

STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0031(58)	1	13

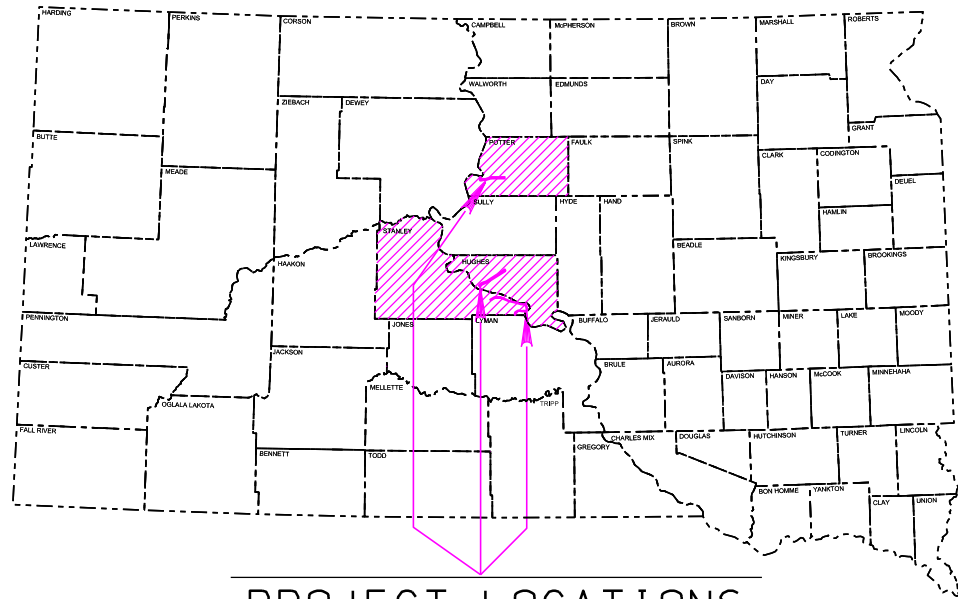
Plotting Date: 12/04/2023

PLANS FOR PROPOSED  
**PROJECT NH-P 0031(58)**  
**US HWY 14, US HWY 212, SD HWY 1806**  
**HUGHES, POTTER, & STANLEY COUNTIES**

ROUT AND SEAL  
PCN 096K

INDEX OF SHEETS

- 1-3 General Layout w/ Index
- 4-6 Estimates w/ General Notes and Tables
- 7-9 Fixed Location Signs
- 10 Typical Crack Seal Reservoir
- 11-13 Standard Plates



PROJECT LOCATIONS

DESIGN DESIGNATION - SEGMENT 1A (US14E)

AADT (2022)	2076
AADT (2042)	3090
DHV	399
D	50%
DHV T%	3.2%
AADT T%	7.0%
V	55 mph

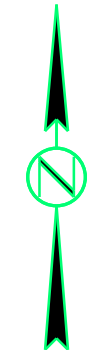
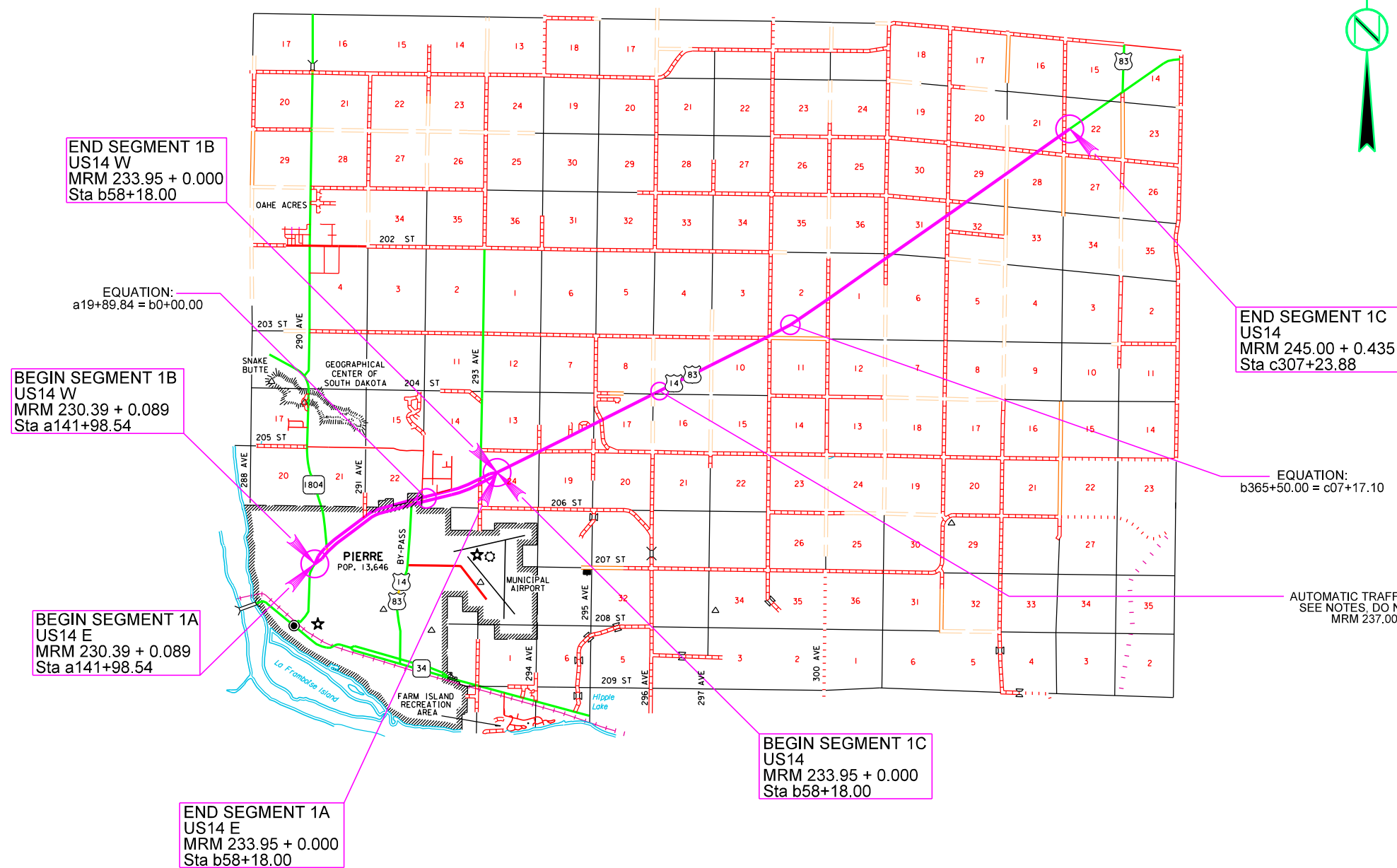
DESIGN DESIGNATION - SEGMENT 1B (US14W)

AADT (2022)	2076
AADT (2042)	3089
DHV	399
D	50%
DHV T%	3.2%
AADT T%	6.9%
V	55 mph

DESIGN DESIGNATION - SEGMENT 1C (US14)

AADT (2022)	2910
AADT (2042)	4525
DHV	585
D	50%
DHV T%	8.0%
AADT T%	17.5%
V	65 mph

SEGMENT 1A GROSS LENGTH:	18,015.36 FT	3.412 MI
LENGTH OF EXCEPTIONS:	0 FT	0 MI
NET LENGTH:	18,015.36 FT	3.412 MI
SEGMENT 1B GROSS LENGTH:	18,073.44 FT	3.423 MI
LENGTH OF EXCEPTIONS:	0 FT	0 MI
NET LENGTH:	18,073.44 FT	3.423 MI
SEGMENT 1C GROSS LENGTH:	60,767.52 FT	11.509 MI
LENGTH OF EXCEPTIONS:	0 FT	0 MI
NET LENGTH:	60,767.52 FT	11.509 MI



PLOT SCALE - 1"=200'

PLOTTED FROM - TRP25584

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PLOT NAME - 4

DESIGN DESIGNATION - SEGMENT 2 (SD1806)

AADT (2022) 190  
 AADT (2042) 275  
 DHV 44  
 D 50%  
 DHV T% 3.7%  
 AADT T% 8.1%  
 V 65 mph

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	NH-P 0031(58)	2	13

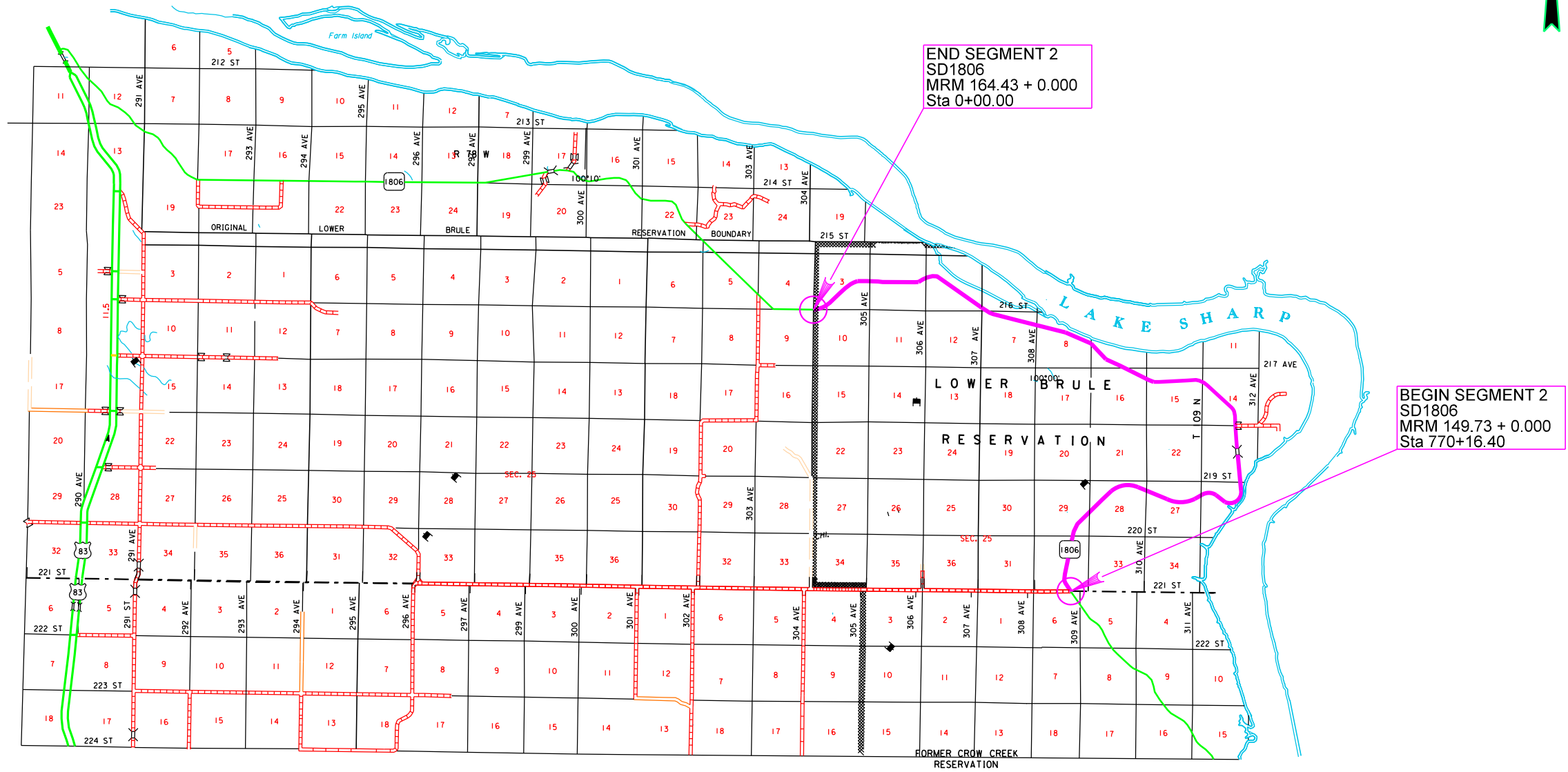
Plotting Date: 12/04/2023

PLOT SCALE - 1"=200'

PLOT NAME - 5

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PLOTTED FROM - IRPR25584



SEGMENT 2 GROSS LENGTH: 76,871.52 FT 14.559 MI  
 LENGTH OF EXCEPTIONS: 0 FT 0 MI  
 NET LENGTH: 76,871.52 FT 14.559 MI

DESIGN DESIGNATION - SEGMENT 3 (US212)

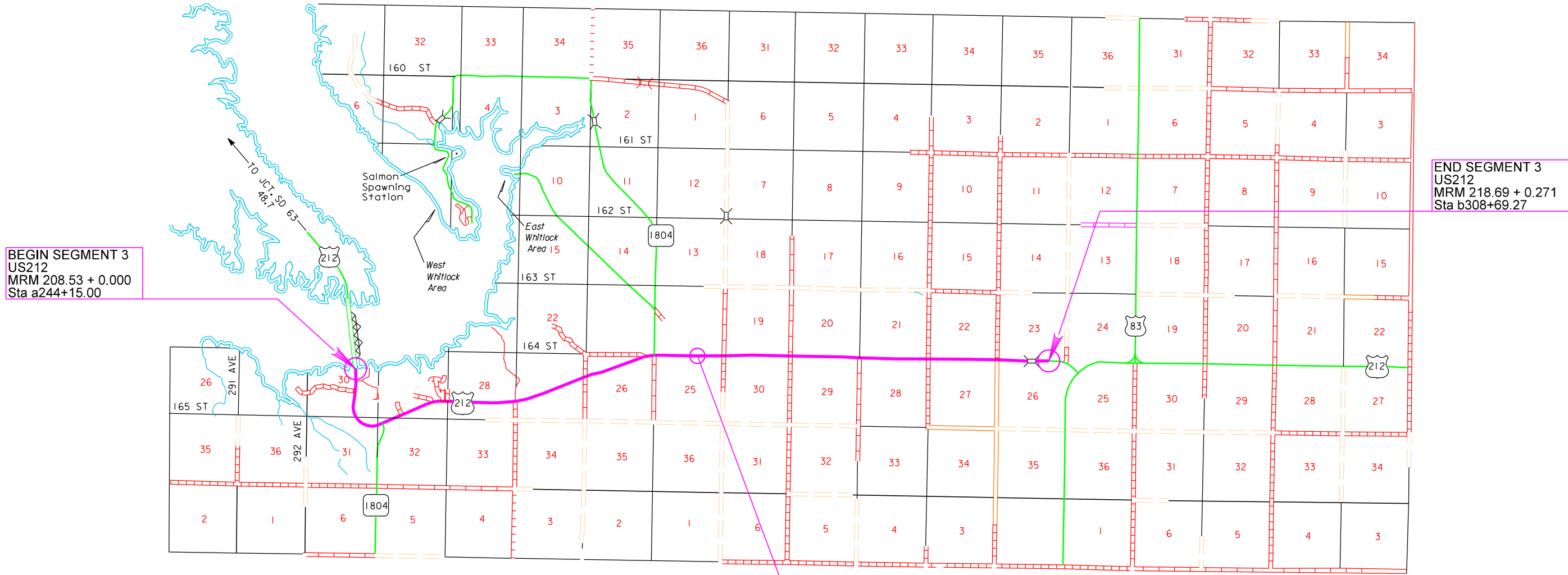
AADT (2022) 841  
 AADT (2042) 1120  
 DHV 148  
 D 50%  
 DHV T% 10.3%  
 AADT T% 22.6%  
 V 65 mph

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0031(58)	3	13

Plotting Date: 12/04/2023

PLOT SCALE - 1:200

PLOT NAME - 6



**BEGIN SEGMENT 3**  
 US212  
 MRM 208.53 + 0.000  
 Sta a244+15.00

**END SEGMENT 3**  
 US212  
 MRM 218.69 + 0.271  
 Sta b308+69.27

EQUATION:  
 $a429+65.57 = b44+00.00$

SEGMENT 3 GROSS LENGTH: 58,608.00 FT 11.100 MI  
 LENGTH OF EXCEPTIONS: 0 FT 0 MI  
 NET LENGTH: 58,608.00 FT 11.100 MI

PLOTTED FROM - TRPR25584

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## ESTIMATE OF QUANTITIES

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
350E0010	Asphalt Concrete Crack Sealing	90,634	Lb
634E0010	Flagging	240.0	Hour
634E0020	Pilot Car	100.0	Hour
634E0110	Traffic Control Signs	1,332.0	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS

## SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications, and Special Provisions as included in the Proposal.

## 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.

## 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/media/documents/EnvironmentalProceduresManual.pdf> >

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 EAGLE

Bald 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.

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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.



**COMMITMENT I: HISTORIC PRESERVATION OFFICE CLEARANCES (CONT.)**

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 100 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 CONTRACTS**

A separate project, NH-0031(59), PCN 0973 is being undertaken by the Department that interferes with this contract. Project NH-0031(59) is an Asphalt Surface Treatment on parts of Segments 1A and 1B and all of Segment 1C.

The Contractor will schedule the work so that this project is completed prior to Project NH-0031(59), so as not to interfere with or hinder the progress of the work performed by other Contractors on the other project. The Contractor will coordinate with the Department and the 0973 contractor to establish the best course of action.

**TRAFFIC RECORDER**

The SDDOT Office of Inventory Management & Research has a permanent traffic counter installation located on US14 (Segment 1) at MRM 237.00 + 0.072. The Contractor will not damage the existing loops, pull boxes, conduit, or electronics cabinet. Any pull boxes, conduit, cabinet or loops damaged during the project will be replaced by the Contractor at no expense to the Department. The loops are visible on the roadway; if necessary, SDDOT Office of Inventory Management and Research will aid in locating the loops. Contact (605)773-6644 or (605)773-3278 to notify the office of a request to locate the ATR.

**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. All construction operations will be conducted in the general direction of traffic movement.

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

Fixed location signing placed more than 4 calendar days prior to the start of construction will be covered or laid down until the time of construction. The covers must be approved by the Engineer prior to installation. The cost of materials, labor, and equipment necessary to complete this work will be incidental to other contract items. No separate payment will be made. All fixed location signs, sign posts, and breakaway bases will be removed within 7 calendar days following pavement marking.

The Contractor will notify businesses/homeowners a minimum of two weeks prior to construction to inform them of upcoming construction and again a minimum of 48 hours prior to any blocked access to make appropriate arrangements.

**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".

**TRAFFIC CONTROL SIGNS**

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

**ITEMIZED LISTS FOR TRAFFIC CONTROL SIGNS**

**Segment 1A/1B/1C**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
R2-1	SPEED LIMIT 45	2	24" x 30"	5.0	10.0
R2-1	SPEED LIMIT 55	1	24" x 30"	5.0	5.0
W3-5	SPEED REDUCTION AHEAD (45 MPH)	2	48" x 48"	16.0	32.0
W4-2	LEFT or RIGHT LANE ENDS (two each) (symbol)	4	48" x 48"	16.0	64.0
W16-2P	1000 FEET (supplemental distance plaque)	2	30" x 24"	5.0	10.0
W20-1	ROAD WORK AHEAD	26	48" x 48"	16.0	416.0
W20-4	ONE LANE ROAD AHEAD	2	48" x 48"	16.0	32.0
W20-5	LEFT or RIGHT LANE CLOSED AHEAD (two each)	4	48" x 48"	16.0	64.0
W20-7	FLAGGER (symbol)	2	48" x 48"	16.0	32.0
SPECIAL	WAIT FOLLOW PILOT CAR	6	30" x 18"	3.8	22.8
G20-1	ROAD WORK NEXT 15 MILES	2	36" x 18"	4.5	9.0
G20-1	ROAD WORK NEXT 7 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
<b>CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT</b>					<b>714.8</b>

**Segment 2**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W16-2P	1000 FEET (supplemental distance plaque)	2	30" x 24"	5.0	10.0
W20-1	ROAD WORK AHEAD	6	48" x 48"	16.0	96.0
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
G20-1	ROAD WORK NEXT 15 MILES	2	36" x 18"	4.5	9.0
G20-1	ROAD WORK NEXT 7 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
<b>CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT</b>					<b>204.6</b>

**Segment 3**

SIGN CODE	SIGN DESCRIPTION	CONVENTIONAL ROAD			
		NUMBER	SIGN SIZE	SQFT PER SIGN	SQFT
W16-2P	1000 FEET (supplemental distance plaque)	2	30" x 24"	5.0	10.0
W20-1	ROAD WORK AHEAD	19	48" x 48"	16.0	304.0
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
G20-1	ROAD WORK NEXT 11 MILES	2	36" x 18"	4.5	9.0
G20-1	ROAD WORK NEXT 5 MILES	2	36" x 18"	4.5	9.0
G20-2	END ROAD WORK	2	36" x 18"	4.5	9.0
<b>CONVENTIONAL ROAD TRAFFIC CONTROL SIGNS SQFT</b>					<b>412.6</b>

**BLOCKING MEDIUM MATERIAL**

All costs for furnishing and placing the blocking material medium will be incidental to the contract unit price per pound for Asphalt Concrete Crack Sealing.

**BLOTTING MATERIAL**

Blotting material shall be placed over the sealant material immediately following placement of sealant on all cracks.

**ESTIMATED CRACK SEALING**

All work shall meet the construction requirements detailed in Section 350. The actual quantity used in the field will be the basis for Contractor payment, with no adjustment in contract unit price allowed.

All work will be performed in accordance with the "Typical Reservoir Section" as detailed on page 10.

Longitudinal centerline and longitudinal lane cracks will be routed so that there is **no** over band present at the crack surface.

Transverse cracks will be routed so that there is a **minimal** amount of over band present at the crack surface.

Segment 1A/1B/1C (US14) consists of a Class S Asphalt Concrete surface. All cracks on this segment will be routed so that there is **no** over band present at the crack surface. The Contractor will coordinate with the Engineer to determine if some cracks are small enough to not require a rout & seal.

No routing will occur when within 1 foot of the top of the slough.

Revised 01/11/2024 JDC

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
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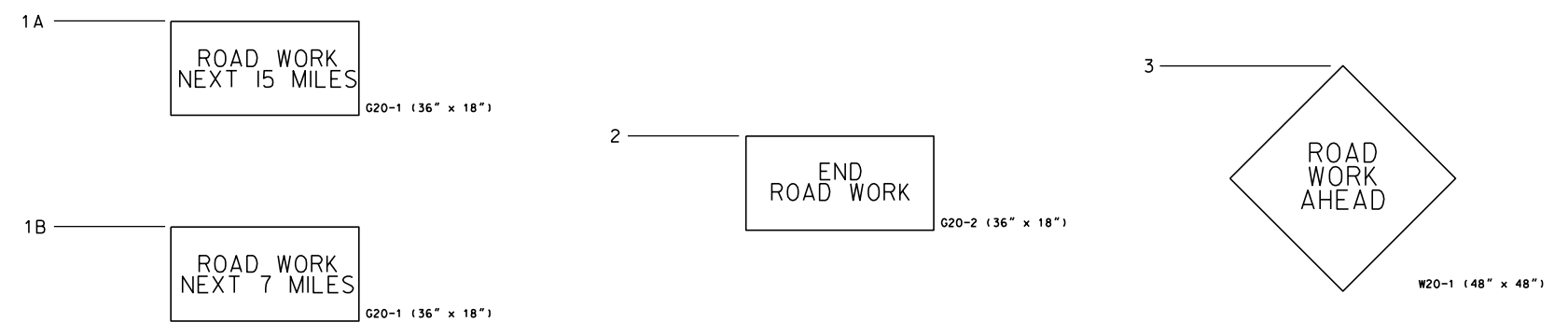
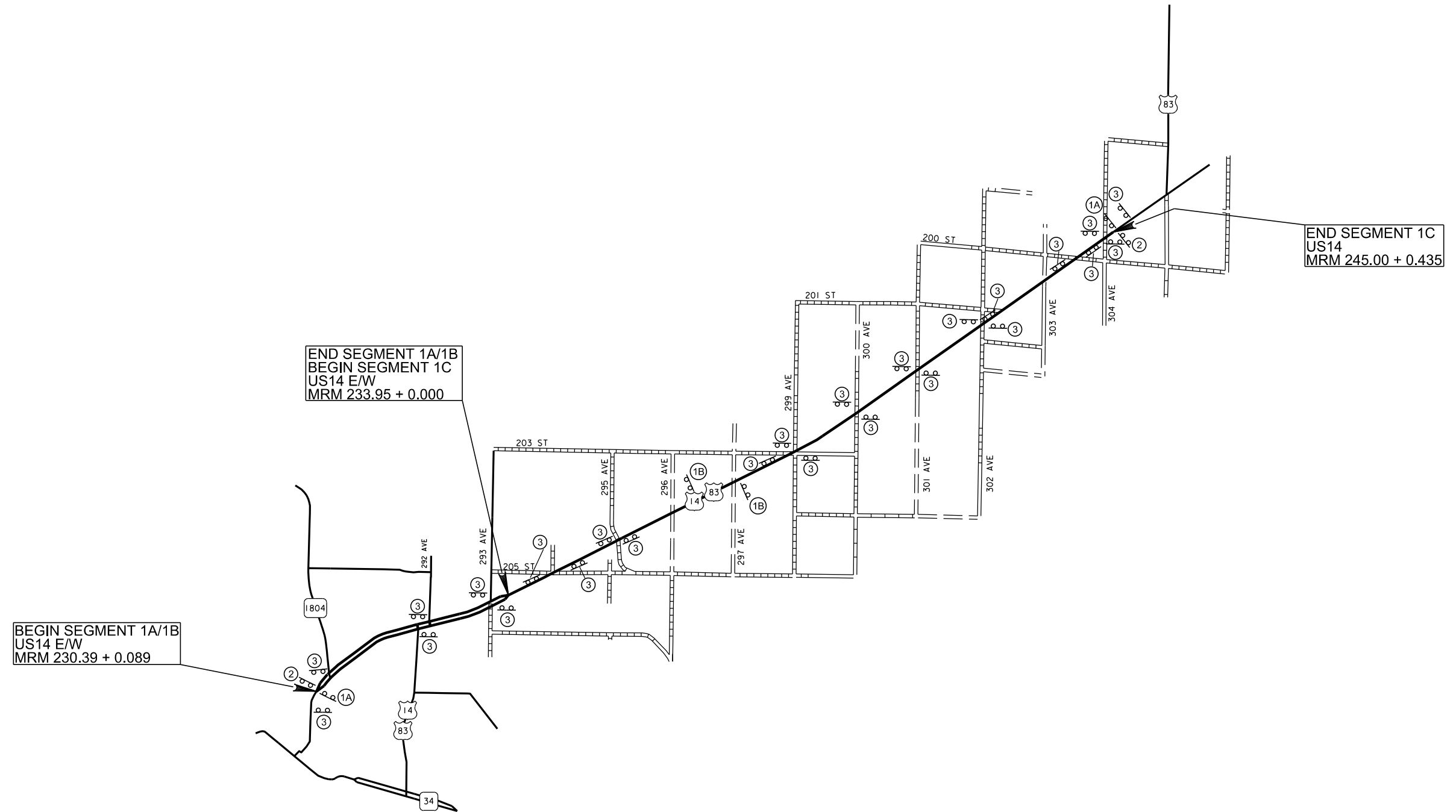
ROUTE	MRM TO MRM	APPROX. FEET TO BE ROUTED	APPROX. CRACK SEALANT (LBS)
US14E – Segment 1A	230.39 + 0.089 to 233.95 + 0.000	2,304	1,936
US14W- Segment 1B	230.39 + 0.089 to 233.95 + 0.000	14,354	12,058
US14 – Segment 1C	233.95 + 0.000 to 245.00 + 0.435	17,950	15,078
SD1806 – Segment 2	149.73 + 0.000 to 164.43 + 0.000	5,954	5,002
US212 – Segment 3	208.53 + 0.000 to 218.69 + 0.271	67,333	56,560
<b>TOTALS:</b>		<b>107,895</b>	<b>90,634</b>

# FIXED LOCATION SIGN LAYOUT

SEGMENT 1A/1B/1C - US14 - NOT TO SCALE

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0031(58)	7	13

Plotting Date: 12/04/2023



Plot Scale - 1:200

Plotted From - TRPR25584

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# FIXED LOCATION SIGN LAYOUT

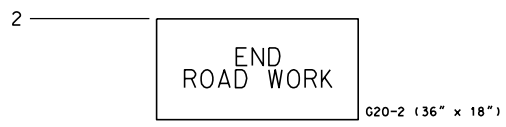
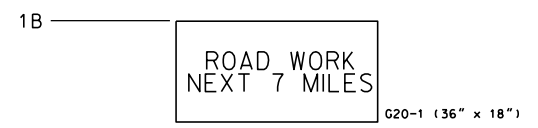
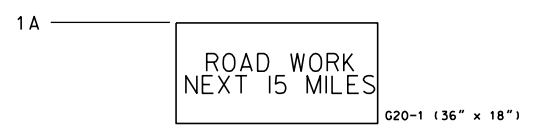
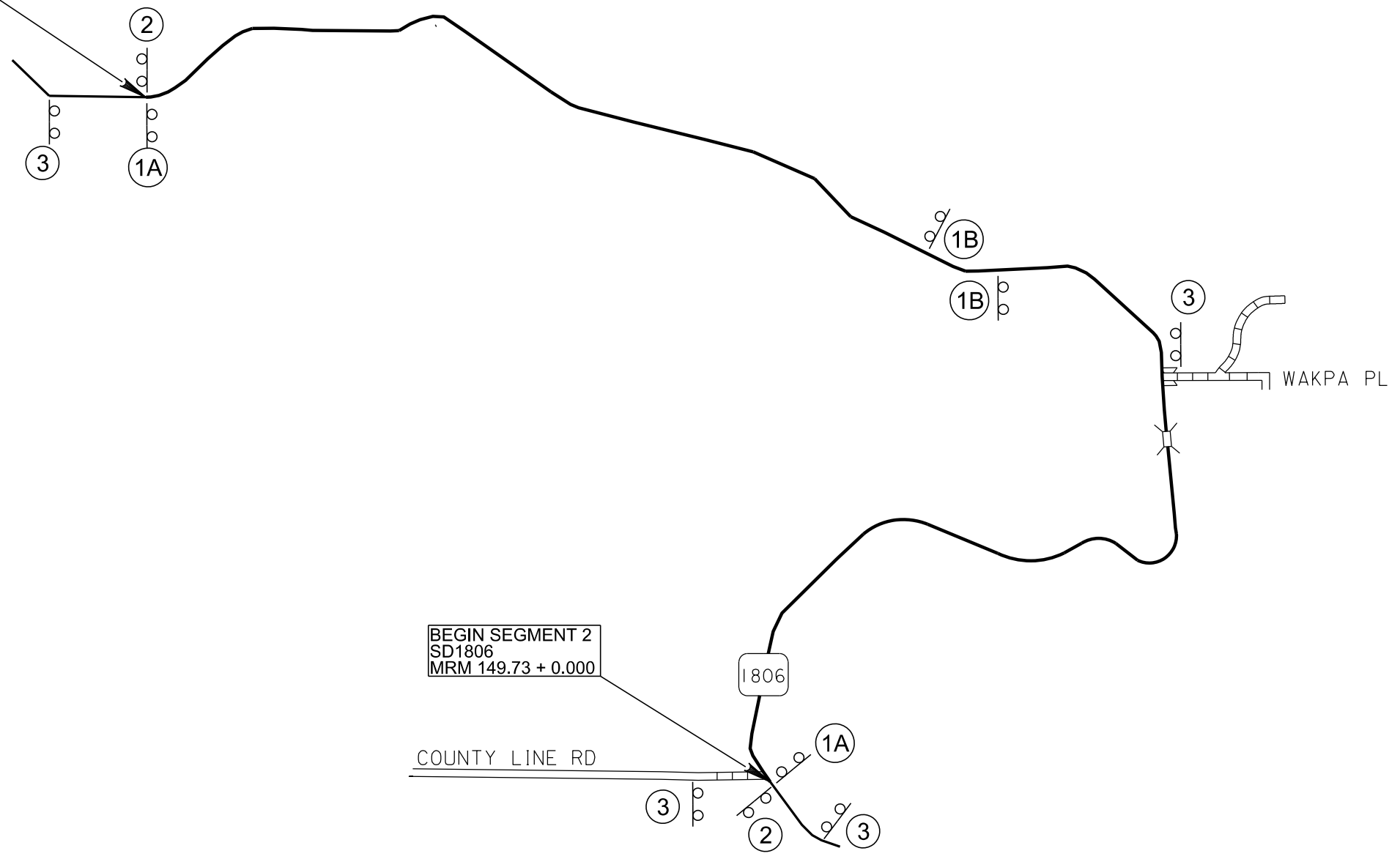
SEGMENT 2 - SD1806 - NOT TO SCALE

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0031(58)	8	13

Plotting Date: 12/04/2023



END SEGMENT 2  
SD1806  
MRM 164.43 + 0.000



Plot Scale - 1:200

Plotted From - TRPR25584

File - ...Istan096K098K\_FixedSign.dgn

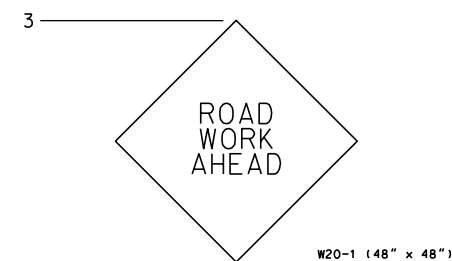
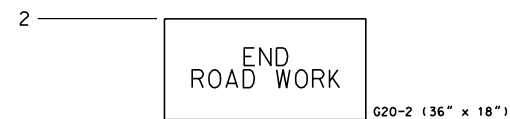
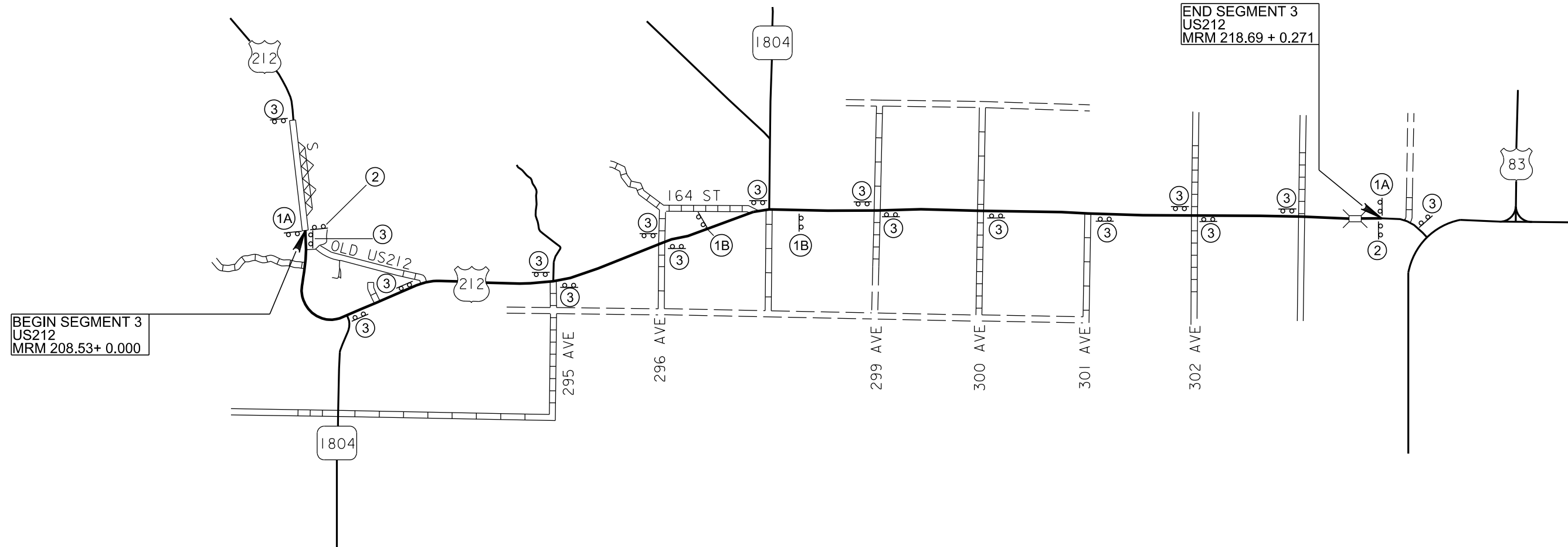


# FIXED LOCATION SIGN LAYOUT

## SEGMENT 3 - US212 - NOT TO SCALE

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH-P 0031(58)	9	13

Plotting Date: 12/04/2023



Plot Scale - 1:200

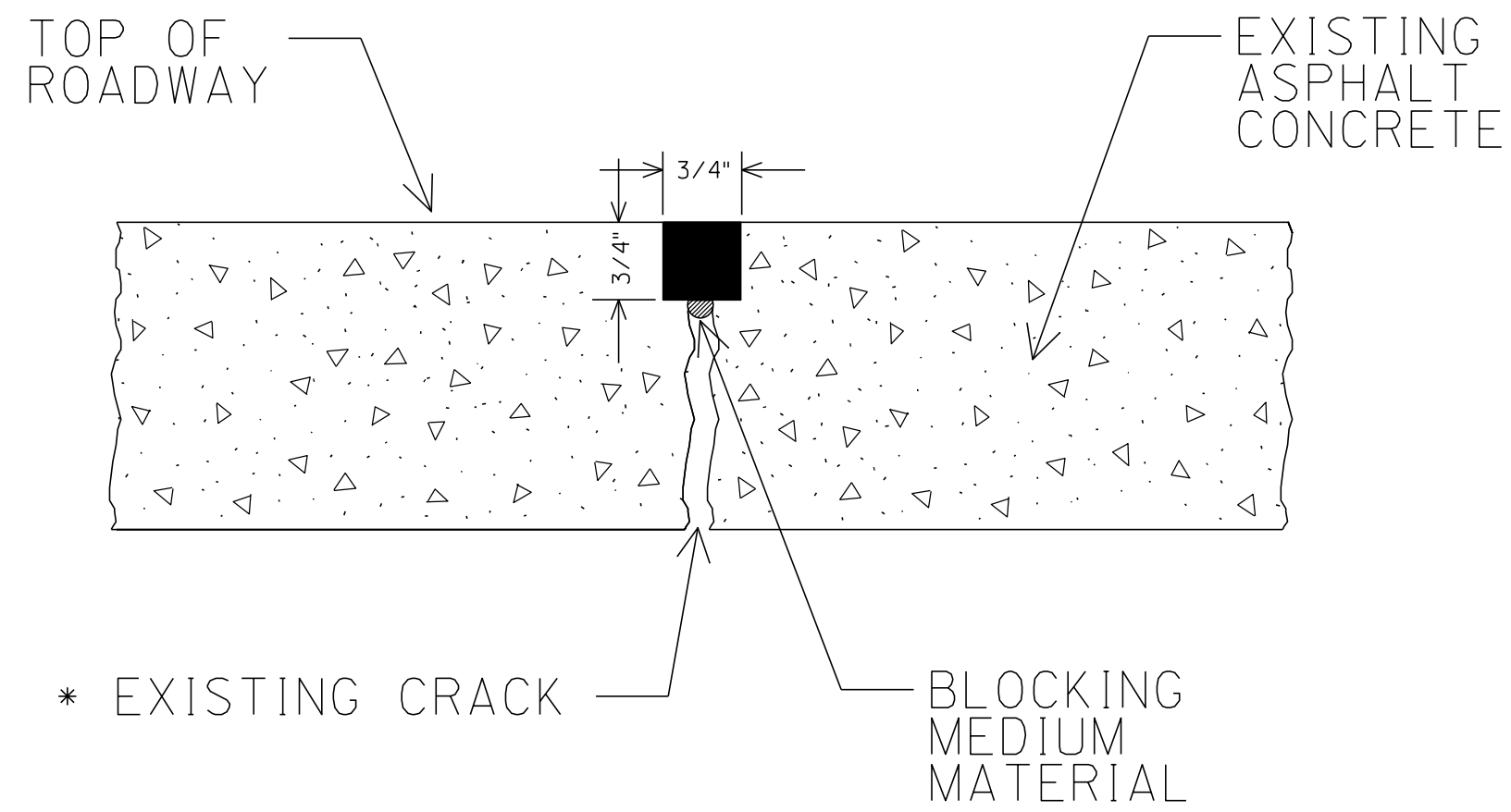
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STATE OF	PROJECT	SHEET NO.	TOTAL SHEETS
S.D.	NH-P 0031(58)	10	13

# TYPICAL RESERVOIR SECTION



\* The blocking medium material will be used in cracks that are  $3/8"$  or more in width.

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.

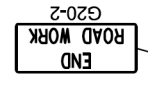
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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.

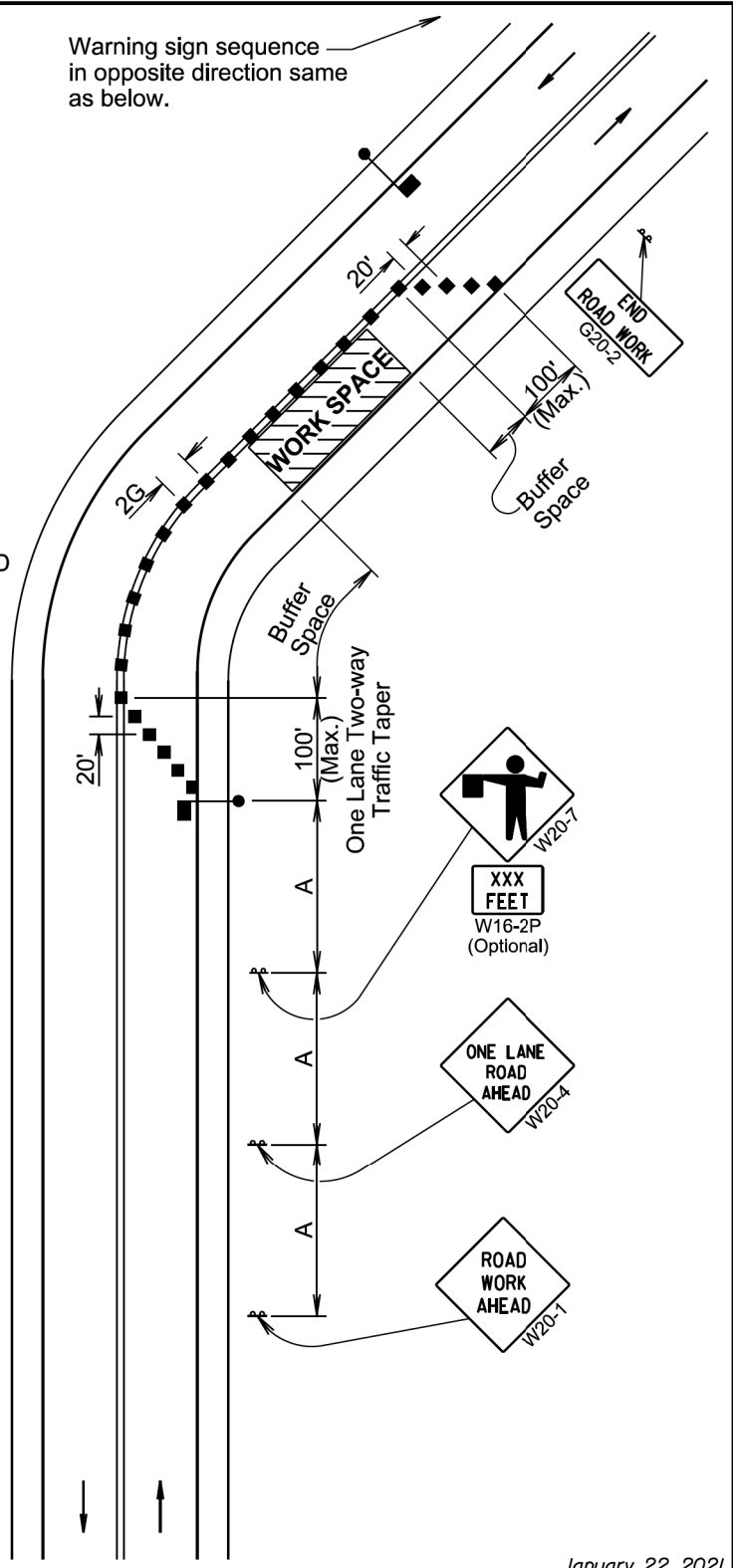


Channelizing devices and flaggers will be used at intersecting roads to control intersecting road traffic as required.

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

<b>S D D O T</b>	<b>LANE CLOSURE WITH FLAGGER PROVIDED</b>	PLATE NUMBER <b>634.23</b>
		Sheet 1 of 1

Published Date: 2024

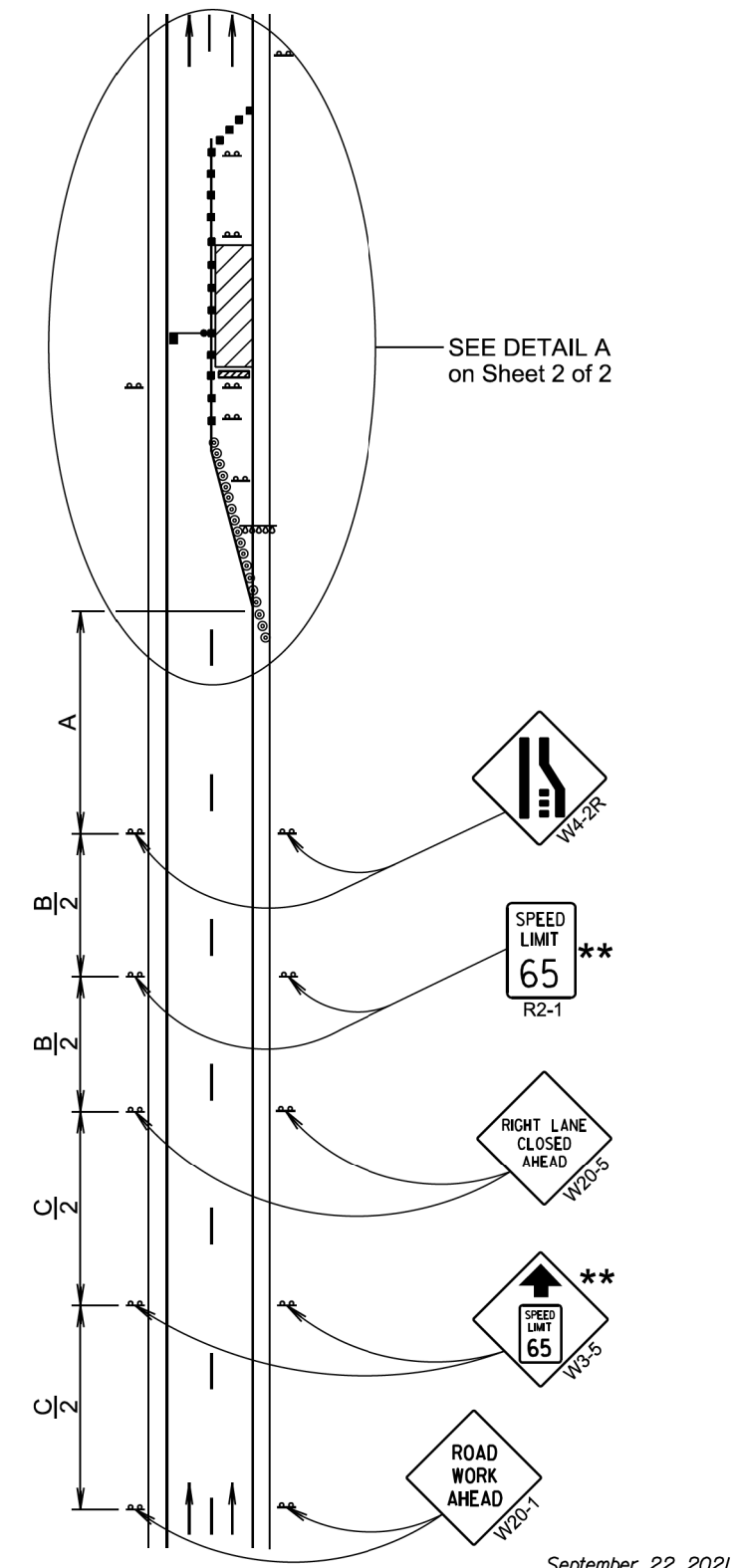
Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet) (A) (B) (C)
0 - 30	200
35 - 40	350
45 - 50	500
55	750
60 - 65	1000
	(A) (B) (C)
70 - 80	1000 1500 2640

\*\* 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.



September 22, 2021

<b>S D D O T</b>	<b>WORK ZONE SPEED REDUCTION FOR INTERSTATE AND HIGH SPEED MULTI-LANE HIGHWAYS</b>	PLATE NUMBER <b>634.63</b>
		Sheet 1 of 2

Published Date: 2024

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.

Flagger (As Necessary)

ReflectORIZED Drum

Channelizing Device

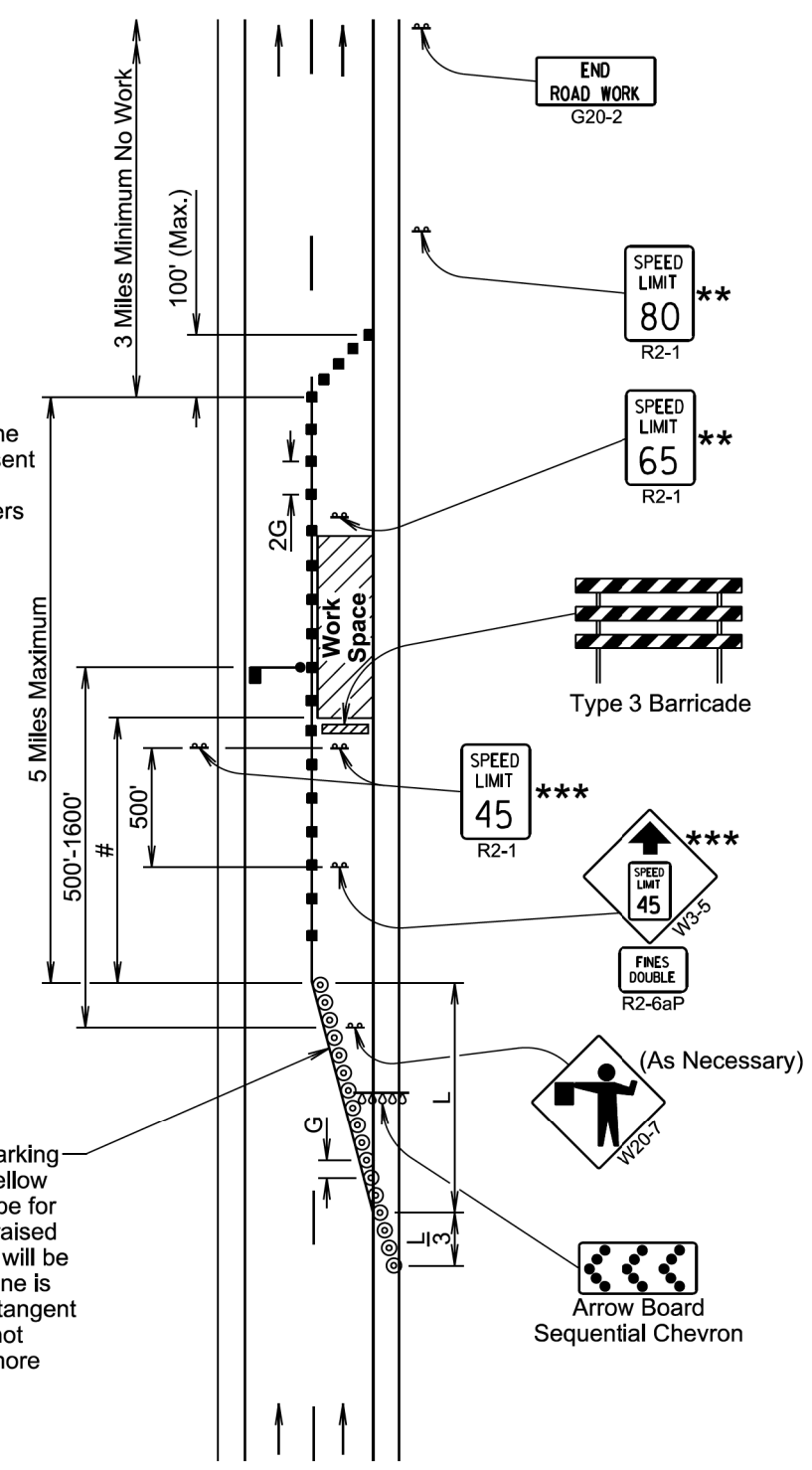
# The Work Space will be a minimum of 500' from the end of the taper.

The FLAGGER sign will be used whenever there is a Flagger present.

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.

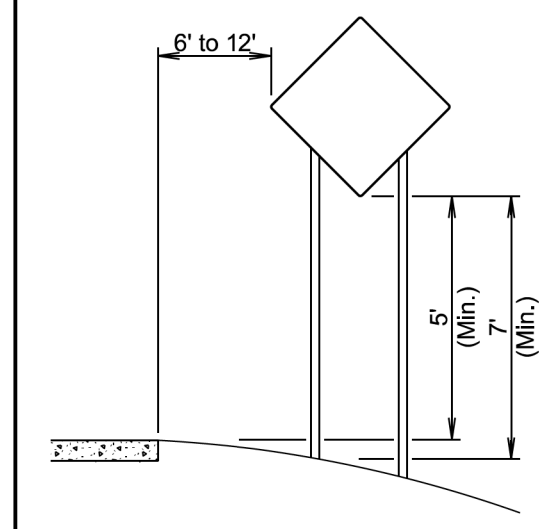


DETAIL A

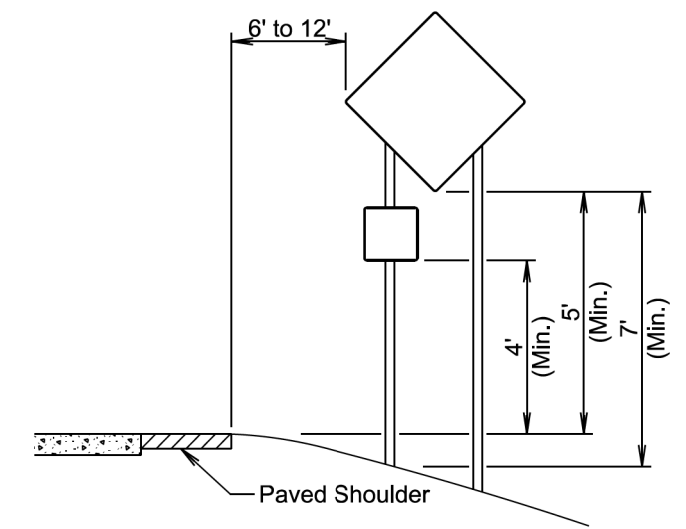
September 22, 2021

S D D O T	WORK ZONE SPEED REDUCTION FOR INTERSTATE AND HIGH SPEED MULTI-LANE HIGHWAYS	PLATE NUMBER 634.63
		Sheet 2 of 2

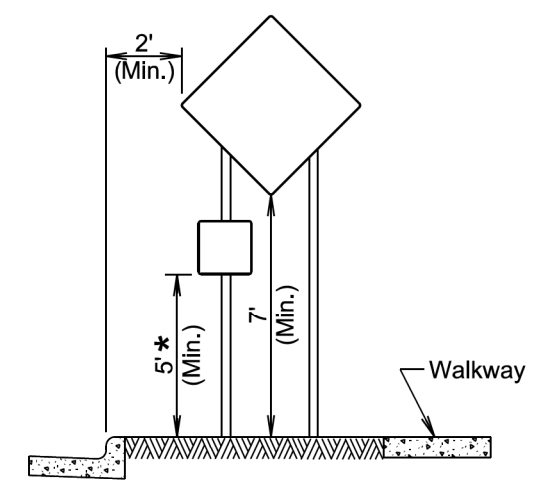
Published Date: 2024



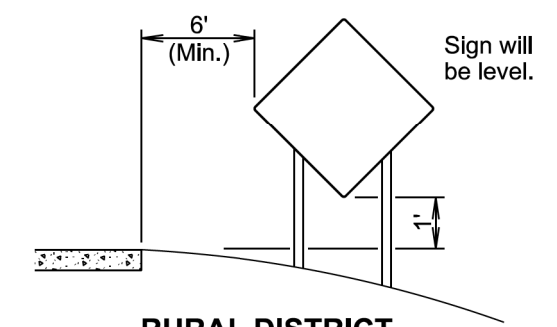
RURAL DISTRICT



RURAL DISTRICT WITH SUPPLEMENTAL PLATE



URBAN DISTRICT



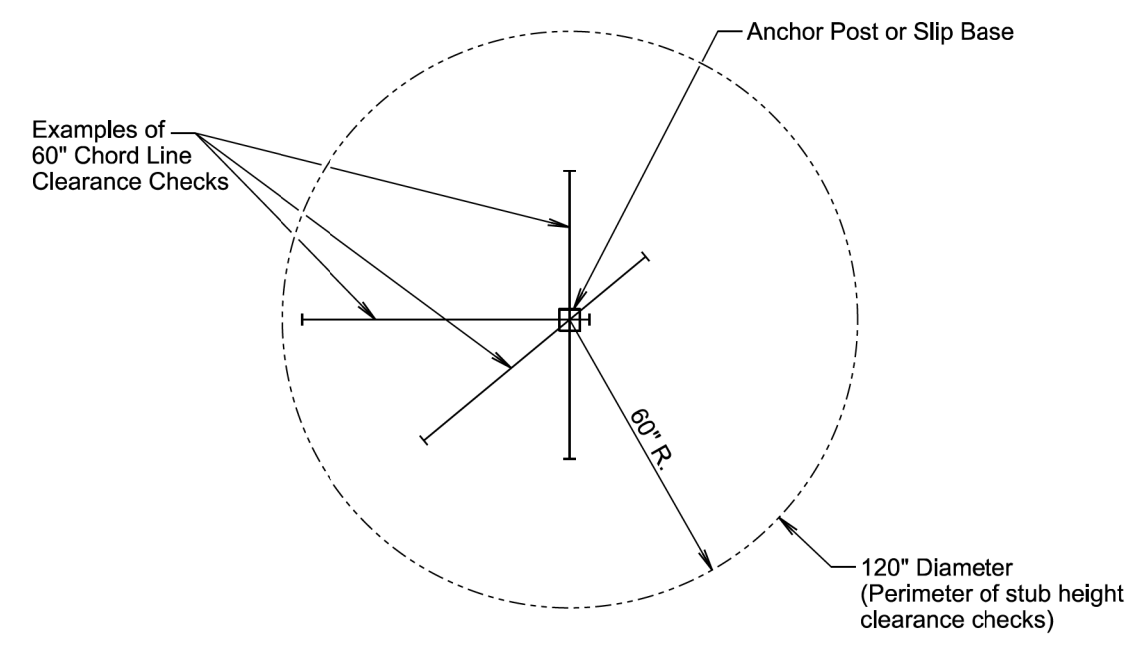
RURAL DISTRICT 3 DAY MAXIMUM

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

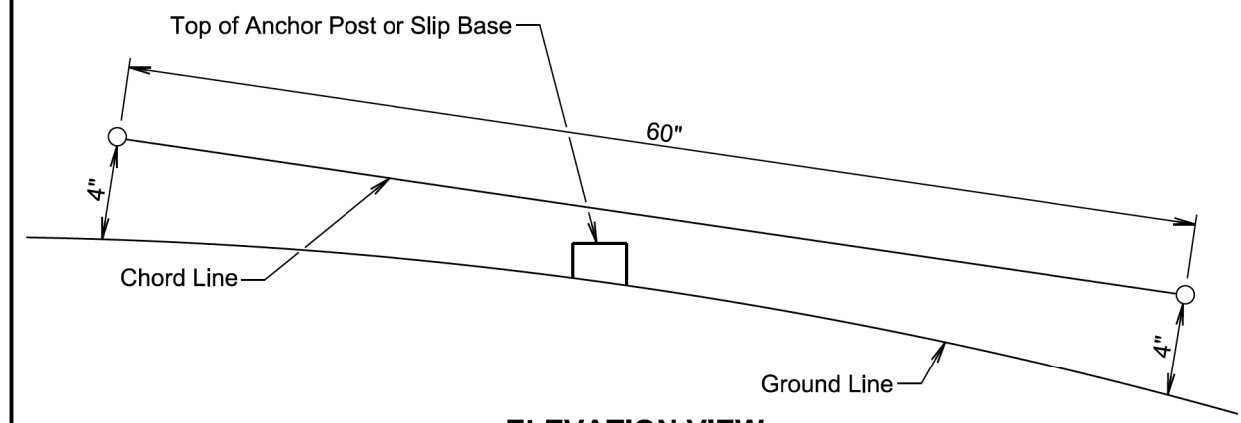
January 22, 2021

S D D O T	CRASHWORTHY SIGN SUPPORTS (Typical Construction Signing)	PLATE NUMBER 634.85
		Sheet 1 of 1

Published Date: 2024



**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

<i>Published Date: 2024</i>	<b>S D D O T</b>	<b>BREAKAWAY SUPPORT STUB CLEARANCE</b>	PLATE NUMBER <b>634.99</b>
			Sheet 1 of 1