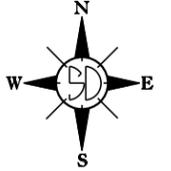


# SECTION C: TRAFFIC CONTROL PLANS

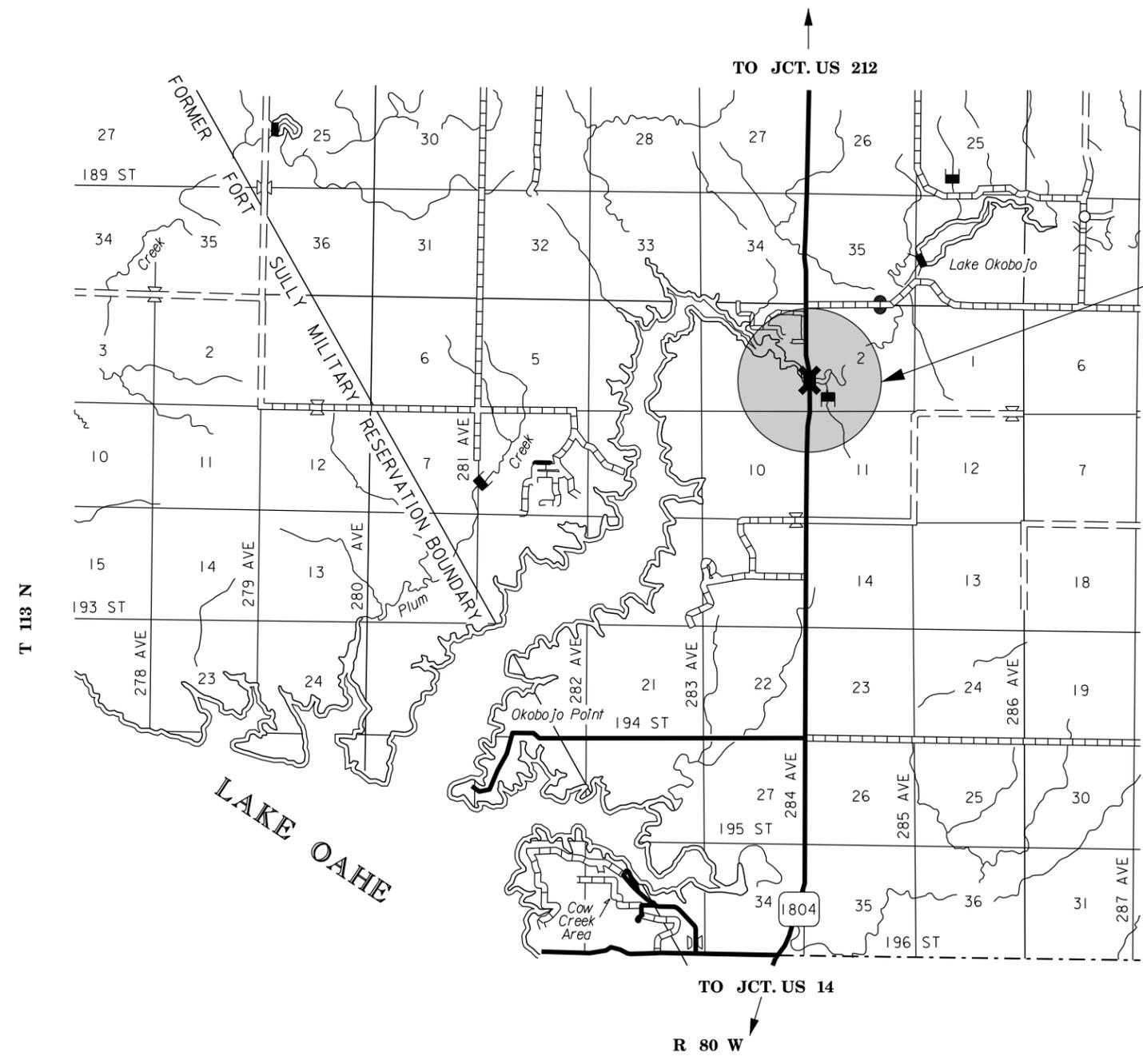
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	P 1804(42)269	C1	C5

Plotting Date: 07/08/2015



### INDEX OF SHEETS

- |                |                      |
|----------------|----------------------|
| Sheet C1       | Layout Map and Index |
| Sheet C2 to C3 | Estimate and Notes   |
| Sheet C4 to C5 | Standard Plates      |



PROJECT P 1804(42)269  
 Structure No. 60-130-188  
 Continuous Concrete Bridge  
 Over Okobojo Creek  
 112.6' = 0.021 Mile  
 MRM 269.66

Plot Scale - 1:7087.29

Plotted From - trp22410

File - ...ISulj03A9\Section C\_ Title.dgn

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	P 1804(42)269	C2	C5

**ESTIMATE OF QUANTITIES**

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
634E0010	Flagging	12.0	Hour
634E0110	Traffic Control Signs	226	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	2	Each
634E0310	Temporary Flexible Vertical Markers (Tabs)	213	Ft
634E0600	4" Temporary Pavement Marking Tape Type I	2,544	Ft

**SEQUENCE OF OPERATIONS**

The Contractor shall submit a proposed sequence of operations for the Engineer's review and approval at least two weeks prior to the preconstruction meeting.

Traffic shall be maintained through the project at ALL times.

Once work that inconveniences traffic has commenced at the structure site, it shall be pursued in a near continuous, expeditious manner to its completion. Any work that restricts the motorist from driving the posted speed limit, reduces existing roadway width, or causes a potentially unsafe condition due to Contractor operations such as frequent movement of equipment or materials on or through the project, is considered to be an inconvenience to traffic.

The Contractor shall maintain access on and off the highway for local residences and county roads.

The Contractor may perform work on the roadway during daylight hours only, unless additional hours are approved by the Engineer.

**GENERAL MAINTENANCE OF TRAFFIC**

All traffic control sign locations shall be set in the field by the Contractor and verified by the Engineer prior to installation.

Channelizing devices in a series shall be of the same type. Channelizing drums shall be of a two part construction with breakaway bases. The cost of additional channeling devices shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".

Type 3 Barricade, 8' Double Sided shall mark both ends of the construction work zone.

Certified flaggers properly attired and preceded by FLAGGER symbol signs, will be required where work activity and/or equipment present a hazard to the workers, a hazard to through traffic, or encroaches into a driving lane. Additional Flagger hours shall be paid for at the contract unit price per hour for "Flagging".

Removing, relocating, covering, salvaging and resetting of existing traffic control devices, including delineation, shall be the responsibility of the Contractor. Cost for this work shall be incidental to the contract lump sum price for "Traffic Control, Miscellaneous". Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.

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.

All non-fixed location signs may be mounted on portable supports. The portable supports shall be constructed to yield upon impact to minimize hazards to motorists, and shall be of proper height. The bottom of signs on portable or temporary supports shall not be less than seven feet above the pavement in urban areas and one foot above the pavement in rural areas. Portable sign supports may be used as long as the duration is less than 3 days. If the duration is more than 3 days the signs shall meet the minimum mounting heights of 5 foot for rural areas and 7 foot for urban areas.

A shadow vehicle, with a ROAD MACHINERY AHEAD sign prominently displayed, shall be used in advance of landscaping, clean up, and other mobile work activities.

The Contractor shall maintain the driving surface on the project to eliminate hazards to the traveling public. The driving surface is defined as both Driving Lanes along with both outside shoulders on the project.

Traffic Control Signs, as shown in the Estimate of Quantities, are estimates. Contractor's operation may require adjustments in quantities, either more or less. Payment will be for those signs actually ordered by the Engineer and used. The cost for additional signs shall be paid for at the contract unit price per square foot for "Traffic Control Signs".

**TEMPORARY PAVEMENT MARKING**

After completion of structure site work, temporary pavement markings shall be used to mark centerline of all new surfaces as per Specifications.

Flagger symbol signs (W20-7) and flaggers, or a shadow vehicle with rotating yellow lights or strobe lights shall be positioned on the roadway shoulder in advance of workers for both directions of traffic during the installation of temporary pavement markings. The traffic control device used shall be moved to provide proper warning of the work operation. A ROAD WORK AHEAD (W20-1), a Workers symbol sign (W21-1) or a BE PREPARED TO STOP (W3-4) warning sign shall be mounted on the rear of the shadow vehicle. The method of traffic control used by the Contractor for this work shall be approved by the Engineer.

Temporary Pavement Marking Tape, Type 1 shall be used for all pavement marking shown on Standard Plate 634.25.

Approximately 144 feet of 4 inch white (24" stop bar reduced to 4" equivalent) and 2,400 feet of 4 inch yellow will be required at the structure site. The Contractor will be paid only once for tape placement. The Contractor is responsible for maintaining and cleaning the tape throughout the duration of the project and for removing all temporary pavement marking tape when it is no longer required.

The Contractor shall install approximately 213 feet (structure length plus 50' off each end of structure) of temporary tabs marking centerline after completion of the deck seal.

**PERMANENT PAVEMENT MARKING**

Application of permanent pavement marking shall be done by State forces.

STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	P 1804(42)269	C3	C5

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R1-1	STOP	2	30" x 30"	6	12
W1-3	REVERSE TURN (L or R)	1	48" x 48"	16	16
W3-1	STOP AHEAD (symbol)	2	48" x 48"	16	32
W3-4	BE PREPARED TO STOP	1	48" x 48"	16	16
W13-1P	ADVISORY SPEED (plaque)	2	30" x 30"	6	12
W20-1	ROAD WORK AHEAD	2	48" x 48"	16	32
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16	32
W20-7	FLAGGER (symbol)	2	48" x 48"	16	32
W21-1	WORKERS (symbol)	1	48" x 48"	16	16
W21-3	ROAD MACHINERY AHEAD	1	48" x 48"	16	16
G20-2	END ROAD WORK	2	36" x 18"	5	10
		<b>CONVENTIONAL ROAD</b>			<b>226</b>
		<b>TRAFFIC CONTROL SIGNS SQFT</b>			

**TYPE 3 BARRICADES**

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Double Sided	2 Each

Plotting Date: 07/08/2015

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	25
35 - 40	350	25
45 - 50	500	50
55	750	50
60 - 65	1000	50

Flagger  
 Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

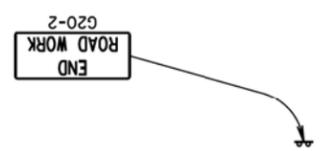
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) shall be displayed in advance of the liquid asphalt areas.

Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

The channelizing devices shall be drums or 42" cones.

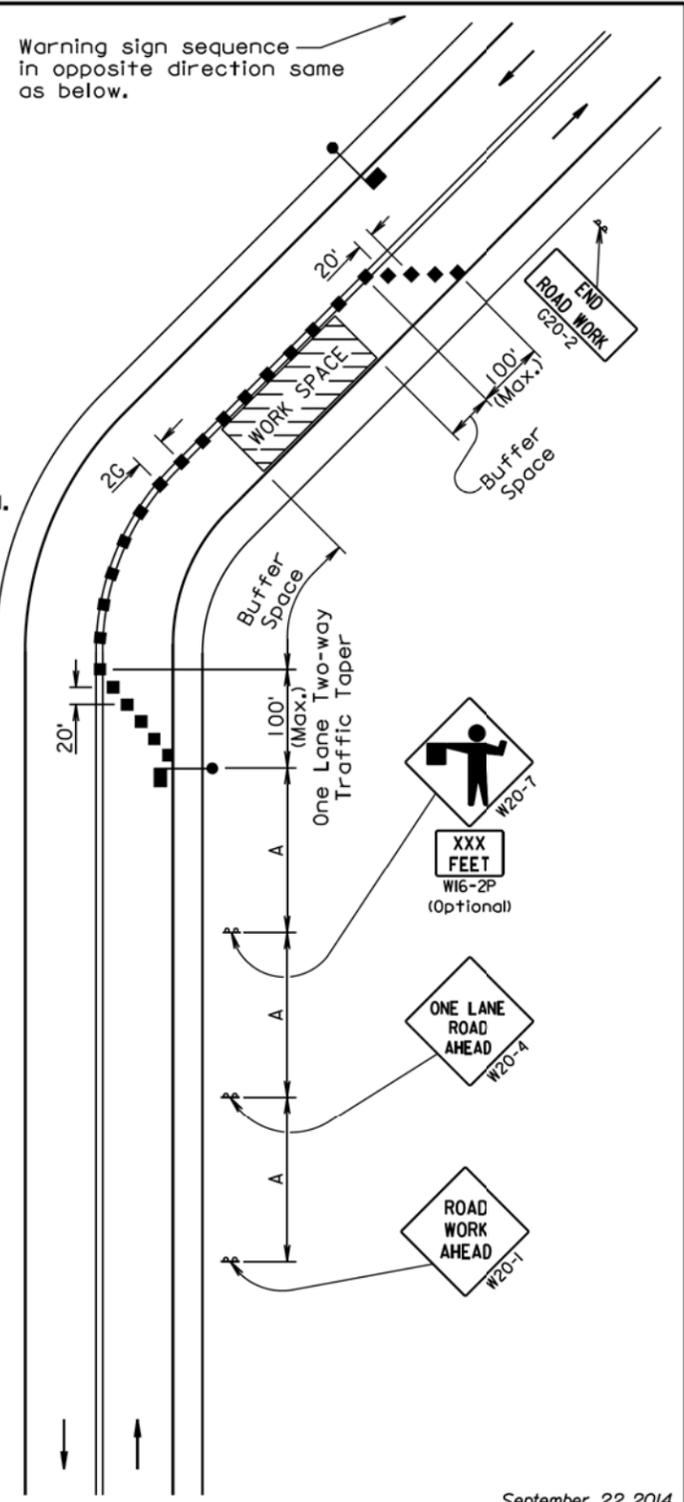
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.



Channelizing devices and flaggers shall be used at intersecting roads to control intersecting road traffic as required.

The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

The length of A may be adjusted to fit field conditions.



September 22, 2014

<b>S D D O T</b>	<b>GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE WITH FLAGGER PROVIDED</b>	PLATE NUMBER <b>634.23</b>
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	Spacing of Taper Length (Feet) (L)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	200	180	25
35 - 40	350	320	25
45 - 50	500	600	50
55	750	660	50
60 - 65	1000	780	50

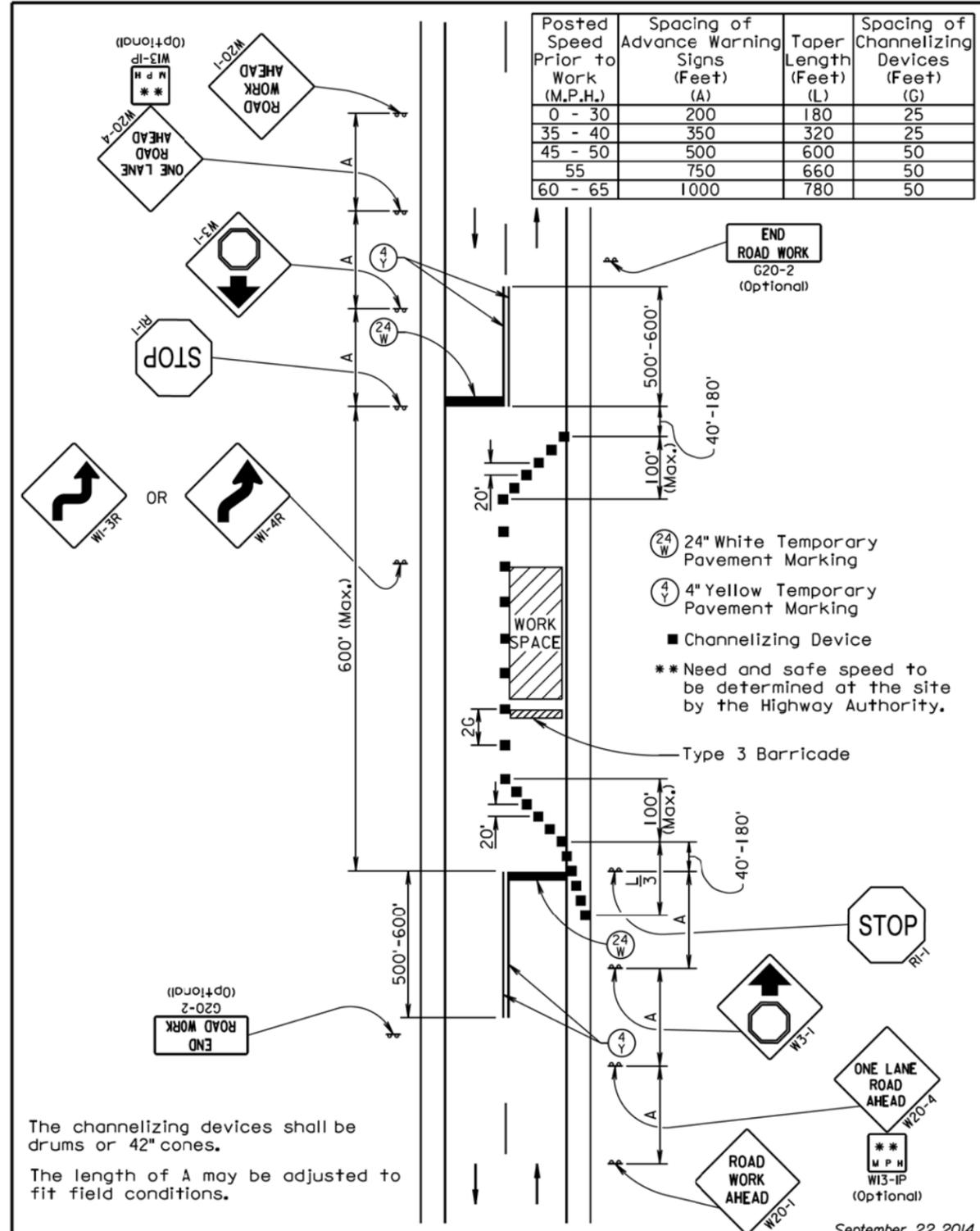
END ROAD WORK G20-2 (Optional)

24" White Temporary Pavement Marking  
 4" Yellow Temporary Pavement Marking

Channelizing Device

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

Type 3 Barricade



September 22, 2014

<b>S D D O T</b>	<b>GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE USING STOP SIGNS</b>	PLATE NUMBER <b>634.25</b>
	Published Date: 2nd Qtr. 2015	Sheet 1 of 1

PLOT SCALE - 1:200

PLOTTED FROM - TRPR22410

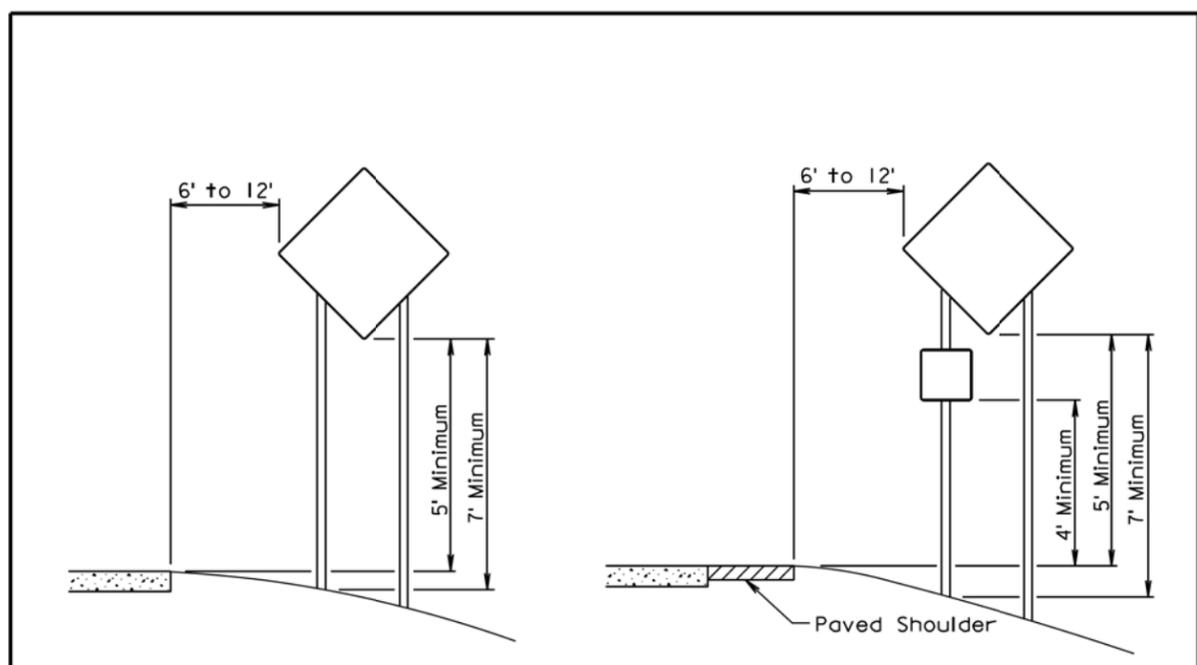
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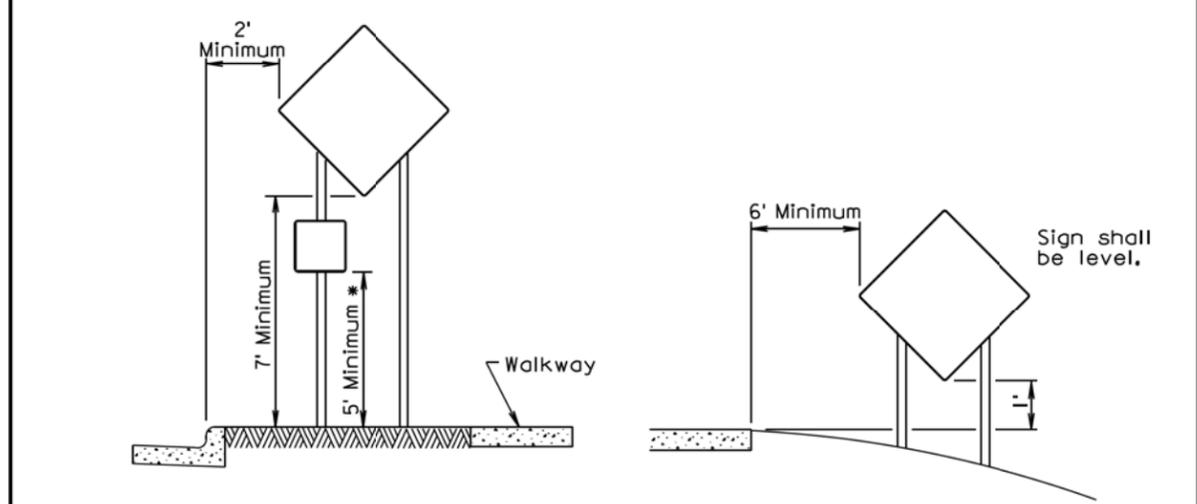
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FILE - ... \SULY03A9\63485.63499.DGN



RURAL DISTRICT

RURAL DISTRICT WITH SUPPLEMENTAL PLATE



URBAN DISTRICT

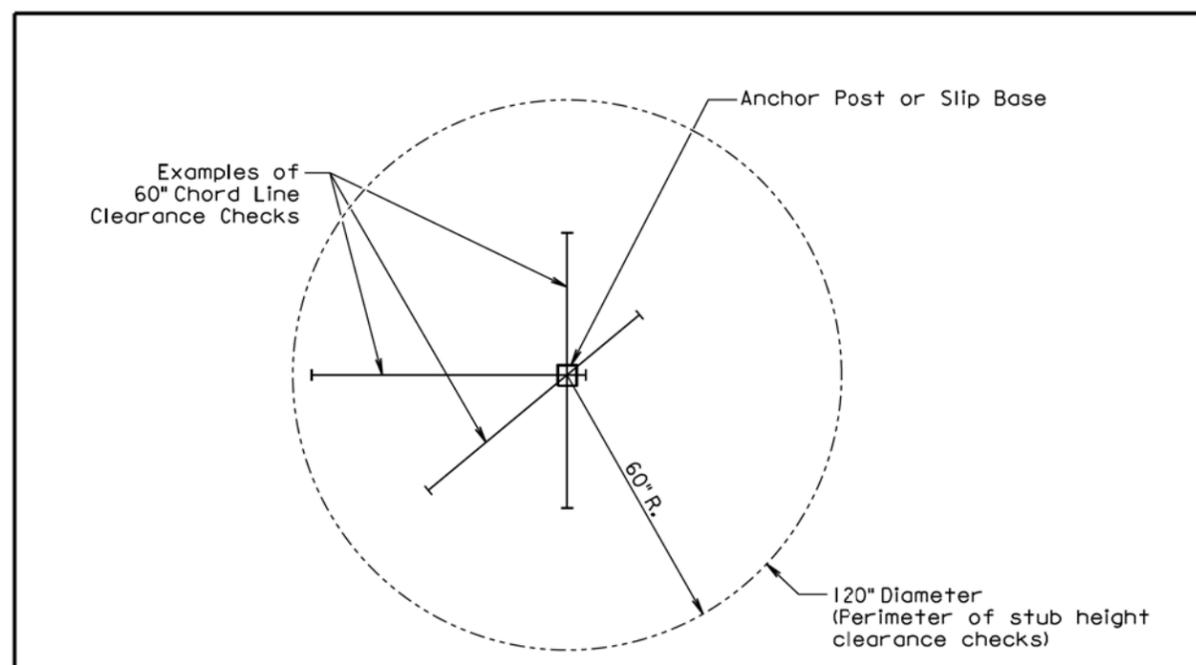
RURAL DISTRICT 3 DAY MAXIMUM

\* 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.

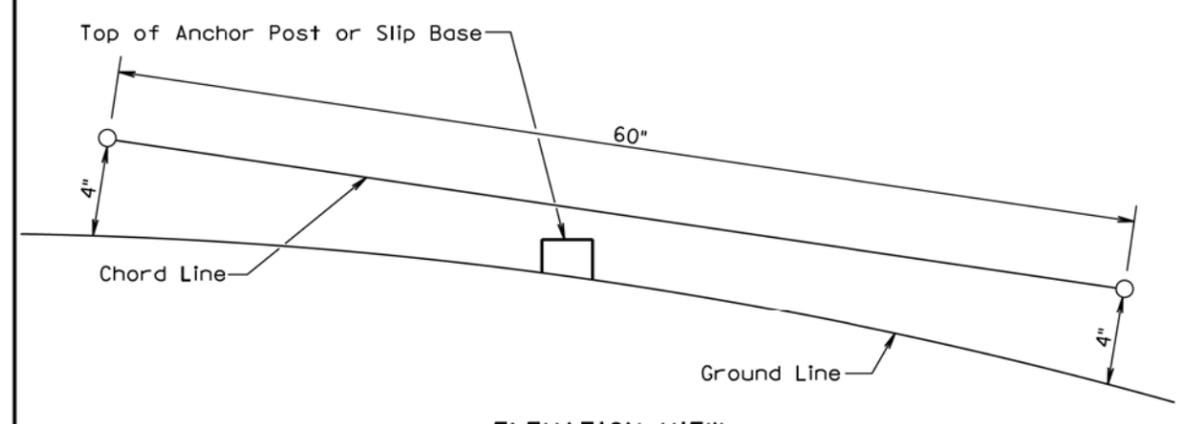
(Not applicable to regulatory signs)

September 22, 2014

Published Date: 2nd Qtr. 2015	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: 2nd Qtr. 2015	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1

-PLOTTED FROM - TRPR22410