

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE

SE 80TH AVENUE & SE MILL STREET LID

Date: 7/25/2017

By: Olivia Grenier

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	LS	1.00	\$121,336.73	\$121,336.73
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	LS	1.00	\$36,401.02	\$36,401.02
3	TEMPORARY SIGNS	SQFT	1,000.00	\$20.00	\$20,000.00
4	TEMPORARY BARRICADES, TYPE II	EACH	30.00	\$100.00	\$3,000.00
5	TEMPORARY BARRICADES, TYPE III	EACH	10.00	\$150.00	\$1,500.00
6	PEDESTRIAN CHANNELIZING DEVICES	EACH	20.00	\$100.00	\$2,000.00
7	TEMPORARY PLASTIC DRUMS	EACH	80.00	\$52.00	\$4,160.00
8	FLAGGERS	HOUR	1,248.00	\$48.50	\$60,528.00
9	EROSION CONTROL	LS	1.00	\$12,133.67	\$12,133.67
10	INLET PROTECTION	EACH	16.00	\$88.00	\$1,408.00
11	POLLUTION CONTROL PLAN	LS	1.00	\$1,213.37	\$1,213.37
12	REMOVAL OF MANHOLES	EACH	1.00	\$1,050.00	\$1,050.00
13	REMOVAL OF STRUCTURES & OBSTRUCTIONS	LS	1.00	\$48,534.69	\$48,534.69
14	CLEARING AND GRUBBING	LS	1.00	\$31,547.54	\$31,547.54
15	GENERAL EXCAVATION	CUYD	1,724.00	\$49.00	\$84,476.00
16	12 INCH SUBGRADE STABILIZATION	SQYD	378.50	\$30.17	\$11,419.35
17	SUBGRADE GEOTEXTILE	SQYD	3,785.00	\$1.25	\$4,731.25
18	VIDEO INSPECTION OF SEWERS, MAINLINE	FOOT	1,258.00	\$3.30	\$4,151.40
19	TRENCH EXCAVATION, COMMON	CUYD	1,356.30	\$16.70	\$22,650.21
20	EXPLORATORY EXCAVATION	CUYD	315.00	\$51.60	\$16,254.00
21	TRENCH FOUNDATION STABILIZATION	CUYD	135.63	\$61.00	\$8,273.43
22	TRENCH BACKFILL, CLASS B	CUYD	979.80	\$33.00	\$32,333.40
23	ENGINEER SHORING	LS	1.00	\$2,200.00	\$2,200.00
24	STORMWATER PLANTERS	SQFT	1,702.00	\$38.10	\$64,846.20
25	6 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D	FOOT	155.00	\$80.00	\$12,400.00
26	10 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	FOOT	400.00	\$110.00	\$44,000.00
27	10 INCH PIPE, HDPE ASTM F714 SDR 26 BEDDING TYPE: D	FOOT	234.00	\$110.00	\$25,740.00
28	24 INCH PIPE, RCP ASTM C76 CLASS V, BEDDING TYPE: B	FOOT	393.00	\$240.00	\$94,320.00
29	PIPE TEES OR WYES 10 INCH X 6 INCH	EACH	9.00	\$350.00	\$3,150.00
30	FIELD FABRICATED CONNECTIONS	EACH	11.00	\$500.00	\$5,500.00
31	CONCRETE MANHOLES, 48 INCH, 0-8 FT DEPTH	EACH	1.00	\$4,400.00	\$4,400.00
32	CONCRETE MANHOLES, 48 INCH, DEEPER THAN 8 FT	FOOT	2.00	\$300.00	\$600.00
33	CONCRETE MANHOLES, 60 INCH, 0-8 FT DEPTH	EACH	1.00	\$8,500.00	\$8,500.00
34	CONCRETE MANHOLES, 60 INCH, DEEPER THAN 8 FT	FOOT	13.00	\$360.00	\$4,680.00
35	CONCRETE INLETS, TYPE CG-2	EACH	14.00	\$1,900.00	\$26,600.00
36	CONCRETE INLETS, TYPE METAL	EACH	36.00	\$500.00	\$18,000.00
37	RECONSTRUCT MANHOLE BASE	EACH	2.00	\$1,600.00	\$3,200.00
38	DIVERSION OF FLOW	LS	1.00	\$7,000.00	\$7,000.00
39	RETAINING WALL, PREFABRICATED MODULAR	SQFT	1,440.00	\$39.50	\$56,880.00
40	COLD PLANE PAVEMENT REMOVAL, 2 INCH DEEP	SQYD	520.00	\$4.50	\$2,340.00
41	AGGREGATE BASE	TON	666.67	\$36.90	\$24,600.00
42	AGGREGATE BASE, 8 INCH THICK	SQYD	3,118.78	\$12.30	\$38,369.97
43	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	TON	752.78	\$89.50	\$67,373.61
44	CONCRETE CURBS, STANDARD CURB	FOOT	2,630.00	\$25.50	\$67,065.00
45	CONCRETE ISLANDS	SQFT	640.00	\$11.70	\$7,488.00
46	CONCRETE DRIVEWAYS	SQFT	10,120.00	\$8.40	\$85,008.00
47	CONCRETE WALKS	SQFT	15,780.00	\$7.40	\$116,772.00
48	POLE FOUNDATIONS	LS*	1.00	\$8,000.00	\$8,000.00

BID ITEMS

ZONE 'A' QUANTITY	ZONE 'A' AMOUNT	ZONE 'B' QUANTITY	ZONE 'B' AMOUNT	ZONE 'C' QUANTITY	ZONE 'C' AMOUNT
0.78	\$94,133.39	0.04	\$5,208.31	0.18	\$21,995.03
0.78	\$28,240.02	0.04	\$1,562.49	0.18	\$6,598.51
800.00	\$16,000.00	100.00	\$2,000.00	100.00	\$2,000.00
24.00	\$2,400.00	3.00	\$300.00	3.00	\$300.00
8.00	\$1,200.00	1.00	\$150.00	1.00	\$150.00
16.00	\$1,600.00	2.00	\$200.00	2.00	\$200.00
60.00	\$3,120.00	10.00	\$520.00	10.00	\$520.00
768.00	\$37,248.00	240.00	\$11,640.00	240.00	\$11,640.00
0.78	\$9,413.34	0.04	\$520.83	0.18	\$2,199.50
12.00	\$1,056.00	2.00	\$176.00	2.00	\$176.00
0.78	\$941.34	0.04	\$52.08	0.18	\$219.95
1.00	\$1,050.00	0.00	\$0.00	0.00	\$0.00
0.78	\$37,653.36	0.04	\$2,083.32	0.18	\$8,798.01
0.78	\$24,474.67	0.04	\$1,354.16	0.18	\$5,718.71
1,350.91	\$66,194.77	35.31	\$1,730.12	337.78	\$16,551.11
298.50	\$9,005.75	0.00	\$0.00	80.00	\$2,413.60
2,985.00	\$3,731.25	0.00	\$0.00	800.00	\$1,000.00
1,258.00	\$4,151.40	0.00	\$0.00	0.00	\$0.00
1,356.30	\$22,650.21	0.00	\$0.00	0.00	\$0.00
315.00	\$16,254.00	0.00	\$0.00	0.00	\$0.00
135.63	\$8,273.43	0.00	\$0.00	0.00	\$0.00
979.80	\$32,333.40	0.00	\$0.00	0.00	\$0.00
1.00	\$2,200.00	0.00	\$0.00	0.00	\$0.00
1,342.00	\$51,130.20	0.00	\$0.00	360.00	\$13,716.00
155.00	\$12,400.00	0.00	\$0.00	0.00	\$0.00
320.00	\$35,200.00	0.00	\$0.00	80.00	\$8,800.00
234.00	\$25,740.00	0.00	\$0.00	0.00	\$0.00
393.00	\$94,320.00	0.00	\$0.00	0.00	\$0.00
9.00	\$3,150.00	0.00	\$0.00	0.00	\$0.00
11.00	\$5,500.00	0.00	\$0.00	0.00	\$0.00
1.00	\$4,400.00	0.00	\$0.00	0.00	\$0.00
2.00	\$600.00	0.00	\$0.00	0.00	\$0.00
1.00	\$8,500.00	0.00	\$0.00	0.00	\$0.00
13.00	\$4,680.00	0.00	\$0.00	0.00	\$0.00
12.00	\$22,800.00	0.00	\$0.00	2.00	\$3,800.00
32.00	\$16,000.00	0.00	\$0.00	4.00	\$2,000.00
2.00	\$3,200.00	0.00	\$0.00	0.00	\$0.00
1.00	\$7,000.00	0.00	\$0.00	0.00	\$0.00
0.00	\$0.00	0.00	\$0.00	1,440.00	\$56,880.00
520.00	\$2,340.00	0.00	\$0.00	0.00	\$0.00
666.67	\$24,600.00	0.00	\$0.00	0.00	\$0.00
2,318.78	\$28,520.97	0.00	\$0.00	800.00	\$9,840.00
612.78	\$54,843.61	0.00	\$0.00	140.00	\$12,530.00
2,010.00	\$51,255.00	260.00	\$6,630.00	360.00	\$9,180.00
640.00	\$7,488.00	0.00	\$0.00	0.00	\$0.00
8,976.00	\$75,398.40	792.00	\$6,652.80	352.00	\$2,956.80
12,060.00	\$89,244.00	1,560.00	\$11,544.00	2,160.00	\$15,984.00
0.00	\$0.00	0.00	\$0.00	1.00	\$8,000.00

EXHIBIT E

NO.	ITEMS OF WORK AND MATERIALS	UNIT	TOTAL QUANTITY	UNIT PRICE	TOTAL AMOUNT
49	LIGHTING POLES, FIXED BASE	LS*	1.00	\$10,000.00	\$10,000.00
50	LIGHTING POLE ARMS	LS*	1.00	\$5,000.00	\$5,000.00
51	LUMINAIRES, LAMPS AND BALLASTS	LS*	1.00	\$2,000.00	\$2,000.00
52	SWITCHING, CONDUIT AND WIRING	LS*	1.00	\$10,000.00	\$10,000.00
53	LAWN SEEDING	SOYD	1,129.33	\$10.04	\$11,338.51
54	TOPSOIL	CUYD	196.00	\$60.00	\$11,760.00
55	DECIDUOUS TREES, 2-1/2 INCH CALIPER	EACH	105.00	\$822.00	\$86,310.00
TOTAL BID ITEMS					\$1,464,534.35

ZONE 'A' QUANTITY	ZONE 'A' AMOUNT	ZONE 'B' QUANTITY	ZONE 'B' AMOUNT	ZONE 'C' QUANTITY	ZONE 'C' AMOUNT
0.00	\$0.00	0.00	\$0.00	1.00	\$10,000.00
0.00	\$0.00	0.00	\$0.00	1.00	\$5,000.00
0.00	\$0.00	0.00	\$0.00	1.00	\$2,000.00
0.00	\$0.00	0.00	\$0.00	1.00	\$10,000.00
893.33	\$8,969.07	116.00	\$1,164.64	120.00	\$1,204.80
150.07	\$9,004.44	19.26	\$1,155.56	26.67	\$1,600.00
81.00	\$66,582.00	10.00	\$8,220.00	14.00	\$11,508.00
\$1,136,190.02		\$62,864.31		\$265,480.02	

##### ANTICIPATED ITEMS #####					
NO.	ITEMS OF WORK AND MATERIALS	UNIT	QUANTITY	UNIT PRICE	TOTAL AMOUNT
1	STREET LIGHTING - UPGRADE LUMINAIRES	EACH	3.00	\$600.00	\$1,800.00
2	STORMWATER PLANTINGS AND PLANT ESTABLISHMENT	SQFT	1,531.80	\$20.00	\$30,636.00
3	BOLI FEE PAYMENT	LS	1.00	\$1,464.53	\$1,464.53
4	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	LS	1.00	\$146,453.44	\$146,453.44
TOTAL ANTICIPATED ITEMS					\$180,353.97

##### ANTICIPATED ITEMS #####					
ZONE 'A' QUANTITY	ZONE 'A' AMOUNT	ZONE 'B' QUANTITY	ZONE 'B' AMOUNT	ZONE 'C' QUANTITY	ZONE 'C' AMOUNT
3.00	\$1,800.00	0.00	\$0.00	0.00	\$0.00
1,531.80	\$30,636.00	0.00	\$0.00	0.00	\$0.00
0.55	\$807.85	0.22	\$328.34	0.22	\$328.34
0.78	\$113,619.00	0.04	\$6,286.43	0.18	\$26,548.00
\$146,862.85		\$6,614.78		\$26,876.35	

SCHEDULE SUMMARY

BID ITEMS			\$1,464,534.35
CONSTRUCTION CONTINGENCY	5% of Bid Items*		\$73,226.72
SUBTOTAL			\$1,537,761.07
ANTICIPATED ITEMS			\$180,353.97
TOTAL CONSTRUCTION			\$1,718,115.04
PROJECT MANAGEMENT	5% of Bid Items		\$73,226.72
DESIGN ENGINEERING	25% of Bid Items		\$366,133.59
CONSTRUCTION MANAGEMENT	15% of Bid Items		\$219,680.15
SUBTOTAL			\$659,040.46
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	79.41% of PM, Eng, and CM		\$523,344.16
TOTAL PROJECT ENGINEERING & MANAGEMENT			\$1,182,384.62
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES			\$35,000.00
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION			\$0.00
RIGHT-OF-WAY CONTINGENCY	20% of Land, Improve, and Damages		\$7,000.00
TOTAL PROJECT RIGHT-OF-WAY			\$42,000.00
INFLATION RATE ON CONTRACT	Years: 2, Inflation: 4.5% of Construction		\$158,110.00
INFLATION RATE ON PERSONNEL	2, 2.0% of Eng & Mgmt		\$47,768.00
ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE	20% of Const, Eng & Mgmt, and Inflation		\$588,499.90
TOTAL PROJECT CONTINGENCY			\$794,377.90
TOTAL PROJECT ESTIMATE			\$3,736,877.56

SCHEDULE SUMMARY

	\$1,136,190.02	\$62,864.31	\$265,480.02
	\$56,809.50	\$3,143.22	\$13,274.00
	\$1,192,999.52	\$66,007.53	\$278,754.02
	\$146,862.85	\$6,614.78	\$26,876.35
TOTAL CONSTRUCTION	\$1,339,862.37	\$72,622.30	\$305,630.37
PROJECT MANAGEMENT	\$56,809.50	\$3,143.22	\$13,274.00
DESIGN ENGINEERING	\$284,047.51	\$15,716.08	\$66,370.01
CONSTRUCTION MANAGEMENT	\$170,428.50	\$9,429.65	\$39,822.00
SUBTOTAL	\$511,285.51	\$28,288.94	\$119,466.01
PROJECT ENGINEERING & MANAGEMENT OVERHEAD	\$406,011.92	\$22,464.25	\$94,867.98
TOTAL PROJECT ENGINEERING & MANAGEMENT	\$917,297.44	\$50,753.19	\$214,333.99
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES	\$35,000.00	\$0.00	\$0.00
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION	\$0.00	\$0.00	\$0.00
RIGHT-OF-WAY CONTINGENCY	\$7,000.00	\$0.00	\$0.00
TOTAL PROJECT RIGHT-OF-WAY	\$42,000.00	\$0.00	\$0.00
INFLATION RATE ON CONTRACT	\$123,301.00	\$6,683.00	\$28,126.00
INFLATION RATE ON PERSONNEL	\$37,059.00	\$2,050.00	\$8,659.00
ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE	\$459,831.93	\$24,675.10	\$103,992.87
TOTAL PROJECT CONTINGENCY	\$620,191.93	\$33,408.10	\$140,777.87
TOTAL PROJECT ESTIMATE	\$2,919,351.74	\$156,783.59	\$660,742.23
	78.122756%	4.195577%	17.681667%