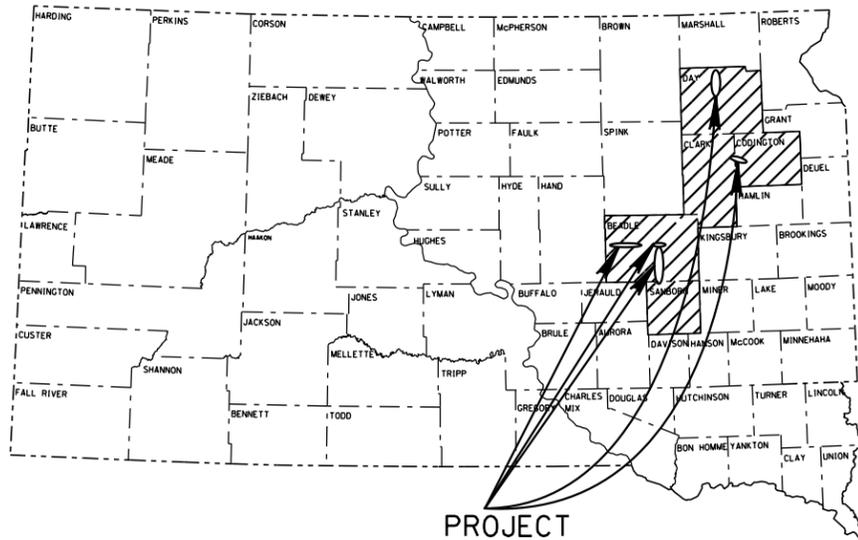


STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH P 0010(117)	1	12
Plotting Date: 02/10/2015			

REVISED: 2-10-2015



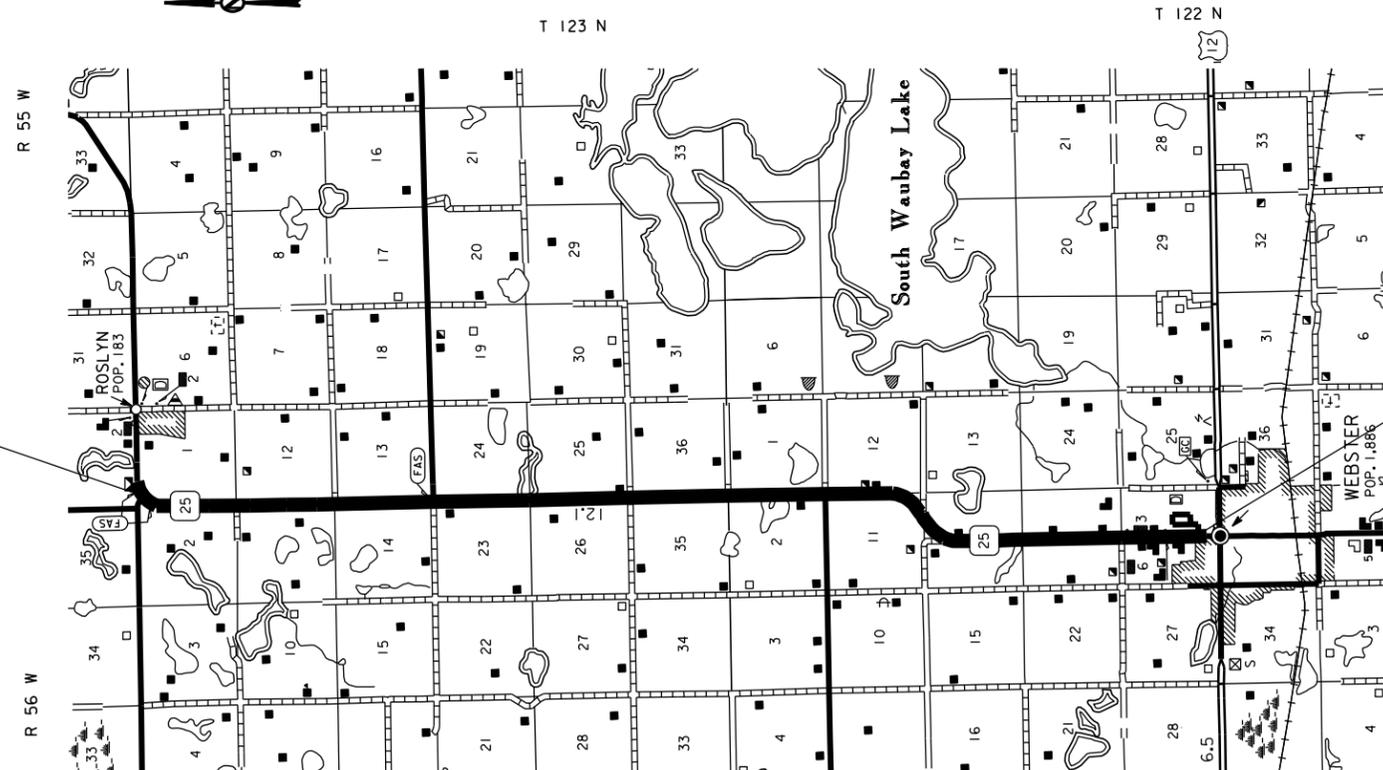
STATE OF SOUTH DAKOTA  
DEPARTMENT OF TRANSPORTATION  
PLANS FOR PROPOSED  
**PROJECT NH-P 0010(117)**  
**US HIGHWAY 14,**  
**SD HIGHWAYS 37,**  
**20, & 25**  
**BEADLE, SANBORN, CLARK,**  
**CODINGTON, & DAY COUNTIES**  
ROUT & SEAL ASPHALT CONCRETE  
PCN 048G

INDEX OF SHEETS

Sheet 1-5	TITLE SHEET & LAYOUT MAP
Sheet 6-7	ESTIMATE OF QUANTITIES
Sheet 8-9	PLAN NOTES
Sheet 10-11	TRAFFIC CONTROL
Sheet 12	TYPICAL RESERVOIR DETAIL

PLOT SCALE - 1:220

PLOT NAME - 5



BEGIN SEGMENT  
STA. 0+00.00  
MRM 193.00 +0.034  
MILEAGE: 147.006

END SEGMENT  
STA. 570+02.88  
MRM 182.17 +0.037  
MILEAGE: 136.210

DESIGN DESIGNATION

ADT (2013)	1009
ADT (2033)	1496
DHV	111
D	51%
T DHV	3.5%
T*ADT	12.0%
V	65 M.P.H.

STORM WATER PERMIT  
(None Required)

**TOTAL PROJECT LENGTHS**  
GROSS LENGTH = 62.617 MILES  
LENGTH OF STRUCTURE EXCEPTIONS = 1804.24 FEET = 0.342 MILES  
LENGTH OF INTERSECTION EXCEPTIONS = 1810 FEET = 0.343 MILES  
TOTAL LENGTH OF EXCEPTIONS = 3614.24 FEET = 0.685 MILES  
NET LENGTH = 327000.96 FEET = 61.932 MILES

**SD 25**  
**SEGMENT #1**  
**DAY COUNTY**  
**LENGTH: 10.796 MILES**

**8**

PLOTTED FROM - TRHJUNT05

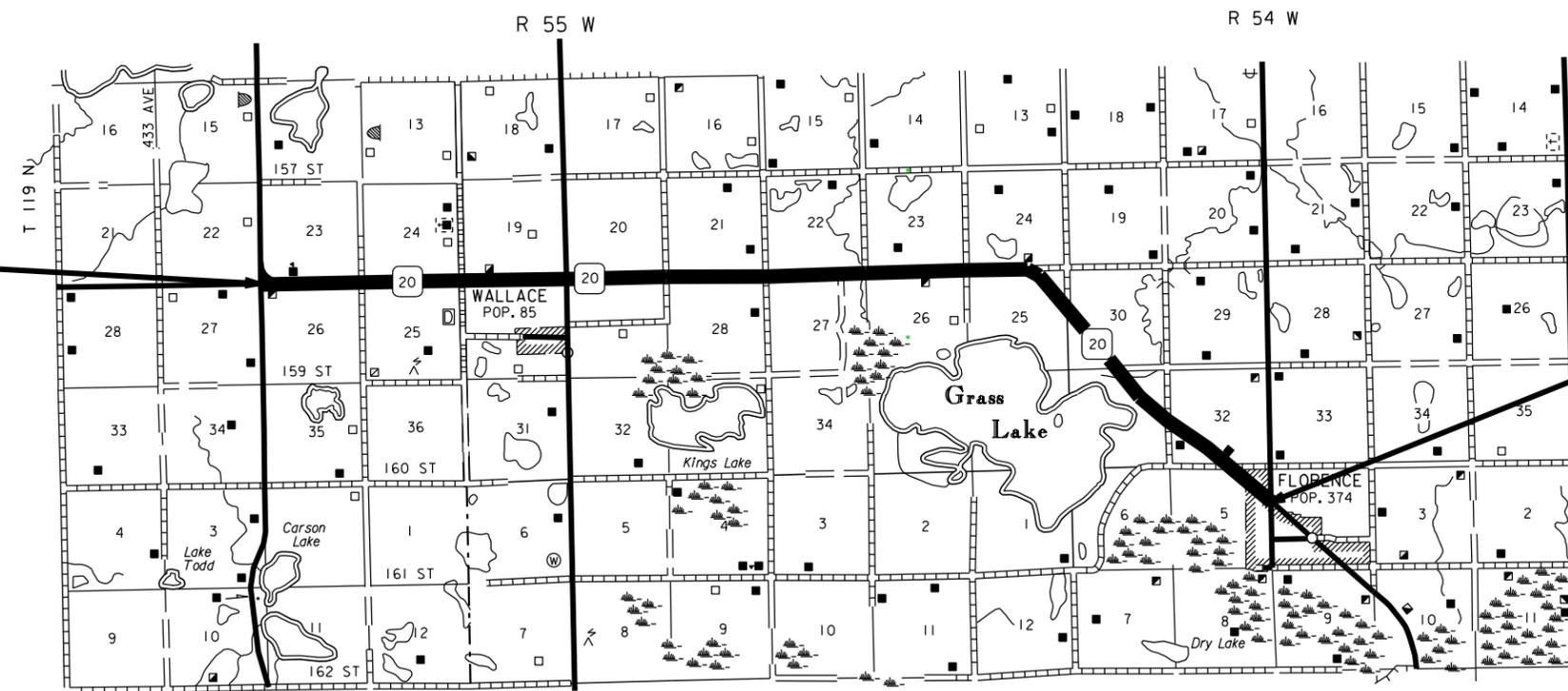
FILE - ... \DESIGN\TITLE SHEET.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH P 0010(117)		
Plotting Date: 02/10/2015		2	12

**SD 20  
SEGMENT #2  
CLARK COUNTY  
LENGTH: 10.970 MILES**

BEGIN PROJECT  
STATION 0+00.00  
MRM 372.75 + 0.000  
MILEAGE: 320.573

END PROJECT  
STATION 579+21.60  
MRM 383.73 + 0.000  
MILEAGE: 331.543



DESIGN DESIGNATION

ADT (2013)	1315
ADT (2033)	1720
DHV	149
D	52%
T DHV	2.9%
T•ADT	11.6%
V	65 M.P.H.

PLOT SCALE - 1:200

PLOTTED FROM - TRHJINT05

PLOT NAME - 1

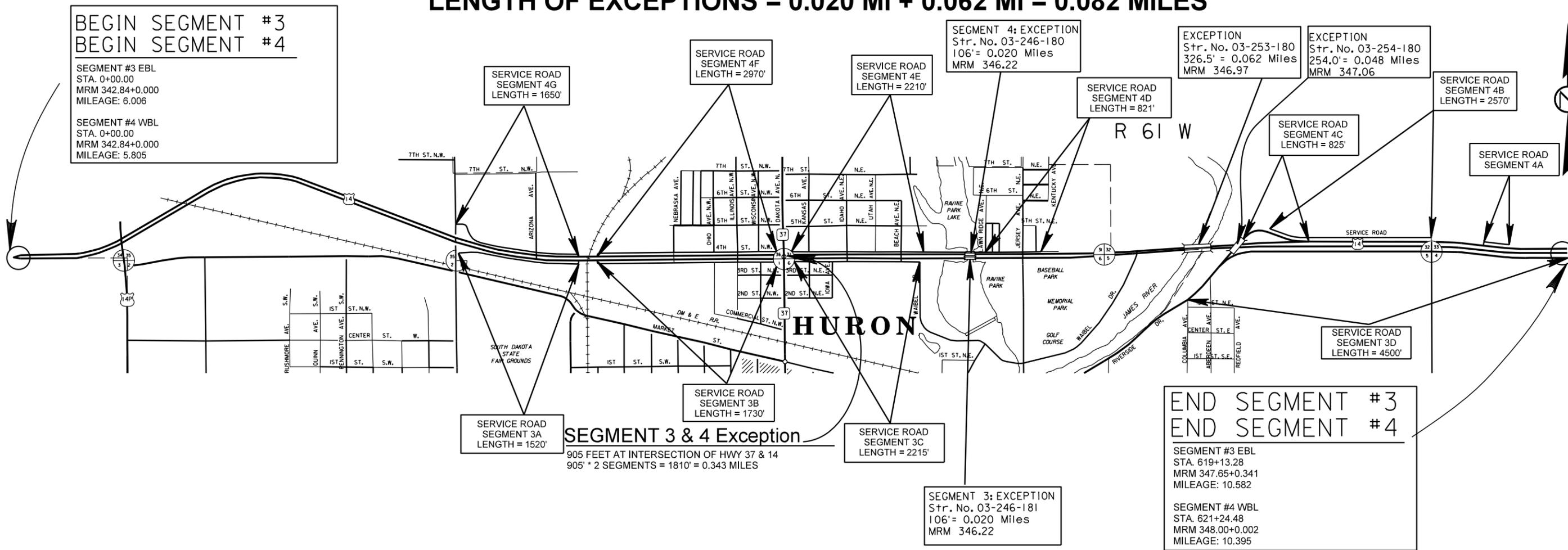
FILE - ... \DESIGN\TITLE SHEET.DGN

**US 14E  
SEGMENT #3:  
STA. 0+00 TO 619+13.28  
MRM: 342.84 TO 347.65  
LENGTH: 4.81 MILES  
LENGTH OF EXCEPTIONS = 0.020 MI + 0.062 MI = 0.082 MILES**

**US 14W  
SEGMENT #4:  
STA. 0+00 TO 621+24.48  
MRM: 342.84 TO 348.002  
LENGTH: 5.162 MILES  
LENGTH OF EXCEPTIONS = 0.020 MI + 0.062 MI = 0.082 MILES**

PLOT SCALE - 1:200

PLOT NAME 2



**BEGIN SEGMENT #3  
BEGIN SEGMENT #4**

SEGMENT #3 EBL  
STA. 0+00.00  
MRM 342.84+0.000  
MILEAGE: 6.006

SEGMENT #4 WBL  
STA. 0+00.00  
MRM 342.84+0.000  
MILEAGE: 5.805

**END SEGMENT #3  
END SEGMENT #4**

SEGMENT #3 EBL  
STA. 619+13.28  
MRM 347.65+0.341  
MILEAGE: 10.582

SEGMENT #4 WBL  
STA. 621+24.48  
MRM 348.00+0.002  
MILEAGE: 10.395

DESIGN DESIGNATION (SEGMENT #3)

ADT (2013)	2610
ADT (2033)	2988
DHV	305
D	51%
T DHV	1.2%
T•ADT	5.7%
V	65 M.P.H.

DESIGN DESIGNATION (SEGMENT #4)

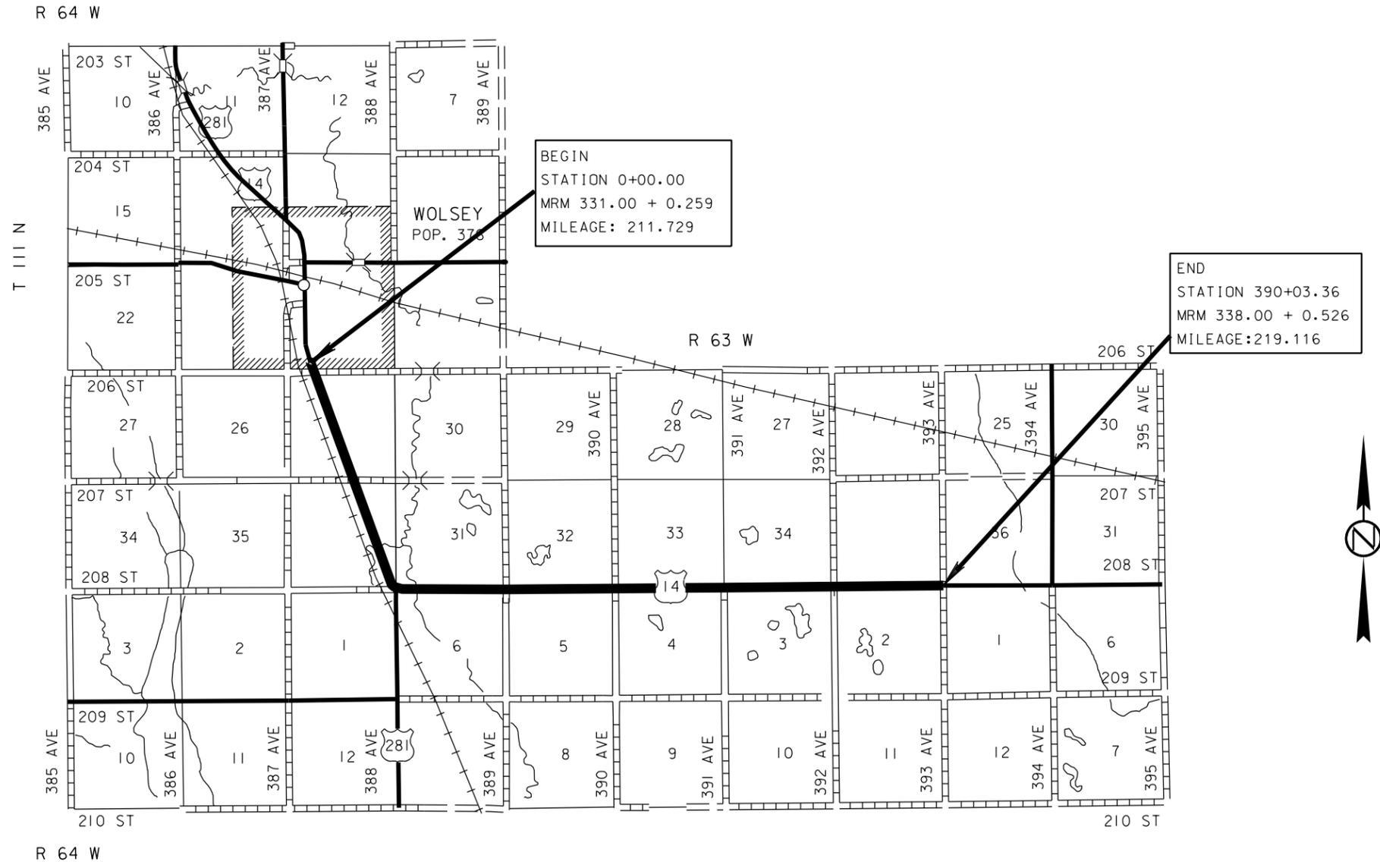
ADT (2013)	2028
ADT (2033)	2322
DHV	237
D	51%
T DHV	1.7%
T•ADT	8.4%
V	65 M.P.H.

PLOTTED FROM - TRHJUNT05

FILE - ... \DESIGN\TITLE SHEET.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH P 0010(117)	4	12
Plotting Date: 02/10/2015			

**US 14  
SEGMENT #5  
STA. 0+00 TO 390+03.36  
MRM: 331.259 TO 338.526  
BEADLE COUNTY  
LENGTH: 7.387 MILES**



DESIGN DESIGNATION

ADT (2013)	2546
ADT (2033)	3375
DHV	415
D	50%
T DHV	2.8%
T•ADT	13.4%
V	65 M.P.H.

PLOT SCALE - 1:200

PLOTTED FROM - TRHJUNT05

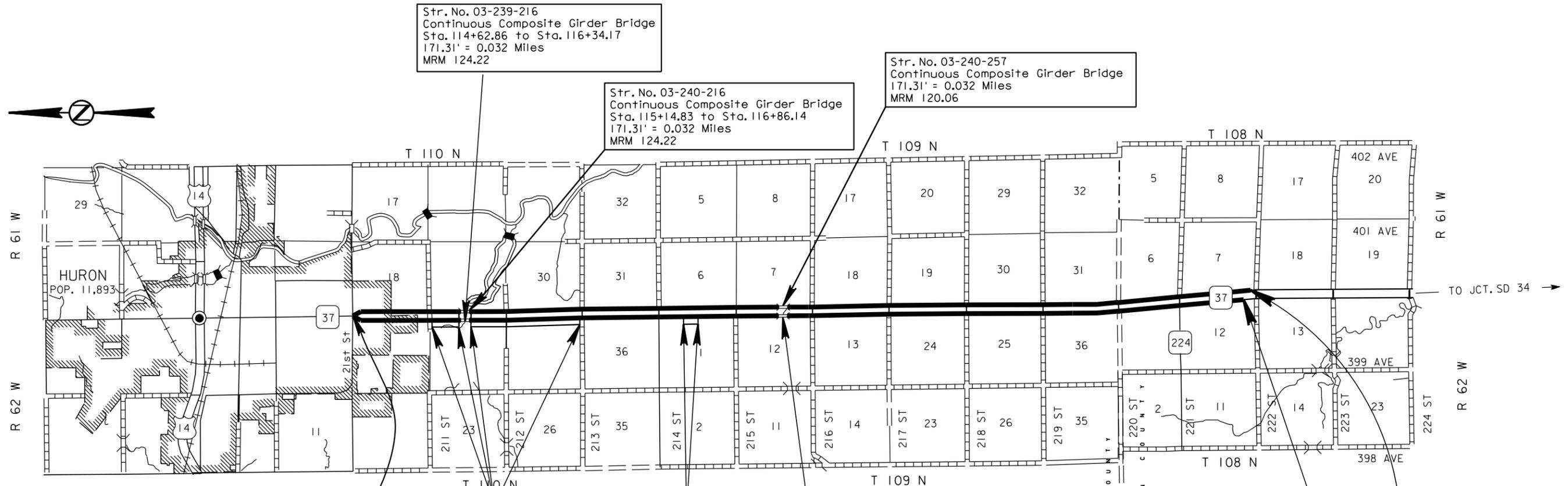
PLOT NAME - 3

FILE - ... \DESIGN\TITLE SHEET.DGN

REVISED: 2-10-2015

SD 37  
SEGMENT #6: SOUTHBOUND  
STA. 0+00 TO 619+13.28  
BEADLE COUNTY  
MRM: 125.71 TO 113.946

SD 37  
SEGMENT #7: NORTHBOUND  
STA. 0+00 TO 621+24.48  
BEADLE COUNTY  
MRM: 125.71 TO 113.906



**END**  
SBL - SEGMENT #6  
Station 619+13.28  
MRM 125.71+0.000  
MILEAGE: 39.564

NBL - SEGMENT #7  
Station 621+24.48  
MRM 125.71+0.000  
MILEAGE: 39.587

SEGMENT 6A & 6B  
NORTH & SOUTH SERVICE ROADS

SEGMENT 6C  
SERVICE ROAD

Str. No. 03-239-257  
Continuous Composite Girder Bridge  
171.31' = 0.032 Miles  
MRM 120.06

**BEGIN**  
SBL - SEGMENT #6  
Station 0+00.00  
MRM 113.0+0.946  
MILEAGE: 27.869

NBL - SEGMENT #7  
Station 0+00.00  
MRM 113.0+0.906  
MILEAGE: 27.852

<b>North Bound Lanes</b>			
GROSS LENGTH	62,122.28 FEET	11.766	MILES
LENGTH OF EXCEPTIONS	342.62 FEET	0.065	MILES
NET LENGTH	61,779.66 FEET	11.701	MILES
<b>South Bound Lanes</b>			
GROSS LENGTH	61,910.82 FEET	11.726	MILES
LENGTH OF EXCEPTIONS	342.62 FEET	0.065	MILES
NET LENGTH	61,568.20 FEET	11.661	MILES

DESIGN DESIGNATION (SEGMENT #6)

ADT (2013)	2015
ADT (2033)	2672
DHV	250
D	51%
T DHV	2.5%
T•ADT	10.5%
V	70 M.P.H.

DESIGN DESIGNATION (SEGMENT #7)

ADT (2013)	2582
ADT (2033)	4102
DHV	320
D	51%
T DHV	1.3%
T•ADT	5.6%
V	70 M.P.H.

PLOT SCALE - 1:200

PLOTTED FROM - TRHJUNT05

PLOT NAME - 4

FILE - ... \DESIGN\TITLE SHEET.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH P 0010(117)	6	12
Plotting Date: 01/12/2015			

## ESTIMATE OF QUANTITIES

Revised: 3-20-2015

Bid Item Number	Item	Quantity	Unit
009E0010	Mobilization	Lump Sum	LS
009E4100	Construction Schedule, Category I	Lump Sum	LS
* 350E0010	Asphalt Concrete Crack Sealing	11,070	Lb
350E0010	Asphalt Concrete Crack Sealing	176,616	Lb
634E0010	Flagging	439	Hour
634E0020	Pilot Car	219	Hour
634E0100	Traffic Control	2,346	Unit
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0420	Type C Advance Warning Arrow Panel	4	Each
998E0100	Railroad Protective Insurance	Lump Sum	LS

\* - Denotes Non-Participating

### SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2004 Edition and Required Provisions, Supplemental Specifications and Special Provisions as included in the Proposal.

**TABLE OF QUANTITIES (FOR INFORMATION ONLY)**

REVISED: 2-10-2015

ROUTE & SEAL ESTIMATE OF QUANTITIES for MAINLINE										
ITEM	SEGMENT 1, HWY 25	SEGMENT 2, HWY 20	SEGMENT 3, HWY 14E	SEGMENT 4, HWY 14W	SEGMENT 5, HWY 14	SEGMENT 6, HWY 37S	SEGMENT 7, HWY 37N	ADDITIONAL QUANTITIES, SERVICE LANES & INTERSECTIONS	TOTAL	UNIT
Mobilization	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
Asphalt Concrete Crack Sealing	25297	38876	14161	14372	21311	29790	31682	12196	187686	LB
Flagging	181	121	-	-	82.5	-	-	54	439	HR
Pilot Car	91	61	-	-	41	-	-	27	219	HR
Traffic Control	238	238	408	408	238	408	408	-	2346	UNIT
Type C Advanced Warning Panel	-	-	1	1	-	1	1	-	4	EACH
Traffic Control, Miscellaneous	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	Lump Sum	LS
Railroad Protective Insurance	-	-	Lump Sum	Lump Sum	-	-	-	-	Lump Sum	LS

**TABLE OF ADDITIONAL QUANTITIES (FOR INFORMATION ONLY)**

ROUTE & SEAL ESTIMATE OF QUANTITIES for SERVICE LANES & ADDITIONAL QUANTITIES	
SEGMENT	Asphalt Concrete Crack Sealing(LBS)
SEGMENT 3A, 14E	369
SEGMENT 3B, 14E	122
SEGMENT 3C, 14E	155
SEGMENT 3D, 14E	3906
SEGMENT 4A, 14W	0
SEGMENT 4B, 14W	524
SEGMENT 4C, 14W	720
SEGMENT 4D, 14W	34
SEGMENT 4E, 14W	0
SEGMENT 4F, 14W	108
SEGMENT 4G, 14W	137
SEGMENT 6A, 37S	1004
SEGMENT 6B, 37S	3737
SEGMENT 6C, 37S	254
LINCOLN AVENUE INTERSECTION, SEGMENT 6 & 7	358
WEST PARK AVENUE INTERSECTION, SEGMENT 6 & 7	768
<b>ADDITIONAL QUANTITY, TOTAL(lbs)</b>	<b>12196</b>

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
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**ENVIRONMENTAL COMMITMENTS**

An Environmental Commitment is a measure that SDDOT commits to implement in order to avoid, minimize, and/or mitigate a real or potential environmental impact. Environmental commitments to various agencies and the public have been made to secure approval of this project. An agency mentioned below with permitting authority can influence a project if perceived 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. These environmental commitments are not subject to change without prior written approval from the SDDOT Environmental Office. The environmental commitments associated with this project are as follows:

**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 pit, or staging site associated with the project, cease construction activities in the affected area until the Whooping Crane departs and contact the Project Engineer. The Project Engineer will contact the Environmental Office so that the sighting can be reported to USFWS.

**COMMITMENT C: WATER SOURCE**

The Contractor shall not withdraw water with equipment previously used outside the State of South Dakota without prior approval from the SDDOT Environmental Office. Thoroughly wash all construction equipment before entering South Dakota to reduce the risk of invasive species introduction into the project vicinity.

The Contractor shall 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 shall obtain the necessary permits from the regulatory agencies such as the Department of Environment and Natural Resources (DENR) and the United States Army Corps of Engineers (COE) prior to executing water extraction activities.

**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 shall 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 State ROW.

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

The waste disposal site(s) shall 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 Project Engineer.

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

1. Construction and/or demolition debris consisting of concrete, asphalt concrete, or other similar materials shall be buried in a trench completely separate from wood debris. The final cover over the construction and/or demolition debris shall consist of a minimum of 1 foot of soil capable of supporting vegetation. Waste disposal sites provided outside of the State ROW shall be seeded in accordance with Natural Resources Conservation Service recommendations. The seeding recommendations may be obtained through the appropriate County NRCS Office. The Contractor shall control the access to waste disposal sites not within the State ROW through the use of 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 of time not to exceed the duration of the project. Prior to project completion, the waste shall 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) shall be incidental to the various contract items.

**COMMITMENT I: HISTORICAL PRESERVATION OFFICE CLEARANCES**

The SDDOT has obtained concurrence with the State Historical Preservation Office (SHPO or THPO) for all work included within the project limits and all designated option borrow sites provided within the plans.

**Action Taken/Required:**

All earth disturbing activities not designated within the plans require review of cultural resources impacts. This work includes, but is not limited to: staging areas, borrow sites, waste disposal sites, and all material processing sites.

The Contractor shall arrange and pay for a cultural resource survey and/or records search. 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; however, a cultural resources survey may need to be conducted by a qualified archaeologist.

The Contractor shall provide ARC with the following: a topographical map or aerial view on 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 shall submit the records search or cultural resources survey report and if the location of the site is within the current geographical or historic boundaries of any South Dakota reservation to SDDOT Environmental Engineer, 700 East Broadway Avenue, Pierre, SD 57501-2586 (605-773-3180). 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.

If evidence for cultural resources is uncovered during project construction activities, then such activities shall cease and the Project Engineer shall be immediately notified. The Project Engineer will contact the SDDOT Environmental Engineer in order 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 staging areas, borrow sites, waste disposal sites, or material processing sites that affect wetlands, threatened and endangered species, or waterways. The Contractor shall provide the required permits and clearances to the Project Engineer at the preconstruction meeting.

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH P 0010(117)	9	12
Plotting Date: 01/12/2015			

**SEQUENCE OF OPERATIONS**

The Contractor shall submit his proposed sequence of operations for the Engineer's approval at least one week prior to the preconstruction meeting. The Contractor shall sequence work for half of roadway width at a time for SD 37N, SD 37S, SD 20, SD 25, US 14, US 14E, US 14W and all additional service road segments shown on the project corridor layout maps.

**TRAFFIC CONTROL**

Traffic shall be maintained on the driving lanes through the work area by use of a lane closure. Use of the shoulder as a driving lane will not be permitted. Any damage to the shoulders due to construction activity shall be repaired by the Contractor at no expense to the State.

Work limits for Asphalt Concrete Rout and Seal shall not exceed a 3 mile work zone in both directions of traffic. All loose materials shall be removed to roadway prior to opening to traffic.

Removing, relocating, covering, salvaging and resetting of existing traffic control devices, including delineation, shall be the responsibility of the Contractor. Cost of this work shall be incidental to the various contract items unless otherwise specified in the plans. Delineators and signs damaged or lost shall be replaced by the Contractor at no cost to the State.

Storage of vehicles and equipment shall be as near the right-of-way as possible. Contractor's employees should mobilize at a location off the right-of-way and arrive at the work sites in a minimum number of vehicles necessary to perform the work. Indiscriminate driving and parking of vehicles within the right-of-way will not be permitted. Any damage to the vegetation, surfacing, embankment, delineators and existing signs resulting from such indiscriminate use shall be repaired and/or restored by the Contractor, at no expense to the State, and to the satisfaction of the Engineer.

Work activities during non-daylight hours are subject to prior approval.

Traffic Control units, as shown in the Estimate of Quantities, are estimates. Contractor's operation may require adjustments in quantities, either more or less. Payment will be for those signs actually ordered by the Engineer and used. Traffic Control units will be paid separately for each project.

Traffic approaching the project from intersecting roadways, streets, and approaches must be adequately accommodated. Major intersections or large commercial entrances may require additional signing, flaggers, and channelizing devices on a temporary basis until work activities pass these areas.

Non-fixed location signs may be mounted on portable supports. The bottom of signs on portable or temporary supports shall not be less than seven feet above the pavement in urban areas, and one foot above the pavement in rural areas.

During construction operations, all Contractor's vehicles, equipment, and materials shall be located within that half of the roadway which is closed to through traffic. No temporary parking or material storage will be permitted on that portion of the roadway open to through traffic.

Traffic Control at the additional service road segments will be required and shall comply with Specifications. Traffic Control at these segments will be incidental to the Traffic Control Miscellaneous and the Traffic Control for the mainline segments.

**CONSTRUCTION REQUIREMENTS**

Shoulder bevel slopes greater than 3/8 inch per foot shall not be routed and sealed unless directed by the Engineer.

The contract unit price per pound for ASPHALT CONCRETE CRACK SEALING shall be nonnegotiable regardless of changes in contract quantity.

**ASPHALT CONCRETE AGGREGATES**

SDDOT asphalt mixes are known to contain crushed ledge rock such as granite. The Contractor can expect to encounter various percentages of crushed ledge rock both in the larger aggregates and the fines. For information only the following projects are known or believed to contain crushed ledge rock:

SD 37 Beadle & Sanborn Counties = 29%

The SDDOT does not guarantee this information to be correct.

Actual field conditions may vary.

**ITEMIZED LIST FOR TRAFFIC CONTROL – SEGMENT #1, #2, & #5**

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	2	17	34
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	2	34	68
W20-4	48" x 48"	ONE LANE ROAD ##### FT. OR AHEAD	2	34	68
W20-7	48" x 48"	FLAGGER (SYMBOL)	2	34	68
<b>TOTAL UNITS</b>					<b>238</b>

**ITEMIZED LIST FOR TRAFFIC CONTROL – SEGMENT #3 & #4, #6 & #7, AND SERVICE LANES**

SIGN CODE	SIGN SIZE	DESCRIPTION	NUMBER REQUIRED	UNITS PER SIGN	UNITS
G20-2	36" x 18"	END ROAD WORK	2	17	34
W4-2	48" x 48"	LEFT OR RIGHT LANE ENDS (SYMBOL)	2	34	68
W20-1	48" x 48"	ROAD WORK ##### FT. OR AHEAD	3	34	102
W20-4	48" x 48"	ONE LANE ROAD ##### FT. OR AHEAD	2	34	68
W20-5	48" x 48"	LT. OR RT. LANE CLOSED ##### FT. OR AHEAD	2	34	68
W20-7	48" x 48"	FLAGGER (SYMBOL)	2	34	68
<b>TOTAL UNITS</b>					<b>408</b>

If a sign is required on a project and not listed in the above inventory, the units per sign will be determined as follows:

Signs 36" x 36" will be measured at 27 units each and signs 48" x 48" will be measured at 34 units each, otherwise:

If a sign measures less than 25" high and 25" wide the units per sign will be computed as sign size (sq ft) x 3.

If a sign measures between 23H" and 37H" the units per sign will be computed as sign size (sq ft) x 1.2 +15.

PLOT SCALE - 1:200

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

- Flagger
- Channelizing Device

For low-volume traffic situations with short work zones on straight roadways where the flagger is visible to road users approaching from both directions, a single flagger may be used.

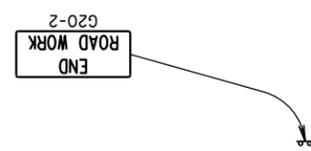
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

For tack and/or flush seal operations, when flaggers are not being used, the FRESH OIL sign (W21-2) shall be displayed in advance of the liquid asphalt areas.

Flashing warning lights and/or flags may be used to call attention to the advance warning signs.

The channelizing devices shall be drums or 42" cones.

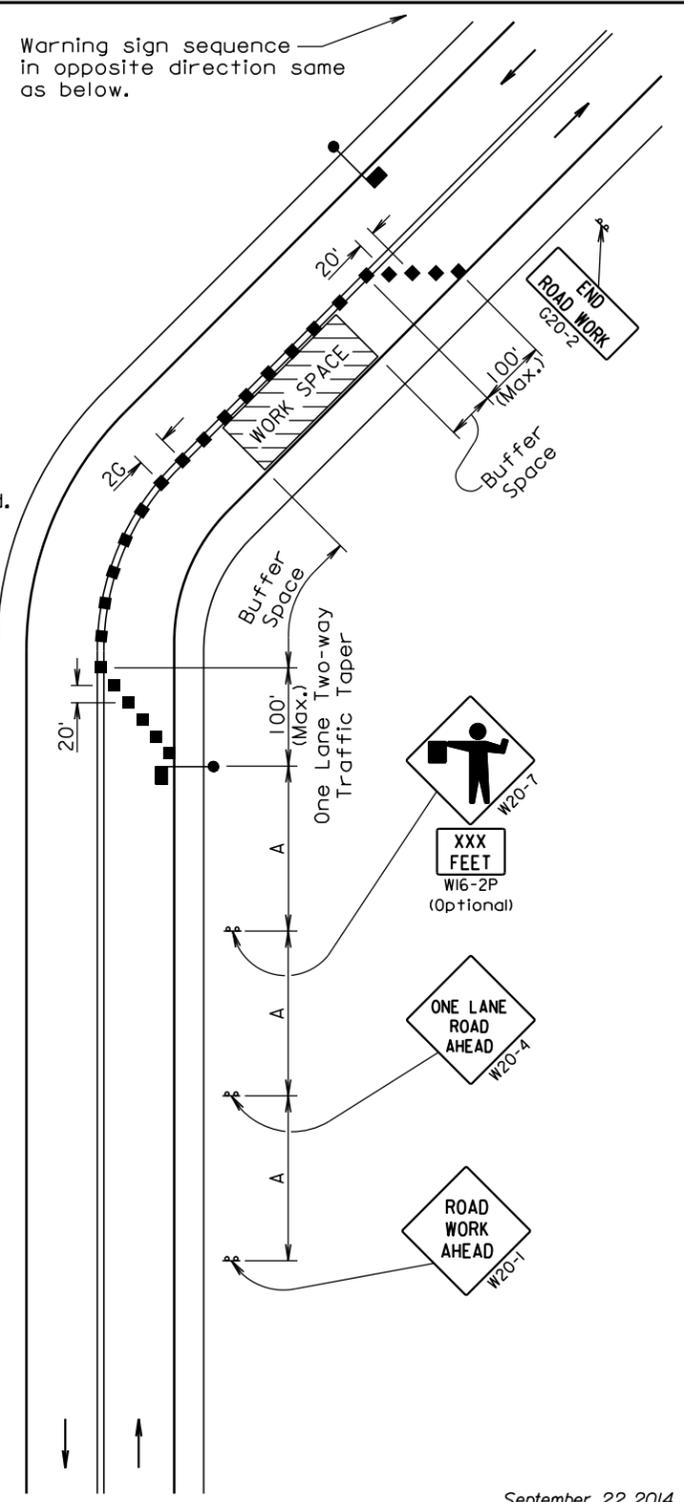
Channelizing devices are not required along the centerline adjacent to work area when pilot cars are utilized for escorting traffic through the work area.



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

The buffer space should be extended so that the two-way traffic taper is placed before a horizontal or vertical curve to provide adequate sight distance for the flagger and queue of stopped vehicles.

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

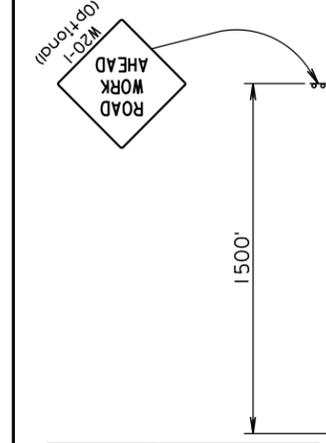


September 22, 2014

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

\*\* Shall be used for overnight and long term operations.

## WITHOUT BARRIER

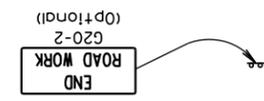


Posted Speed Prior to Work (M.P.H.)	Length of Longitudinal Buffer Space (Feet)
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485
70	535
75	585

This procedure also applies when work is being performed in the lane adjacent to the median on a divided highway. Under these conditions, LEFT LANE CLOSED signs and the corresponding LANE REDUCTION symbol signs shall be used.

- ⊙ Reflectorized Drum
- Channelizing Device shall be 42" cones or drums

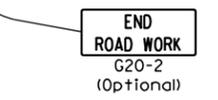
42" cones may be used in place of the drums shown in the taper if setup will not be used during any night time hours.



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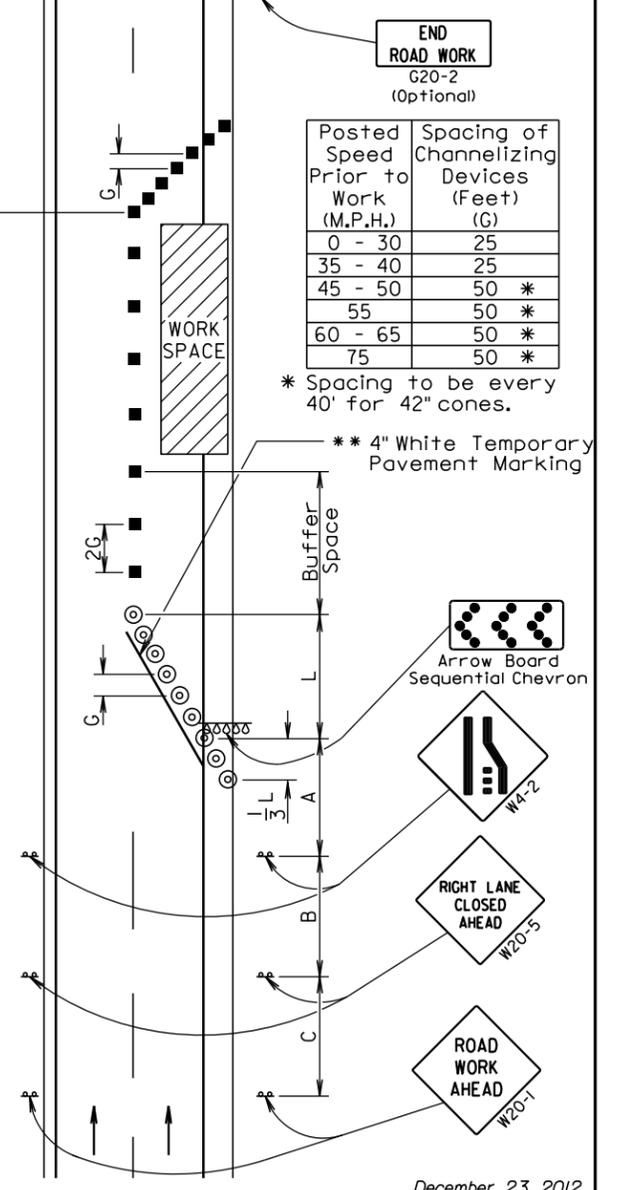
Posted Speed Prior to Work (M.P.H.)	Spacing of Advance Warning Signs (Feet)			Taper Length (Feet) (L)
	(A)	(B)	(C)	
0 - 30	200			180
35 - 40	350			320
45 - 50	500			600
55	750			660
60 - 65	1000			780
	(A)	(B)	(C)	
70 - 75	1000	1600	2600	900



Posted Speed Prior to Work (M.P.H.)	Spacing of Channelizing Devices (Feet) (G)
0 - 30	25
35 - 40	25
45 - 50	50 *
55	50 *
60 - 65	50 *
75	50 *

\* Spacing to be every 40' for 42" cones.

\*\* 4" White Temporary Pavement Marking



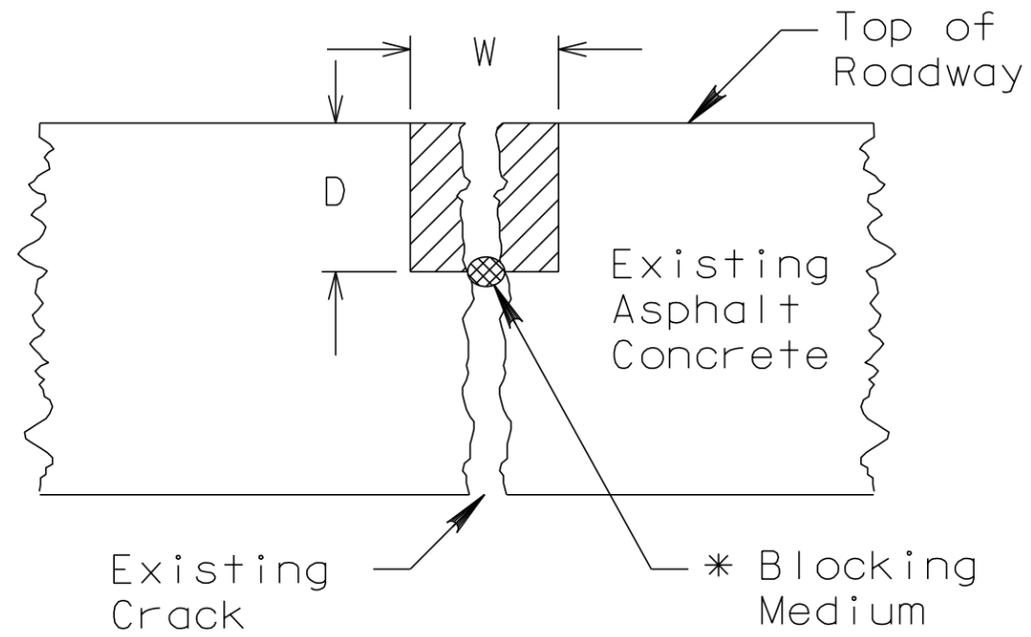
December 23, 2012

<b>S D D O T</b>	<b>GUIDES FOR TRAFFIC CONTROL DEVICES LANE CLOSURE WITHOUT BARRIER</b>	PLATE NUMBER <b>634.64</b>
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PLOT NAME - 8  
FILE - ... \DESIGN\TITLE SHEET.DGN

STATE OF SOUTH DAKOTA	PROJECT	SHEET NO.	TOTAL SHEETS
	NH P 0010(117)	12	12
Plotting Date: 01/12/2015			

## TYPICAL RESERVOIR SECTION



\* Inert compressible material required for cracks  $\frac{3}{8}$ " or more in width.

$$D \ \& \ W = \frac{3}{4}"$$