

Weber Road Traffic Signal Improvements

City of Crest Hill

Engineer's Estimate - *Pre-Final*

CBEL Project #: 240070

SP	PAY ITEM NO	PAY ITEM NAME	UNIT	UNIT COST	QUANTITY	TOTAL COST
	20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	\$75.00	10	\$750.00
	21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	\$5.00	465	\$2,325.00
	28000400	PERIMETER EROSION BARRIER	FOOT	\$5.00	325	\$1,625.00
	28000510	INLET FILTERS	EACH	\$250.00	15	\$3,750.00
#	30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	\$75.00	10	\$750.00
#	30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	\$35.00	465	\$16,275.00
	31101200	SUBBASE GRANULAR MATERIAL, TYPE B 4"	SQ YD	\$12.00	170	\$2,040.00
	35501308	HOT-MIX ASPHALT BASE COURSE, 6"	SQ YD	\$90.00	175	\$15,750.00
	35501316	HOT-MIX ASPHALT BASE COURSE, 8"	SQ YD	\$115.00	10	\$1,150.00
	40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$2.50	100	\$250.00
	40604062	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N70	TON	\$200.00	25	\$5,000.00
#	42400200	PORTLAND CEMENT CONCRETE SIDEWALK 5 INCH	SQ FT	\$20.00	750	\$15,000.00
#	42400800	DETECTABLE WARNINGS	SQ FT	\$50.00	20	\$1,000.00
	44000100	PAVEMENT REMOVAL	SQ YD	\$35.00	385	\$13,475.00
	44000200	DRIVeway PAVEMENT REMOVAL	SQ YD	\$25.00	115	\$2,875.00
	44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	\$18.00	550	\$9,900.00
	44000600	SIDEWALK REMOVAL	SQ FT	\$8.00	725	\$5,800.00
	44003100	MEDIAN REMOVAL	SQ FT	\$8.00	305	\$2,440.00
	60206905	CATCH BASINS, TYPE C, TYPE 1 FRAME, OPEN LID	EACH	\$4,000.00	1	\$4,000.00
	60406100	FRAMES AND LIDS, TYPE 1, CLOSED LID	EACH	\$500.00	1	\$500.00
	60618300	CONCRETE MEDIAN SURFACE, 4 INCH	SQ FT	\$25.00	760	\$19,000.00
#	67100100	MOBILIZATION	L SUM	\$50,000.00	1	\$50,000.00
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	\$35.00	360	\$12,600.00
	72000100	SIGN PANEL - TYPE 1	SQ FT	\$25.00	90	\$2,250.00
	72800100	TELESCOPING STEEL SIGN SUPPORT	FOOT	\$15.00	110	\$1,650.00
	73100100	BASE FOR TELESCOPING STEEL SIGN SUPPORT	EACH	\$225.00	2	\$450.00
	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	\$10.00	100	\$1,000.00
	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4"	FOOT	\$1.50	720	\$1,080.00
	78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	\$2.00	178	\$356.00
	78000500	THERMOPLASTIC PAVEMENT MARKING - LINE 8"	FOOT	\$3.00	252	\$756.00
	78000600	THERMOPLASTIC PAVEMENT MARKING - LINE 12"	FOOT	\$5.00	202	\$1,010.00
	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24"	FOOT	\$7.00	133	\$931.00
	78009000	MODIFIED URETHANE PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	\$10.00	73	\$730.00
	78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	\$3.50	234	\$819.00
	78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	\$4.00	180	\$720.00
	78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	\$5.00	213	\$1,065.00
	78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	\$7.00	67	\$469.00
	78009024	MODIFIED URETHANE PAVEMENT MARKING - LINE 24"	FOOT	\$10.00	11	\$110.00
	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	\$150.00	30	\$4,500.00
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	\$10.00	60	\$600.00
	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	\$7.00	539	\$3,773.00
#	80400100	ELECTRIC SERVICE INSTALLATION	EACH	\$2,500.00	1	\$2,500.00
#	80400200	ELECTRIC UTILITY SERVICE CONNECTION	L SUM	\$10,000.00	1	\$10,000.00

SP	PAY ITEM NO	PAY ITEM NAME	UNIT	UNIT COST	QUANTITY	TOTAL COST
#	81028200	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2" DIA.	FOOT	\$40.00	2092	\$83,680.00
#	81028210	UNDERGROUND CONDUIT, GALVANIZED STEEL, 2 1/2" DIA.	FOOT	\$60.00	750	\$45,000.00
#	81028220	UNDERGROUND CONDUIT, GALVANIZED STEEL, 3" DIA.	FOOT	\$75.00	76	\$5,700.00
#	81028240	UNDERGROUND CONDUIT, GALVANIZED STEEL, 4" DIA.	FOOT	\$130.00	350	\$45,500.00
#	81028730	UNDERGROUND CONDUIT, COILABLE NONMETALLIC CONDUIT, 1 1/4" DIA.	FOOT	\$25.00	4650	\$116,250.00
#	81400100	HANDHOLE	EACH	\$3,000.00	7	\$21,000.00
#	81400200	HEAVY-DUTY HANDHOLE	EACH	\$4,000.00	2	\$8,000.00
#	81400300	DOUBLE HANDHOLE	EACH	\$4,500.00	1	\$4,500.00
	81400730	HANDHOLE, COMPOSITE CONCRETE	EACH	\$1,500.00	2	\$3,000.00
	81702120	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 8	FOOT	\$2.00	22020	\$44,040.00
	81702150	ELECTRIC CABLE IN CONDUIT, 600V (XLP-TYPE USE) 1/C NO. 2	FOOT	\$6.00	155	\$930.00
#	82110007	LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION G	EACH	\$1,200.00	20	\$24,000.00
	82500350	LIGHTING CONTROLLER, BASE MOUNTED, 240VOLT, 100AMP	EACH	\$20,000.00	1	\$20,000.00
	83008500	LIGHT POLE, ALUMINUM, 40 FT. M.H., 12 FT. MAST ARM	EACH	\$5,500.00	16	\$88,000.00
	83050580	LIGHT POLE, ALUMINUM, 40 FT. M.H., 2-12 FT. MAST ARMS	EACH	\$6,000.00	2	\$12,000.00
#	83600200	LIGHT POLE FOUNDATION, 24" DIAMETER	FOOT	\$300.00	160	\$48,000.00
	83800205	BREAKAWAY DEVICE, TRANSFORMER BASE, 15 INCH BOLT CIRCLE	EACH	\$750.00	18	\$13,500.00
	85000200	MAINTENANCE OF EXISTING TRAFFIC SIGNAL INSTALLATION	EACH	\$2,500.00	1	\$2,500.00
#	87300925	ELECTRIC CABLE IN CONDUIT, TRACER, NO. 14 1C	FOOT	\$1.50	2323	\$3,484.50
#	87301215	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 2C	FOOT	\$2.00	159	\$318.00
#	87301225	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 3C	FOOT	\$2.50	606	\$1,515.00
#	87301245	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 5C	FOOT	\$3.00	1743	\$5,229.00
#	87301255	ELECTRIC CABLE IN CONDUIT, SIGNAL NO. 14 7C	FOOT	\$3.50	1466	\$5,131.00
#	87301305	ELECTRIC CABLE IN CONDUIT, LEAD-IN, NO. 14 1 PAIR	FOOT	\$1.50	2171	\$3,256.50
#	87301805	ELECTRIC CABLE IN CONDUIT, SERVICE, NO. 6 2 C	FOOT	\$6.00	213	\$1,278.00
#	87301900	ELECTRIC CABLE IN CONDUIT, EQUIPMENT GROUNDING CONDUCTOR, NO. 6 1C	FOOT	\$5.00	1520	\$7,600.00
#	87501200	TRAFFIC SIGNAL POST, 16 FT.	EACH	\$2,000.00	2	\$4,000.00
#	87700250	STEEL MAST ARM ASSEMBLY AND POLE, 42 FT.	EACH	\$20,000.00	2	\$40,000.00
#	87702350	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 26 FT. AND 32 FT.	EACH	\$32,000.00	1	\$32,000.00
#	87702450	STEEL MAST ARM ASSEMBLY AND POLE WITH DUAL MAST ARMS, 30 FT. AND 38 FT.	EACH	\$35,000.00	1	\$35,000.00
#	87800100	CONCRETE FOUNDATION, TYPE A	FOOT	\$350.00	12	\$4,200.00
#	87800150	CONCRETE FOUNDATION, TYPE C	FOOT	\$900.00	4	\$3,600.00
#	87800415	CONCRETE FOUNDATION, TYPE E 36-INCH DIAMETER	FOOT	\$400.00	50	\$20,000.00
#	88030020	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, MAST-ARM MOUNTED	EACH	\$1,500.00	7	\$10,500.00
#	88030050	SIGNAL HEAD, LED, 1-FACE, 3-SECTION, BRACKET MOUNTED	EACH	\$1,250.00	3	\$3,750.00
#	88030100	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, BRACKET MOUNTED	EACH	\$1,500.00	1	\$1,500.00
#	88030110	SIGNAL HEAD, LED, 1-FACE, 5-SECTION, MAST-ARM MOUNTED	EACH	\$1,750.00	7	\$12,250.00
#	88102717	PEDESTRIAN SIGNAL HEAD, LED, 1-FACE, BRACKET MOUNTED WITH COUNTDOWN TIMER	EACH	\$1,000.00	2	\$2,000.00
#	88200410	TRAFFIC SIGNAL BACKPLATE, LOUVERED, FORMED PLASTIC	EACH	\$250.00	14	\$3,500.00
	88500100	INDUCTIVE LOOP DETECTOR	EACH	\$300.00	9	\$2,700.00
#	88600100	DETECTOR LOOP, TYPE I	FOOT	\$30.00	920	\$27,600.00
#	88700200	LIGHT DETECTOR	EACH	\$2,000.00	1	\$2,000.00
#	89500120	REMOVE EXISTING SERVICE INSTALLATION	EACH	\$1,500.00	1	\$1,500.00
	89502300	REMOVE ELECTRIC CABLE FROM CONDUIT	FOOT	\$1.50	2587	\$3,880.50
#	89502375	REMOVE EXISTING TRAFFIC SIGNAL EQUIPMENT	EACH	\$15,000.00	1	\$15,000.00
	89502380	REMOVE EXISTING HANDHOLE	EACH	\$600.00	7	\$4,200.00

SP	PAY ITEM NO	PAY ITEM NAME	UNIT	UNIT COST	QUANTITY	TOTAL COST
#	89502382	REMOVE EXISTING DOUBLE HANDHOLE	EACH	\$700.00	1	\$700.00
	89502385	REMOVE EXISTING CONCRETE FOUNDATION	EACH	\$750.00	9	\$6,750.00
#	X0324085	EMERGENCY VEHICLE PRIORITY SYSTEM LINE SENSOR CABLE, NO. 20 3/C	FOOT	\$2.00	436	\$872.00
#	X0324599	ROD AND CLEAN EXISTING CONDUIT	FOOT	\$1.00	522	\$522.00
#	X1400101	NETWORK CONFIGURATION	L SUM	\$5,000.00	1	\$5,000.00
#	X1400150	SERVICE INSTALLATION, GROUND MOUNTED, METERED	EACH	\$2,700.00	1	\$2,700.00
#	X1400217	TERMINATE FIBER IN CABINET	EACH	\$200.00	8	\$1,600.00
#	X1400378	PEDESTRIAN SIGNAL POST, 5 FT.	EACH	\$1,500.00	1	\$1,500.00
#	X5510011	PROPOSED STORM SEWER CONNECTION TO EXISTING MANHOLE	EACH	\$1,500.00	1	\$1,500.00
#	X6060052	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (SPECIAL)	FOOT	\$65.00	155	\$10,075.00
#	X6064200	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.12 (SPECIAL)	FOOT	\$50.00	595	\$29,750.00
#	X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	\$55,000.00	1	\$55,000.00
#	X7240205	REMOVE SIGN COMPLETE	EACH	\$250.00	3	\$750.00
#	X7240502	RELOCATE SIGN, SPECIAL	EACH	\$300.00	1	\$300.00
#	X8360215	LIGHT POLE FOUNDATION, 24" DIAMETER, OFFSET	FOOT	\$350.00	28	\$9,800.00
#	X8710015	FIBER OPTIC CABLE IN CONDUIT, 24 FIBERS, SINGLE MODE	FOOT	\$6.00	2349	\$14,094.00
#	X8710317	SPLICE FIBER IN CABINET	EACH	\$200.00	8	\$1,600.00
#	X8760200	ACCESSIBLE PEDESTRIAN SIGNALS	EACH	\$1,200.00	2	\$2,400.00
#	X8780012	CONCRETE FOUNDATION, TYPE A 12-INCH DIAMETER	FOOT	\$400.00	4	\$1,600.00
#	X8950103	RELOCATE EXISTING TRAFFIC SIGNAL CONTROLLER AND CABINET, COMPLETE	EACH	\$5,000.00	1	\$5,000.00
#	X8950115	RELOCATE LIGHT DETECTOR	EACH	\$500.00	1	\$500.00
#	X8950120	RELOCATE LIGHT DETECTOR AMPLIFIER	EACH	\$200.00	1	\$200.00
#	XX000541	EXPLORATORY EXCAVATION	CU YD	\$300.00	22	\$6,600.00
#	Z0013798	CONSTRUCTION LAYOUT	L SUM	\$15,000.00	1	\$15,000.00
#	Z0017400	DRAINAGE & UTILITY STRUCTURES TO BE ADJUSTED	EACH	\$600.00	3	\$1,800.00
#	Z0033046	RE-OPTIMIZE TRAFFIC SIGNAL SYSTEM LEVEL 2	EACH	\$2,500.00	1	\$2,500.00
#	N/A	CLASS B PATCHES, SPECIAL, 12"	SQ YD	\$325.00	45	\$14,625.00
#	N/A	MISCELLANEOUS ADDITIONS TO PROJECT AT CITY'S DISCRETION	UNIT	\$1.00	50000	\$50,000.00
#	N/A	PARKWAY RESTORATION - SEEDING	SQ YD	\$15.00	1850	\$27,750.00
#	N/A	STORM SEWERS, PVC, 12"	FOOT	\$200.00	11	\$2,200.00

ESTIMATED CONSTRUCTION COST = \$1,336,304.50

CONSTRUCTION ENGINEERING (12%) = \$160,356.54

TOTAL ESTIMATED COST = \$1,496,661.04