

STATE OF SOUTH DAKOTA  
 DEPARTMENT OF TRANSPORTATION  
 PLANS FOR PROPOSED

**PROJECT 445-452**

State Route 445  
**Pennington County**  
 REPLACEMENT OF ONE WOODEN SPAN WIRE POLE  
 PCN I5J4

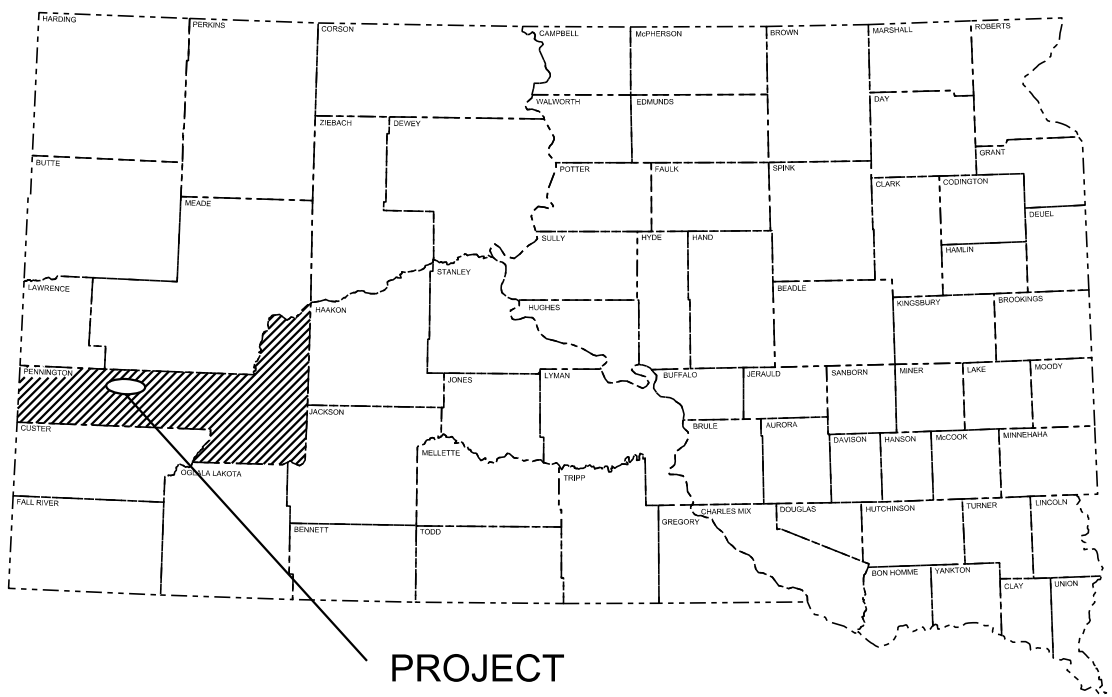
STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	445-452	1	3

Plotting Date: 03/06/2019

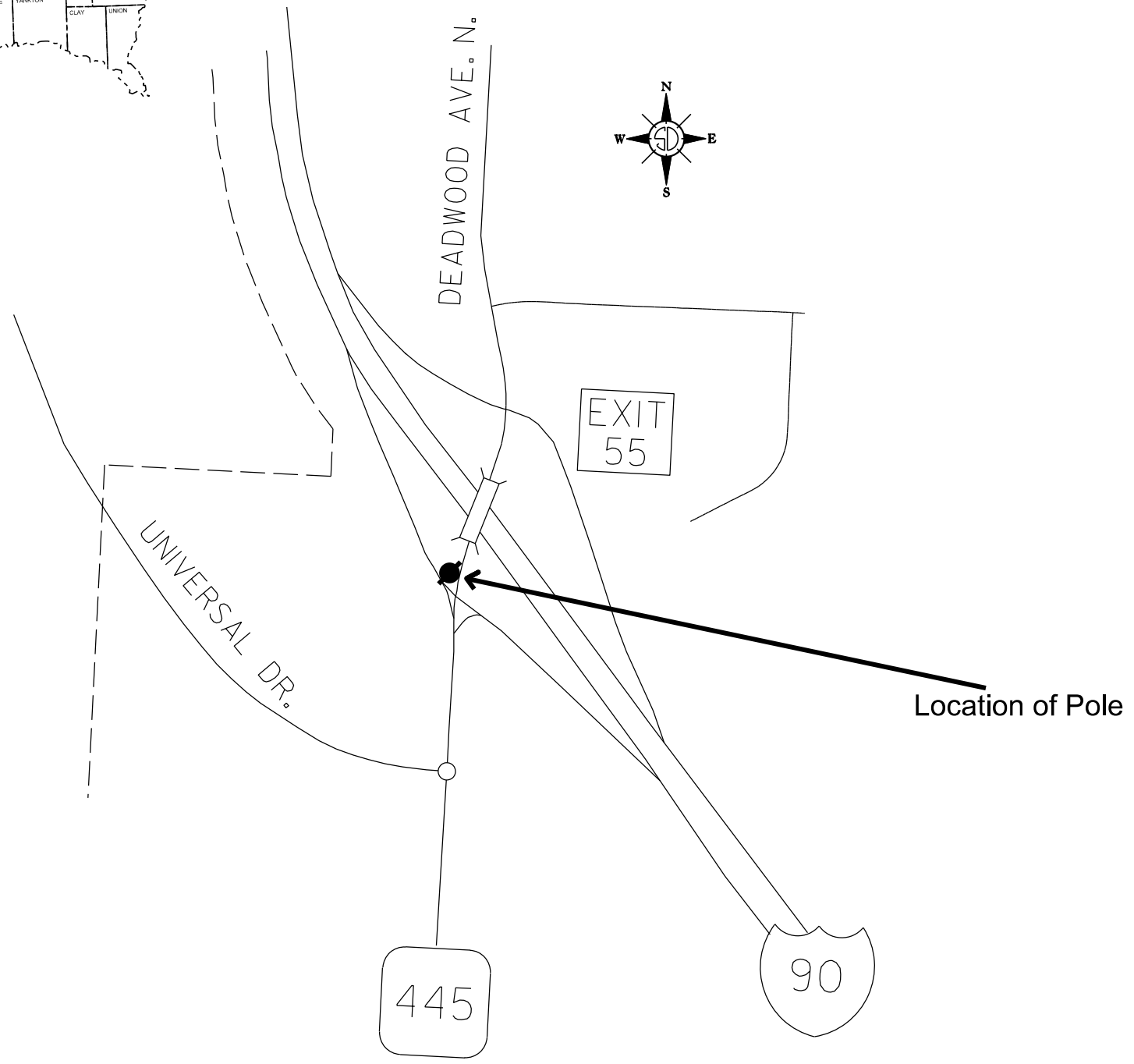
NONSECTION : INDEX OF PAGES

Page 1	Title Sheet
Page 2	Estimate of Quantities & Notes
Page 3	Standard Plate

Plot Scale - 1:200



PROJECT



Plotted From - TRRC12221

File - ...I5J4\_titleSheet.dgn

**ESTIMATE OF QUANTITIES**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1520	Remove Signal Equipment	Lump Sum	LS
634E0010	Flagging	8.0	Hour
634E0110	Traffic Control Signs	105.0	SqFt
635E2520	Wood Utility Pole	1	Each

**SPECIFICATIONS**

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

**SEQUENCE OF OPERATIONS**

1. Set up traffic control.
2. Replace signal pole.
3. Remove traffic control.

**REPLACING SIGNAL POLE**

This project includes replacing one wooden temporary signal pole at the I-90 Exit 55 ramp in Rapid City on SD Hwy 445 (Deadwood Ave). The Contractor shall remove the existing damaged pole and undo all the electrical and cable connections. The removal shall be paid for with the bid item "Remove Signal Equipment", the existing pole to be removed has no concrete footing and is direct bury. The Contractor shall install the new pole in the exact same spot. The Contractor shall match the newly installed pole to dimensions of the existing pole; including height, thickness, footing type and depth etc. The Contractor shall match the footing characteristics of the newly installed wooden pole to the existing pole. Once the new pole is installed the Contractor shall re-attach all electrical and cable connections as before, this shall be paid for thru the bid item "Remove Signal Equipment".

**SUPPLYING AS BUILT PLANS**

If the traffic signal systems are constructed differently than what is stated in the plans, the Contractor shall supply as built plans to the Engineer and a copy shall be sent to the Traffic Design Engineer. The as built plans may include conduit layouts, wiring diagrams, or other drawings depicting the changes from the original plans.

**SHOP DRAWING AND CATALOG CUTS SUBMITTALS**

The Contractor shall submit shop drawings and catalog cuts in accordance with Section 985 of the Specifications.

Adobe PDF submittals shall be sent to the following email addresses:

Norris.Leone@state.sd.us  
John.Less@state.sd.us

**ON-SITE INSPECTION**

An on-site inspection of the new signal pole shall be conducted before acceptance of the project. The on-site inspection shall be conducted by the Project Engineer.

**TRAFFIC CONTROL**

During signal pole replacement, the contractor may need to occupy a lane of traffic below the span wire to remove it and reattach it, traffic control at that time shall conform to standard plate 634.23.

**General Notes**

- Non-applicable traffic control devices shall be completely covered or removed during periods of inactivity. Periods of inactivity shall be defined as no work taking place for a period of more than 2 calendar days.
- All regulatory signs shall have a minimum mounting height of 5' in rural locations, even when mounted on portable supports.
- All materials and equipment shall be stored a minimum distance of 30' from the traveled way during nonworking hours.
- All construction operations shall be conducted in the general direction of traffic movement.
- If there is a discrepancy between the traffic control plans, standard plates, and the MUTCD – whichever is more stringent shall be used, as determined by the Engineer.

**ITEMIZED LIST FOR TRAFFIC CONTROL SIGNS**

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

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.

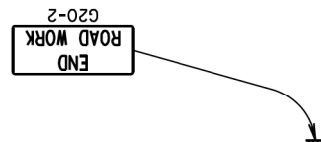
The ROAD WORK AHEAD and the END ROAD WORK signs may be omitted for short duration operations (1 hour or less).

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

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

The channelizing devices shall be drums or 42" cones.

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

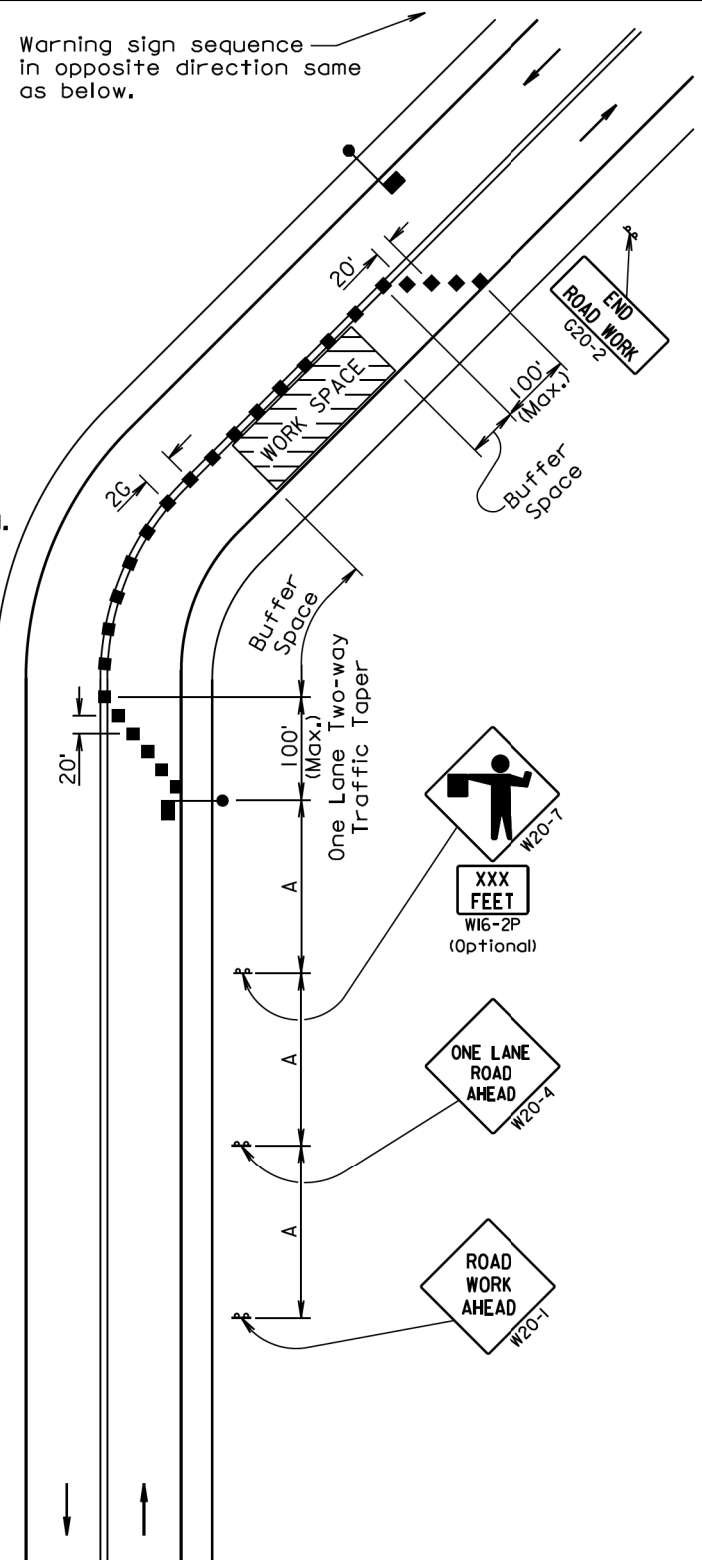


Channelizing devices and flaggers shall be used at intersecting roads to control intersecting road traffic as required.

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

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

Warning sign sequence in opposite direction same as below.



June 3, 2016

Published Date: 1st Qtr. 2019

**S  
D  
D  
O  
T**

**GUIDES FOR TRAFFIC CONTROL DEVICES  
LANE CLOSURE WITH FLAGGER PROVIDED**

PLATE NUMBER  
634.23

Sheet 1 of 1