

**190340
EXHIBIT C**

**CITY OF PORTLAND, OREGON
BUREAU OF TRANSPORTATION
IN-LIEU ENGINEER'S ESTIMATE
NW 20th Avenue LID**

IN-LIEU ENGINEER'S ESTIMATE FOR THE IMPROVEMENT OF 20TH AVE: UPSHUR ST. TO RALEIGH ST. AND NW 23RD & VAUGHN & U.S. 30 INTERSECTION

BID ITEMS

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	MOBILIZATION	0.82	LS	\$401,250.00	\$327,741.22
2	TEMPORARY PROTECTION & DIRECTION OF TRAFFIC	0.82	LS	\$125,000.00	\$102,099.33
3	TEMPORARY SIGNS	2,106.42	SQFT	\$20.00	\$42,128.40
4	TEMPORARY BARRICADES, TYPE II	6.00	EACH	\$50.00	\$300.00
5	TEMPORARY BARRICADES, TYPE III	43.00	EACH	\$95.00	\$4,085.00
6	TEMPORARY CONCRETE BARRIER, REFLECTORIZED	0.00	FOOT	\$18.00	\$0.00
7	TEMPORARY IMPACT ATTENUATOR	0.00	EACH	\$2,500.00	\$0.00
8	TEMPORARY PEDESTRIAN CHANNELIZING DEVICES	1,214.00	FOOT	\$20.00	\$24,280.00
9	TEMPORARY PLASTIC DRUMS	157.00	EACH	\$50.00	\$7,850.00
10	STRIPING & STRIPE REMOVAL MOBILIZATION	2.00	EACH	\$1,400.00	\$2,800.00
11	SEQUENTIAL ARROW SIGNS	1.00	EACH	\$4,850.00	\$4,850.00
12	PORTABLE CHANGEABLE MESSAGE SIGNS	5.00	EACH	\$9,000.00	\$45,000.00
13	FLAGGERS	584.64	HOUR	\$50.00	\$29,232.03
14	TRAFFIC CONTROL SUPERVISOR	0.00	HOUR	\$60.00	\$0.00
15	TEMPORARY TYPE ORANGE PLASTIC MESH FENCE	54.84	FOOT	\$5.00	\$274.20
16	EROSION CONTROL	0.82	LS	\$49,500.00	\$40,431.33
17	INLET PROTECTION	24.00	EACH	\$75.00	\$1,800.00
18	POLLUTION CONTROL PLAN	0.82	LS	\$5,000.00	\$4,083.67
19	CONTAMINATED MEDIA DISPOSAL	224.00	CUYD	\$150.00	\$33,600.00
20	HASP/CMDDP WORKPLANS	0.82	LS	\$10,000.00	\$8,170.00
21	REMOVAL OF RAILROAD TRACK AND TIES	66.00	FOOT	\$125.00	\$8,250.00
22	REMOVE AND REINSTALL HORSE RINGS	0.00	EACH	\$750.00	\$0.00
23	REMOVAL OF STRUCTURES & OBSTRUCTIONS	0.95	LS	\$262,746.15	\$248,873.40
24	REMOVAL OF FENCES	480.00	FOOT	\$1.00	\$480.00
25	CLEARING AND GRUBBING	0.82	LS	\$25,600.00	\$20,910.29
26	GENERAL EXCAVATION	6,164.30	CUYD	\$28.00	\$172,600.40
27	12 INCH SUBGRADE STABILIZATION	616.10	SQYD	\$35.00	\$21,563.50
28	SUBGRADE GEOTEXTILE	4,813.60	SQYD	\$1.00	\$4,813.60
29	VIDEO INSPECTION OF SEWERS, MAINLINE	0.00	FOOT	\$5.00	\$0.00
30	VIDEO INSPECTION OF SEWERS, LATERALS	0.00	FOOT	\$600.00	\$0.00
31	POTHOLE EXCAVATION	2.00	EACH	\$1,000.00	\$2,000.00
32	STORMWATER PLANTERS	0.00	SQFT	\$80.00	\$0.00
33	6 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0.00	FOOT	\$68.00	\$0.00
34	10 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	219.00	FOOT	\$72.00	\$15,768.00
35	12 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0.00	FOOT	\$89.50	\$0.00
36	15 INCH PIPE, PVC ASTM D3034 SDR35, BEDDING TYPE: D, COMPLETE	0.00	FOOT	\$100.00	\$0.00
37	CONCRETE CLOSURE COLLAR	3.00	EACH	\$5,000.00	\$15,000.00
38	18 INCH PIPE, RCP ASTM C76 CLASS IV, BEDDING TYPE: B, COMPLETE	0.00	FOOT	\$135.00	\$0.00
39	24 INCH PIPE, RCP ASTM C76 CLASS IV, BEDDING TYPE: B, COMPLETE	0.00	FOOT	\$198.00	\$0.00
40	CONCRETE MANHOLES, 48 INCH, 0-8 FT DEPTH	0.00	EACH	\$6,580.00	\$0.00
41	CONCRETE MANHOLES, 48 INCH, DEEPER THAN 8 FT	0.00	FOOT	\$550.00	\$0.00
42	CONCRETE MANHOLES, 60 INCH, 0-8 FT DEPTH	0.00	EACH	\$8,550.00	\$0.00
43	CONCRETE MANHOLES, 60 INCH, DEEPER THAN 8 FT	0.00	FOOT	\$750.00	\$0.00
44	CONCRETE INLETS, TYPE CG-2	12.00	EACH	\$1,910.00	\$22,920.00
45	CONCRETE INLETS, TYPE G-2	10.00	EACH	\$1,750.00	\$17,500.00
46	CONCRETE INLETS, TYPE METAL, MODIFIED	0.00	EACH	\$450.00	\$0.00
47	CONCRETE INLETS, TYPE CHANNEL & GRATE	2.00	EACH	\$4,400.00	\$8,800.00
48	CATCH BASINS, METAL SUMP	0.00	EACH	\$1,580.00	\$0.00
49	DRAINAGE CURBS	335.10	FOOT	\$24.00	\$8,042.40
50	ADJUSTING BOXES	7.00	EACH	\$450.00	\$3,150.00
51	CONNECTION TO EXISTING STRUCTURES	10.00	EACH	\$3,580.00	\$35,800.00
52	MINOR ADJUSTMENT OF MANHOLES	0.00	EACH	\$1,500.00	\$0.00
53	DIVERSION OF FLOW	0.00	EACH	\$3,500.00	\$0.00
54	RECONSTRUCT MANHOLE BASE	0.00	EACH	\$7,500.00	\$0.00
55	RODENT CONTROL	0.00	LS	\$1,500.00	\$0.00
56	TRENCH RESURFACING	237.00	SQYD	\$115.00	\$27,255.00
57	AGGREGATE BASE, 6 INCH THICK	4,813.60	SQYD	\$10.00	\$48,136.00
58	LEVEL 3, 1/2 INCH DENSE, MWMAC MIXTURE	2,498.25	TON	\$84.00	\$209,853.00

190340
EXHIBIT C

NO.	ITEMS OF WORK AND MATERIALS	TOTAL QUANTITY	UNIT	UNIT PRICE	TOTAL AMOUNT
59	9 INCH ASPHALT CONCRETE PAVEMENT REPAIR, Temporary Driveway & parking	240.00	SQYD	\$50.00	\$12,000.00
60	17 INCH ASPHALT CONCRETE PAVEMENT REPAIR	473.44	SQYD	\$132.00	\$62,494.08
61	16 INCH ASPHALT CONCRETE PAVEMENT REPAIR, US 30 ramp	978.36	SQYD	\$142.00	\$138,927.12
62	EXTRA FOR ASPHALT APPROACHES	0.00	EACH	\$1,000.00	\$0.00
63	CONCRETE CURBS, CURB AND GUTTER	222.00	FOOT	\$40.00	\$8,880.00
64	CONCRETE CURBS, STANDARD CURB	348.80	FOOT	\$29.00	\$10,115.20
65	CONCRETE CURBS, THICKENED CURB AND GUTTER	78.70	FOOT	\$55.00	\$4,328.50
66	CONCRETE ISLANDS	1,600.65	SQFT	\$29.00	\$46,418.83
67	MONOLITHIC CURB AND DRIVEWAYS	639.05	SQFT	\$16.00	\$10,224.80
68	MONOLITHIC CURB AND GUTTER DRIVEWAYS	1,324.90	SQFT	\$20.00	\$26,498.00
69	CONCRETE WALKS	8,221.30	SQFT	\$10.00	\$82,213.00
70	MONOLITHIC CURB AND SIDEWALKS	3,221.80	SQFT	\$28.00	\$90,210.40
71	MONOLITHIC CURB GUTTER AND SIDEWALKS	32,125.23	SQFT	\$19.50	\$626,441.99
72	DETECTABLE WARNING SURFACE	16.00	SQFT	\$120.00	\$1,920.00
73	CONCRETE BARRIER	230.00	FOOT	\$28.50	\$6,555.00
74	PAVEMENT LINE REMOVAL	8,146.00	FOOT	\$0.85	\$6,924.10
75	PAVEMENT LEGEND REMOVAL	21.00	EACH	\$105.00	\$2,205.00
76	PAVEMENT BAR REMOVAL	331.30	SQFT	\$3.75	\$1,242.38
77	MONO-DIRECTIONAL WHITE TYPE I MARKERS	65.00	EACH	\$6.50	\$422.50
78	60" WHITE ROUND TOP SURFACE MOUNTED TUBULAR MARKERS	0.00	EACH	\$150.00	\$0.00
79	CURB MARKINGS - PAINT	249.00	FOOT	\$6.00	\$1,494.00
80	THERMOPLASTIC, NON-PROFILE, 120 MILS, EXTRUDED	12,259.00	FOOT	\$1.30	\$15,936.70
81	PAVEMENT LEGEND, TYPE B-HS: ARROWS	13.00	EACH	\$300.00	\$3,900.00
82	PAVEMENT LEGEND, TYPE B-HS: BICYCLE LANE STENCIL	15.00	EACH	\$300.00	\$4,500.00
83	PAVEMENT LEGEND, TYPE B-HS: BIKE YIELD LINE TRIANGLE	3.00	EACH	\$70.00	\$210.00
84	PAVEMENT LEGEND, TYPE F: GREEN BICYCLE LANE MARKINGS	12,090.00	SQFT	\$9.60	\$116,064.00
85	PAVEMENT BAR, TYP B-HS	1,656.00	SQFT	\$9.50	\$15,732.00
86	REMOVE EXISTING SIGNS	1.00	LS	\$2,500.00	\$2,500.00
87	REMOVE & REINSTALL EXISTING SIGNS	1.00	LS	\$3,200.00	\$3,200.00
88	WOOD SIGN POSTS	0.00	FBM	\$32.00	\$0.00
89	SIGN SUPPORT FOOTINGS, BREAKAWAY	1.00	LS	\$21,000.00	\$21,000.00
90	PIPE SIGN SUPPORTS	1.00	LS	\$14,500.00	\$14,500.00
91	BIKE RACK SIGN SUPPORTS	0.00	EACH	\$700.00	\$0.00
92	60" WHITE ROUND TOP SURFACE MOUNTED TUBULAR MARKER SIGN MOUNTS	10.00	EACH	\$480.00	\$4,800.00
93	TYPE "B" SIGNS IN PLACE	10.00	SQFT	\$25.00	\$250.00
94	TYPE "BL1" SIGNS IN PLACE	4.50	SQFT	\$25.00	\$112.50
95	TYPE "F" SIGNS IN PLACE	10.00	SQFT	\$25.00	\$250.00
96	TYPE "G" SIGNS IN PLACE	62.89	SQFT	\$36.00	\$2,264.04
97	TYPE "R" SIGNS IN PLACE	81.75	SQFT	\$20.00	\$1,635.00
98	TYPE "W1" SIGNS IN PLACE	24.50	SQFT	\$20.00	\$490.00
99	TYPE "W2" SIGNS IN PLACE	14.00	SQFT	\$20.00	\$280.00
100	TYPE "W12" SIGNS IN PLACE	47.24	SQFT	\$30.00	\$1,417.20
101	TYPE "Y1" SIGNS IN PLACE	9.33	SQFT	\$20.00	\$186.60
102	TYPE "Y4" SIGNS IN PLACE	18.75	SQFT	\$20.00	\$375.00
103	42 INCH DIAMETER SIGNAL SUPPORT DRILLED SHAFT	45.00	FOOT	\$800.00	\$36,000.00
104	POLE FOUNDATIONS	1.00	LS	\$48,100.00	\$48,100.00
105	LIGHTING POLES, FIXED BASE	1.00	LS	\$62,000.00	\$62,000.00
106	LIGHTING POLE ARMS	1.00	LS	\$2,300.00	\$2,300.00
107	LUMINAIRES, LAMPS AND BALLASTS	1.00	LS	\$50,500.00	\$50,500.00
108	SWITCHING, CONDUIT AND WIRING	1.10	LS	\$90,000.00	\$99,000.00
109	TRAFFIC SIGNAL INSTALLATION	1.00	LS	\$266,000.00	\$266,000.00
110	INTERCONNECT SYSTEM (underground)	1.00	LS	\$25,000.00	\$25,000.00
111	LAWN SEEDING	238.20	SQYD	\$6.00	\$1,429.20
112	TOPSOIL	48.30	CUYD	\$110.00	\$5,313.00
113	REMOVING AND REBUILDING FENCE	263.55	FOOT	\$26.00	\$6,852.39
30A	VIDEO INSPECTION OF SEWERS, LATERALS	0.00	EACH	\$600.00	\$0.00
CO 3.01	MAJOR ADJUSTMENT OF MANHOLES	0.00	EACH	\$3,500.00	\$0.00
CO 3.02	CONNECTION TO EXISTING STRUCTURES	1.00	EACH	\$3,580.00	\$3,580.00
CO 6.01	LIQUIDATED DAMAGES	131.00	DAYS	-\$3,400.00	-\$445,399.00
CO 7.01	ASPHALT ESCALATION	1.00	LS	\$8,994.20	\$8,994.20
CO 8.01	CONCRETE PAVERS	2,830.40	SQFT	\$41.75	\$118,169.20
CO 9.01	EXTRA REMOVAL OF STRUCTURES & OBSTRUCTIONS	0.79	LS	\$185,440.00	\$146,044.25
CO 11.01	CONTAMINATED MEDIA DISPOSAL ROUNDING	1,775.80	CUYD	\$130.00	\$230,854.00
* Unit Price Shown is on Pound, Each, or Foot Basis as Applicable					\$0.01
TOTAL BID ITEMS					\$3,584,295.96