

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	034-468, 014A-468 085-468, & 044-468		
		1	7

Plotting Date: 09/02/2015

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

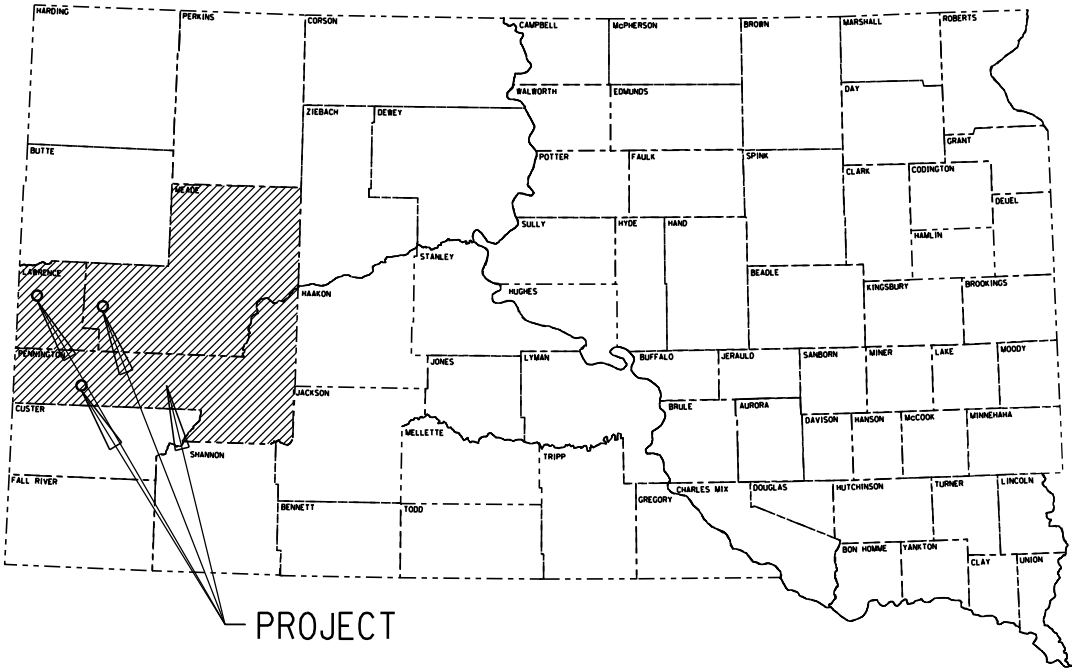
PROJECTS 034-468, 014A-468,
085-468 & 044-468

US HWY 14A, US HWY 85
& SD HWYS 34 & 44

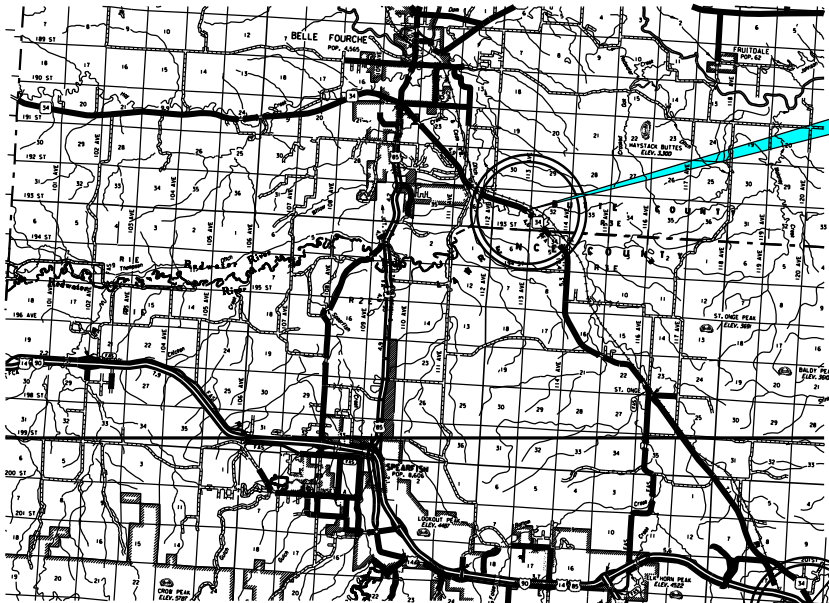
LAWRENCE, MEADE, BUTTE,
& PENNINGTON COUNTIES

INDEX OF SHEETS

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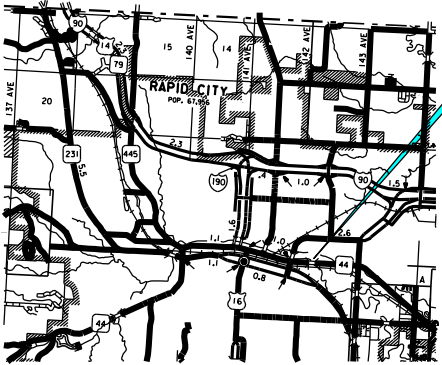


Traffic Control
PCN'S I41C, I41D, I41E,
I41F, I41G, I41H, & I41J



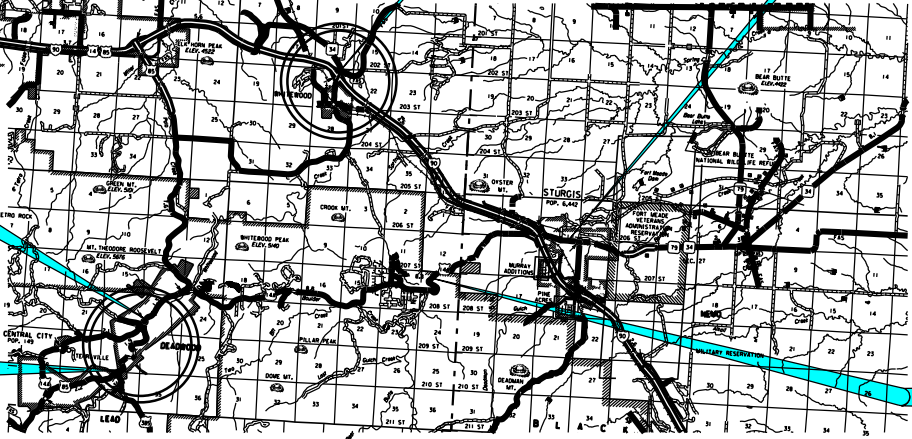
Str. No. 41-207-092
Steel Girder Bridge
266' - 6"
SD 34 MRM 27.37

Str. No. 47-024-429
2-10'x3' Sp. Box Culvert
21' - 9"
SD 34 MRM 34.43



Str. No. 41-161-156
Prestressed Girder Bridge
1768' - 0"
SD 14A MRM 41.03

Str. No. 41-156-169
Prestressed Girder Bridge
54' - 5 1/4"
SD 85 S MRM 26.11



ESTIMATE OF QUANTITIES

PCN I41J

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	60.0	Hour
634E0110	Traffic Control Signs	164	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	3	Each
634E0420	Type C Advance Warning Arrow Board	1	Each

PCN I41C

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	40.0	Hour
634E0110	Traffic Control Signs	138	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0420	Type C Advance Warning Arrow Board	2	Each

PCN I41E

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	60.0	Hour
634E0110	Traffic Control Signs	166	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	1	Each

PCN I41D

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	60.0	Hour
634E0110	Traffic Control Signs	166	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	1	Each

PCN I41H

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	40.0	Hour
634E0110	Traffic Control Signs	328	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

PCN I41G

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	60.0	Hour
634E0110	Traffic Control Signs	328	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	1	Each
634E0420	Type C Advance Warning Arrow Board	2	Each

PCN I41F

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	60.0	Hour
634E0110	Traffic Control Signs	166	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0285	Type 3 Barricade, 8' Double Sided	1	Each

TRAFFIC CONTROL – GENERAL NOTES

- Requests to deviate from the sequence of operations shall be submitted in writing to the Engineer for review. Approval of an alternate sequence of operations will only be allowed when the proposed changes meet with the Department's intent for traffic control and sequencing of the work. An alternate sequence shall be submitted for review a minimum of one week prior to potential implementation.
- Unless otherwise stated in these plans, no work will be allowed during hours of darkness.
- Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage of 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.
- Existing guide, route, informational logo, regulatory, warning signs and delineation shall be temporarily reset and maintained during construction as directed by the Engineer. Removing, relocating, salvaging and resetting of the above items shall be the responsibility of the Contractor.
- Periods of inactivity shall be defined as no work taking place for a period of more than 48 hours.
- Construction signing mounted on portable supports shall not be used for a duration of more than 3 days, unless approved by the Engineer. Construction signing that remains in the same location for more than 3 days shall be mounted on fixed location, ground mounted, breakaway supports.
- Any delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.
- All materials and equipment shall be stored a minimum distance of 30’ from the traveled way during nonworking hours.
- The Contractor shall provide installation details at the preconstruction meeting for all breakaway sign support assemblies.
- All haul trucks shall be equipped with a second flashing amber light that is visible from the backside of the haul truck. The costs for the flashing amber lights shall be incidental to the various related contract bid items.
- All construction operations shall be conducted in the general direction of traffic movement.

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	034-468, 014A-468 085-468, & 044-468	2	7

- If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD – whichever is more stringent shall be used, as determined by the Engineer.
- Temporary Flexible Vertical Markers (Tabs) shall be used for lane closure tapers or lane shift tapers and shall be installed at 5’ spacing. Tabs used for tapers and shifts will not be measured for payment. All costs associated to furnish, install, maintain (including replacement as required by the Engineer at no added cost to the Department), and remove all markers will be incidental to the contract lump sum price for Traffic Control, Miscellaneous.
- Flagging may be required at any location, as directed by the Engineer.
- Any temporary pavement marking needed as shown on the Standard Plates shall be incidental to Traffic Control, Miscellaneous.

PROJECT OVERVIEW

This project consists of providing the necessary traffic control to complete 7 epoxy chip seal bridge deck repairs in accordance with the SDDOT standard plates or the MUTCD, as directed by the Engineer. The work durations at each location will vary however 1 to 3 days is anticipated at each location. There will be 2 other Contractors performing the repair work so coordination with those Contractors will be required.

LISTED BELOW ARE THE PROJECT LOCATIONS ALONG WITH A BRIEF WORK DESCRIPTION:

52-424-301, SD 44 - Omaha Street over Rapid Creek – PCN I41J

Eastbound outside (south) lane 100% repair required with approximately 10% of eastbound inside lane. Standard Plate No. 634.58 shall be used for traffic control.

47-024-429, SD 34 - Sturgis drainage ditch – PCN I41C

Spot repair in all lanes with westbound inside lane coming off. Standard Plate No.’s 634.47 and 634.48 shall be used. One lane closure in each direction may be used.

41-207-092, SD 34 - Whitewood I-90 overpass – PCN I41E

Westbound lane 100%. Most already removed with some additional removal along edges. Standard Plate No.’s 634.23 or 634.25 shall be used.

10-130-416, SD 34 - Over False Bottom Creek – PCN I41D

Eastbound lane 100%. Most already removed with some additional removal along edges. Standard Plate No.’s 634.23 or 634.25 shall be used.

41-156-169, US 85 - South Deadwood over Whitewood Creek – PCN I41H

Outside ½ of Northbound lane. Standard Plate No. 634.53 shall be used as a reference.

41-161-156, US 14A - Deadwood Box – PCN I41G

Deadwood street west side outside lane 30’ north of joint just north of intersection through the intersection to south side crosswalk. Small spot by joint south of Lee street outside southbound lane (3’ x 3’) and a few spots at Lee street east side outside northbound lane (10’x10). Sherman street southbound inside lane 40’-50’. Both southbound lanes from crosswalk by Bullock Hotel to joint by Mineral Palace. Most joints and edges have some minor loss of chip seal. This location will take approximately 4-6 days to complete. Standard Plate No.’s 634.47 and 634.48 shall be used. One lane closure in each direction may be used.

41-161-156, Deadwood Box - Pine Street Deadwood – PCN I41G

5’x 5’ spot with some edge damage also. Standard Plate No. 634.53 shall be used as a reference.

41-233-142, US 14A - Boulder Canyon – PCN I41F

Eastbound lane full length. Standard Plate No.’s 634.23 or 634.25 shall be used.

ITEMIZED LISTS FOR TRAFFIC CONTROL SIGNS

52-424-301 – PCN I41J

CONVENTIONAL ROAD					
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R3-2	NO LEFT TURN (symbol)	1	24" x 24"	4	4
W1-4	REVERSE CURVE (L or R)	2	48" x 48"	16	32
W4-2	LEFT or RIGHT LANE ENDS (symbol)	1	48" x 48"	16	16
W9-3	CENTER LANE CLOSED AHEAD	1	48" x 48"	16	16
W13-1P	ADVISORY SPEED (plaque)	1	30" x 30"	6	6
W20-1	ROAD WORK AHEAD	2	48" x 48"	16	32
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	2	48" x 48"	16	32
W20-7	FLAGGER (symbol)	1	48" x 48"	16	16
G20-2	END ROAD WORK	2	36" x 18"	5	10
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					164

TYPE 3 BARRICADES

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

ARROW BOARDS

ITEM DESCRIPTION	QUANTITY
Type C Arrow Board	1 Each

47-024-429 – PCN I41C

CONVENTIONAL ROAD					
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W4-2	LEFT or RIGHT LANE ENDS (symbol)	2	48" x 48"	16	32
W20-1	ROAD WORK AHEAD	2	48" x 48"	16	32
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	2	48" x 48"	16	32
W20-7	FLAGGER (symbol)	2	48" x 48"	16	32
G20-2	END ROAD WORK	2	36" x 18"	5	10
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					138

ARROW BOARDS

ITEM DESCRIPTION	QUANTITY
Type C Arrow Board	2 Each

41-207-092 – PCN I41E

CONVENTIONAL ROAD					
SIGN CODE	SIGN DESCRIPTION	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
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
G20-2	END ROAD WORK	2	36" x 18"	5	10
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					166

TYPE 3 BARRICADES

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Double Sided	1 Each

10-130-416 – PCN I41D

CONVENTIONAL ROAD					
SIGN CODE	SIGN DESCRIPTION	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
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
G20-2	END ROAD WORK	2	36" x 18"	5	10
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					166

TYPE 3 BARRICADES

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Double Sided	1 Each

41-156-169 – PCN I41H

CONVENTIONAL ROAD					
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W1-3	REVERSE TURN (L or R)	2	48" x 48"	16	32
W13-1P	ADVISORY SPEED (plaque)	2	30" x 30"	6	12
W20-1	ROAD WORK AHEAD	2	48" x 48"	16	32
W20-7	FLAGGER (symbol)	1	48" x 48"	16	16
G20-2	END ROAD WORK	4	36" x 18"	5	20
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					112

41-161-156 – PCN I41G

CONVENTIONAL ROAD					
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W1-3	REVERSE TURN (L or R)	1	48" x 48"	16	16
W4-2	LEFT or RIGHT LANE ENDS (symbol)	2	48" x 48"	16	32
W13-1P	ADVISORY SPEED (plaque)	1	30" x 30"	6	6
W20-1	ROAD WORK AHEAD	10	48" x 48"	16	160
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	2	48" x 48"	16	32
W20-7	FLAGGER (symbol)	2	48" x 48"	16	32
G20-2	END ROAD WORK	10	36" x 18"	5	50
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					328

TYPE 3 BARRICADES

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Double Sided	1 Each

ARROW BOARDS

ITEM DESCRIPTION	QUANTITY
Type C Arrow Board	2 Each

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	085-468, & 044-468	3	7

41-233-142 – PCN I41F

CONVENTIONAL ROAD					
SIGN CODE	SIGN DESCRIPTION	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
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
G20-2	END ROAD WORK	2	36" x 18"	5	10
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					166

TYPE 3 BARRICADES

ITEM DESCRIPTION	QUANTITY
Type 3 Barricade, 8' Double Sided	1 Each

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.

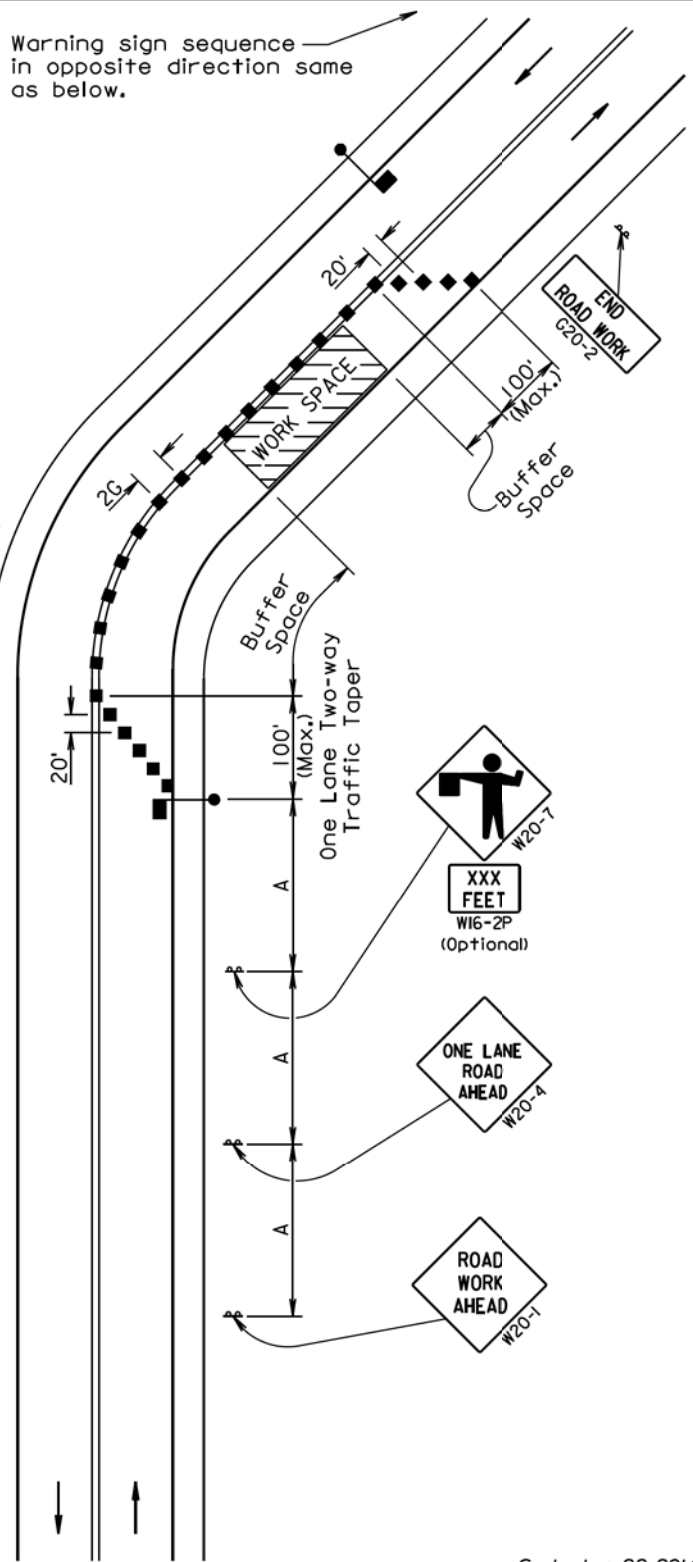
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.

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.

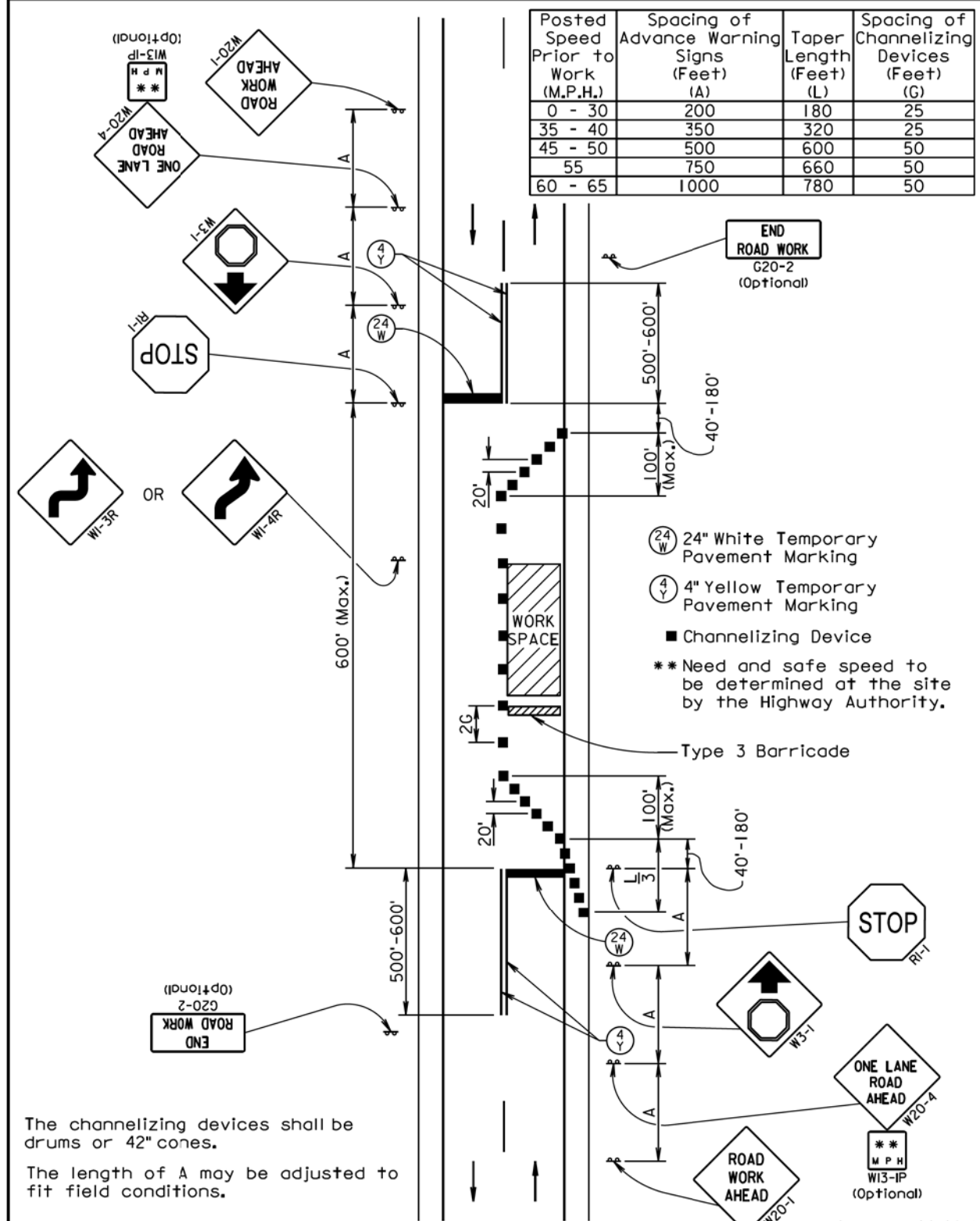
The length of A may be adjusted to fit field conditions.

Warning sign sequence in opposite direction same as below.



September 22, 2014

Published Date: 3rd Qtr. 2015	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER
			634.23
			Sheet 1 of 1

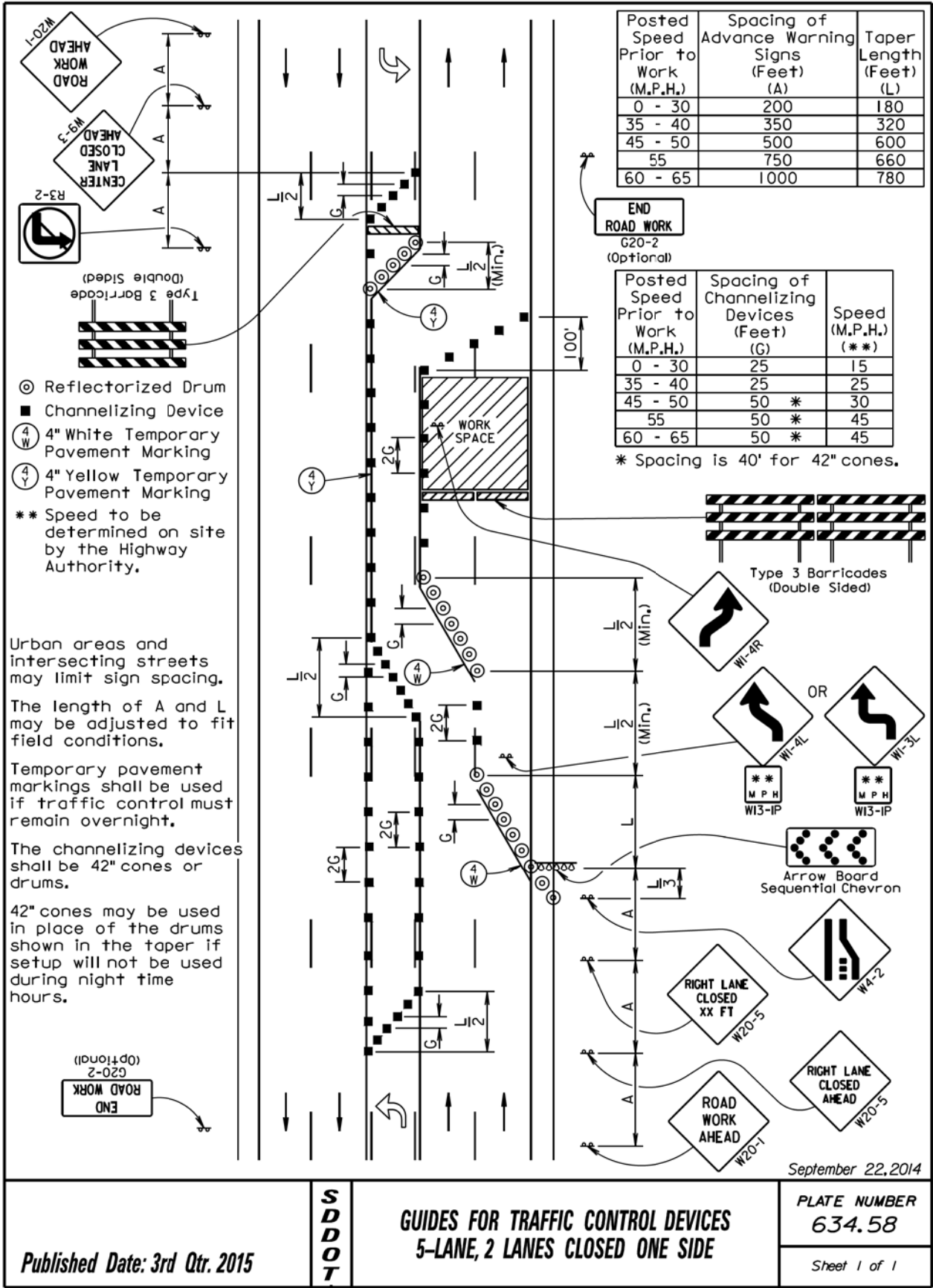
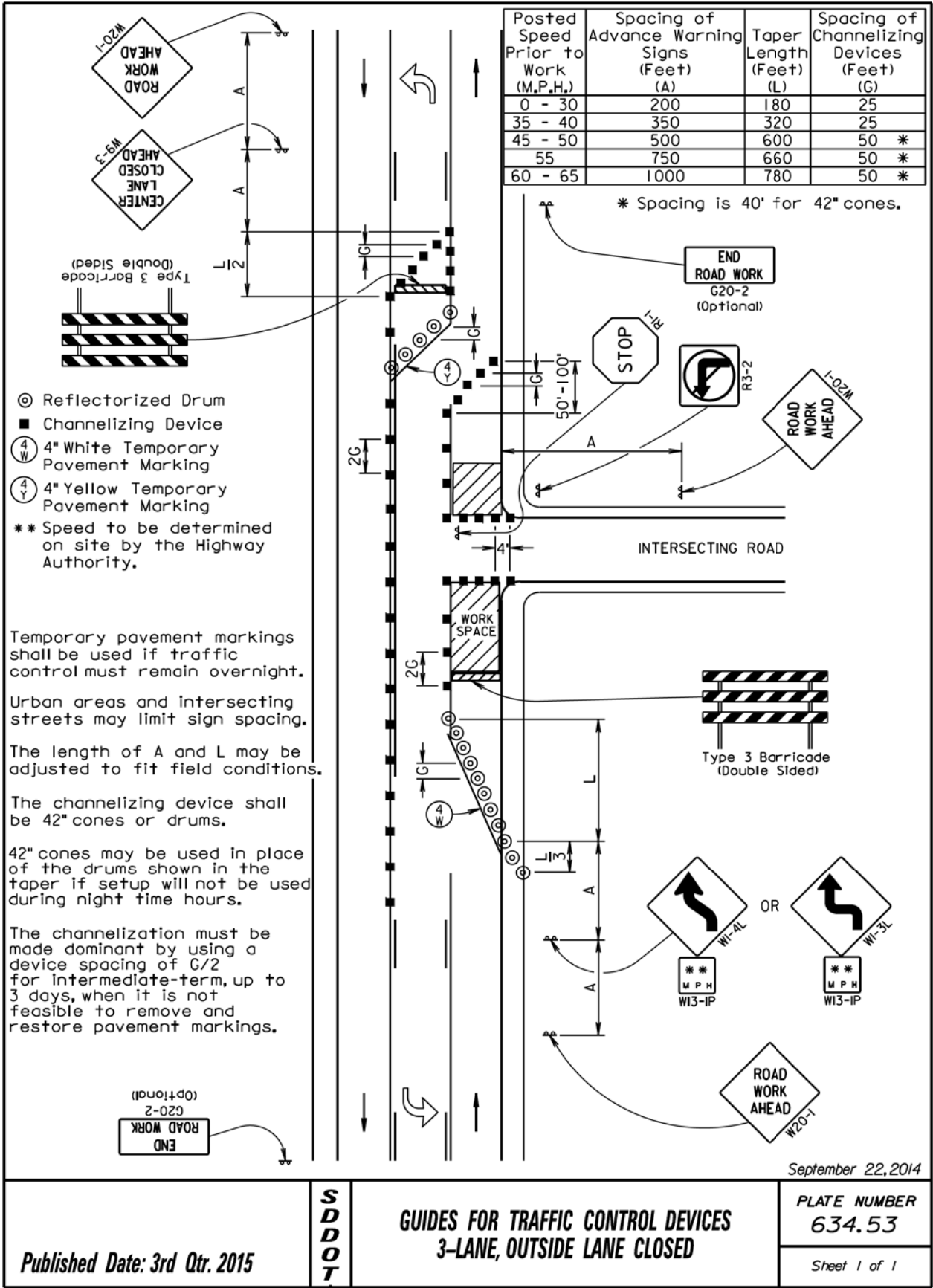


The channelizing devices shall be drums or 42" cones.

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

September 22, 2014

Published Date: 3rd Qtr. 2015	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE USING STOP SIGNS	PLATE NUMBER
			634.25
			Sheet 1 of 1



Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A)	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 *

* Spacing is 40' for 42" cones.

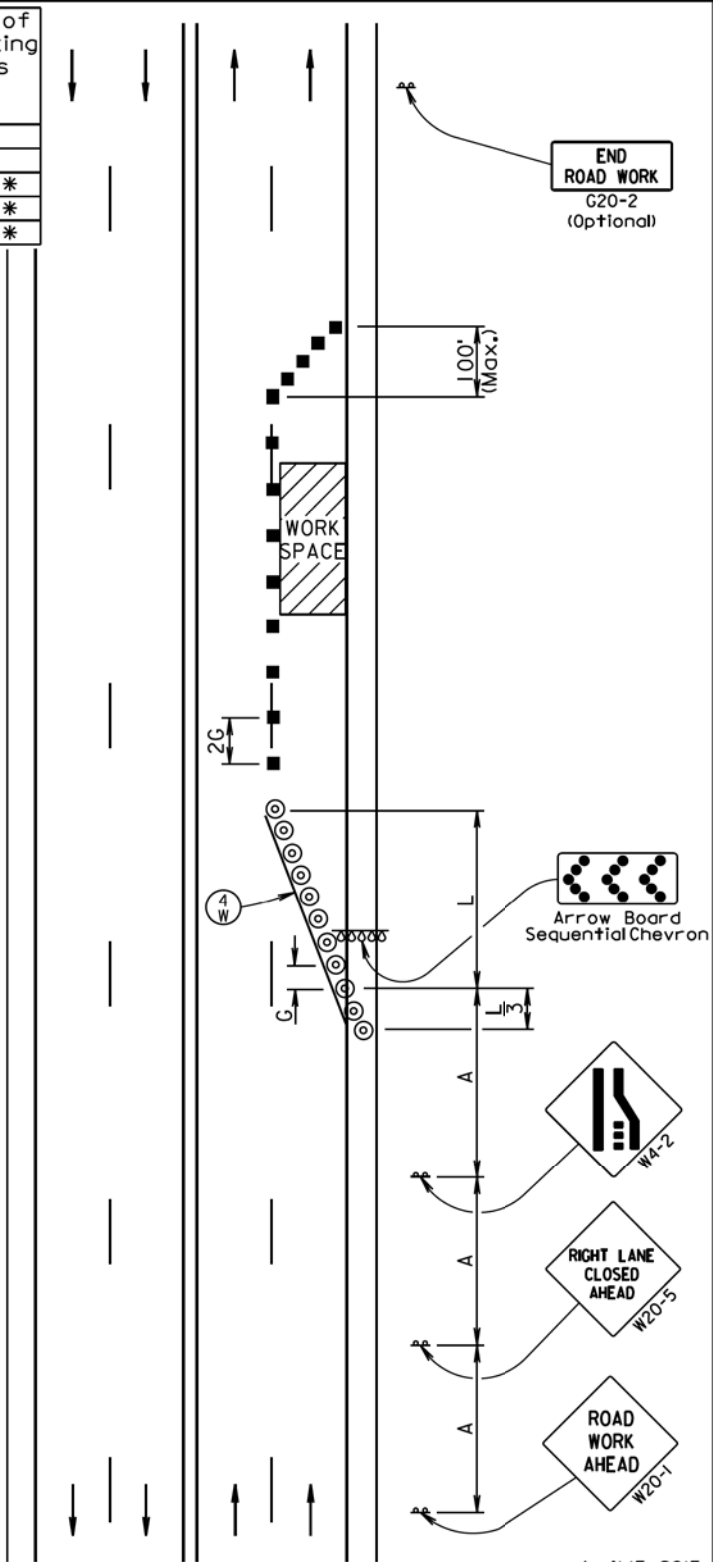
- ⊙ Reflectorized Drum
- Channelizing Device
- ④ W 4" White Temporary Pavement Marking

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.

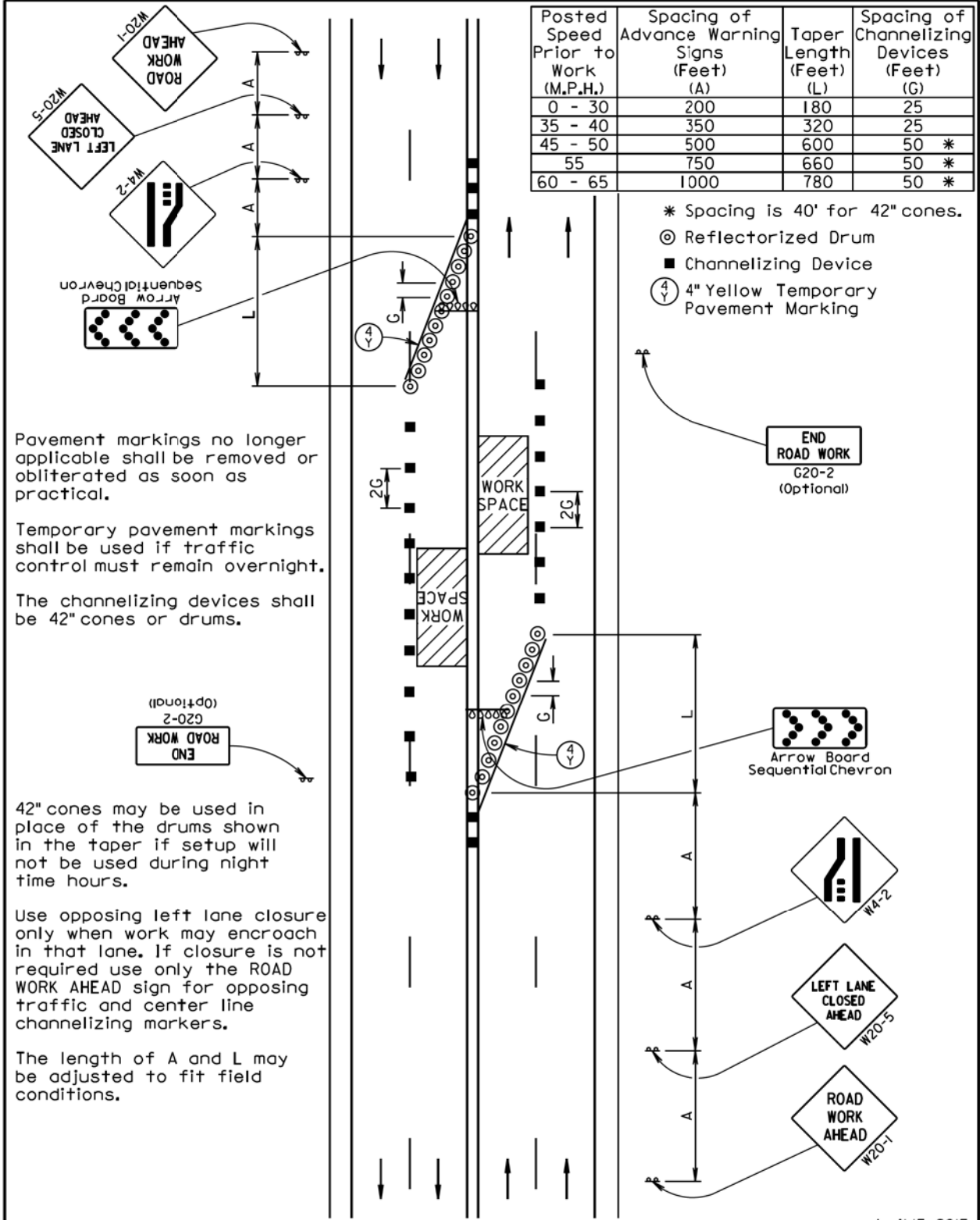
Temporary pavement markings shall be used if traffic control must remain overnight.

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



April 15, 2015

Published Date: 3rd Qtr. 2015	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES 4-LANE UNDIVIDED, RIGHT LANE CLOSED	PLATE NUMBER 634.47
		Sheet 1 of 1	



April 15, 2015

Published Date: 3rd Qtr. 2015	S D D O T	GUIDES FOR TRAFFIC CONTROL DEVICES 4-LANE UNDIVIDED, LEFT LANE CLOSED	PLATE NUMBER 634.48
		Sheet 1 of 1	

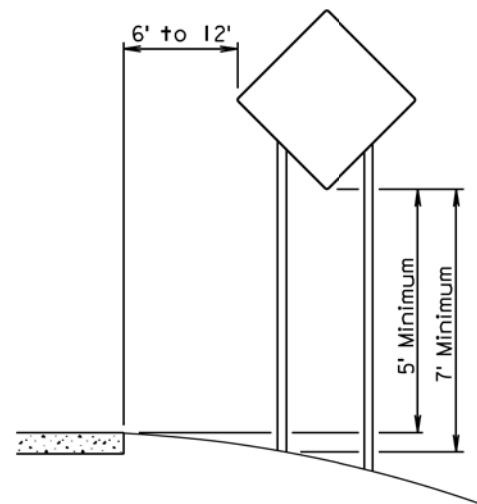
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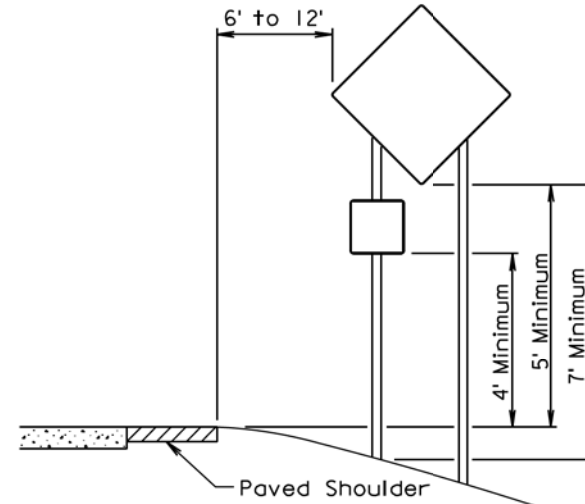
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
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Plotting Date: 09/01/2015

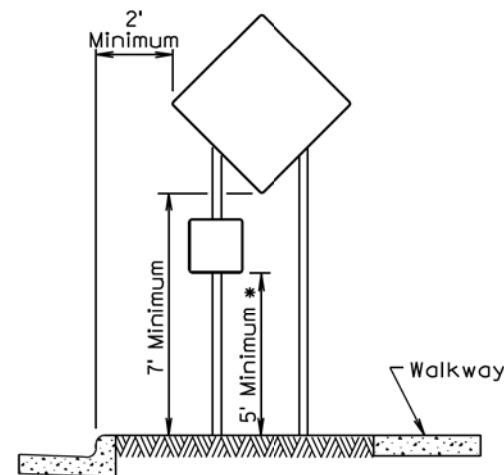
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RURAL DISTRICT

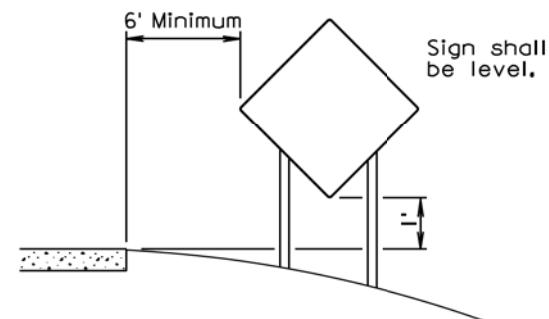


RURAL DISTRICT WITH
SUPPLEMENTAL PLATE



URBAN DISTRICT

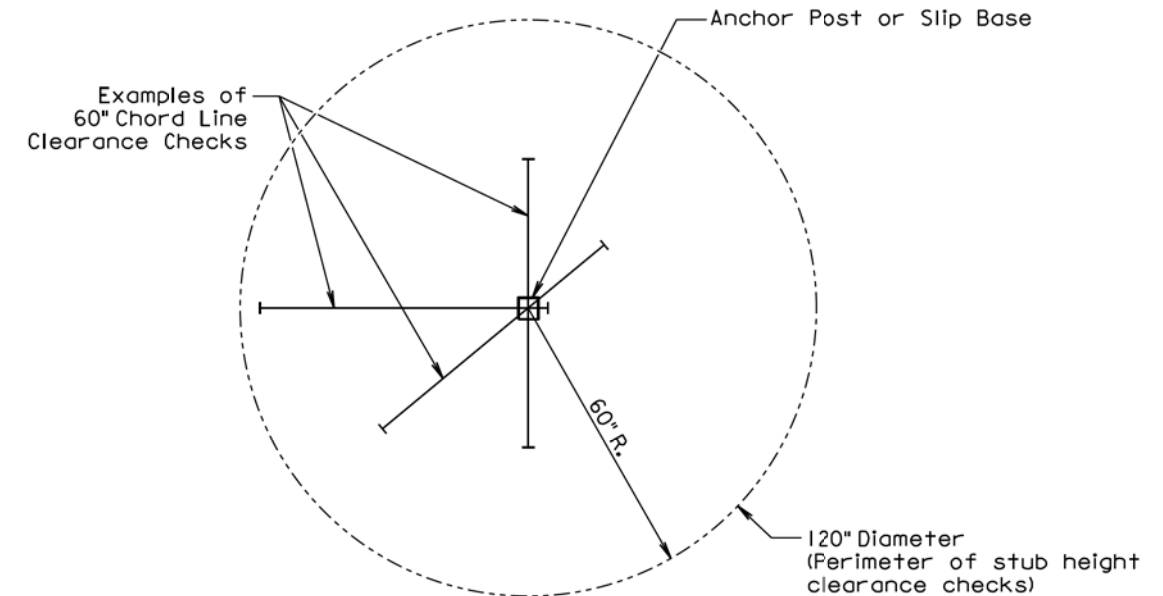
* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.



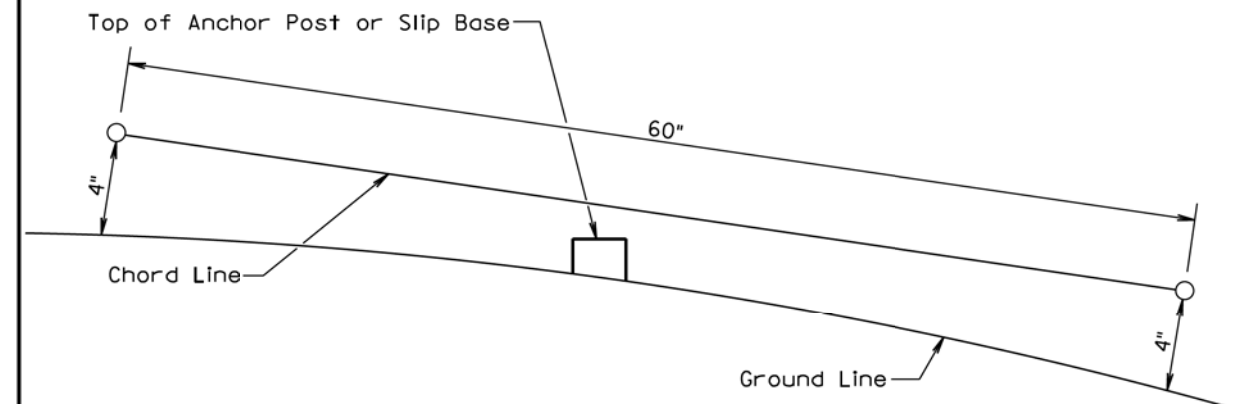
RURAL DISTRICT
3 DAY MAXIMUM
(Not applicable to regulatory signs)

September 22, 2014

Published Date: 3rd 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: 3rd Qtr. 2015	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1