

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRF 018P(02)13 P 0471(08)27	C1	C9

Plotting Date: 12/05/2014

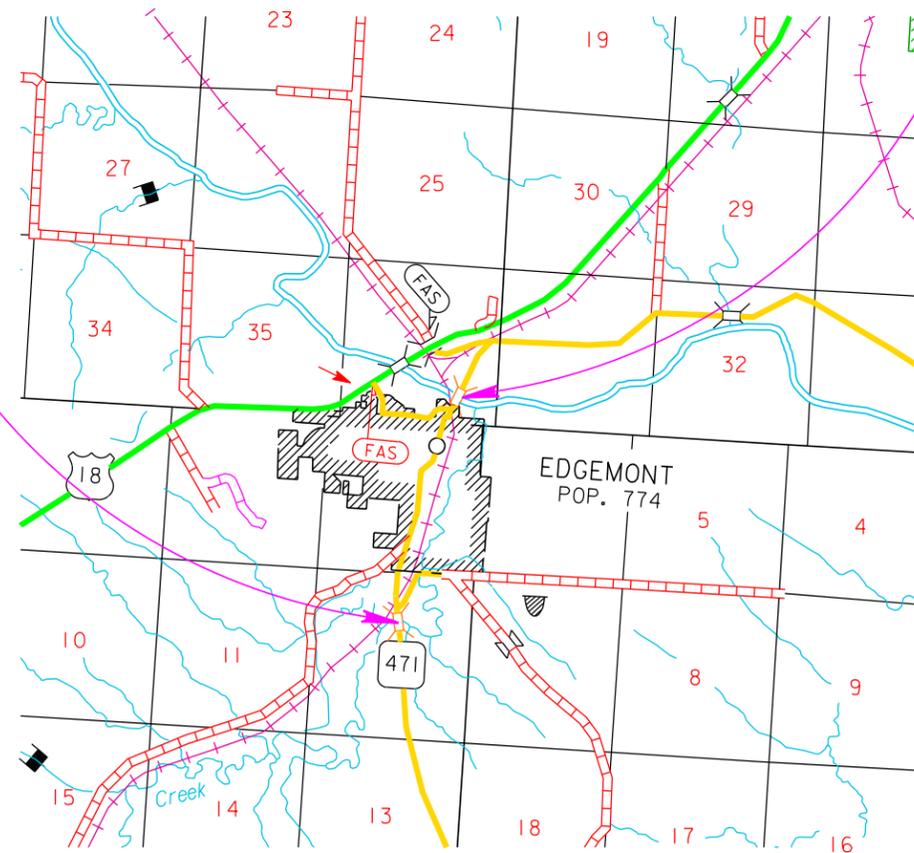
# Section C: Traffic Control Plans

## INDEX OF SHEETS

- C1 General Layout W/Index
- C2 Estimate With General Notes & Tables
- C3-C4 Fixed Location Signs
- C5 Mickelson Trail Detour
- C6-C9 Standard Plates

P 0471(08)27  
Str 24-116-133, MRM 27.29

BRF 018P(02)13  
Str 24-118-119, MRM 13.40



**SECTION C – ESTIMATE OF QUANTITIES – BRF 018P(02)13**

Bid Item Number	Item	Quantity	Unit
632E3526	Install State Furnished Sign	10.0	Each
634E0010	Flagging	250.0	Hour
634E0100	Traffic Control	962.0	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

**SECTION C – ESTIMATE OF QUANTITIES – P 0471(08)27**

Bid Item Number	Item	Quantity	Unit
634E0010	Flagging	250.0	Hour
634E0100	Traffic Control	1,083.0	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

**GENERAL MAINTENANCE OF TRAFFIC**

Traffic shall not be delayed for a cumulative period longer than 15 minutes throughout the project.

Vehicles working in traffic or alongside traffic shall be equipped with a flashing amber light visible from all directions. The amber light shall be mounted on the uppermost part of the contractor's vehicle. Lights must have peak intensity within the range of 40 to 400 candelas and must flash at 75 ± 15 flashes per minute. Vehicle flasher/hazard lights are not acceptable.

Traffic control shall be in accordance with MUTCD Standards, the Specifications and these plans.

The Contractor shall keep the portion of the project being used by public traffic in a condition that will adequately and safely accommodate traffic. A power broom will be required to clean all loose debris off of paved surfacing.

Storage of vehicles, materials 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.

Non-applicable signing will be covered or removed and reset during periods of in-activity. All costs to do this work shall be incidental to Traffic Control, Miscellaneous.

Removing, relocating, covering, salvaging and resetting of permanent traffic control devices 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.

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 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 be on fixed location, ground mounted, breakaway supports at the time of initial installation.

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

Work activities shall only be during daylight hours. Daylight hours are considered to be ½ hour before sunrise until ½ hour after sunset.

The Contractor or designated traffic control subcontractor shall make night (after dark) inspections at the initial set up of traffic control and every week thereafter to ensure the adequacy, legibility and reflectivity of each sign and device. A written summary of each inspection shall be given to the Engineer within 24 hours after completion of the inspection. The cost for the nighttime inspection work shall be incidental to the related contract items.

The Contractor shall be required to have a person available 24 hour/day, 7 days/week to maintain traffic control devices. The name and cellular telephone number of this individual shall be given to the Engineer at the preconstruction meeting.

The quantity of signs paid for will be for the most installations per sign in place at any one time regardless of the number of set-ups at this project site.

**Mickelson Trail Detour**

All signs not accounted for in the provided sign inventory to be used for the Mickelson Trail Detour will be provided by South Dakota Game, Fish, and Parks. All costs associated with placing and removing these signs will be incidental to the contract unit price per each for Install State Furnished Sign bid item.

**SIGN INVENTORY**

**PCN 02S8**

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	2	17	34
R11-2	48" x 30"	ROAD CLOSED	2	27	54
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	2	34	68
W20-3	48" x 48"	ROAD CLOSED ##### FT. OR AHEAD	4	34	136
W20-4	48" x 48"	ONE LANE ROAD ##### FT. OR AHEAD	2	34	68
W20-7	48" x 48"	FLAGGER (symbol)	2	34	68
SPECIAL	48" x 30"	TRAIL CLOSED	2	27	54
*****	*****	TYPE 3 BARRICADE - 8 FT. SINGLE SIDED	12	40	480
				<b>TOTAL UNITS</b>	<b>962</b>

**PCN 039Z**

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	3	17	51
W1-4	48" x 48"	REVERSE CURVE SIGN (LEFT OR RIGHT)	4	34	136
W1-6	48" x 24"	LARGE ARROW (one direction)	6	24	144
W3-4	48" x 48"	BE PREPARED TO STOP (also show n as W20-7b)	2	34	68
W13-1	24" x 24"	ADVISORY SPEED PLATE	2	16	32
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	3	34	102
W20-4	48" x 48"	ONE LANE ROAD ##### FT. OR AHEAD	2	34	68
W20-7	48" x 48"	FLAGGER (symbol)	2	34	68
*****	12" x 36"	TYPE 2 OBJECT MARKER	1	14	14
*****	*****	TYPE 3 BARRICADE - 8 FT. SINGLE SIDED	10	40	400
				<b>TOTAL UNITS</b>	<b>1083</b>

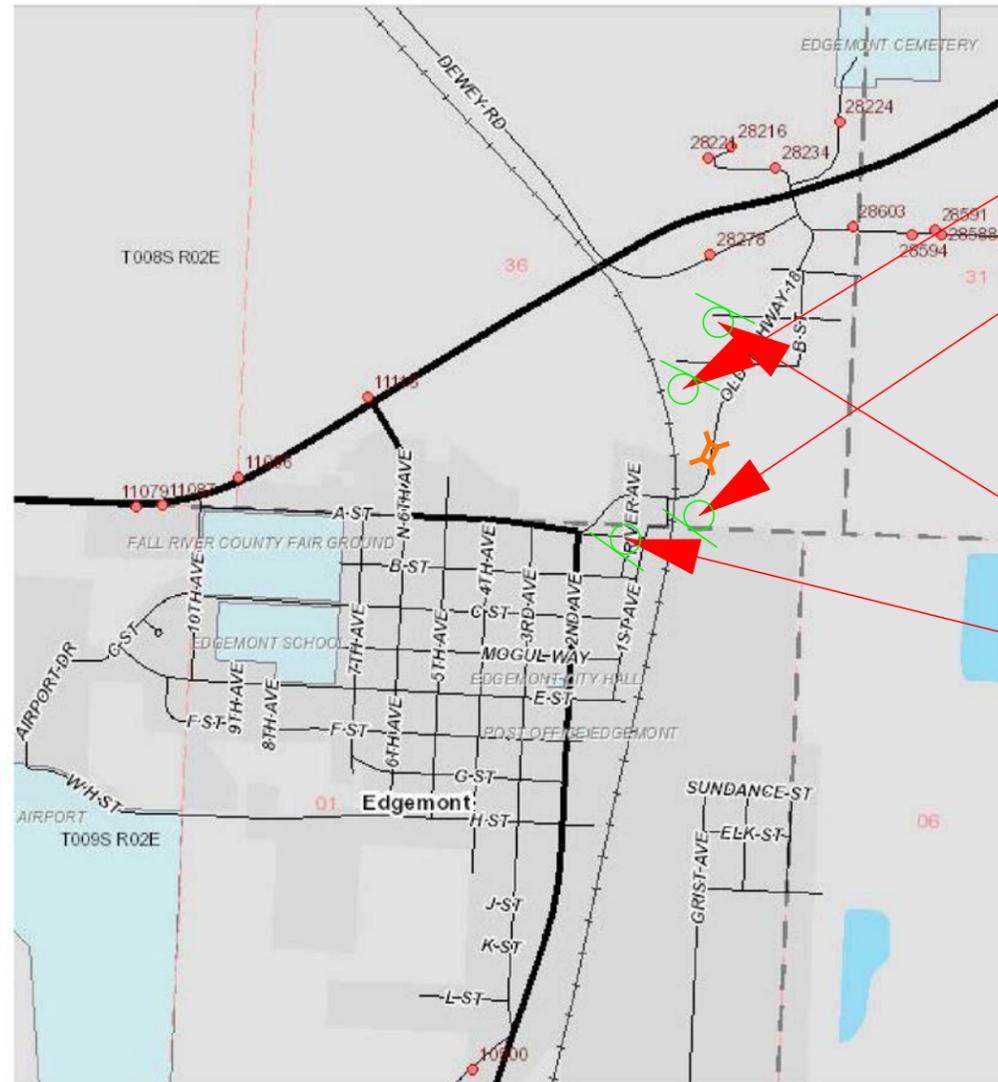
**PRESS RELEASE ANNOUNCEMENTS**

The DOT will prepare a Press Release to be released 48 hours prior to any phase change or any other major change that affects traffic flow. The DOT will be responsible to keep law enforcement, emergency services, and the traveling public notified of changes in project access. The Contractor shall provide the Engineer with pertinent information 4 days prior to any major change that affects traffic flow.

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Plotting Date: 12/05/2014

# FIXED SIGN LOCATION BRF 018 P(02)13



PLOT SCALE - 1:201.258

PLOTTED FROM - TRCU10206

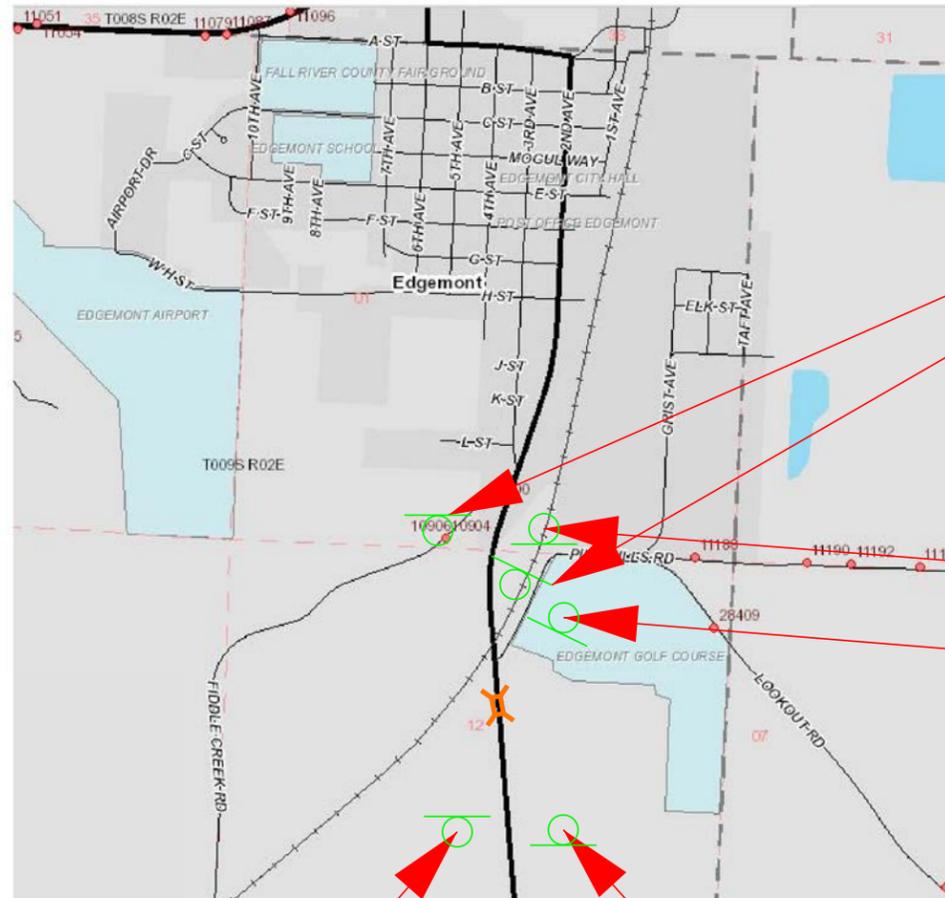
PLOT NAME - 1

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STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRF 018P(02)13 P 0471(08)27	C4	C9

Plotting Date: 12/05/2014

# FIXED SIGN LOCATION P 047 1(08 )27



END ROAD WORK  
G20-2A

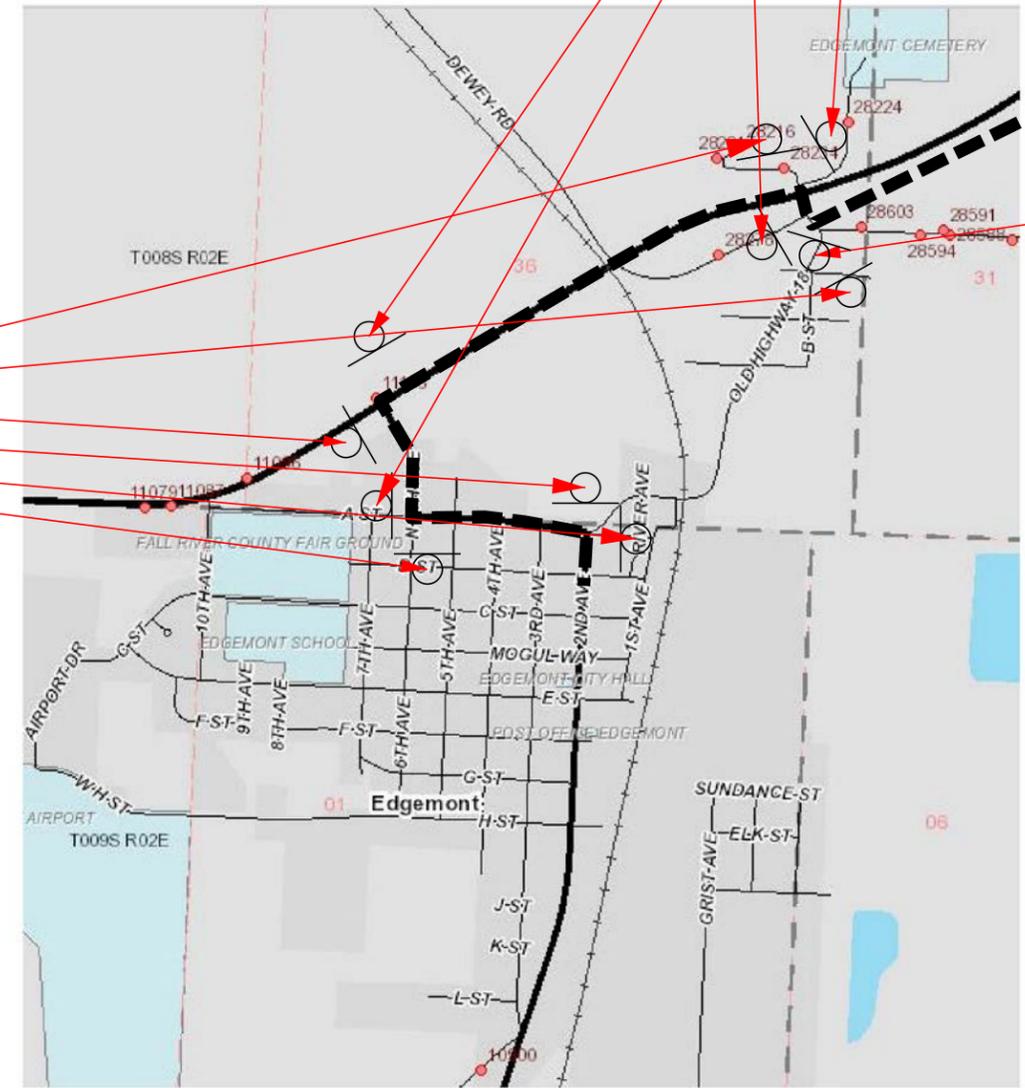
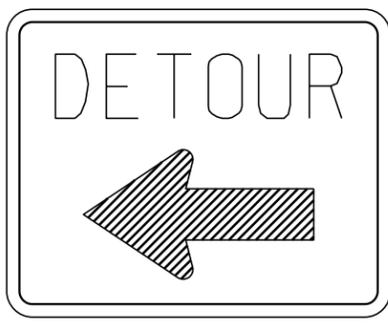
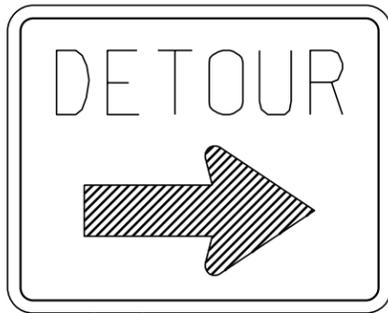
END ROAD WORK  
G20-2A



STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	BRF 018P(02)13 P 0471(08)27	C5	C9

Plotting Date: 12/05/2014

# Mickelson Trail Detour



PLOT SCALE - 1:201.258

PLOTTED FROM - TRCU10206

PLOT NAME - 3

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PLOT SCALE - 1:201,258

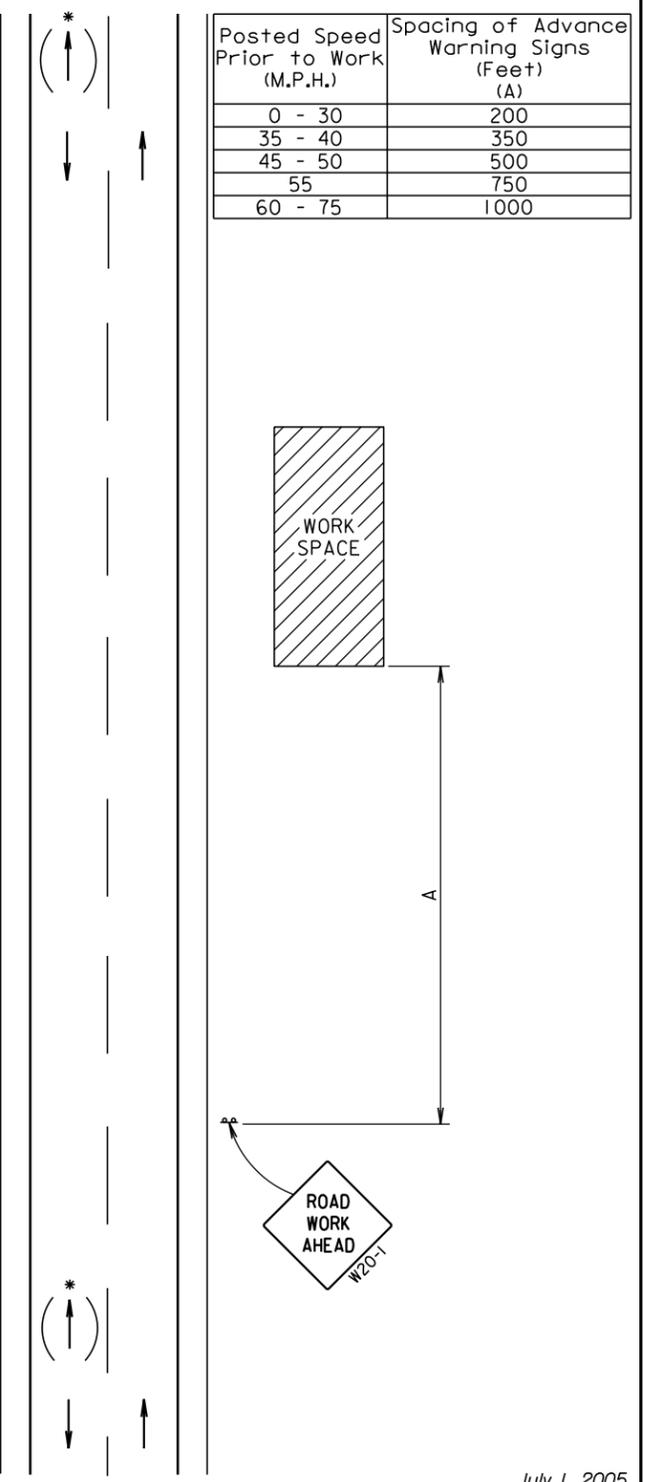
The signs illustrated are not required if the work space is behind a barrier, more than 2 feet behind the curb, or 15 feet or more from the edge of any roadway.

The signs illustrated shall be used where there are distracting situations; such as: vehicles parked on shoulder, vehicles accessing the work site via the highway, and equipment traveling on or crossing the roadway to perform work operations.

The ROAD WORK AHEAD sign may be replaced with other appropriate signs, such as the SHOULDER WORK sign. The SHOULDER WORK sign may be used for work adjacent to the shoulder.

\* If the work space is on a divided highway, an advance warning sign should also be placed on the left side of the directional roadway.

For short term, short duration, or mobile operations, all signs and channelizing devices may be eliminated if a vehicle with an activated flashing or revolving yellow light is used.



July 1, 2005

Published Date: 4th Qtr. 2014	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES WORK BEYOND THE SHOULDER	PLATE NUMBER 634.01
			Sheet 1 of 1

PLOTTED FROM - TRCU10206

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

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.

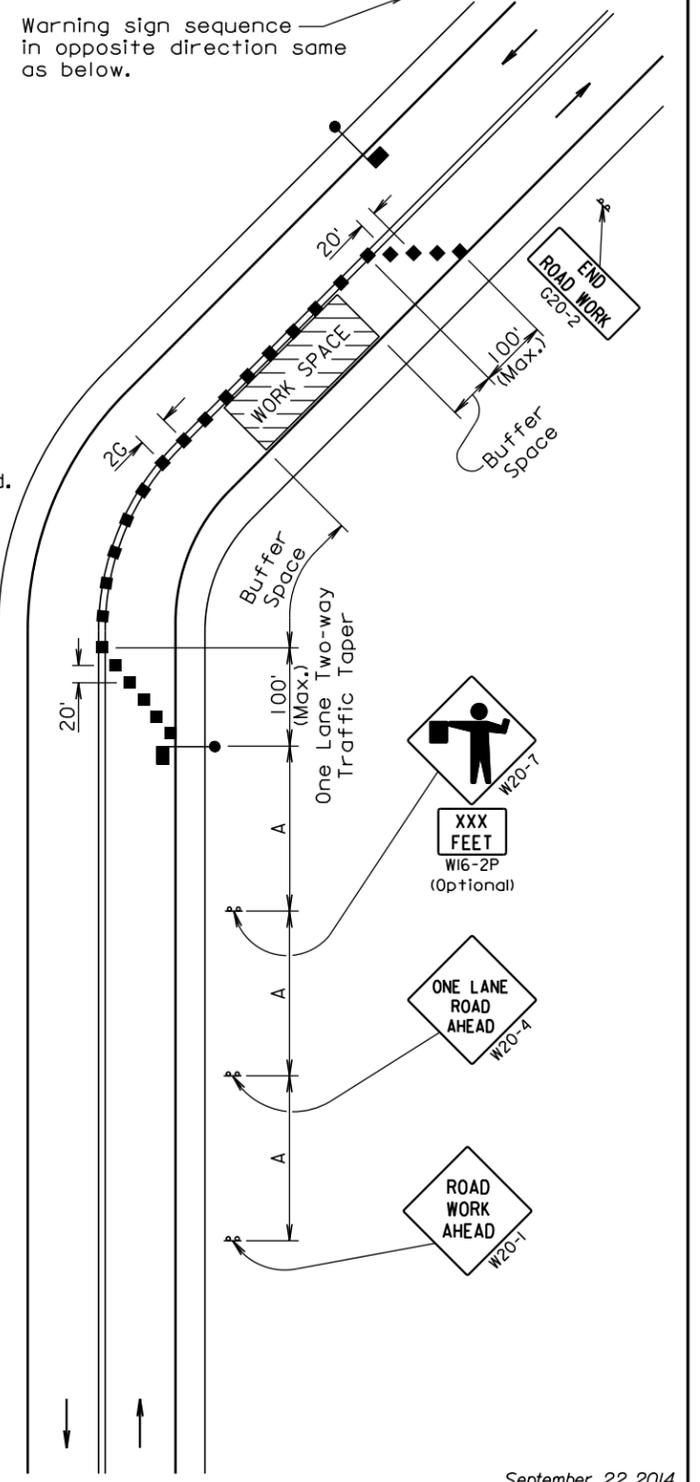
The channelizing devices shall be drums or 42" cones.

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.



Warning sign sequence in opposite direction same as below.

Published Date: 4th Qtr. 2014

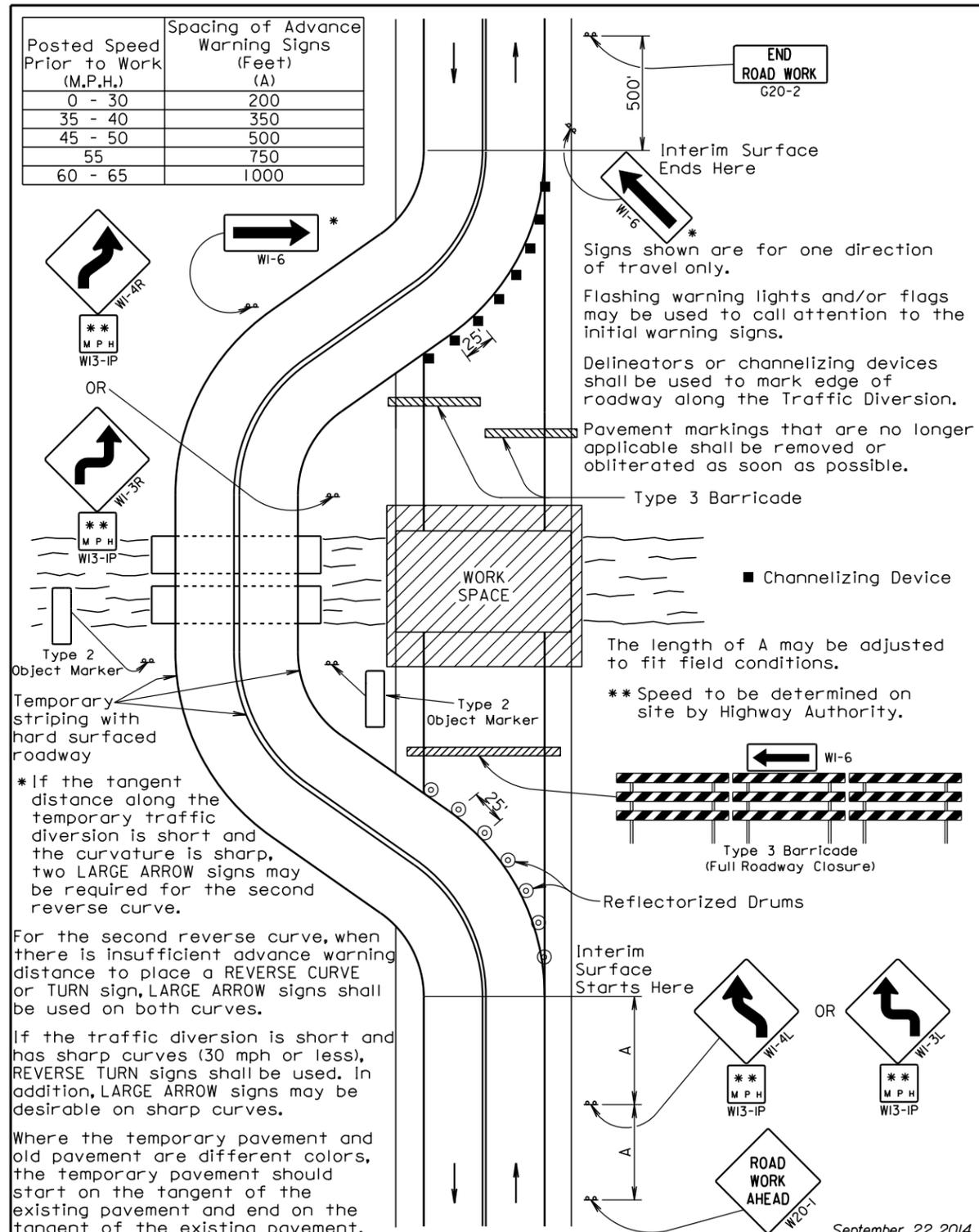
Published Date: 4th Qtr. 2014	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER 634.23
			Sheet 1 of 1

September 22, 2014

PLOT NAME - 3

FILE - H:\PCN 0256\020C TRAFFIC.DGN

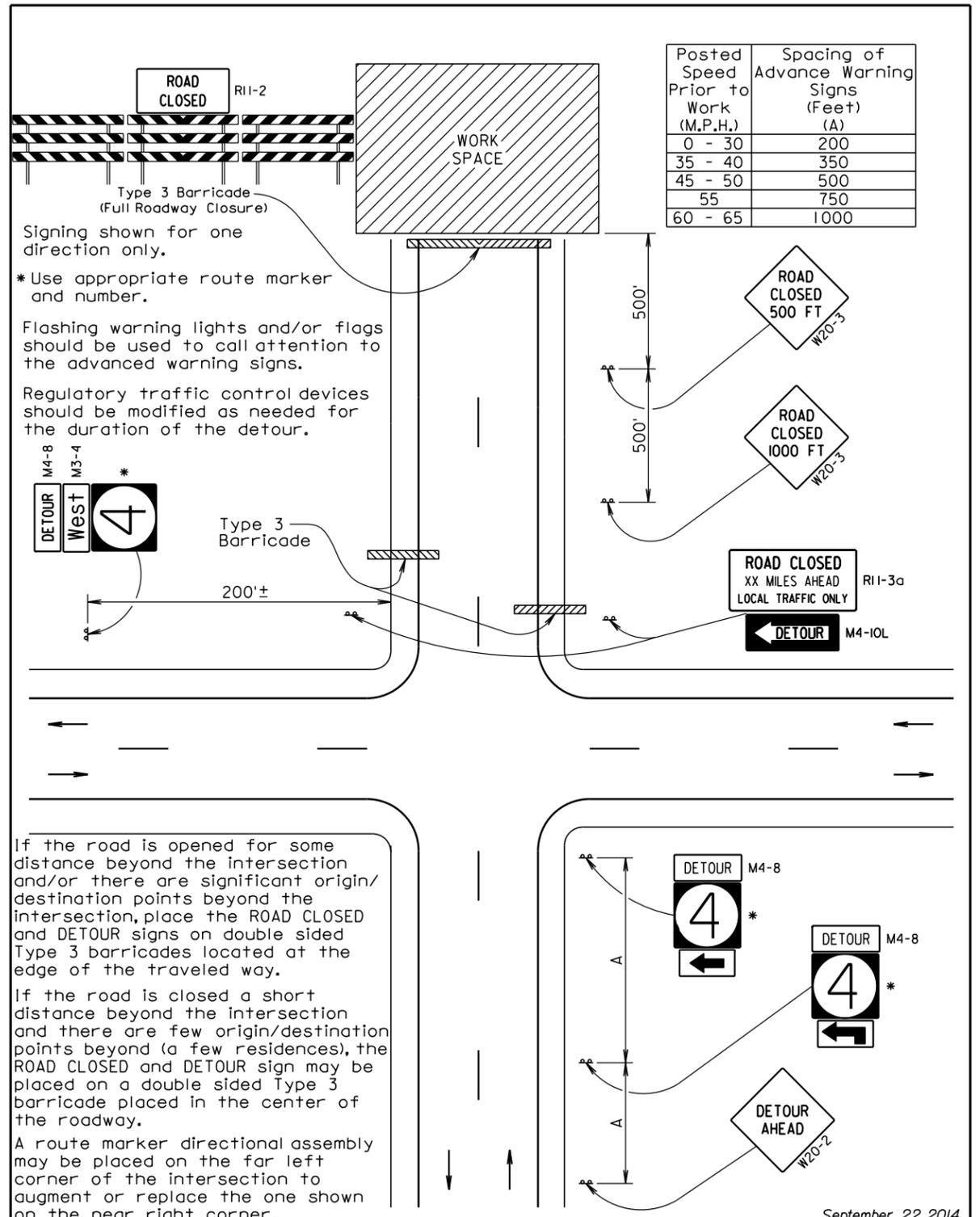
PLOT SCALE - 1:201,258



<b>SDDOT</b> Published Date: 4th Qtr. 2014	<b>GUIDES FOR TRAFFIC CONTROL DEVICES          ROAD CLOSED WITH TRAFFIC DIVERTED</b>	PLATE NUMBER <b>634.28</b>
		Sheet 1 of 1

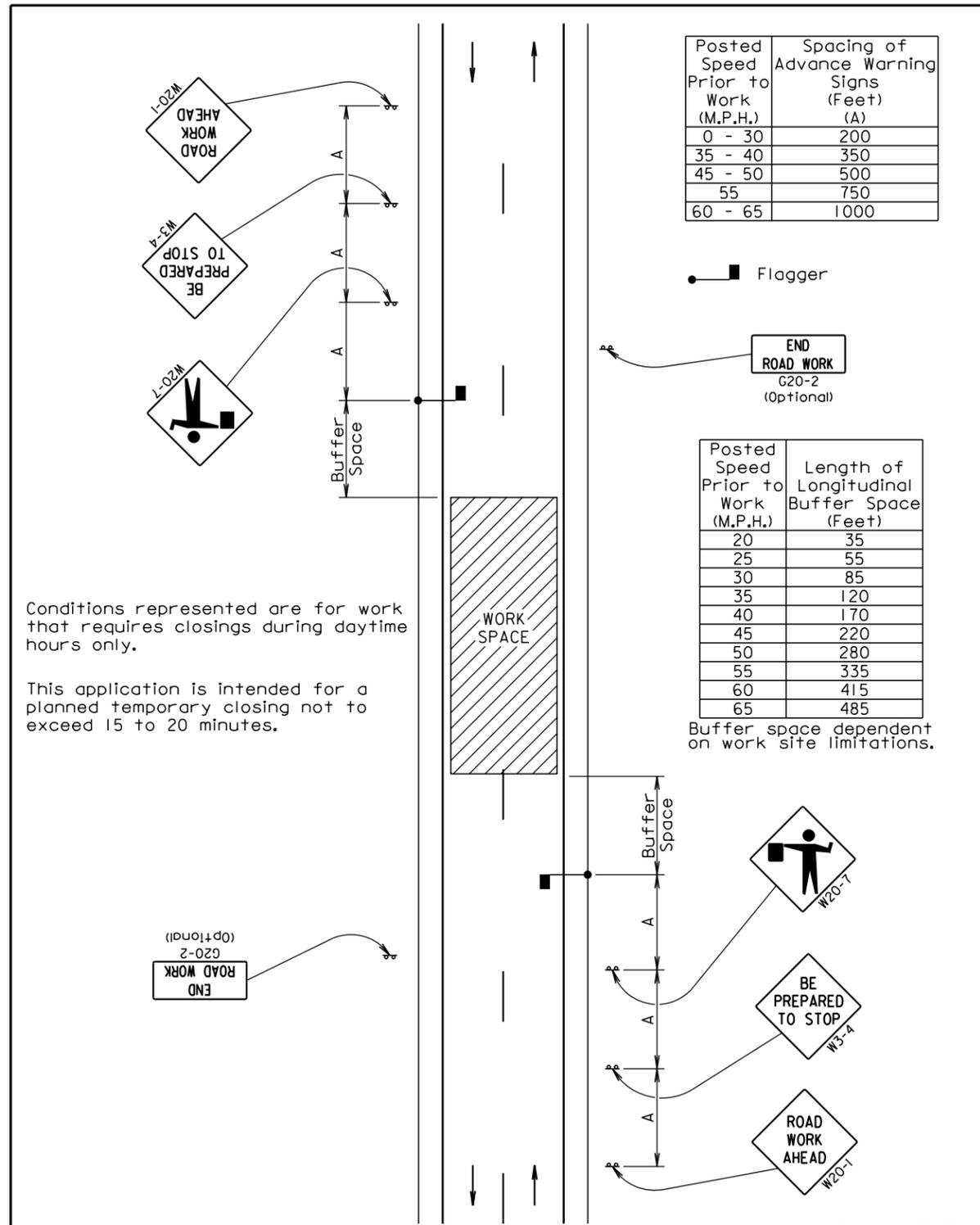
PLOT NAME - 4

FILE - H:\PCN 0256\020C TRAFFIC.DGN



<b>SDDOT</b> Published Date: 4th Qtr. 2014	<b>GUIDES FOR TRAFFIC CONTROL DEVICES          ROAD CLOSED WITH OFF-SITE DETOUR</b>	PLATE NUMBER <b>634.29</b>
		Sheet 1 of 1

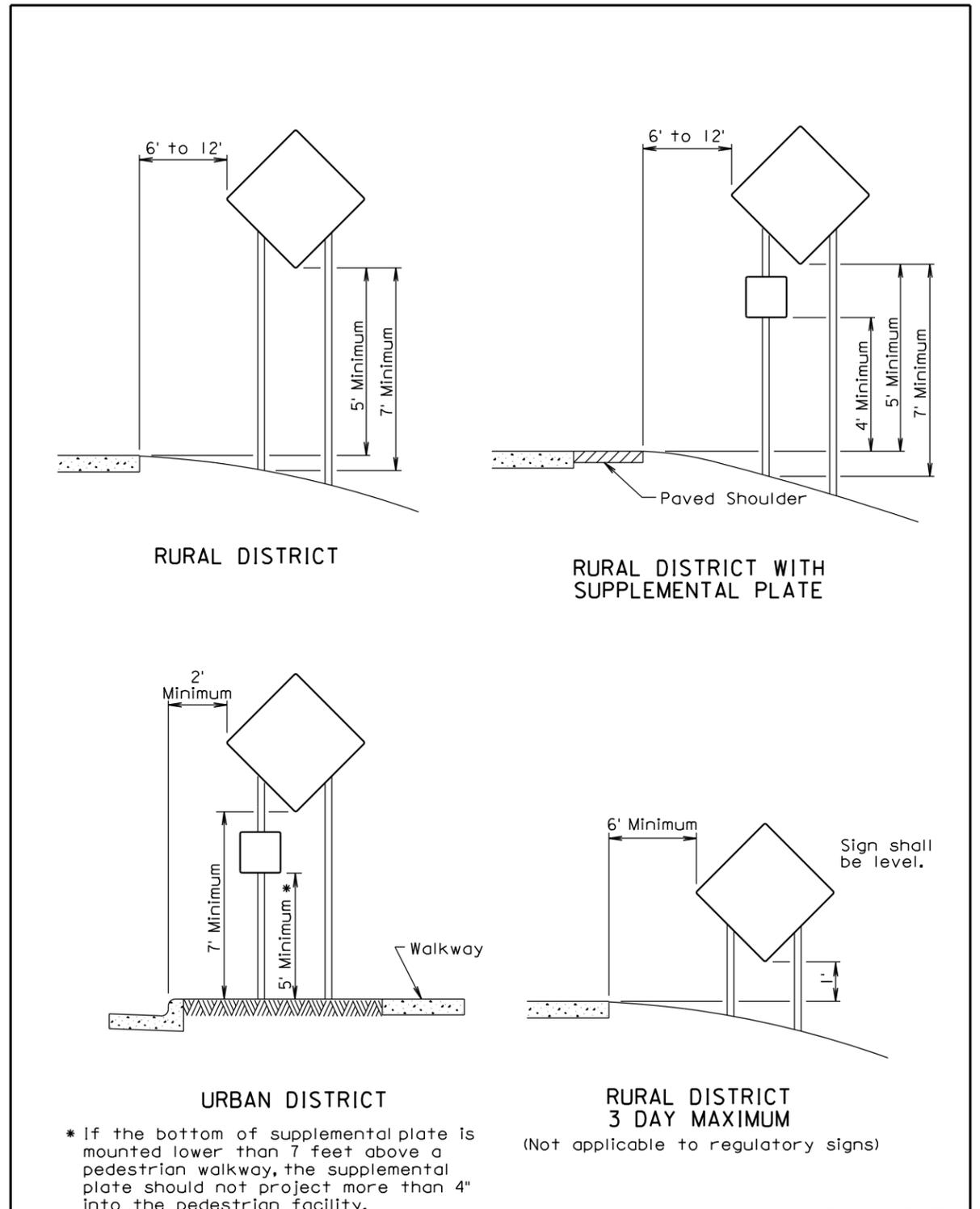
PLOT SCALE - 1:201.258



September 22, 2014

Published Date: 4th Qtr. 2014	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES TEMPORARY ROAD WORK	PLATE NUMBER 634.30
			Sheet 1 of 1

PLOT NAME - 5



September 22, 2014

Published Date: 4th Qtr. 2014	S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
			Sheet 1 of 1

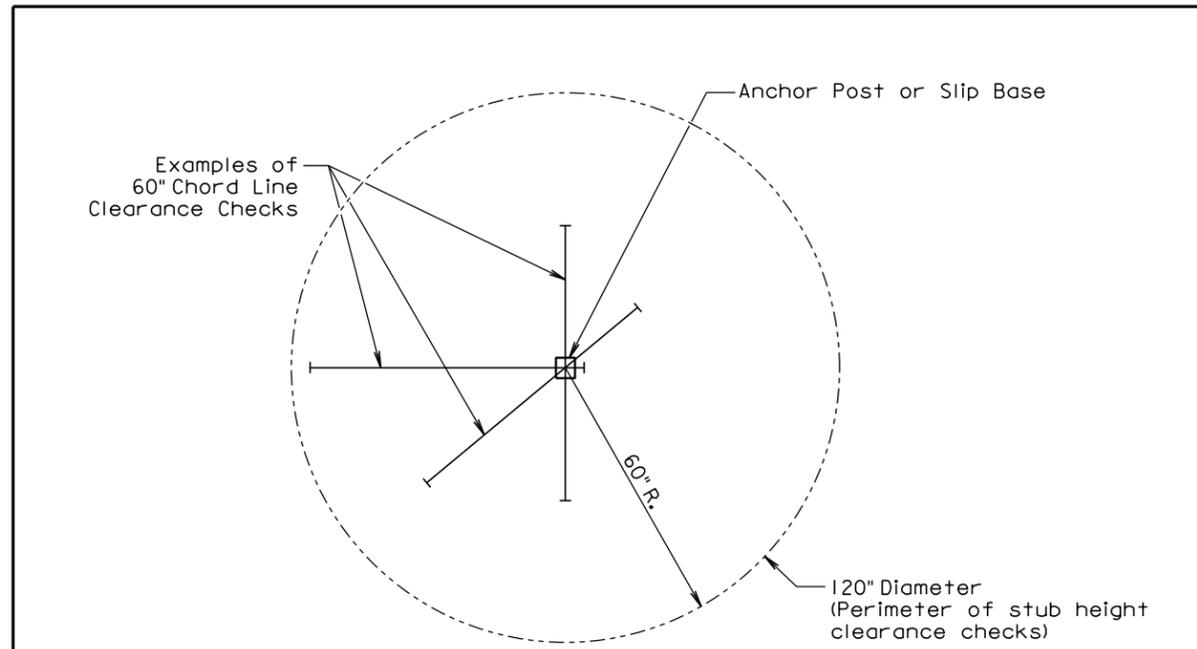
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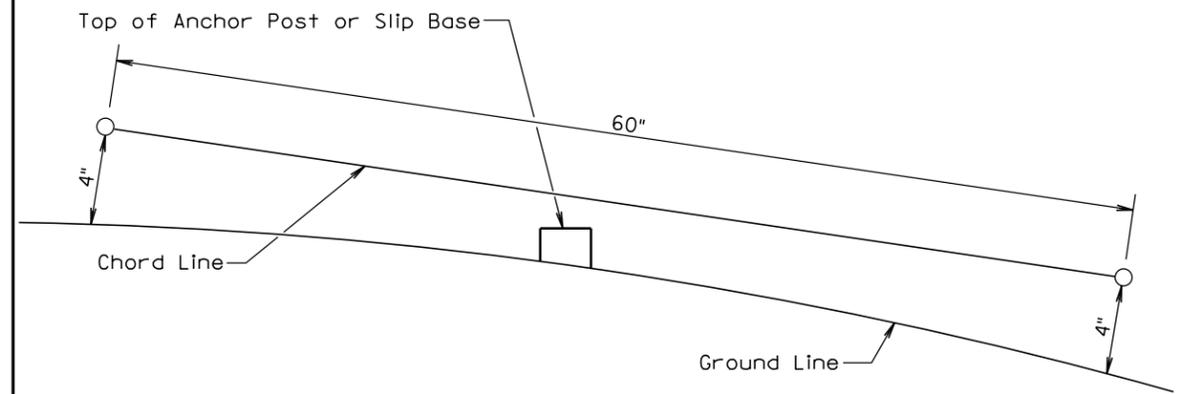
PLOT SCALE - 1:201.258

PLOT NAME - 6

FILE - H:\PCN 0258\020C TRAFFIC.DGN



**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

<i>Published Date: 4th Qtr. 2014</i>	<b>S D D O T</b>	<b>BREAKAWAY SUPPORT STUB CLEARANCE</b>	PLATE NUMBER <b>634.99</b>
			Sheet 1 of 1