

CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
PRELIMINARY ENGINEER'S ESTIMATE
N Cook St. at N Vancouver Ave. - Mast Arm Signal

PRELIMINARY ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF THE INTERSECTION OF N COOK ST AND N VANCOUVER AVENUE

VALUES IN BLUE ARE PERCENT OF CONTRACT.

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	1.00	EACH	\$48,933.75	\$48,933.75
2	DUAL ARM POLE (2 @ 35-FT ARMS)	1.00	EACH	\$9,500.00	\$9,500.00
3	SINGLE ARM POLE (1 @ 25-FT ARM)	1.00	EACH	\$8,000.00	\$8,000.00
4	PEDESTRIAN SIGNAL PEDESTAL (10-FT POST)	3.00	EACH	\$1,000.00	\$3,000.00
5	SIGNAL MAST ARM (2 @ 35-FT)	2.00	EACH	\$4,200.00	\$8,400.00
6	SIGNAL MAST ARM (1 @ 25-FT)	1.00	EACH	\$3,500.00	\$3,500.00
7	LUMINAIRE ARM	3.00	EACH	\$1,000.00	\$3,000.00
8	SIGNAL POLE FOUNDATION	2.00	EACH	\$7,000.00	\$14,000.00
9	FRANGIBLE BASE FOUNDATION (PEDESTRIAN SIGNAL PEDESTAL)	3.00	EACH	\$3,500.00	\$10,500.00
10	LED COBRA HEAD LUMINAIRE	3.00	EACH	\$600.00	\$1,800.00
11	PHOTO-ELECTRIC CELL (LIGHTING CONTROL SWITCH)	1.00	EACH	\$300.00	\$300.00
12	VEHICLE SIGNAL HEADS (LED 12"-12"-12" OR 12"-8"-8")	7.00	EACH	\$1,200.00	\$8,400.00
13	PEDESTRIAN SIGNAL HEAD (LED COUNT-DOWN STYLE)	8.00	EACH	\$600.00	\$4,800.00
14	PEDESTRIAN APS PUSHBUTTON	4.00	EACH	\$450.00	\$1,800.00
15	OPTICOM DETECTOR FOR EMERGENCY VEHICLE (2 CHANNEL - 2 DETECTOR) - CC	1.00	EACH	\$4,100.00	\$4,100.00
16	TYPE A J-BOX	5.00	EACH	\$500.00	\$2,500.00
17	TYPE B J-BOX	4.00	EACH	\$650.00	\$2,600.00
18	OVERHEAD SIGN (30" X 36")	4.00	EACH	\$450.00	\$1,800.00
19	STREET NAME SIGN	3.00	EACH	\$600.00	\$1,800.00
20	TYPE 332 CONTROLLER CABINET	1.00	EACH	\$15,000.00	\$15,000.00
21	MODEL 2070 CONTROLLER	1.00	EACH	\$2,500.00	\$2,500.00
22	TERMINAL CABINET	2.00	EACH	\$475.00	\$950.00
23	TYPE B SERVICE CABINET (40-AMP BREAKER & 30-AMP LIGHTING & 15- AMP PHOTO)	1.00	EACH	\$3,000.00	\$3,000.00
24	VEHICLE & BIKE DETECTION (6-FT ROUNDED LOOP & 1 QUADRAPOLE BIKE LOOP)	16.00	EACH	\$650.00	\$10,400.00
25	CONDUIT BORING - HORIZONTAL DIRECTIONAL DRILLING (HDD)	220.00	FT	\$65.00	\$14,300.00
26	CONDUIT TRENCHING & BACKFILL	260.00	FT	\$30.00	\$7,800.00
27	2-INCH CONDUIT STUB-OUT	5.00	EACH	\$500.00	\$2,500.00
28	2-INCH ELECTRICAL CONDUIT	560.00	FT	\$15.00	\$8,400.00
29	2.5-INCH ELECTRICAL CONDUIT	220.00	FT	\$22.00	\$4,840.00
30	3-INCH ELECTRICAL CONDUIT	5.00	FT	\$25.00	\$125.00
31	POLY PULL LINE	750.00	FT	\$2.50	\$1,875.00
32	5-CONDUCTOR NO. 14 AWG CABLE	675.00	FT	\$6.50	\$4,387.50
33	2-CONDUCTOR NO. 14 AWG CABLE	265.00	FT	\$5.25	\$1,391.25
34	NO. 6 AWG THWN WIRES (SERVICE)	150.00	FT	\$4.50	\$675.00
35	NO. 10 AWG THWN WIRES (LED LIGHTS)	250.00	FT	\$3.50	\$875.00
36	FUSE HOLDER	3.00	EACH	\$80.00	\$240.00
37	LOOP FEEDER CABLE (NO. 14 AWG SHIELDED, TWISTED PAIR CABLE)	845.00	FT	\$3.50	\$2,957.50
38	INTERCONNECT CABLE (1-12PR NO. 22 AWG PAIRS)	2,500.00	FT	\$5.50	\$13,750.00
39	NETSYS MODEMS (REMOTE COMMUNICATION)	2.00	EACH	\$150.00	\$300.00

* Unit Price Shown is on Pound, Each, or Foot Basis as Applicable

TOTAL BID ITEMS

\$235,000.00

ANTICIPATED ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
14	BOLI FEE PAYMENT	1.00	LS	\$250.00	\$250.00
15	CONTRACT CONTINGENCY (REQUIREMENT TO ACCEPT BIDS UP TO 10% OVER ESTIMATE)	1.00	LS	\$23,500.00	\$23,500.00

TOTAL ANTICIPATED ITEMS

\$23,750.00

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
<u>SCHEDULE SUMMARY</u>					
	BID ITEMS				\$235,000.00
	CONSTRUCTION CONTINGENCY			15% of Bid Items*	\$35,250.00
	SUBTOTAL				\$270,250.00
	ANTICIPATED ITEMS				\$23,750.00
	TOTAL CONSTRUCTION				\$294,000.00
	PROJECT MANAGEMENT				\$0.00
	DESIGN ENGINEERING				\$15,000.00
	CONSTRUCTION MANAGEMENT				\$35,300.00
	SUBTOTAL				\$50,300.00
	PROJECT ENGINEERING & MANAGEMENT OVERHEAD			73.78% of PM, Eng, and CM	\$37,111.34
	TOTAL PROJECT ENGINEERING & MANAGEMENT				\$87,411.34
	RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES				\$0.00
	RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION				\$0.00
	RIGHT-OF-WAY CONTINGENCY			30% of Land, Improve, and Damages	\$0.00
	TOTAL PROJECT RIGHT-OF-WAY				\$0.00
	INFLATION RATE ON CONTRACT	Years	Inflation		
	INFLATION RATE ON PERSONNEL	0	4.5% of Construction		\$0.00
	ESTIMATE CONTINGENCY FOR UNDEFINED OR CHANGE IN SCOPE	0	2.0% of Eng & Mgmt		\$0.00
			0% of Const, Eng & Mgmt, and Inflation		\$0.00
	TOTAL PROJECT CONTINGENCY				\$0.00
	TOTAL PROJECT ESTIMATE				\$381,411.34