

APPENDIX A

SCOPE OF WORK

Formal Task Assignment Document

Task Number 00-06

The general provisions and clauses of Agreement No. 1, shall be in full force and effect for this Task Assignment.

Location of Project: City of Lynnwood City Hall, 19100- 44th Ave. W
Project Title: Hall Lake Water Quality and Quantity Evaluation

Maximum Amount Payable Per Task Assignment: \$31,100

Completion Date: _____

Description of Work:

Provide engineering services to evaluate alternative methods to improve the water quality and enhance the hydraulic regime of Hall Lake.

- Collect and review available information available from the City of Lynnwood, City of Montlake Terrace, WSDOT and homeowners regarding water quality and flow into and out of Hall Lake.
- Review hydrologic/hydraulic model of the Hall Lake basin prepared for the 1998 Comprehensive Flood and Drainage Management Plan. This information will be used to prepare alternatives for inlet and outlet controls for the Lake. The feasibility of the potential alternatives will be evaluated based on environmental impacts, potential for habitat enhancement, capital cost, operation and maintenance cost and homeowner or agency acceptance.
- Review water quality data available for the lake. Develop alternative methods for improving the water quality of the lake including general and specific improvements to the basin-wide non-point pollution control as well as, improvements to the existing water treatment/detention ponds which receive runoff from I-5. The feasibility of the potential alternatives will be evaluated based on efficacy of treatment, environmental impacts, potential for habitat enhancement, capital cost, operation and maintenance cost and homeowner acceptance.

- Based on habitat reconnaissance of the lake prepared by Jones & Stokes, develop alternatives for habitat enhancement and/or ESA related improvements.
- Perform field evaluation to verify hydraulic and water quality features within the basin draining to the lake and the discharge outlet.
- Facilitate two public meetings of the stakeholders, including, but not limited to, homeowners, City of Lynnwood, City of Montlake Terrace. Key members of the Hall Lake community will be met with as the first contact. The City will coordinate the meeting times and dates. The first meeting would be held at the beginning of the project. The goal of the first meeting would be to gather support for the project, get approval for access to the lake and gather information and homeowners concerns regarding the lake water quality and hydraulics. The second meeting would be held near the end of the project to discuss the conclusions and recommendations and the direction of future projects.
- Identify the environmental permits, ESA requirements and timelines which would be required for the recommended alternative.

See Estimate of Man-hours & Compensation, Attached.

Agency Project Manager Signature _____ Date: _____

Oral Authorization Date: _____ See Letter Dated: _____

Consultant Signature _____ Date: _____
 Gray & Osborne, Inc.

Agency Approving Authority: _____ Date: _____

APPENDIX B

COST ESTIMATES

**CITY OF LYNNWOOD
EAST I-5 POND INCREASE IN WET STORAGE VOLUME
PRELIMINARY STORM DRAINAGE COST ESTIMATE**

No.	DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT
1	Mobilization, Cleanup & Demobilization	1	LS \$2,300	\$2,300
2	Locate Existing Utilities	1	LS \$400	\$400
3	Trench Excavation Safety Systems	1	LS \$800	\$800
4	12-inch Storm Pipe (Incl. Bedding)	40	LF \$100	\$4,000
5	72-inch diam Type 2 Flow Control Catch Basin	1	EA \$7,000	\$7,000
6	Common Borrow (9-03.14(3))	80	TN \$25	\$2,000
7	Geotextile Liner	167	SY \$20	\$3,333
8	Special Excavation of Unsuitable Material,	59	CY \$20	\$1,185
9	Erosion Control	1	LS \$1,000	\$1,000
10	Traffic control	1	LS \$2,500	\$2,500
11	Seeding, Fertilizing, and Mulching	1	SY \$2	\$2
SUBTOTAL ALL ITEMS; BASE BID				\$24,521
SALES TAX (8.6%)				\$2,109
TOTAL CONSTRUCTION COST ALL ITEMS TO INCLUDE SALES TAX:				\$26,629
Construction Contingencies 20%				\$5,326
Subtotal				\$31,955
Project Administration, Engineering, Permitting etc. (30%)				\$9,586.54
TOTAL COST ESTIMATE				\$42,000

**ESTIMATED MANHOURS & COMPENSATION SCHEDULE
CITY OF LYNNWOOD
HALL LAKE INLET & OUTLET MONITORING PROGRAM**

Task No.	Project Manager	Project Engineer	Design Engineers	Drafting Technician
Project Management	2.0	8.0		
Field Sampling	2.0	8.0	24.0	
Data Analysis and Tracking	2.0	8.0	16.0	4.0
Flow Monitoring	2.0	4.0	16.0	
Total Hours	8.0	28.0	56.0	4.0
Estimated Hourly Rate	\$35.00	\$30.00	\$26.00	\$22.00
Direct Labor cost	\$280	\$840	\$1,456	\$88
Direct Salary Costs				\$2,664
Indirect Costs (156%)				\$4,155.84
Labor Costs				\$6,820
Fee (15%)				\$1,023
Subtotal - Salary Related Costs				\$7,843
Indirect Expenses				
Printing & Reproduction				\$100
Miscellaneous Expenses				\$100
Equipment Rental				\$1,000
Laboratory costs (1-storm event sampling & three winter baseflows) ¹				\$500
Subtotal - Non Salary Costs				\$1,700
Total Estimated Project Cost				\$9,500

**ESTIMATED MANHOURS & COMPENSATION SCHEDULE
CITY OF LYNNWOOD
HALL LAKE MONITORING PROGRAM**

Task No.	Project Manager	Project Engineer	Design Engineers	Drafting Technician
Project Management	2.0	4.0		
Field Sampling	2.0	4.0	24.0	
Data Analysis and Tracking	2.0	4.0	16.0	4.0
Total Hours	6.0	12.0	40.0	4.0
Estimated Hourly Rate	\$35.00	\$30.00	\$26.00	\$22.00
Direct Labor cost	\$210	\$360	\$1,040	\$88
Direct Salary Costs				\$1,698
Indirect Costs (156%)				\$2,648.88
Labor Costs				\$4,347
Fee (15%)				\$652
Subtotal - Salary Related Costs				\$4,999
Indirect Expenses				
Printing & Reproduction				\$100
Miscellaneous Expenses				\$100
Equipment Rental				\$1,000
Laboratory costs (1-year at one sampling & three depths per month) ¹				\$3,600
Subtotal - Non Salary Costs				\$4,800
Total Estimated Project Cost				\$9,800
<p>Note: This assumes that the monitoring program will be largely a volunteer program with initial oversight by consultants to get program operational. After the first year there should little involvement by consultants.</p> <p>1 - Assumes sampling for total phosphorus, soluble reactive phosphorus, total nitrogen, chlorophyll a and Total Suspended Solids.</p>				

**CITY OF LYNNWOOD
WEST I-5 POND CANISTER FILTER INSTALLATION
PRELIMINARY STORM DRAINAGE COST ESTIMATE**

No.	DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT
1	Mobilization	1 LS	\$7,190	\$7,190
2	Adjust Outlet to Lake	1 LS	300	\$300
3	Stormwater Management Filter Cannister Vault	1 LS	50000	\$50,000
4	Adjust inlet to west pond	3 LS	2600	\$7,800
5	PVC Storm Sewer 12-inch	340 LF	40.58	\$13,797
SUBTOTAL ALL ITEMS; BASE BID				\$79,087
SALES TAX (8.6%)				\$6,801
TOTAL CONSTRUCTION COST ALL ITEMS TO INCLUDE SALES TAX:				\$85,888
Construction Contingencies 20%				\$17,178
Subtotal				\$103,066
Project Administration, Engineering, Permitting etc. (30%)				\$30,919.82
TOTAL COST ESTIMATE				\$134,000
Annual Maintenance Costs				\$5,000