

EXHIBIT A –SCOPE OF WORK
WALLIS ENGINEERING
PHASE II
LACAMAS CREEK SEWER PUMP STATION IMPROVEMENTS
CITY OF CAMAS

January 2019
WE#1460B

PROJECT DESCRIPTION

The existing Lacamas Creek Pump Station was constructed in 1958 and is located just east of 1642 NE 3rd Avenue in Camas, WA on the west shoreline of Lacamas Creek. The pump station is nearing its design capacity, and many of the components have reached their useful life. The City of Camas has selected the Wallis Engineering team to design and permit a new Lacamas Creek pump station, and a nearby satellite pump station at Baz Park to serve homes and businesses in the NE 3rd Loop area.

The project is divided into three phases:

Phase I: 30% design including environmental and archeological permitting.

Phase II: Land use permitting, preparation of contract documents, and bidding

Phase III: Construction services

Phase I has been completed except for environmental permitting and archeological surveys and reporting, which is still in progress. This contract is for Phase II services and includes preparation of final construction contract documents for the improvements that were identified in the predesign report prepared for Phase I. Phase II also includes supplemental survey work as needed, soil infiltration testing for stormwater, preparation and processing of land use permits, building permits, and a Construction Stormwater General (NPDES) Permit, a hazardous building materials survey of the existing pump station, and bidding assistance.

CONTRACT DURATION

Contract term shall be from the date contract is fully executed until December 31, 2019.

DESIGN TEAM

Firm	Role	Task(s)
Wallis Engineering (WE)	Project Management, Pump Station and Pipeline Engineering, Site Engineering	1, 2,
GreenWorks (GW)	Park Design, Landscape Architecture	4,5
R&W Engineering (R&W)	Electrical Engineering	4
Geotechnical Resources Inc. (GRI)	Geotechnical Engineering	3
KC Development (KC)	Surveying	2
MWA Architects (MWA)	Architectural Design	4
MD Structural (MDS)	Structural Design	4
G2 Consultants (G2)	Hazardous Building Materials Survey	6

PHASE II: LAND USE PERMITTING, PREPARATION OF CONTRACT DOCUMENTS, AND BIDDING

TASK 1 PROJECT MANAGEMENT

1.1 Project Management and Quality Control. Provide ongoing coordination with all team members and City staff for the duration of the project. Provide technical oversight and financial management to ensure the schedule and budget are met and subconsultant work is coordinated; prepare monthly progress reports; and provide a single point of contact for City staff. This task includes:

- Preparation and ongoing monitoring of a project budget and schedule.
- Quality assurance/ quality control (QA/ QC).
- Scope change management.
- Coordinate between tasks and team members.
- Manage quality control review of all work activities and project deliverables.
- Monthly progress reports to be submitted with billings.

1.2 Project Update Meetings. Facilitate project meetings, either at City offices or by conference call, with the City's Project Manager.

Task 1 Assumptions:

- Up to three (3) project update meetings at City offices.
- This phase of the project (Phase II) will be complete in 22 weeks from Notice To Proceed. Environmental permitting processes will run concurrently with design activities. Completion of Phase II services is contingent on approval of environmental permits by the respective regulatory agencies.

Task 1 Deliverables:

- Updated project schedule and budget as required
- Monthly progress and status reports
- Monthly invoices

TASK 2 SURVEY AND MAPPING

2.1 Survey. KC Development will provide supplemental topography survey that may be needed during the final design phase, including tree surveys that are required as part of land use permitting.

Task 2.1 Assumptions:

- A maximum of 20 hours of survey field crew (includes Party Chief and Chain Person) and 20 hours of office survey will be required.
- Right-of-way and easement acquisitions are not required.

Task 2.1 Deliverables:

- Supplemental survey information in AutoCAD Civil 3D.

TASK 3 GEOTECHNICAL INVESTIGATIONS

3.1 Infiltration Testing. A boring will be drilled to a depth of 30 ft. The boring will be made by a truck-mounted drill rig, using hollow-stem auger drilling techniques. Disturbed split-spoon samples will be obtained from the boring at 2.5-ft intervals of depths using an oversized California Modified Sampler. The samples will be collected by dropping a 140-lb hammer a distance of 30 in. using an automatic hammer. The boring will be subcontracted to a drilling contractor experienced in drilling and sampling soils for engineering purposes. Soil cuttings from the borings will be placed in 55-gallon drums and disposed of off-site by the drilling subcontractor.

As the boring is advanced, an infiltration test will be completed in the silty gravel or silty, gravelly sand anticipated at a depth of about 18 ft. Due to the required depth of the test and the anticipated subsurface conditions, the infiltration tests will be completed, if feasible, in general accordance with the alternative Auger Borehole Falling-Head Infiltration Test method outlined in Section 4.1.6, Alternative Test Methods, of the SWWASCE Infiltration Standards, or if infeasible due to hard subsurface conditions, the open borehole method as described in Appendix 6B in the 2004 Stormwater Management Manual of Eastern Washington.

A member of GRI's engineering staff will coordinate the field exploration program, log each excavation, obtain representative samples of the soils encountered, and document the field infiltration tests. Prior to drilling, the public utility notification process will be completed.

Laboratory testing of soil samples obtained from the boring will include standard classification tests such as natural water content and grain size analyses.

Engineering analyses will be accomplished that will lead to the preparation of conclusions and recommendations concerning the measured permeability.

A memorandum will be prepared that summarizes the soils encountered in the boring and discusses the results of the infiltration tests. The memorandum will be provided in electronic format for your use and distribution.

Task 3.1 Assumptions:

- The boring will take one day to complete and is scheduled for on January 17, 2019.
- The design memorandum will be submitted within four weeks after completion of all field work. Preliminary information can be submitted informally as soon as it becomes available from the studies.

Task 3.1 Deliverables:

- Technical memorandum summarizing the findings.

3.2 Level One Hydrogeologic Assessment. Per CMC 16.55.050(C), Critical Area Report Requirements for Critical Aquifer Recharge Areas, a Level One Hydrogeologic Assessment is required because the new impervious area for the Lacamas Creek Trailhead pump station will exceed 2,500 sf of area.

A Level 1 Hydrogeologic Assessment will be completed for the Lacamas Lake Park site by a Washington licensed hydrogeologist who is experienced in preparing hydrogeologic assessments. The assessment will include:

- Summary of available geologic and hydrogeologic characteristics of the site and approximate permeability of the unsaturated zone;
- Approximate groundwater depth, flow direction, and gradient;
- Location of wells and springs located within 1,300 ft of the site;
- Location of other critical areas, including surface waters, within 1,300 ft of the site;
- Results of ground-level reconnaissance of the site and the surrounding area to evaluate the presence of underground storage tanks, above-ground storage tanks, hazardous materials, hazardous waste, solid waste, pits, sumps, staining, odors, or distressed vegetation which may be indicative of adverse environmental conditions.
- Identification of appropriate Best Management Practices (BMPs) used to prevent degradation of groundwater.
- The results of the Level 1 Hydrogeologic Assessment will be summarized in a report that will include a summary of the information required by Chapter 16.55 of the City of Camas Municipal Code. A draft report in electronic format will be provided for your review. The final report will be signed and stamped by a Washington licensed hydrogeologist.

Task 3.2 Assumptions:

- City will assist with the provision of a list of existing site monitoring wells (if available), BMPs related to facility use of hazardous materials, and any existing spill prevention plans.
- The Level 1 Hydrogeologic Assessment will be completed within four weeks after notice to proceed.

Task 3.2 Deliverables:

- Draft and Final Hydrogeologic Assessment Reports.

TASK 4 FINAL DESIGN (PS&E)

4.1 Utility Coordination. Coordinate with private utility providers to ensure all potential conflicts with proposed work are addressed. Coordination work will include the following:

- Develop a utility contact information list and send project information letters to all utility companies involved to explain nature of the work.
- Coordinate with private utility providers for relocation of existing and installation of new facilities as needed. This task includes up to two meetings each with private utility companies.
- Submit applicable plans to the affected private utility providers. Utility conflict notices will be sent to utilities at the 60% and 90% completion stage.
- Maintain a record of correspondence with utility companies.

4.2 60% PS&E. The design team will prepare and submit 60% plans, specifications, and estimate (PS&E) for City review. Comments from the 30% design submittal will be reviewed and incorporated into the 60% PS&E. The 60% PS&E will include the design components described below.

Civil and Site Design

Civil and site design will include the following:

- Finalize stormwater management concepts (swales, infiltration system).
- Prepare draft and final stormwater report.
- Finalize finished floor levels for new structures. Establish final finished grades; overall major surfaces, road profiles, etc.
- Develop final site and utility plans for the Lacamas Creek Pump Station and Baz Park Pump Station.
- Design alignments of utilities (water, sewer, electric) to serve future restroom at Lacamas Creek Trailhead Park.

Pipelines

- Final pipeline design will include:
- Finalize vertical and horizontal pipe alignments for gravity and pressure force mains.
- Develop typical trench sections and pavement restoration plan.
- Finalize jack & bore road crossing design, including provisions to prevent road settlement.

Mechanical

- Final mechanical design will include the following:
- Finalize system curve and hydraulic grade line calculations.
- Establish wetwell liquid levels.
- Finalize selection and sizing of major equipment, including pumps.
- Coordinate equipment selection and design with electrical and controls discipline
- Finalize selection of piping materials and ancillary equipment (check valves, plug valves, etc.).

Odor Control

- Final odor control design will include the following:
- Select ventilation and carbon filtration equipment to be used in pump stations.
- Design layout of odor control equipment, ventilation piping.

Electrical & Controls

- R&W will prepare the PS&E for the pump station electrical and control components, including the following design tasks:
- Coordinate with Clark Public Utilities for review of load calculations and one-line diagrams, including up to one site visit.

- Final sizing of electrical equipment and generators.
- Design of control panels, motor control centers, disconnect panels, and other electrical and control equipment.
- Site lighting, power, and instrumentation signal design.
- Design of SCADA communications from pump stations to City's central monitoring site.

Structural

MD Structural will provide structural design for the following components:

- Structural design of an approximately 900 square foot gabion retaining wall for the LCPS to support a level backfill and pump station equipment.
- Structural design of a 3-sided concrete masonry unit (CMU) equipment shelter with a single slope steel roof canopy for the LCPS.
- Structural design of a wood or structural steel equipment shelter for the BPPS.
- Structural calculations for building permits.

Landscape

- GreenWorks will prepare the PS&E for the pump station landscaping components, including the following design tasks:
- Final selection of gabion wall, fencing and gate materials
- Irrigation and planting design

Architectural

- MWA will provide architectural specifications for the following:
- LCPS finishes, CMU pattern and color recommendations
- Metal roofing
- CMU block seal
- Sheet Metal Flashing and Trim

4.3 90% PS&E. The design team will prepare and submit 90% plans, specifications, and estimate for City review. Design components described in Task 4.2 will be further refined and comments from the 60% design submittal will be reviewed and incorporated into the 90% PS&E.

4.4 Final PS&E. The design team will prepare and submit final plans, specifications, and estimate for City review. 90% PS&E will be further refined and comments from the 90% design submittal will be reviewed and incorporated into the final PS&E.

4.5 Project Meetings. Facilitate project meetings, providing materials, agenda, and minutes as appropriate, and record key discussions and action items. Specific project meetings included in this subtask are:

- Project team meetings (up to 3) at Wallis' office throughout the project duration at appropriate intervals based upon design activities.
- Submittal review meetings. Submittal review meetings will be held after the 60% and 90% PS&E submittals to review City comments.

Task 4 Assumptions:

- Up to three (3) project team meetings.
- City will provide assistance to the consultant when required regarding coordination with undergrounding private utilities.
- The impervious area for Baz Park falls under the threshold for triggering stormwater regulations
- Any required drawing standards will be provided by the City.
- Technical specifications will be prepared in combined WSDOT and CSI formats.
- Park improvements beyond what is required to construct the pump stations are not included.
- SCADA communications will use a cellular link with provisions for a future fiber optic connection.

- One site visit with CPU will be required.
- Programming of PLC and SCADA system will not be required at this time.
- The maximum wall height is 10'.
- Full-size, stamped, reproducible contract documents will be provided at the final stage.
- A total of 76 plan sheets is estimated to be prepared, as follows:

Sheets	Description	Firm
1	Cover Sheet	WE
1	Sheet Index	WE
2	General Notes, Legend & Abbreviations	WE
1	Pump Station Design Criteria	WE
3	Erosion Control Plans	WE
1	Erosion Control Details	WE
3	Traffic Control Plans	WE
3	Demolition Plans	WE
2	Demolition Details	WE
1	Restoration Plans & Details	WE
4	Gravity Sewer Plan & Profiles	WE
8	Force Main Plan & Profiles	WE
6	Pump Station Civil Site, Utility, and Grading Plans	WE
2	Stormwater Facility Details	WE
5	Pump Station Mechanical Plans and Sections	WE
2	Standard Details	WE
2	Civil Details	WE
2	Mechanical Details	WE
6	Landscape and Irrigation Plans	GW
1	Landscape and Irrigation Details	GW
3	Equipment Shelter Structural Plans	MDS
1	Retaining Wall Plan & Profile	MDS
1	Structural Details	MDS
1	Electrical Legend and Abbreviations	R&W
2	Electrical One-Line Diagrams	R&W
4	Electrical Plans	R&W
1	Electrical Details and Schedules	R&W
1	Pump Disconnect Panel Details	R&W
2	Control Panel Layout	R&W
2	Control Panel Wiring Diagram	R&W
2	Control Panel I/O Wiring Diagram	R&W
76		

Task 4 Deliverables:

- Utility contact list and correspondence records.
- 60%, 90% and final plans, specifications and estimate.
- Meeting agenda and notes from submittal review meetings.

TASK 5 PERMITTING

5.1 Site Plan Review. The two pump stations will require site plan review approvals from the City, a Type II land use process, with a separate site plan review application for each pump station. Following preliminary site plan approval, building permit approval is required prior to construction.

The site plan review applications will be processed as an administrative Type II application. For the site plan review application, the project team will:

- Prepare the application narrative, describing the project and documenting how each pump station complies with applicable City criteria for approval.
- Submit application packages to City Community Development and work with the City to ensure that the application is processed efficiently.
- Coordinate with Community Development and resubmit any items necessary for the fully complete determination
- Review staff reports with the client to ensure they reflect the project elements and anticipated conditions of approval.
- Attend a design review meeting with the Parks and Recreation Commission to present the project and respond to questions.

Task 5.1 Assumptions:

- Site Plan Review applications will be submitted using 60% design plans.
- The site plan review applications will require one round of client review and one revision.
- Application fees will be paid by the City.
- City will provide a mailing list of property owners within three hundred feet for each pump station.

Task 5.1 Deliverables:

- Site plan review application forms for two pump station sites, for client review and for submittal to City Community Development.
- Complete site plan review application packages for two pump station sites including narratives addressing the site plan approval criteria, necessary drawings, pre-app meeting notes, and SEPA checklist.
- Resubmittal of items necessary for the fully complete determination for each site plan application.
- All permit fees will be paid for by the City.

5.2 Building Permit Application. The two pump stations will require building permit approvals. The project team will prepare the building permit applications and submit to City Community Development for review and approval.

Task 5.2 Assumptions:

- Building permits will be submitted using the 90% design plans.
- Community Development approval will require a preliminary submittal and one resubmittal.
- Application fees will be paid by the City.

Task 5.2 Deliverables:

- A building permit application package for each pump station, including an application, plan set, and structural calculations.

5.3 Construction Stormwater General (NPDES) Permit. This subtask includes preparation and submittal of an online Construction Stormwater Discharge permit application. (<https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Stormwater-general-permits/Construction-stormwater-permit>).

Task 5.3 Assumptions:

- ESC plans prepared for the 90% design phase will be included with the NPDES application.

Task 5.3 Deliverables:

- Online Construction Stormwater Discharge Permit application.
- The entire project will be processed as a single application.

5.4 Arborist Tree Survey. GreenWorks will provide a Tree Survey as required by Camas Municipal Code 18.13.045. The site work, inventory, and assessment will be performed by a licensed arborist.

Task 5.4 Assumptions:

- The Tree Survey will be an inventory and assessment of existing trees, but will not locate them. The current topographic surveys do not include all trees required for the Tree Survey. Therefore additional trees will be added to the topographic survey (see Task 2).
- The Tree Survey will include approximately 42 trees at Lacamas Trailhead Park, and approximately 10 trees at Baz Park.
- Some off-site trees will need to be included in the Tree Survey. The City will gain permission from the landowners for the arborist to access their property.

Task 5.4 Deliverables:

- Tree Survey including inventory and assessment of Significant Trees impacted by pump station and park development.

TASK 6 HAZARDOUS BUILDING MATERIALS SURVEY

G2 Consultants will perform a hazardous building materials survey for the existing Lacamas Creek Pump Station building, including an asbestos survey, limited lead-containing paint inspection, visual mercury, PCB, and universal waste.

Asbestos. The asbestos portion will include an interior and exterior inspection for accessible asbestos containing building materials. All identified accessible suspect asbestos-containing materials, in those areas available for access within the scope of work, will be sampled. The presence, quantity, location and condition of identified asbestos-containing materials will be provided. All work will be performed by an experienced EPA Accredited Asbestos Inspector. Samples will be submitted via chain-of-custody to an NVLAP accredited laboratory for analysis.

Lead-Based Paint. A limited inspection for lead-containing paint of the predominant painted surfaces, for the purposes of demolition, will be conducted in order to provide a general indication of the distribution of lead based paint. A direct read XRF device will be utilized for the paint/coating inspection. The presence, location and condition of identified lead-based paint will be provided, in areas within the scope of work. All work will be performed by an experienced Washington Licensed Lead-Based Paint Inspector.

Mercury, PCBs and Universal Waste Visual Inspection. During the course of the inspection, G2 will conduct a visual inspection items suspected of containing mercury and/or PCBs. Items considered universal waste will also be identified and catalogued. Should suspect PCBs be identified, G2 has allowed for sampling of representative materials and analyzed. The presence, quantity and location will be recorded in a single report inclusive of all structures.

Task 6 Assumptions:

- The pump station building will be available for unimpeded inspection over the course of two days of site work.
- Cost is based on standard sample turnaround time of three business days from completion of field work. Expedited sample turn-around is available at an additional cost, if requested.
- Destructive methods will be utilized in order to access potentially hidden materials, such as multiple layers of flooring, however no equipment will be dismantled, etc. Repairs to building components damaged by destructive sampling will be provided by others, if required.
- Roofs will be included in the sampling for asbestos. All accessible roof samples will be collected in a manner to represent the layers of the material, down to the substrate. It is recommended that the roof is repaired by a qualified contractor, contracted by the client, after G2's sampling is performed. If there are any concerns of water intrusion in the structure between this inspection and demolition, if a roofing contractor isn't utilized by the client for patching, upon request, the roof sample locations will be patched with materials available off of the shelf, at a building supply store.
- No drawings are required to be provided.

Task 6 Deliverables:

- Final report of findings.

TASK 7 BIDDING ASSISTANCE

7.1 Project Bidding. Contract documents prepared in Task 4 will be used to bid the project. Wallis will prepare an agenda and conduct a pre-bid meeting at the City of Camas, respond to questions that come up during bidding, and coordinate responses to questions with project subconsultants as they arise.

7.2 Bid Addenda. Wallis will prepare addenda and submit to the City for distribution.

7.3 Project Award. Wallis will attend the bid opening, review bid prices with City project manager and make a recommendation as to contract award.

Task 7 Assumptions:

- City will be responsible for advertising the project, preparing and distributing Contract Documents to prospective bidders and maintaining a planholder's list.
- Up to two addenda will be necessary (assistance allotments provided for subconsultants).
- Advertisement and plan distribution will be through the City's online plan center.
- City will prepare and maintain a planholder's list, review and process all bids, prepare the bid tabulation and prepare a recommendation of award.

Task 7 Deliverables:

- Addenda will be prepared and provided to the City in electronic format for distribution to bidders.
- Pre-bid meeting agenda and meeting minutes.
- Email with comments and recommendation from review of bid prices

Agreement Exhibit B - Fee Estimate City of Camas - Lacamas Creek Sewer Pump Station Improvements: Phase II WE #1460B January 2019																						
TASK		SE	E1	E2	E3	E4	E5	E6	Insp.	T1	TW	C1	Staff Cost	Wallis Expenses	GW	R&W	GRI	KC	MWA	MDS	G2	Total Cost
		\$182.70	\$167.50	\$155.30	\$133.00	\$115.80	\$99.50	\$89.40	\$96.50	\$101.50	\$93.40	\$78.20										
Task 1	Project Management																					
1.1	Project Management and QC		100									10	\$17,532.00									\$17,532.00
1.2	Project Update Meetings		10										\$1,675.00	\$50 (M)								\$1,725.00
	TASK 1 SUBTOTAL	0	110	0	0	0	0	0	0	0	0	10	\$19,207.00	\$50	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$19,257.00
Task 2	Survey and Mapping																					
2.1	Survey												\$0.00					\$ 5,280.00				\$ 5,280.00
	TASK 2 SUBTOTAL	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0	\$ -	\$ -	\$ -	\$ 5,280.00	\$ -	\$ -	\$ -	\$ 5,280.00
Task 3	Geotechnical Investigation																					
3.1	Infiltration Testing												\$0.00				\$ 12,023.00					\$ 12,023.00
3.2	Level One Hydrogeologic Assessment												\$0.00				\$ 4,400.00					\$ 4,400.00
	TASK 3 SUBTOTAL	0	0	0	0	0	0	0	0	0	0	0	\$0.00	\$0	\$ -	\$ -	\$ 16,423.00	\$ -	\$ -	\$ -	\$ -	\$ 16,423.00
Task 4	Final Design (PS&E)																					
4.1	Utility Coordination			2			10					2	\$1,462.00	\$50 (P)								\$ 1,512.00
4.2	60% PS&E	24	64	120		160	96			120	16	48	\$79,248.80	\$50 (M)	\$ 35,893	\$ 46,321			\$ 3,850.00	\$ 14,300.00		\$179,662.80
4.3	90% PS&E	24	48	96		96	80			120	8	36	\$62,152.80	\$50 (M)								\$ 62,202.80
4.4	Final PS&E	24	32	72		80	72			80	8	24	\$48,098.40	\$100 (P)								\$ 48,198.40
4.5	Project Meetings	2	12	12		12							\$5,628.60									\$ 5,628.60
	Submittal Review Workshops	3	8	6		6							\$3,514.70	\$50 (M)								\$ 3,564.70
	TASK 4 SUBTOTAL	77	164	308	0	354	258	0	0	320	32	110	\$200,105.30	\$300	\$ 35,893.00	\$ 46,321.00	\$ -	\$ -	\$ 3,850.00	\$ 14,300.00	\$ -	\$ 300,769.30
Task 5	Permitting																					
5.1	Site Plan Review		20	4		4				8		8	\$5,872.00	\$75 (M)	\$ 1,320							\$ 7,267.00
5.2	Building Permits		8									8	\$1,965.60	\$50 (M)								\$ 2,015.60
5.3	NPDES			1			4						\$553.30									\$ 553.30
5.4	Arborist Tree Survey												\$0.00		\$ 3,117							\$ 3,117.00
	TASK 5 SUBTOTAL	0	28	5	0	4	4	0	0	8	0	16	\$8,390.90	\$125	\$ 4,437.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 12,952.90
Task 6	Hazardous Building Materials Survey																					
													\$0.00								\$ 1,803.00	\$ 1,803.00
	TASK 6 SUBTOTAL	0	0	0	0	0	0	0		0	0	0	\$0.00	\$0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 1,803.00	\$ 1,803.00
Task 7	Bidding Assistance																					
7.1	Project Bidding		4	4		4						1	\$1,832.60	\$25 (M)	\$ 3,797	\$ 3,828.00						\$ 9,482.60
7.2	Bid Addenda		16	8		8						1	\$4,927.00									\$ 4,927.00
7.3	Project Award		4	16		16				16		1	\$6,709.80	\$25 (M)								\$ 6,734.80
	TASK 7 SUBTOTAL	0	24	28	0	28	0	0		16	0	3	\$13,469.40	\$50	\$ 3,797.00	\$ 3,828.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,144.40
	GRAND TOTAL	77	326	341	0	386	262	0	0	344	32	139	\$ 241,173.00	\$ 525.00	\$ 44,127.00	\$ 50,149.00	\$ 16,423.00	\$ 5,280.00	\$ 3,850.00	\$ 14,300.00	\$ 1,803.00	\$377,630.00

FEE SUMMARY			
Staff	Hours	Rate	Fees
SE - Senior Engineer	77	\$182.70	\$ 14,067.90
E1- Engineer 1 (PM)	326	\$167.50	\$ 54,605.00
E2 - Engineer 2	341	\$155.30	\$ 52,957.30
E3 - Engineer 3	0	\$133.00	\$ -
E4 - Engineer 4	386	\$115.80	\$ 44,698.80
E5- Engineer 5	262	\$ 99.50	\$ 26,069.00
E5- Engineer 5	0	\$ 99.50	\$ -
E6 -Engineer 6	0	\$ 89.40	\$ -
Inspector	0	\$ 96.50	\$ -
T1 - Technician 1	344	\$101.50	\$ 34,916.00
TW- Technical Writer	32	\$ 93.40	\$ 2,988.80
C1 - Clerical 1	139	\$ 78.20	\$ 10,869.80
Total Fees from Staff			\$ 241,173.00
Subconsultant		Fees	
GW		\$	44,127.00
R&W		\$	50,149.00
GRI		\$	16,423.00
KC		\$	5,280.00
MWA		\$	3,850.00
MDS		\$	14,300.00
G2		\$	1,803.00
Total Fees from Subconsultants		\$	135,932.00
Note: Subconsultant fee includes 10% markup			
Expenses			Cost
Printing (P)		\$	150.00
Other (O)		\$	-
Mileage (M)			375.00
Total Fees from Expenses			\$ 525.00
TOTAL BUDGET		\$	377,630.00

Depending on availability, actual staff usage may not match the above estimated hours breakdown. Billing rates for all staff are listed in the Fee Summary.