

February 26, 2025

**ADDENDUM NO. 2**

**RE: Item #13, March 5, 2025 Letting - NH 0081(114)0, PCN 07DH, Yankton County - ADA,  
Modify Intersection, Signals**

**TO WHOM IT MAY CONCERN:**

The following addenda to the plans shall be inserted and made a part of your proposal for the referenced project.

**SPECIAL PROVISIONS:** NO CHANGE

**SDEBS BID PROPOSAL:** *The electronic bid proposal for this contract has been revised to include the changes associated with this addendum. Bidders must log in to the SDEBS to retrieve and incorporate these changes into their bid.*

**Bid Items were added:**

Bid Item 635E2000 "Pedestal Signal Pole"

**Quantities for Bid Items were changed:**

Bid Item 380E4080 "9.5" PCC Fillet Section" changed from 623.5 to 596.8 SqYd

Bid Item 462E0100 "Class M6 Concrete" changed from 24.9 to 17 CuYd

Bid Item 635E2150 "Signal Pole with 50' Mast Arm and Luminaire Arm" changed from 5 to 6 Each

Bid Item 635E2155 "Signal Pole with 55' Mast Arm and Luminaire Arm" changed from 4 to 3 Each

Bid Item 635E5020 "2' Diameter Footing" changed from 6 to 13 Ft

Bid Item 635E5030 "3' Diameter Footing" changed from 240 to 249 Ft

Bid Item 635E8120 "2" Rigid Conduit, Schedule 40" changed from 765 to 780 Ft

Bid Item 635E9504 "4/C #14 AWG Copper Tray Cable, K2" changed from 2,625 to 2,675 Ft

Bid Item 651E0040 "4" Concrete Sidewalk" changed from 11,367.1 to 9,966 SqFt

**Bid Items were removed:**

Bid Item 420E0400 "Structure Excavation, Miscellaneous"

Bid Item 460E0382 "Install Dowel in Rock"

Bid Item 480E0200 "Epoxy Coated Reinforcing Steel"

**PLANS:** Please destroy sheets A1, A2, B2, B6, B10, L2, L3, L6, L10, L12, L21, L22, L31, and L37 and replace with the enclosed sheets, dated 2/20/25, 2/21/25, 2/25/25, 2/26/25. Sheet L31-b was added.

**Sheets A1 & B2: Quantities for Bid Items were changed:**

Bid Item 380E4080 for "9.5" PCC Fillet Section" changed from 623.5 to 596.8 SqYd

Bid Item 651E0040 for "4" Concrete Sidewalk" changed from 11,367.1 to 9,966 SqFt

**Sheets A2 & L2: Bid Items were added:**

Bid Item 635E2000 "Pedestal Signal Pole"

**Quantities for Bid Items were changed:**

Bid Item 635E2150 "Signal Pole with 50' Mast Arm and Luminaire Arm" changed from 5 to 6 Each

Bid Item 635E2155 "Signal Pole with 55' Mast Arm and Luminaire Arm" changed from 4 to 3 Each

Bid Item 635E5020 "2' Diameter Footing" changed from 6 to 13 Ft

Bid Item 635E5030 "3' Diameter Footing" changed from 240 to 249 Ft

Bid Item 635E8120 "2" Rigid Conduit, Schedule 40" changed from 765 to 780 Ft

Bid Item 635E9504 "4/C #14 AWG Copper Tray Cable, K2" changed from 2,625 to 2,675 Ft

**Bid Items were removed:**

Bid Item 420E0400 "Structure Excavation, Miscellaneous"

Bid Item 460E0382 "Install Dowel in Rock"

Bid Item 462E0100 "Class M6 Concrete"

Bid Item 480E0200 "Epoxy Coated Reinforcing Steel"

**Sheet B2:** INCIDENTAL WORK, GRADING table was revised.

**Sheet B6:** PAVEMENT, CURB, AND GUTTER, AND SIDEWALK QUANTITIES table was revised.

**Sheet B10:** Removal note for retaining wall was added.

**Sheet L2:** SIGNAL POLE A2 note was removed, and LUMINAIRE POLE note was added.

**Sheet L3:** TABLE OF FOOTING DATA and notes were revised.

**Sheets L6 & L10:** CONDUIT AND CABLE QUANTITIES table was revised.

**Sheet L12:** SIGNAL LAYOUT and ESTIMATE OF QUANTITIES were revised.

**Sheets L21 & L22:** CONDUIT LAYOUT and ESTIMATE OF QUANTITIES were revised.

**Sheet L31:** TRAFFIC SIGNAL WIRING TABLES was revised.

**Sheet L31-b:** TRAFFIC SIGNAL WIRING AND TABLES was added.

**Sheet L37:** SPECIAL DETAIL was removed, and THIS PAGE LEFT INTENTIONALLY BLANK was added.

Sincerely,

Sam Weisgram  
Engineering Supervisor

SW/cj

CC: Travis Dressen, Mitchell Region Engineer  
Greg Rothschadl, Yankton Area Engineer

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET A1	TOTAL SHEETS A4
-----------------------	--------------------------	-------------	--------------------

Plotting Date: 02/26/2025  
Revised Date: 02/25/2025 MDJ

## Section B - Grading

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	15	Each
009E3230	Grade Staking	0.141	Mile
009E3250	Miscellaneous Staking	0.070	Mile
009E3280	Slope Staking	0.070	Mile
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	1,722	Ft
110E0400	Remove Drop Inlet	4	Each
110E1010	Remove Asphalt Concrete Pavement	1.3	SqYd
110E1100	Remove Concrete Pavement	543.0	SqYd
110E1140	Remove Concrete Sidewalk	1,175.9	SqYd
250E0020	Incidental Work, Grading	Lump Sum	LS
260E2010	Gravel Cushion	287.4	Ton
320E1200	Asphalt Concrete Composite	0.2	Ton
380E0080	9.5" Nonreinforced PCC Pavement	547.4	SqYd
380E3540	8" PCC Approach Pavement	396.0	SqYd
380E4080	9.5" PCC Fillet Section	596.8	SqYd
380E6110	Insert Steel Bar in PCC Pavement	1,143	Each
450E0122	18" RCP Class 2, Furnish	4	Ft
450E0130	18" RCP, Install	4	Ft
450E0142	24" RCP Class 2, Furnish	36	Ft
450E0150	24" RCP, Install	36	Ft
450E0416	24" RCP Bend, Furnish	1	Each
450E0417	24" RCP Bend, Install	1	Each
462E0100	Class M6 Concrete	17.0	CuYd
480E0100	Reinforcing Steel	2,866	Lb
650E0095	Type B69.5 Concrete Curb and Gutter	1,074	Ft
650E0395	Type BL69.5 Concrete Curb and Gutter	499	Ft
650E4695	Type P9.5 Concrete Gutter	24	Ft
651E0040	4" Concrete Sidewalk	9,966	SqFt
651E0740	4" Reinforced Colored Concrete Sidewalk	187	SqFt
651E7000	Type 1 Detectable Warnings	660	SqFt
670E5340	4' x 11' Precast Concrete Type S Drop Inlet Lid	4	Each
671E6007	Type A7 Manhole Frame and Lid	1	Each
998E0100	Railroad Protective Insurance	Lump Sum	LS

## Section C - Traffic Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
634E0010	Flagging	50.0	Hour
634E0110	Traffic Control Signs	1,075.2	SqFt
634E0120	Traffic Control, Miscellaneous	Lump Sum	LS
634E0275	Type 3 Barricade	6	Each
634E0330	Temporary Raised Pavement Markers	9,240	Ft
634E0420	Type C Advance Warning Arrow Board	2	Each
634E0915	Short Term Temporary Traffic Control Signal	5	Site

## Section D - Erosion and Sediment Control

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1690	Remove Sediment	1.9	CuYd
110E1693	Remove Erosion Control Wattle	250	Ft
110E1695	Remove Sediment Filter Bag	244	Ft
110E1700	Remove Silt Fence	196	Ft
230E0100	Remove and Replace Topsoil	Lump Sum	LS
730E0206	Type D Permanent Seed Mixture	30	Lb
731E0100	Fertilizing	146	Lb
732E0600	Hydraulic Straw Mulch	297	Lb
734E0154	12" Diameter Erosion Control Wattle	250	Ft
734E0165	Remove and Reset Erosion Control Wattle	63	Ft
734E0180	Sediment Filter Bag	244	Ft
734E0604	High Flow Silt Fence	196	Ft
734E0610	Mucking Silt Fence	14	CuYd
734E0620	Repair Silt Fence	49	Ft
734E0845	Sediment Control at Inlet with Frame and Grate	1	Each
734E0847	Sediment Control at Type S Reinforced Concrete Drop Inlet	52	Ft
734E5005	Dewatering	Lump Sum	LS

### INDEX OF SHEETS

A1 and A2 Estimate of Quantities for Sections B, C, D, L, M and S  
A3 Environmental Commitments

### SPECIFICATIONS

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

# ESTIMATE OF QUANTITIES AND ENVIRONMENTAL COMMITMENTS

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	A2	A4

Plotting Date: 02/26/2025  
Revised Date: 02/26/2025 MDJ

## Section L - Signal and Lighting

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1510	Remove Luminaire Pole	1	Each
110E1520	Remove Signal Equipment	Lump Sum	LS
110E1530	Remove Signal Pole Footing	19	Each
110E1540	Remove Luminaire Pole Footing	1	Each
110E5110	Salvage Signal Equipment	Lump Sum	LS
635E0040	Breakaway Base Luminaire Pole with Arm, 40' Mounting Height	1	Each
635E2000	Pedestal Signal Pole	1	Each
635E2025	Signal Pole with 25' Mast Arm	2	Each
635E2120	Signal Pole with 20' Mast Arm and Luminaire Arm	1	Each
635E2135	Signal Pole with 35' Mast Arm and Luminaire Arm	1	Each
635E2145	Signal Pole with 45' Mast Arm and Luminaire Arm	2	Each
635E2150	Signal Pole with 50' Mast Arm and Luminaire Arm	6	Each
635E2155	Signal Pole with 55' Mast Arm and Luminaire Arm	3	Each
635E2160	Signal Pole with 60' Mast Arm and Luminaire Arm	2	Each
635E2165	Signal Pole with 65' Mast Arm and Luminaire Arm	2	Each
635E3700	Roadway Luminaire, LED with Photoelectric Cell	89	Each
635E3815	Decorative Luminaire, LED with Photoelectric Cell	61	Each
635E4030	3 Section Vehicle Signal Head	49	Each
635E4050	5 Section Vehicle Signal Head	10	Each
635E4090	4 Section Directional Vehicle Signal Head	32	Each
635E5020	2' Diameter Footing	13.0	Ft
635E5030	3' Diameter Footing	249.0	Ft
635E5301	Type 1 Electrical Junction Box	15	Each
635E5303	Type 3 Electrical Junction Box	14	Each
635E5400	Electrical Service Cabinet	5	Each
635E5430	Traffic Signal Controller	5	Each
635E5515	Battery Backup System for Traffic Signal	5	Each
635E5520	Video Detection System	6	Each
635E5560	Emergency Vehicle Preemption Unit	5	Each
635E5570	Optical Detector	19	Each
635E5880	Accessible Pedestrian Signal	38	Each
635E5910	Pedestrian Push Button Pole	38	Each
635E5922	Pedestrian Signal Head with Countdown Timer	38	Each
635E5930	Pedestrian Crossing Sign	38	Each
635E6200	Miscellaneous, Electrical	Lump Sum	LS
635E8110	1" Rigid Conduit, Schedule 40	890	Ft
635E8120	2" Rigid Conduit, Schedule 40	780	Ft
635E8130	3" Rigid Conduit, Schedule 40	85	Ft
635E8140	4" Rigid Conduit, Schedule 40	120	Ft
635E8220	2" Rigid Conduit, Schedule 80	920	Ft
635E8230	3" Rigid Conduit, Schedule 80	1,315	Ft
635E9016	1/C #6 AWG Copper Wire	455	Ft

## Section L - Signal and Lighting (Continued)

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
635E9018	1/C #8 AWG Copper Wire	7,005	Ft
635E9502	2/C #14 AWG Copper Tray Cable, K2	7,200	Ft
635E9503	3/C #14 AWG Copper Tray Cable, K2	920	Ft
635E9504	4/C #14 AWG Copper Tray Cable, K2	2,675	Ft
635E9505	5/C #14 AWG Copper Tray Cable, K2	1,400	Ft
635E9506	6/C #14 AWG Copper Tray Cable, K2	2,020	Ft
635E9507	7/C #14 AWG Copper Tray Cable, K2	1,435	Ft
635E9515	15/C #14 AWG Copper Tray Cable, K2	140	Ft
635E9519	19/C #14 AWG Copper Tray Cable, K2	710	Ft
635E9525	25/C #14 AWG Copper Tray Cable, K2	2,900	Ft
635E9710	2/C #10 AWG Copper Pole and Bracket Cable	6,525	Ft

## Section M - Pavement Marking

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
633E0210	Preformed Thermoplastic Pavement Marking, 4"	47,340	Ft
633E0225	Preformed Thermoplastic Pavement Marking, 24"	3,240	Ft
633E0230	Preformed Thermoplastic Pavement Marking, Area	19	SqFt
633E0235	Preformed Thermoplastic Pavement Marking, Arrow	98	Each
633E0250	Preformed Thermoplastic Pavement Marking, Railroad Crossing	4	Each
633E5000	Grooving for Cold Applied Plastic Pavement Marking, 4"	47,340	Ft
633E5015	Grooving for Cold Applied Plastic Pavement Marking, 24"	3,240	Ft
633E5020	Grooving for Cold Applied Plastic Pavement Marking, Area	19	SqFt
633E5025	Grooving for Cold Applied Plastic Pavement Marking, Arrow	98	Each
633E5040	Grooving for Cold Applied Plastic Pavement Marking, Railroad Crossing	4	Each

## Section S - Permanent Signing

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E0130	Remove Traffic Sign	22	Each
632E1320	2.0"x2.0" Perforated Tube Post	68.0	Ft
632E1340	2.5"x2.5" Perforated Tube Post	148.0	Ft
632E3203	Flat Aluminum Sign, Nonremovable Copy High Intensity	660.0	SqFt
632E3205	Flat Aluminum Sign, Nonremovable Copy Super/Very High Intensity	25.2	SqFt

Plot Scale - 1:200

Plotted From - TRSF12140

File - ...:\p\yamk07\DH\Notes\SectionA.dgn

**SECTION B ESTIMATE OF QUANTITIES**

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
009E0010	Mobilization	Lump Sum	LS
009E3220	Reestablish Right-of-Way and Property Corner	15	Each
009E3230	Grade Staking	0.141	Mile
009E3250	Miscellaneous Staking	0.070	Mile
009E3280	Slope Staking	0.070	Mile
009E4200	Construction Schedule, Category II	Lump Sum	LS
110E0300	Remove Concrete Curb and/or Gutter	1,722	Ft
110E0400	Remove Drop Inlet	4	Each
110E1010	Remove Asphalt Concrete Pavement	1.3	SqYd
110E1100	Remove Concrete Pavement	543.0	SqYd
110E1140	Remove Concrete Sidewalk	1,175.9	SqYd
250E0020	Incidental Work, Grading	Lump Sum	LS
260E2010	Gravel Cushion	287.4	Ton
320E1200	Asphalt Concrete Composite	0.2	Ton
380E0080	9.5" Nonreinforced PCC Pavement	547.4	SqYd
380E3540	8" PCC Approach Pavement	396.0	SqYd
380E4080	9.5" PCC Fillet Section	596.8	SqYd
380E6110	Insert Steel Bar in PCC Pavement	1,143	Each
450E0122	18" RCP Class 2, Furnish	4	Ft
450E0130	18" RCP, Install	4	Ft
450E0142	24" RCP Class 2, Furnish	36	Ft
450E0150	24" RCP, Install	36	Ft
450E0416	24" RCP Bend, Furnish	1	Each
450E0417	24" RCP Bend, Install	1	Each
462E0100	Class M6 Concrete	17.0	CuYd
480E0100	Reinforcing Steel	2,866	Lb
650E0095	Type B69.5 Concrete Curb and Gutter	1,074	Ft
650E0395	Type BL69.5 Concrete Curb and Gutter	499	Ft
650E4695	Type P9.5 Concrete Gutter	24	Ft
651E0040	4" Concrete Sidewalk	9,966	SqFt
651E0740	4" Reinforced Colored Concrete Sidewalk	187	SqFt
651E7000	Type 1 Detectable Warnings	660	SqFt
670E5340	4' x 11' Precast Concrete Type S Drop Inlet Lid	4	Each
671E6007	Type A7 Manhole Frame and Lid	1	Each
998E0100	Railroad Protective Insurance	Lump Sum	LS

**UTILITIES**

The Contractor will be aware that the existing utilities shown in the plans were surveyed prior to the design of this project and might have been relocated or replaced by a new utility facility prior to construction of this project, might be relocated or replaced by a new utility facility during the construction of this project, or might not require adjustment and may remain in its current location. The Contractor will contact each utility owner and confirm the status of all existing and new utility facilities. The utility contact information is provided elsewhere in the plans or bidding documents.

Prior to excavation in or adjacent to BNSF (Burlington Northern Santa Fe) Railway ROW and in conjunction with contacting the SD One-Call, the Contractor will call the BNSF Utility Locate number 1-800-533-2891.

**US81 & 15th Street Utility Adjustment**  
 A 2" plastic gas line exists in the northwest quadrant of US81 & 15th Street at the location of Signal Pole C2. MidAmerican Energy Company will adjust the gas week prior to signal footing install. The Contractor will notify MidAmerican Energy Company 4 weeks before the installation of the signal pole footing. The MidAmerican Energy Company contact is

Nicolle Rasmusson  
 MidAmerican Energy Company  
 1200 South Blauvelt Ave.  
 Sioux Falls, SD 57105  
 Phone – (605) 373-6081

**RAILROAD CONSTRUCTION**

Construction to the railroad will be done by a separate contractor. The Contractor will need to coordinate with the railroad.

**TABLE OF DROP INLET REMOVAL**

All costs for removal of the frame and grate assembly will be incidental to the contract unit price per each for "Remove Drop Inlet".

Station	L/R	Quantity (Each)
42+23	R	1
42+41	L	1
84+11	R	1
84+22	R	1
Total:		4

**ASPHALT REMOVAL**

The general limits of asphalt removal are 1 foot beyond the proposed curb and gutter and or fillet. This limit was used as the basis for the estimated quantity of "Remove Asphalt Concrete Pavement".

**SIDEWALK REMOVAL**

The limits of the sidewalk removal shown in these plans are approximate. The limits should be adjusted to meet field conditions (i.e. joint lines) and to ensure that the new curb ramps meet the slope and grade requirements

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET B2	TOTAL SHEETS B38
-----------------------	--------------------------	-------------	---------------------

Plotting Date: 02/26/2025  
 Revised Date: 02/25/2025 MDJ

**PUBLIC LANDS SURVEY SYSTEM, RIGHT OF WAY, AND PROPERTY CORNERS**

The Contractor will have a Land Surveyor, licensed in the State of South Dakota, to set, reestablish or verify public land survey system (PLSS) corners, right of way (ROW) corners, and property corners as directed by the appropriate SDDOT Region Land Surveyor. It is estimated that 15 ROW and property corners will be set, reestablished, or verified for this project. The Contractor's Land Surveyor, under the direction of the Region Land Surveyor, will set, reestablish, or verify all corner monuments after surfacing and fencing operations are completed in accordance with the PUBLIC LANDS SURVEY SYSTEM CORNERS section and the RIGHT OF WAY AND PROPERTY CORNERS section in Chapter 8 of the SDDOT Survey Manual.

< <https://dot.sd.gov/doing-business/engineering/design-services/surveyors> >

All costs associated with furnishing and installing PLSS caps, rebar, and all other materials associated with setting, reestablishing, or verifying PLSS, ROW corners, and property corners in accordance with the SDDOT Survey Manual will be incidental to the contract unit price per each for "Reestablish Public Land Survey System Corner" and/or "Reestablish Right-of-Way and Property Corner".

**INCIDENTAL WORK, GRADING**

Station	Remarks
13+75 to 14+00	Remove Retaining Wall needed for Signal Pole Footing Placement
42+20-42' R to 42+24-32' R	Take Out 18"-10' RCP
42+40-32' L to 42+40-42' L	Take Out 18"-12' RCP
84+07-56' R to 84+24-47' R	Take Out 24"-18' RCP
84+07-56' R to 84+23-94' R	Take Out 24"-18' RCP

1:200 Plot Scale -

Plotted From - TRSF12140

File - ...apj\ank07\DHNotes\SectionB.dgn

# PAVEMENT, CURB AND GUTTER, AND SIDEWALK QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	B6	B38

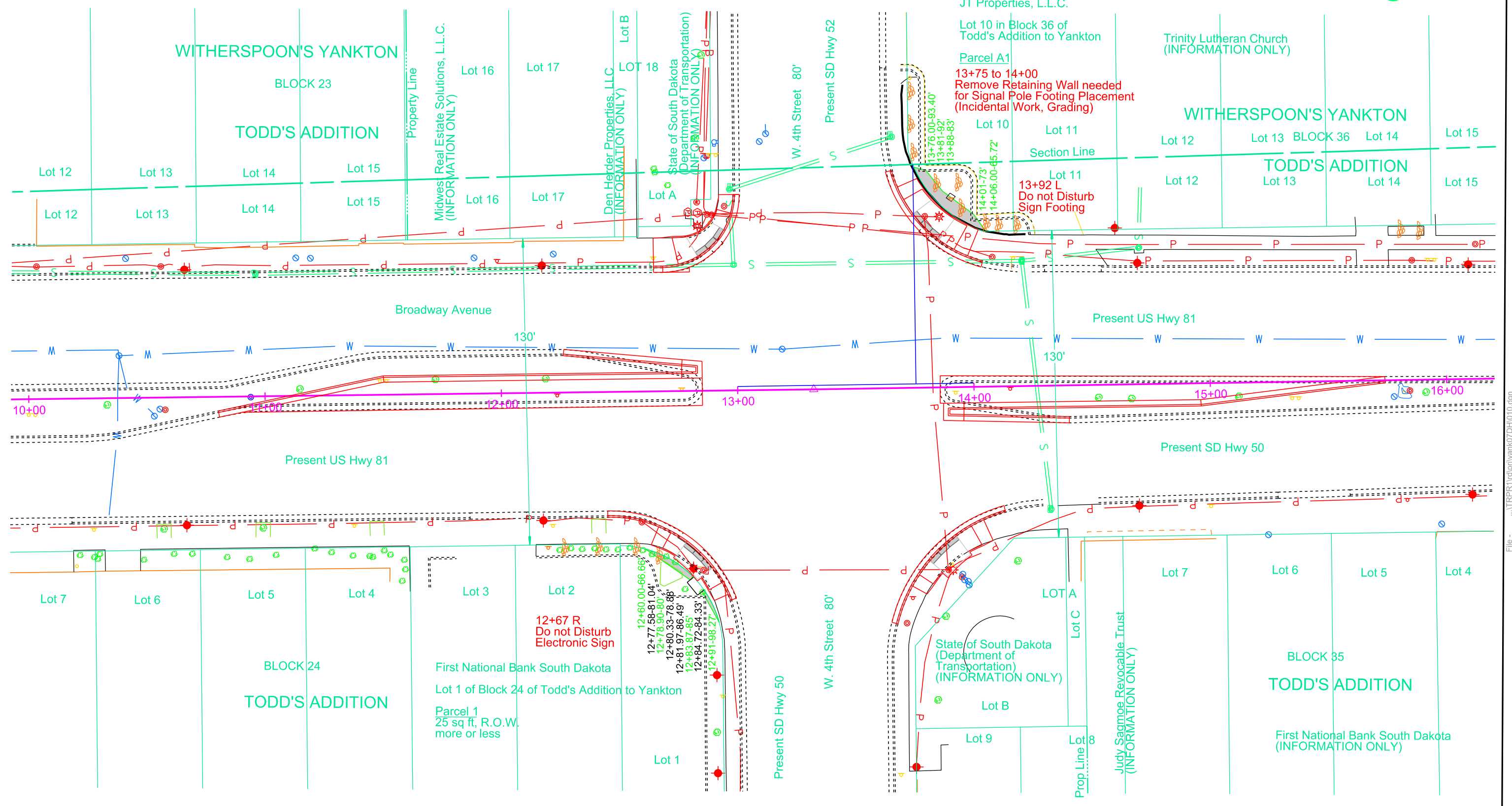
Plotting Date: 02/25/2025  
 Revised Date: 02/25/2025 MDJ

Plot Scale - 1:200

Intersection	Quadrant	REMOVE				INSTALL													
		Concrete Curb and/or Gutter	Concrete Pavement	Concrete Sidewalk	Asphalt Concrete	PCC Fillet Section	Concrete Curb and Gutter Type		Concrete Sidewalk		Detectable Warnings		Type A PCC Approach Pavement	Concrete Curb		Nonreinforced PCC Pavement	Steel Bar Insertion		Gravel Cushion
		Ft	SqYd	SqYd	SqYd	9.5" SqYd	B69.5 Ft	BL69.5 Ft	4" SqFt	4" Reinforced SqFt	Type 1 SqFt	8" SqFt	P9.5 Ft	9.5" SqYd	No. 5 x 30 Inch Ea		Ton	Ton	
<b>US Hwy 81</b>																			
West 4th Steet	Northwest	56.8		46.0			56.8		414.4		30.0						25		
	Northeast	68.9		35.0			68.9		360.1		30.0						29		
	Southeast	66.8		33.6			66.8		302.2		30.0						28		
	Southwest	40.3	4.1	43.8		4.1	40.3		394.0		30.0						17		
	North Splitter Island	242.9							237.5						175.0		96	91.9	
South Splitter Island	264.8							261.9						215.6		106	113.2		
West 8th Steet	Northwest		35.1			35.1	0.7		342.4		30.0						25		
	Northeast			9.8			11.0		136.5		10.0						4		
	Southeast			16.2			9.0		139.0		10.0						4		
	Southwest			55.5		26.7			467.7		30.0						21		
West 10th Steet	Northwest	151.0	27.1	110.7	0.2	22.6	115.8		902.2		40.0	396	24				77		0.05
	Northeast	99.3	26.8	93.0	0.2	32.0	100.2		847.2		20.0						64		0.05
	Southeast	64.1	74.1	67.3	0.1	71.9	89.7		722.1		50.0						90		0.02
	Southwest	89.9	25.0	80.4	0.8	27.1	96.0		300.8		20.0						162		0.1
West 15th Steet	Northwest		25.9	42.7		25.9			411.6		30.0						21		
	Northeast	5.0	26.0	29.9		25.9	5.0		269.4		30.0						23		
	Southeast	10.0	25.0	24.3		25.0	10.0		255.9		30.0						25		
	Southwest	5.0	26.8	27.0		24.1	5.0		270.6		30.0						23		
West 21st Steet	Northwest		45.9	21.7		45.8			195.6		30.0						25		
	Northeast	46.7		42.6		46.7	46.7		383.2		20.0						20		
	Southeast	230.5	112.6	152.2		67.5	153.3		1164.6	186.6	20.0						97		
	Southwest		88.6	53.6		55.3			482.6		20.0			62.3			36	32.7	
West 23rd Steet	Northwest	203.7		89.1		86.8	122.6		266.2		30.0			94.5			91	49.6	
	Northeast	39.1		44.6		21.0	2.0		413.0		30.0						2		
	Southeast	33.2		26.9			33.2		288.9		30.0						14		
	Southwest	3.9		17.3			40.5		236.1		30.0						18		
<b>Total:</b>		1722.0	543.0	1163.3	1.3	596.8	1073.5	499.4	9966.2	186.6	660.0	396	24	547.4		1143	287.4	0.2	

Plotted From - TRSF12140

File - U:\proj\jvank07\DH1\TableCG.dgn



Plot Scale = 1:40

Plotted From: TRSF12140

File: ...:\TRPR1\rdp\yank07\DH10.dgn

# YANKTON

**SECTION L ESTIMATE OF QUANTITIES**

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET L2	TOTAL SHEETS L43
-----------------------	--------------------------	-------------	---------------------

Revised 2/26/2025 - RR

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
110E1510	Remove Luminaire Pole	1	Each
110E1520	Remove Signal Equipment	Lump Sum	LS
110E1530	Remove Signal Pole Footing	19	Each
110E1540	Remove Luminaire Pole Footing	1	Each
110E5110	Salvage Signal Equipment	Lump Sum	LS
635E0040	Breakaway Base Luminaire Pole with Arm, 40' Mounting Height	1	Each
635E2000	Pedestal Signal Pole	1	Each
635E2025	Signal Pole with 25' Mast Arm	2	Each
635E2120	Signal Pole with 20' Mast Arm and Luminaire Arm	1	Each
635E2135	Signal Pole with 35' Mast Arm and Luminaire Arm	1	Each
635E2145	Signal Pole with 45' Mast Arm and Luminaire Arm	2	Each
635E2150	Signal Pole with 50' Mast Arm and Luminaire Arm	6	Each
635E2155	Signal Pole with 55' Mast Arm and Luminaire Arm	3	Each
635E2160	Signal Pole with 60' Mast Arm and Luminaire Arm	2	Each
635E2165	Signal Pole with 65' Mast Arm and Luminaire Arm	2	Each
635E3700	Roadway Luminaire, LED with Photoelectric Cell	89	Each
635E3815	Decorative Luminaire, LED with Photoelectric Cell	61	Each
635E4030	3 Section Vehicle Signal Head	49	Each
635E4050	5 Section Vehicle Signal Head	10	Each
635E4090	4 Section Directional Vehicle Signal Head	32	Each
635E5020	2' Diameter Footing	13.0	Ft
635E5030	3' Diameter Footing	249.0	Ft
635E5301	Type 1 Electrical Junction Box	15	Each
635E5303	Type 3 Electrical Junction Box	14	Each
635E5400	Electrical Service Cabinet	5	Each
635E5430	Traffic Signal Controller	5	Each
635E5515	Battery Backup System for Traffic Signal	5	Each
635E5520	Video Detection System	6	Each
635E5560	Emergency Vehicle Preemption Unit	5	Each
635E5570	Optical Detector	19	Each
635E5880	Accessible Pedestrian Signal	38	Each
635E5910	Pedestrian Push Button Pole	38	Each
635E5922	Pedestrian Signal Head with Countdown Timer	38	Each
635E5930	Pedestrian Crossing Sign	38	Each
635E6200	Miscellaneous, Electrical	Lump Sum	LS
635E8110	1" Rigid Conduit, Schedule 40	890	Ft
635E8120	2" Rigid Conduit, Schedule 40	780	Ft
635E8130	3" Rigid Conduit, Schedule 40	85	Ft
635E8140	4" Rigid Conduit, Schedule 40	120	Ft
635E8220	2" Rigid Conduit, Schedule 80	920	Ft
635E8230	3" Rigid Conduit, Schedule 80	1,315	Ft
635E9016	1/C #6 AWG Copper Wire	455	Ft

BID ITEM NUMBER	ITEM	QUANTITY	UNIT
635E9018	1/C #8 AWG Copper Wire	7,005	Ft
635E9502	2/C #14 AWG Copper Tray Cable, K2	7,200	Ft
635E9503	3/C #14 AWG Copper Tray Cable, K2	920	Ft
635E9504	4/C #14 AWG Copper Tray Cable, K2	2,675	Ft
635E9505	5/C #14 AWG Copper Tray Cable, K2	1,400	Ft
635E9506	6/C #14 AWG Copper Tray Cable, K2	2,020	Ft
635E9507	7/C #14 AWG Copper Tray Cable, K2	1,435	Ft
635E9515	15/C #14 AWG Copper Tray Cable, K2	140	Ft
635E9519	19/C #14 AWG Copper Tray Cable, K2	710	Ft
635E9525	25/C #14 AWG Copper Tray Cable, K2	2,900	Ft
635E9710	2/C #10 AWG Copper Pole and Bracket Cable	6,525	Ft

**SUPPLYING AS BUILT PLANS**

If the traffic signal systems are constructed differently than what is stated in the plans, the Contractor will supply as built plans to the Engineer and a copy will 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 will submit shop drawings and catalog cuts in accordance with Section 985 of the Specifications.

PDF submittals will be sent to the following email addresses:

Ryley.Rapp@state.sd.us  
John.Less@state.sd.us  
Stacy.Bartlett@state.sd.us

**ON-SITE INSPECTION**

An on-site inspection of the traffic signals will be conducted before acceptance of the project once the traffic signals are completed and operational. The on-site inspection will be conducted by the Project Engineer or Region Traffic Engineer with the Contractor, City of Yankton personnel, and the Traffic Design Engineer present.

**REMOVE SIGNAL POLE FOOTING**

The footings of existing signal poles EA1 to EA4, EB1, EB3, EB4, EC1 to EC4, ED1 to ED4, and EE1 to EE4 will be removed by the Contractor to a minimum of 2' below the ground surface. Restoration of the disturbed area will be to the satisfaction of the Engineer.

All costs for removing the footings of the existing signal poles will be incidental to the contract unit price per each for "Remove Signal Pole Footing".

**REMOVE LUMINAIRE POLE FOOTING**

The footing of existing luminaire pole EB2 will be removed by the Contractor to a minimum of 2' below the ground surface. Restoration of the disturbed area will be to the satisfaction of the Engineer.

All costs for removing the footing of the existing luminaire pole will be incidental to the contract unit price per each for "Remove Luminaire Pole Footing".

**SIGNAL POLES**

Cantilever traffic signal supports, including anchor bolts, will be designed for fatigue in accordance with Fatigue Importance Category III without galloping and truck induced gusts.

The pole fabricator will be responsible for the determining the diameter, length, and number of anchor bolts.

Signal poles will have rotatable mast arms.

Luminaire extension(s) will have a 50-foot mounting height with 6-foot arm.

**SIGNAL POLE C2**

A minimum of 4 weeks prior to installation of signal pole C2 the Contractor will contact MidAmerican Energy Company and coordinate the relocation of the gas line that is currently at the proposed location of C2. Contact information is:

Nicolle Rasmusson  
MidAmerican Energy Company  
1200 South Blauvelt Ave.  
Sioux Falls, SD 57105  
605-373-6081  
Nicolle.Rasmusson@midamerican.com

**LUMINAIRE POLE**

Luminaire pole B2 will have a mounting height of 40 foot with an 8-foot arm.

The pole fabricator will be responsible for the determining the diameter, length, and number of anchor bolts.



**SALVAGE SIGNAL EQUIPMENT**

The existing signal equipment identified on the plans will be salvaged and delivered to the city of Yankton by the Contractor. The Contractor will notify the city 5 days before the delivery of the salvaged signal equipment for a time and location of delivery. The city contact is:

Corey Potts  
City of Yankton Street Department  
605-668-5250

Any equipment damaged during salvaging or delivery will be repaired or replaced by the Contractor at no cost to the State.

All costs for work involved in the salvage and delivery of the existing signal equipment will be incidental to the contract lump sum price for "Salvage Signal Equipment".

**PEDESTAL SIGNAL POLES**

Pedestal signal poles may be aluminum. Aluminum poles will conform to the following requirements:

Aluminum will conform to ASTM B221, Alloy 6061, and Temper T6.

Poles will be round with a minimum outside pole diameter of 4 inches, and the pole assembly will have a square, cast aluminum base with aluminum access door. The base will conform to the breakaway requirements of NCHRP 350 or MASH. A grounding lug will be provided in the base.

The pole to base connection will be a threaded connection; threads will be 8 TPI, NPT. A collar (integral or non-integral) to prevent wind-induced loosening of pole will be provided. All bolt and connection threads will be coated with a commercially available anti-seize compound intended for use in aluminum-to-aluminum and steel-to-aluminum connections.

The pole finish will either be brushed satin or spun. The top of the pole will be sealed by the traffic signal head mounting hardware or by an aluminum cap.

Measurement and payment for aluminum poles will be as specified in Specifications Section 635.

**DECORATIVE LUMINAIRES**

Decorative luminaire heads on the existing 15' luminaire poles from the Missouri River Bridge to 10<sup>th</sup> Street (47 total) will be removed and replaced with a LED post top fixture. The 47 existing metal halide fixtures will be removed and disposed of by the contractor. Any damage done to the poles will be repaired, or the poles will be replaced, at the Contractor's expense. All cost associated with removal, disposal and replacement of the fixtures will be incidental to the unit price for each "Decorative Luminaire, LED with Photoelectric Cell."

Existing 2/C #10 AWG Copper Pole and Bracket Cable will be removed and replaced with new cable. Contractor will be responsible of disposing of the existing Pole and Bracket Cable. All cost associated with removal, disposal

and replacement of Pole and Bracket Cable will be incidental to the cost for "2/C #10 AWG Copper Pole and Bracket Cable".

The lighting design used the following parameters and provides 1.1 and greater average maintained foot-candles and uniformity ratios of 3:1 (average maintained to minimum maintained foot-candles):

Pole Setback: 2 Ft.  
Lamp Loss Factor (LLF): 0.8  
Width of Lighted Area: 84 Ft.  
Luminaire Cycle Length: 96 Ft.  
Configuration: Staggered  
Mounting Height: 15 Ft.  
Arm Length: NA  
Light Source: LED

The following LED luminaire meets the requirements for this design:

Holophane: AWDE3-P79-40K-MVOLT-SPL-AL3-BK-CL

**DECORATIVE FLOODLIGHT, LED**

The existing vertical flood lights mounted on the river-side of the decorative bridge columns of the Discovery Bridge (14 total) will be removed, disposed of, and replaced. The following LED luminaire (or an approved equivalent) meets the requirements for this design:

Beacon Alpha: AL-U / 60L-136 / 4K7 / 3x5 / sf3 / BLS

All costs associated with the removal & disposal of the existing vertical flood lights, and the installation of the new light will be incidental to the contract unit for each "Decorative Luminaire, LED with Photoelectric Cell".

**STANDARD LUMINAIRES**

The Contractor will remove the existing luminaires on the 40-ft poles between 10<sup>th</sup> and 23<sup>rd</sup> Street (57 total), and on the bridge pier towers of the Discovery Bridge (14 total). The existing HPS luminaires will be removed and disposed of by the contractor. New LED luminaires will be reinstalled onto the existing poles/bridge pier towers. All cost associated with the removal and disposal of the luminaires will be incidental to the unit price for each "Roadway Luminaire, LED with Photoelectric Cell".

Existing 2/C #10 AWG Copper Pole and Bracket Cable will be removed and replaced with new cable. Contractor will be responsible of disposing of the existing Pole and Bracket Cable. All cost associated with removal, disposal and replacement of Pole and Bracket Cable will be incidental to the cost for "2/C #10 AWG Copper Pole and Bracket Cable".

The lighting design used the following parameters and provides 1.1 and greater average maintained foot-candles and uniformity ratios of 3:1 (average maintained to minimum maintained foot-candles).

Pole Setback: 0 Ft.  
Lamp Loss Factor (LLF): 0.8  
Width of Lighted Area: 80 Ft.  
Luminaire Cycle Length: 97 Ft.

STATE OF SOUTH DAKOTA	PROJECT	SHEET	TOTAL SHEETS
	NH 0081(114)0	L3	L43

Revised 2/26/2025 - RR

Configuration: Staggered  
Mounting Height: 40 Ft.  
Arm Length: 8 Ft.  
Light Source: LED

The following LED luminaires meet the requirements for this design for all standard poles and luminaire extensions:

- a.) GE Evolve: ERL2-0-19-C5-40-A
- b.) AEL Autobahn ATB0-P452-MVOLT-R3-P7

**SIGNAL BACKPLATES**

All new vehicle signal heads will have backplates with retroreflective border. The vehicle signal head backplates will have a factory applied 3-inch wide yellow retroreflective border. Sheeting for the border will be Type XI or Type IX in conformance with ASTM D4956. Backplates will be polycarbonate, aluminum, or aluminum-composite. Minimum material thicknesses are:

Polycarbonate, 0.10-inch  
Aluminum, 0.06-inch  
Aluminum-Composite, 0.08-inch

Signal backplates will extend not less than 5 inches from the edge of the signal head at the top, bottom, and sides. The bottom of the backplate on vehicle signal faces mounted directly above pedestrian signal indications will be sized to permit the separate adjustment of the vehicle and pedestrian signal indication and may be less than 4 inches.

All costs involved with furnishing and installing backplates with retroreflective border for the new vehicle signal heads will be incidental to the contract unit price per each for "3 Section Vehicle Signal Head", "3 Section Directional Vehicle Signal Head", "4 Section Directional Vehicle Signal Head". and "5 Section Vehicle Signal Head",

**TABLE OF FOOTING DATA**

Site Designation	Footing Diameter	* Footing Depth	**Spiral Diameter	**Spiral Length	Vertical Reinforcement
A5***	2' - 0"	6' - 0"	1' - 8"	44' - 3"	8-#7 x 5' - 6"
B2	2' - 0"	7' - 0"	1' - 8"	49' - 6"	8-#7 x 6' - 6"
B4	3' - 0"	10' - 0"	2' - 8"	104' - 3"	14-#8 x 9' - 6"
B3, C2, C4, D4, & E2	3' - 0"	12' - 0"	2' - 8"	120' - 9"	14-#8 x 11' - 6"
A2***, C3, D2	3' - 0"	13' - 0"	2' - 8"	129' - 3"	14-#8 x 12' - 6"
A1, A3, A4, B1, C1, D1, D3, E1, E3, & E4	3' - 0"	14' - 0"	2' - 8"	137' - 6"	14-#8 x 13' - 6"

\* Footing depth will be below ground level.

\*\* The size of all spirals will be #3.

\*\*\*At pole footing locations A2 and A5, if drilled shaft excavation cannot be completed due to obstructions, contact the Office of Bridge Design for alternate footing details

# CONDUIT AND CABLE QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET L6	TOTAL SHEETS L43
-----------------------	--------------------------	-------------	---------------------

Revised 2/26/2025 - RR

Plot Scale - 1:200

Plotted From - TRPR17199

File - ...:\prj\ank07\DH\T\tableConduit.dgn

Location to Location		Rigid Conduit						Copper Wire												Preemptive Cable (Not a Bid Item)		Pole and Bracket	
		Schedule 40				Schedule 80		1/C #8 AWG	1/C #6 AWG	2/C #14 AWG	3/C #14 AWG	4/C #14 AWG	5/C #14 AWG	6/C #14 AWG	7/C #14 AWG	15/C #14 AWG	19/C #14 AWG	25/C #14 AWG	PC	2/C #10 AWG			
		1"	2"	3"	4"	2"	3"	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT			
<b>4TH &amp; BROADWAY INTERSECTION</b>																							
METER	CONTROLLER		40'					125'	125'														
CONTROLLER	JA1			30'						250'				155'				125'		125'			
JA1	PA1	25'								30'													
JA1	PA2	25'								30'													
JA1	A1		20'						65'					25'				25'		25'			
JA1	JA4							170'	530'		700'			530'				350'		350'			
JA4	PA7	15'								20'				35'				35'		20'			
JA4	PA8	20'									25'												
JA4	A4		15'						50'					40'				20'					
JA4	JA3							125'	390'		260'			130'				130'		130'			
JA3	PA5	20'									25'												
JA3	PA6	30'									35'												
JA3	A3		15'						50'					20'				20'		20'			
JA1	JA2							120'	375'		250'			125'				125'		125'			
JA2	PA3	20'									25'												
JA2	PA4	25'									30'												
JA2	A2		25'						80'					30'				30'		30'			
JF1	CONTROLLER		25'																				
JF2	CONTROLLER							135'															
JA2	A5		15'											50'									
<b>Poles</b>																							
A1	SIGNAL POLE											30'	130'	110'				80'		65'			
A2	SIGNAL POLE												135'	100'				65'		65'			
A3	SIGNAL POLE											30'	130'	110'				75'		65'			
A4	SIGNAL POLE											30'	45'	85'	65'			70'		65'			
PA1	PUSHBUTTON POLE										10'												
PA2	PUSHBUTTON POLE										10'												
PA3	PUSHBUTTON POLE										10'												
PA4	PUSHBUTTON POLE										10'												
PA5	PUSHBUTTON POLE										10'												
PA6	PUSHBUTTON POLE										10'												
PA7	PUSHBUTTON POLE										10'												
PA8	PUSHBUTTON POLE										10'												
A5												30'											
<b>Subtotal:</b>		180'	155'		30'	255'	295'		1,665'	125'	1,760'	120'	490'	405'	1,155'			860'	1,115'	260'			

# CONDUIT AND CABLE QUANTITIES

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET L10	TOTAL SHEETS L43
-----------------------	--------------------------	--------------	---------------------

Revised 2/26/2025 - RR

Location to Location	Rigid Conduit						Copper Wire											Preemlive Cable (Not a Bid Item)		Pole and Bracket	
	Schedule 40				Schedule 80		1/C	1/C	2/C	3/C	4/C	5/C	6/C	7/C	15/C	19/C	25/C	PC	2/C		
	1"	2"	3"	4"	2"	3"	#8 AWG	#6 AWG	#14 AWG	#14 AWG	#14 AWG	#14 AWG	#14 AWG	#14 AWG	#14 AWG	#14 AWG	#14 AWG		#10 AWG		
FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT	FT		FT			
<b>23RD &amp; BROADWAY INTERSECTION</b>																					
METER	CONTROLLER	15																			
CONTROLLER	JE2			25																	
JE2	PE3	30																			
JE2	PE4	30																			
JE2	E2		20																		
JE2	JE1					90															
JE1	PE1	30																			
JE1	PE2	20																			
JE1	E1		35																		
JE2	JE3					150															
JE3	PE5	25																			
JE3	PE6	25																			
JE3	E3		15																		
JE3	JE4					100															
JE4	PE7	25																			
JE4	PE8	15																			
JE4	E4		20																		
METER	JE2		40																		
JF9	CONTROLLER					85															
<b>Poles</b>																					
E1	SIGNAL POLE								30	215							70		65		
E2	SIGNAL POLE								30	125		50					70		65		
E3	SIGNAL POLE								30	225		60					80		65		
E4	SIGNAL POLE								30	150							70		65		
PE1	PUSHBUTTON POLE									10											
PE2	PUSHBUTTON POLE									10											
PE3	PUSHBUTTON POLE									10											
PE4	PUSHBUTTON POLE									10											
PE5	PUSHBUTTON POLE									10											
PE6	PUSHBUTTON POLE									10											
PE7	PUSHBUTTON POLE									10											
PE8	PUSHBUTTON POLE									10											
<b>Subtotal:</b>		200'	145'		25'	85'	340'														
<b>Total:</b>		890'	780'	85'	120'	920'	1,315'														

Plot Scale - 1:200

Plotted From - TRPR17199

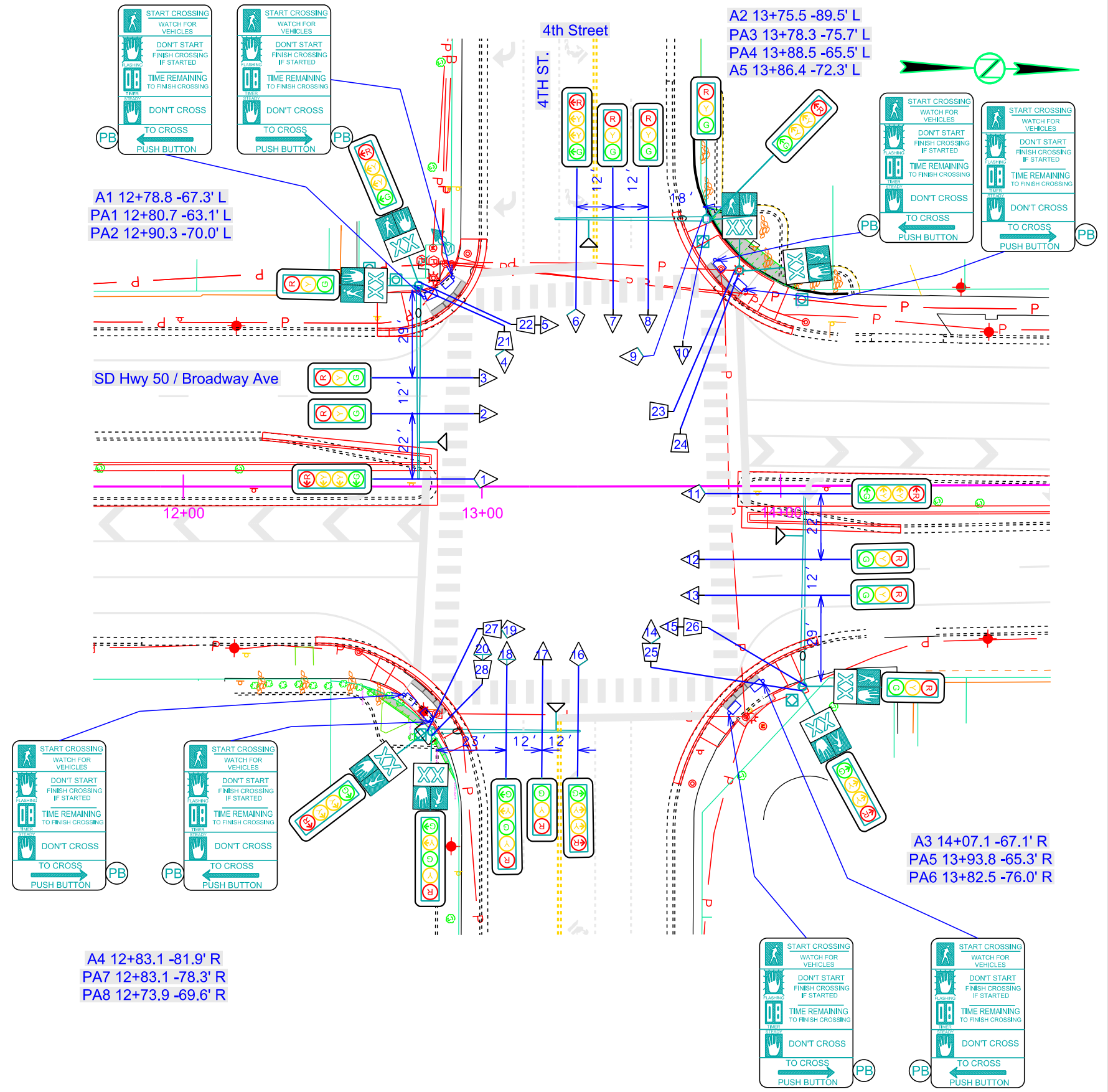
File - ...:\prj\ank07\DH\tableConduit.dgn

# SIGNAL LAYOUT

## SD HWY 50 / BROADWAY AVE. & 4TH STREET

Revised 2/20/2025 - RR

ESTIMATE OF QUANTITIES			
KEY	ITEM	EST QUANT	UNIT
	Signal Pole w/65' Mast Arm & 6' Lumin Arm (A1, A3)	2	EACH
	Signal Pole w/50' Mast Arm & 6' Lumin Arm (A2, A4)	2	EACH
	Pedestal Signal Pole (A5)	1	EACH
	Roadway Luminaire, LED with P.E. (A1, A2, A3, A4)	4	EACH
	3 Section Vehicle Signal Head (2, 3, 5, 7, 8, 10, 12, 13, 15, 17)	10	EACH
	4 Section Directional Vehicle Signal Head (1, 4, 6, 9, 11, 14, 16, 19)	8	EACH
	5 Section Vehicle Signal Head (18, 20)	2	EACH
	Emergency Vehicle Preemption Unit (4-Channel)	1	EACH
	Optical Detector	4	EACH
	Accessible Pedestrian Signal	8	EACH
	Pedestrian Push Button Pole (PA1-PA8)	8	EACH
	Pedestrian Signal Head w/Countdown Timer (21-28)	8	EACH
	Pedestrian Crossing Sign R10-3e (Left - 4 /Right - 4 )	8	EACH



Plot Scale - 1"=40'

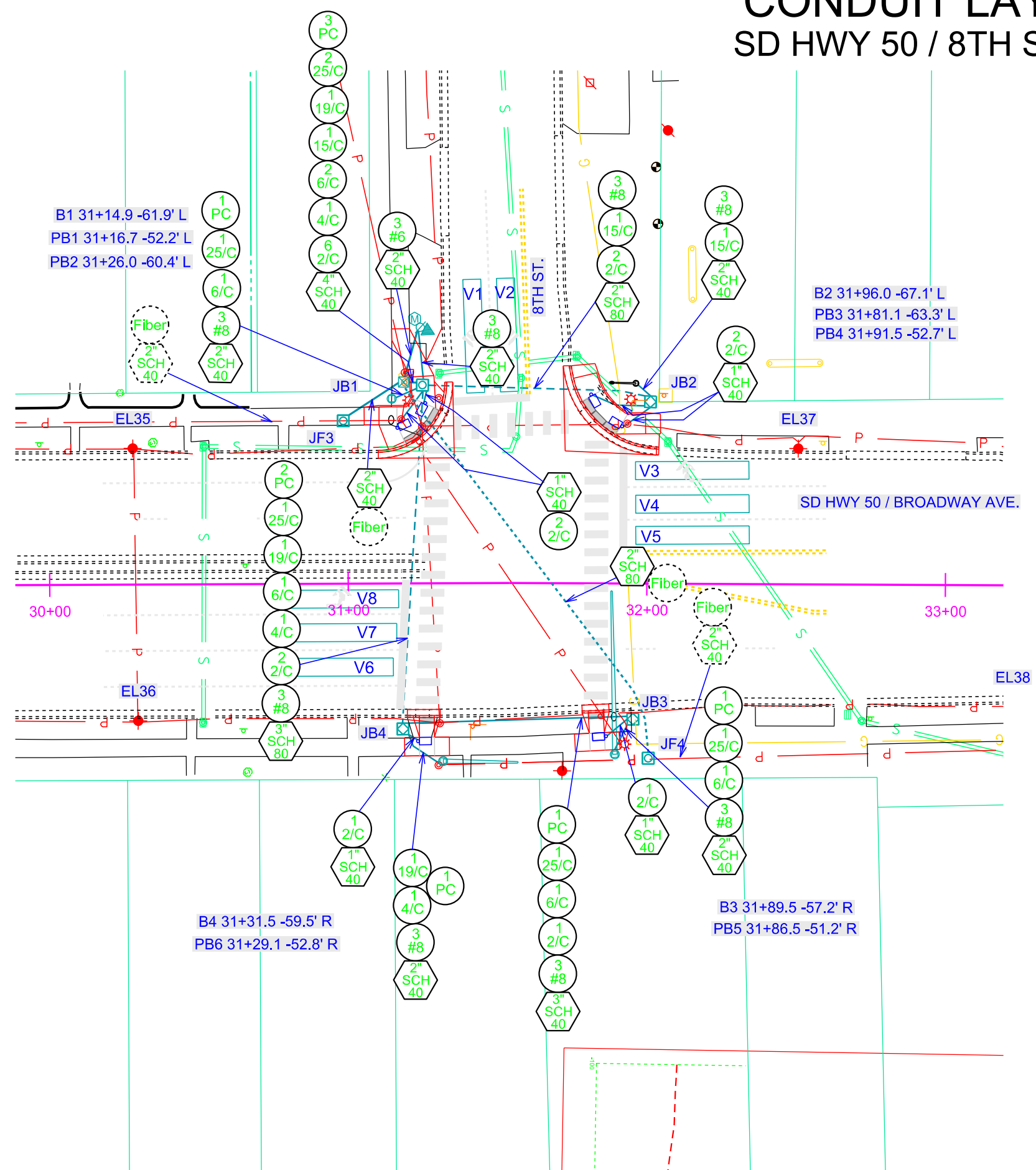
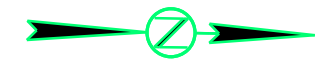
Plotted From - TRPR17199

File - Untitled1.dwg



# CONDUIT LAYOUT SD HWY 50 / 8TH STREET

Revised 2/25/2025 - RR



## ESTIMATE OF QUANTITIES

KEY	ITEM	EST QUANT	UNIT
○	2' Diameter Footing (B2)	7	FT
○	3' Diameter Footing (B1,B3,B4)	40	FT
⊠	Type 1 Electrical Junction Box (JB2-JB4)	3	EACH
⊠	Type 3 Electrical Junction Box (JB1,JF3,JF4)	3	EACH
▲	Electrical Service Cabinet	1	EACH
⊘	Galvanized Steel Utility Pole Not a Bid Item	1	EACH
Ⓜ	Meter Socket Not a Bid Item	1	EACH
⊠	Traffic Signal Controller	1	EACH
	Battery Backup System	1	EACH
	Video Detection System	1	EACH
□	Video Detection Zones 6' x 38' (Not a Bid Item)	8	EACH
1" SCH 40	1" Rigid Conduit, Schedule 40	140	FT
2" SCH 40	2" Rigid Conduit, Schedule 40	125	FT
3" SCH 40	3" Rigid Conduit, Schedule 40	85	FT
4" SCH 40	4" Rigid Conduit, Schedule 40	20	FT
2" SCH 80	2" Rigid Conduit, Schedule 80	250	FT
3" SCH 80	3" Rigid Conduit, Schedule 80	125	FT
#8	1/C #8 AWG Copper Wire	1030	FT
#6	1/C #6 AWG Copper Wire	105	FT
2/C	2/C #14 AWG Copper Tray Cable, K2	885	FT
3/C	3/C #14 AWG Copper Tray Cable, K2	90	FT
4/C	4/C #14 AWG Copper Tray Cable, K2	615	FT
5/C	5/C #14 AWG Copper Tray Cable, K2	80	FT
6/C	6/C #14 AWG Copper Tray Cable, K2	305	FT
15/C	15/C #14 AWG Copper Tray Cable, K2	140	FT
19/C	19/C #14 AWG Copper Tray Cable, K2	185	FT
25/C	25/C #14 AWG Copper Tray Cable, K2	305	FT
	2/C #10 AWG Copper Pole & Bracket Cable	195	FT
PC	Preemption Cable (Not a Bid Item)	660	FT

## EXISTING ITEMS

KEY	ITEM
2" SCH 40	2" Rigid Conduit, Schedule 40
(Fiber)	48 Strand Fiber Optic Cable

Plot Scale - 1"=40'

Plotted From - TRPR317199

File - U:\trp\jyank07\DH1030c.dgn

# TRAFFIC SIGNAL WIRING TABLES

SD HWY 50/BROADWAY AVE. & 4TH STREET

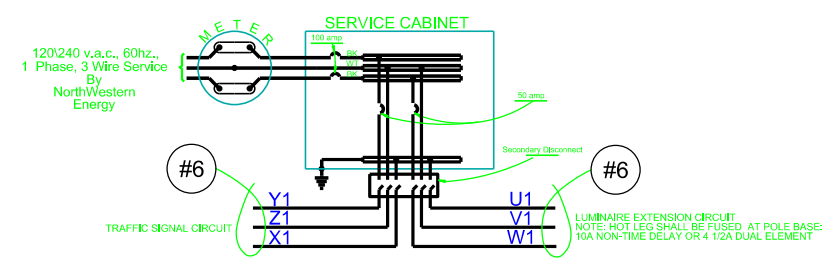
STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET L31	TOTAL SHEETS L43
-----------------------	--------------------------	--------------	---------------------

Revised 2/21/2025 - RR

POLE: A1 CABLE SIZE: 25/C						POLE: A2 CABLE SIZE: 25/C						POLE: A3 CABLE SIZE: 25/C						POLE: A4 CABLE SIZE: 25/C					
CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø	CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø	CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø	CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø
1R	Red	RED	RA	1	1	3R	Red	RED	RA	6	3	5R	Red	RED	RA	11	5	7R	Red	RED	RA	16	7
1Y	Orange	ORANGE	YA	1	1	3Y	Orange	ORANGE	YA	6	3	5Y	Orange	ORANGE	YA	11	5	7Y	Orange	ORANGE	YA	16	7
9Y	Yellow	YELLOW	FYA	1	1	10Y	Yellow/Orange	YELLOW	FYA	6	3	11Y	Yellow	YELLOW	FYA	11	5	12Y	Yellow	YELLOW	FYA	16	7
1G	Blue	BLUE	GA	1	1	3G	Blue	BLUE	GA	6	3	5G	Blue	BLUE	GA	11	5	7G	Blue	BLUE	GA	16	7
N	Black	BLACK	N	1	1	N	Black	BLACK	N	6	3	N	Black	BLACK	N	11	5	N	Black	BLACK	N	16	7
6R	Red/Black	RED	R	2	6	8R	Red/Black	RED	R	7	8	2R	Red/Black	RED	R	12	2	4R	Red/Black	RED	R	17	4
6Y	Orange/Black	ORANGE	Y	2	6	8Y	Orange/Black	ORANGE	Y	7	8	2Y	Orange/Black	ORANGE	Y	12	2	4Y	Orange/Black	ORANGE	Y	17	4
6G	Blue/Black	BLUE	G	2	6	8G	Blue/Black	BLUE	G	7	8	2G	Blue/Black	BLUE	G	12	2	4G	Blue/Black	BLUE	G	17	4
N	Yellow/Black	BLACK	N	2	6	N	Yellow/Black	BLACK	N	7	8	N	Yellow/Black	BLACK	N	12	2	N	Yellow/Black	BLACK	N	17	4
6R	Black/Red	RED	R	3	6	8R	Black/Red	RED	R	8	8	2R	Black/Red	RED	R	13	2	1R	Black/Red	RED	RA	19	1
6Y	Orange/Red	ORANGE	Y	3	6	8Y	Orange/Red	ORANGE	Y	8	8	2Y	Orange/Red	ORANGE	Y	13	2	1Y	Orange/Red	ORANGE	YA	19	1
6G	Blue/Red	BLUE	G	3	6	8G	Blue/Red	BLUE	G	8	8	2G	Blue/Red	BLUE	G	13	2	9Y	Yellow/Blue	YELLOW	FYA	19	1
N	Brown/Black	BLACK	N	3	6	N	Brown/Black	BLACK	N	8	8	N	Brown/Black	BLACK	N	13	2	1G	Red/Blue	BLUE	GA	19	1
6R	Brown/Red	RED	R	5	6	8R	Red/Blue	RED	R	10	8	7R	Red/Blue	RED	RA	14	7	N	Brown/Black	BLACK	N	19	1
6Y	Orange/Blue	ORANGE	Y	5	6	8Y	Orange/Blue	ORANGE	Y	10	8	7Y	Orange/Blue	ORANGE	YA	14	7	9R	Red/Orange	RED	DW	27	2P
6G	Red/Blue	BLUE	G	5	6	8G	Yellow/Blue	BLUE	G	10	8	7G	Yellow/Blue	BLUE	GA	14	7	9G	Blue/Orange	BLUE	W	27	2P
N	Black/Blue	BLACK	N	5	6	N	Black/Blue	BLACK	N	10	8	N	Black/Blue	BLACK	N	14	7	N	Black/Orange	BLACK	N	27	2P
10R	Red/Orange	RED	DW	21	4P		Yellow/Red					12R	Red/Orange	RED	DW	25	8P	10R	Brown/Red	RED	DW	28	4P
10G	Blue/Orange	BLUE	W	21	4P		Blue/Orange					12G	Brown/Blue	BLUE	W	25	8P	10G	Brown/Blue	BLUE	W	28	4P
N	Brown/Blue	BLACK	N	21	4P		Brown					N	Black/Orange	BLACK	N	25	8P	N	Brown	BLACK	N	28	4P
11R	Yellow/Red	RED	DW	22	6P		Red/Orange					9R	Brown/Red	RED	DW	26	2P		Blue/Red				
11G	Yellow/Blue	BLUE	W	22	6P		Brown/Blue					9G	Blue/Orange	BLUE	W	26	2P		Orange/Blue				
N	Black/Orange	ORANGE	N	22	6P		Black/Orange					N	Brown	BLACK	N	26	2P		Black/Blue				
	Yellow/Orange						Yellow												Yellow/Red				
	Brown						Brown/Red						Yellow/Orange						Yellow/Orange				

POLE: A1 CABLE SIZE: 6/C						POLE: A2 CABLE SIZE: 6/C						POLE: A3 CABLE SIZE: 6/C						POLE: A4 CABLE SIZE: 6/C					
CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø	CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø	CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø	CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø
3R	Red	RED	RA	4	3	5R	Red	RED	RA	9	5	2R	Red	RED	R	15	2	4R	Red	RED	R	18	4
3G	Blue	BLUE	GA	4	3	5Y	Orange	ORANGE	YA	9	5	2Y	Orange	ORANGE	Y	15	2	4Y	Orange	ORANGE	Y	18	4
N	Black	BLACK	N	4	3	11Y	Yellow	YELLOW	FYA	9	5	2G	Blue	BLUE	G	15	2	4G	Blue	BLUE	G	18	4
3Y	Orange	ORANGE	YA	4	3	5G	Blue	BLUE	GA	9	5	N	Black	BLACK	N	15	2	13Y	Yellow	YELLOW	YA	18	4
10Y	Yellow	YELLOW	FYA	4	3	N	Black	BLACK	N	9	5		Yellow					13G	Brown	BROWN	GA	18	4
	Brown						Brown						Brown					N	Black	BLACK	N	18	4



Plot Scale - 1:200

Plotted From - TRPR317199

File - ...:\p\yank07\DW\WiringTables.dgn

# TRAFFIC SIGNAL WIRING TABLES

STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET L31-b	TOTAL SHEETS L43
-----------------------	--------------------------	----------------	---------------------

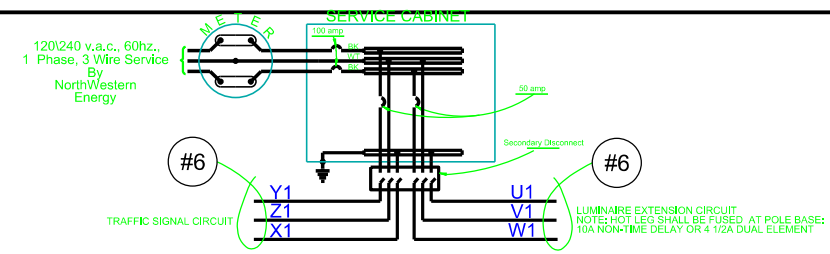
Revised 2/21/2025 - RR

POLE: A5 CABLE SIZE: 4/C

CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø
11R	Red	RED	DW	23	6P
11G	Blue	BLUE	W	23	6P
N	Black	BLACK	N	23	6P
	Orange				

POLE: A5 CABLE SIZE: 4/C

CABINET TERM.	CABLE CONDUCTOR COLOR	POLE COND. COLOR	HEAD TERM.	HEAD NO.	Ø
12R	Red	RED	DW	24	8P
12G	Blue	BLUE	W	24	8P
N	Black	BLACK	N	24	8P
	Orange				





STATE OF SOUTH DAKOTA	PROJECT NH 0081(114)0	SHEET L37	TOTAL SHEETS L43
-----------------------------	--------------------------	--------------	------------------------

Plotting Date: 02/26/2025

THIS PAGE LEFT INTENTIONALLY BLANK