Version: September 2023

Exhibit D

Agency	City of Portland Bureau of Transportation
Title	Engineer's Estimate for 2020 Standard Construction Specifications
Stage	Preliminary
Project Name	NE 11th Ave & NE Columbia Blvd LID
Project No.	N/A
Date	March 26, 2024
Engineer	Nicholas Morell, PE

BID ITEMS

BID ITEM NO.	ITEMS OF WORK AND MATERIALS	SPEC REFERENCE	UNIT	NE 11th & Columbia Intersection	SE Corner	SW Corner	OHS	Private Sanitary Connection	Private Property Work	PWB	TOTAL QUANTITY	UNIT PRICE	NE 11th & Columbia Intersection	SE Corner	SW Corner	OHS	Private Sanitary Connection	PWB Private PropertyWork	PWB	TOTAL AMOUNT
1	MOBILIZATION	0210	LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 204,150.40	$ 113,226.78	$ 29,855.15	$ 29,403.55	$ 8,655.08	$ 23,009.84	$ -	$ -	$ 204,150.40
3	TEMPORARY WORK ZONE TRAFFIC CONTROL, COMPLETE	0221	LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 204,150.40	$ 113,226.78	$ 29,855.15	$ 29,403.55	$ 8,655.08	$ 23,009.84	$ -	$ -	$ 204,150.40
19	STRIPE REMOVAL	0225	FOOT				90				90	$ 1.50	$ -	$ -	$ -	$ 135.00	$ -	$ -	$ -	$ 135.00
32	EROSION CONTROL	0280	LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 10,207.52	$ 5,661.34	$ 1,492.76	$ 1,470.18	$ 432.75	$ 1,150.49	$ -	$ -	$ 10,207.52
37	POLLUTION CONTROL PLAN	0290	LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 1,414.32	$ 784.42	$ 206.83	$ 203.70	$ 59.96	$ 159.41	$ -	$ -	$ 1,414.32
38	NON-HAZARDOUS CONTAMINATED SOIL/SEDIMENT DISPOSAL	0291	CUYD	533.5	206.4	212.4	102.7	102.7	0	0	1,158	$ 98.97	$ 52,800.50	$ 20,427.41	$ 21,021.23	$ 10,164.22	$ 10,164.22	$ -	$ -	$ 114,577.57
41	CMDP WORK PLANS	0291	LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 2,676.85	$ 1,484.65	$ 391.47	$ 385.54	$ 113.49	$ 301.71	$ -	$ -	$ 2,676.85
42	CONSTRUCTION SURVEY WORK	0305	LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 32,664.06	$ 18,116.29	$ 4,776.82	$ 4,704.57	$ 1,384.81	$ 3,681.57	$ -	$ -	$ 32,664.06
51	REMOVAL OF STRUCTURES AND OBSTRUCTIONS	0310	LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 81,660.16	$ 45,290.71	$ 11,942.06	$ 11,761.42	$ 3,462.03	$ 9,203.94	$ -	$ -	$ 81,660.16
52	CLEARING AND GRUBBING	0320	LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 20,415.04	$ 11,322.68	$ 2,985.52	$ 2,940.36	$ 865.51	$ 2,300.98	$ -	$ -	$ 20,415.04
54	GENERAL EXCAVATION	0330	CUYD	533.5	206.4	212.4	102.7	102.7			1,158	$ 56.98	$ 30,398.83	$ 11,760.67	$ 12,102.55	$ 5,851.85	$ 5,851.85	$ -	$ -	$ 65,965.75
56	12 INCH SUBGRADE STABILIZATION	0331	SQYD		86	81	48	26		133	374	$ 49.62	$ -	$ 4,279.73	$ 4,019.22	$ 2,374.32	$ 1,272.75	$ -	$ 6,594.50	$ 18,540.51
57	SUBGRADE GEOTEXTILE	0350	SQYD		575	540	319	171		886	2,491	$ 2.11	$ -	$ 1,213.25	$ 1,139.40	$ 673.09	$ 360.81	$ -	$ 1,869.46	$ 5,256.01
NEW	PRIVATE PLUMBING WORK (930 NE Columbia Blvd & 1012 NE Columbia Blvd)	0444	LS					1			1	$ 25,000.00	$ -	$ -	$ -	$ -	$ 25,000.00	$ -	$ -	$ 25,000.00
NEW	PRIVATE PROPERTY WORK PLAN	0444	LS					1			1	$ 1,000.00	$ -	$ -	$ -	$ -	$ 1,000.00	$ -	$ -	$ 1,000.00
NEW	6 INCH PIPE, PVC ASTM D3034 SDR 35 BEDDING TYPE: D, COMPLETE	0445	FOOT					85			85	$ 350.00	$ -	$ -	$ -	$ -	$ 29,750.00	$ -	$ -	$ 29,750.00
61	12 INCH PIPE, PVC ASTM D3034 SDR 35 BEDDING TYPE: D, COMPLETE	0445	FOOT		65	28	75				168	$ 266.58	$ -	$ 17,327.70	$ 7,464.24	$ 19,993.50	$ -	$ -	$ -	$ 44,785.44
70	CONCRETE INLETS, TYPE CG-2	0470	EACH		1	1	1				3	$ 4,424.75	$ -	$ 4,424.75	$ 4,424.75	$ 4,424.75	$ -	$ -	$ -	$ 13,274.25
78	DRAINAGE CURBS	0480	FOOT		65						65	$ 14.47	$ -	$ 940.55	$ -	$ -	$ -	$ -	$ -	$ 940.55
91	RETAINING WALL, CAST-IN-PLACE CONCRETE RIGID GRAVITY	0596C	LS			1					1	$ 15,000.00	$ -	$ -	$ 15,000.00	$ -	$ -	$ -	$ -	$ 15,000.00
100	AGGREGATE BASE, 8 INCHES THICK	0640	SQYD		575	540	319	171		886	2,491	$ 24.51	$ -	$ 14,093.25	$ 13,235.40	$ 7,818.69	$ 4,191.21	$ -	$ 21,715.86	$ 61,054.41
101	LEVEL 2, 1/2 INCH ACP MIXTURE WITH PG 64-22 ASPHALT	0744	TON				56.00				56	$ 146.85	$ -	$ -	$ -	$ 8,223.60	$ -	$ -	$ -	$ 8,223.60
103	LEVEL 4, 1/2 INCH ACP MIXTURE WITH PG 70-22 ASPHALT	0745	TON		344.00	323.00		120.00		621.00	1,408	$ 250.00	$ -	$ 86,000.00	$ 80,750.00	$ -	$ 30,000.00	$ -	$ 155,250.00	$ 352,000.00
111	ASPHALT APPROACHES	0749	SQFT		63	150					213	$ 6.39	$ -	$ 402.57	$ 958.50	$ -	$ -	$ -	$ -	$ 1,361.07
118	CONCRETE CURBS, STANDARD CURB	0759	FOOT	27	120	112					259	$ 41.73	$ 1,126.71	$ 5,007.60	$ 4,673.76	$ -	$ -	$ -	$ -	$ 10,808.07
122	CONCRETE DRIVEWAYS	0759	SQFT	756		530					1,286	$ 18.67	$ 14,114.52	$ -	$ 9,895.10	$ -	$ -	$ -	$ -	$ 24,009.62
123	CONCRETE WALKS	0759	SQFT	341	1382	1394					3,117	$ 10.92	$ 3,723.72	$ 15,091.44	$ 15,222.48	$ -	$ -	$ -	$ -	$ 34,037.64
124	MONOLITHIC CURB AND SIDEWALKS	0759	SQFT	529	407	506		110			1,552	$ 24.50	$ 12,960.50	$ 9,971.50	$ 12,397.00	$ -	$ 2,695.00	$ -	$ -	$ 38,024.00
129	EXTRA FOR NEW CURB RAMPS	0759	EACH	4	2	2					8	$ 1,932.80	$ 7,731.20	$ 3,865.60	$ 3,865.60	$ -	$ -	$ -	$ -	$ 15,462.40
130	TRUNCATED DOMES ON NEW SURFACES	0759	SQFT	44	20	20					84	$ 68.94	$ 3,033.36	$ 1,378.80	$ 1,378.80	$ -	$ -	$ -	$ -	$ 5,790.96
147	THERMOPLASTIC, EXTRUDED, SURFACE, NON-PROFILED	0865	FOOT	1139	1500	900		228			3,767	$ 1.10	$ 1,252.90	$ 1,650.00	$ 990.00	$ -	$ 250.80	$ -	$ -	$ 4,143.70
150	PAVEMENT BAR, TYPE B-HS	0867	SQFT	468							468	$ 10.67	$ 4,993.56	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,993.56
166	TRAFFIC SIGNAL INSTALLATION, NE 11th Ave & NE Columbia Blvd	0990	LS	1				0.11			1	$ 464,450.00	$ 464,450.00	$ -	$ -	$ -	$ 52,348.26	$ -	$ -	$ 516,798.26
170	INTERCONNECT SYSTEM	0990	LS	1				0.11			1	$ 39,000.00	$ 39,000.00	$ -	$ -	$ -	$ 4,395.70	$ -	$ -	$ 43,395.70
173	LAWN SEEDING	1030	SQYD	38	119	132	195				485	$ 4.36	$ 164.93	$ 520.43	$ 577.25	$ 852.00	$ -	$ -	$ -	$ 2,114.61
174	TOPSOIL	1040	CUYD	6	20	22	33				81	$ 74.03	$ 466.75	$ 1,472.76	$ 1,633.55	$ 2,411.07	$ -	$ -	$ -	$ 5,984.13
176	DECIDUOUS TREES, 2-1/2 INCH CALIPER	1040	EACH	2	5	4					11	$ 753.45	$ 1,506.90	$ 3,767.25	$ 3,013.80	$ -	$ -	$ -	$ -	$ 8,287.95
184	REMOVING AND REBUILDING FENCE	1050	FOOT		210						210	$ 64.05	$ -	$ 13,450.50	$ -	$ -	$ -	$ -	$ -	$ 13,450.50
TOTAL BID ITEMS													$ 946,838.02	$ 298,551.51	$ 294,035.50	$ 86,550.80	$ 230,098.38	$ -	$ 185,429.82	$ 2,041,504.03

ANTICIPATED ITEMS

ANTICIPATED ITEM NO.	ITEMS OF WORK AND MATERIALS		UNIT	NE 11th & Columbia Intersection	SE Corner	SW Corner	OHS	Private Sanitary Connection	PWB Private Property Work	PWB	TOTAL QUANTITY	UNIT PRICE	NE 11th & Columbia Intersection	SE Corner	SW Corner	OHS	Private Sanitary Connection	PWB Private Property Work	PWB	TOTAL AMOUNT
1	RIGHT OF WAY MONUMENTATION		LS		0.50	0.50					1	$ 5,000.00	$ -	$ 2,500.00	$ 2,500.00	$ -	$ -	$ -	$ -	$ 5,000.00
NEW	REMOVE WATER FACILITIES - SERVICES		LS							1	1	$ 3,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ 3,000.00	$ 3,000.00
NEW	RELOCATE WATER FACILITIES - SERVICES		LS							1	1	$15000	$ -	$ -	$ -	$ -	$ -	$ -	$ 15,000.00	$ 15,000.00
NEW	INSTALL WATER FACILITIES - SERVICES		LS							1	1	$55200	$ -	$ -	$ -	$ -	$ -	$ -	$ 55,200.00	$ 55,200.00
NEW	INSTALL WATER FACILITIES - FIRE HYDRANT		LS							1	1	$7,700	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,700.00	$ 7,700.00
NEW	INSTALL WATER FACILITIES - BACKSIDE SERVICES		LS						1		1	$60,000	$ -	$ -	$ -	$ -	$ -	$ 60,000.00	$ -	$ 60,000.00
NEW	CAPITALIZED POWER COSTS		LS	1							0	$ 150,000.00	$ 150,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ 150,000.00
11	OFFSITE STORMWATER MANAGEMENT FEE		SQFT	9625.2	7080	7398.5	2963.9	1640.2			28707.6	$ 8.50	$ 81,814.20	$ 60,180.00	$ 62,887.25	$ 25,193.15	$ 13,941.70	$ -	$ -	$ 244,016.30
16	STEEL ESCALATION		LS	1							1	$ 5,000.00	$ 5,000.00	$ -	$ -	$ -	$ -	$ -	$ -	$ 5,000.00
19	BOLI FEE PAYMENT		LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 2,041.50	$ 1,132.27	$ 298.55	$ 294.04	$ 86.55	$ 230.10	$ -	$ -	$ 2,041.50
20	CONTRACT CONTINGENCY		LS	0.55	0.15	0.14	0.04	0.11	0.00	0.00	1	$ 204,150.40	$ 113,226.78	$ 29,855.15	$ 29,403.55	$ 8,655.08	$ 23,009.84	$ -	$ -	$ 204,150.40
TOTAL ANTICIPATED ITEMS													$ 351,173.25	$ 92,833.70	$ 95,084.84	$ 33,934.78	$ 37,181.64	$ 60,000.00	$ 80,900.00	$ 751,108.21

CONSTRUCTION ESTIMATE SUMMARY

TOTAL BID ITEMS	$ 946,838.02	$ 298,551.51	$ 294,035.50	$ 86,550.80	$ 230,098.38	$ -	$ 185,429.82	$ 2,041,504

Exhibit D

CONSTRUCTION CONTINGENCY		5%	of Bid Items	$ 47,342	$ 14,928	$ 14,702	$ 4,328	$ 11,505	$ -	$ 9,271	$ 102075
SUBTOTAL				$ 994,180	$ 313,480	$ 308,738	$ 90,879	$ 241,603	$ -	$ 194,701	$ 2,143,579
ANTICIPATED ITEMS				$ 351173	$ 92,834	$ 95,085	$ 33,935	$ 37,182	$ 60,000	$ 80,900	$ 751108
TOTAL CONSTRUCTION				**$ 1,345,353**	**$ 406,313**	**$ 403,822**	**$ 124,814**	**$ 278,785**	**$ 60,000**	**$ 275,601**	**$ 2,894,687**
For 60%, 95%, and Final estimates stop here. The PM will add soft costs. Hide rows in grey.											
PROJECT DEVELOPMENT		0%	of Bid Items	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
PROJECT MANAGEMENT		5%	of Bid Items	$ 47,342	$ 14,928	$ 14,702	$ 4,328	$ 11,505	$ -	$ 9,271	$ 102,075
DESIGN ENGINEERING		15%	of Bid Items	$ 142,026	$ 44,783	$ 44,105	$ 12,983	$ 34,515	$ -	$ 27,814	$ 306,226
CONSTRUCTION MANAGEMENT		10%	of Bid Items	$ 94,684	$ 29,855	$ 29,404	$ 8,655	$ 23,010	$ -	$ 18,543	$ 204,150
PROJECT DEVELOPMENT OVERHEAD		83.32%	of PD	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
PROJECT MANAGEMENT OVERHEAD		83.32%	of PE	$ 39,445	$ 12,438	$ 12,250	$ 3,606	$ 9,586	$ -	$ 7,725	$ 85,049
DESIGN ENGINEERING OVERHEAD		83.32%	of DE	$ 118,336	$ 37,313	$ 36,748	$ 10,817	$ 28,758	$ -	$ 23,175	$ 255,148
CONSTRUCTION MANAGEMENT OVERHEAD		83.32%	of CM	$ 78,891	$ 24,875	$ 24,499	$ 7,211	$ 19,172	$ -	$ 15,450	$ 170098
TOTAL PROJECT ENGINEERING & MANAGEMENT				**$ 520,724**	**$ 164,192**	**$ 161,708**	**$ 47,601**	**$ 126,546**	**$ -**	**$ 101,977**	**$ 1,122,745**
RIGHT-OF-WAY LAND, IMPROVEMENTS, AND DAMAGES											$ -
RIGHT-OF-WAY APPRAISAL, TITLE INSURANCE, AND NEGOTIATION											$ 25,000
RIGHT-OF-WAY CONTINGENCY		30%	of L&I&D								$ -
TOTAL PROJECT RIGHT-OF-WAY											**$ 25,000**
	Years	*Inflation*									
INFLATION RATE ON CONSTRUCTION CONTRACT	2	5.1%	of Construction	$ 140,725	$ 42,501	$ 42,240	$ 13,056	$ 29,161	$ 6,276	$ 28,828	$ 302,787
INFLATION RATE ON PERSONNEL COSTS	2	5.0%	of Eng. & Mgmt.	$ 53,374	$ 16,830	$ 16,575	$ 4,879	$ 12,971	$ -	$ 10,453	$ 115,081
ALLOWANCE FOR DESIGN REFINEMENT		10%	of Const, Eng. & Mgmt., and Inflation	$ 206018	$ 62,984	$ 62,435	$ 19,035	$ 44,746	$ 6,628	$ 41,686	$ 443530
TOTAL INFLATION AND ALLOWANCE FOR DESIGN REFINEMENT				**$ 400,117**	**$ 122,315**	**$ 121,250**	**$ 36,970**	**$ 86,878**	**$ 12,904**	**$ 80,967**	**$ 861,398**
TOTAL 2% FOR ART				**$ -**	**$ -**	**$ -**	**$ -**		**$ -**	**$ -**	**$ -**
TOTAL PROJECT ESTIMATE				**$ 2,266,194**	**$ 692,820**	**$ 686,780**	**$ 209,384**	**$ 492,209**	**$ 72,904**	**$ 458,545**	**$ 4,903,830**