Council Meeting Date: February 24, 2020 **Agenda Item:** 7(f)

CITY COUNCIL AGENDA ITEM

CITY OF SHORELINE, WASHINGTON

AGENDA TITLE:	Authorizing the City Manager to Execute a Contract with TCF Architecture, PLLC, in the amount of $407,687 for Design of City Maintenance Facilities at the Brightwater Site
DEPARTMENT:	Public Works
PRESENTED BY:	Tricia Juhnke, City Engineer
ACTION:	____ Ordinance ____ Resolution __X_ Motion ____ Discussion ____ Public Hearing

PROBLEM/ISSUE STATEMENT:

Staff is requesting that Council authorize the City Manager to execute an agreement with TCF Architecture to design the Maintenance Facilities at the Brightwater Site. In 2015, TCF Architecture was selected through a competitive Request for Qualifications (RFQ) to design the North Maintenance Facility site. Pre-design on that project identified flaws with placing the entire maintenance operation at that site, prompting the City to pursue a distributed site option, which TCF also led. After several years of space planning and alternative layouts, Council approved a specific alternative layout on April 22, 2019 for further design and construction. This contract is to design the Brightwater site as identified in Phase I of the City Maintenance Facility (CMF) project. The remaining portions of Phase I, including schematic designs at the North Maintenance Facility and Hamlin Yard, will be added by addendum at a later date.

RESOURCE/FINANCIAL IMPACT:

On June 17, 2019, Council adopted Ordinance No. 861, 2019-2020 Biennial Budget Amendment Amending Ordinance No. 855 for Phase 1 Improvements of the City Maintenance Facility. That ordinance appropriated additional funds for the CMF project to bring the 2019-2020 Biennial appropriated total to $1,747,614 for the Phase 1 Improvements comprised of General Fund and Surface Water Fund Contributions. The Brightwater design portion of the Phase 1 Improvements will be funded as follows:

Project Expenditures:	
Staff and Other Direct Expenses	$ 35,000
Brightwater Design Consultant	***$ 407,687***
Total Project Expenditures	**$ 442,687**

Project Revenue:	
General Fund Contribution	$ 442,687
Total Available Revenue	**$ 442,687**

RECOMMENDATION

Staff recommends that the City Council authorize the City Manager to execute a professional services contract with TCF Architecture, PLLC, in the amount of $407,687 for the Brightwater Site Project.

Approved By: City Manager ***DT*** City Attorney ***MK***

BACKGROUND

The City began using Hamlin Yard for Public Works and Parks maintenance operations just after the incorporation of the City. Over time, a series of modest improvements have been made to the property as the City has provided an increasing number of Parks and Public Works services with in-house staff. This property is ageing, inefficient and has been at capacity for some time.

To accommodate increasing maintenance operations space needs, the City acquired the Brugger's Bog Maintenance Facility from King County with the intent to develop it as a future site for a new Public Works maintenance facility. In October 2015, the City retained TCF Architecture to prepare a site master plan and provide construction assistance on development of a Public Works maintenance facility at the Brugger's Bog Maintenance Facility property, now identified as the North Maintenance Facility (NMF).

Limitations with the site required the City to pause design and assess options. After several years of studies and alternatives analysis, including several Council discussions, Council selected Scenario A from the Distributed City Maintenance Facilities Analysis for furthering design and construction at the April 22, 2019 Council meeting. The staff report for this discussion is available at the following link: http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/Council/StaffReports/2019/staffreport042219-9b.pdf.

On June 17, 2019, Council authorized funding for Phase 1 of the City Maintenance. Phase 1 includes early works at the NMF Site, final design and construction of the Brightwater site and, schematic design of the North Maintenance Facility and Hamlin Yard. The staff report for this discussion is available at the following link: http://cosweb.ci.shoreline.wa.us/uploads/attachments/cck/Council/StaffReports/2019/staffreport061719-7d.pdf.

Early work at the NMF is underway and the next step is to proceed with the design of the Brightwater site, followed by schematic design of the other two locations. A project vicinity map for the Brightwater site, along with the NMF and Hamlin Yard sites, is included with this staff report as Attachment A.

ALTERNATIVE ANALYSIS

In 2015, TCF Architecture was selected through a competitive RFQ (8145) for the original scope of work at North Maintenance Facility. Since then TCF has conducted the original North Maintenance Facility pre-design, the Distributed Maintenance Facility Analysis, and the North Maintenance Facility Early Works projects. At the time of the initial RFQ the need for a distributed maintenance facility was not anticipated, and therefore, it was not within the scope of the RFQ. However, based on their historical knowledge, a deep understanding of the space requirements and how the multiple sites fit together, a waiver from a formal Request for Proposal has been processed for City Manager approval for the design of Phase 1 improvements.

Tonight, staff is requesting that Council authorize the City Manager to execute this agreement with TCF Architecture to design the Brightwater Site project. The proposed

scope of work with TCP Architecture for this contract is attached to this staff report as Attachment B. The alternative to authorizing this contract with TCF Architecture is to not authorize the contract and issue a new RFQ for consultant selection or not proceed with the contract at all. This alternative is not recommended as it will further delay the design and construction of this facility.

COUNCIL GOALS ADDRESSED

This project addresses Goal 2*: Improve Shoreline's infrastructure to continue the delivery of highly valued public service*. The Brightwater Site project is a large part of the first phase of the comprehensive City Maintenance Facility and satisfies Action Step #6 of Goal 2: *Establish a plan to address the City's long-term maintenance facility need.*

RESOURCE/FINANCIAL IMPACT

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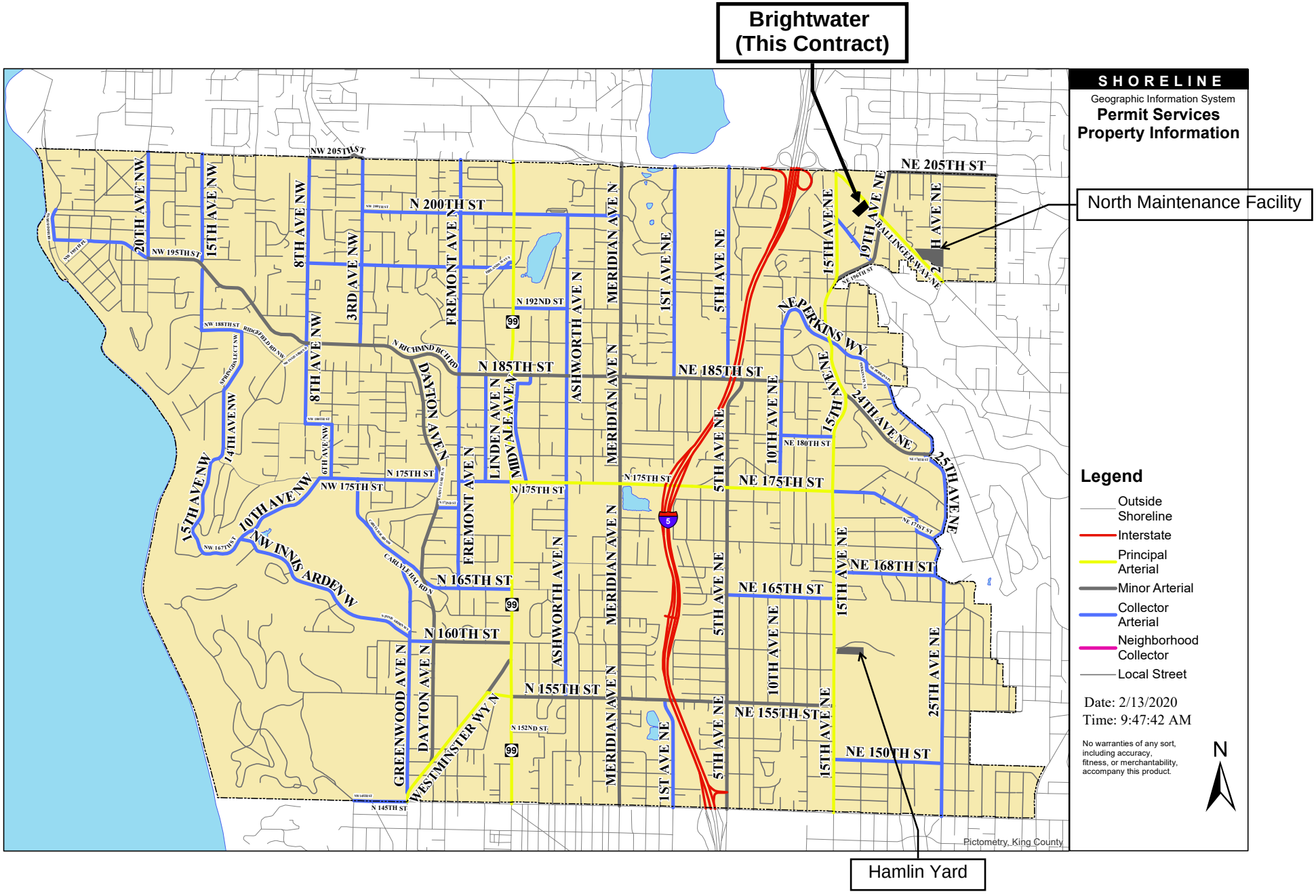
Project Revenue:	
General Fund Contribution	$ 442,687
Total Available Revenue	**$ 442,687**

RECOMMENDATION

Staff recommends that the City Council authorize the City Manager to execute a professional services contract with TCF Architecture, PLLC, in the amount of $407,687 for the Brightwater Site Project.

ATTACHMENTS

Attachment A – Brightwater Site Project Vicinity Map
Attachment B – TCF Architecture, PLLC. Professional Services Contract Scope of Work


Brightwater
(This Contract)
North Maintenance Facility
Hamlin Yard
SHORELINE
Geographic Information System
Permit Services
Property Information
Legend
Outside Shoreline
Interstate
Principal Arterial
Minor Arterial
Collector Arterial
Neighborhood Collector
Local Street
Date: 2/13/2020
Time: 9:47:42 AM
No warranties of any sort, including accuracy, fitness, or merchantability, accompany this product.
N
Pictometry, King County
NW 205TH ST
N 200TH ST
NE 205TH ST
NW 195TH ST
N 192ND ST
NW 188TH ST
N RICHMOND BCH RD
N 185TH ST
NE 185TH ST
N 175TH ST
NW 175TH ST
NE 175TH ST
NW 167TH ST
N 165TH ST
NE 168TH ST
NE 165TH ST
N 160TH ST
N 155TH ST
NE 155TH ST
N 152ND ST
N 145TH ST
NE 150TH ST
20TH AVE NW
15TH AVE NW
8TH AVE NW
3RD AVE NW
FREMONT AVE N
DAYTON AVE N
LINDEN AVE N
MIDVALE AVE N
ASHWORTH AVE N
MERIDIAN AVE N
1ST AVE NE
5TH AVE NE
10TH AVE NE
15TH AVE NE
19TH AVE NE
24TH AVE NE
25TH AVE NE
NE PERKINS WY
BALLINGER WAY NE
14TH AVE NW
6TH AVE NW
NW INNIS ARDEN WY
CARILLON POINT
GREENWOOD AVE N
WESTMINSTER WY N
99
5

TCF Architecture

SCOPE OF SERVICES

DESIGN THROUGH BIDDING

EXHIBIT A

TO PROFESSIONAL SERVICES AGREEMENT FOR

CITY OF SHORELINE
BRIGHTWATER SITE FUEL, WASH AND STG CANOPY STRUCTURES

I. GENERAL

1. **Project Description:** City of Shoreline Brightwater site fuel, wash and canopy structures, hereafter the "Project", generally includes a new, approximately 850 SF, one story building, comprised of enclosed and heated space, as well as approximately 7,300 SF of canopy covered area, accommodating vehicle fueling and washing, and other material and equipment storage, as well as new site development, asphalt and concrete, fencing, stormwater systems, and utility systems, tying into the existing development to the east of the site. (See Exhibit A(a) for concept drawings illustrating the general scope and limits of work.)

2. **Scope of Services:** The Scope of Services described below, along with the attached Exhibits, describe the professional services to be provided by THE CONSULTANT for ***Schematic Design, Design Development, Construction Documents and Bidding*** (with the Construction Administration scope at a later time) for the Project. (See definitions below). Should any provision herein be found in conflict with the Prime Agreement, the Prime Agreement shall prevail.

3. **Definitions:**

   The following definitions are provided for clarity and are not intended to replace any terms that may already be defined or implied in the Prime Agreement.

   - **The City:** City of Shoreline (CITY) – also known as the "Owner".
   - **Consultant:** "TCF Architecture" ("THE CONSULTANT"), located at 902 North 2nd Street, Tacoma, WA 98403. When the term CONSULTANT is used, it shall also include other sub-consulting firms contracted to the CONSULTANT as defined herein.
   - **Contract Documents:** The executed agreement between the City and the CONTRACTOR, General Conditions and Supplemental Conditions, Addenda and all Drawings and Specifications.
   - **Sub consultants:** Professional service firms under contract with THE CONSULTANT.

- **Prime Agreement:** The Prime Agreement is the "Agreement for Professional Services" executed between THE CONSULTANT and the CITY, and any executed amendments to the Agreement.
- **The Project:** The redevelopment of the Brightwater Site to include site development and the addition of several canopy and enclosed structures as describe at the outset of this Exhibit.
- **Owner-Provided Services:** All professional services not specifically defined within the Consultant's Scope of Work, which will be provided under separate contract to the CITY, or performed by the CITY's own personnel or another consultant hired by the CITY. (None included currently).
- **Principal-In-Charge (PIC):** Mark Hurley, TCF Principal. Oversight and project continuum advisor.
- **Project Manager:** TBD, will be the Project Manager for the Project and will be the CITY's primary point of contact for day to day communication.
- **Construction Administrator:** THE CONSULTANT will provide a Construction Administrator, for the duration of the construction of the Work. In general, the Construction Administrator will be responsible for periodic site visits to observe and monitor the general progress of the Work, and to coordinate with the CITY's Project Manager in the delivery of Construction Phase services, to be determined at a later phase.
- **CITY Project Manager:** The CITY will assign Zach Evans as Project Manager for the duration of the Work. The Project Manager will act on behalf of the CITY to administer and coordinate the Project and provide day to day communication with THE CONSULTANT.
- **Authority Having Jurisdiction (AHJ):** City of Shoreline is the AHJ for the project.
- **Other Definitions:** See the Professional Services Agreement.

4. **Summary of Subconsultants:** Subconsultants contracted through THE CONSULTANT shall provide specific services within each phase as described in each attached Exhibit and as authorized in the approved Fee Schedule, Exhibit A.1:

    - **Structural Engineering –** AHBL Engineers, Inc. (Exhibit A.2)
    - **MEP Engineering –** BCE Engineers, Inc. (Exhibit A.3)
    - **Equipment Planning –** Pinnacle Consulting Group, Inc (Exhibit A.4)
    - **Detailed Cost Estimating –** ARC Cost Group, Inc. (Exhibit A.5)
    - **Civil Engineering –** Perteet Consulting Services (Exhibit A.6)
    - **Geotechnical –** Terracon (Exhibit A.7)
    - **Environmental Site Assessment** – Terracon (Exhibit A.8)
    - **Survey** – 1 Alliance – (Exhibit A.9)
    - **Coatings Consulting** – TM Coatings – Provide guidance on coatings for specs
    - **Hardware Consulting –**Adams Consulting & Estimating – Provide hardware schedule and specifications

- **Landscape Architecture –** Not included, see note below
- **Other Consultants:** Other consultants that are determined to be needed during the course of the project may be added by amendment as mutually negotiated between the CITY and THE CONSULTANT.

5. **Professional Services Contracted or Provided Separately by the CITY:** THE CONSULTANT shall communicate with and coordinate with other consulting firms contracted separately with the CITY, and directly with the CITY's own personnel engaged in project design, or other activities, as appropriate and necessary in the execution of THE CONSULTANT's services, but shall not be responsible for the performance of others not directly contracted with THE CONSULTANT.

6. **Reimbursable Expenses:** THE CONSULTANT shall invoice for approved reimbursable expenses in addition to labor costs.

   - Printing & Mailing: Minimal printing costs are assumed for the Project, as the majority of submittal documents (drawings and small documents) will be transferred to the CITY in .pdf form via e-mail or file transfer web site. Except for the Permit Submittal drawings and reports, the CITY will print documents in-house. Costs for printing and mailing by THE CONSULTANT will be invoiced to the CITY at cost plus 10%.
   - Travel: Mileage will be charged per federal standards. Travel time will be charged at regular rates.

7. **Cost of the Work:** The Cost of the Work shall be the total cost of construction as accepted in open competitive bidding by the CITY. (See Prime Agreement for full definition). THE CONSULTANT shall provide estimates for the Cost of the Work as described herein, designing the Project in good faith within the CITY's established "MACC" Budget, described below. Design fee's are not directly related to the MACC number and instead are estimated based on the level of work anticipated to complete the work.

   - (MACC Budget): The Initial Maximum Allowable Construction Cost ("MACC") budget, as set forth by the CITY, exclusive of "soft costs" (sales tax, professional services, permit fees, construction or management reserve contingencies, furnishings, etc) is estimated at **$2,550,000** in February 2020 dollars**.** The MACC will be confirmed, and potentially adjusted (up or down) following the completion of Schematic Design to keep the CITY informed of the project Budget.
   - Cost Estimates: THE CONSULTANT shall provide estimates for the Cost of the Work as part of each design phase as described herein and in the Prime Agreement.
   - Bid Alternates**:** It is expected that alternate bids will be part of this project and is expected to be a complete structure and is included in this scope of work. Exact bidding alternates are not specifically identified in the preliminary design drawings or work scope. If, at the completion of the Schematic Design Phase, the CITY requests THE CONSULTANT to include more complex Bid Alternates in the final Bid Documents, THE CONSULTANT shall review such requests to determine if the level of complexity will require additional services for documentation and shall inform the CITY if additional compensation for such documentation may be warranted.

8. **Related Projects:** It is known that The CITY is currently working on several studies that may or may not affect this project. The CITY will make every effort to inform and coordinate with the CONSULTANT as needed to incorporate timely adjustment to the project. The following are known projects that may have an impact on this project;

    - Snow and ice study
    - Pesticide storage and mixing facility

SITE INVESTIGATIONS / ENVIRONMENTAL REVIEW

1. **Geotechnical Report:** THE CONSULTANT shall provide geotechnical engineering services setting forth design recommendations for activities associated with earthwork, steep slope remediation, below-slab preparation, and structural foundation systems. Additional investigations may be required depending on the outcome of the initial investigations. See Exhibit A.7.

2. **Environmental Site Assessment Phase 1:** The consultant shall provide the ESA consistent with the procedures included in ASTM E1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Assessment Process. The purpose of this ESA is to assist the client in developing information to identify recognized environmental conditions, "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment, 2) under conditions indicative of a release to the environment, or 3) under conditions that pose a material threat of a future release to the environment. Additional investigations may be required depending on the outcome of the initial investigations.

3. **Surveying:** THE CONSULTANT shall provide a topographic and existing conditions survey of the property using existing information as a starting point with field confirmation. A full new survey will be produced using existing information as a resource. See Exhibit A.9.

TASK 1 – PROJECT MANAGEMENT AND ADMINISTRATION (SD - PERMITTING)

General PM and Administration Services: Provide contract management, consultant management & coordination, schedule development and on-going communication, information management, and correspondence between TCF and CITY PM.

Deliverables:

- Executed contract with CITY.
- Invoices / Monthly billing
- Project updates via email / phone
- Consultant management

TASK 2 - SCHEMATIC DESIGN (SD)

1. **SD Phase General Scope of Services:** The Schematic Design Documents shall further develop and confirm the conceptual site and building design (See Exhibit A(a)), provide 3D massing renderings, identify major materials, basic structural systems, basic HVAC, plumbing and electrical systems, low voltage systems, civil systems and equipment layouts. Deliverables will be in the form of preliminary drawings for each design discipline, including reference notes to identify major systems, materials, conditions, and overall scope of the project, etc. Design includes:

   - Site: Redevelopment of the site consistent with the conceptual site design shown in Exhibit A(a). Site design shall include parking, asphalt and concrete surfacing, fencing & gates, signage, and lighting.
   - New Building and Canopies: New enclosed and heated structure along with storage canopies.
   - Meetings: (1) program confirmation meeting with the City, to be scheduled on the same day with (1) preapplication meeting with the AHJ. (1) design update meeting will be accommodated by conference call /video conference.

2. **Permitting Agency Coordination:** THE CONSULTANT shall attend a pre-application meeting with the Authority Having Jurisdiction (AHJ). Comments from the AHJ will be summarized and incorporated into the SD documents. Assume there is no need for a Conditional Use Permit. Note: The City of Shoreline only controls sewer and drainage utilities. Water, Power, Gas, and any other utilities will be permitted with appropriate agencies and may require permit submittals with other jurisdictions.

3. **Cost Estimating:** A Schematic level cost estimate shall be prepared reflecting the scope of the Project indicated in the SD Documents. THE CONSULTANT shall advise the CITY of possible adjustments to the MACC budget, and provide recommendations as appropriate to meet the CITY's budget goals. A project "Base Bid" scope and budget will be finalized, along with any possible Alternate Bid items.

Deliverables:

- Updated program document, if needed.
- Pre Application submittal package
- Written Basis of Design Narratives for each design discipline. (Provide in WORD format).
- 100% SD Documents Set (.pdf documents by transfer file).
- SD Cost Estimate and Budget Summary.
- SD report assembling pertinent technical and narrative information into one PDF file.

Receivables (from CITY to CONSULTANT):

- Consolidated comment responses on drawings within one week of starting Design Development
- Existing GIS information on stormwater and sewer system

- Any available relevant historical documents such as record drawings, surveys, easement information, Geotech reports, environmental reports, etc.
- CIP budget numbers
- Alternative selection for snow and ice study prior to 100% SD if this affects current master planned building locations.
- By 50%, provide sizing of the pesticide storage and mixing facility in order to determine possible locations on site

TASK 3 - DESIGN DEVELOPMENT (DD)

1. **DD Phase:** Based on the CITY'S approval of the Schematic Design Documents updated Cost Estimate and adjusted MACC budget, the Design Development Documents shall illustrate, and describe the development of the approved Schematic Design Documents, further identifying specific materials, products, forms, size and appearance of the project by means of plans, sections, elevations, 3-dimensional images, and details. The Design Development Documents shall include outline specifications and manufacturer's products or systems literature describing the expected performance, quality, and character of materials, systems and products. Physical materials samples and color studies shall be provided for the selection of both interior and exterior materials. Other services and deliverables are further described in the various Scopes of Services proposals provided by each sub-consulting team member, hereby made a part of the Scope of Services, and attached to this Exhibit.

    - Meetings: (1) conference call/video conference design/floor plan layout update meeting including color and finishes review with the City

2. **Permitting Agency Coordination:** In preparation for Plan Review submittals and final permitting, THE CONSULTANT shall further coordinate consultations with the AHJ and provide updated research of applicable codes and site development regulation & requirements under which the Project is subject to. Note: The City of Shoreline only controls sewer and drainage utilities. Water, Power, Gas, and any other utilities will be permitted with appropriate agencies and may require permit submittals with other jurisdictions.

3. **Cost Estimating:** An updated estimate for the Cost of the Work will be prepared reflecting the scope of the Project indicated in the DD Documents. THE CONSULTANT shall advise the CITY of any further adjustments to the MACC budget, and provide recommendations as appropriate to meet the CITY's Project goals**.**

Deliverables:

- 50% DD Coordination Set (.pdf documents by transfer file).
- 75% DD Coordination and Cost Estimating Set (.pdf documents by transfer file).
- 100% DD Documents Set (.pdf documents by transfer file).
- Outline Specification with Product Cutsheets
- DD report assembling pertinent technical and narrative information into one PDF file.

Receivables (from CITY to CONSULTANT):

- Consolidated comment responses on drawings (within one week of starting CD's), outline specifications and DD report comments can follow
- By 50% DD determine the sizing and specs on selected snow and ice method for placement on the site and coordination with project engineers.
- By 50% DD confirmation on inclusion of pesticide storage and mixing facility
- CIP budget numbers, updated if needed

TASK 4 - CONSTRUCTION DOCUMENTS (CD)

1. **CD Phase:** Based upon the CITY's approval of the Design Development documents' updated cost estimate, and confirmed Base Bid Scope and any Alternate Bid items, THE CONSULTANT shall proceed with preparation of drawings and specifications, setting forth in detail the requirements for the Project for bidding, permitting, and construction. The Construction Documents shall include drawings and specifications that establish in detail the quality level of materials, products and systems required for the Project to be competitively bid, permitted, and constructed.

   - Other Services: During the CD Phase, services related special coatings and building hardware, shall be incorporated into the CD process and final CD documents.
   - Project Manual**:** THE CONSULTANT shall collaborate with the CITY to develop the Project Manual, incorporating the CITY's required "Front End" documents for the bidding process, General and Supplementary Conditions, prevailing wage rates, and other contractual documents required by the CITY to be contained in the Project Manual.

   Deliverables:

   - 50% CD Coordination Set (.pdf documents by transfer file).
   - 90% CD Coordination, Cost Estimating, and Building Permit Set (.pdf documents by transfer file as well as up to (4) sets of plans and (1) copy of the reports of the permit submittal or as needed).
   - 100% CD/Bid Documents Set (.pdf documents by transfer file).

   Receivables (from CITY to CONSULTANT):

   - Consolidated comment responses on drawings and specifications (within one week is preferred)
   - Front end specification language at the start of CD's but no later than 50% CD's (see section "4. Project Manual/Specifications" of this section)
   - CIP budget numbers, updated if needed

2. **Permit Coordination:** THE CONSULTANT shall coordinate the plan review and permit process including the submittal of required documents to the AHJ, and will be the primary point of contact for permitting agencies. The CITY, as the Owner, shall be responsible for signing all

applicable permit documents as required by the AHJ, unless THE CONSULTANT can sign on behalf of the Owner, and paying for all plan review and permitting fees. Note: The City of Shoreline only controls sewer and drainage utilities. Water, Power, Gas, and any other utilities will be permitted with appropriate agencies and may require permit submittals with other jurisdictions.

- Permit Fees: The CITY shall be responsible for direct payment of all permit and plan review fees to all governing/permitting agencies.
- Submittal Documents: THE CONSULTANT shall provide completed permit application(s), site and building design drawings, specifications, structural calculations, energy code compliance calculations, storm water management report and geotechnical report.
- Comment Response: THE CONSULTANT shall provide written responses to agency plan review comments, and revise documents as needed for permit acquisition. The CITY shall provide other documents if required by the County.

3. **Cost Estimating:** An updated estimate for the Cost of the Work shall be prepared, reflecting the scope of the Project indicated in the CD Documents and organized by Base Bid and Alternate Bid items. THE CONSULTANT shall advise the CITY of any final adjustments to the MACC, and provide recommendations as appropriate to meet the CITY's Project goals and budget.

4. **Project Manual / Specifications:** A multi-volume Project Manual will be prepared containing project bidding requirements and organized in the 33 division Master Spec format. The Project Manual will include the following basic components:

   - Division 0 – General Bidding Requirements and General Conditions: The CITY shall provide THE CONSULTANT its standard bidding requirements including, but not limited to, Instructions to Bidders, Bidder's Checklist, Form of Proposal, legal forms and documents, and General and Special or Supplemental Conditions. THE CONSULTANT and The CITY will mutually work to confirm that the General Conditions are compatible with the Project conditions, editing the documents as needed and providing any Supplemental Conditions.
   - Division 01 – General Requirements: THE CONSULTANT shall prepare the Division 01 General Requirements sections, edited for the specific conditions of the Project and for consistency with The CITY's General Conditions, subject to the CITY's approval.
   - Divisions 2-33 – Technical Specifications: THE CONSULTANT shall prepare technical specifications using the standard CSI format to specify materials, products and systems for the Project.

5. **Bid Document Distribution:** CONSULTANT shall provide all Bidding Documents to the CITY for uploading to an on-line document distribution service such as Builders Exchange etc.

TASK 5 - BIDDING PHASE

1. **General Bid Phase Services:** THE CONSULTANT shall attend one pre-bid conference, prepare and issue addenda as necessary and generally assist The CITY during the bidding process to answer bidder's questions. It is expected the CITY will lead and coordinate this process.
2. **Call to Bid / Bid Advertisement:** The CITY shall be responsible for all bid advertising. THE CONSULTANT shall provide the CITY with basic project information as required for advertisements.

3. **Analysis of Substitutions:** THE CONSULTANT shall provide services consisting of consideration, analysis, comparisons, and recommendations relative to product and material substitutions proposed by bidders for the Project prior to receipt of bids. Approved substitutions will be identified in addenda.

4. **Bid Materials Distribution:** Bid documents will be available electronically through services such as the Builders Exchange system and the CITY's website.

5. **Communication during Bidding:** Bidder questions shall be e-mailed by the CITY to THE CONSULTANT.

6. **Bid Opening:** The CITY shall conduct the bid opening process and maintain the official summary of bids.

7. **Bid Evaluation:** THE CONSULTANT shall provide services consisting of evaluation of bids, and assistance in reference checking of the apparent low bidder.

PRELIMINARY SCHEDULE

1. Below is an approximate schedule that is anticipated for design and construction. This schedule should be updated at each phase and throughout the project as necessary.
   - **Project NTP** March 2020
   - **Schematic Design:** March – April 2020 (Approx. 2months) (Including Geotech, survey and all other consultants to get updated cost estimate)
   - **Design Development:** May – June 2020
   - **Construction Documents:** July – September 2020
   - **Permitting:** July – August 2020
   - **Bid/Contracts:** As soon as October – November 2020
   - **Construction:** As soon as December 2020 – August 2021 (8-10 months)
   - **Occupancy:** As soon as September/November 2021

TASK 6 - CONSTRUCTION ADMINISTRATION (Not part of current scope and fee, to be added later)

TASK NO.	PROJECT TASK DESCRIPTION (see scope letter for more detail)							Other Team Members Contracted under TCF (See Separate Proposal Letters)								TOTALS
	BRIGHTWATER SITE	Principal-in-Charge Mark Hurley	Project Architect / PM TBD	Designer / Production TBD	Project Coordinator Teta Brown	Admin Support Robin Stice	TCF HOURS	A.2 AHBL (Structural)	A.3 BCE (MEP)	A.4 Pinnacle (Equipment)	A.5 ARC (Estimating)	A.6 Perteet (Civil)	A.7/8 Terracon (Geo/Environ)	A.9 1 Alliance (Survey)	Adams (Hardware)	
1 - PROJECT MANAGEMENT / ADMINISTRATION																
1.1	Project Start Up	4	4		16	6	30									
1.2	Project Management (SD - Permitting)	10	20				30					$3,900				
	ESTIMATED HOURS OR FEES	**14**	**24**	**0**	**16**	**6**	**60**									
	HOURLY RATE	$220	$155	$105	$105	$75		See Consultant Letters								
	ESTIMATED FEES	$3,080	$3,720	$0	$1,680	$450										
	SUBTOTALS			**$8,930**								**$3,900**				**$12,830**
2 - SCHEMATIC DESIGN																
2.1	Drawing Development / Consultant Coordination	2	40	100	6	4	152									
2.2	Program Confirmation Update and meeting	8	6				14									
2.3	Agency Coordination / Preapplication meeting prep		20	6			26									
2.4	Preapplication Meeting, SD Review meeting with City and prep		4				4									
2.5	Building Code Review Summary Draft		2					$5,500	$9,000	$9,150	$2,520	$31,230	$20,950	$13,932		
2.6	Basis of Design		4													
2.7	Cost Budget Summary	1	2				3									
2.8	SD Report	1	8				9									
	ESTIMATED HOURS OR FEES	**12**	**86**	**106**	**6**	**4**	**214**									
	HOURLY RATE	$220	$155	$105	$105	$75		See Consultant Letters								
	ESTIMATED FEES	$2,640	$13,330	$11,130	$630	$300										
	SUBTOTALS			**$28,030**				**$5,500**	**$9,000**	**$9,150**	**$2,520**	**$31,230**	**$20,950**	**$13,932**	**$0**	**$120,312**
3 - DESIGN DEVELOPMENT																
3.1	Drawing Development / Consultant Coordination	4	60	160		6	230									
3.2	DD Review Meeting and Prep		4	5												
3.3	Building Code Review Summary Final	1	10													
3.4	Cost Budget Summary	2	2					$6,050	$13,500	$4,590	$3,360	$28,680			$200	
3.5	Outline Specifications		4	20												
3.6	DD Report		10				10									
	ESTIMATED HOURS OR FEES	**7**	**90**	**185**	**0**	**6**	**288**									
	HOURLY RATE	$220	$155	$105	$105	$75		See Consultant Letters								
	ESTIMATED FEES	$1,540	$13,950	$19,425	$0	$450										
	SUBTOTALS			**$35,365**				**$6,050**	**$13,500**	**$4,590**	**$3,360**	**$28,680**	**$0**	**$0**	**$200**	**$91,745**
4 - CONSTRUCTION DOCUMENTS																
4.1	Drawing Development / Consultant Coordination	4	65	160			229									
4.2	Specifications		66		20	10	96	$8,450	$18,200	$7,350	$3,920	$44,210			$300	
4.3	Permit Submittal and Reponses		12	12			24									
	ESTIMATED HOURS OR FEES	**4**	**143**	**172**	**20**	**10**	**349**									
	HOURLY RATE	$220	$155	$105	$105	$75		See Consultant Letters								
	ESTIMATED FEES	$880	$22,165	$18,060	$2,100	$750										
	SUBTOTALS			**$43,955**				**$8,450**	**$18,200**	**$7,350**	**$3,920**	**$44,210**	**$0**	**$0**	**$300**	**$126,385**
5 - Bidding																
5.1	Bidding (City Leading)	2	36	12	20		70									
5.2	Conformed Set			5			5	$2,000	$1,300	$2,500		$5,050			$200	
	ESTIMATED HOURS OR FEES	**2**	**36**	**17**	**20**	**0**	**75**									
	HOURLY RATE	$220	$155	$105	$105	$75		See Consultant Letters								
	ESTIMATED FEES	$440	$5,580	$1,785	$2,100	$0										
	SUBTOTALS			**$9,905**				**$2,000**	**$1,300**	**$2,500**	**$0**	**$5,050**	**$0**	**$0**	**$200**	**$20,955**
6 - CONSTRUCTION ADMINISTRATION (FUTURE PHASE)																
6.1	CA Services (Limited Role, 9 months construction)						0									
	ESTIMATED HOURS OR FEES	**0**	**0**	**0**	**0**	**0**	**0**									
	HOURLY RATE	$220	$155	$105	$105	$75										
	ESTIMATED FEES	$0	$0	$0	$0	$0										
	SUBTOTALS			**$0**				**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**	**$0**
SUBTOTAL TASKS 1 - 6		**$8,580**	**$58,745**	**$50,400**	**$6,510**	**$1,950**	**986**	**$22,000**	**$42,000**	**$23,590**	**$9,800**	**$113,070**	**$20,950**	**$13,932**	**$700**	**$246,042**
TCFA MARK UP ON CONSULTANT SERVICES 5%								**$1,100**	**$2,100**	**$1,180**	**$490**	**$5,654**	**$1,048**	**$697**	**$35**	**$12,302**
TCF REIMB. EXPENSE BUDGET				**$2,500**				**$400**	**$500**	**$500**	**$0**	**$290**	**$0**	**$1,468**	**$0**	**$3,158**
FEE CONTINGENCY (Held by Owner)				**$17,500**												**$17,500**
TCF TOTAL ESTIMATED FEES (includes expense, but does not include the fee contingency)				**$128,685**				**TOTAL DESIGN FEES (including fee contingency)**								**$407,687**

7f-15

Attachment B

NORTH MAINTENANCE

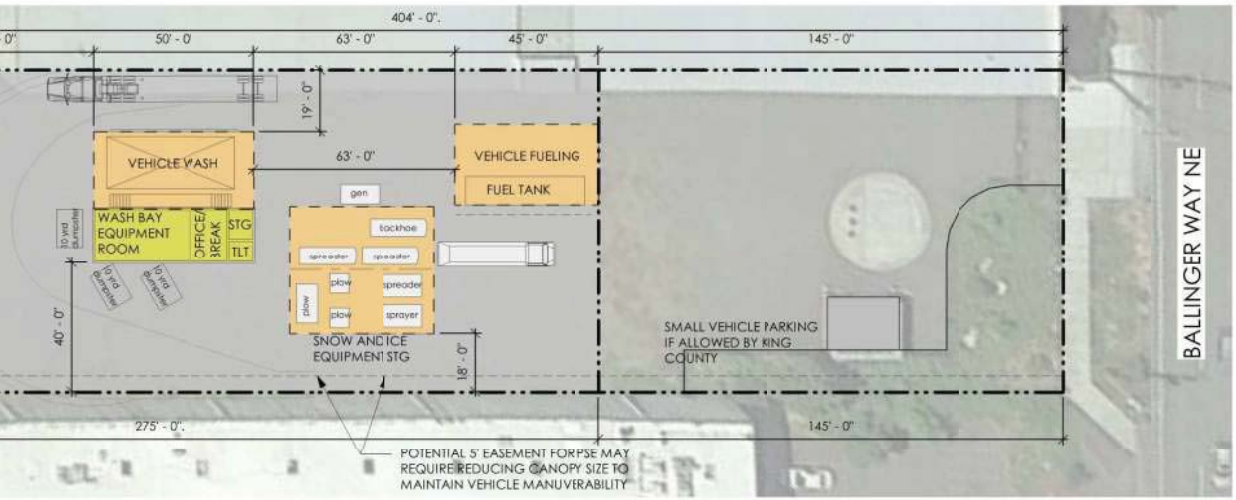
DEVELOPED SITE
1.3 ACRES

EXPANDED PARK/FLOOD PLAIN
1.2 ACRES

CANOPY CITY VEHICLES
M 11
S 9
XS 6
XXS 4

CANOPY
9,500 SF

9,500 SF TOTAL PROGRAM AREA



AUTHORIZATION FOR ADDITIONAL SERVICES

EXHIBIT A.2

TO:	Mr. Mark Hurley, AIA TCF Architecture, PLLC 902 North Second Street Tacoma, WA 98403	**DATE:**	February 10, 2020
		PROJECT NO.:	2190518.20
		PROJECT NAME:	City of Shoreline Maintenance Facility
TEL:	(253) 572-3993	**SUBJECT:**	Structural Engineering - Brightwater Site

DESCRIPTION OF WORK:

The anticipated scope of work involves the structural design associated with the proposed Brightwater Site for the City of Shoreline. Our structural scope and fees is based upon the RFP documents from TCF (dated June 10, 2019) and preliminary conceptual site plan. A breakdown of our anticipated scope and fee is as follows:

- **Task 21: Structural design of foundations for pre-engineered Vehicle Fueling Canopy, Snow and Ice Equipment Storage Canopy, Vehicle Wash Canopy and Salt / Decant Canopy.**
    - This task includes the structural design of foundations for several pre-engineered building structures. Our structural foundation design will be based upon anticipated building loads / column reactions that will be determined by AHBL prior to the involvement of a pre-engineered building manufacturer.
- **Task 22: Structural design of office / equipment storage building structure as well as vehicle wash catwalk structure.**
    - This task includes the complete structural design of a proposed 850 square foot one-story building. We have assumed that the proposed structure will be constructed with conventional light framed wood construction.
    - This task also includes the structural design of a free-standing steel framed catwalk structure.
- **Task 23: Bidding Phase Services**
    - Assist the owner during the bidding process. Our scope will include responding to contractor questions and substitution requests.
    - We can bill our effort on a time and expense basis against the allowance indicated.
- **Task 24: Construction Administration Services**
    - Construction Administration Services have currently been excluded from our scope of work. The extent of our C/A involvement may be reviewed at a later date, and incorporated into the project scope with an additional services agreement.
- **Task 90: Reimbursable Expenses**
    - Reimbursable expenses such as mileage and reprographics. This scope of work will be billed on a time and expense basis.

BILLING SUMMARY:

EXHIBIT A.2

Description	Task No.	Amount
Structural Foundation Design of Pre-Engineered Canopies	T-21	$10,500
• Schematic Design		3,000
• Design Development		3,150
• Construction Documents		4,350
Structural Design of Office / Storage Building	T-22	$9,500
• Schematic Design		2,500
• Design Development		2,900
• Construction Documents		4,100
Bidding Phase Services	T-23	$2,000
Construction Administration Services	T-24	EXCLUDED
Reimbursable Expenses (T&E Allowance)	T-90	$400
	Total	$22,400

Client Name: _____

Signature: _____ **Date:** _____

Printed Name/Title: _____

AHBL Project Mgr. Signature: _____ **Date:** 2/10/2020

AHBL Proj. Mgr. Printed Name: Andrew McEachern, P.E., S.E.

☒ TACOMA
2215 North 30th Street, Suite 300
Tacoma, WA 98403-3350
253.383.2422 TEL

☐ SEATTLE
1200 6th Avenue, Suite 1620
Seattle, WA 98101-3117
206.267.2425 TEL

☐ SPOKANE
827 West First Avenue, Suite 301
Spokane, WA 99201-3912
509.252.5019 TEL

☐ TRI-CITIES
9825 Sandifur Parkway, Suite A
Pasco, WA 99301-6738
509.380.5883 TEL

c: Accounting

ADM/

Q:\2019\2190518\20_STR\NON_CAD\PROJ_MGT\2190518.20 - auth01 - Brightwater - revised 2020-02-10.docx

February 10, 2020

TCF Architecture
902 N. Second Street
Tacoma, WA 98403

Attn: Mark Hurley

RE: City of Shoreline Maintenance Facility Brightwater Site, MEP Fee Proposal, Rev#2

We are pleased that you have included BCE Engineers on the CSMF Brightwater Site Project team. We look forward to working with you on this exciting and challenging project. The project, as we understand it, consists of a 850 sq/ft building and 7,300 sq/ft canopy covered area with fueling and washing facilities. BCE proposes to provide professional services for mechanical, electrical, and plumbing systems as described herein.

BASIC SERVICES

Mechanical Systems

- Schematic Design, Design Development, Construction/Bid Documents (plans and specifications), permitting, bidding, and construction administration services for HVAC, DDC control systems, plumbing and underground utilities within five feet of the building exterior for storm drainage, waste water drainage, and domestic water. The piping invert elevation will be coordinated between BCE and the civil engineer.
- Vehicle fuel and washing equipment is assumed by others any plumbing connections will be coordinated with the Equipment Specifier.
- Fire protection systems are assumed to be excluded at this time.

Electrical Systems

- Schematic Design, Design Development, Construction /Bid Documents (plans and specifications), permitting, biding and construction administration services for building electrical power, site electrical power, building lighting, site lighting, fire alarm and data network communication infrastructure wiring. (See "Exclusions" for services not included).
- Security system, access control, CCTV coordination/design (up to 6 CCTV locations & 2 access control locations)
- Vehicle fuel and washing equipment is assumed by others any electrical connections will be coordinated with the Equipment Specifier.

Basic Services includes electronic submittal documents for Schematic Design, Design Development, Permitting, and Bid Sets. Cost estimates and each submittal package is included. All drawing work will be produced using Revit.

	SD	$9,000.00
	DD	$13,500.00
	CD	$18,200.00
	BID	$1,300.00
	CA	$0
Basic Services Fixed Fee:		$42,000.00

OPTIONAL SERVICES

In addition to Basic Services BCE proposes the following Optional Services and fee budgets are included:

Services	Fixed Fee
1. Conformed Set	$1,200
2. CAD Record Set	$3,000

EXCLUSIONS

The following tasks are excluded from BCE's scope of services for this Project:

- Construction Administrative Services
- Fire Protection System
- Mechanical/Electrical Commissioning as the Commissioning Agent
- Commissioning Support
- LEED Documentation/Submittals
- Fire Pumps
- Grease interceptors, sand sediment filtration tanks, oil water separators.
- Street Lighting
- Generator
- Life-Cycle Cost Analysis
- Value Engineering
- Constructability Review drafting
- Conformed Set drafting
- As-Built Record Document drafting
- Construction Change Orders / Directives
- Printing (Except as required for hard copy permit submittals).
- Telephone systems, computer servers, network switches.
- A/V system design
- Off-site Electrical work
- Utility relocation/coordination
- Evacuation assistance systems
- Seismic calculations for mechanical and electrical components
- All work associated with the research, application, and submittal for any grant monies

If any of the excluded items (above) are determined to be required, at a later time, for furtherance of the Project, scope and fees for these additional services will be addressed in a future, separate proposal by BCE.

Again, thank you for the opportunity to work on this project with you; if you have any questions please do not hesitate to call.

Sincerely,

BCE Engineers, Inc.

Chuck Heaton, PE
Principal

O:\BUSINESS OPPORTUNITIES\2019\219-152 Shoreline City-Maintenance Facility Brightwater Site\PROPOSAL\219-152 CSMF Brightwater MEP fee proposal rev#2.doc

K NO.	PROJECT TASKS	Pinnacle - Operations and Equipment					TOTALS
	City of Shoreline Maintenance Facility - Brightwater	Principal	PM	IE	PE	CAD	

SCOPE SUMMARY:

1) Coordination with Design Team for all site related work as shown on Scenario A
2) Finalize site plan, building/equipment plans, cost estimate.
3) Schematic Design, Design Development, Construction Documents, Submittal Review

K 2 - Schematic Design							
01	**Determine Preliminary Equipment List**		2		8		
02	**Layouts for Vehicle Fueling, Vehicle Wash**		2		8		
03	**Layouts for Deicer and Salt Shed**		2		8	16	
04	**Equipment Cost Estimate, proposals**		8		1		
05	**Determine Utlities and Equipment Requirements**		4		8	2	
09							
	HOURS	0	18	0	33	18	
	HOURLY RATE	$215.00	$175.00	$150.00	$130.00	$95.00	
	FEES	$0.00	$3,150.00	$0.00	$4,290.00	$1,710.00	
	SUBTOTAL			**$9,150.00**			**$9,150.0**
K 3 - Design Development							
01	**Refine Equipment Requirements**		4		8		
02	**Update Utlities and Requirements Spreedsheet**		2		4		
03	**Update Equipment Layouts with CAD Backgrounds**				4	8	
04	**Update Cost Estimate**		4				
	HOURS	0	10	0	16	8	
	HOURLY RATE	$215.00	$175.00	$150.00	$130.00	$95.00	
	FEES	$0.00	$1,750.00	$0.00	$2,080.00	$760.00	
	SUBTOTAL			**$4,590.00**			**$4,590.0**
K 4 - Construction Documents							
01	**Final Equipment Requirements**		1		2		
02	**Final Utlities and Requirements Spreedsheet**		4		8		
03	**Specifications**		4		16		
04	**Final Equipment Layouts, update CAD Background**		1			16	
05	**Update Cost Estimate**		4				
06							
	HOURS	0	14	0	26	16	
	HOURLY RATE	$215.00	$175.00	$150.00	$130.00	$95.00	
	FEES	$0.00	$2,450.00	$0.00	$3,380.00	$1,520.00	
	SUBTOTAL			**$7,350.00**			**$7,350.0**
K 5 - Bidding Support							
01	**Bidding Support**		4		8	8	
02							
	HOURS	0	4	0	8	8	
	HOURLY RATE	$215.00	$175.00	$150.00	$130.00	$95.00	
	FEES	$0.00	$700.00	$0.00	$1,040.00	$760.00	
	SUBTOTAL			**$2,500.00**			**$2,500.0**
	Total Fee			**$23,590.00**			**$23,590.0**

Exhibit A.5

June 19th, 2019

Mark Hurley
Principal

TCF Architecture PLLC
902 N Second Street
Tacoma, Washington 98403
P: 253.572.3993 | F: 253.572.1445
www.tcfarchitecture.com

RE: City of Shoreline Brightwater Site
Construction Cost Consulting Services

Dear Mark,

Please see below our proposal for providing cost consulting services for the City of Shoreline Brightwater Project.

Provide cost consulting services at the following design stages:

- Schematic Design Estimate
- Design Development Estimate
- Construction Documents Estimate

2.1 Cost Estimate
The cost estimate will be based on the measurement of quantities from drawings and provided information and priced in accordance with these drawings, specifications and descriptions of the work. All sections will be estimated in detail based upon the information available. It is our understanding cost estimates will be provided by the design team engineers for Civil, Landscape for our review prior to incorporation in the overall cost estimate.

2.2 Format
The estimates will be presented in elemental format or that determined by the project team.

2.3 Exclusions
Any design work or estimating beyond the above stated services and scope and beyond the site.

2.4 Meetings / Follow Up / Estimate Review
We have assumed for this fee proposal for (2) hours of meetings, conference calls and follow up.

2.5 Project Staffing Assignment

- Andrew Cluness, Lead Estimator (20 Years' Experience)
- Neil Watson, MEP Estimator (24 Years' Experience)

3a. Basic Services Fees
Our Fixed Fee for cost estimating services are $9,800 for the following services:

- Schematic Design Estimate – 18 Hours x $140/Hr. = $2,520

- Architectural 12 Hours x $140/Hr.
- MEP 6 Hours x $140

- **Design Development Estimate – 24 Hours x $140/Hr. = $3,360**
  - Architectural 16 Hours x $140/Hr.
  - MEP 8 Hours x $140
- **Construction Document Estimate – 28 Hours x $140/Hr. = $3,920**
  - Architectural 18 Hours x $140/Hr.
  - MEP 10 Hours x $140

4. Expenses

Direct reimbursable expenditures if appropriate will be charged in accordance with the prime agreement or Our Hourly rates for miscellaneous additional services will be billed as reimbursable at $140/Hr. Flights and Accommodations will be billed at Cost + 10%. *We are not anticipating expenses for this project.*

5. Payment

We will invoice on completion of each phase for payment net thirty (30) days. This proposal remains open for acceptance for a period of three months after which time the writer should be consulted for verification of scope and fees.

6. Project Schedule

Based on our understanding of the current schedule that if successful in our proposal we would receive the documents on the following dates for the formal submittals of our service:

Documents to ARC Cost Group	Complete Cost Plan
Per Schedule	Per Schedule

We look forward to the opportunity of working with you on this important project and if you have any questions regarding this proposal or the fee structure, please give us a call. Thank you.

Yours Truly,

Andrew Cluness, President
ARC Cost Group, LLC
Office: 253-258-2925

Confirmation of Agreement:

This letter correctly sets out the scope and fees for services to be provided by ARC Cost Group, LLC. for this project.

Signature of Authorized Officer | Title of Authorized Officer | Date

Scope of Services

Design Phase

City of Shoreline – CSMF Brightwater

February 2020

City of Shoreline

PERTEET
Better communities, by design

2707 COLBY AVENUE, SUITE 900
EVERETT, WA 98201
800.615.9900 | 425.252.7700

INTRODUCTION

The City of Shoreline is moving forward with the design of a maintenance facility on the City's Brightwater site. The project includes a new one story building with canopy area, accommodating vehicle fueling and washing, as well as equipment storage.

Perteet's services shall be limited to those expressly set forth herein. If the service is not specifically identified herein, it is expressly excluded. Perteet shall have no other obligations, duties or responsibilities associated with the project except as expressly provided in this Scope of Services and any additional services authorized by amendment. Perteet reserves the right to shift funds within the Contract between Tasks.

DESIGN STANDARDS

Design file, reports, documents, and plans prepared as part of this Scope of Services, to the extent feasible, shall be developed in accordance with the latest edition and amendments to the following documents, as of the date this Agreement is signed:

- Standard Specifications for Road, Bridge, and Municipal Construction, 2020 English Edition, published by WSDOT and the Washington State Chapter APWA.
- Standard Plans for Road, Bridge, and Municipal Construction, (M 21-10), published by WSDOT.
- 2009 Manual on Uniform Traffic Control Devices (MUTCD).
- 2010 American with Disabilities Act Standards.
- Proposed Accessibility Guidelines for Pedestrian Facilities in the Public Right-of-Way (PROWAG), July 26, 2011.
- 2019 Stormwater Management Manual for Western Washington (SWMMWW).
- 2012 Low Impact Design Manual (LID Manual) may be used as guidance.
- City of Shoreline Municipal Code.
- City of Shoreline Engineering Development Manual (2020).

TASKS

The following tasks will be performed under this scope of services:
Task 1 – Project Management
Task 2 – Stormwater
Task 3 – Civil Schematic Design (30% Plans and Estimate)

Task 4 – Civil Design Development (60% Plans, Specifications Outline and Estimate)
Task 5 – Civil Permit Documents (90% Plans, Specifications and Estimate)
Task 6 – Civil Construction Documents (Ad Ready Plans, Specifications and Estimate)
Task 7 – Permitting Assistance and Documentation
Task 8 – Bidding Support

Assumptions:

- The Owner will not be pursuing Greenroads, LEED certification, or other certifications.
- Off-site design work is excluded from this proposal.

It is assumed that this project will not exceed a twenty (20) month duration from the date the Consultant receives a notice to proceed from the City.

TASKS – CIVIL DESIGN

Task 1 – Project Management

As part of the Civil Design portion of the project, Perteet will prepare monthly progress reports that describe the work items and percentage of work items that were accomplished during a given month, as well as a forecast of work to be completed over the following month. The monthly progress reports will also identify any other issues or problems that may occur in any given month. Perteet will submit these monthly progress reports to TCF's Project Manager with the monthly invoices. The Perteet Project Manager will notify TCF's Project Manager, in writing (memo format) or via email, of any out of scope and/or budgetary issues that are inconsistent with this Scope of Services.

Work Elements:

- Civil Design Scope and budget management.
- Coordination of Perteet personnel.
- Coordinate QA/QC reviews for plan and Drainage Report submittals.
- Prepare monthly progress reports/invoices.

Assumptions:

- This contract duration shall be no longer than nineteen (19) months.
- Perteet will prepare its invoice and associated progress report monthly.
- A maximum of nineteen (19) progress reports and invoices will be prepared.
- Perteet will coordinate with TCF's Project Manager via e-mails and phone calls on an as needed basis.

Deliverables:

- Perteet Standard Monthly Progress Reports/Invoices (maximum of nineteen [19], hard copy)

Task 2 – Stormwater

The stormwater task consists of the following work elements:

Design Criteria

The 2019 Stormwater Management Manual for Western Washington (SWMMWW), the City of Shoreline Municipal Code and the City of Shoreline Engineering Development Manual will be used as the stormwater regulatory manuals for this project. The 2012 LID Manual may also be used as guidance. Prior to beginning project stormwater design, a stormwater design criteria matrix will be prepared summarizing all stormwater related requirements and standards. The design criteria matrix will be provided to TCF and City of Shoreline for review and concurrence prior to beginning design work.

Deliverables:

- Stormwater Design Criteria Matrix (to be included with the drainage report)

Off-Site Analysis

Perteet will conduct a downstream analysis extending ¼ mile downstream/down-gradient of the project limits for each of the Threshold Discharge Areas (TDAs) identified. The downstream analysis will include a review of recent drainage complaint documentation provided by the County or City (if it exists) and a visual assessment of downstream routes to identify evidence of erosion, flooding, sedimentation, or flow constriction points. A visual above-ground inspection, where practical, will be conducted for each of the downstream drainage conveyance systems associated with the project. Representative photographs will be taken and an assessment of the downstream effects will be performed. The assessment of the downstream effects is to be a qualitative evaluation based upon engineering judgment. The Consultant will prepare a written description of the downstream system conditions and provide a map showing downstream routes. This task does not include detailed hydraulic analysis or computations of the downstream section, but it can be provided as an additional service.

Assumptions:

- The site may consist of up to two (2) TDAs and therefore the Consultant will analyze up to two (2) downstream routes.
- There are no upstream areas tributary to the project site.
- The downstream route field investigation is assuming the Consultant has permission to enter private properties to conduct the work. If the downstream route field investigation requires access onto private property, right-of-entry permissions will be obtained by TCF.

Deliverables:

- Offsite Analysis Write-up, to be included in a section of the Drainage Report.

Site Assessment and Mapping

Perteet will prepare site assessment maps showing existing drainage features within the project site. Mapping will be assembled based upon existing topographic maps and any updated survey. Offsite information will be acquired from GIS mapping, City records, and City maps. The assessment maps, produced by Perteet, will show existing contours, existing drainage elements and any critical areas such as wetlands and streams. This information will be used for appropriate documentation in the Drainage Report. These site assessment maps and exhibits will include:

- Land use types and areas.
- Topographic plans within the project site, including enclosed drainage.
- Topographic mapping outside of the project site but within the project area of interest (electronic GIS).
- Soil types, depth, and slope – Natural Resources Conservation Service (NRCS).
- Soil subsurface information, as available.

Deliverables:

- Site Assessment Maps in 11” x 17” sheet size with a scale of 1:50 (to be included in the Drainage Report)

Change in Land Use Area Map

Perteet will prepare maps identifying existing and proposed impervious areas. This is used for threshold determination in accordance with the drainage standards, and to verify mitigation needs for detention and stormwater quality treatment are being met. TDA boundaries, based on high points and conveyance system configuration, will be identified on these maps. Perteet will also prepare a summary of area tables for pre-project and post-project conditions. This task includes updating the proposed impervious area maps after Design Development plans (60% plans) are complete, if there are significant changes to the site design that warrants an update.

Deliverables:

- One (1) electronic PDF copy of the Change in Land Use Maps and corresponding table of change in land use areas. To be included in the Drainage Report. These maps will include:
    - Existing Impervious Area Map (one [1] sheet)
    - Proposed Impervious Area Map (one [1] sheet)
    - Tables identifying the different types of impervious surfaces

Water Quality Treatment Calculations

Perteet will prepare sizing calculations for the proposed water quality treatment facilities.

Assumptions:

- The hydrologic analysis conducted as part of this work element will be done using MGS Flood™, a continuous simulation modeling software accepted by the Washington State Department of Ecology.

Deliverables:

- Water Quality Treatment calculations (to be included in the Drainage Report)

Flow Control Calculations

Perteet will prepare sizing calculations for flow control (detention or infiltration) facilities.

Assumptions:

- The hydrologic analysis conducted as part of this work element will be done using MGS Flood™, a continuous simulation modeling software accepted by the Washington State Department of Ecology.

Deliverables:

- Flow Control Calculations (to be included in the Drainage Report)

Pipe Conveyance Calculations

Perteet will prepare storm pipe conveyance capacity calculations for new storm drain pipe segments associated with the project site:

- Design Development (60% PS&E): Prepare preliminary pipe sizing calculations, using full-flow conditions with the Manning equation and Rational Method.
- Construction Documents (90% PS&E): Update conveyance calculations for the Drainage Report.

Deliverables:

- Conveyance Calculations (to be included in Drainage Report)

Drainage Report

Perteet will assemble a draft (Design Development [60% PS&E]) and final (Construction Documents [90% PS&E]) Drainage Report. The drainage report will include a written assessment and summary of the surface water design features on the project, summary of tables, flow control and water quality treatment calculations, pipe capacity calculations, drainage basin maps, backwater analysis (Hydraulic Grade Line) and supporting exhibits.

Deliverables:

- Draft Drainage Report at Design Development phase (60% PS&E) (two [2] comb bound hard copies one [1] electronic PDF copy)
- Final Drainage Report at Construction Document phase (90% PS&E) (two [2] comb bound hard copies, one [1] electronic copy on CD in Word/Excel [editable] and PDF formats)

Task 3 – Civil Schematic Design (30% Plans and Estimate)

The Schematic Design phase will include the preparation of design documents based on the approved conceptual design which was established during the Pre-Design phase.

Work Elements:

In addition to the design elements described in other tasks, the following work elements will occur during the 30% design phase.

- Meeting Attendance

  Perteet project manager and design engineer to attend one coordination meeting with TCF at TCF's office.

- Site Preparation

  Identify work which must be conducted prior to beginning construction of the proposed facilities. This work generally includes elements like tree removal/protection, onsite infrastructure to be removed/protected/reused, pavement removal, and temporary security measures.

- Erosion Control

  Prepare erosion control design to minimize the discharge of sediment from the site. Erosion control measures will be designed in accordance with the current version of the Washington State Department of Ecology's Stormwater Management Manual, Volume II.

- Grading and Earthwork

  Identify proposed finished grades throughout the site which provide both surface drainage and user comfort. Due to the size of the site and constraints on all sides grading will generally match the existing site but modified to accommodate drainage. Earthwork design will extend under all building additions to the bottom of the foundations and slabs. Perteet will provide the design for all retaining walls less than 4 feet in height. Finished grades will be identified by contours at 1' intervals. Up to three (3) site cross sections will be prepared. Earthwork design and calculations will be performed using Civil 3D software.

- Drainage

  Drainage plans showing the collection, conveyance and treatment of stormwater runoff from the site. Conveyance and flow control/water quality systems will be shown in plan view only for this design phase.

- Paving

  Identify surfacing and surface features. It is anticipated that the majority of the site will be constructed using asphalt or concrete pavement. The paving plans will also identify surfacing materials for drive lanes, parking area and pedestrian areas. Perteet is responsible for site paving/flatwork up to the buildings.

- Striping and Site Amenities

Identify striping and site features necessary for the operation of the project site. Signage will be limited to standard signage available in the MUTCD or other sources, except for the site monument signs.

- Control Plan

  Identify the locations and dimensions of proposed site features in a manner that allows the contractor to correctly locate the features. Location information will be a combination of coordinates, Station/Offset callouts and measured dimensions as best conveys the intent of the design. Only minimal control information will be provided during this design phase.

- Composite Utility Plans

  Provide design for the water and irrigation system from the point of connection at the water main up to the point of connection with the building system (5 feet outside the buildings). Identify domestic and irrigation meter size and location and whether or not additional fire hydrants will be necessary. Identify type and location of the double check valve assembly.

  Provide design for the sanitary sewer system from the point of connection at the sanitary sewer main up to the point of connection with the building system (5 feet outside the buildings).

  The utility plans will also be used to show all utilities in a single location, including power, data, and storm drainage systems in order to help identify potential conflicts.

- Opinion of Probable Cost

  Perteet will prepare an opinion of the probable construction cost for the project based on the 30% design plans. The opinion will capture all significant project costs to the extent known, and provide sufficient contingency to gauge the final cost of the project.

- Specifications

  Specifications will not be prepared until the 60% submittal.

- Document Assembly

  Assemble all deliverables into a cohesive package for delivery to the TCF Team.

- A maximum of nine (9) civil plans will be prepared. Plan sheets will be scaled at 1” = 20’ for full size drawings (22” x 34”) and 1” = 40’ for half size drawings (11” x 17”). This scale allows the most efficient breakdown of the site while providing sufficient detail to convey the design intent. The anticipated plans are as follows:
  - Legend and Abbreviations (1 plan sheet)
  - Control Plan (1 plan sheet)
  - Site Preparation and Erosion Control (1 plan sheets)
  - Site Preparation and Erosion Control Details (1 sheet)
  - Grading Plan (1 plan sheets)

- Grading Sections (1 plan sheet)
- Drainage Plan (1 plan sheets)
- Composite Utility Plan (1 plan sheets)
- Paving and Channelization Plan (1 plan sheets)

Assumptions:

- Survey Control Plan to be prepared by others.
- Comments on conceptual plans will be provided to Perteet in a consolidated, non-conflicting format. Either plan markups or tabulated comments are acceptable.
- The project configuration and design elements selected in the schematic design phase will not be substantially revised during the course of the design efforts.
- Off-site frontage improvements are not anticipated.
- TCF will control the development of the overall site and hardscape layout, with collaboration from Perteet. Perteet will be responsible to fully document and dimension the site and hardscape layout, along with detailed design of all site elements, except those covered by other disciplines.
- TCF will provide Perteet with an architectural site plan in AutoCAD, along with the AutoCAD site survey.
- TCF will assist Perteet with site layout striping and wheel stop placement.
- TCF will handle site vehicular signage, monument signs, vehicular gates, and fencing design.
- Security system design is excluded from this scope of work.
- Site illumination design is excluded from this scope of work. However, Perteet will coordinate with the project's electrical engineer regarding trenching and backfill for conduit, light pole bases and bollards.
- Landscape and irrigation design, if required, will be by others.
- The mechanical engineer will be responsible for the water systems from 5 feet outside the buildings to the building interiors and will provide Perteet with the demand requirements.
- The mechanical engineer will be responsible for the sanitary sewer systems from 5 feet outside the buildings to the building interiors.
- Utility coordination will be minimal.
- If retaining walls are required, then WSDOT Standard CIP walls or MSE walls will be specified.

Deliverables:

- 30% Plans (four [4] copies, half-size – 11" x 17")
- 30% Opinion of Probable Cost (four [4] copies)

- Electronic version of submittal documents (PDF)

Task 4 – Civil Design Development (60% Plans, Specifications Outline and Estimate)

The Design Development phase will incorporate ideas captured during the Schematic Design phase. The intent of this task is to further the schematic design developed in Task 3 and design it to the 60% design level. Plans will be prepared to a level of competency presently maintained by practicing professionals in the field of civil engineering in the Puget Sound Region. Along with plan development, specifications will also be prepared.

Work Elements:

In addition to the design elements described in other tasks, the following work elements will occur during the 60% design phase.

- Meeting Attendance

  Perteet project manager to attend one coordination meeting with TCF at TCF's office and one coordination with TCF at City of Shoreline for a total of two (2) meetings.
- Grading and Earthwork

  Detailed grading work will be performed during this design phase. Elevation spot shots will be provided on the grading plans to clearly identify to the contractor flow lines, low points, crest lines, slopes for ADA compliance and other necessary locations to convey how the site should be graded.
- Drainage

  Drainage profiles will be prepared and included in the drawing set during this phase. More detailed information such as roof and footing drain configuration and connections, flow control details and water quality treatment details will also be included. TCF will design the roof drainage system and will provide Perteet with the downspout locations. Perteet will show all building perimeter footing drains and their connection to the site storm drainage system.
- Control Plan

  Control points, which will also include vertical information, will be provided to clearly convey to the contractor the location of all site features such as curb lines, buildings, site amenities and storm drainage facilities. A separate sheet of control tables will also be added during this design phase.
- Specifications

  The 60% specifications will include an outline of the project specifications only (CSI format).
- Opinion of Probable Cost

Prepare an opinion of the probable construction cost for the project based on the 60% design plans. The opinion will capture all significant project costs to the extent known, and provide sufficient contingency to gauge the final cost of the project.

- Document Assembly

  Assemble all deliverables into a cohesive package for delivery to the TCF Team.

- A maximum of thirteen (13) civil plans will be prepared. Plan sheets will be scaled at 1" = 20' for full size drawings (22" x 34") and 1" = 40' for half size drawings (11" x 17"). This scale allows the most efficient breakdown of the site while providing sufficient detail to convey the design intent. The anticipated plans are as follows:
  - Legend and Abbreviations (1 plan sheet)
  - Control Plan (1 plan sheets)
  - Control Tables (1 plan sheet)
  - Site Preparation and Erosion Control (1 plan sheet)
  - Site Preparation and Erosion Control Details (1 sheet)
  - Grading Plan (1 plan sheet)
  - Grading Sections (1 plan sheet)
  - Drainage Plan (1 plan sheet)
  - Drainage Details (2 plan sheet)
  - Composite Utility Plan (1 plan sheet)
  - Utility Details (1 plan sheet)
  - Paving and Channelization Plan (1 plan sheet)
  - Paving and Channelization Details (1 plan sheet)

Assumptions:

- Comments on schematic design plans (30% plans) will be provided to Perteet in a consolidated, non-conflicting format. Either plan markups or tabulated comments are acceptable.
- The Perteet project manager will attend up to one (1) meeting at the TCF offices and (1) meeting at the City of Shoreline during this design phase.

Deliverables:

- Responses to schematic design (30%) design comments
- 60% Plans (four [4] copies, half-size – 11" x 17")
- 60% Specifications outline (Word file)
- 60% Opinion of Probable Cost (four [4] copies)
- Electronic version of submittal documents (PDF)

Task 5 – Civil Permit Documents (90% Plans, Specifications and Estimate)

The 90% design will incorporate comments from the review of the 60% design documents. At the 90% level, all major elements of the project will be incorporated into the plan set and all major design decisions will have been made.

Work Elements:
In addition to the design elements described in other tasks, the following work elements will occur during the 90% design phase:

- Meeting Attendance

  Perteet project manager to attend one coordination meeting with TCF at TCF's office and one coordination with TCF at City of Shoreline for a total of two (2) meetings.
- Review and address 60% design comments and incorporate into the 90% design. A summary of comments and actions taken/responses will be provided with the 90% submittal.
- Specifications

  Specifications will be prepared in CSI format for the design elements that Perteet is responsible for on the project. The 90% specifications will address significant design elements but will leave some details for later completion.
- Opinion of Probable Cost

  Prepare an opinion of the probable construction cost for the project based on the 90% design plans. The opinion will capture all significant project costs to the extent known, and provide sufficient contingency to gauge the final cost of the project.
- Document Assembly

  Assemble all deliverables into a cohesive package for delivery to the TCF Team.
- A maximum of thirteen (13) civil plans will be prepared. Plan sheets will be scaled at 1" = 20' for full size drawings (22" x 34") and 1" = 40' for half size drawings (11" x 17"). This scale allows the most efficient breakdown of the site while providing sufficient detail to convey the design intent. The anticipated plans are as follows:
  - Legend and Abbreviations (1 plan sheet)
  - Control Plan (1 plan sheets)
  - Control Tables (1 plan sheet)
  - Site Preparation and Erosion Control (1 plan sheets)
  - Site Preparation and Erosion Control Details (1 sheet)
  - Grading Plan (1 plan sheets)
  - Grading Sections (1 plan sheet)
  - Drainage Plan (1 plan sheets)
  - Drainage Details (2 plan sheets)
  - Composite Utility Plan (1 plan sheets)

- Utility Details (1 plan sheet)
- Paving and Channelization Plan (1 plan sheets)
- Paving and Channelization Details (1 plan sheets)

Assumptions:

- Comments on the design development plans (60% plans) will be provided to Perteet in a consolidated, non-conflicting format. Either plan markups or tabulated comments are acceptable.
- TCF will provide Perteet with their standard CSI format template for specification production.
- The Perteet project manager will attend up to one (1) meeting at the TCF offices and one at the City of Shoreline during this design phase.

Deliverables:

- Responses to design development (60%) design comments
- 90% Plans (four [4] copies, half-size – 11" x 17")
- 90% Specifications (Word file)
- 90% Opinion of Probable Cost (four [4] copies)
- Electronic version of submittal documents (PDF)

Task 6 – Civil Construction Documents (Ad-Ready Plans and Specifications)

The intent of this task is to progress all site civil elements to a bid ready status for issuance to the City of Shoreline. The number of plan sheets is anticipated to remain the same as the 90% design effort.

Work Elements:

- Review and address 90% design comments and incorporate into the Ad-Ready design plans. A summary of comments and actions taken/responses will be provided with the Ad-Ready submittal.
- Progress all design elements (plans, specs and estimate) to an Ad-Ready, construction ready state.

Assumptions:

- The TCF team will assemble and advertise the final product, including document reproduction.
- The Perteet project manager will not attend any meetings during this design phase.
- All remaining review comments will be presented with the 90% review. There will be no comments or revisions following submittal of the Permit Documents.

Deliverables:

- Responses to construction document (90% plans and specifications) comments
- Camera ready full-size set of plans (one [1] set – 22" x 34")
- Bid Ready Plans (four [4] copies, half-size – 11" x 17")
- Bid Ready Specifications (Word file for inclusion into your project manual)
- Final Opinion of Probable Cost (four [4] copies)
- Electronic version of submittal documents (PDF and AutoCAD/Word)

Task 7 – Permitting Assistance and Documentation

Perteet will assist the project team to assemble local land use permit documentation and permit submittal information, and provide permit review follow-up with the City of Shoreline. Perteet will assist to complete or partially complete application forms and required submittal information for building and site development review. It is assumed that permit submittal with SEPA may occur with the Design Development plans (60% plans). Perteet will provide all related permit information associated with site civil engineering associated with other tasks in this scope. Other disciplines will be provided with permit forms for inclusion and completion of relevant permit information such as building/mechanical information and other items outside of our discipline. Perteet will assist to coordinate City submittal intake and review progress. Documentation related to other disciplines will need to be prepared and provided by others, assumed to be coordinated by TCF. Permit fees are assumed to be paid by the City of Shoreline.

Deliverables:

- Coordinate and attend a pre-application meeting with Shoreline Planning and Community Development to verify land use permit requirements; provide meeting notes to TCF.
- Prepare SEPA checklist with 60% plans and information.
- Prepare City permit forms, checklists, and known submittal requirements for assumed land use related permit items: Clearing and Grading Permit and Site Development Permit.
- Critical Areas Worksheet (assuming no critical areas on or adjacent to site).
- Hardcopies of site civil information design documents for SEPA and land use permit submittal.
- Preparation and coordination for City permit intake.
- Correspondence by email and phone.
- Coordination for resubmittal items related to permit comments associated with site civil design documentation. Any follow-up permit response submittals are assumed to occur concurrent with later design submittals.

Assumptions:

- The proposed land use is consistent with current zoning or otherwise permittable.
- Building Permit related items are assumed to be coordinated by TCF.
- Critical areas delineation, report, or permitting will not be necessary.
- Tree inventory/retention or replacement tree planting will not be necessary.
- No deviations from standards will be necessary.
- Any other special studies or design information not included in Perteet scope items is excluded from the Perteet scope.

Task 8 – Bidding Support

Perteet will respond to Contractor questions as requested by the TCF Team during the bidding process. Perteet will also assist in preparing up to one (1) addendum during the bidding process. The effort for the preparation of addendums is limited to the fee identified in the attached fee schedule. Perteet will not attend the bid opening.

Deliverables:

- Electronic copies of addendum in PDF format, if required.

water

Contract Start Date 2/15/2020 Last Update date 2/10/2020

Contract End Date 8/31/2021 Perteet Project No.

Contract Duration: 18 Months

Sr. ociate	Sr. Associate	Lead Engineer / Mgr	Lead Engineer / Mgr	Engineer II	Engineer I	Lead Technician/ Designer	Planner II	Accountant	Clerical	Total Hours	Labor Dollars
$215.00	$215.00	$170.00	$170.00	$130.00	$110.00	$130.00	$120.00	$100.00	$90.00		
		20.00						5.00		25.00	$3,900.00
0.00	0.00	20.00	0.00	0.00	0.00	0.00	0.00	5.00	0.00	25.00	$3,900.00
4.00		2.00	32.00	32.00		8.00			3.00	81.00	$12,110.00
4.00	0.00	2.00	32.00	32.00	0.00	8.00	0.00	0.00	3.00	81.00	$12,110.00
8.00		12.00	32.00	24.00	24.00	32.00				132.00	$19,120.00
8.00	0.00	12.00	32.00	24.00	24.00	32.00	0.00	0.00	0.00	132.00	$19,120.00
16.00		24.00	44.00	44.00	44.00	24.00				196.00	$28,680.00
16.00	0.00	24.00	44.00	44.00	44.00	24.00	0.00	0.00	0.00	196.00	$28,680.00
8.00		16.00	28.00	28.00	28.00	22.00				130.00	$18,780.00
8.00	0.00	16.00	28.00	28.00	28.00	22.00	0.00	0.00	0.00	130.00	$18,780.00
8.00		4.00	16.00	16.00	16.00	12.00				72.00	$10,520.00
8.00	0.00	4.00	16.00	16.00	16.00	12.00	0.00	0.00	0.00	72.00	$10,520.00
	34.00	8.00	6.00				42.00		2.00	92.00	$14,910.00
0.00	34.00	8.00	6.00	0.00	0.00	0.00	42.00	0.00	2.00	92.00	$14,910.00
2.00		2.00	16.00	8.00		4.00				32.00	$5,050.00
2.00	0.00	2.00	16.00	8.00	0.00	4.00	0.00	0.00	0.00	32.00	$5,050.00
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	$0.00
46.00	34.00	88.00	174.00	152.00	112.00	102.00	42.00	5.00	5.00	760.00	
,890.00	$7,310.00	$14,960.00	$29,580.00	$19,760.00	$12,320.00	$13,260.00	$5,040.00	$500.00	$450.00		$113,070.00

Attachment B

$0.00	
$113,360.00	

Exhibit A.7

June 20, 2019

TCF Architecture, PLLC
902 N 2nd St
Tacoma, WA 98403-1931

Attn: Mark Hurley - Principal
P: 253.572.3993
E: mark@tcfarchitecture

Re: Proposal for Geotechnical Engineering Services
Shoreline Maintenance Facility – Brightwater Ballinger Way Site
20031 Ballinger Way NE
Shoreline, WA
Terracon Proposal No. P81195086

Dear Mark:

We appreciate the opportunity to submit this proposal to TCF Architecture, PLLC (TCF) to provide Geotechnical Engineering services for the above referenced project. The following are exhibits to our proposal.

Exhibit A	Project Understanding
Exhibit B	Scope of Services
Exhibit C	Compensation and Project Schedule

Our fee to perform the Scope of Services described in this proposal is $23,850 See Exhibit C for more details of our fees and consideration of additional services.

Your authorization for Terracon to proceed in accordance with this proposal can be issued by issuing a subconsultant addendum to our existing agreement with TCF for services on the City of Shoreline's Maintenance Facilities Project.

Chad McMullen will be our project manager and day-to-day contact for our services. Dennis Stettler will provide consultation and quality review. We look forward to working with you on this project.

Sincerely,
Terracon Consultants, Inc.

Chad T. McMullen, P.E.
Project Engineer

Dennis R. Stettler. P.E.
Senior Engineering Consultant

EXHIBIT A - PROJECT UNDERSTANDING

Our Scope of Services is based on our understanding of the project as described by TCF and the expected subsurface conditions as described below. We have visited the project site to confirm the information provided. Aspects of the project, undefined or assumed, are noted below. We request the design team verify all information prior to our initiation of field exploration activities.

Site Location and Anticipated Conditions

Item	Description
Parcel Information	The project is located at 20031 Ballinger Way NE in Shoreline, WA. Lot Size: 0.6 acres; 100 ft wide by 259 to 275 ft long Latitude: 47.7745 Longitude: -122.31080
Existing Improvements	The adjacent northeast parcel is the access portal for the King County Metro Brightwater Tunnel. Adjacent properties to the northwest and southeast are occupied by commercial buildings. The proposed maintenance facility site is covered with gravel.
Current Ground Cover	Gravel-covered parking lot
Existing Topography (from King County documents)	Brightwater tunnel portal area is about elevation 406 ft (King County Metro Datum) in the northeast portion of the site. The site slopes up to elevations ranging from about 409 – 415 ft (King County Metro Datum). A slope designated as a steep slope hazard area is present on adjacent property near the southwest property line.
Site Access	We expect the site, and all exploration locations, are accessible with truck-mounted drilling equipment. TCF or the City of Shoreline will resolve any private property access restrictions prior to mobilizing drilling equipment to the site.
Expected Subsurface Conditions	Our review of geologic maps and existing subsurface information indicates subsurface conditions will consist of recessional glacial outwash comprised primarily of medium dense sand and gravel deposits of variable silt content overlying very dense glacial till. Some fill may be on the site associated with past site development and earthwork activities.

Planned Construction

Item	Description
Information Provided	■ Email request for proposal prepared by TCF dated June 10, 2019 ■ Preliminary Architectural site plans dated January 26, 2019 ■ Geotechnical engineering and environmental documents prepared for the King County Metro Brightwater Tunnel Ballinger Way Access Site.

Item	Description
Project Description	The 0.6-acre site will be developed as a maintenance facility to include 7,300 sf of canopy structures, an 850 sf one-story building, vehicle fueling and washing facilities, and asphalt and concrete paving throughout the site.
Proposed Structures	The canopies for the site are assumed to be pre-engineered structures; the single-story building with a footprint of about 850 square feet is assumed to be wood-frame with a slab-on-grade (non-basement).
Finished Floor Elevation	Not available. Assumed to be near existing site grades
Maximum Loads	Not Available. Assumed to be relatively lightly loaded. Anticipated loads should be provided to Terracon for use in our analyses
Grading/Slopes	Finished floor elevation is assumed to be near existing site grades. Grading plans are not available, but cuts and fills for general site grading are assumed to be less than about 1 to 2 feet. A steep slope is mapped adjacent to the southwest side of the site. The steep slope appears to be beyond the boundaries of this site. Terracon will require elevation contours of the adjacent steep slope. We assume that information will be provided to Terracon by the project team. Evaluation of the steep slope and development of appropriate steep slope setbacks will be a part of the geotechnical analysis.
Below-Grade Structures	None anticipated, although stormwater detention vaults may be used. Given the steep slope adjacent to the property and the presence of soil and groundwater contamination on the property, stormwater infiltration would seem to be problematic and we assume that infiltration will not be used for stormwater disposal.
Free-Standing Retaining Walls	No retaining walls are planned for the project, unless stormwater detention vaults are used.
Pavements	Paved driveway and parking will be constructed on most of the 0.6 acres of the parcel that are not occupied by other structures. We assume both rigid (concrete) and flexible (asphalt) pavement sections should be considered. Please confirm this assumption. Anticipated traffic loading will need to be provided to Terracon by the design team in order to develop pavement design recommendations as follows: ■ Autos/light trucks: To be provided ■ Light delivery and trash collection vehicles: To be provided ■ Tractor-trailer trucks: To be provided The pavement design period is 20 years.
Applicable Building Code(s)	International Building Code – Version 2015 (IBC 2015) American Society of Civil Engineers – Version 7, 2010 (ASCE 7-10)
Estimated Start of Construction	May 2020

EXHIBIT B - SCOPE OF SERVICES

Our proposed Scope of Services consists of field exploration, laboratory testing, engineering/project delivery, post-report geotechnical consultation, and geotechnical services during construction. These services are described in the following sections.

Field Exploration

The field exploration program will primarily rely on the results from borings and monitoring wells contained in reports for the Brightwater Tunnel completed by consultants working for King County Metro. To supplement that information, Terracon will complete the following explorations:

Exploration Type	Number of Explorations	Planned Boring Depth (feet) [1]	Planned Location
Soil Borings	1	25	Near southwest property line to evaluate steep slope conditions
Soil Borings	1	10-15 feet	Central portion of the site

1. Below existing ground surface

Exploration Layout and Elevations: We use handheld GPS equipment to locate the proposed subsurface explorations with an estimated horizontal accuracy of +/-10 feet. Field measurements from existing site features may be also used. If available, approximate elevations are obtained by interpolation from a site specific, surveyed topographic map, otherwise elevations at the explorations locations will be estimated from Google Earth imagery.

Soil Boring Procedures: Soil borings will be advanced using a truck-mounted drill rig using continuous flight hollow-stem augers. Four samples are obtained in the upper 10 feet of each boring and at intervals of 5 feet thereafter. Soil sampling is typically performed using split-barrel sampling (performed in general accordance with ASTM D1586). This sampling method advances a standard 2-inch outer diameter split-barrel sampling spoon into the subsurface by repeatedly dropping a 140-pound hammer a fall height of 30 inches. The number of blows required to advance the sampler the last 12 inches of a normal 18-inch penetration is recorded as the Standard Penetration Test (SPT) resistance value. The SPT resistance values, also referred to as N-values are reported as uncorrected values on the boring logs at the test depths.

Samples obtained from split-spoon sampling are typically tested for geotechnical index properties. All samples are placed in appropriate containers, taken to our soil laboratory for testing, and classified by a geotechnical engineer. In addition, we observe and record groundwater levels during drilling and sampling.

Our exploration team prepares draft boring logs in the field (i.e. field logs) as part of standard drilling operations. The field logs include sampling depths, sampler advancement, penetration resistance, and other relevant sampling information. Field logs include visual classifications of materials encountered during drilling, and our interpretation of subsurface conditions between samples. Final boring logs, prepared from field logs, represent the geotechnical engineer's interpretation, and include modifications based on observations and laboratory tests.

Monitoring Well: No groundwater monitoring wells are planned as part of the geotechnical site investigation. A monitoring well may be needed for purposes of environmental site investigations and will be further evaluated during completion of a Phase 1 Environmental Site Assessment (addressed in a companion proposal).

Infiltration Testing: This proposal assumes that infiltration will not be used as means of stormwater disposal.

Property Disturbance: Borings will be backfilled with granular bentonite. Backfilling of boreholes will be performed consistent with Washington State Administrative Code (WAC 173-160). The services do not include repair of the site beyond backfilling the boreholes and patching existing pavements, though care will be taken to limit property disturbance. Excess auger cuttings will be placed in steel drums and left on site for disposal by the City of Shoreline using their preferred hazardous waste disposal contractor. Because backfill material often settles below the surface over time, we recommend boreholes are checked periodically and backfilled, if necessary.

Site Access: Terracon must be granted access to the site by the property owner. By acceptance of this proposal, without information to the contrary, we consider this as authorization to access the property for conducting field exploration in accordance with the scope of services. We assume TCF or the City of Shoreline will resolve any access restrictions associated with private property, locked gates, and barricades.

Safety

Terracon is aware of low levels of petroleum hydrocarbon and related environmental concerns at this project site that could create health or safety hazards associated with our exploration program; thus, our scope considers development of a field health and safety plan and use of standard OSHA Level D Personal Protection Equipment (PPE) appropriate, combined with monitoring for organic vapors during the field exploration program. Our scope of geotechnical services does not include environmental site investigations, but identification of unusual or unnatural materials encountered while drilling will be noted on our logs and discussed in our report.

Exploration efforts require borings (and possibly excavations) into the subsurface, therefore Terracon complies with Washington State Administrative Code (WAC) in requesting public utility location service through Washington One Call (811). We consult with the owner/client regarding potential utilities, or other unmarked underground hazards. Based upon the results of this consultation, we consider the need for alternative subsurface exploration methods, as the safety of our field crew is a priority.

Private utilities should be marked by the owner prior to commencement of field exploration. Terracon will not be responsible for damage to private utilities that are not made aware to us. If the owner is not able to accurately locate private utilities, Terracon can assist the owner by coordinating or subcontracting with a private utility locating services. Fees associated with the additional services are included in our current scope of services. The detection of underground utilities is dependent upon the composition and construction of the utility line; some utilities are comprised of non-electrically conductive materials and may not be readily detected. The use of a private utility locate service would not relieve the owner of their responsibilities in identifying private underground utilities.

Laboratory Testing

The project engineer reviews field data and assigns various laboratory tests to better understand the engineering properties of various soil strata. Exact types and number of tests cannot be defined until completion of field explorations. Procedural standards noted below are for reference to methodology in general. In some cases, local practices and professional judgement require method variations. Standards noted below include reference to other related standards. Such references are not necessarily applicable to describe the specific test performed.

- ASTM D422 Standard Test Method for Particle-Size Analysis of Soils (Withdrawn 2016)
- ASTM D2216 Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
- ASTM D1140 Standard Test Method for determining the Amount of Material Finer than 75-µm (No. 200) Sieve in Soils by Washing

Our laboratory testing program includes examination of soil samples by an engineer. Based on the material's texture and plasticity, we describe and classify soil samples in accordance with the Unified Soil Classification System (USCS). For planning purposes, we anticipate performing the following index tests for further soil classification:

- 10 – ASTM D2216 (Water Content)
- 4 – ASTM D422 (Grain Size Distribution)
- 2 – ASTM D1140 (No. 200 Wash)

Engineering and Project Delivery

Results of our field and laboratory programs will be evaluated by a professional engineer. The engineer will develop a geotechnical site characterization, perform the engineering calculations necessary to evaluate foundation alternatives, and develop appropriate geotechnical engineering design criteria for earth-related phases of the project.

Your project will be delivered using our ***GeoReport®*** system. Upon initiation, we provide you and your design team the necessary link and password to access the website (if not previously registered). Each project includes a calendar to track the schedule, an interactive site map, a listing of team members, access to the project documents as they are uploaded to the site, and a collaboration portal. The typical delivery process includes the following:

- Project Planning – Proposal information, schedule and anticipated exploration plan will be posted for review and verification
- Site Characterization – Findings of the site exploration
- Geotechnical Engineering – Recommendations and geotechnical engineering report

When utilized, our collaboration portal documents communication, eliminating the need for long email threads. This collaborative effort allows prompt evaluation and discussion of options related to the design and associated benefits and risks of each option. With the ability to inform all parties as the work progresses, decisions and consensus can be reached faster. In some cases, only minimal uploads and collaboration will be required, because options for design and construction are limited or unnecessary. This is typically the case for uncomplicated projects with no anomalies found at the site.

When services are complete, we upload a printable version of our completed geotechnical engineering report, including the professional engineer's seal and signature, which documents our services. Previous submittals, collaboration and the report are maintained in our system. This allows future reference and integration into subsequent aspects of our services as the project goes through final design and construction.

The geotechnical engineering report will provide the following:

- Boring logs with field and laboratory data
- Results from previous borings on the site
- Stratification based on visual soil classification
- Groundwater levels observed during drilling and from historical data
- Site Location and Exploration Plans
- Subsurface exploration procedures
- Description of subsurface conditions
- Recommended foundation options and engineering design parameters
- Estimated settlement of foundations

- Recommendations for design and construction of interior floor slabs
- Seismic considerations
- Subgrade preparation/earthwork recommendations
- Recommendations for lateral earth pressures against shallow retaining walls or buried detention vaults
- Evaluation of the stability of the adjacent steep slope
- Assessment of the potential steep slope risk and development of appropriate slope setbacks and mitigating measures, if needed, to satisfy City of Shoreline geologic hazards and steep slope requirements as contained in the City of Shoreline Municipal Code.
- Recommended pavement options and design parameters

Post-report Consultation: Following issuing of the final geotechnical engineering report, the need for geotechnical consultation often arises as the design progresses and design changes are incorporated. The lump sum fee presented in Exhibit C includes a limited post-report consultation services.

Review of Plans and Specifications: Our geotechnical report and associated verbal and written communications will be used by others in the design team to develop plans and specifications for construction. Review of project plans and specifications is a vital part of our geotechnical engineering services. This consists of review of project plans and specifications related to site preparation, foundation, and pavement construction. Our review will include a written statement conveying our opinions relating to the plans and specifications' consistency with our geotechnical engineering recommendations.

Geotechnical Observation and Testing of During Construction: Development of our geotechnical engineering recommendations and report relies on an interpretation of soil conditions. This is based on widely spaced exploration locations, and assuming construction methods will be performed in a manner sufficient to meet our expectations, and is consistent with recommendations made at the time the geotechnical engineering report is issued. We should be retained to conduct construction observations, and perform/document associated soil testing, for site preparation, foundation, and pavement construction. This allows a more comprehensive understanding of subsurface conditions and necessary documentation of construction, to confirm and/or modify (when necessary) the assumptions and recommendations made by our engineers. The following outlines our anticipated scope of services during construction.

Based on our understanding of the project, we assume that our services would be part-time as needed for the following construction activities:

- Structural fill placement and compaction for
    - General site grading
    - Utility and stormwater vault backfill compaction

  - Foundations
  - Slab-on-grade
  - Pavements
- Soil bearing observation for:
  - Wall footings
  - Spread footings

- Preparation of daily field reports documenting the site observations and earthwork testing, with electronic copies provided

For budgeting purposes, we have assumed that the above construction observation activities would be completed in 3 to 4 site visits, with a typical on-site duration of about 2 to 3 hours plus an hour of reporting effort. Our budget also includes costs for a limited number of laboratory tests to support construction observation.

Project Management During Construction

We anticipate providing the following services related to project management:

- Attend a preconstruction meeting with the City of Shoreline. We have assumed one preconstruction meeting with a total duration of up to four (4) hours.
- Review of approved project plans and specifications by our project manager and field representative
- Review daily field reports and distribute to TCF, the general contractor superintendent on-site, and the City of Shoreline
- Scheduling and coordination
- Regular site visits
- Review of submittals for earthwork materials
- Respond to any geotechnical RFI's
- Monthly Invoicing
- Prepare a final geotechnical observation letter for submission to the City of Shoreline.

For the above "office tasks" we have assumed a total 25 hours of effort, primarily at a Project Engineer level.

Geotechnical Role of Terracon During Construction

The contractors for the project should be advised that our activities and responsibilities do not include supervision or direction of the actual work performed by the contractor, subcontractors, or their employees. Our professional opinions and conclusions will be developed in accordance with generally accepted geotechnical engineering practices. However, we will not undertake to

guarantee any aspects of the construction nor will our testing and monitoring relieve the contractor from his primary responsibility to produce a completed project conforming to the project plans and specifications. All parties associated with the construction should be informed that our firm and our employees are not responsible for job or site safety on this project.

Observation and Testing of Pertinent Construction Materials: Construction materials inspection and testing of concrete, asphalt, steel, and related construction materials will likely be required as a condition of the building permit. This geotechnical proposal does NOT include construction materials testing and inspection, but such services can be provided through Mayes Testing Engineers, Inc. (Mayes), a Terracon company. These services could be provided through Mayes' Lynnwood office. The scope and budget for construction materials testing and inspection services is best developed near the completion of the design so that the construction materials services conform to the project requirements identified during design and construction permitting.

EXHIBIT C - COMPENSATION AND PROJECT SCHEDULE

Compensation

Based upon our understanding of the site, the project as summarized in Exhibit A, and our planned Scope of Services outlined in Exhibit B, our fee is shown in the following table:

Task	Lump Sum Fee
Subsurface Exploration, Laboratory Testing, Geotechnical Consulting & Reporting	$16,050
Post-Report Consultation and Plans and Specification Review	$ 1,700
Task	**Time and Materials Estimate**
Geotechnical Construction Observation and Testing Services	~~$ 6,100~~

Unless instructed otherwise, we will submit our invoice(s) to the address shown at the beginning of this proposal. If conditions are encountered that require Scope of Services revisions and/or result in higher fees, we will contact you for approval, prior to initiating services. A supplemental proposal stating the modified Scope of Services as well as its effect on our fee will be prepared. We will not proceed without your authorization, as evidenced by your signature on the Supplemental Agreement for Services form.

Project Schedule

Terracon will provide our services in accordance with the general project schedule developed by TCF extending from August 2019 through construction completion expected to be February 2021.

We developed a schedule to complete the Geotechnical Report portion of the project based upon our existing availability and understanding of your project schedule. However, this does not account for delays in field exploration beyond our control, such as weather conditions, permit delays, or lack of permission to access the boring locations. To the extent that exploration subcontractors are used to accomplish the scope of services, the schedule can be subject to their availability at the time of authorization. In the event the schedule provided is inconsistent with your needs, please contact us so we may consider alternatives.

***GeoReport®* Delivery**	**Posting Date from Notice to Proceed** [1, 2]
Project Planning	2 weeks
Site Characterization	4 weeks
Geotechnical Engineering	8 weeks

1. Upon receipt of your notice to proceed we will activate the schedule component of our ***GeoReport®*** website with specific, anticipated calendar days for the three delivery points noted above as well as other pertinent events such as field exploration crews on-site, etc.
2. We will maintain a current calendar of activities within our ***GeoReport®*** website. In the event of a need to modify the schedule, the schedule will be updated to maintain a current awareness of our plans for delivery.

Exhibit A.8

June 20, 2019

TCF Architecture
902 North 2nd Street
Tacoma, WA 98403-1931

Attn: Mr. Mark Hurley
E: mark@tcfarchitecture.com

RE: Proposal for a Phase I Environmental Site Assessment
Shoreline Maintenance Facility-Brightwater Site
20031 Ballinger Way Northeast
Shoreline, WA 98155
Terracon Proposal No. P81197319R

Dear Mr. Hurley:

Terracon Consultants, Inc. (Terracon) appreciates the opportunity to submit this proposal to TCF Architecture (client) to conduct a Phase I Environmental Site Assessment (ESA) of the above-referenced site. We understand the site is comprised of two King County parcels totaling approximately 0.95 acre; 0.34-acre King County Brightwater Wastewater access tunnel (Parcel No. 741770-0291) and 0.61-acre vacant lot (Parcel No. 741770-0290), located at 20031 Ballinger Way Northeast, in Shoreline, WA 98155.

Scope of Services (see Section 2.0 of attached proposal detail)	Phase I ESA consistent with ASTM E1527-13 ■ Chain of Title/Environmental Lien Search is not included in this fee. ■ Additional non-scope items: None
Schedule (see Section 2.4 of attached proposal detail)	15 business days
Compensation	Lump sum of $3,200

If this proposal meets with your approval, work may be initiated by returning a fully executed copy of a signed Consultant Agreement Amendment and User Questionnaire attached to this proposal to our Seattle office. **Please provide site contact information with the signed agreement.** The terms, conditions, and limitations stated in the Agreement for Services and sections of this proposal incorporated therein, shall constitute the exclusive terms and conditions and services to be performed for this project.

We appreciate the opportunity to provide this proposal and look forward to working with you on this project. If you have any questions or comments regarding this proposal or require additional services, please give me a call.

Sincerely,
Terracon Consultants, Inc.

Clifford J. Nale, L.G.
Senior Project Manager

Matt Wheaton, L.G., P.E.
Department Manager

Attachments: ASTM E1527-13 User Questionnaire
Detailed Scope of Services

Attachment B

Client/User Required Questionnaire

Exhibit A.8

Person Completing Questionnaire	Name: Phone: Company: Email:
Site Name	Shoreline Maintenance Facility-Brightwater Site
Site Address	20031 Ballinger Way Northeast, Shoreline, WA 98155
Point of Contact for Access	Name: Phone: Company: Email:
Access Restrictions or Special Site Requirements?	___No ___Yes (If yes, please explain)
Confidentiality Requirements?	___No ___Yes (If yes, please explain)
Current Site Owner	Name: Phone: Company: Email:
Current Site Operator	Name: Phone: Company: Email:
Reasons for ESA (e.g., financing, acquisition, lease, etc.)	
Anticipated Future Site Use	
Relevant Documents?	Please provide Terracon copies of prior Phase I or II ESAs, Asbestos Surveys, Environmental Permits or Audit documents, Underground Storage Tank documents, Geotechnical Investigations, Site Surveys, Diagrams or Maps, or other relevant reports or documents.

ASTM User Questionnaire

In order to qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Relief and Brownfields Revitalization Act of 2001 (the "Brownfields Amendments"), the user must respond to the following questions. Failure to provide this information to the environmental professional may result in significant data gaps, which may limit our ability to identify recognized environmental conditions resulting in a determination that "all appropriate inquiry" is not complete. This form represents a type of interview and as such, the user has an obligation to answer all questions in good faith, to the extent of their actual knowledge.

1) Did a search of recorded land title records (or judicial records where appropriate) identify any environmental liens filed or recorded against the property under federal, tribal, state, or local law (40 CFR 312.25)?
___No ___Yes (If yes, explain below and send Terracon a copy of the title records or judicial records reviewed.)

2) Did a search of recorded land title records (or judicial records where appropriate) identify any activity and use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls that are in place at the property and/or have been filed or recorded against the property under federal, tribal, state, or local law (40 CFR 312.26)?
___No ___Yes (If yes, explain below and send Terracon a copy of the title records or judicial records reviewed.)

3) Do you have any specialized knowledge or experience related to the site or nearby properties? For example, are you involved in the same line of business as the current or former occupants of the site or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business (40 CFR 312-28)?
___No ___Yes (If yes, explain below)

4) Do you have actual knowledge of a lower purchase price because contamination is known or believed to be present at the site (40 CFR 312.29)?
___No ___Yes ___Not applicable (If yes or Not applicable, explain below)

5) Are you aware of commonly known or reasonably ascertainable information about the site that would help the environmental professional to identify conditions indicative of releases or threatened releases (40 CFR 312.30)?
___No ___Yes (If yes, explain below)

6) Based on your knowledge and experience related to the site, are there any obvious indicators that point to the presence or likely presence of contamination at the site (40 CFR 312.31)?
___No ___Yes (If yes, explain below)

Comments or explanations:

Please return this form with the signed authorization to proceed. Proposal No. P81197319R

DETAILED SCOPE OF SERVICES

1.0 PROJECT INFORMATION

We understand the site is comprised of two King County parcels totaling approximately 0.95 acre; 0.34-acre King County Brightwater Wastewater access tunnel (Parcel No. 741770-0291) and 0.61-acre vacant lot (Parcel No. 741770-0290), located at 20031 Ballinger Way Northeast, in Shoreline, WA 98155. We further understand that the anticipated future use of the site is as a City of Shoreline maintenance facility and the purpose of the ESA is to assist the client with redevelopment of the site. If this is not accurate, or if you have additional useful information, please inform us as soon as possible.

Terracon reviewed previous subsurface investigation reports provided by the client from 2004 and 2005 by Camp Dresser & McKee Inc. (CDM) that were prepared for the Brightwater Wastewater access tunnel project. Based on Terracon's review of these reports, on-site soil samples collected from soil borings/groundwater monitoring wells detected gasoline-range and oil-range total petroleum hydrocarbon (TPH), xylene, and tetrachloroethylene (PCE); however, the concentrations were below Washington State's Model Toxics Control Act (MTCA) Method A soil cleanup levels. Groundwater samples collected from six groundwater monitoring wells installed by CDM indicated that gasoline-range TPH, benzene, ethylbenzene, toluene, and xylenes (BTEX), and PCE are present at concentrations exceeding MTCA Method A groundwater cleanup levels. Based on the inferred southern groundwater gradient across the site, the off-site source of these groundwater impacts is likely the Ballinger Way Shopping Center with reported former leaking underground storage tanks (LUSTs) and dry-cleaning operations.

The proposed Phase I ESA will review records pertaining to additional investigations associated with the identified groundwater impacts at the site and/or north-adjoining Ballinger Way Shopping Center since 2005. At this point, a recommendation of further soil and/or groundwater investigations cannot be determined until a Phase I ESA is completed and a supplemental proposal for a limited site investigation (LSI) can be prepared for the client to determine existing soil and/or groundwater conditions at the site, if necessary. Furthermore, it should be understood that a scope and cost estimate associated with environmental monitoring, remediation, and/or mitigation can only be provided following the completion of the proposed Phase I ESA and based on the findings of a subsequent LSI, if one appears to be warranted.

2.0 SCOPE OF SERVICES

2.1 Base Phase I ESA Services

The ESA will be performed consistent with the procedures included in ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Assessment Process*. The purpose of this ESA is to assist the client in developing information to identify recognized environmental conditions (RECs - as defined below) in connection with the site as reflected by the scope of this proposal. The potential for vapor migration will be addressed as part of a Phase I ESA and will be considered by Terracon in evaluation of RECs associated with the site. If modifications to the scope of services are required, please contact us to discuss proposal revisions.

REC Definition

Recognized environmental conditions are defined by ASTM E1527-13 as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: 1) due to any release to the environment, 2) under conditions indicative of a release to the environment, or 3) under conditions that pose a material threat of a future release to the environment. *De minimis* conditions are not recognized environmental conditions."

Physical Setting

The physical setting for the site will be described based on a review of the applicable USGS topographic quadrangle map, USDA soil survey, and selected geologic reference information.

Historical Use Information

A review of selected historical sources, where reasonably ascertainable and readily available, will be conducted in an attempt to document obvious past land use of the site and adjoining properties back to 1940 or when the site was initially developed, whichever is earlier. The following selected references, depending on applicability and likely usefulness, will be reviewed for the site.

- Historical topographic maps
- Aerial photographs (approximate 10- to 15-year intervals)
- City directories (approximate 5-year intervals)
- Fire (Sanborn) insurance maps
- Property tax file information
- Building department records
- Zoning records
- Prior environmental reports, permits and registrations; or geotechnical report, if provided by the client.

- Site title search information, if provided by client
- Environmental liens, if provided by client

Pursuant to ASTM E1527-13, the client should engage a title company or title professional to undertake a review of reasonably ascertainable recorded land title records (or judicial records where appropriate) for environmental liens and activity and use limitations currently recorded against or relating to the site. If the client is unable to provide land title records (or judicial records where appropriate), an abstract firm may be contracted by Terracon to perform a review of land title records (or judicial records where appropriate) for an additional fee. Documentation of environmental liens and activity and use limitations, if recorded, will be provided in the land title records (or judicial records where appropriate). Note, however, unless specifically requested within three days of project commencement, Terracon will rely on the client to provide land title records (or judicial records where appropriate). **If land title records (or judicial records where appropriate) are not provided for review in a timely manner, Terracon may conclude that the absence of records represents a data gap, which must be evaluated and documented in the final report.**

The client and the current owner or their representative will be interviewed to provide information regarding past uses of the site and information pertaining to the use of hazardous substances and petroleum products on the site. Additionally, a reasonable attempt will be made to interview past owners, operators, and occupants of the site to the extent that they are identified within the scope of the ESA and are likely to have material information that is not duplicative of information already obtained through the assessment process.

Regulatory Records Review

Consistent with ASTM E1527-13, federal, state, and tribal databases, where applicable and within ASTM-defined minimum search distances from the nearest property boundary, will be reviewed for indications of RECs. A database firm will be subcontracted to access governmental records used in this portion of the assessment. Additional federal, state, and local databases may be reviewed if provided by the database firm. Determining the location of unmapped facilities is beyond the scope of this assessment.

In addition to the database review and if customary practice for the site location, an attempt will be made to review reasonably ascertainable and useful local lists or records such as Brownfield sites, landfill/solid waste disposal sites, registered storage tanks, land records, emergency release reports, and contaminated public wells. A reasonable attempt will also be made to interview at least one staff member of any one of the following types of local government agencies: fire department, health agency, planning department, building department, or environmental department. As an alternative, a written request for information may be submitted to the local agencies.

The scope of work proposed herein includes **up to two hours of regulatory agency file and/or records review, including client-provided reports and files**. If the results of this initial review appear to warrant a more extensive review of applicable regulatory agency files and/or records, a cost estimate will be provided to the client for pre-approval. Review of regulatory files and/or records, when authorized, will be for the purpose of identifying RECs. Please note that all requested files may not be available from regulatory agencies within the client's requested project schedule.

Site and Adjoining/Surrounding Property Reconnaissance

A site reconnaissance will be conducted to identify RECs. The reconnaissance will consist of visual observations of the site from the site boundaries and selected interior portions of the site. The site reconnaissance will include, where applicable, an interview with site personnel who the client has identified as having knowledge of the uses and physical characteristics of the site. Pertinent observations from the site reconnaissance will be documented including:

- Site description
- General site operations
- Aboveground chemical or waste storage
- Visible underground chemical or waste storage, drainage, or collection systems
- Electrical transformers
- Obvious releases of hazardous substances or petroleum products

The adjoining property reconnaissance will consist of visual observations of the adjoining/surrounding properties from the site boundaries and accessible public rights-of-way.

Report Preparation

A PDF-formatted copy of the final report will be submitted that presents the results of this assessment, based upon the scope of services and limitations described herein. The final report will be signed by an environmental professional responsible for the Phase I ESA, and the report will contain an environmental professional statement as required by 40 CFR 312.21(d). Recommendations will be developed as part of the Phase I ESA scope of services. Prior to final report issuance, the client may request paper copies at a charge of $75.00 per report copy.

2.2 Additional Services Beyond Base ESA

At the direction of the client, additional services beyond the scope of the base Phase I ESA have not been included. A proposal for a geotechnical services will be provided under separate cover.

2.3 Additional Services Not Included

The following services, although not specifically required by ASTM E1527-13, may also be performed concurrently with ESAs and may be beneficial for the evaluation of environmental conditions and/or an evaluation of specific business environmental risks at the site. At your direction, these services have not been included as part of the scope of services for this ESA. Please note that this list is not all-inclusive. If you seek additional services, please contact us for a supplemental proposal and cost estimate.

- Visual Observations for Suspect Asbestos
- Limited Asbestos Sampling
- Asbestos Survey (prior to renovation/demolition)
- Visual Observations for Mold
- Radon Records Review
- Short-Term Radon Testing
- Visual Observations for Suspect Lead-Based Paint
- Limited Lead-Based Paint Sampling
- Lead in Drinking Water Records Review
- Limited Lead in Drinking Water Sampling
- Wetland Records Review
- Threatened/Endangered Species Records Review
- Historic Properties/Archaeological Resources Review
- ASTM E 2600-15 Vapor Encroachment Screen
- Regulatory Agency File Review

At the client's request, Terracon can also provide proposals for facility engineering services including property condition assessments, roofing inspections, curtain wall evaluations, structural surveys and mechanical surveys.

If the site is intended for future development, Terracon can also provide proposals for geologic hazards (like growth faulting), construction materials testing, construction draw reviews and scope and budget review services.

2.4 Schedule

Services will be initiated upon receipt of the written notice to proceed. The final report will be submitted within 15 business days after receipt of your written notice to proceed, assuming site access can be obtained within three days after the notice to proceed.

In order to comply with the proposed schedule, please provide the following items at the time of notification to proceed.

- A signed Consultant Agreement Amendment evidencing acceptance of this scope of services.
- The completed ASTM E1527-13 User Questionnaire, supplied as an attachment to this proposal.
- Right of entry to conduct the assessment, including access to building interiors.
- Notification of any restrictions or special requirements (such as confidentiality, scheduling, or on-site safety requirements) regarding accessing the site.
- An accurate legal description and/or a diagram of the site such as a surveyor's plat map or scaled architect's drawing (if such diagrams exist).
- Current site owner, property manager, occupant information (including tenant list), and contact information for persons knowledgeable about the site history including current and historical use of hazardous substances and petroleum products on site (e.g., names, phone numbers, etc.).
- Copies of environmental reports, permits and registrations, and geotechnical reports that were previously prepared for the site.
- Information relating to known or suspect environmental conditions at the site, including commonly known or reasonable ascertainable information within the local community about the site that is material to RECs in connection with the site.
- Information about environmental liens and activity and use limitations for the site, if any.
- Specialized knowledge or experience that is material to RECs in connection with the site, if any.
- Knowledge that the purchase price of the site is significantly less than the purchase price of comparable properties.
- Land title records.

Please note that requested regulatory files or other information may not be provided to Terracon by the issuance date of the report. Consideration of information not received by the issuance date of the report is beyond the scope of this ESA.

2.5 Reliance

The ESA report will be prepared for the exclusive use and reliance of TCF Architecture. Reliance by any other party is prohibited without the written authorization of the client and Terracon.

If the client is aware of additional parties that will require reliance on the ESA report, the names, addresses, and relationship of these parties should be provided for Terracon approval prior to the time of authorization to proceed. Terracon may grant reliance on the ESA report to those approved parties upon receipt of a fully executed Reliance Agreement (available upon request) and receipt of information requested in the Reliance Agreement. If, in the future, the client and Terracon consent to reliance on the ESA by a third party, Terracon may grant reliance upon receipt of a fully executed Reliance Agreement, requested information and receipt of an additional minimum fee of $500 per relying party.

Reliance on the ESA by the client and all authorized parties will be subject to the terms, conditions, and limitations stated in the Agreement for Services, sections of this proposal incorporated therein, the Reliance Agreement, and ESA report. The limitation of liability defined in the Agreement for Services is the aggregate limit of Terracon's liability to the client and all relying parties.

Continued viability of the report is subject to ASTM E1527-13 Sections 4.6 and 4.8. If the ESA will be used by a different user (third party) than the user for whom the ESA was originally prepared, the third party must also satisfy the user's responsibilities in Section 6 of ASTM E1527-13.

2.6 Scope and Report Limitations

The fee is valid for 90 days from the date of this proposal and is based on the assumption that all field services will be performed under safety Level D personal protective procedures and that only one site visit will be made by Terracon personnel. The lump sum fee is based on the assumptions and conditions provided at the time of this proposal.
The findings and conclusions presented in the final report will be based on the site's current utilization, the anticipated future use of the site, if provided to Terracon, and the information collected as discussed in this proposal. Please note that we do not warrant database or third-party information (such as from interviewees) or regulatory agency information used in the compilation of reports.

Phase I ESAs, such as the one proposed for this site, are of limited scope, are noninvasive, and cannot eliminate the potential that hazardous, toxic, or petroleum substances are present or

have been released at the site beyond what is identified by the limited scope of this ESA. In conducting the limited scope of services described herein, certain sources of information and public records will not be reviewed. It should be recognized that environmental concerns may be documented in public records that are not reviewed. This ESA does not include subsurface or other invasive assessments, vapor intrusion assessments or indoor air quality assessments (i.e. evaluation of the presence of vapors within a building structure), business environmental risk evaluations, or other services not particularly identified and discussed herein. No ESA can wholly eliminate uncertainty regarding the potential for RECs. The limitations herein must be considered when the user of this report formulates opinions as to risks associated with the site. No warranties, express or implied, are intended or made.

An evaluation of significant data gaps will be based on the information available at the time of report issuance, and an evaluation of information received after the report issuance date may result in an alteration of our opinions and conclusions. We have no obligation to provide information obtained or discovered by us after the date of the report, or to perform any additional services, regardless of whether the information would affect any conclusions, recommendations, or opinions in the report. This disclaimer specifically applies to any information that has not been provided by the client.

1 ALLIANCE GEOMATICS SURVEYING & MAPPING
MBE/DBE

27 June 2019
19-157

Mark Hurley, AIA
TCF Architecture, PLLC
902 N. Second Street, Tacoma, WA 98043
mark@tcfarchitecture.com

Re: **Professional Surveying Services Proposal – Surveying and Mapping**
King County Wastewater, Brightwater

Dear Dustin,

1 Alliance Geomatics, LLC (1 Alliance) is pleased to provide this proposal for professional surveying and mapping services in support of TCF Architecture on the King County Wastewater, Brightwater project located at 20031 Ballinger Way NE, Shoreline, WA 98155.

Project Limits

Surveying limits will be Lots 1 and 2, City of Shoreline Short Plat No. 202011, and extend 30-feet northerly and southerly beyond of the property lines or to building faces (whichever is nearest) and extend to the northeasterly Right-of-Way of Ballinger Way NE.

Please see Exhibit A, Surveying Limits, attached to this proposal.

Scope of Services

1. Surveying and Mapping
   1.1. Survey PM, Admin, QA/QC
   This task includes the survey project management, administrative duties, and quality control required for a project of this complexity and magnitude. Depending on the project requirements, 1 Alliance will assign a Survey Project Manager, Assistant Project Manager, and Survey Quality Leader for this project.

   1.2. Survey Control
   This task includes the establishment of survey control, or the recovery of existing survey control, as required for the project. Typically, survey control will be set, found, or referenced utilizing Real Time Kinematic (RTK) GPS (GNSS) and the Washington State Reference Network (WSRN) in conformance with industry standards. This survey control is then typically propagated, as required, utilizing standard terrestrial total station measurements.

1 ALLIANCE GEOMATICS SURVEYING & MAPPING

MBE/DBE

1.2.1. Geodetic Survey Control

A system of horizontal and/or vertical control stations that have been established and adjusted by geodetic methods and in which the shape and the size of the earth (geoid) have been considered in position computations. A geodetic datum is an abstract coordinate system with a reference surface that serves to provide known locations to begin surveys and create maps.

1.2.1.1. Horizontal

Typically, survey work shall reference the Washington State Plane Coordinate System of 1983 as established in accordance with Chapter 58.20 Revised Code of Washington.

1.2.1.2. Vertical

Typically, the Vertical Datum for the survey work shall reference the North American Vertical Datum of 1988 (NAVD88).

1.2.2. Units

Units shall be in US Survey Feet

1.3. Field Surveying and Mapping

This task includes the field surveying and mapping required for this specific effort.

1.3.1. Topographic will be sufficient enough to generate 1' contours for the project area and includes:

- Significant grade breaks
- Top and toe of slope (if any)

1.3.2. Planimetric mapping will include:

- Channelization
- Surface utilities
- Painted/flagged utility marks
- Utility poles/luminaries (if any)
- Trees 6" or greater in diameter measured at DBH (driplines are not included)
- Storm and sewer structures (best attempts will be made to determine structure size, pipe invert elevations, pipe material and size)
- Sidewalk
- Curb
- Build corners and face within project limits

1 ALLIANCE GEOMATICS SURVEYING & MAPPING MBE/DBE

1.4. Utility Surveying Services

1.4.1. Surface Observable

This task includes locating all surface observable utilities such as water valves, gas valves, and power/utility poles.

1.4.2. Underground Conductible Utility Locates and Surveying

1 Alliance will coordinate a utility locating service for marking conductible utilities within the project limits

1.5. Office Processing

This task includes the office processing of the collected survey data, data extraction, field book note reductions, CADD drafting, and other duties required for the generation of the deliverable(s).

1.6. Boundary and Easement resolution

1.6.1. Boundary calculations for Lots 1 and 2, City of Shoreline Short Plat No. 202011, to be added to the boundary base map.

1.6.2. Easement(s) to be calculated and added to the boundary base map.

Understandings

1. Right of Entry(s) will be obtained by the Client.
2. A Record of Survey not a part of these services.
3. Setting of property corners is not a part of these services.
4. Deliverable dependent on completion of the conductible utility locates.
5. Tree tags are not a part of these services.
6. Locating geotechnical boreholes and utility potholes are not a part of these services.
7. Traffic control is not a part of these services.
8. Entry to confined spaces is not a part of these services.
9. Client to provide a Title report with underlying documents.

Deliverables

1. 2016, or newer, AutoCAD Civil 3D drawing file at 1”=20’ with 1-foot contours
2. ASCII file of all points

Level of Effort

$15,400 (See attached LOE spreadsheet)

1 ALLIANCE
GEOMATICS
SURVEYING & MAPPING
MBE/DBE

1 Alliance appreciates the opportunity to present this proposal. If you have any questions, please feel free to call.

Sincerely,
1 Alliance Geomatics, LLC

Erik J. Van Buskirk, PLS
Project Manager

1 ALLIANCE GEOMATICS
SURVEYING & MAPPING
MBE/DBE

Exhibit A – Surveying Limits

PROJECT		
	NUMBER	19-157
	NAME	Shoreline Brightwater
	CLIENT	TCF Architecture
	OWNER	King County Waste Water

Date 26-Jun-19
by EV
ckd MG

WSDOT OH - Loaded Rates

1 ALLIANCE GEOMATICS
SURVEYING & MAPPING
MBE/DBE

TASK			Principal	PM	PLS	Asst PM	CADD 5	CADD 4	TECH 5	TECH 4	TECH 3	ADMIN	FEE
			$ 260.96	$ 153.84	$ 129.40	$ 89.14	$ 121.49	$ 106.40	$ 121.49	$ 106.40	$ 99.21	$ 81.95	
No.	DESCRIPTION	HRS											TASK
1	PM/Admin	10	2	4		2						2	$ 1,479
2	Control	11		1	2				4		4		$ 1,295
3	Mapping	51	1	2			16		16		16		$ 6,044
4	Boundary/Easement resolution	22	2	4	8				4		4		$ 3,055
5	Existing CAD file review	15	1	2	4		8						$ 2,058
6		0											$ -
7		0											$ -
	TOTAL HOURS	109	6	13	14	2	24	0	24	0	24	2	109
			$ 1,565.76	$ 1,999.92	$ 1,811.60	$ 178.28	$ 2,915.76	$ -	$ 2,915.76	$ -	$ 2,381.04	$ 163.90	$ 13,932.02
			TOTAL DIRECT BURDENED SALARY COSTS										**$ 13,932**

MILEAGE	(ONE WAY)	20
number of field days		3

NOTES

OTHER DIRECT COSTS					
MILEAGE (TOTAL MILES)	117		$ 0.58	DRAFT	$ 68
PER DIEM (DAYS)					$ -
LODGING (DAYS)					$ -
MATERIALS & SUPPLIES					$ -
OTHER (DESCRIBE)					$ -
SUE LOCATES			APS (estimate only)		$ 1,400
TOTAL OTHER DIRECT COSTS					**$ 1,468**
GRAND TOTAL FEE ESTIMATE					**$ 15,400**

Attachment B
Exhibit A.9