PROJECT NAME: Elk Vale Road & Minnesota Street Traffic Signal Improvements

PROJECT NUMBER: PROJECT NO. 16-2352 / CIP NO. 51047

LET DATE: June 27, 2017

LOW BID AMOUNT: \$291,834.00

					ENGINEER'S	SESTIMATE	MUTH ELECTRIC, INC.		SOLAR SOUND CORPORATION	
ITEM NO.	STD. BID ITEM NO.	DESCRIPTION OF ITEM	UNIT	QTY (EST)	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST	UNIT COST	TOTAL COST
1		MOBILIZATION	LS	1.00	\$35,000.00	\$35,000.00	\$17,000.00	\$17,000.00	\$19,250.00	\$19,250.00
2		INCIDENTAL	LS	1.00	\$2,000.00	\$2,000.00	\$4,000.00	\$4,000.00	\$14,800.00	\$14,800.00
3		INCIDENTAL, ELECTRICAL	LS	1.00	\$8,000.00	\$8,000.00	\$5,750.00	\$5,750.00	\$7,500.00	\$7,500.00
4		CONSTRUCTION STAKING	LS_	1.00	\$2,200.00	\$2,200.00	\$2,130.00	\$2,130.00	\$3,667.00	\$3,667.00
5		REESTABLISH PROPERTY CORNERS	EA_	1.00	\$250.00	\$250.00	\$400.00	\$400.00	\$875.00	\$875.00
6_		SALVAGE LIGHT POLE	EA_	2.00	\$500.00	\$1,000.00	\$330.00	\$660.00	\$375.00	\$750.00
7		REMOVE LIGHT POLE FOOTING	EA	4.00	\$400.00	\$1,600.00	\$500.00	\$2,000.00	\$625.00	\$2,500.00
8		REMOVE PAVEMENT MARKING, STRIPES	LF	710.00	\$1.00	\$710.00	\$0.50	\$355.00	\$0.60	\$426.00
9		REMOVE PAVEMENT MARKING, ARROW	EA	3.00	\$100.00	\$300.00	\$50.00	\$150.00	\$62,50	\$187.50
10		REMOVE & RESET SIGN	EA	8.00	\$130.00	\$1,040.00	\$80.00	\$640.00	\$100.00	\$800.00
11		REMOVE & SALVAGE SIGN	EA	12.00	\$100.00	\$1,200.00	\$50.00	\$600.00	\$62.50	\$750.00

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12	AASHTO T-180 SOIL TEST	EA	1.00	\$500.00	\$500.00	\$300.00	\$300.00	\$375.00	\$375.00
13	EXCAVATION, UNCLASSIFIED	CY	133.00	\$25.00	\$3,325.00	\$30.00	\$3,990.00	\$37.50	\$4,987.50
14	EXCAVATION, EXPLORATORY	HR	25.00	\$250.00	\$6,250.00	\$133.00	\$3,325.00	\$250.00	\$6,250.00
15	BORROW, IMPORTED	CY	108.00	\$20.00	\$2,160.00	\$30.00	\$3,240.00	\$37.50	\$4,050.00
16	TOPSOIL, PLACE	CY	119.00	\$15.00	\$1,785.00	\$20.00	\$2,380.00	\$25.00	\$2,975.00
17	SEEDING, FERTILIZING, & MULCHING	SY	849.00	\$5.00	\$4,245.00	\$3.60	\$3,056.40	\$1.38	\$1,171.62
18	9" WATTLES	LF	524.00	\$7.00	\$3,668.00	\$5.00	\$2,620.00	\$6.04	\$3,164.96
19	EROSION CONTROL, INLET PROTECTION	EA	4.00	\$200.00	\$800.00	\$100.00	\$400.00	\$500.00	\$2,000.00
20	CONCRETE SIDEWALK, 6" NONREINFORCED	SF	1,121.00	\$12.00	\$13,452.00	\$10.00	\$11,210.00	\$12.50	\$14,012.50
21	DETECTABLE WARNING PANEL	LF	24.00	\$80.00	\$1,920.00	\$50.00	\$1,200.00	\$62.50	\$1,500.00
22	2" RIGID CONDUIT, SCHEDULE 40	L F	185.00	\$10.00	\$1,850.00	\$10.00	\$1,850.00	\$7.54	\$1,394.90
23	3" RIGID CONDUIT, SCHEDULE 40	LF	110.00	\$18.00	\$1,980.00	\$11.00	\$1,210.00	\$10.91	\$1,200.10
24	1/C #4 AWG COPPER WIRE	LF	405.00	\$1.30	\$526.50	\$1.00	\$405.00	\$1.32	\$534.60
25	1/C #6 AWG COPPER WIRE	LF	540.00	\$1.10	\$594.00	\$0.75	\$405.00	\$0.96	\$518.40
26	2/C #14 AWG COPPER TRAY CABLE, K2	LF	310.00	\$1.20	\$372.00	\$0.80	\$248.00		\$204.60
27	4/C #14 AWG COPPER TRAY CABLE, K2	LF	825.00	\$1.60	\$1,320.00		\$825.00	\$0.90	\$742.50
28	5/C #14 AWG COPPER TRAY CABLE, K2	LF	215.00	\$1.80	\$387.00		\$247.25		\$217.15
29	7/C #14 AWG COPPER TRAY CABLE	LF	70.00	\$2.10			\$112.00		

30	12/C #14 AWG COPPER TRAY CABLE	LF	900.00	\$5.00	\$4,500.00	\$2.30	\$2,070.00	\$1.89	\$1,701.00
31	24/C #14 AWG COPPER TRAY CABLE, K2	LF	900.00	\$7.00	\$6,300.00	\$4.20	\$3,780.00	\$3.42	\$3,0 7 8.00
32	2/C #10 COPPER POLE AND BRACKET CABLE	LF	260.00	\$3.00	\$780.00	\$1.70	\$442.00	\$1.54	\$400.40
33	#16 AWG COPPER TWIST SHIELDED PAIR	LF	1,640.00	\$1.00	\$1,640.00	\$0.50	\$820.00	\$0.92	\$1,508.80
34	OUTDOOR RATED CAT5 CABLE	LF	570.00	\$2.00	\$1,140.00	\$1.40	\$798.00	\$0.52	\$296.40
35	INSTALL LUMINAIRE FIXTURE	EA	4.00	\$600.00	\$2,400.00	\$65.00	\$260.00	\$75.00	\$300.00
36	INSTALL SIGNAL POLE W/ 60' MAST ARM & LUMINAIRE ARM	EA	1.00	\$2,500.00	\$2,500.00	\$1,375.00	\$1,375.00	\$1,850.00·	\$1,850.00
37	SIGNAL POLE W/ 65' MAST ARM & LUMINAIRE ARM	EA	1.00	\$20,000.00	\$20,000.00	\$29,000.00	\$29,000.00	\$29,159.14	\$29,159.14
38	SIGNAL POLE W/ 70' MAST ARM & LUMINAIRE ARM	EA	2.00	\$23,000.00	\$46,000.00	\$30,000.00	\$60,000.00	\$29,497.75	\$58,995.50
39	2' DIAMETER FOOTING	LF	16.00	\$210.00	\$3,360.00	\$40.00	\$640.00	\$115.06	\$1,840.96
40	3' DIAMETER FOOTING	LF	40.00	\$300.00	\$12,000.00	\$220.00	\$8,800.00	\$265.00	\$10,600.00
41	3.5 DIAMETER FOOTING	LF	40.00	\$350.00	\$14,000.00	\$300.00	\$12,000.00	\$325.00	\$13,000.00
42	INSTALL TRAFFIC SIGNAL CONTROLLER	EA	1.00	\$5,000.00	\$5,000.00	\$985.00	\$985.00	\$3,200.00	\$3,200.00
43	BATTERY BACKUP SYSTEM FOR TRAFFIC SIGNAL	EA	1.00	\$10,000.00	\$10,000.00	\$8,500.00	\$8,500.00	\$6,755.00	\$6,755.00
44	FOOTING FOR BATTERY BACKUP CABINET	EA	1.00	\$2,000.00	\$2,000.00	\$625.00	\$625.00	\$850.00	\$850.00
45	3 SECTION VEHICLE SIGNAL HEAD	EA	14.00	\$1,300.00	\$18,200.00	\$900.00	\$12,600.00	\$750.00	\$10,500.00
46	4 SECTION VEHICLE SIGNAL HEAD	EA	4.00	\$1,700.00	\$6,800.00	\$1,100.00	\$4,400.00	\$1,275.00	\$5,100.00
47	5 SECTION VEHICLE SIGNAL HEAD	EA	2.00	\$2,100.00	\$4,200.00	\$1,230.00	\$2,460.00	\$1,335.00	\$2,670.00

	INSTALL EMERGENCY VEHICLE PRE-				. 11.452				
48	EMPTION SYSTEM (PER INTERSECTION)	EA	1.00	\$4,000.00	\$4,000.00	\$2,955.00	\$2,955.00	\$2,500.00	\$2,500.00
49	PEDESTRIAN SIGNAL HEAD WITH COUNTDOWN TIMER	EA	2.00	\$900.00	\$1,800.00	\$640.00	\$1,280.00	\$639.50	\$1,279.00
50	ACCESSIBLE PEDESTRIAN SIGNAL	EA	2.00	\$1,000.00	\$2,000.00	\$2,585.00	\$5,170.00	\$2,571.50	\$5,143.00
51	PEDESTRIAN CROSSING SIGN	EA	2.00	\$160.00	\$320.00	\$90.00	\$180.00	\$55.00	\$110.00
52	PEDESTRIAN PUSH BUTTON POLE	EA	2.00	\$1,300.00	\$2,600.00	\$800.00	\$1,600.00	\$917.50	\$1,835.00
53	RELOCATE LIGHT POLE	EA	2.00	\$800.00	\$1,600.00	\$800.00	\$1,600.00	\$450.00	\$900.00
54	WIRELESS IN PAVEMENT TRAFFIC SENSOR	EA	14.00	\$1,500.00	\$21,000.00	\$962.00	\$13,468.00	\$893.00	\$12,502.00
55	WIRELESS ACCESS POINT	EA	2.00	\$5,500.00	\$11,000.00	\$4,220.00	\$8,440.00	\$4,188.00	\$8,376.00
56	WIRELESS REPEATER	ĒΑ	4.00	\$3,500.00	\$14,000.00	\$2,400.00	\$9,600.00	\$2,518.00	\$10,072.00
57	COLD APPLIED PLASTIC PAVEMENT MARKING, 4"	LF	972.00	\$4.00	\$3,888.00	\$3.00	\$2,916.00	\$3.36	\$3,265.92
58	COLD APPLIED PLASTIC PAVEMENT MARKING, 24"	LF	273.00	\$16.00	\$4,368.00	\$18.00	\$4,914.00	\$22.50	\$6,142.50
59	COLD APPLIED PLASTIC PAVEMENT MARKING, ARROW	EA .	3.00	\$200.00	\$600.00	\$175.00	\$525.00	\$278.75	\$836.25
60	GROOVE FOR COLD APPLIED PLASTIC MARKING, 4"	LF	972.00	\$1.00	\$972.00	\$0.50	\$486.00	\$0.63	\$612.36
61	GROOVE FOR COLD APPLIED PLASTIC MARKING, 24"	LF	273.00	\$5.00	\$1,365.00	\$3.00	\$819.00	\$3.75	\$1,023.75
62	GROOVE FOR COLD APPLIED PLASTIC MARKING, ARROW	EA	3.00	\$130.00	\$390.00	\$125.00	\$375.00	\$156.25	\$468.75
63	ROAD SIGN	SF	103.00	\$40.00	\$4,120.00	\$13.25	\$1,364.75	\$16.52	\$1,701.56
64	SIGN POST	LF	12.00	\$20.00	\$240.00	\$9.25	\$111.00	\$11.52	\$138.24
65	FLAGGING	HR	60.00	\$40.00	\$2,400.00	\$30.00	\$1,800.00	\$25,00	\$1,500.00

66	TRAFFIC CONTROL SIGNS	SF	2,062.00	\$8.00	\$16,496.00	\$4.30	\$8,866.60	\$5.37	\$11,072.94
67	TRAFFIC CONTROL MISCELLANEOUS	LS	1.00	\$10,000.00	\$10,000.00	\$2,200.00	\$2,200.00	\$2,750.00	\$2,750.00
68	TYPE C ADVANCE WARNING ARROW BOARD	EA	3.00	\$1,200.00	\$3,600.00	\$300.00	\$900.00	\$375.00	\$1,125.00
69	TEMPORARY FLEXIBLE VERTICAL MARKERS (TABS)	LF	4,000.00	\$0.50	\$2,000.00	\$0.25	\$1,000.00	\$0.31	\$1,240.00
70	CITY FURNISHED PORTABLE CHANGEABLE MESSAGE SIGN	EA	2.00	\$800.00	\$1,600.00		\$1,000.00	\$312.50	\$625.00
	TOTAL	-			\$369,760.50		\$291,834.00		\$323,924.00

CONSULTANT

I certify that, to the best of my knowledge, this is a true tabulation of bids received for this project.

Chris Robinson, PE

HDR, Inc.

Date

6/29/17

CITY OF RAPID CITY

Reviewed by:

Todd Peckosh, PE

0/28/17 Date Contract awarded to Muth Electric, Inc. in the amount of \$291,834.00 at the July 3, 2017 Council Meeting.