

STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM-NH-P 0023(72)	1	15

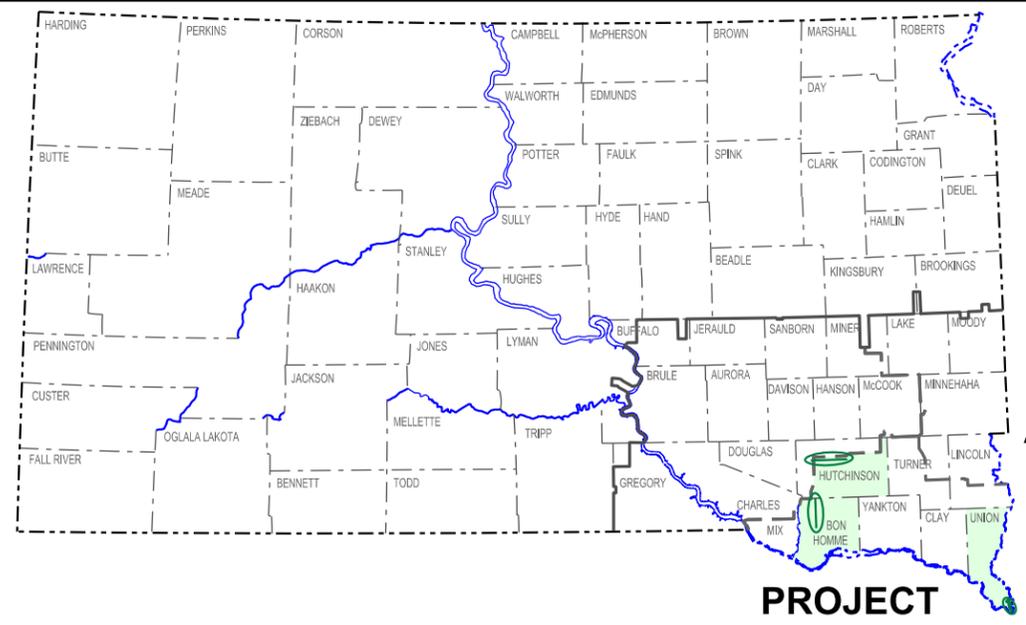
Plotting Date: 01/20/2026

PLANS FOR PROPOSED
PROJECT IM-NH-P 0023(72)
INTERSTATE 29 & 29P US HIGHWAY 18,
SD HIGHWAY 37
BON HOMME, HUTCHINSON & UNION COUNTIES
ASPHALT CONCRETE CRACK SEALING &
ASPHALT CONCRETE CRACK SEALING OF SHOULDERS
PCN 09WK

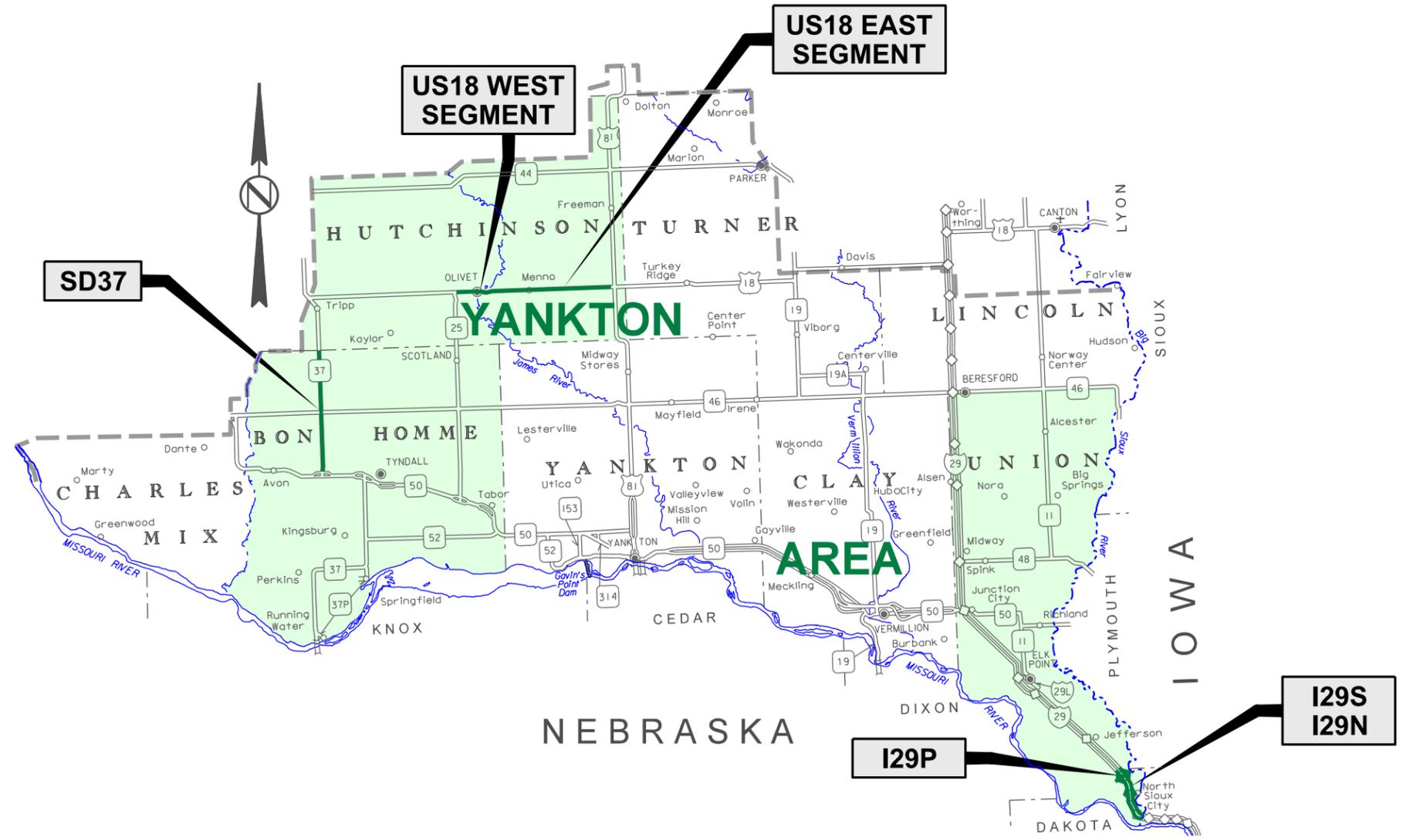
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PLOT SCALE - 1" = 7000'



PROJECT



STORM WATER PERMIT
(None required)

**I29S
I29N**

I29P

7

April 1, 2026

PLOTTED FROM - TRYPRINT48

FILE - ... \2026 YAN AREA CRACK SEAL TITL09WK.DGN

PLOT NAME - 1

**US HIGHWAY 18 WEST SEGMENT
HUTCHINSON COUNTY
ASPHALT CONCRETE CRACK SEALING
GROSS LENGTH: 2.714 MILES
BRIDGES LENGTH: 0.109 MILE
NET LENGTH: 2.605 MILES**

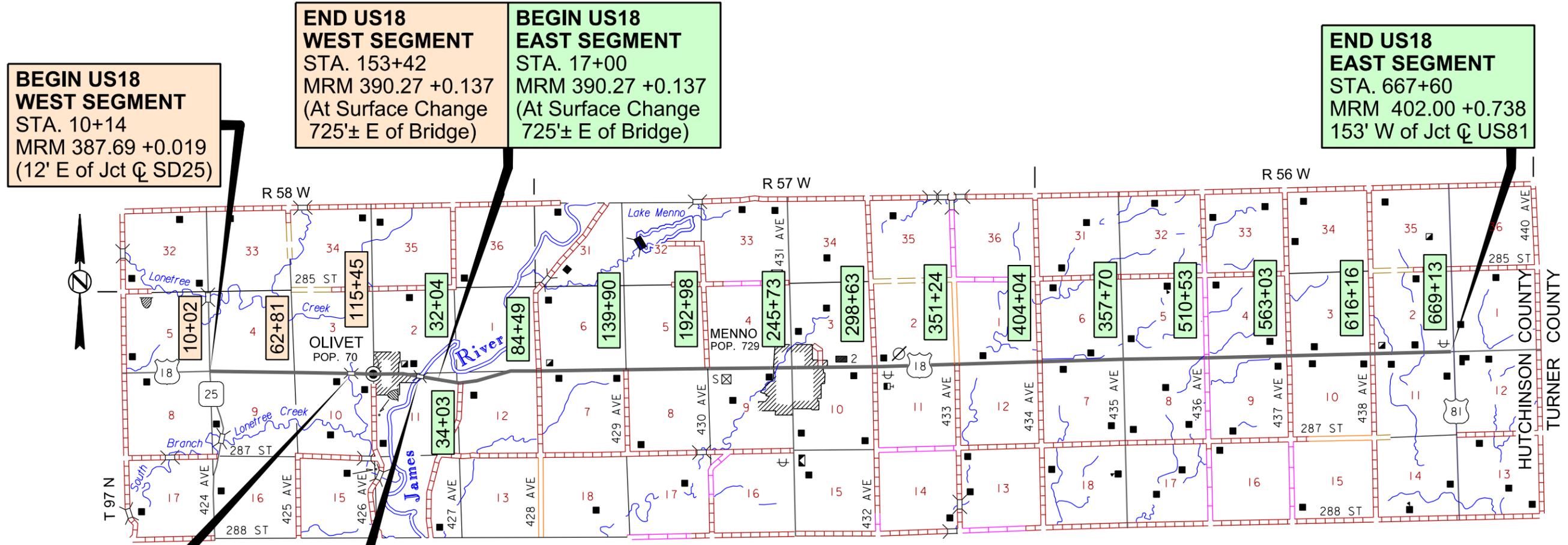
**US HIGHWAY 18 EAST SEGMENT
HUTCHINSON COUNTY
ASPHALT CONCRETE CRACK SEALING
LENGTH: 12.322 MILES**

STATE OF SOUTH DAKOTA	PROJECT IM-NH-P 0023(72)	SHEET 2	TOTAL SHEETS 15
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Plotting Date: 02/04/2026

PLOT SCALE - 1" = 7000'

PLOT NAME - 2



BEGIN US18 WEST SEGMENT
STA. 10+14
MRM 387.69 +0.019
(12' E of Jct Q SD25)

END US18 WEST SEGMENT
STA. 153+42
MRM 390.27 +0.137
(At Surface Change 725'± E of Bridge)

BEGIN US18 EAST SEGMENT
STA. 17+00
MRM 390.27 +0.137
(At Surface Change 725'± E of Bridge)

END US18 EAST SEGMENT
STA. 667+60
MRM 402.00 +0.738
153' W of Jct Q US81

STR. NO. 34-217-180
98+04.28 to 99+66.78
Continous Concrete Bridge
162'-6" = 0.031 Mile MRM 389.39
Two Approach/Sleeper Slabs *
2@22'=44' = 0.008 Mile

STR. NO. 34-226-180
142+05.25 to 146+16.75
I Beam Bridge
411'-6" = 0.078 Mile
MRM 390.27

* Existing Approach/Sleeper Slabs to be sealed on this project.

**US18 WEST SEGMENT ADT (2024) 668
US18 EAST SEGMENT ADT (2024) 1,009**

PLOTTED FROM - TRYPRINT48

FILE - ... \2026 YAN AREA CRACK SEAL TITL09WK.DGN

**INTERSTATE 29
UNION COUNTY
ASPHALT CONCRETE CRACK SEALING
OF SHOULDERS
GROSS LENGTH: 4.657 MILES *
BRIDGES & APPROACH SLABS LENGTH: 0.032 MILE
NET LENGTH: 4.625 MILES *
ASPHALT SURFACE TREATMENT OF RAMPS
RAMPS LENGTH: 0.914 MILE**

**SD HIGHWAY 29P
(NORTHSHORE DRIVE)
UNION COUNTY
ASPHALT CONCRETE CRACK SEALING
GROSS LENGTH: 0.241 MILE
BRIDGE LENGTH: 0.056 MILE
NET LENGTH: 0.185 MILE**

STATE OF SOUTH DAKOTA	PROJECT IM-NH-P 0023(72)	SHEET 3	TOTAL SHEETS 15
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Plotting Date: 01/20/2026

BEGIN I29
STA. 773+75
MRM 4.35 +0.446
(Center of Crossover)

I29 BEGIN OUTSIDE SHOULDERS
STA. 773+75
(Center of Crossover)

I29 EXIT 4 RAMPS ADT(2015)

NB On Ramp = 863'	328
NB Off Ramp = 616'	1,789
SB On Ramp = 863'	2,738
SB Off Ramp = 615'	321

TWIN STR. NOS. 64-154/155-385
SB 896+93.59 to 898+19.59
NB 896+92.80 to 898+18.80
Twin Continuous Concrete Bridges
126'-0"=0.024 Mile MRM 2.48
Two Approach/Sleeper Slabs
2@22'=44' = 0.008 Mile

END I29S OUTSIDE SHOULDER
STA. 952+29
(At Begin Concrete Exit 1 SB Off Ramp)

BEGIN I29 MEDIAN SHOULDERS
STA. 777+10
(S Tip of Crossover)

I29 CROSSROAD (NORTHSHORE DRIVE)
STA. 1+00 to STA. 13+75
From 50' E of Jct Streeter Drive, E to Jct W Edge of Military Road

STR. NO. 64-149-367
5+53.375 to 8+46.625
Concrete Box Girder Bridge
293'-3"=0.056 Mile
I29 MRM 4.35

I29 EXIT 2 RAMPS ADT(2015)

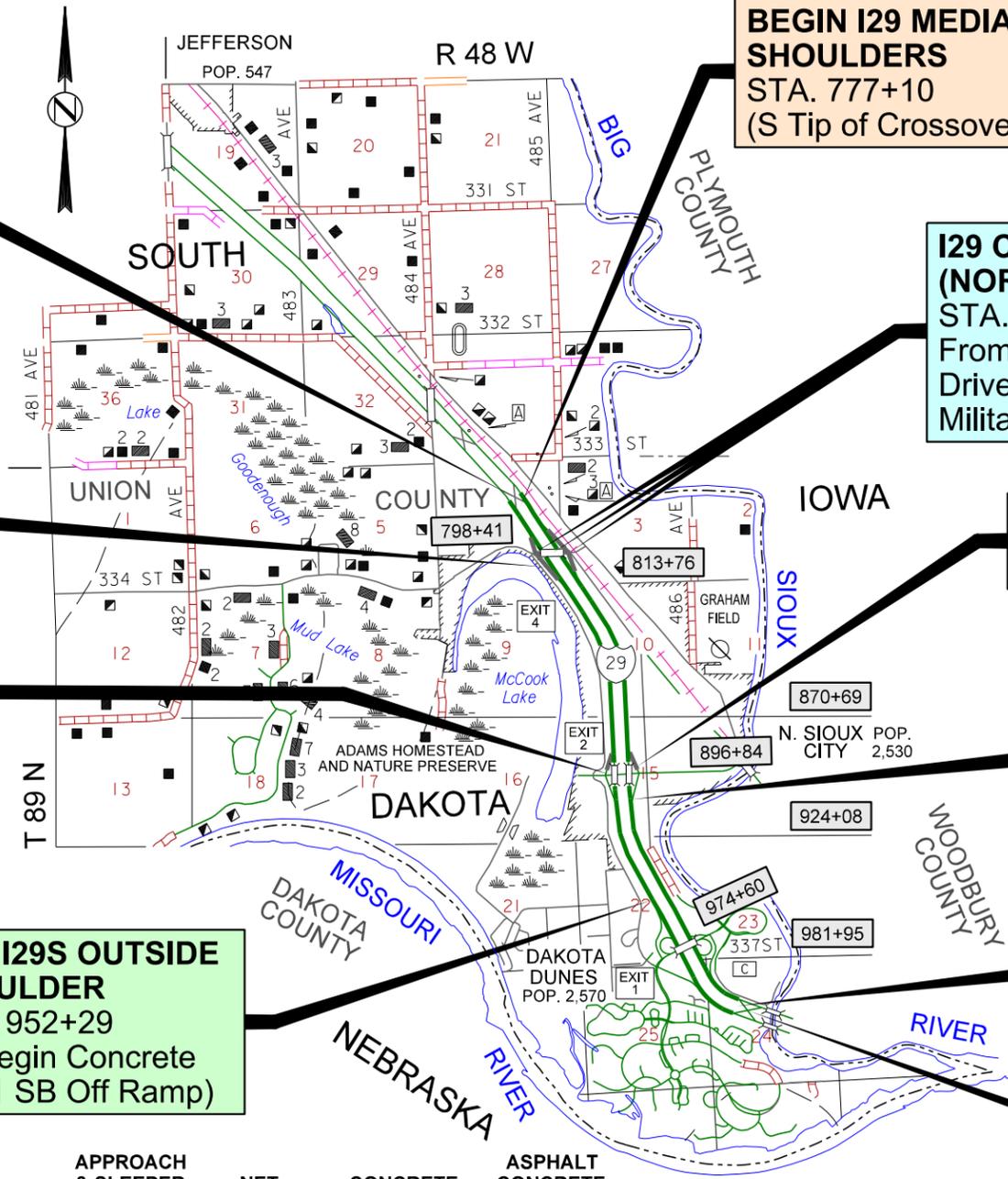
NB On Ramp = 996'	980
SB Off Ramp = 995'	890

END I29N OUTSIDE SHOULDER
STA. 905+27
(At Begin Concrete NB Gore Area)

END I29S MEDIAN SHOULDER
STA. 1016+27
(N Tip of Crossover)

END I29N MEDIAN SHOULDER
STA. 1016+39
(N Tip of Crossover)

END I29
STA. 1019+66
MRM 0.05 +0.097
(Center of Crossover)



I29S ADT (2023) 13,186
I29N ADT (2023) 13,156
SD29P ADT (2023) 2,983

	GROSS	BRIDGE	APPROACH & SLEEPER SLABS	NET SHOULDERS	CONCRETE SHOULDERS	ASPHALT CONCRETE SHOULDERS	
* SHOULDER LENGTHS:							
SB OUTSIDE SHOULDER:	3.381	0.024	0.008	3.349	0.541	2.808	MILES
NB OUTSIDE SHOULDER:	2.491	0.024	0.008	2.459	0.752	1.707	MILES
SB MEDIAN SHOULDER:	4.530	0.024	0.008	4.498	0.020	4.478	MILES
NB MEDIAN SHOULDER:	4.532	0.024	0.008	4.500	0.017	4.483	MILES

PLOT SCALE - 1:7000

PLOTTED FROM - TRMLINT15

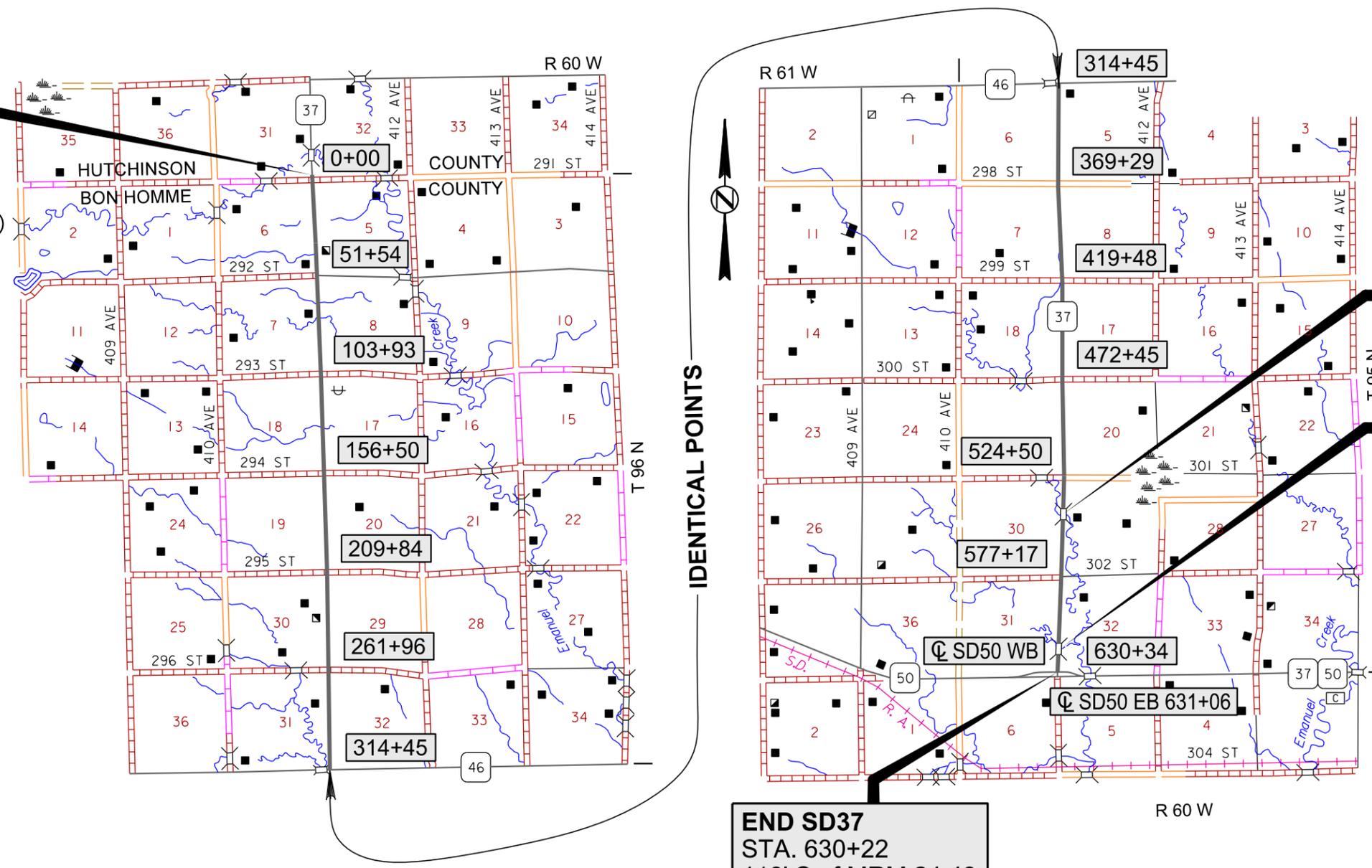
FILE - ... \2026 YAN AREA CRACK SEAL TITL09WK.DGN PLOT NAME - 3

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM-NH-P 0023(72)	4	15

Plotting Date: 02/04/2026

**SD HIGHWAY 37
BON HOMME COUNTY
ASPHALT CONCRETE CRACK SEALING
GROSS LENGTH: 11.947 MILES
BRIDGES LENGTH: 0.042 MILE
NET LENGTH: 11.905 MILES**

BEGIN SD37
STA. 0+00 - 60'
MRM 36.00 +0.406
(60' N of \odot Jct 291 St)



STR. NO. 05-100-104
543+97.25 to 545+02.75
Continuous Concrete Bridge
105'-6"=0.020 Mile
MRM 26.08

STR. NO. 05-100-118
616+81.5 to 617+99.5
Continuous Concrete Bridge
118'-0"=0.022 Mile
MRM 24.70

END SD37
STA. 630+22
110' S of MRM 24.48
(Edgeline of SD50W)

IDENTICAL POINTS



PLOT SCALE - 1:7000

PLOTTED FROM - TRYPRINT48

PLOT NAME - 4

FILE - ... \2026 YAN AREA CRACK SEAL TITL09WK.DGN

ADT (2024) 1,375

ESTIMATE OF QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT IM-NH-P 0023(72)	SHEET 5	TOTAL SHEETS 15
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BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
350E0010	Asphalt Concrete Crack Sealing	60,412	Lb
633E1200	High Build Waterborne Pavement Marking Paint, White	1,156	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	384	Gal
634E0010	Flagging	239.0	Hour
634E0020	Pilot Car	119.0	Hour
634E0110	Traffic Control Signs	903.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	20	Each
634E0420	Type C Advance Warning Arrow Board	3	Each

ESTIMATE OF QUANTITIES (FOR INFORMATION ONLY)

BID ITEM NUMBER	ITEM	US HWY 18W	US HWY 18E	INTERSTATE 29 SHLDR	EXIT 2 RAMPS	EXIT 4 RAMPS & CROSSROAD	SD HWY 37	QUANTITY
009E0010	Mobilization	-----Lump Sum----->						Lump Sum
350E0010	Asphalt Concrete Crack Sealing	2270	25983	1990	2372	4553	23244	60412 Lb
633E1200	High Build Waterborne Pavement Marking Paint, White	138	477	-	-	-	541	1156 Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	51	129	-	-	-	204	384 Gal
634E0010	Flagging	10	111	-	-	19	99	239 Hour
634E0020	Pilot Car	5	55	-	-	10	49	119 Hour
634E0110	Traffic Control Signs	105.0	105.0	224.0	172.0	192.0	105.0	903 SqFt
634E0120	Traffic Control, Miscellaneous	-----Lump Sum----->						Lump Sum
634E0275	Type 3 Barricade	-	-	20	-	-	-	20 Each
634E0420	Type C Advance Arrow Board	-	-	1	1	1	-	3 Each

ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM-NH-P 0023(72)	6	15

ENVIRONMENTAL COMMITMENTS

The SDDOT is committed to protecting the environment and uses Environmental Commitments as a communication tool for the Engineer and Contractor to ensure that attention is given to avoid, minimize, and/or mitigate an environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency with permitting authority can delay a project if identified environmental impacts have not been adequately addressed. Unless otherwise designated, the Contractor's primary contact regarding matters associated with these commitments will be the Project Engineer. During construction, the Project Engineer will verify that the Contractor has met Environmental Commitment requirements. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office.

Additional guidance on SDDOT's Environmental Commitments can be accessed through the Environmental Procedures Manual found at: <https://dot.sd.gov/doing-business/environmental/about-environmental/>

For questions regarding change orders in the field that may have an effect on an Environmental Commitment, the Project Engineer will contact the Environmental Engineer at 605-773-3180 or 605-773-4336 to determine whether an environmental analysis and/or resource agency coordination is necessary.

Once construction is complete, the Project Engineer will review all environmental commitments for the project and document their completion

COMMITMENT B: FEDERALLY THREATENED, ENDANGERED, AND PROTECTED SPECIES

COMMITMENT B2: WHOOPING CRANE

The Whooping Crane is a spring and fall migratory bird in South Dakota that is about 5 feet tall and typically stops on wetlands, rivers, and agricultural lands along their migration route. An adult Whooping Crane is white with a red crown and a long, dark, pointed bill. Immature Whooping Cranes are cinnamon brown. While in flight, their long necks are kept straight, and their long dark legs trail behind. Adult Whooping Cranes' black wing tips are visible during flight.

Action Taken/Required:

Harassment or other measures to cause the Whooping Crane to leave the site is a violation of the Endangered Species Act. If a Whooping Crane is sighted roosting in the vicinity of the project, borrow pits, or staging areas associated with the project, cease construction activities in the affected area until the Whooping Crane departs and immediately contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

COMMITMENT B4: BALD AND GOLDEN EAGLE

Bald and/or Golden eagles are known to occur in this area.

Action Taken/Required:

If a nest is observed within one mile of the project site, notify the Project Engineer immediately so that he/she can consult with the Environmental Office for an appropriate course of action.

COMMITMENT E: STORM WATER

Construction activities constitute less than 1 acre of disturbance.

Action Taken/Required:

At a minimum and regardless of project size, appropriate erosion and sediment control measures must be installed to control the discharge of pollutants from the construction site.

COMMITMENT H: WASTE DISPOSAL SITE

The Contractor will furnish a site(s) for the disposal of construction and/or demolition debris generated by this project.

Action Taken/Required:

Construction and/or demolition debris may not be disposed of within the Public ROW.

The waste disposal site(s) will be managed and reclaimed in accordance with the following from the General Permit for Construction/Demolition Debris Disposal Under the South Dakota Waste Management Program issued by the Department of Agriculture and Natural Resources.

The waste disposal site(s) will not be located in a wetland, within 200 feet of surface water, or in an area that adversely affects wildlife, recreation, aesthetic value of an area, or any threatened or endangered species, as approved by the Environmental Office and the Project Engineer.

If the waste disposal site(s) is located such that it is within view of any ROW, the following additional requirements will apply:

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials will be buried in a trench separate from wood debris. The final cover over the construction and/or demolition debris will consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the Public ROW will be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor will control the access to waste disposal sites not within the Public ROW with fences, gates, and placement of a sign or signs at the entrance to the site stating, "No Dumping Allowed".
2. Concrete and asphalt concrete debris may be stockpiled within view of the ROW for a period not to exceed the duration of the project. Prior to project completion, the waste will be removed from view of the ROW or buried, and the waste disposal site reclaimed as noted above.

The above requirements will not apply to waste disposal sites that are covered by an individual solid waste permit as specified in SDCL 34A-6-58, SDCL 34A-6-1.13, and ARSD 74:27:10:06.

Failure to comply with the requirements stated above may result in civil penalties in accordance with South Dakota Solid Waste Law, SDCL 34A-6-1.31.

All costs associated with furnishing waste disposal site(s), disposing of waste, maintaining control of access (fence, gates, and signs), and reclamation of the waste disposal site(s) will be incidental to the various contract items.

COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES

The SDDOT has obtained concurrence with the State Historic Preservation Office (SHPO or THPO) for all work included within the project limits and all department designated sources and designated option material sources, stockpile sites, storage areas, and waste sites provided within the plans.

Action Taken/Required:

All earth disturbing activities not designated within the plans require a cultural resource review prior to scheduling the pre-construction meeting. This work includes but is not limited to: Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas.

The Contractor will arrange and pay for a record search and when necessary, a cultural resource survey. The Contractor has the option to contact the state Archaeological Research Center (ARC) at 605-394-1936 or another qualified archaeologist, to obtain either a records search or a cultural resources survey. A record search might be sufficient for review if the site was previously surveyed; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor will provide ARC with the following: a topographical map or aerial view in which the site is clearly outlined, site dimensions, project number, and PCN. If applicable, provide evidence that the site has been previously disturbed by farming, mining, or construction activities with a landowner statement that artifacts have not been found on the site.

The Contractor will submit the cultural resources survey report to SDDOT Environmental Office, 700 East Broadway Avenue, Pierre, SD 57501-2586. SDDOT will submit the information to the appropriate SHPO/THPO. Allow **30 Days** from the date this information is submitted to the Environmental Engineer for SHPO/THPO review.

In the event of an inadvertent discovery of human remains, funerary objects, or if evidence of cultural resources is identified during project construction activities, then such activities within 150 feet of the inadvertent discovery will immediately cease and the Project Engineer will be immediately notified. The Project Engineer will contact the SDDOT Environmental Office, who will contact the appropriate SHPO/THPO within 48 hours of the discovery to determine an appropriate course of action.

SHPO/THPO review does not relieve the Contractor of the responsibility for obtaining any additional permits and clearances for Contractor furnished material sources, material processing sites, stockpile sites, storage areas, plant sites, and waste areas that affect wetlands, threatened and endangered species, or waterways. The Contractor will not utilize a site known or suspected of having contaminated soil or water. The Contractor will provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

ASPHALT CONCRETE CRACK SEALING

Only the top of the road will be routed and sealed. No routing and sealing will be done on the Asphalt Concrete bevel/sluff.

The width of crack sealing will vary but the typical roadway widths for information only are as follows:

On routes with curb and gutter the asphalt concrete will typically be sealed gutter to gutter.

On US18W, the average top width is 46 feet wide.

On US18E, the average top width is 31 feet wide.

On I29 outside shoulders, the average top width is 8 feet wide

On I29 inside shoulder, the average top width is 6 feet wide.

On Exit 2 NB on ramp, the average width is 18 feet wide.

On Exit 2 SB off ramp, the average width is 18 feet wide.

On Exit 4 SB off ramp, the average width is 18 feet wide.

On Exit 4 NB on ramp, the average width is 18 feet wide.

On Exit 4 NB off ramp, the average width is 18 feet wide.

On Exit 4 SB on ramp, the average width is 18 feet wide.

On Exit 4 Crossroad (Northshore Dr), the average width is 25 feet wide.

On SD37, the average width is 32 feet wide.

ASPHALT CONCRETE CRACK SEALING (CONTINUED)

All other requirements stated in Section 350 will apply, except the crack sealant material will be from one of those listed below:

<u>Product</u>	<u>Manufacturer</u>
Deery 101 ELT Hot Poured Elastic Joint Sealer ASTM D-6690 Type IV (Modified)	Crafco, Inc. Chandler, AZ 602-276-0406 http://www.crafco.com
W.R. Meadows 3405-M Hot Poured Elastic Joint Sealer ASTM D-6690 Type IV	W.R. Meadows Hampshire, IL 800-342-5976 http://www.wrmeadows.com

TABLE OF LONGITUDINAL AND TRANSVERSE CRACKS

ROUTE	LONGITUDINAL	TRANSVERSE
US18W	1%	99%
US18E	1%	99%
I29 Shldrs	75%	25%
Exit 2	39%	61%
Exit 4	36%	64%
SD37	1%	99%

HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

All materials will be applied as per manufacturer's recommendations. High build waterborne pavement marking paint will conform to Section 980.1 B.

Reflective media will consist of glass beads. Reflective media will require a Certificate of Compliance for Certification for each source and lot. Acceptance sampling will not be required.

RATES OF MATERIALS FOR HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT

Solid 4" line = 27.8 Gals/Mile
Dashed 4" line = 7.6 Gal/Mile
Glass Beads = 8.0 Lbs/Gal.

All cost for materials, labor, and equipment necessary to furnish and install the pavement markings will be incidental to the contract unit price for the respective High Build Waterborne Pavement Marking Paint items.

PERMANENT PAVEMENT MARKING

The application of permanent pavement marking may not begin until 7 calendar days following completion of the crack seal and will be completed within 14 calendar days following completion of the crack seal.

Marking eight-inch edgelines and gore areas will require the use of two spray nozzles to achieve the required width. Marking twelve-inch gore lines will require the use of three spray nozzles to achieve the required width.

The Contractor will be required to repaint existing pavement marking including centerline, edgeline, dashed edgelines, dashed lane lines, lane lines, turn lanes, gore areas, etc.

Flush sealing will not be allowed as an option for correction of markings that are not within tolerance due to the occurrence of shadow through.

The following table contains locations of existing pavement marking to be painted by hand.

TABLE OF HAND PAINTED PAVEMENT MARKING

ROUTE	LOCATION
SD37	Stop Bar at SD50 (25')
SD37	24" Hashes in Turn Bays at SD46 (285')
SD37	Left Arrows (4 Ea)

PERMANENT PAVEMENT MARKING (CONTINUED)

TABLES OF PERMANENT PAVEMENT MARKING

US18 West Segment	White	Yellow
Yellow Centerline Dashes = 2.558 miles @ 7.6 Gal/Mile		19.4
Solid Yellow Centerline = 1.121 miles @ 27.8 Gal/Mile		31.2
4" Solid White Edgeline = 4.969 miles @ 27.8 Gal/Mile	138.1	
TOTAL GALLONS	138	51

US18 East Segment	White	Yellow
Yellow Centerline Dashes = 7.521 miles @ 7.6 Gal/Mile		57.2
Solid Yellow Centerline = 2.597 miles @ 27.8 Gal/Mile		72.2
4" Solid White Edgeline = 17.155 miles @ 27.8 Gal/Mile	476.9	
TOTAL GALLONS	477	129

SD37	White	Yellow
Yellow Centerline Dashes = 4.803 miles @ 7.6 Gal/Mile		36.5
Solid Yellow Centerline = 5.421 miles @ 27.8 Gal/Mile		150.7
24" Yellow Hatches for Turn Bays = 0.054 miles @ 166.8 Gal/Mile		9.0
Double Yellow for Turn Bays = 2 (4" line) x 0.141 miles @ 27.8 Gal/Mile		7.8
4" Solid White Edgeline = 19.270 miles @ 27.8 Gal/Mile	535.7	
4" Solid White Lane Lines = 0.045 miles @ 27.8 Gal/Mile	1.3	
24" White Stop Line = 0.005 miles @ 166.8 Gal/Mile	0.8	
Arrows = 4 each @ 0.8 Gal/Each	3.2	
TOTAL GALLONS	541	204

RETROREFLECTIVITY FOR PAVEMENT MARKING PAINT

The Department may take retroreflectivity readings on the pavement marking lines after 14 days and within 42 days of the line application using either a portable or mobile retroreflectometer that conforms to 30-meter geometry. If the Department chooses to take retroreflectivity readings, three retroreflectivity readings will be taken on each line at each test location. The three readings will be averaged and become the reading for that test location.

If the Department chooses to take retroreflectivity readings, three readings will be taken on the edge lines and lane lines in the direction of application. For combination solid yellow and skip yellow lines for turn lanes and for centerline markings on two-way roadways, three readings will be taken in one direction, the reflectometer will be turned 180 degrees and three more readings will be taken. The six readings for the centerline markings will be averaged and become the test reading for that test location.

If the Department chooses to take readings, the minimum retroreflectivity values will be 275 mc/m²/lux for white and 170 mc/m²/lux for yellow.

SEQUENCE OF OPERATIONS

The Contractor will submit a sequence of operations for approval two weeks prior to the preconstruction meeting. If changes to the sequence of operations are proposed during the project, these must be submitted for review a minimum of one week prior to potential implementation. Approval for changes to the 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.

GENERAL MAINTENANCE OF TRAFFIC

Existing guide, route, informational logo, regulatory, and warning signs will be temporarily reset and maintained during construction. Removing, relocating, covering, salvaging, and resetting of existing traffic control devices, including delineation, will be the responsibility of the Contractor. Cost for this work will be incidental to the contract unit prices for the various items unless otherwise specified in the plans. Any delineators and signs damaged or lost will be replaced by the Contractor at no cost to the State.

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

All temporary speed limit signs will have a minimum mounting height of 5 feet in rural locations, even when mounted on portable supports.

Portable sign supports will not be located on sidewalks, bicycle facilities, or other areas designated for pedestrian or bicycle traffic.

If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD, whichever is more stringent will be used, as determined by the Engineer.

Unless otherwise stated in these plans, work will not be allowed during hours of darkness.

Traffic will be maintained on the driving lanes. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulder due to rerouted traffic or Contractor's equipment will be repaired at no expense to the Department.

LANE CLOSURES

Interstate lane closures shorter than 5 miles will be used if 5 miles is greater than the length of work that can be accomplished in one day's production. More than one lane closure may be permitted; however, there will be a minimum of a three-mile section between lane closures, excluding the tapers.

Interstate lane closures will be removed when work will not be occurring for a period of 3 or more calendar days. Activities that do not involve workers being present, such as curing time for concrete, constitute work. Lane closures will not be set up on a Friday if no work will be occurring on Saturday or Sunday. In these cases, the lane closure will be installed on Monday.

A Type 3 Barricade will be installed at the end of a lane closure taper as detailed in these plans. Additional Type 3 Barricades will be installed facing traffic within the closed lane at a spacing of 1/4 mile.

FLAGGING

Flaggers and a pilot car will be used when traffic must be routed out of its normal lane for a distance greater than the two flaggers are able to communicate with each other.

Operations will be conducted so that the traveling public will not have to wait longer than 15 minutes at the flagger station.

It is required that the flaggers and pilot car operators be able to communicate with one another. If an emergency vehicle needs to pass through the project, the Contractor will be required to expedite traffic movement. All costs associated with this will be incidental to the contract unit price per hour for "Flagging".

TRAFFIC CONTROL SIGNS

Traffic control signs have been included in a table for each route. Payment will only be for those signs used on each route.

FURNISHING AND APPLYING PAVEMENT MARKING PAINT

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	IM-NH-P 0023(72)	9	15

Paint application rates will be as follows:

Two Lane and Undivided Roadway	
(Rate for one line)	
Dashed Yellow Centerline	Rate = 7.6 Gal/Pass-Mile
Solid Yellow Centerline	Rate = 27.8 Gal/Pass-Mile
Solid White Edgeline	Rate = 27.8 Gal/Pass-Mile

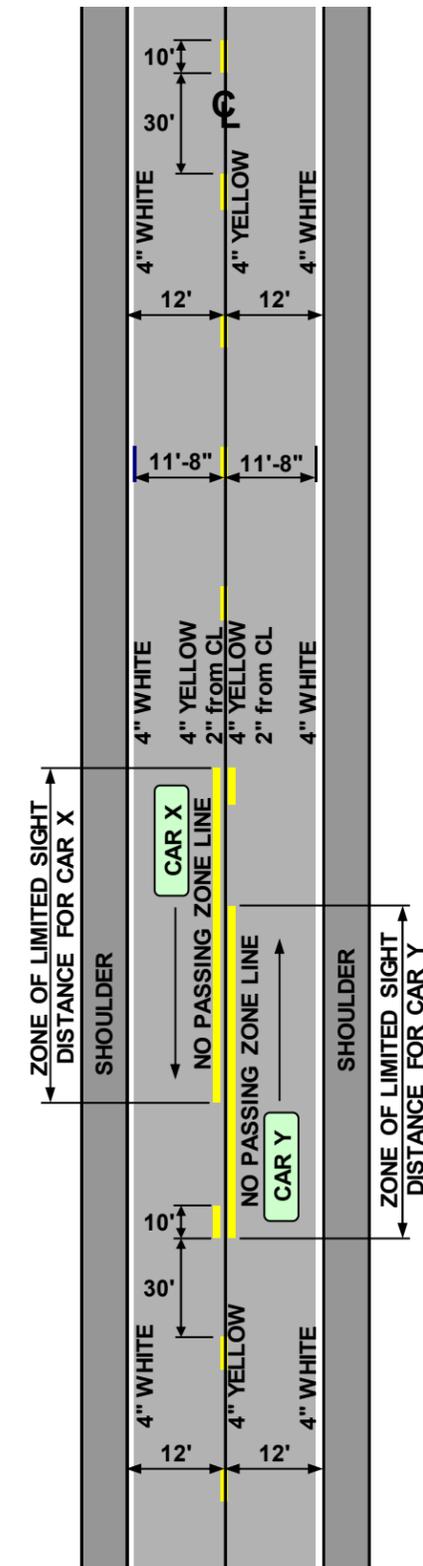
Typical pavement marking as shown on these sheets will be applied throughout the entire length of applicable sections of roadway.

Traffic Control will be incidental to the cost of application. The striper and advance or trailing warning vehicle will be equipped with flashing amber lights and advance warning arrow board.

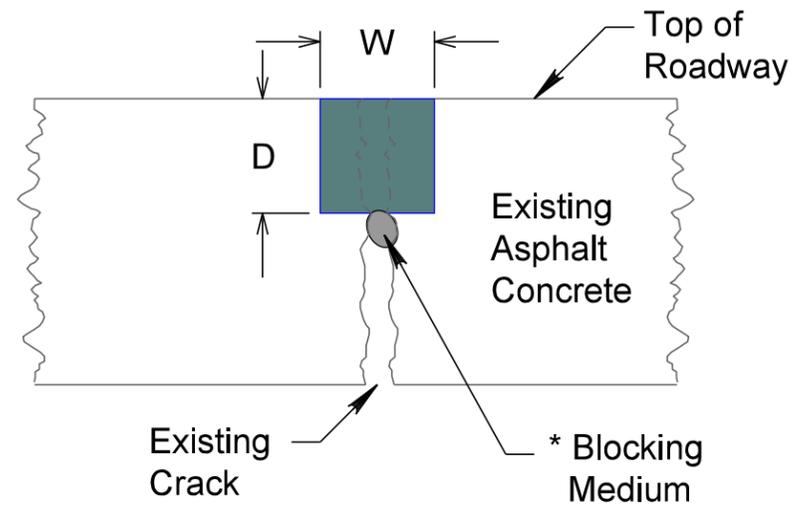
4" Yellow Skip Centerline (when not adjacent to a 4" Yellow No Passing Zone) will be placed consistently to the south or east of centerline.

ESTIMATED QUANTITIES		
ROUTES	ESTIMATED QUANTITIES	
	WHITE	YELLOW
US HWY 18W	138	51
US HWY 18E	477	129
SD HWY 37	541	204
TOTALS:	1156 GALLONS	384 GALLONS

TWO LANE ROADWAY



TYPICAL RESERVOIR SECTION



* Inert compressible material required for cracks 3/8" or more in width. The backer rod will be a nonmoisture absorbing, resilient material approximately 25 percent larger in diameter than the width of the joint to be sealed. The backer rod will be compatible with the sealant and no bond or reaction will occur between the rod and the sealant.

D & W = 3/4"

Recommended Backer Rod Diameter for Joint Width	
Joint Width	Rod Diameter
3/16" - 1/4"	3/8"
1/4" - 3/8"	1/2"
3/8" - 1/2"	5/8"
5/8" - 3/4"	7/8"
3/4" - 7/8"	1"
7/8" - 1"	1 1/4"
1" - 1 1/4"	1 1/2"
1 1/4" - 1 1/2"	2"

ITEMIZED LIST FOR TRAFFIC CONTROL

STATE OF SOUTH DAKOTA	PROJECT IM-NH-P 0023(72)	SHEET 11	TOTAL SHEETS 15
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US HWY 18 West Segment

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					105.0

US HWY 18 East Segment

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					105.0

SD HWY 37

		CONVENTIONAL ROAD			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT					105.0

I-29 NB and SB Shoulders

		EXPRESSWAY / INTERSTATE			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R2-1	SPEED LIMIT 65	3	36" x 48"	12.0	36.0
R2-1	SPEED LIMIT 45	2	36" x 48"	12.0	24.0
R2-1	SPEED LIMIT 80	1	36" x 48"	12.0	12.0
W3-5	SPEED REDUCTION AHEAD (65 MPH)	2	48" x 48"	16.0	32.0
W3-5	SPEED REDUCTION AHEAD (45 MPH)	1	48" x 48"	16.0	16.0
W4-2	LEFT or RIGHT LANE ENDS (symbol)	2	48" x 48"	16.0	32.0
W20-1	ROAD WORK AHEAD	2	48" x 48"	16.0	32.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	2	48" x 48"	16.0	32.0
G20-2	END ROAD WORK	1	48" x 24"	8.0	8.0
EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT					224.0

I-29 Exit 2 Ramps

		EXPRESSWAY / INTERSTATE			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W4-2	LEFT or RIGHT LANE ENDS (symbol)	2	48" x 48"	16.0	32.0
W4-3	ADDED LANE (symbol)	1	48" x 48"	16.0	16.0
W20-1	ROAD WORK AHEAD	3	48" x 48"	16.0	48.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	1	48" x 48"	16.0	16.0
SPECIAL	EXIT 2 (45° ARROW)	1	60" x 48"	20.0	20.0
G20-2	END ROAD WORK	1	48" x 24"	8.0	8.0
EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT					172.0

I-29 Exit 4 Ramps & Crossroad

		EXPRESSWAY / INTERSTATE			
SIGN CODE	SIGN DESCRIPTION	NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W4-2	LEFT or RIGHT LANE ENDS (symbol)	2	48" x 48"	16.0	32.0
W4-3	ADDED LANE (symbol)	1	48" x 48"	16.0	16.0
W20-1	ROAD WORK AHEAD	3	48" x 48"	16.0	48.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
SPECIAL	EXIT 4 (45° ARROW)	1	48" x 48"	16.0	16.0
G20-2	END ROAD WORK	2	48" x 24"	8.0	16.0
EXPRESSWAY / INTERSTATE TRAFFIC CONTROL SIGNS SQFT					192.0

* Messages on signs will vary depending on the operation being conducted.

Vehicle-mounted signs will be mounted in a manner such that they are not obscured by equipment or supplies. Sign legends on vehicle-mounted signs will be covered or turned from view when work is not in progress.

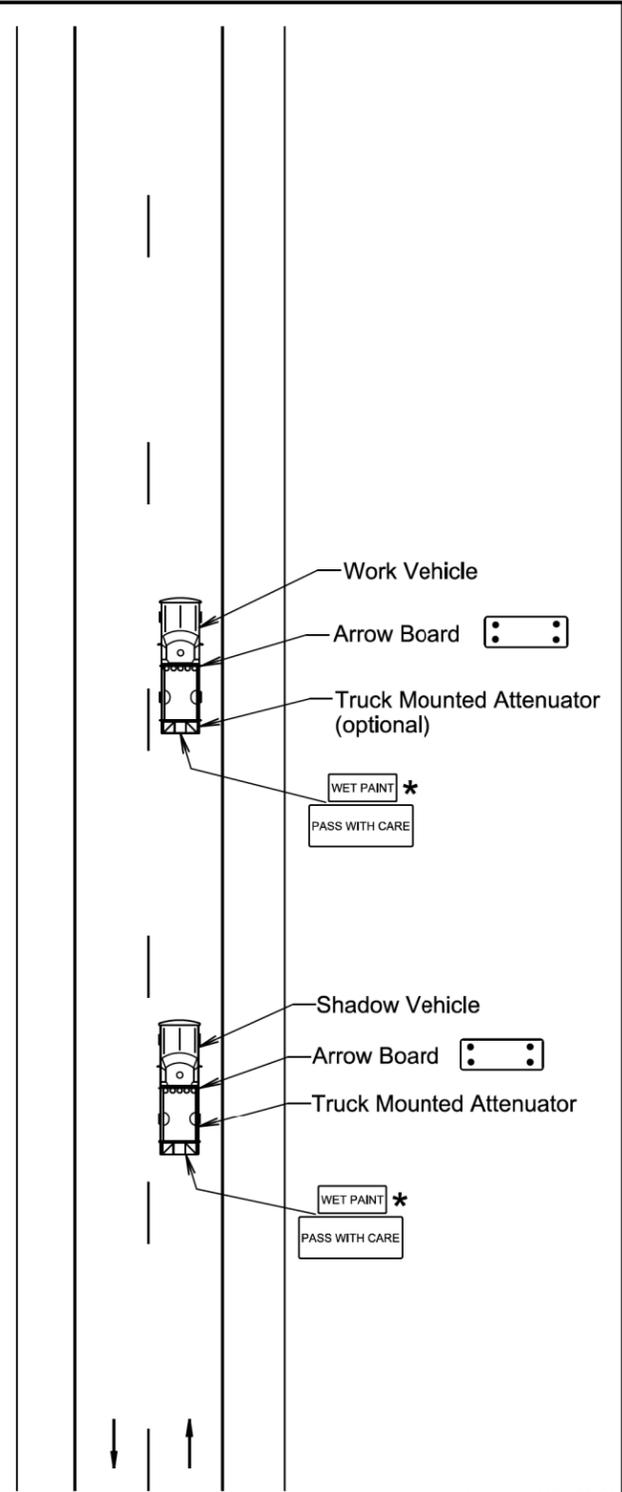
Shadow and Work vehicles will display high-intensity rotating, flashing, oscillating, or strobe lights, flags, signs, or arrow boards.

Vehicle hazard warning signals will not be used instead of the vehicle's high-intensity rotating, flashing, oscillating, or strobe lights.

When an arrow board is used, it will be used in the caution mode. Marching Diamonds are acceptable.

Arrow boards will, as a minimum, be Type B, with a size of 60" x 30".

All costs associated with the traffic control for mobile operation including signs, arrow boards and equipment will be incidental to the contract lump sum price for "Traffic Control, Miscellaneous".



January 22, 2021

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MOBILE OPERATIONS ON 2-LANE ROAD

PLATE NUMBER
634.06

Sheet 1 of 1

Published Date: 2026

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	500	25
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.

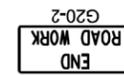
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) will 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 will be drums or 42" cones.

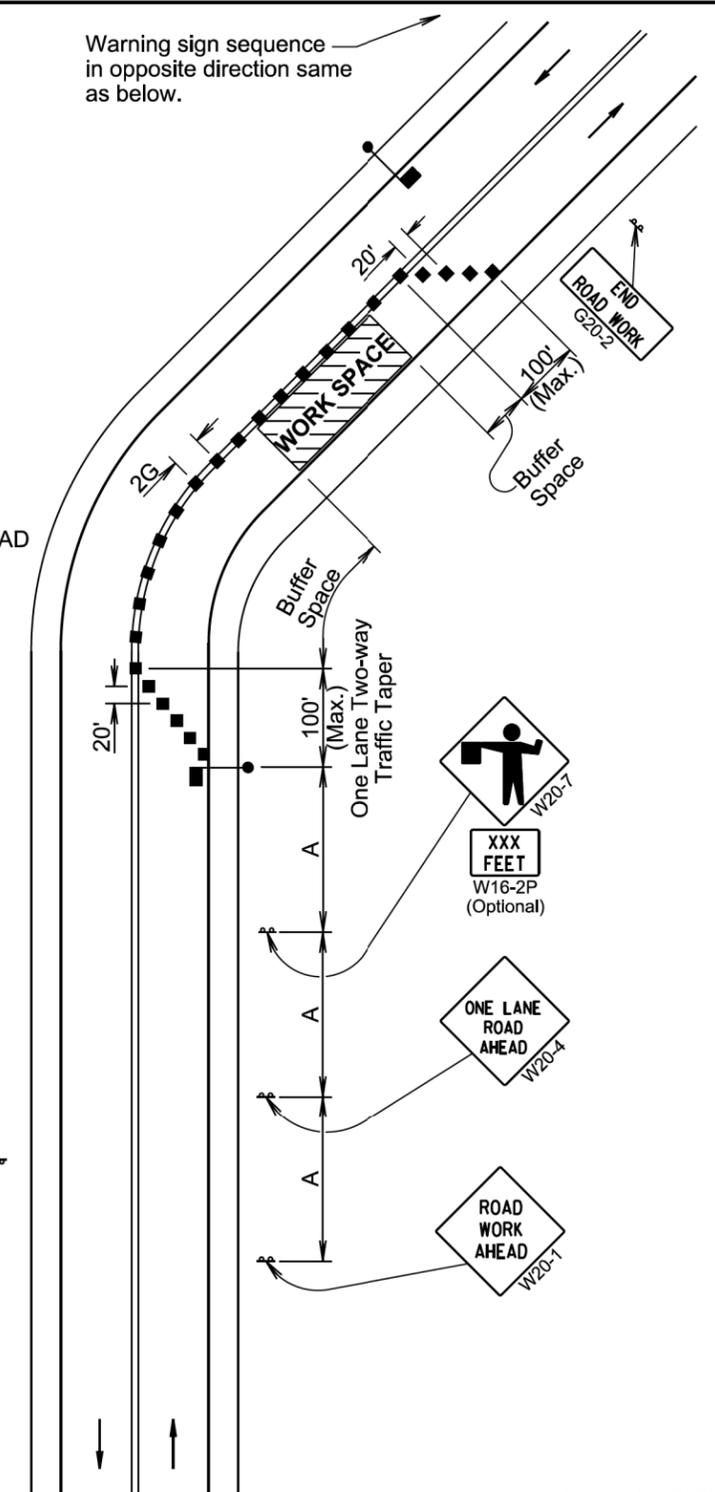
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.



Channelizing devices and flaggers will 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.

January 22, 2021

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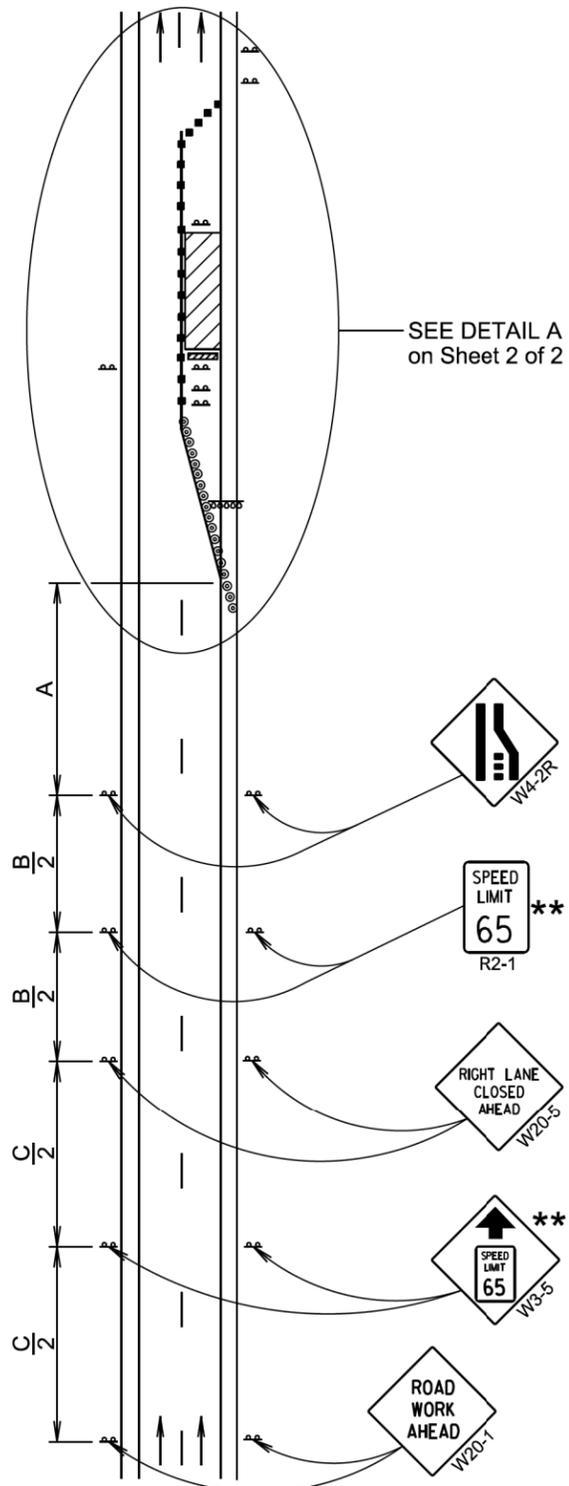
LANE CLOSURE WITH FLAGGER PROVIDED

PLATE NUMBER
634.23

Sheet 1 of 1

Published Date: 2026

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)		
	(A)	(B)	(C)
0 - 30	200		
35 - 40	350		
45 - 50	500		
55	750		
60 - 65	1000		
	(A)	(B)	(C)
70 - 80	1000	1500	2640



** Speed appropriate for location.

⊙ Reflectorized Drum

■ Channelizing Device

ROAD WORK AHEAD sign is only required in advance of the first lane closure.

High speed is defined as having a posted speed limit greater than 45 mph.

April 8, 2025

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**WORK ZONE SPEED REDUCTION
FOR INTERSTATE AND HIGH
SPEED MULTI-LANE HIGHWAYS**

PLATE NUMBER
634.63

Sheet 1 of 2

Published Date: 2026

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 will be covered or removed when workers are not present.

⊙ Reflectorized Drum

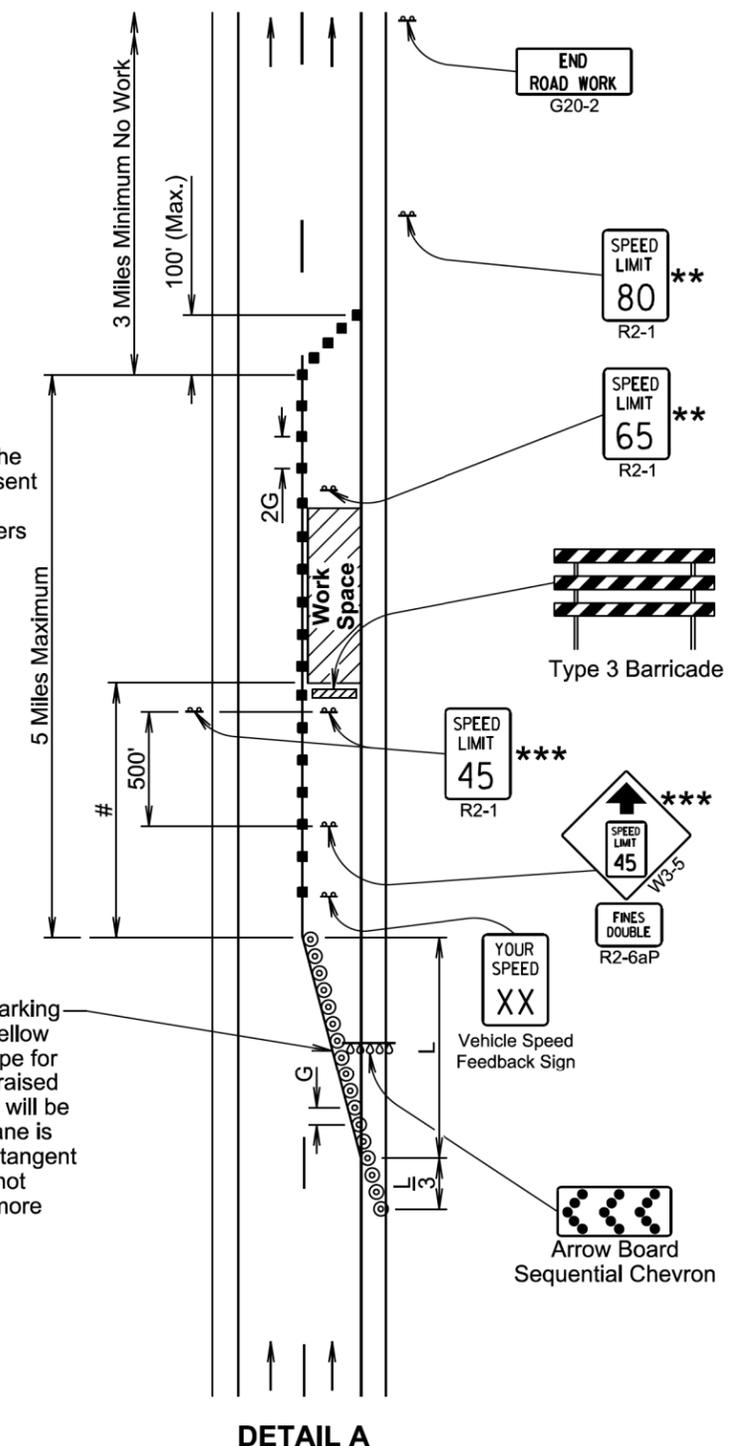
■ Channelizing Device

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

The channelizing devices will 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 raised pavement markers at 5' spacing will 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.



April 8, 2025

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**WORK ZONE SPEED REDUCTION
FOR INTERSTATE AND HIGH
SPEED MULTI-LANE HIGHWAYS**

PLATE NUMBER
634.63

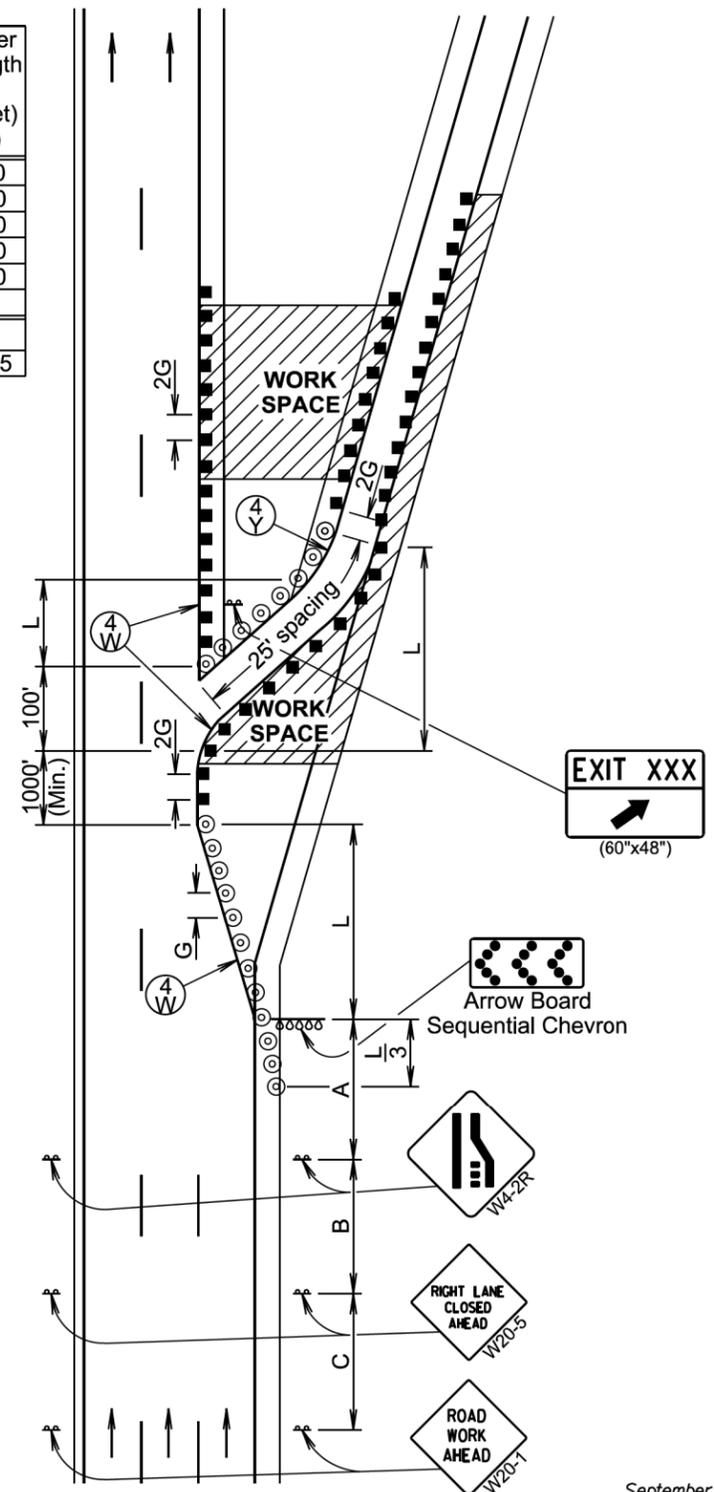
Sheet 2 of 2

Published Date: 2026

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)			Taper Length (Feet) (L)
	(A)	(B)	(C)	
0 - 30	200			180
35 - 40	350			320
45 - 50	500			600
55	750			660
60 - 65	1000			780
	(A)	(B)	(C)	
70 - 80	1000	1500	2640	1125

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

- * Spacing is 40' for 42" cones.
 - ⊙ Reflectorized Drum
 - Channelizing Device
 - Ⓞ 4" White Temporary Pavement Marking
 - Ⓞ 4" Yellow Temporary Pavement Marking
- The channelizing devices will be drums or 42" cones if traffic control must remain overnight.
- 42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours.



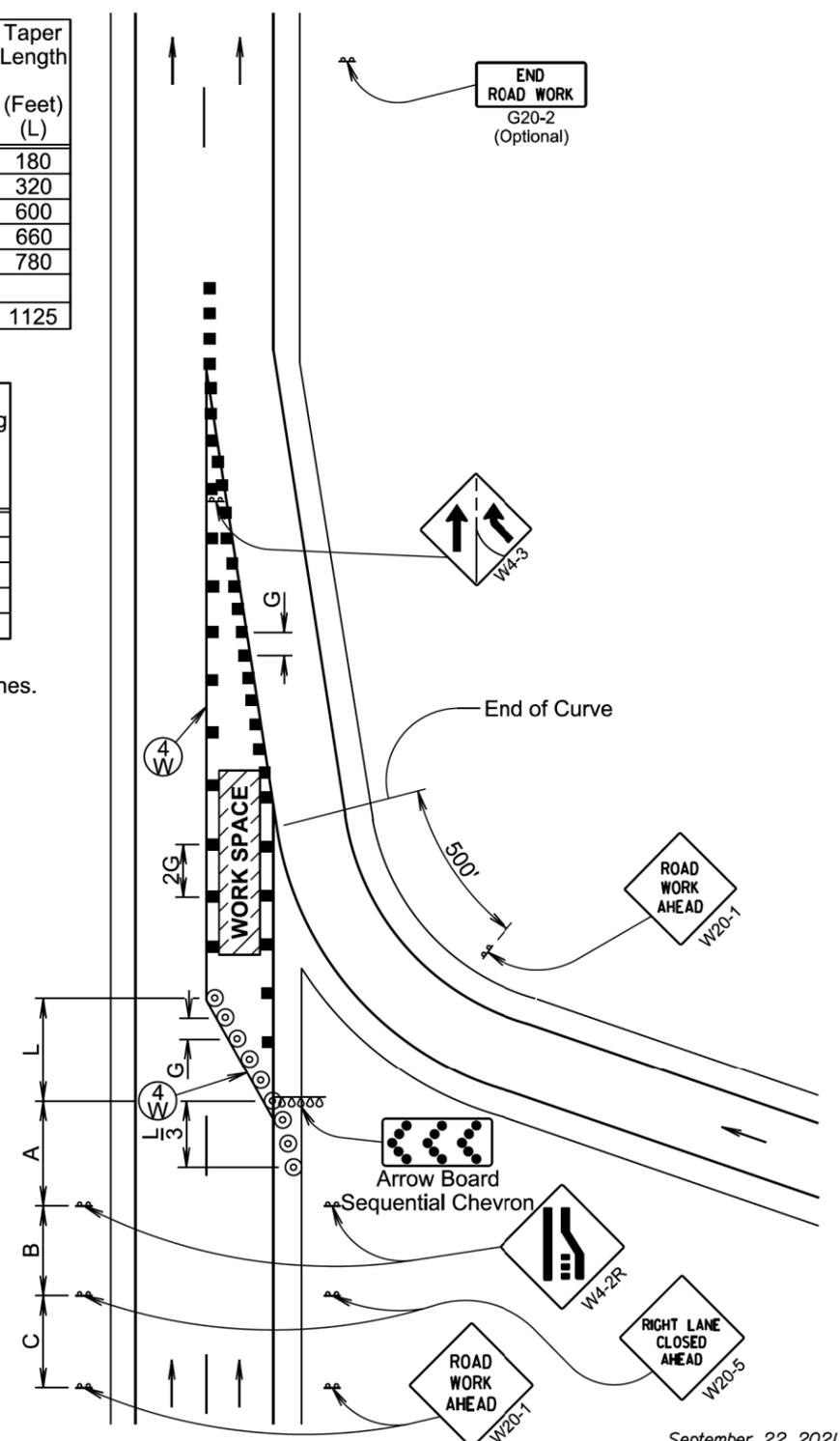
September 22, 2021

S D D O T	WORK IN VICINITY OF EXIT RAMP	PLATE NUMBER 634.68
	Published Date: 2026	Sheet 1 of 1

Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)			Taper Length (Feet) (L)
	(A)	(B)	(C)	
0 - 30	200			180
35 - 40	350			320
45 - 50	500			600
55	750			660
60 - 65	1000			780
	(A)	(B)	(C)	
70 - 80	1000	1500	2640	1125

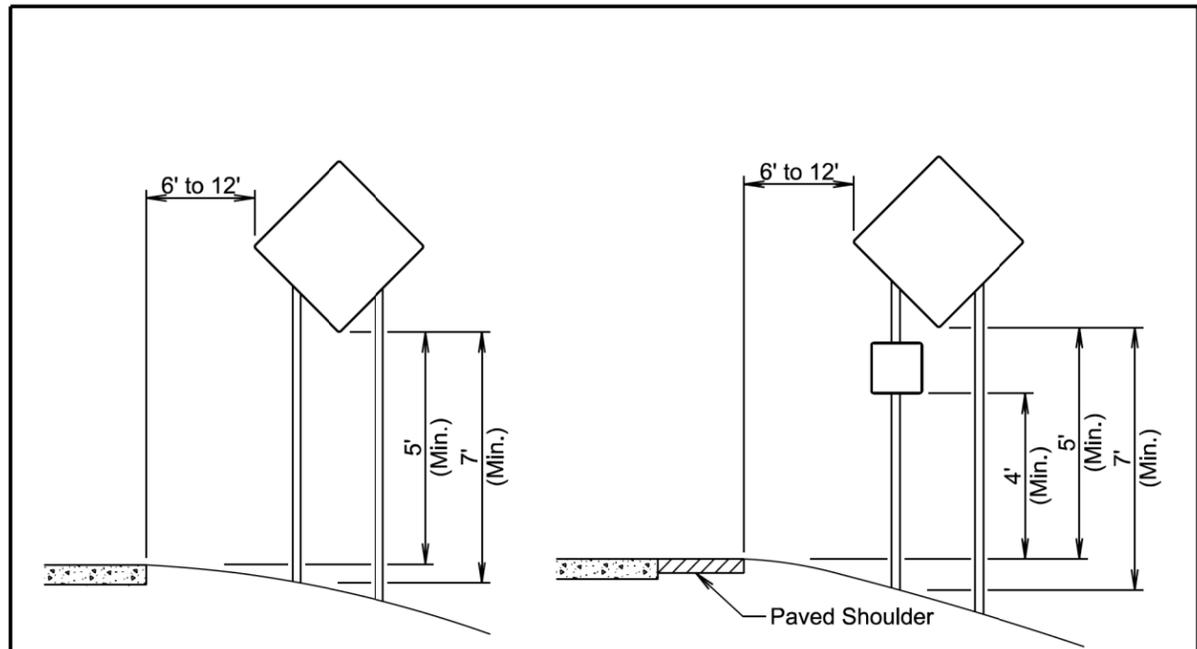
Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)	
	(G)	
0 - 30	25	
35 - 45	25	
50	50	*
55	50	*
60 - 80	50	*

- * Spacing is 40' for 42" cones.
 - ⊙ Reflectorized Drum
 - Channelizing Device
 - Ⓞ 4" White Temporary Pavement Marking
- Temporary pavement markings will be used if traffic control must remain overnight.
- The channelizing devices will be drums or 42" cones if traffic control must remain overnight.
- 42" cones may be used in place of the drums shown in the taper if setup will not be used during night time hours.



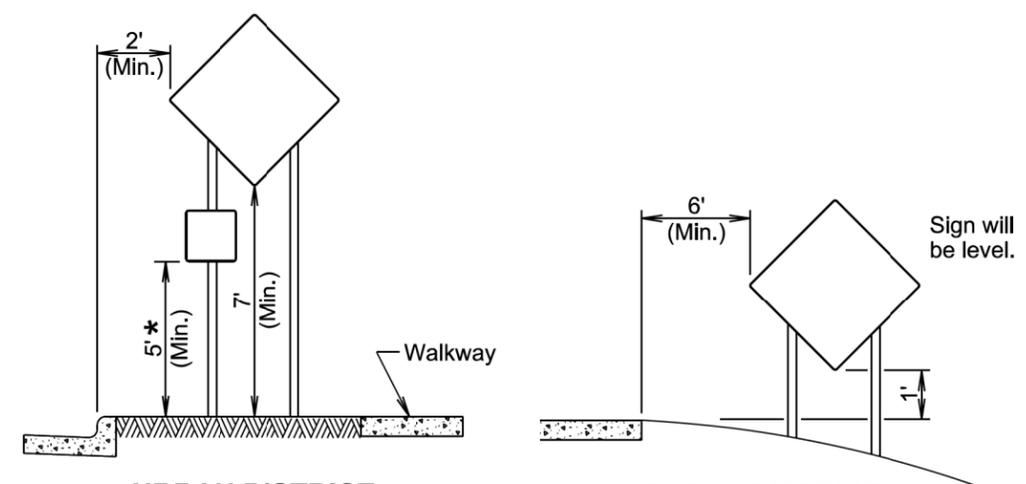
September 22, 2021

S D D O T	WORK IN VICINITY OF ENTRANCE RAMP	PLATE NUMBER 634.70
	Published Date: 2026	Sheet 1 of 1



RURAL DISTRICT

RURAL DISTRICT WITH SUPPLEMENTAL PLATE



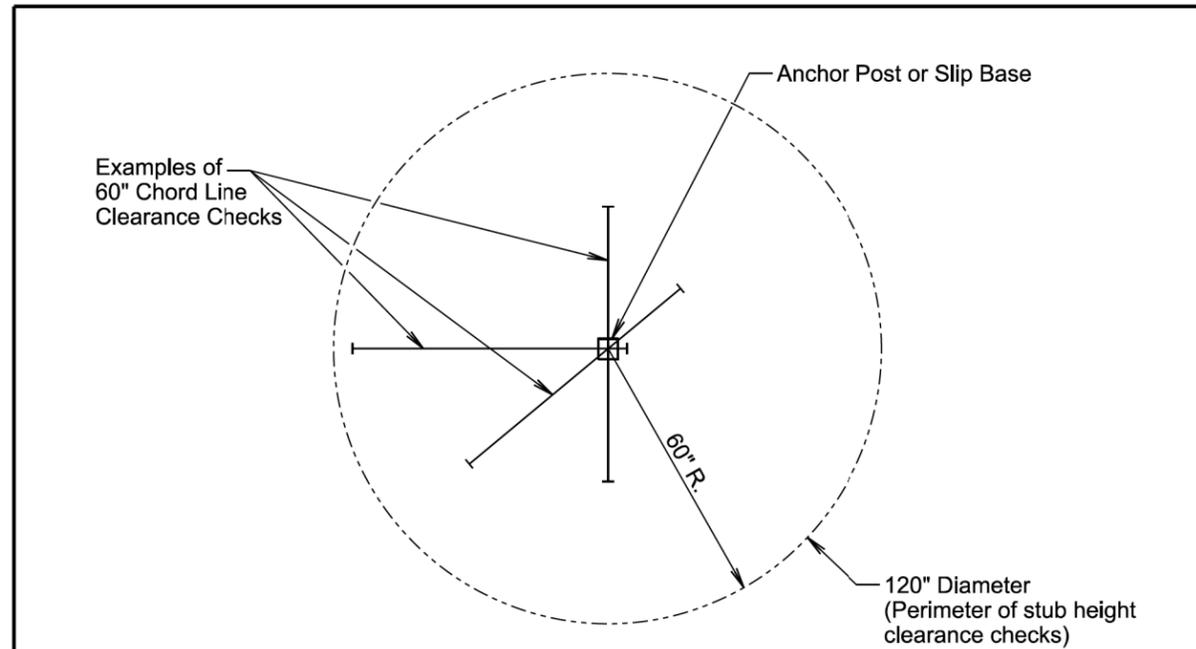
URBAN DISTRICT

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

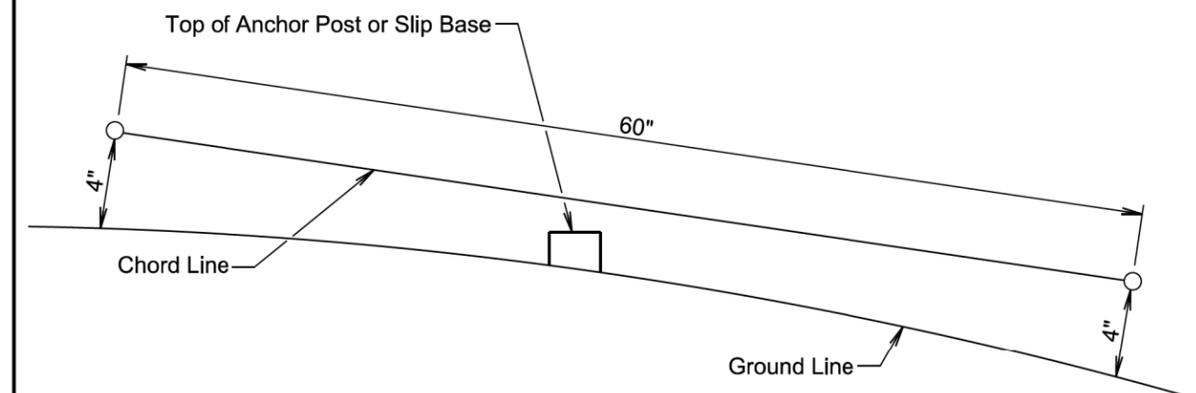
* If the bottom of supplemental plate is mounted lower than 7 feet above a pedestrian walkway, the supplemental plate should not project more than 4" into the pedestrian facility.

January 22, 2021

Published Date: 2026	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 WILL 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 will 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.

January 22, 2021

Published Date: 2026	S D D O T	BREAKAWAY SUPPORT STUB CLEARANCE	PLATE NUMBER 634.99
			Sheet 1 of 1