANE CLOSED AHEAD" mainline signs, a "ROAD WORK AHEAD" sign, "RT or LT LANE CLOSED AHEAD" sign, and a "SPEED LIMIT" sign shall be placed along the on-ramp before reaching mainline.

The traffic control signs designated on the standard plates for movement within the manned work area shall be maintained by the Contractor in a manner that will assure they are never permitted to be further than one (1) mile from the manned work activity. Furthermore, no speed limit sign shall be improperly displayed or left in place inappropriately.

The Contractor's equipment will be required to enter and leave the project only at interchanges. Crossing of the median will not be allowed.

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS**

SIGN CODE	SIGN DESCRIPTION	EXPRESSWAY / INTERSTATE			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-2	YIELD	4	60"	10.9	43.6
R2-1	SPEED LIMIT 65	12	36" x 48"	12.0	144.0
R2-1	SPEED LIMIT 45	8	36" x 24"	6.0	48.0
R2-1	SPEED LIMIT 80	4	36" x 48"	12.0	48.0
R2-6aP	FINES DOUBLE (plaque)	4	36" x 36"	9.0	36.0
W3-5	SPEED REDUCTION AHEAD (65 MPH)	8	48" x 48"	16.0	128.0
W3-5	SPEED REDUCTION AHEAD (45 MPH)	4	48" x 48"	16.0	64.0
W4-2	LEFT or RIGHT LANE ENDS (symbol)	8	48" x 48"	16.0	128.0
W5-4	RAMP NARROWS	4	48" x 48"	16.0	64.0
W13-4P	ON RAMP (plaque)	4	30" x 30"	6.3	25.2
W20-1	ROAD WORK AHEAD	16	48" x 48"	16.0	256.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	8	48" x 48"	16.0	128.0
W20-7	FLAGGER (symbol)	4	48" x 48"	16.0	64.0
G20-2	END ROAD WORK	4	48" x 24"	8.0	32.0
EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT					<b>1208.8</b>

**SPECIAL SIGNING TABLE**

Sign Code	Quantity	Width	Height	Sign Description	Color		Sq Ft per sign	Total Sq. Ft.
		Inches	Inches		Background	Legend/Border		
	4	36	32	EXIT with Arrow	Green	White	8.0	32.0
<b>TOTAL</b>							<b>32.0</b>	

**TYPE 3 BARRICADES**

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Single Sided	4 Each

**ARROW BOARDS**

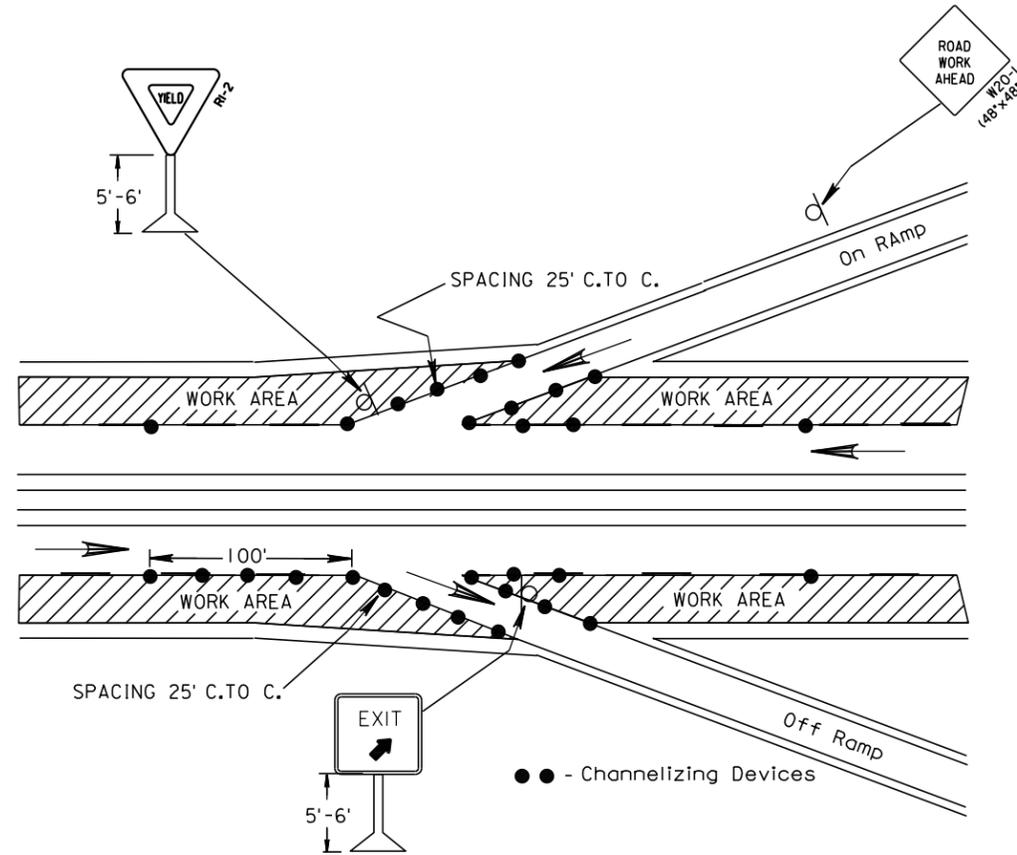
ITEM DESCRIPTION	QUANTITY
Type C Advance Warning Arrow Board	4 Each

# GUIDES FOR TRAFFIC CONTROL DEVICES RAMP SIGNING DETAILS

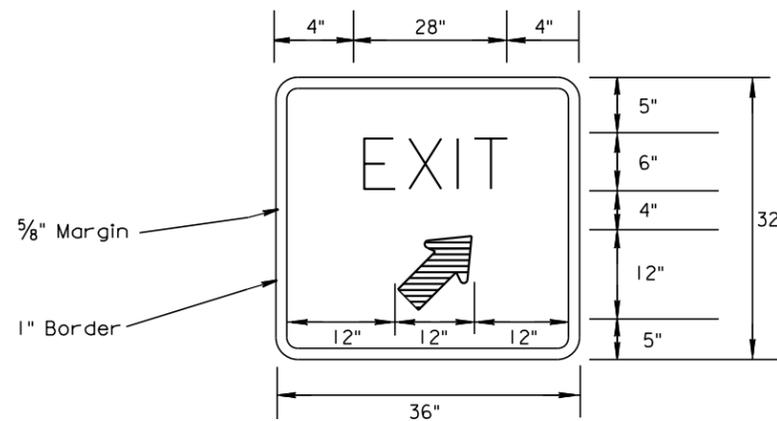
STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	IM 0299(76)231	C4	C7
Plotting Date: 02/03/2016			

## ON-RAMP AND OFF-RAMP

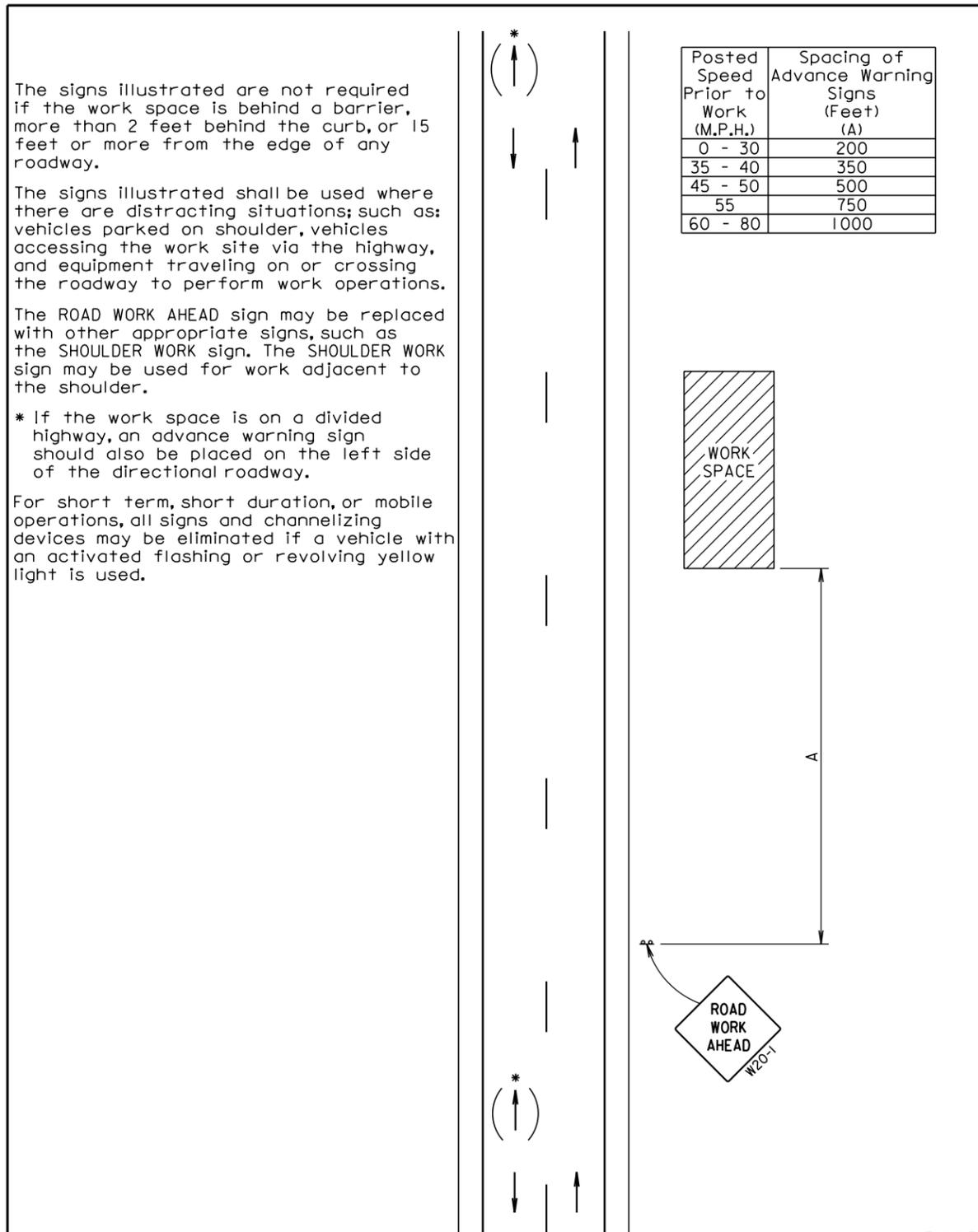
This layout is to be utilized  
with lane closure standard plate 634.63



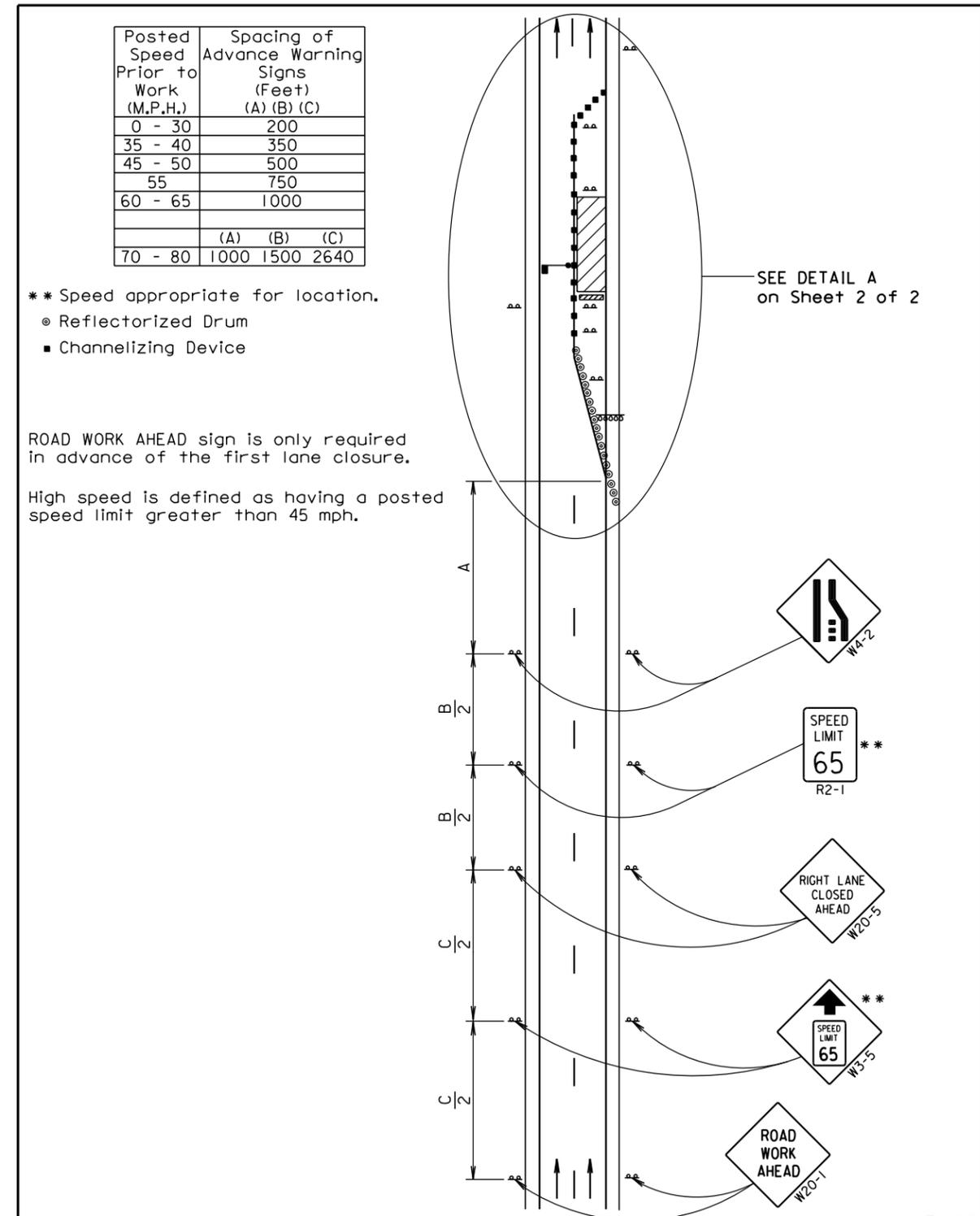
## DETAILS FOR SPECIAL SIGN



Legend - White (High Intensity)  
Background - Green (High Intensity)  
Sign Blank - 0.100" Aluminum



April 15, 2015



June 3, 2016

Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)	Taper Length (Feet) (L)
0 - 30	25	180
35 - 40	25	320
45	25	600
50	50 *	600
55	50 *	660
60 - 65	50 *	780
70 - 80	50 *	960

\* Spacing is 40' for 42" cones.  
 \*\* Speed appropriate for location.  
 \*\*\* Use speed limit designated for the condition when workers are present in the work space. Signs shall be covered or removed when workers are not present.

- Flagger (As Necessary)
- ⊙ Reflectorized Drum
- Channelizing Device

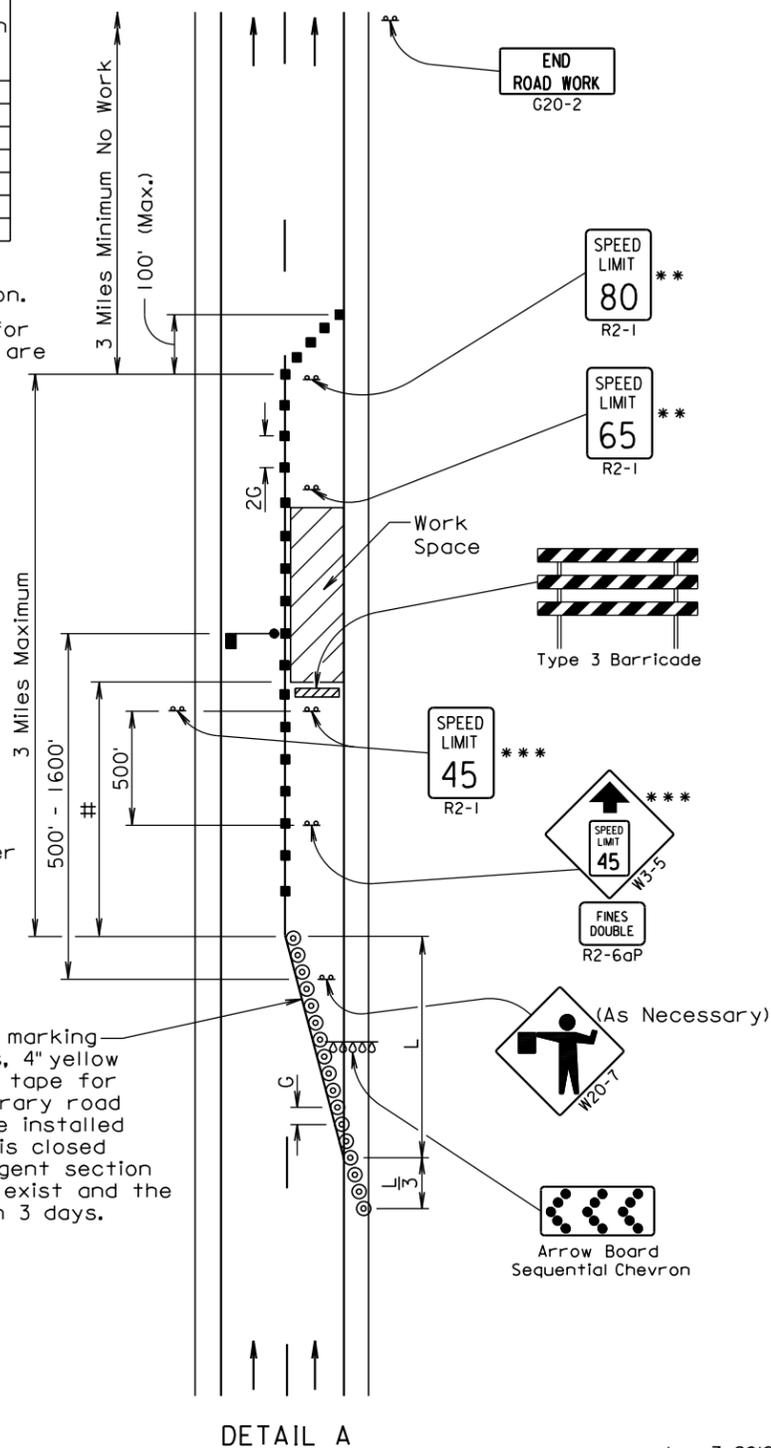
# The Work Space shall be a minimum of 500' from the end of the taper.

The FLAGGER sign shall be used whenever there is a Flagger present.

The channelizing devices shall be 42" cones or drums.

42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours.

4" white temporary pavement marking tape for right lane closures, 4" yellow temporary pavement marking tape for left lane closures, or temporary road markers at 5' spacing shall be installed in the taper when the lane is closed overnight, and along the tangent section where the skip lines do not exist and the lane is closed for more than 3 days.



DETAIL A

June 3, 2016

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A) (B)	L (Feet)
45 - 50	500	600
55	750	660
60 - 65	1000	780
	(A) (B)	
70 - 80	1000 1500	1125

Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	25
35 - 45	25
50	50 *
55	50 *
60 - 80	50 *

\* Spacing is 40' for 42" cones.

- Channelizing Device

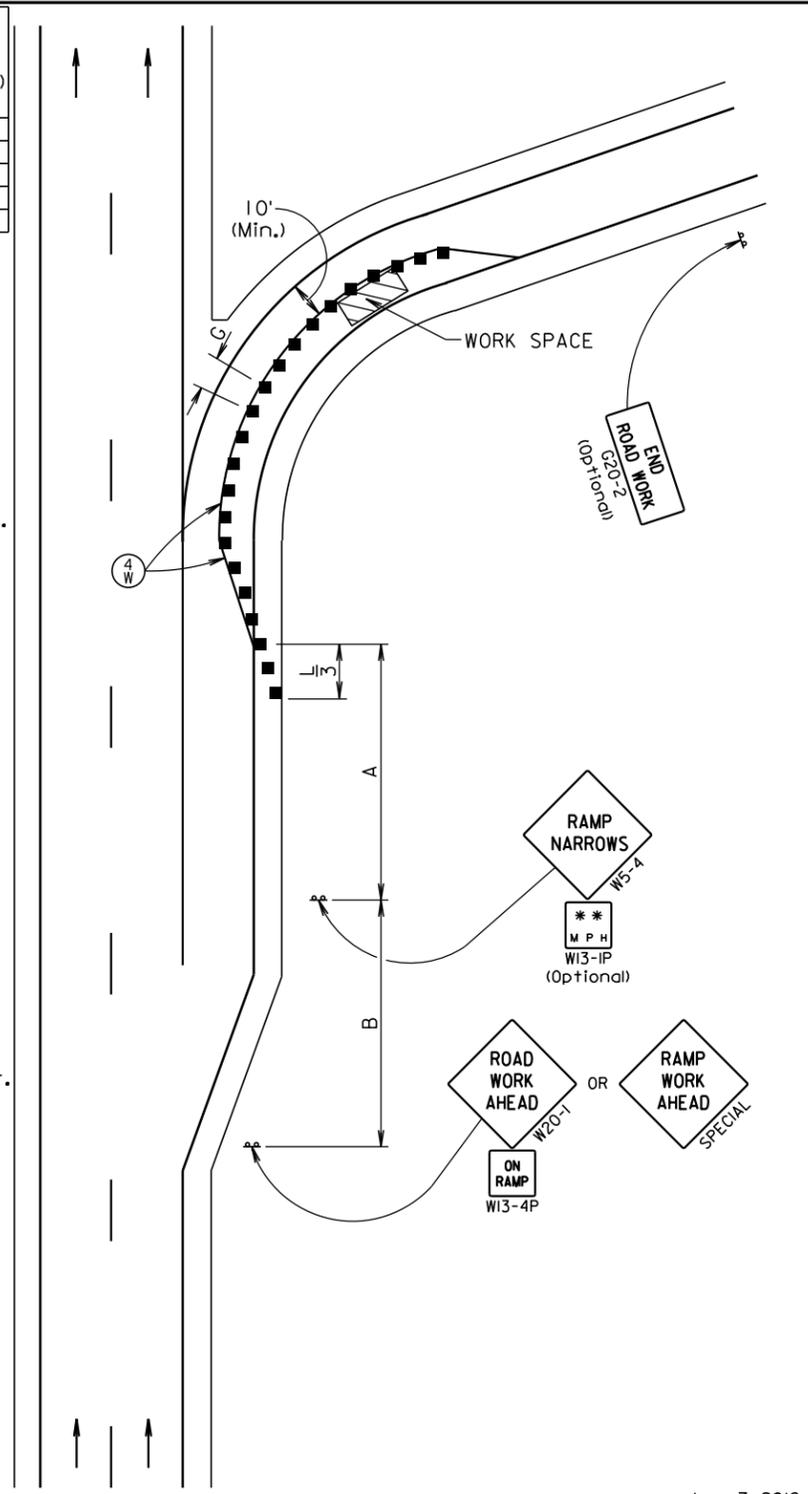
④ 4" White Temporary Pavement Marking

\*\* Need and safe speed to be determined by the Highway Authority.

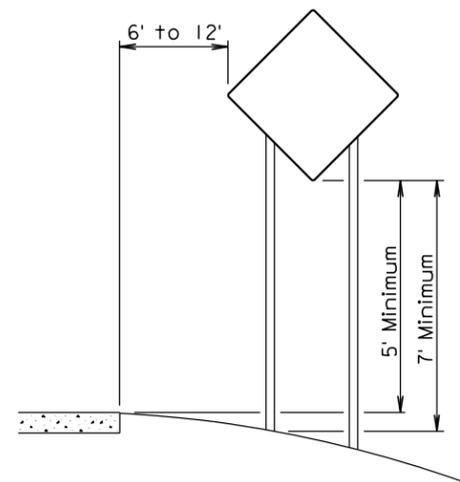
Temporary pavement markings shall be used if traffic control must remain overnight.

The channelizing devices shall be drums or 42" cones if traffic control must remain overnight.

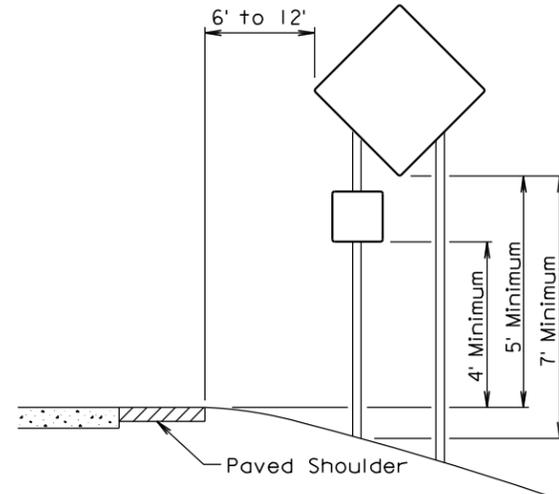
Truck off-tracking should be considered when determining whether the 10-foot minimum lane width is adequate.



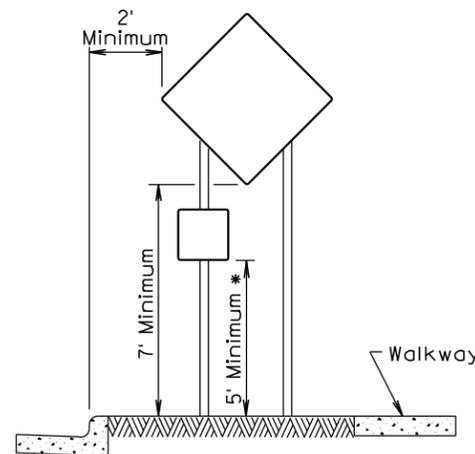
June 3, 2016



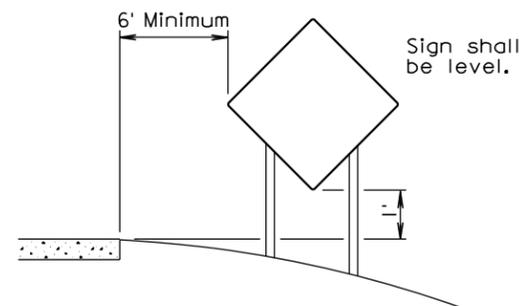
RURAL DISTRICT



RURAL DISTRICT WITH  
SUPPLEMENTAL PLATE



URBAN DISTRICT

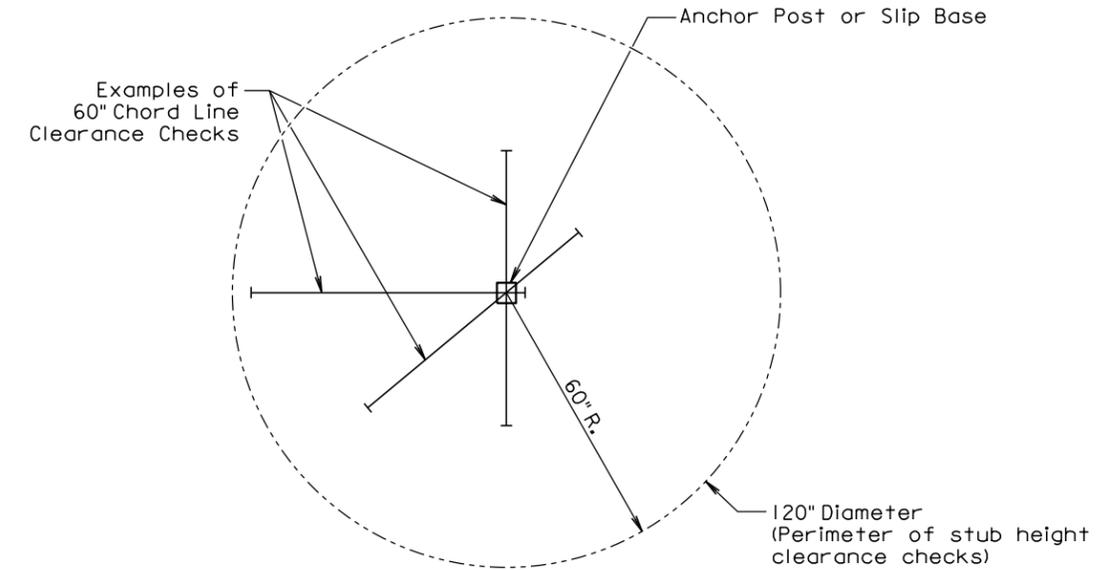


RURAL DISTRICT  
3 DAY MAXIMUM  
(Not applicable to regulatory signs)

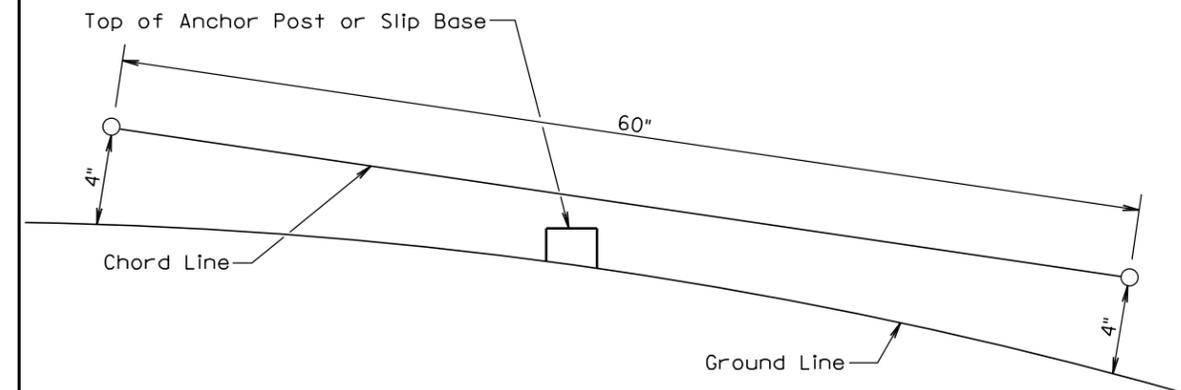
\* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

September 22, 2014

Published Date: 3rd Qtr. 2016	S D D O T	CRASHWORTHY 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: 3rd Qtr. 2016	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1