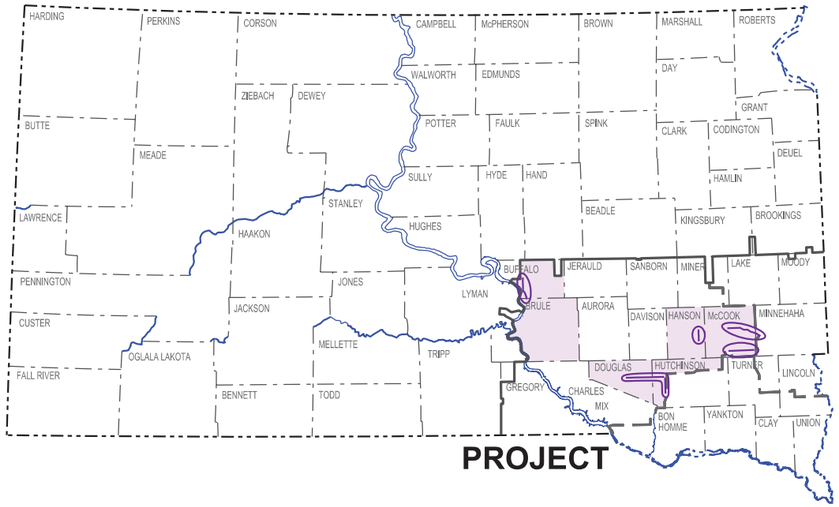


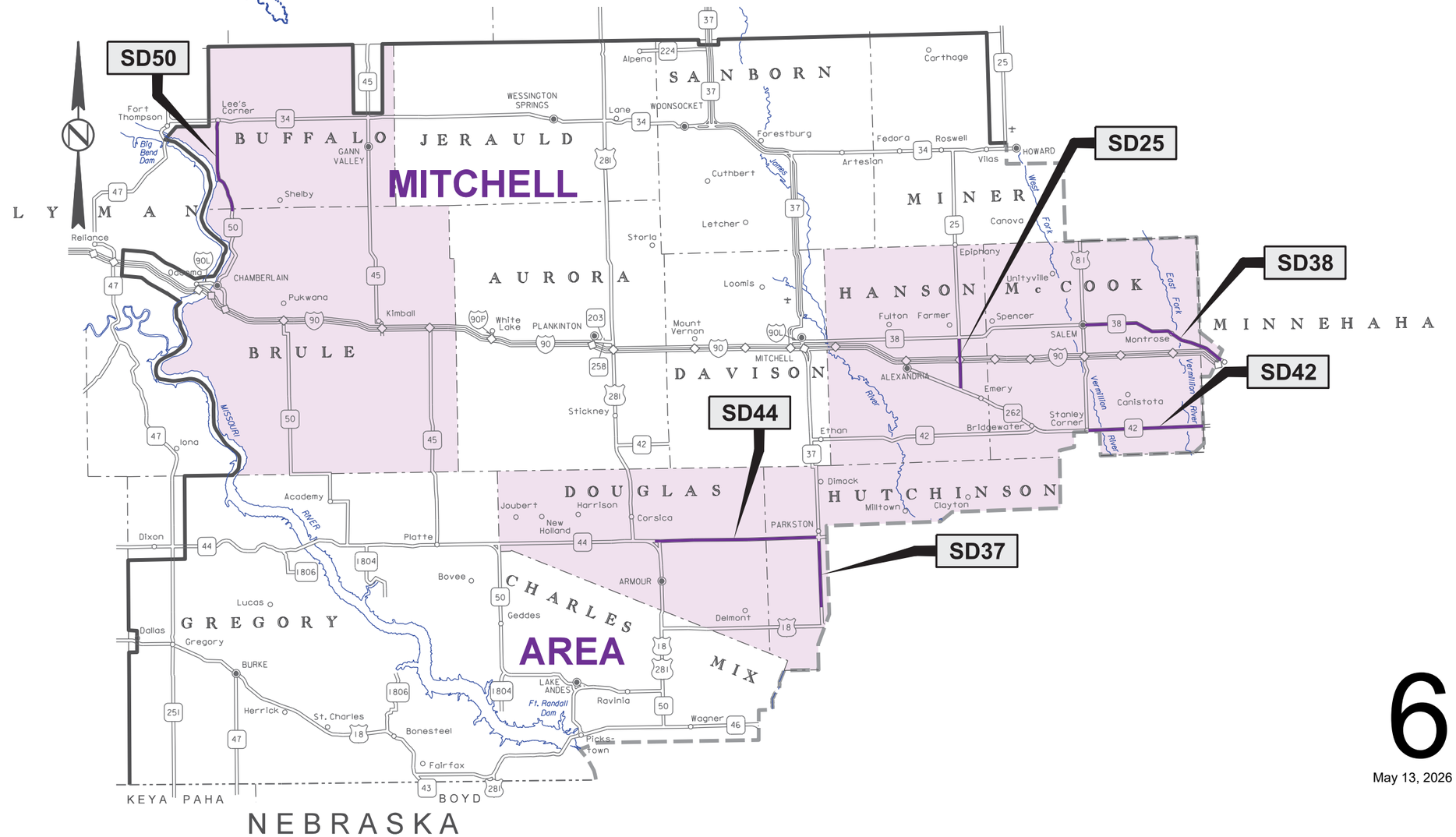
STATE OF SOUTH DAKOTA
DEPARTMENT OF TRANSPORTATION
PLANS FOR PROPOSED

PROJECT NH-P 0021(190)
SD HIGHWAYS 25, 37, 38, 42, 44 & 50
BUFFALO, BRULE, DOUGLAS, HANSON, HUTCHINSON, McCOOK & MINNEHAHA COUNTIES
ASPHALT CONCRETE CRACK SEALING &
ASPHALT CONCRETE CRACK SEALING OF SHOULDERS
PCN 09WD

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	1	26

Plotting Date: 03/20/2026

INDEX OF SHEETS



STORM WATER PERMIT
(None required)

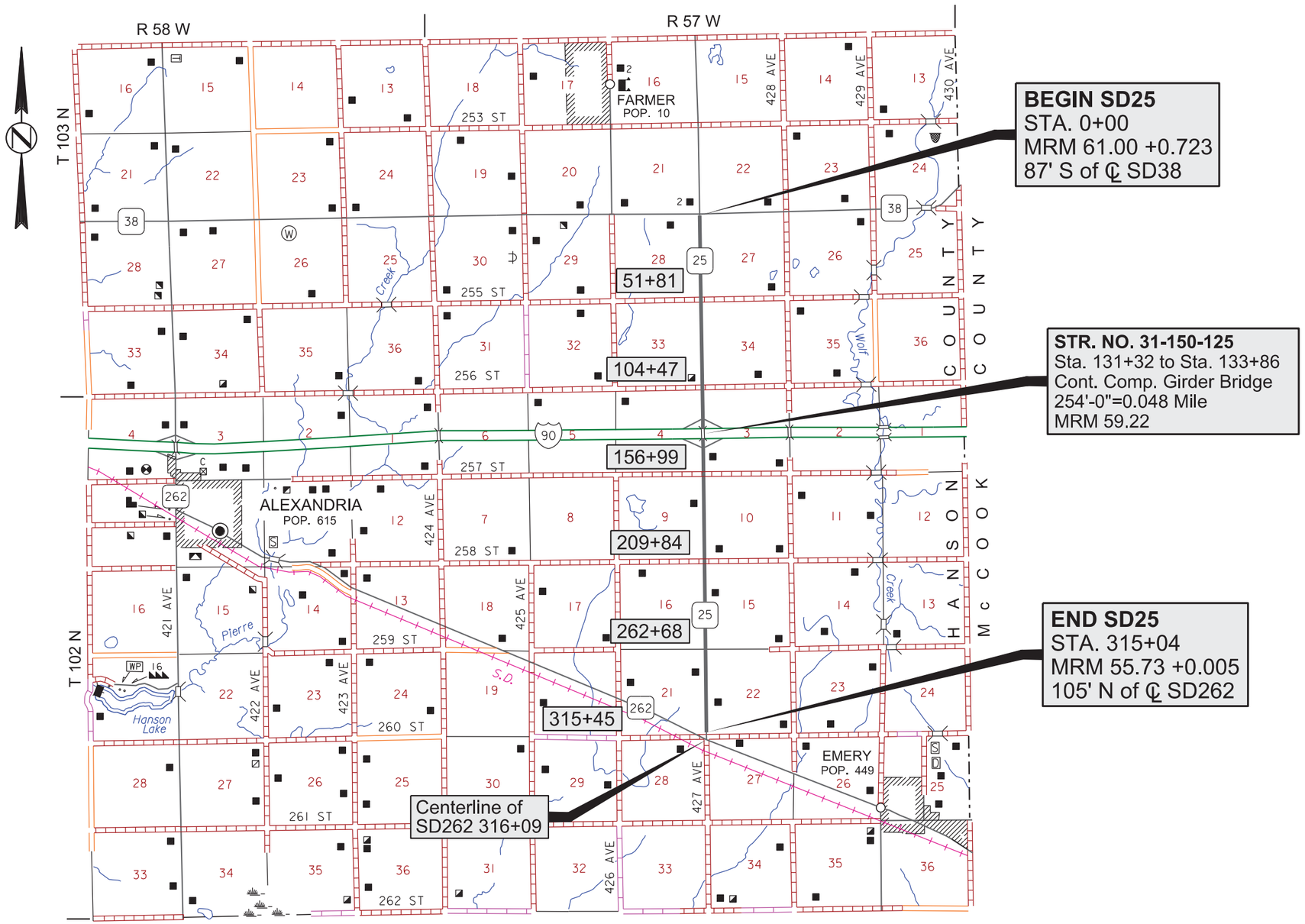
6

May 13, 2026

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	2	26

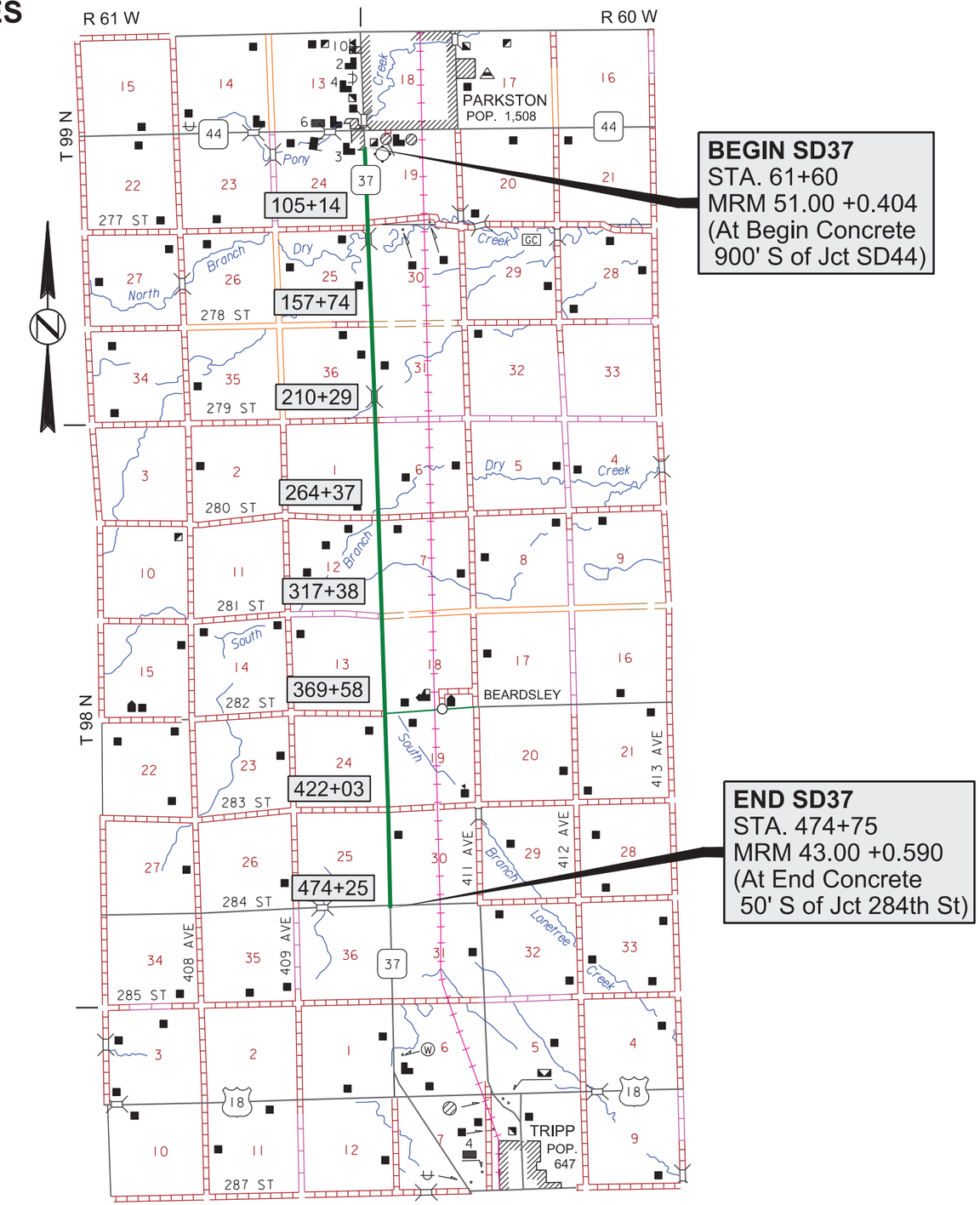
Plotting Date: 03/20/2026

SD HIGHWAY 25
HANSON COUNTY
ASPHALT CONCRETE CRACK SEALING
GROSS LENGTH: 5.967 MILES
BRIDGE LENGTH: 0.048 MILE
NET LENGTH: 5.919 MILES



DESIGN DESIGNATION	
SD25	
AADT(2025)	288
AADT(2045)	445
DHV	33
D	51%
T DHV	22.7%
T AADT	49.8%
V	65 MPH

SD HIGHWAY 37
HUTCHINSON COUNTY
ASPHALT CONCRETE CRACK SEALING OF SHOULDERS
LENGTH: 7.825 MILES



BEGIN SD37
STA. 61+60
MRM 51.00 +0.404
(At Begin Concrete
900' S of Jct SD44)

END SD37
STA. 474+75
MRM 43.00 +0.590
(At End Concrete
50' S of Jct 284th St)

DESIGN DESIGNATION	SD37
AADT(2025)	2304
AADT(2045)	3659
DHV	265
D	51%
T DHV	9.4%
T AADT	20.7%
V	65 MPH

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	4	26

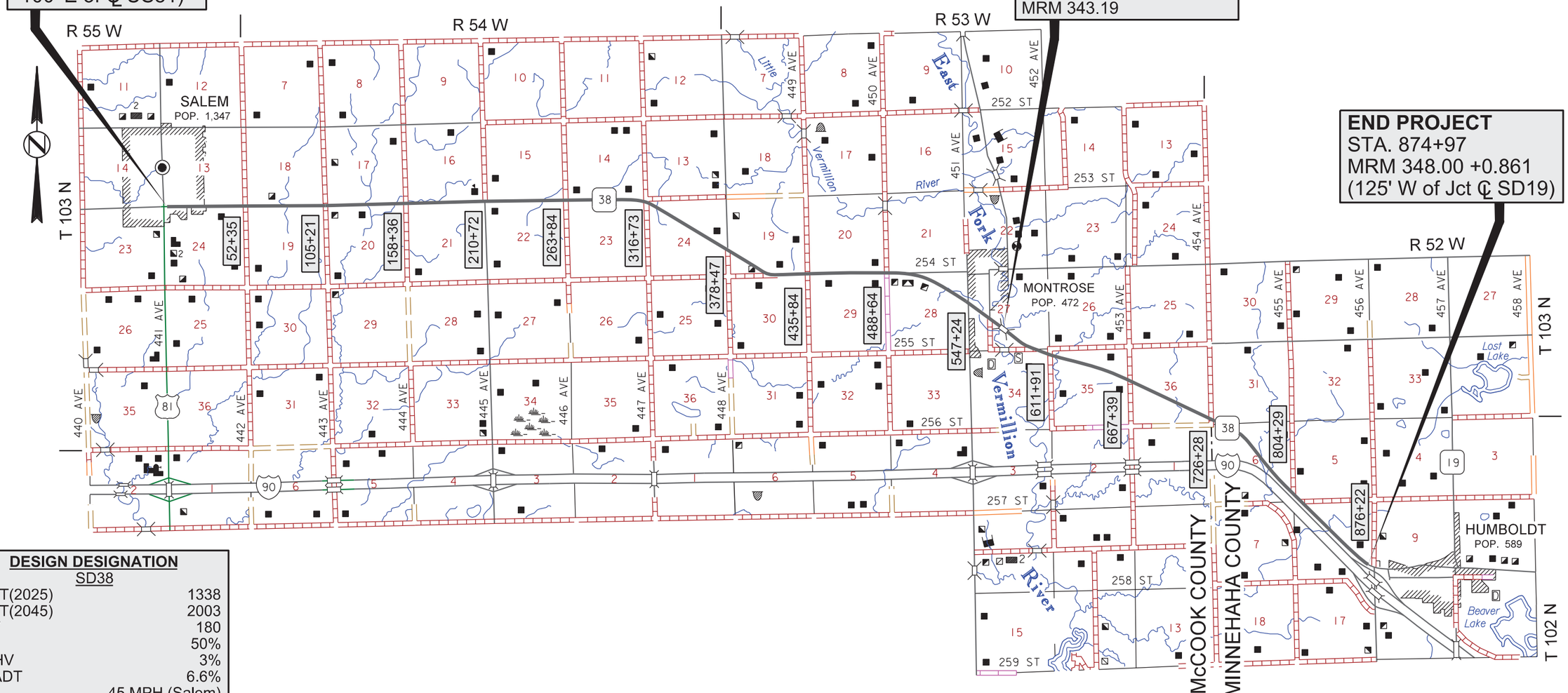
Plotting Date: 03/20/2026

SD HIGHWAY 38
McCOOK & MINNEHAHA COUNTIES
ASPHALT CONCRETE CRACK SEALING
GROSS LENGTH: 16.571 MILES
BRIDGE LENGTH: 0.030 MILE
NET LENGTH: 16.541 MILES

BEGIN PROJECT
STA. 0+00
MRM 332.00 +0.290
(At End Concrete
100' E of ℄ US81)

STR. NO. 44-214-107
575+00.17 to 576+57.83
Reinforced Concrete Bridge
157'-8"=0.030 Mile
MRM 343.19

END PROJECT
STA. 874+97
MRM 348.00 +0.861
(125' W of Jct ℄ SD19)



DESIGN DESIGNATION
SD38

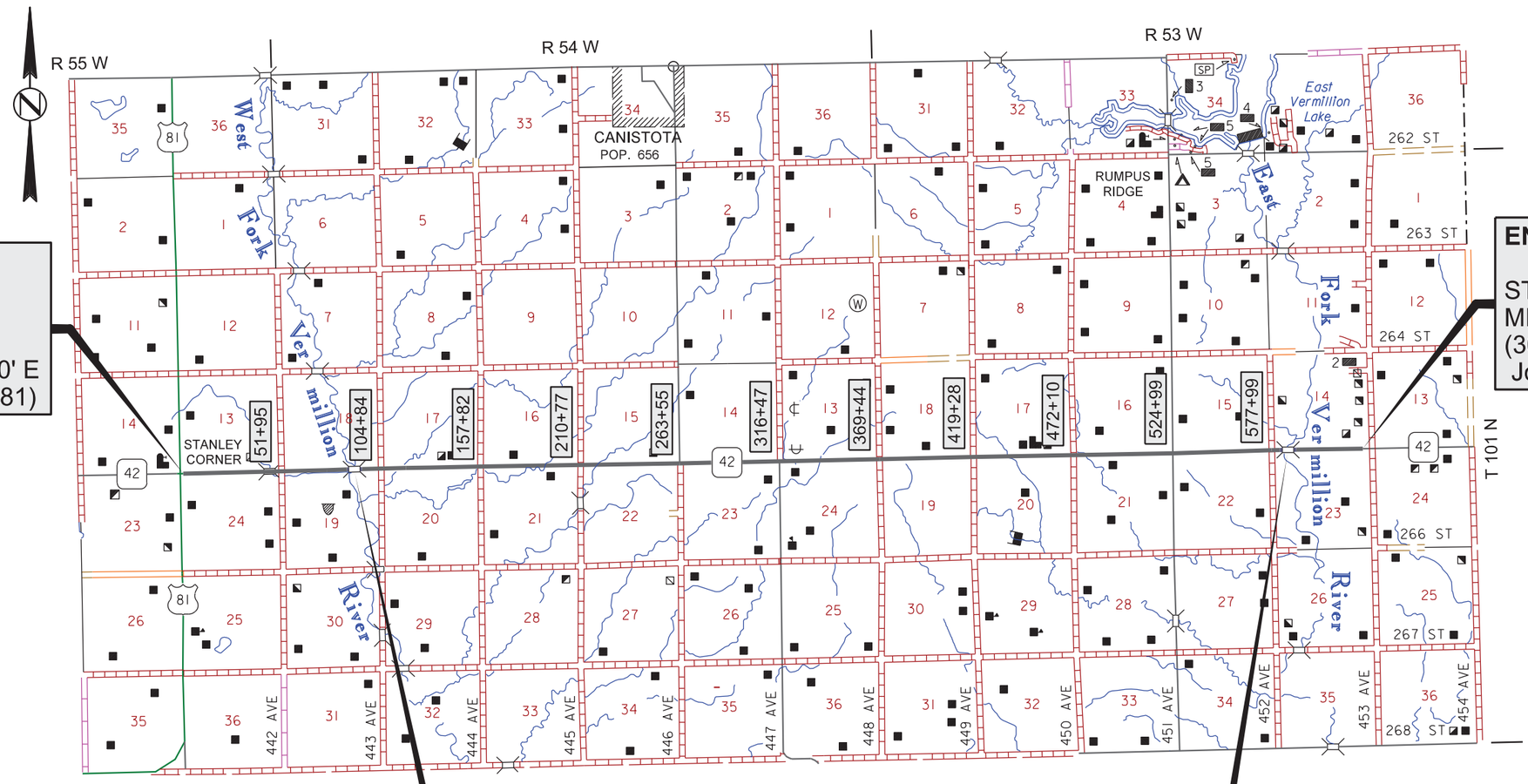
AADT(2025)	1338
AADT(2045)	2003
DHV	180
D	50%
T DHV	3%
T AADT	6.6%
V	45 MPH (Salem) 55 MPH (Montrose) 55 MPH (Humboldt) 65 MPH (Rural)

PLOT SCALE - 1:70000
PLOT NAME - 4
PLOTTED FROM - TRMIINT06
FILE - ...\2026 MIT AREA CRACK SEAL TITL09WD.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	5	26

Plotting Date: 03/20/2026

SD HIGHWAY 42
McCOOK COUNTY
ASPHALT CONCRETE CRACK SEALING
GROSS LENGTH: 11.892 MILES
BRIDGES LENGTH: 0.039 MILE
NET LENGTH: 11.853 MILES



BEGIN SD42

STA. 0+00
MRM 333.05 +0.030
(At End Concrete 120' E of Centerline Jct US81)

END SD42

STA. 627+90
MRM 344.18 +0.812
(300' W of Centerline Jct 453rd Avenue)

STR. NO. 44-128-210
Sta. 88+00 to Sta. 88+99.5
Continuous Concrete Bridge
99'-5" = 0.019 Mile
MRM 334.77
Two Approach/Sleeper Slabs
2@20'=40' = 0.008 Mile but AC overlay covers most of the slabs)

STR. NO. 44-222-210
Sta. 584+70 to Sta. 585+76
Continuous Concrete Bridge
106'-0"=0.020 Mile
MRM 344.18
Two Approach/Sleeper Slabs
2@20'=40' = 0.008 Mile but AC overlay covers most of the slabs)

DESIGN DESIGNATION

SD42	
AADT(2025)	2266
AADT(2045)	3393
DHV	262
D	51%
T DHV	6.1%
T AADT	13.3%
V	65 MPH

PLOT SCALE - 1:70000
PLOTTED FROM - TRM1INT06
PLOT NAME - 5
FILE - ...\2026 MIT AREA CRACK SEAL TITL09WD.DGN

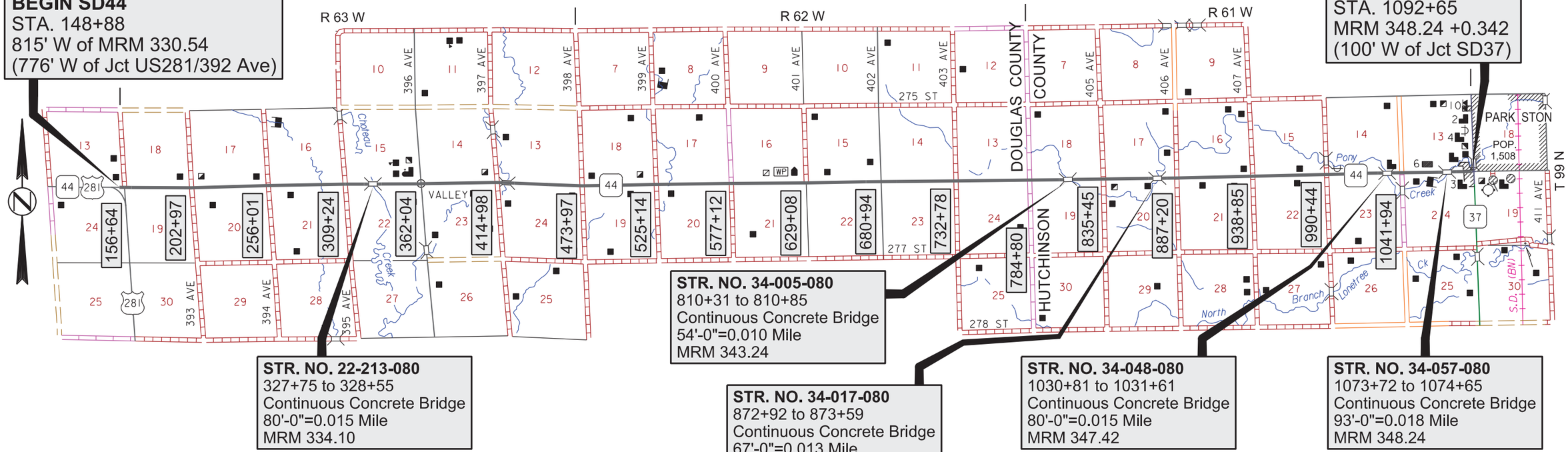
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	6	26

Plotting Date: 03/20/2026

SD HIGHWAY 44
DOUGLAS & HUTCHINSON COUNTIES
ASPHALT CONCRETE CRACK SEALING
GROSS LENGTH: 17.874 MILES
BRIDGES LENGTH: 0.071 MILE
NET LENGTH: 17.803 MILES

BEGIN SD44
STA. 148+88
815' W of MRM 330.54
(776' W of Jct US281/392 Ave)

END SD44
STA. 1092+65
MRM 348.24 +0.342
(100' W of Jct SD37)



STR. NO. 22-213-080
327+75 to 328+55
Continuous Concrete Bridge
80'-0"=0.015 Mile
MRM 334.10

STR. NO. 34-005-080
810+31 to 810+85
Continuous Concrete Bridge
54'-0"=0.010 Mile
MRM 343.24

STR. NO. 34-017-080
872+92 to 873+59
Continuous Concrete Bridge
67'-0"=0.013 Mile
MRM 344.43

STR. NO. 34-048-080
1030+81 to 1031+61
Continuous Concrete Bridge
80'-0"=0.015 Mile
MRM 347.42

STR. NO. 34-057-080
1073+72 to 1074+65
Continuous Concrete Bridge
93'-0"=0.018 Mile
MRM 348.24

DESIGN DESIGNATION
SD44

AADT(2025)	1617
AADT(2045)	2235
DHV	187
D	51%
T DHV	10.5%
T AADT	23.0%
V	65 MPH (Rural)
	45 MPH (Parkston)

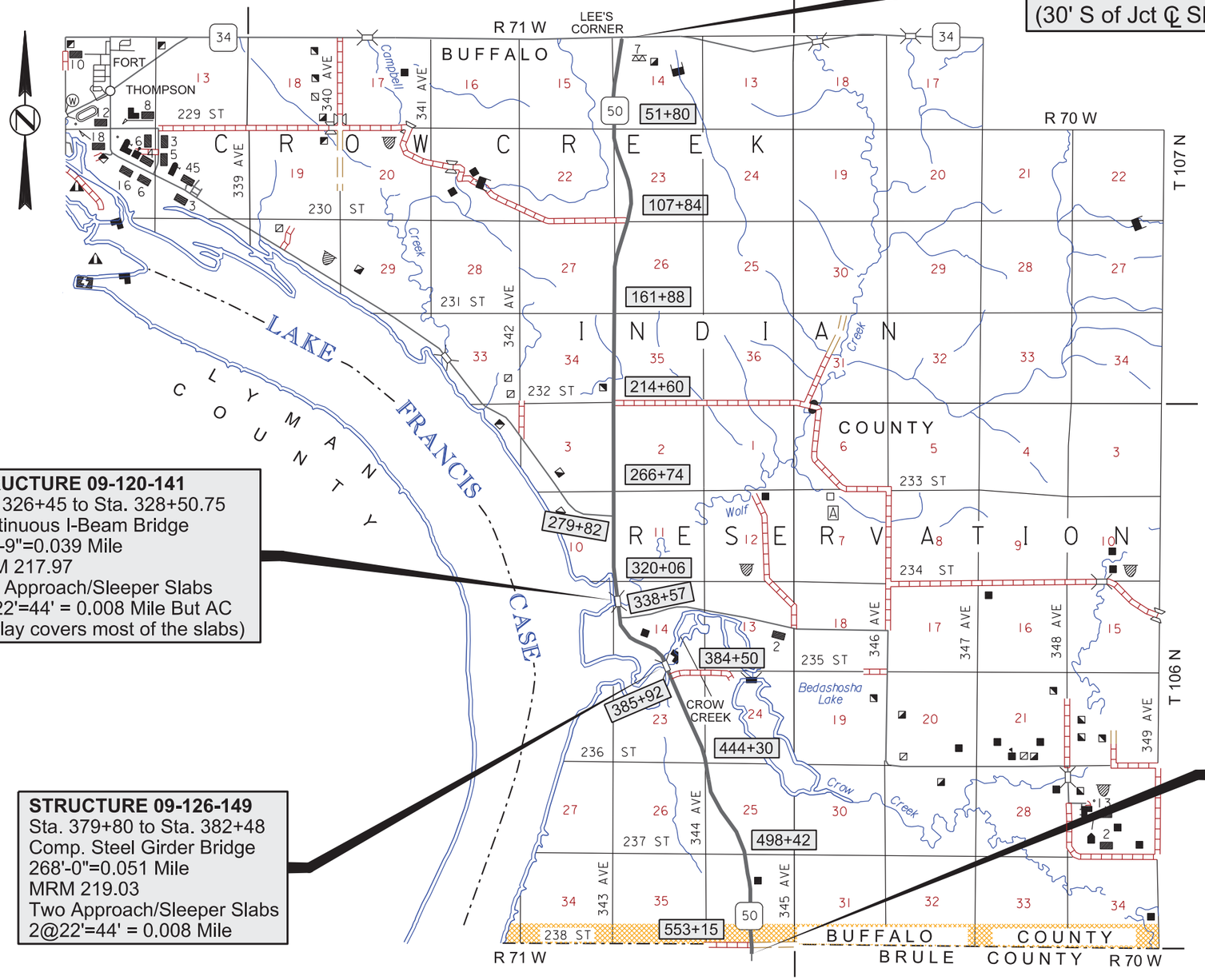
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	7	26

Plotting Date: 03/20/2026

SD HIGHWAY 50
BUFFALO & BRULE COUNTIES
ASPHALT CONCRETE CRACK SEALING
GROSS LENGTH: 10.486 MILES
BRIDGES LENGTH: 0.090 MILE
NET LENGTH: 10.396 MILES

TERO 10.477 miles on SD50 Crow Creek

BEGIN SD50
STA. 0+00
MRM 211.77 +0.006
(30' S of Jct ℄ SD34)



STRUCTURE 09-120-141
Sta. 326+45 to Sta. 328+50.75
Continuous I-Beam Bridge
205'-9"=0.039 Mile
MRM 217.97
Two Approach/Sleeper Slabs
2@22'=44' = 0.008 Mile But AC overlay covers most of the slabs)

STRUCTURE 09-126-149
Sta. 379+80 to Sta. 382+48
Comp. Steel Girder Bridge
268'-0"=0.051 Mile
MRM 219.03
Two Approach/Sleeper Slabs
2@22'=44' = 0.008 Mile

END SD50
STA. 553+65
MRM 222.00 +0.274
(50' S of County Line)

DESIGN DESIGNATION
SD50

AADT(2025)	612
AADT(2045)	938
DHV	79
D	50%
T DHV	2.5%
T AADT	5.4%
V	65 MPH

PLOT SCALE - 1:70000
PLOTTED FROM - TRM1INT06
PLOT NAME - 7
FILE - ...\2026 MIT AREA CRACK SEAL TTL09WD.DGN

ESTIMATE OF QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	8	26

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	LS
350E0010	Asphalt Concrete Crack Sealing	258,134	Lb
633E1200	High Build Waterborne Pavement Marking Paint, White	3,006	Gal
633E1205	High Build Waterborne Pavement Marking Paint, Yellow	768	Gal
634E0010	Flagging	2,940.0	Hour
634E0020	Pilot Car	1,475.0	Hour
634E0110	Traffic Control Signs	675.6	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

ESTIMATE OF QUANTITIES (FOR INFORMATION ONLY)

BID ITEM	ITEM	SD25 Hanson	SD37 Hutchinson	SD38 McCook & Minnehaha	SD42 McCook	SD44 Douglas & Hutchinson	SD50 Buffalo & Brule	QUANTITY
009E0010	Mobilization	◄——— LUMP SUM ——— ►						**Lump Sum**
009E4100	Construction Schedule, Category I	◄——— LUMP SUM ——— ►						**Lump Sum**
350E0010	Asphalt Concrete Crack Sealing	15,937	2,814	31,214	28,937	85,510	93,722	**258,134 Lb**
633E1200	Highbuild Waterborne Pavement Marking Paint, White	528	----	742	530	734	472	**3,006 Gal**
633E1205	Highbuild Waterborne Pavement Marking Paint, Yellow	59	----	157	134	197	221	**768 Gal**
634E0010	Flagging	180	30	355	330	975	1070	**2,940 Hour**
634E0020	Pilot Car	90	15	180	165	490	535	**1,475 Hour**
634E0110	Traffic Control Signs	112.6	112.6	112.6	112.6	112.6	112.6	**675.6 SqFt**
634E0120	Traffic Control, Miscellaneous	◄——— LUMP SUM ——— ►						**Lump Sum**

ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	9	26

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 C: WATER SOURCE

If a Contractor needs access to state waters for extraction, the Contractor must obtain a water right through the application of a Temporary Permit to Use Public Waters before work begins.

The Contractor will not withdraw water with equipment previously used outside the State of South Dakota or previously used in aquatic invasive species (AIS) positive waters within South Dakota without prior approval from the SDDOT Environmental Office. To prevent and control the introduction and spread of invasive species into the project vicinity, all equipment will be power washed with hot water (≥140 °F) and completely dried for a minimum of 7 days prior to subsequent use. South Dakota administrative rule 41:10:04:02 forbids the possession and transport of AIS; therefore, all attached dirt, mud, debris and vegetation must be removed and all compartments and tanks capable of holding standing water must be drained. This includes, but is not limited to, all equipment, pumps, lines, hoses and holding tanks.

The Contractor will not withdraw water directly from streams of the James, Big Sioux, and Vermillion watersheds without prior approval from the SDDOT Environmental Office.

Action Taken/Required:

The Contractor will obtain the necessary permits from the regulatory agencies such as the South Dakota Department of Agriculture and Natural Resources (SDDANR) and the United States Army Corps of Engineers (USACE) prior to water extraction activities.

Temporary permit to use public waters for highway construction purposes application can be found on the SDDANR website: https://danr.sd.gov/OfficeOfWater/WaterRights/PermitForms/default.aspx

Additional information and mapping of water sources impacted by Aquatic Invasive Species in South Dakota can be accessed at:
< https://sdleastwanted.sd.gov/maps/default.aspx >

South Dakota Administrative Rule 41:10:04 Aquatic Invasive Species:
< https://sdlegislature.gov/rules/DisplayRule.aspx?Rule=41:10:04 >

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.

ENVIRONMENTAL COMMITMENTS (CONTINUED)

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	10	26

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.

COORDINATION BETWEEN CONTRACTORS

A separate contract for Project PH 0020(245) - PCN 09UT has been awarded to another Contractor for centerline rumble stripes, transverse rumble strips and permanent pavement marking on SD38 from MRM 332.3 to MRM 348.9 and on SD50 from MRM 211.77 to MRM 222.3 That same project is also adjacent to the west end of SD44 on this contract.

The Contractor will schedule work so as to complete the work on this contract after the flush seal has been completed on PH 0020(245) – PCN 09UT.

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.

The joint between the concrete and the asphalt concrete on US18 and SD37 will not be routed and sealed.

The crack sealant will conform to Section 871 A. or B. and be one of those listed below:

Product	Manufacturer
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

The reservoir for all longitudinal cracks will be slightly recessed so the sealant will not be picked up by vehicle tires or snowplow cutting edges.

Seasonal and Temperature Limitations.

Routing and sealing of asphalt concrete surfaces will be permitted between May 1 and November 14.

Application of the sealant material will only be allowed when the ambient air temperature is between 40°F and 95°F.

All other requirements of Section 350 will apply.

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 = 22.5 Gals/Mile
Dashed 4" line = 6.2 Gal/Mile
Glass Beads = 8 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 WORK FOR PAVEMENT MARKING

ROUTE	LOCATION
SD38	STOP Message at Jct US81 – WB
SD38	AHEAD Message at Jct US81 – WB
SD38	STOP Messages at Jct SD19 – EB
SD38	AHEAD Message at Jct SD19 – EB
SD38	Stop Line at Jct SD19 – EB
SD42	STOP Messages at Jct US81 – WB
SD42	AHEAD Message at Jct US81 – WB
SD42	Stop Line at Jct US81 – WB
SD50	Stop Line at Jct SD34 – NB

PERMANENT PAVEMENT MARKING (CONTINUED)

TABLES OF PERMANENT PAVEMENT MARKING

SD25 South Segment	White	Yellow
4" Yellow Centerline Dashes = 5.788 miles @ 6.2 Gal/Mile		35.9
4" Solid Yellow Centerline = 1.023 miles @ 22.5 Gal/Mile		23.0
8" Solid White Edgeline = 11.737 miles @ 45.0 Gal/Mile	528.2	
TOTAL GALLONS	**528**	**59**

SD38	White	Yellow
4" Yellow Centerline Dashes = 16.343 miles @ 6.2 Gal/Mile		101.3
4" Solid Yellow Centerline = 3.924 miles @ 22.5 Gal/Mile		55.3
4" Solid White Edgeline = 32.827 miles @ 22.5 Gal/Mile	738.6	
4" White Edgeline Dashes = 0.115 miles @ 6.2 Gal/Mile	0.7	
White STOP Message = 3 Each @ 0.34 Gal/Each	1.0	
White AHEAD Message = 2 Each @ 0.43 Gal/Each	0.9	
24" White Stop Line = 0.006 miles @ 135.0 Gal/Mile	0.8	
TOTAL GALLONS	**742**	**157**

SD42	White	Yellow
4" Yellow Centerline Dashes = 11.596 miles @ 6.2 Gal/Mile		71.9
4" Solid Yellow Centerline = 2.736 miles @ 22.5 Gal/Mile		61.6
4" Solid White Edgeline = 23.464 miles @ 22.5 Gal/Mile	527.9	
24" White Stop Line = 0.006 miles @ 135.0 Gal/Mile	0.8	
White STOP Messages = 2 each at 0.3 Gal/Each	0.6	
White AHEAD Message = 1 each @ 0.8 Gal/Each	0.8	
TOTAL GALLONS	**530**	**134**

SD44	White	Yellow
4" Yellow Centerline Dashes = 16.852 miles @ 6.2 Gal/Mile		104.5
4" Solid Yellow Centerline = 3.139 miles @ 22.5 Gal/Mile		70.6
Double Yellow for Turn Bays = (2 - 4" lines) x 0.988 miles @ 22.5 Gal/Mile		22.2
4" Solid White Edgeline = 32.231 miles @ 22.5 Gal/Mile	725.2	
4" Solid White Lane Lines = 0.369 miles @ 22.5 Gal/Mile	8.3	
TOTAL GALLONS	**734**	**197**

SD50	White	Yellow
4" Yellow Centerline Dashes = 8.941 miles @ 6.2 Gal/Mile		55.4
4" Solid Yellow Centerline = 7.368 miles @ 22.5 Gal/Mile		165.8
4" Solid White Edgeline = 20.947 miles @ 22.5 Gal/Mile	471.3	
24" White Stop Line = 0.004 miles @ 135.0 Gal/Mile	0.5	
TOTAL GALLONS	**472**	**221**

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/m^2/lux for white and 170 mc/m^2/lux for yellow.

SEQUENCE OF OPERATION & MAINTENANCE OF TRAFFIC NOTES

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 of 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 TRAFFIC CONTROL

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.

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.

A Type 3 Barricade will be installed at the end of a lane closure taper.

Lane closures will be limited to 5 miles in length. The distance between the closest points of any two-lane closures will be at least 3 miles, excluding tapers.

TRAFFIC CONTROL SIGNS

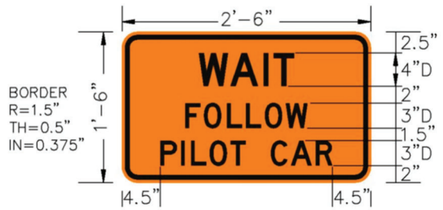
Traffic control signs have been included in a table for each route. Payment will only be for those signs used on each route.

All signs used on this contract are to be on temporary portable supports.

FLAGGING

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

Additional flagger warning signs and flagger hours have been included in the Estimate of Quantities for use on intersecting roads. These flaggers will be used as directed by the Engineer and will be used primarily during daytime hours. Also included in the Estimate of Quantities are WAIT FOLLOW PILOT CAR signs for use on low volume intersecting roads as determined by the Engineer. WAIT FOLLOW PILOT CAR signs will not block the view of the stop sign.



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".

TABLES OF ASPHALT CONCRETE CRACKS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	13	26

SD25
Hanson County
MRM 61.00 +0.723 to MRM 55.00 +0.005

Begin MRM	End MRM	Feet of Transverse Cracks	Feet of Longitudinal Cracks	Feet of Additional Quantities	Total Feet Per Mile
61.072	61.000	2250	52		2302
61.000	60.000	2949	88		3037
60.000	59.000	2508	1210		3718
59.000	58.000	2979	101		3080
58.000	57.000	2556	81		2637
57.000	56.000	2424			2424
56.000	55.735	510			510
		16,176	1,532	0	**17,708**

SD37
Hutchinson County
MRM 51.00 +0.404 to MRM 43.00 +0.590

Begin MRM	End MRM	Feet of Transverse Cracks NB Shld	Feet of Longitudinal Cracks NB Shld	Feet of Additional Quantities NB Shld	Total Feet Per Mile
51.404	51.000	88			88
51.000	50.000	200			200
50.000	49.000	200			200
49.000	48.000	184			184
48.000	47.000	184			184
47.000	46.000	192			192
46.000	45.000	192			192
45.000	44.000	176			176
44.000	43.590	64		44	108
		1,480	0	44	**1,524**

SD37
Hutchinson County
MRM 51.00 +0.404 to MRM 43.00 +0.590

Begin MRM	End MRM	Feet of Transverse Cracks SB Shld	Feet of Longitudinal Cracks SB Shld	Feet of Additional Quantities SB Shld	Total Feet Per Mile
51.404	51.000	168			168
51.000	50.000	152			152
50.000	49.000	176			176
49.000	48.000	176			176
48.000	47.000	176		18	194
47.000	46.000	184			184
46.000	45.000	248			248
45.000	44.000	184		51	235
44.000	43.590	70			70
		1,534	0	69	**1,603**

SD38
McCook & Minnehaha Counties
MRM 332.00 +0.290 to MRM 348.00 +0.861

Begin MRM	End MRM	Feet of Transverse Cracks	Feet of Longitudinal Cracks	Feet of Additional Quantities	Total Feet Per Mile
332.290	333.000	1870			1870
333.000	334.000	1870			1870
334.000	335.000	2210			2210
335.000	336.000	2210			2210
336.000	337.000	1802			1802
337.000	338.000	2142			2142
338.000	339.000	2156			2156
339.000	340.000	1768			1768
340.000	341.000	1728			1728
341.000	342.000	2272			2272
342.000	343.000	2272	124		2396
343.000	344.000	2688	36		2724
344.000	345.000	2016			2016
345.000	346.000	1792			1792
346.000	347.000	1952			1952
347.000	348.000	2048			2048
348.000	348.861	1728			1728
		34,524	160	0	**34,684**

TABLES OF ASPHALT CONCRETE CRACKS (CONTINUED)

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	14	26

SD42
McCook County
MRM 333.05 +0.030 to MRM 344.18 +0.812

Begin MRM	End MRM	Feet of Transverse Cracks	Feet of Longitudinal Cracks	Feet of Additional Quantities	Total Feet Per Mile
333.080	334.000	462	1963		2425
334.000	335.000	582	813		1395
335.000	336.000	540	1848		2388
336.000	337.000	546	6147		6693
337.000	338.000	606	2921		3527
338.000	339.000	648	1500		2148
339.000	340.000	636	2448		3084
340.000	341.000	504	1912		2416
341.000	342.000	288	633		921
342.000	343.000	306	376		682
343.000	344.000	450	817		1267
344.000	344.992	2850	2356		5206
		8,418	23,734	0	**32,152**

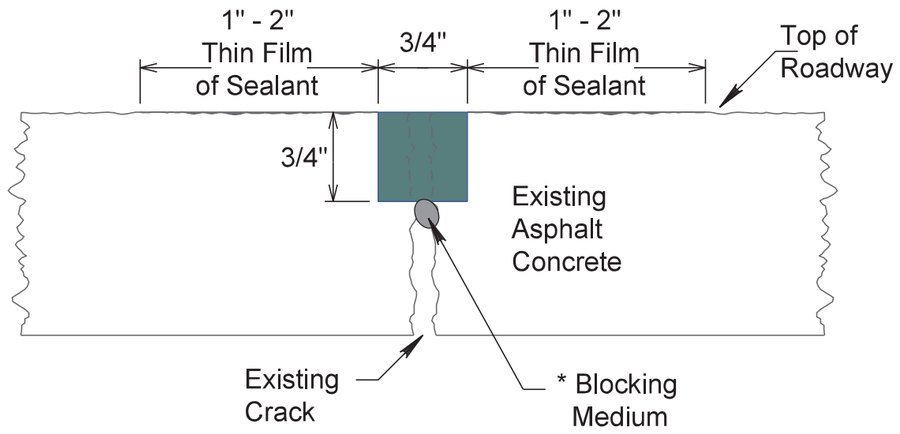
SD44
Douglas & Hutchinson Counties
MRM 330.54 -0.154 to MRM 348.24 +0.342

Begin MRM	End MRM	Feet of Transverse Cracks	Feet of Longitudinal Cracks	Feet of Additional Quantities	Total Feet Per Mile
330.54-	331.000	1062	3868	0	4930
331.000	332.000	3178	2104	0	5282
332.000	333.000	3160	2389	0	5549
333.000	334.000	3026	1818	0	4844
334.000	335.000	3094	1491	0	4585
335.000	336.000	2854	2375	0	5229
336.000	337.000	3602	3483	0	7085
337.000	338.000	3526	1755	0	5281
338.000	339.000	3288	2151	0	5439
339.000	340.000	3344	1374	0	4718
340.000	341.000	3598	2725	0	6323
341.000	342.000	3510	2546	0	6056
342.000	343.000	3484	2152	0	5636
343.000	344.000	3172	1402	0	4574
344.000	345.000	2942	752	0	3694
345.000	346.000	2956	2074	0	5030
346.000	347.000	2834	1756	0	4590
347.000	348.000	2854	825	0	3679
348.000	348.582	1588	899	0	2487
		57,072	37,939	0	**95,011**

SD50
Buffalo & Brule Counties
MRM 211.77 +0.006 to MRM 222.00 +0.274

Begin MRM	End MRM	Feet of Transverse Cracks	Feet of Longitudinal Cracks	Feet of Additional Quantities	Total Feet Per Mile
211.830	212.000	1050	272		1322
212.000	213.000	5805	3497		9302
213.000	214.000	5805	3498		9303
214.000	215.000	5850	4016		9866
215.000	216.000	4950	4073		9023
216.000	217.000	5040	3318		8358
217.000	218.000	5880	4006		9886
218.000	219.000	7080	5232		12312
219.000	220.000	6600	5339		11939
220.000	221.000	5520	5224		10744
221.000	222.000	4080	6179		10259
222.000	222.274	1350	542		1892
		59,010	45,196	0	**104,206**

TYPICAL RESERVOIR SECTION TRANSVERSE CRACK

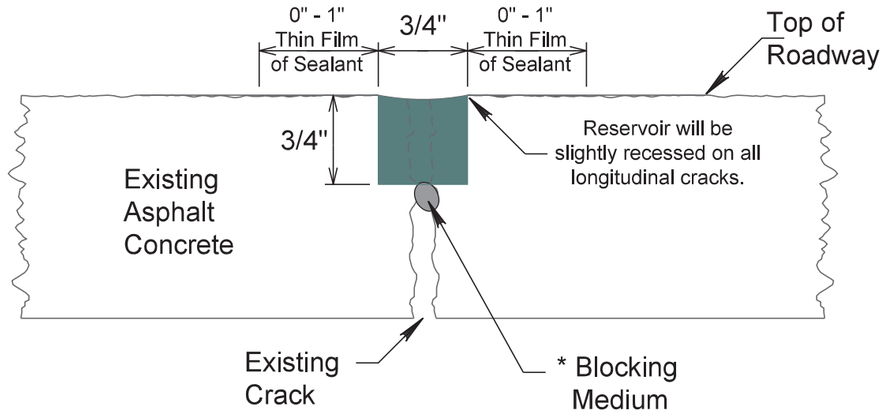


* Inert compressible material required for cracks 3/8" or more in width. The backer rod will be a nonmoisture absorbing, resilient material approximately 25 percent larger in diameter than the width of the joint to be sealed. The backer rod will be compatible with the sealant and no bond or reaction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

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"

April 2023

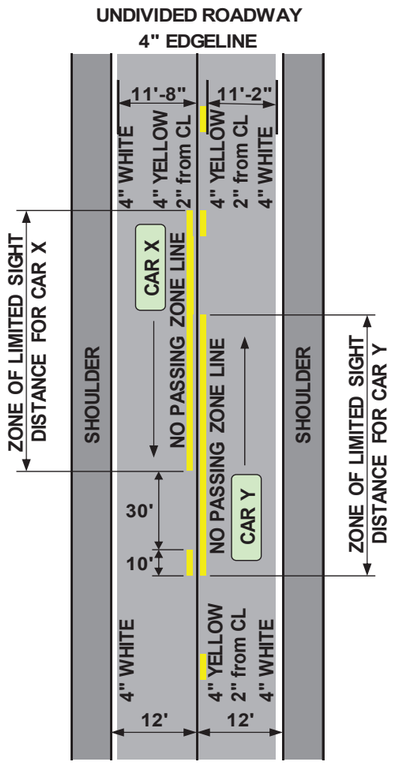
TYPICAL RESERVOIR SECTION LONGITUDINAL CRACK



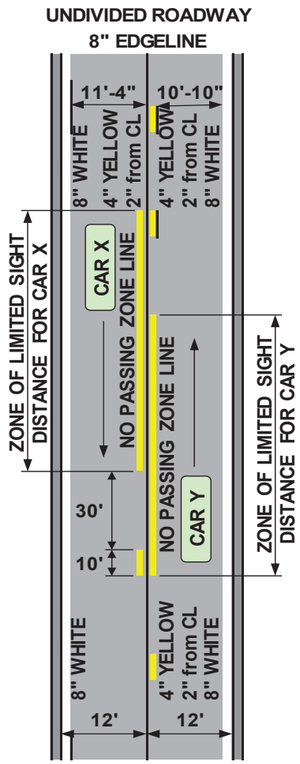
* Inert compressible material required for cracks 3/8" or more in width. The backer rod will be a nonmoisture absorbing, resilient material approximately 25 percent larger in diameter than the width of the joint to be sealed. The backer rod will be compatible with the sealant and no bond or reaction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

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"

April 2023



SD38
SD42
SD44
SD50



SD25

Application rates will be as follows:

UNDIVIDED ROADWAY	
ROUTES **SD38** **SD42** **SD44** **SD50**	**ROUTES** **SD25**
TWO LANE ROADWAY	
(Rate for one line)	
Solid Yellow Centerline Rate = 22.5 Gal/Pass-Mile	
Dashed Yellow Centerline Rate = 6.2 Gal/Pass-Mile	
Solid White Edgeline – 4” Rate = 22.5 Gal/Pass-Mile	Solid White Edgeline – 8” Rate = 45.0 Gal/Pass-Mile

Typical pavement marking as shown on this sheet and the following 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. The trailing warning vehicle will also be equipped with a truck mounted attenuator. This mobile work operation will be as per Standard Plate 634.06.

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	**PAVEMENT MARKING PAINT**	
	WHITE	**YELLOW**
SD25	**528**	**59**
SD38	**742**	**157**
SD42	**530**	**134**
SD44	**734**	**197**
SD50	**472**	**221**
TOTAL GALLONS	**3006**	**768**

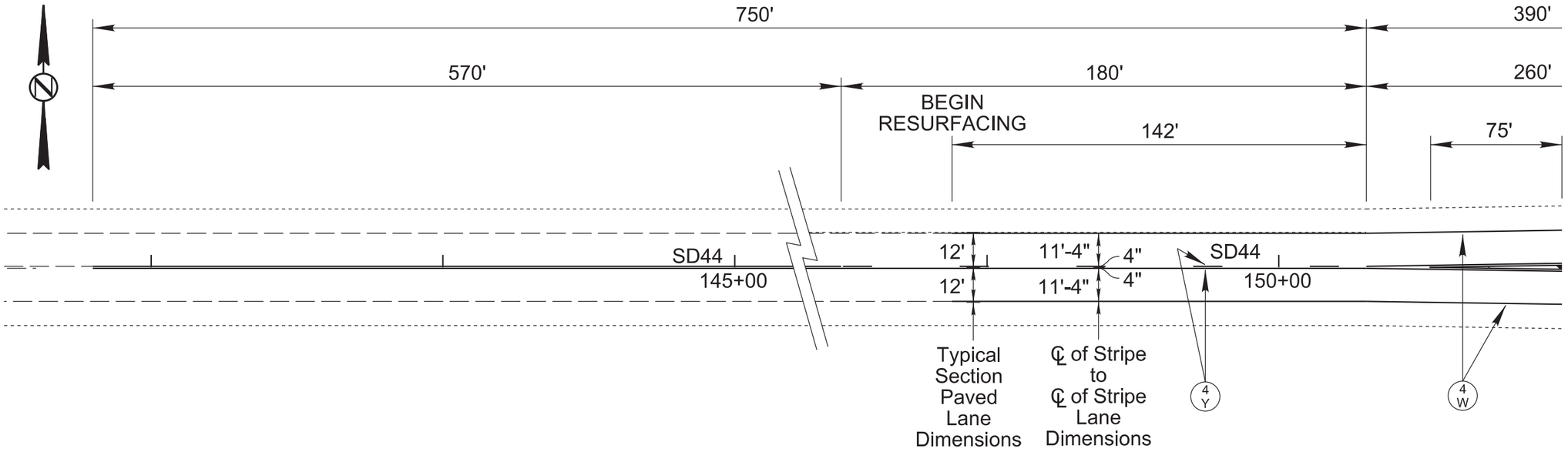
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	17	26

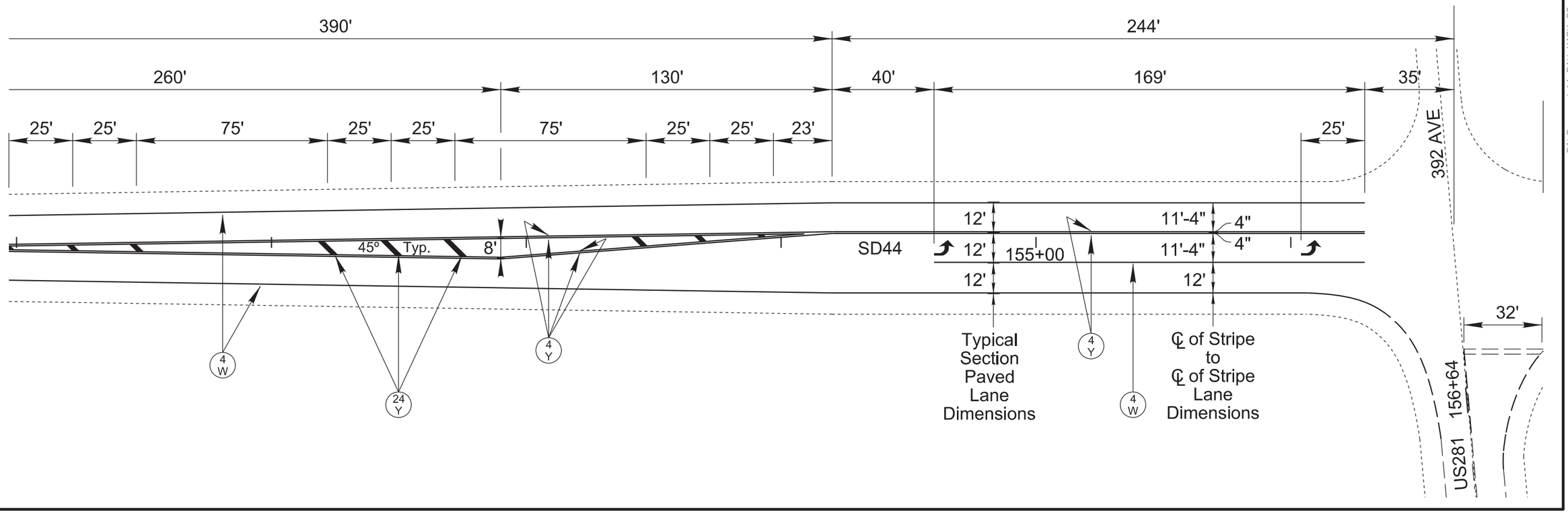
Plotting Date: 03/20/2026

PAVEMENT MARKING LAYOUT

SD44 - Approaches to East Jct US281 (1 of 3)

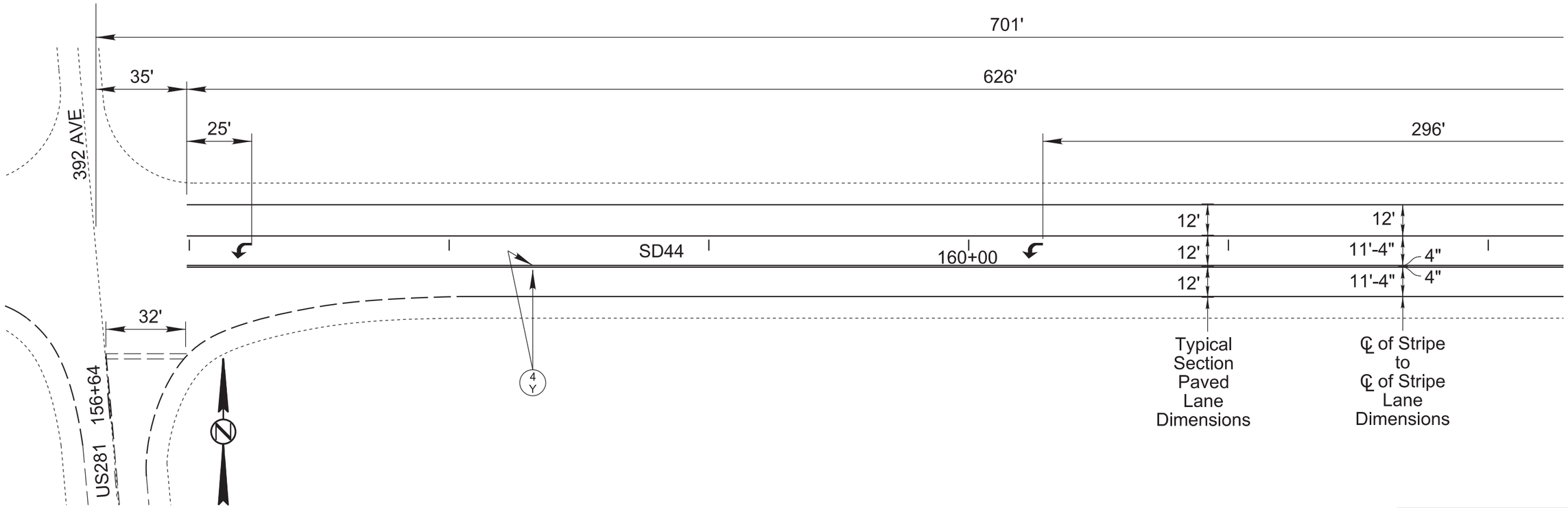
PAINT KEY	
ITEM	SYMBOL
4" White	4 W
4" Yellow	4 Y
24" White	24 W
24" Yellow	24 Y
Left Arrow	↰
Right Arrow	↱

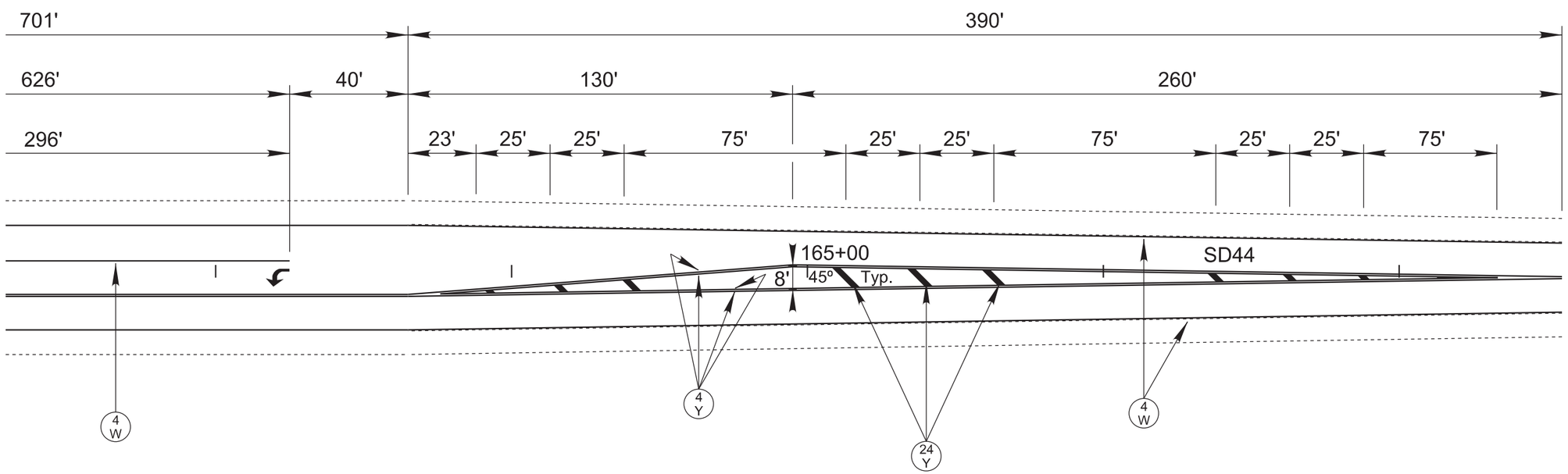




PAVEMENT MARKING LAYOUT

SD44 - Approaches to East Jct US281 (2 of 3)





PAINT KEY	
ITEM	SYMBOL
4" White	4 W
4" Yellow	4 Y
24" White	24 W
24" Yellow	24 Y
Left Arrow	↰
Right Arrow	↱

PLOT SCALE - 1:39.9999
PLOT NAME - 3
FILE - ...\44 PAV MARK 26 09WD.DGN
PLOTTED FROM - TRMI1INT06

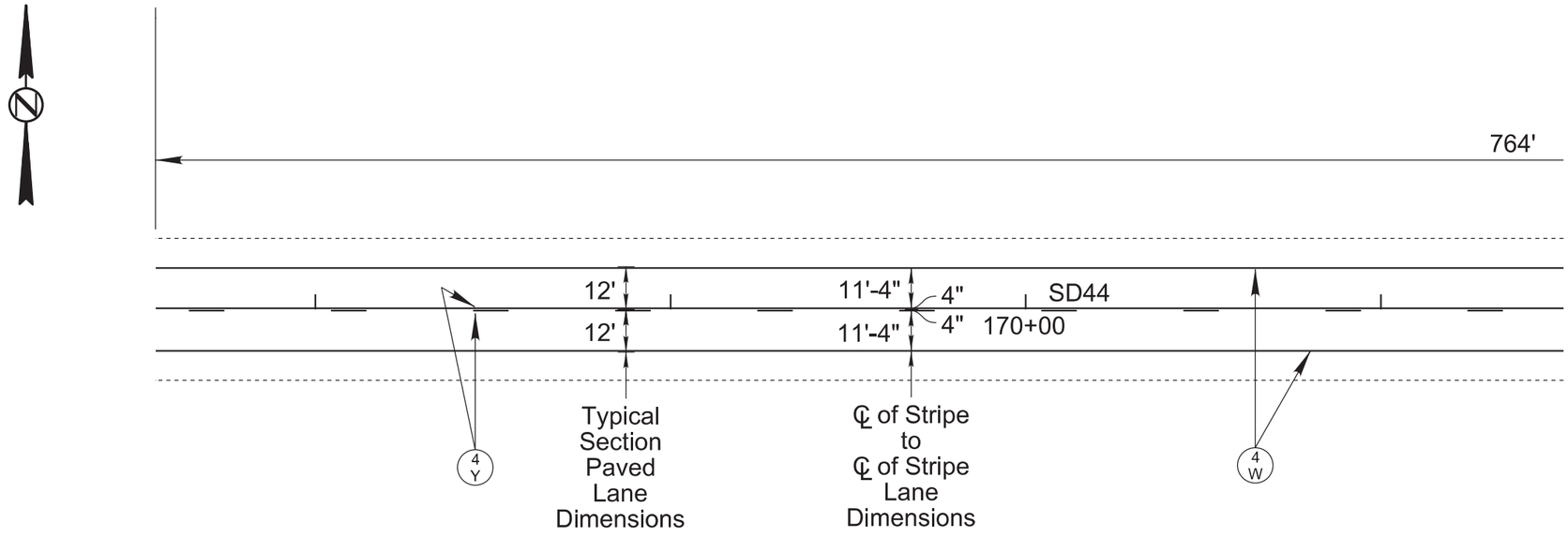
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	19	26

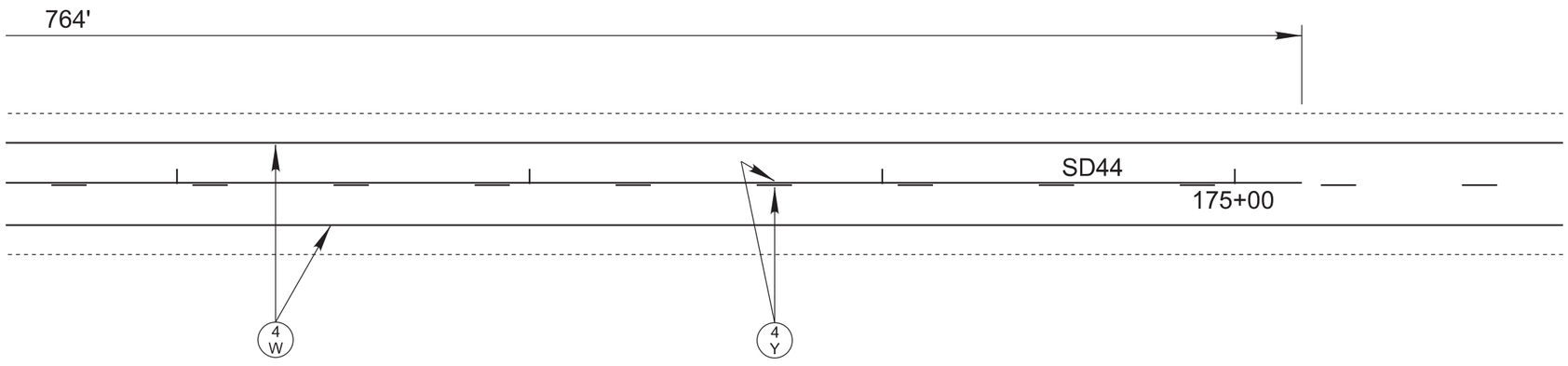
Plotting Date: 03/20/2026

PAVEMENT MARKING LAYOUT

SD44 - Approaches to East Jct US281 (3 of 3)

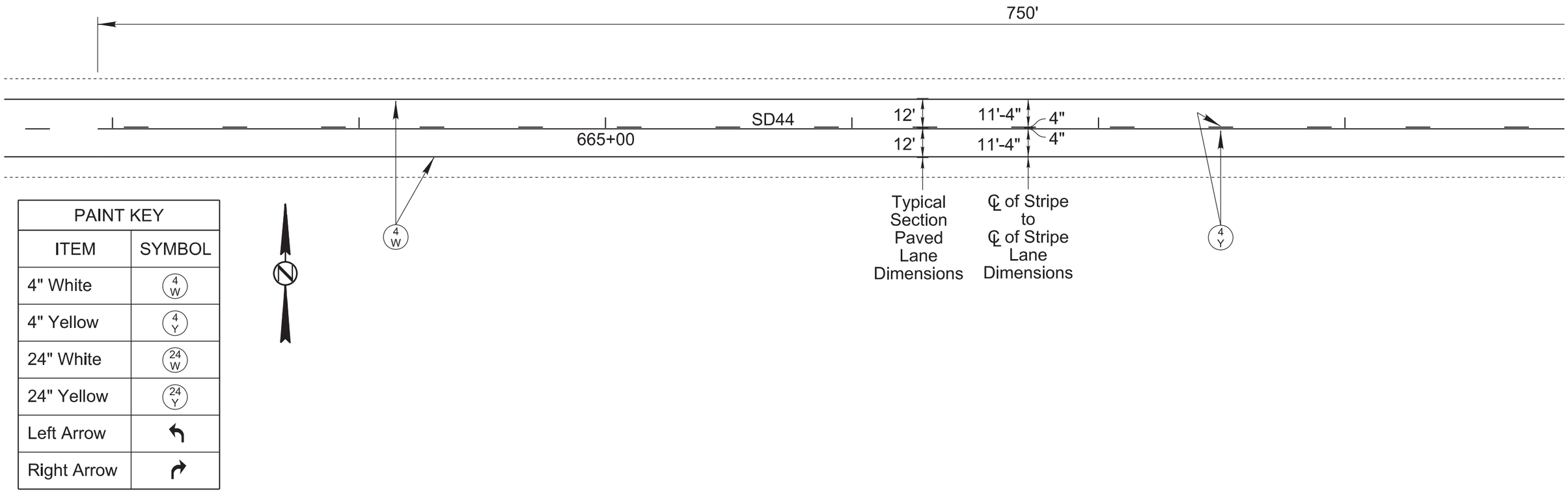
PAINT KEY	
ITEM	SYMBOL
4" White	4 W
4" Yellow	4 Y
24" White	24 W
24" Yellow	24 Y
Left Arrow	↰
Right Arrow	↱



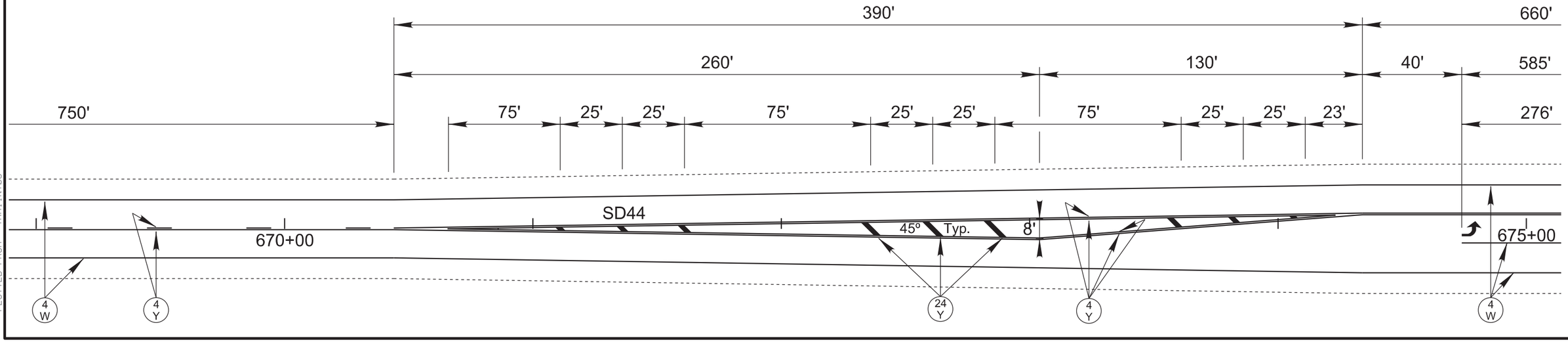


PAVEMENT MARKING LAYOUT

SD44 - Approaches to Jct Betts Road (1 of 3)

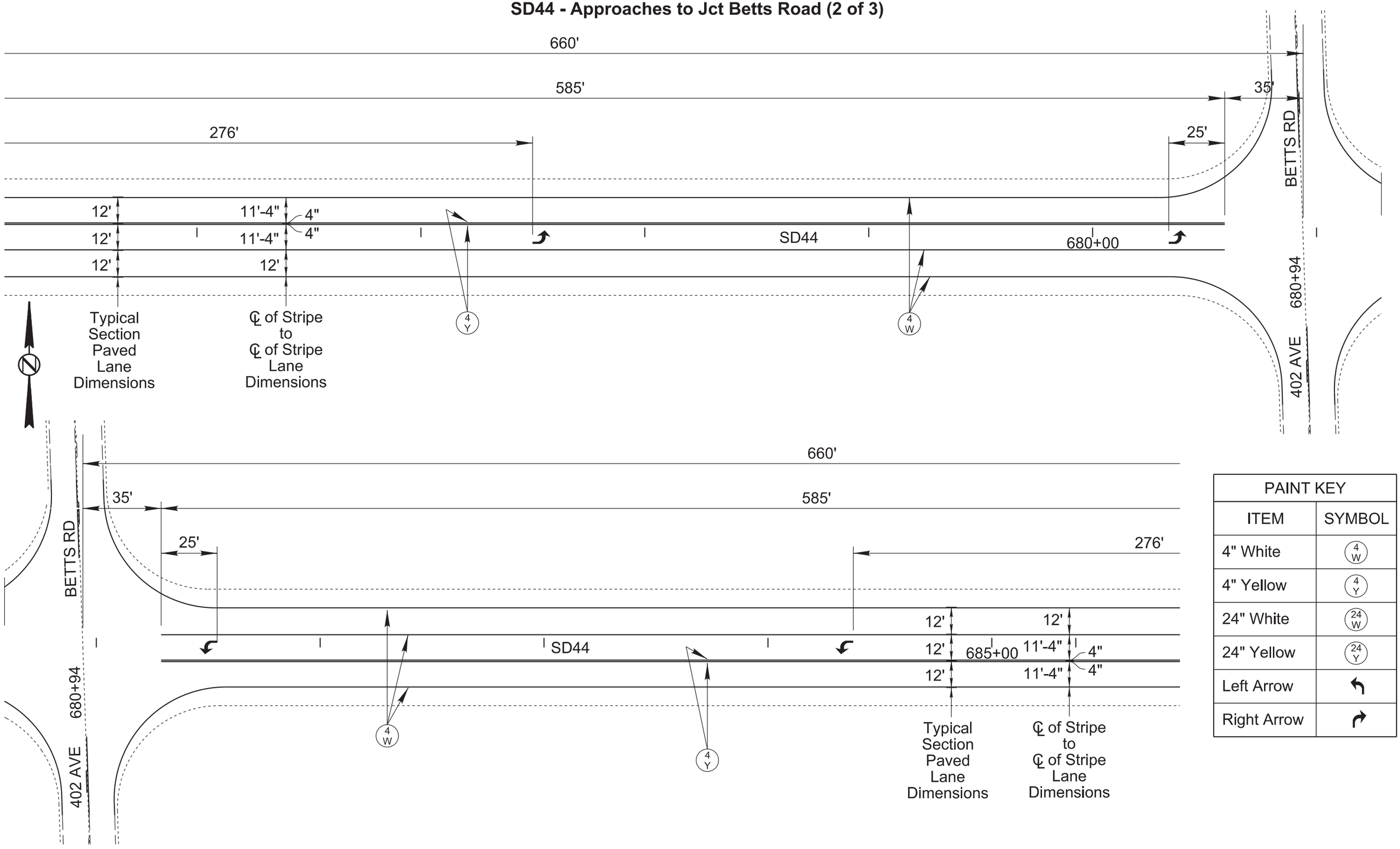


PAINT KEY	
ITEM	SYMBOL
4" White	4 W
4" Yellow	4 Y
24" White	24 W
24" Yellow	24 Y
Left Arrow	
Right Arrow	



PAVEMENT MARKING LAYOUT

SD44 - Approaches to Jct Betts Road (2 of 3)



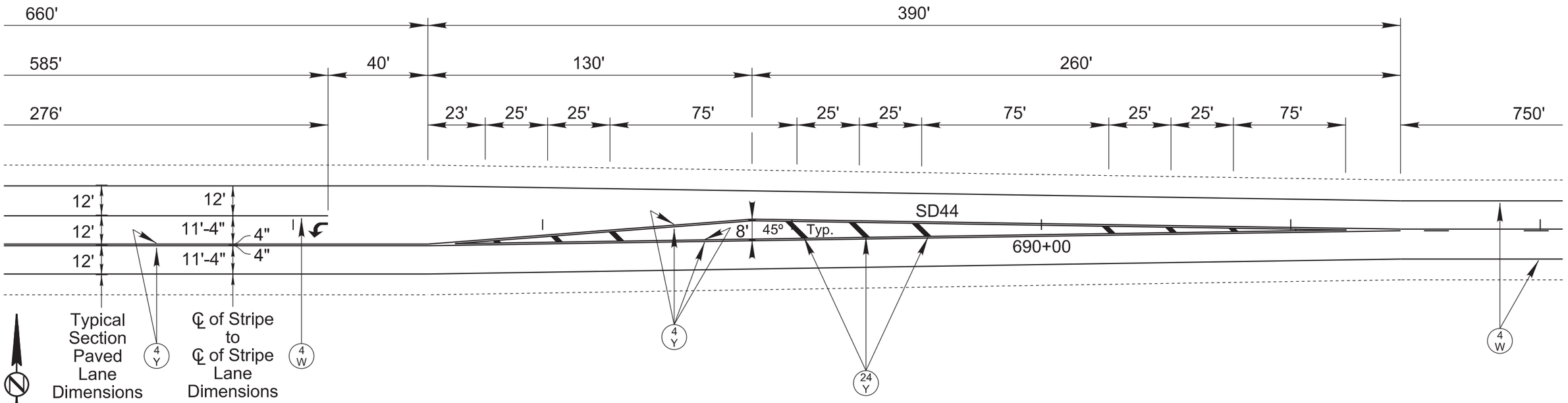
PAINT KEY	
ITEM	SYMBOL
4" White	4 W
4" Yellow	4 Y
24" White	24 W
24" Yellow	24 Y
Left Arrow	↰
Right Arrow	↱

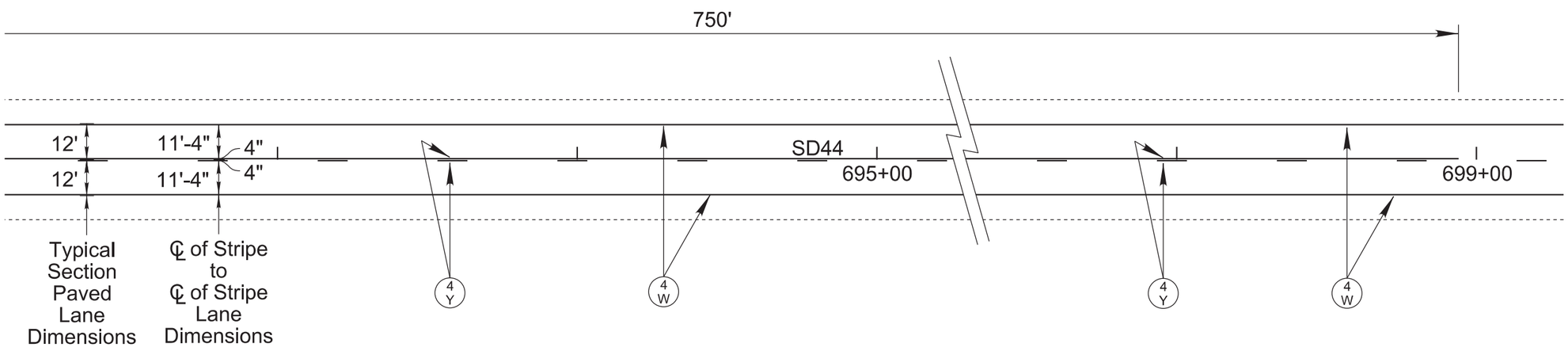
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	22	26

Plotting Date: 03/20/2026

PAVEMENT MARKING LAYOUT

SD44 - Approaches to Jct Betts Road (3 of 3)





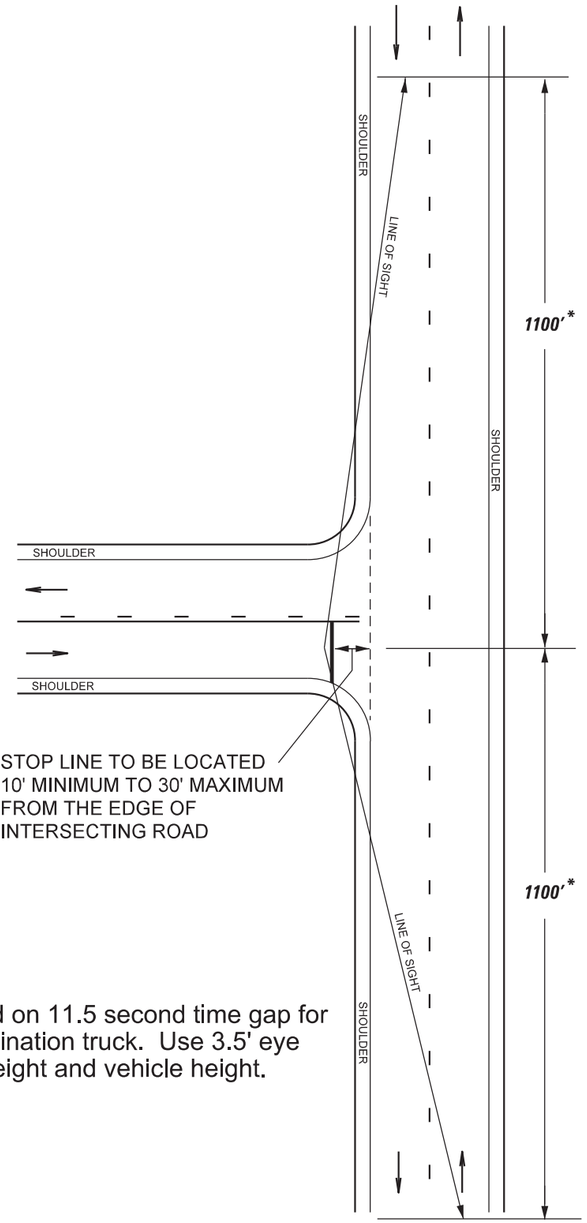
PAINT KEY	
ITEM	SYMBOL
4" White	4 W
4" Yellow	4 Y
24" White	24 W
24" Yellow	24 Y
Left Arrow	↰
Right Arrow	↱

PLOT SCALE - 1:39.9999

PLOTTED FROM - TRM1INT06

PLOT NAME - 6

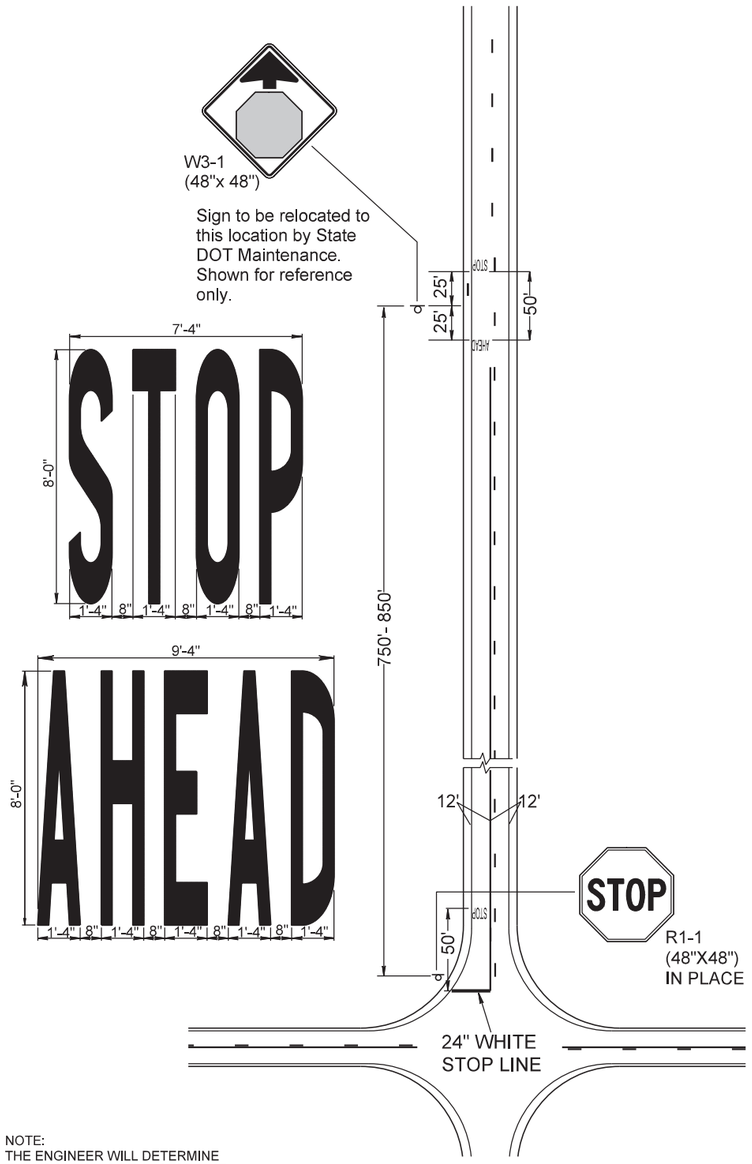
FILE - ...\44 PAV MARK 26 09WD.DGN



* - Based on 11.5 second time gap for combination truck. Use 3.5' eye height and vehicle height.

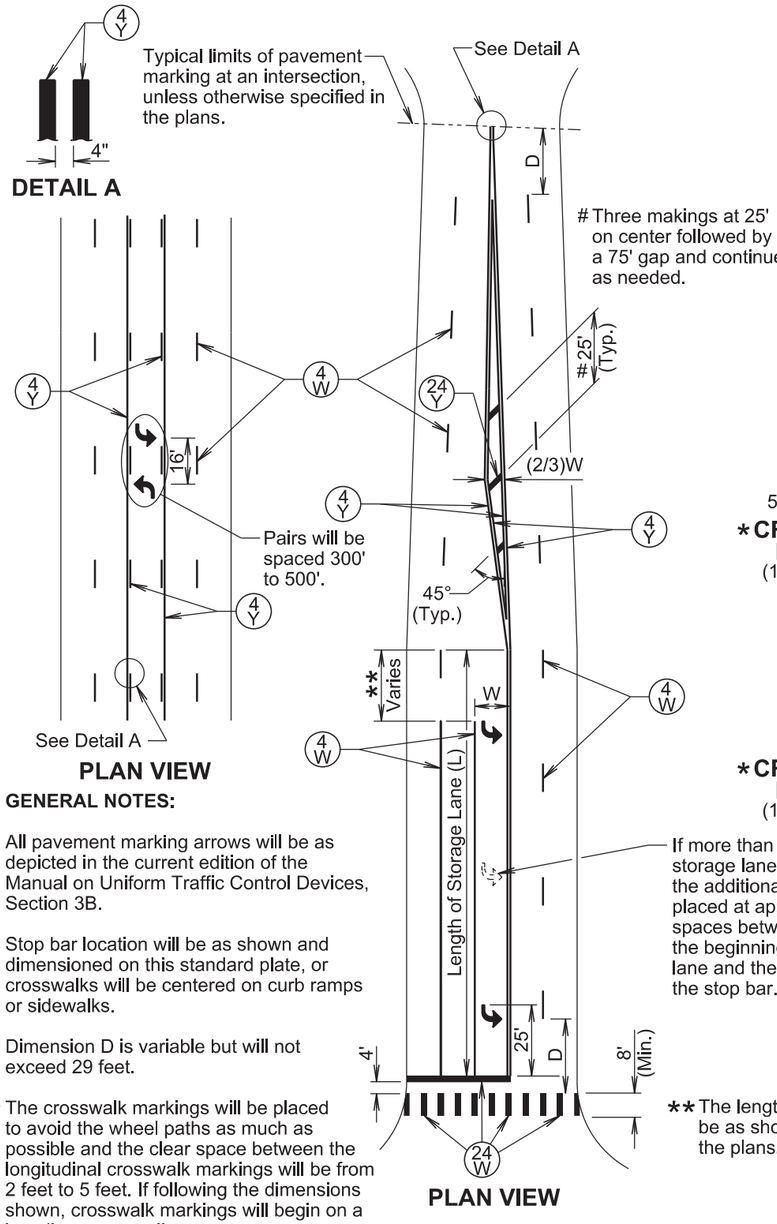
STOP LINE PAVEMENT MARKING INSTALLATION

INTERSECTION APPROACH PAVEMENT MARKING (Typical)



NOTE:
THE ENGINEER WILL DETERMINE THE LOCATION OF THE STOP LINE.

Revised 12-28-20, PEH



KEY	ITEM
4 W	4" White
4 Y	4" Yellow
12 W	12" White
24 W	24" White
24 Y	24" Yellow
	Arrow

GENERAL NOTES:

All pavement marking arrows will be as depicted in the current edition of the Manual on Uniform Traffic Control Devices, Section 3B.

Stop bar location will be as shown and dimensioned on this standard plate, or crosswalks will be centered on curb ramps or sidewalks.

Dimension D is variable but will not exceed 29 feet.

* The crosswalk markings will be placed to avoid the wheel paths as much as possible and the clear space between the longitudinal crosswalk markings will be from 2 feet to 5 feet. If following the dimensions shown, crosswalk markings will begin on a lane line or centerline.

March 31, 2024

Published Date: 2026	SDDOT	PAVEMENT MARKINGS FOR ADJACENT INTERSECTIONS AND CENTER TURN LANE	PLATE NUMBER 633.01 Sheet 1 of 1

* 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.

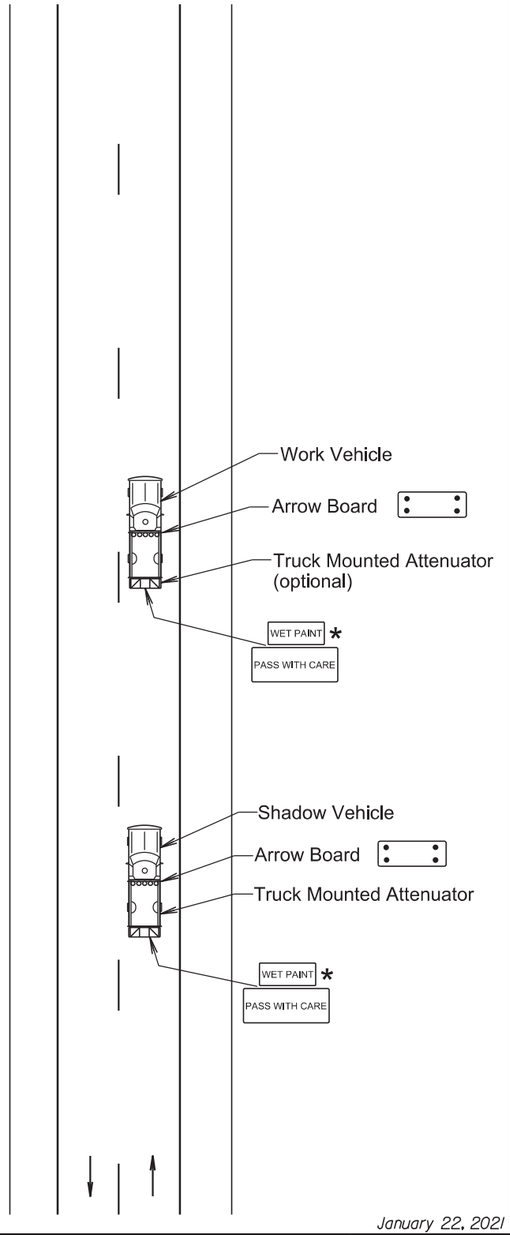
Shadow and Work vehicles will display high-intensity rotating, flashing, oscillating, or strobe lights, flags, signs, or arrow boards.

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

Published Date: 2025	SDDOT	MOBILE OPERATIONS ON 2-LANE ROAD	PLATE NUMBER 634.06
			Sheet 1 of 1

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.

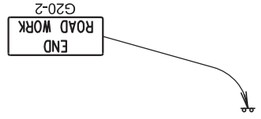
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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.

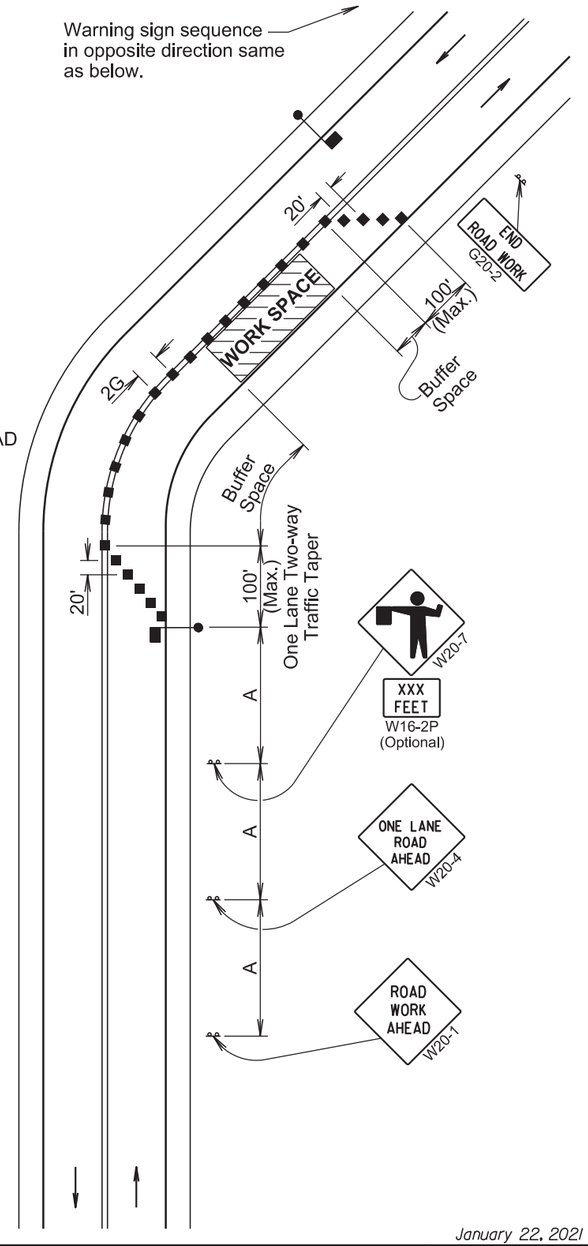
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.



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.



January 22, 2021

Published Date: 2026	SDDOT	LANE CLOSURE WITH FLAGGER PROVIDED	PLATE NUMBER 634.23
			Sheet 1 of 1

ITEMIZED LIST FOR TRAFFIC CONTROL (CONTINUED)

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0021(190)	26	26

SD25 – HANSON COUNTY

		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
SPECIAL	WAIT FOLLOW PILOT CAR	2	30" x 18"	3.8	7.6
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			112.6

SD37 – HUTCHINSON COUNTY

		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
SPECIAL	WAIT FOLLOW PILOT CAR	2	30" x 18"	3.8	7.6
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			112.6

SD38 – McCOOK & MINNEHAHA COUNTIES

		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
SPECIAL	WAIT FOLLOW PILOT CAR	2	30" x 18"	3.8	7.6
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			112.6

SD42 – McCOOK COUNTY

		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
SPECIAL	WAIT FOLLOW PILOT CAR	2	30" x 18"	3.8	7.6
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			112.6

SD44 – DOUGLAS & HUTCHINSON COUTIES

		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
SPECIAL	WAIT FOLLOW PILOT CAR	2	30" x 18"	3.8	7.6
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			112.6

SD50 – BUFFALO & BRULE COUNTIES

		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
SPECIAL	WAIT FOLLOW PILOT CAR	2	30" x 18"	3.8	7.6
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
		CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT			112.6