

**CITY COUNCIL AGENDA ITEM**  
CITY OF SHORELINE, WASHINGTON

<b>AGENDA TITLE:</b>	Authorizing the City Manager to Execute a Professional Services Amendment with BHC Consultants in an Amount Not to Exceed \$591,768 for Final Design, Permitting, Bidding Support, and Construction Management for the Pump Station 30 Upgrades Project
<b>DEPARTMENT:</b>	Public Works
<b>PRESENTED BY:</b>	Elizabeth Kelly, Interim City Engineer
<b>ACTION:</b>	<input type="checkbox"/> Ordinance <input type="checkbox"/> Resolution <input checked="" type="checkbox"/> Motion <input type="checkbox"/> Discussion <input type="checkbox"/> Public Hearing

**PROBLEM/ISSUE STATEMENT:**

The City of Shoreline operates and maintains eight (8) surface water pump stations throughout the city. The condition and capacity of all eight pump stations was evaluated in 2016, in the Stormwater Pump Station Condition and Capacity Assessment. Additional recommendations were made in 2020, in the Stormwater Pump Stations and SCADA Improvements Preliminary Design Report. Various improvements were proposed for all eight pump stations, including the full replacement of Pump Station 30.

Staff previously selected BHC consultants to design, permit, support bidding, and provide construction management for recommended improvements to all eight pump stations. Improvements to seven (7) of those pump stations are nearing completion in early 2023. Staff is now seeking Council authorization for the City Manager to execute an amendment to BHC’s contract, adding design, permitting, bidding support, and construction management of the eighth pump station – Pump Station 30 Upgrades Project.

**RESOURCE/FINANCIAL IMPACT:**

The project is funded by the Surface Water Capital Fund (SWCF). The 2023-2028 Capital Improvement Plan (CIP) included funding for design and construction of the Pump Station 30 Upgrades Project.

**PROJECT EXPENDITURES:**

**Design:**

Staff and Other Direct Expenses	\$	55,587
Preliminary Design Report, Survey and Geotechnical Study	\$	24,014
<b><i>BHC Design and Construction Management (This Amendment)</i></b>	<b>\$</b>	<b>591,768</b>
<i>Design Subtotal:</i>	<b>\$</b>	<b>671,369</b>

**Construction and Art:**

Construction Estimate (includes tax and contingency)	\$	1,750,000
1% for the Arts	\$	17,500
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<i>Construction and Art Subtotal</i>	\$	<i>1,767,500</i>

**Total Project Expenditures** \$ **2,438,869**

**PROJECT REVENUE**

Surface Water Capital Fund	\$	2,438,869
<hr/>		
<b>Total Available Revenue</b>	\$	<b>2,438,869</b>

**RECOMMENDATION**

Staff recommends that Council authorize the City Manager to execute an amendment to the City's professional services contract with BHC Consultants in an amount not to exceed \$591,768 for the Pump Station 30 Upgrades Project.

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

## **BACKGROUND**

The City operates and maintains eight (8) surface water pump stations. The condition and capacity of all eight pump stations were evaluated in the 2016 Stormwater Pump Station Condition and Capacity Assessment (Assessment). The Assessment recommended complete replacement of Pump Stations 26 and 30 and repairs/upgrades for the other six pump stations. The 2023-2024 Capital Improvement Plan (2023-2028), includes three capital projects to improve these facilities:

- Pump Station 26 Improvements
- Pump Station 30 Upgrades
- Pump Station Miscellaneous Improvements

Staff determined that these projects would be best developed concurrently by a single engineering firm to ensure that certain key elements of the design approach and details of the designs are standardized. The City requested Statements of Qualifications (SOQs) through a competitive Request for Qualifications (RFQ #9146) process in August 2018 and received four responses. Each firm's qualifications were evaluated and BHC Consultants was selected as the most qualified firm.

At the [January 28, 2019 Council meeting](#), City Council authorized a contract with BHC Consultants to complete a Preliminary Design Report of the Stormwater Pump Stations and SCADA Improvements Project. That report, completed in 2020, expanded on the 2016 Assessment of all eight surface water pump stations, evaluated SCADA options, analyzed design alternatives at the Pump Station 26 and Pump Station 30, and created an implementation plan for those improvements. That implementation plan recommended that Pump Station 26 be improved first.

At the [August 17, 2020 Council meeting](#), City Council authorized an amendment with BHC Consultants to design and permit the Pump Station 26 Improvements Project. This project replaces the existing pump station, replaces the above-ground detention pond with an underground detention tank, and adds sidewalk along the 10<sup>th</sup> Avenue NE frontage.

In June 2021, staff approved an amendment with BHC Consultants to add design of the Pump Station Miscellaneous Improvements Project and add services during construction for both that project and the Pump Station 26 Improvements project. The Miscellaneous Pump Station Project was combined with the Pump Station 26 Improvements Project into a single construction project that began in 2022. That construction contract is currently underway and estimated to be complete in the second quarter of 2023.

## **ALTERNATIVES ANALYSIS**

Staff is now requesting that Council authorize the City Manager to execute a contract amendment (Attachment A) with BHC Consultants to complete the design and construction support of the Pump Station 30 Improvements Project. A project vicinity map for this project is attached to this staff report as Attachment B. This amendment

includes scope and fee to fully design, permit, support bidding, and provide construction management and inspection services during construction for completion of the Pump Station 30 Improvement Project.

The alternative would be to not authorize the amendment and issue a new RFQ to select a design consultant. This would delay the start of the Pump Station 30 Improvements project and make it difficult to keep on schedule to build the project during the 2024 dry season. For that reason, this alternative is not recommended.

**COUNCIL GOAL(S) ADDRESSED**

The Pump Station 30 Upgrades Project supports Council Goal #2: Continue to deliver highly-value public services through management of the City’s infrastructure and stewardship of the natural environment.

**RESOURCE/FINANCIAL IMPACT**

The project is funded by the Surface Water Capital Fund (SWCF). The 2023-2028 Capital Improvement Plan (CIP) included funding for design and construction of the project.

**PROJECT EXPENDITURES:**

**Design:**

Staff and Other Direct Expenses	\$	55,587
Preliminary Design Report, Survey and Geotechnical Study	\$	24,014
<b><i>BHC Design and Construction Management (This Amendment)</i></b>	<b>\$</b>	<b>591,768</b>
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<i>Design Subtotal:</i>	\$	671,369

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<b>Total Project Expenditures</b>	<b>\$</b>	<b>2,438,869</b>
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**PROJECT REVENUE**

Surface Water Capital Fund	\$	2,438,869
<hr/>		
<b>Total Available Revenue</b>	<b>\$</b>	<b>2,438,869</b>

**RECOMMENDATION**

Staff recommends that Council move to authorize the City Manager to execute an amendment to the City’s professional services contract with BHC Consultants in an amount not to exceed \$591,768 for the Pump Station 30 Upgrades Project.

**ATTACHMENTS**

Attachment A:        BHC Consultants Contract Amendment Scope and Services

Attachment B: Project Vicinity Map

**EXHIBIT A3**  
**SCOPE OF SERVICES**  
**CITY OF SHORELINE**  
**Stormwater Pump Station and SCADA Improvements**  
**PS-30 Design and Construction Phases**

### **Statement of Understanding**

The City of Shoreline (Shoreline) owns and operates eight stormwater pump stations. Shoreline and BHC Consultants, LLC (BHC) have evaluated the condition, capacity, and overall functionality of these pump stations and recommended replacement of two pump stations and various improvements to the other six stations and implementation of a utility wide supervisory control and data acquisition (SCADA) system to provide off-site monitoring. This work has been grouped into three projects as follows:

1. Pump Station 26 (PS-26) Replacement, including SCADA
2. Pump Station 30 (PS-30) Replacement, including SCADA
3. Pump station improvements and SCADA (Safety and SCADA) for the remaining six pump stations (Linden, Palatine, Ronald Bog, Pan Terra, Serpentine, and PS-25)

The fundamental objectives of the project are as follows:

- Improve safety and reliability of the pump stations
- Improve or replace infrastructure to maintain compliance with current electrical codes
- Replace infrastructure that is at the end of its useful life
- Implement a SCADA system for monitoring the stormwater utility infrastructure

This Scope of Services is limited to the design and construction support for the PS-30 replacement only. PS-26 and Safety and SCADA projects are currently underway with completion expected by March 2023. Surveying and geotechnical investigations for PS-30 were completed during the PS-26 site investigations phase. This scope is based on BHC's current understanding of Shoreline's needs and objectives for these improvements.

### **Approach and Scope**

The engineering services for this Project have been split into three phases: Preliminary Design, Design, and Construction. The following scope of services outlines the tasks associated with the Design and Construction phases for PS-30 only. The PS-30 Design and Construction tasks include the following:

1. Project Management
2. Preliminary Design (30%)
3. Construction Documents (60% through 100%)
4. Bidding Support
5. Engineering Services During Construction

The scope for each task is defined separately and each task description includes the following elements:

- Description: Summary description of task.
- Receivables: Elements that will be provided by Shoreline.
- Work Tasks: Work activities that will be completed by BHC.
- Deliverables: The finished products that will be delivered to Shoreline.
- Assumptions: Assumptions used to define each task.
- Meetings: Meetings identified for each task.

## Assumptions

The scope of services herein and associated budget were prepared based on the following assumptions:

- Pump Station 30 design will be in accordance with the configuration recommendations of Stormwater Pump Station and SCADA Improvements Preliminary Design Report completed by BHC in July 2020.
- Shoreline will lead permitting and related activities with review and input from BHC as identified elsewhere in the scope of work. These permitting activities include the following:
  - Conditional Use Permit
  - SEPA Checklist
  - Site Development Permit
  - Underground Injection Control registration
- Shoreline will address all easements and easement releases.
- A cultural resources investigation will not be required.
- Project funding sources (State or federal) will not require additional evaluations or specialized design/procurement requirements.

## Subconsultants

The BHC Team performing this work will include the following subconsultants in the roles identified below:

- Geotechnical – Landau Associates

### Task 100 – Project Management

Description: Track and monitor the progress of the project and coordinate with the design team and Shoreline project manager.

Receivables:

- Approved Contract Amendment.

Work Tasks:

- 100.1 PS-30 Design Kickoff Workshop: Meet with Shoreline project manager and stakeholders to review the project scope, address project roles and responsibilities, and confirm or refine project objectives.
- 100.2 Internal Design Kickoff Meeting: Project meeting with the design team prior to initiating work to review scope, schedule, budget, staff roles/responsibilities, and objectives for the project.

- 100.3 Coordinate with Shoreline: Coordinate with Shoreline Project Manager by phone or video call at approximately two-week intervals.
- 100.4 Status Reports: Provide monthly invoices with brief status and progress summaries.
- 100.5 Project Team Coordination: Coordinate with the project team on a bi-weekly basis to review current and upcoming tasks, deliverables, and coordination efforts.
- 100.6 Project Schedule: Prepare a baseline project schedule for the scope of services.
- 100.7 QA/QC Program: Coordinate and facilitate QA/QC reviews of all deliverables to Shoreline.

Deliverables:

- Project Kickoff and Objectives Workshop notes (PDF).
- Project Schedule (PDF and MS Project).
- Monthly status reports with invoices (PDF).

Assumptions:

- Combined duration for the PS-30 design and construction work is estimated to be 21 months.
- Formal agendas and notes will not be required for biweekly coordination meetings.

Meetings:

- Project Kickoff and Objectives Workshop at Shoreline City Hall with up to four BHC staff.
- Biweekly coordination, with the BHC project manager only.
- Biweekly internal project team meetings/conference calls with active BHC Team members.

**Task 321 – Preliminary Design, PS-30 – Design Phase**

Description: Task 321 includes the preparation of the PS-30 Basis of Design (BOD) Report.

Receivables:

- Consolidated set of Shoreline comments on the Draft PS-30 BOD Report.
- Tree Protection Plan and Detail Drawings

Work Tasks:

- 321.1 PS-30 BOD Development: Prepare the Draft and Final PS-30 BOD Report. The BOD Report will include the following:
  - Introduction (including background and purpose of the report)
  - Zoning and Permitted Uses
  - Design Criteria and Constraints
    - Project Datum
    - 100-Year Flood Elevation
    - Access Constraints
    - Design Flow Development
    - Force Main Hydraulic Analysis



- Pump Selection
  - Pump Station Cycle Times
  - Temporary Bypass Pumping
  - Design Parameters
  - Design Alternatives
    - New force main alignment through public right of way (ROW)
    - Utilize existing force main alignment through easements through replacement or slip lining
  - Permit and Site Restoration Requirements
    - Permit Requirements
    - Frontage Improvements
  - Existing Utility Coordination
  - Tree Protection Requirements
- 321.2 30% Design Drawings
- Preliminary Design Drawings (11 drawings identified as bold in the drawing list included under Task 332)
  - Specification Table of Contents
  - Preliminary Opinion of Probable Construction Cost
  - Preliminary Construction Schedules
- 321.3 Meetings
- Drainage System Modeling Coordination Meeting: Coordination meeting to be held with Shoreline staff, capacity modeling consultant and two BHC team members. Objective will be to confirm modeling assumptions for consistency between capacity modeling work and PS-30 basis of design.
  - Pre-Application Meeting: Meeting with Shoreline Planning and Community Development to review preliminary plans and pre-application documents. Two-hour meeting with two BHC team members and Shoreline staff at Shoreline City Hall or via MS Teams.
  - 30% Design Workshop: Facilitate a two-hour design workshop with three BHC staff and Shoreline staff at Shoreline City Hall or via MS Teams to present and discuss the PS-30 30% design prepared by BHC.
  - Neighborhood Meeting or Virtual Open House: City to lead and schedule as required by SEPA or internal City Requirements. BHC to provide support including providing simplified figures and Zoom meeting facilitation. One BHC staff member to attend.

Deliverables:

- Draft PS-30 BOD Report (PDF).
- Final PS-30 BOD Report (PDF).

Assumptions:

- Shoreline will confirm permitting requirements for inclusion in the PS-30 BOD Report.
- Pump Station 30 will be designed in accordance with the configuration recommendations of Stormwater

Pump Station and SCADA Improvements Preliminary Design Report.

- Flow data will be provided by or confirmed with on-going capacity modeling being completed by others.
- Tree protection requirements will be provided by others.
- Design alternatives will be described in the BOD report and include simplified site plan figures, and rough order of magnitude cost estimates. Site plans for each alternative will consider force main alignment, major site improvements, and preliminary frontage improvements. City to prepare any variation requests for City Engineer approval with support from BHC.
- Design will include limited frontage improvements (sidewalk, curb and gutter) along NE 170<sup>th</sup> St directly adjacent to project site. No frontage improvements will be included along 15<sup>th</sup> Ave NE or along the forcemain alignment.

Meetings:

- Drainage System Modeling Coordination Meeting.
- Pre-Application Meeting
- 30% Design Workshop
- Neighborhood Meeting or Virtual Open House

**Task 332 – Construction Documents, PS-30 – Design Phase**

Description: Detailed design of the PS-30 project elements and preparation of Construction Documents (drawings and specifications). Preparation of the Opinions of Probable Construction Costs (OPCCs) for the project. BHC has prepared a preliminary drawing list for the design based on our current understanding of the project scope and design intent. The preliminary drawing list includes the following (bold items to be included in the PS-30 BOD Report):

1	<b>G-1</b>	<b>Cover Sheet, Location, and Vicinity Map</b>
2	<b>G-2</b>	<b>Index of Drawings and General Notes</b>
3	<b>G-3</b>	<b>Abbreviations, Symbols, and Designations</b>
4	G-4	Tree Protection Plan (by others)
5	G-5	Tree Protection Details (by others)
6	<b>C-1</b>	<b>Existing Conditions – Topography and Geotech Borings</b>
7	<b>C-2</b>	<b>TESC and Demolition Plan</b>
8	<b>C-3</b>	<b>TESC Details and Notes</b>
9	<b>C-4</b>	<b>Utility Plan</b>
10	C-5	Grading Plan
11	<b>C-6</b>	<b>Frontage Improvement Plan</b>
12	C-7	Site Finish and Restoration Plan
13	C-8	Site Sections
14	C-9	Civil Details
15	C-10	Civil Details
16	<b>M-1</b>	<b>Pump Station Plan</b>
17	<b>M-2</b>	<b>Pump Station Sections</b>
18	<b>M-3</b>	<b>Pump Station Sections</b>
19	M-4	Mechanical Details

20	M-5	Mechanical Details
<b>21</b>	<b>E-1</b>	<b>Electrical Symbols and Abbreviations</b>
<b>22</b>	<b>E-2</b>	<b>Electrical One-Line Diagram</b>
23	E-3	Conduit Grouping and Instrumentation Diagram
24	E-4	Electrical Schedules
<b>25</b>	<b>E-5</b>	<b>Electrical Pump Station and Site Plans</b>
26	E-6	Electrical and Instrumentation Details
27	E-7	Control Panel Sections and Details
28	E-8	Control Panel Schematic Diagram
29	E-9	Control Panel Schematic Diagram

#### Receivables:

- Consolidated Shoreline review comments on the 60% and 90% document submittals
- Consolidated Shoreline review comments on the 60%, 90%, and Final OPCCs

#### Work Tasks:

- 332.1 60% Design Drawings and Specifications: Prepare 60% general, civil, mechanical, and electrical drawings, specifications, and OPCC for the project. Incorporate Shoreline feedback from the 30% drawings and PS-30 BOD Report review. Submit 60% Construction Documents for Shoreline review and Planning and Community Development (PCD) permit application. BHC will prepare Seattle City Light (SCL) service application for Shoreline review, and initiate application process with SCL as directed by Shoreline.
- 332.2 90% Design Drawings and Specifications: Prepare 90% general, civil, mechanical, and electrical drawings, specifications, and OPCC for the project. Address Shoreline and PCD comments from the 60% design review.
- 332.3 Final Construction Documents: Prepare final general, civil, mechanical, and electrical final drawings, specifications, and OPCC ready for bidding. Address Shoreline and PCD comments from the 90% design review.

#### Deliverables:

- 60% Drawings, Specifications, and OPCC:
  - Drawings (PDF)
  - Specifications (PDF)
  - OPCC (PDF)
- 90% Drawings and Specifications, and OPCC:
  - Drawings (PDF)
  - Specifications (PDF)
  - OPCC (PDF)
- Final Construction Documents, and OPCC:
  - Drawings (PDF, 11"x17" and 22"x34" and AutoCAD)
  - Specifications (PDF and MS Word)

- OPCC (PDF)

Assumptions:

- Division 0 and 1 of the Specifications will be provided by Shoreline with limited input from BHC on Division 1 specifications (e.g., summary of work, constraints, etc.).
- Prepare OPCCs for 60% (AACE Class 4), 90% (AACE Class 2), and Final Construction Documents (AACE Class 1).
- 60% Drawings will be used for initial site development permit application by the City. 90% Drawings will address Shoreline PCD comments for site development permit, with additional clouding provided as required to identify revisions. One additional set of drawings will be prepared for the final site development permit package, if required.
- Shoreline to prepare permit application and submit documents to PCD. BHC to review application, and provide drawing package with applicable sheets.

Meetings:

- 60% Design Workshop: Facilitate a two-hour design presentation workshop with three BHC staff and Shoreline staff at Shoreline City Hall or via MS Teams.
- 90% Design Workshop: Facilitate a one-hour design presentation workshop with up to three BHC staff and key Shoreline staff at Shoreline City Hall or via MS Teams.

**Task 341 – Bid Period Services**

Description: Provide Engineering support to Shoreline in association with advertising, bidding, and developing a recommendation for award to the responsive low bidder.

Receivables:

- Bidder questions submitted to Shoreline
- Bid tabulation

Work Tasks:

- 341.1 Attend a pre-bid meeting with prospective Contractors.
- 341.2 Respond to bidder questions during the bid period.
- 341.3 Prepare a maximum of two addenda if necessary and deliver to Shoreline for distribution to bidders.
- 341.4 Review bid tabulation and apparent low bidder's bid documents.

Deliverables:

- Pre-Bid Meeting Agenda
- Up to two Addenda
- Award Recommendation Memorandum

Assumptions:

- Shoreline to pay bid advertisement costs directly and conduct the bid advertisement.
- Shoreline will facilitate and handle distribution of bid documents and addenda, to prospective bidders through an electronic bidding service (e.g., Builder's Exchange).

### Task 401 – Engineering Services During Construction

Description: Provide Engineering Services During Construction, including contract administration support, meetings, periodic on-site observation, RFI and submittal reviews, change management, closeout, record drawings, and development of an Operations and Maintenance (O&M) Manual.

#### Receivables:

- Contractor documentation: Submittals, Requests for Information (RFIs), Lookahead schedules, Pay Estimates, Change Requests, etc.
- Consolidated Shoreline submittal and document review comments.

#### Work Tasks:

- 401.1 Construction Administration and Contractor Coordination: Monitor and track contractor progress and documentation. Facilitate the review and responses to documents provided by the Contractor. Manage construction contract documentation using SharePoint resources. Assist Shoreline staff in the administration of the Construction contract, including review of pay estimates. Review and respond to construction contractor RFIs. Review and respond to construction contractor submittals. Review contractor requests for changes, prepare directive changes, review requests for contractor proposals, negotiate pricing, and prepare change order documentation, as required. Prepare substantial completion punch list and contract closeout documentation.
- 401.2 Construction Meetings: Facilitate weekly construction meetings with Shoreline and construction contractor representatives. Prepare meeting agendas and minutes.
- 401.3 Construction Observation: Provide periodic on-site observation of construction contractor activities, with additional observation of key work activities including limited observation visits by a geotechnical engineer. Prepare weekly construction observation reports.
- 401.4 Record Drawings: Prepare record drawings based on construction contractor redlines.
- 401.5 O&M Manual: Prepare facility operation and maintenance manual providing operational guidance for the facility and incorporating operation and maintenance documentation submitted by the construction contractor as Appendices.

#### Deliverables:

- Monthly pay applications
- Weekly progress meeting agendas and minutes
- Construction observation reports
- RFI and submittal responses
- Change directives and change orders
- Punch list
- Record drawings (PDF, 11"x17" and 22"x34" and AutoCAD)
- Operation and Maintenance Manual (PDF)

#### Assumptions:

- The total construction period is assumed to be eight months with six months of active construction work requiring on-site observation.

- Construction observation will be limited to 20 hours per week by a project engineer with limited site visits by lead engineers.
- Included geotechnical observations are not intended to be formal special inspections.
- Up to 30 RFIs
- Up to 50 submittals (including resubmittals)
- Up to five change orders or directive changes.

Meetings:

- Pre-construction meeting – MS Teams
- Weekly progress meetings – MS Teams

### Task 500 – Management Reserve

Description: This task and budget is reserved as a contingency fund for minor changes in scope which may occur during the project and will be used to facilitate additional work without the need for a contract amendment. Based on discussions with Shoreline, the contingency has been set at **\$50,000**, which represents approximately 9% of the total budget.

Receivables:

- Written requests for any additional services.
- Written authorization to proceed with additional services from the Shoreline Project Manager.

Work Tasks:

- 500.1 Develop scope/budget proposals for additional design services as needed.
- 500.2 Prepare contract amendments as needed.
- 500.3 Complete additional engineering services as authorized by Shoreline.

Deliverables:

- As defined in the additional design services scope/budget.

Assumptions:

- As defined in the additional design services scope/budget.
- Work under Task 500 must be authorized in writing by Shoreline prior to starting work.

Meetings:

- As defined in the additional design services scope/budget.

### Budget

The Project budget is **\$591,768**. This budget is based on, and in accordance with BHC's 2023 billing rates, which are calculated as current direct salary rates multiplied by BHC's 2021 calculated overhead rate (153.08% of direct salary rate) and profit (30% of direct salary rate). Subconsultant rates are calculated in the same manner. Shoreline agrees to allow BHC and subconsultants to update direct salary rates and overhead rates as needed to reflect current rates (labor rates are typically updated on January first of each year).

## Schedule

A baseline schedule will be developed after Notice to Proceed and before the Kickoff Meeting. The Project budget is based on and assumes that the efforts associated with this scope of services will be completed within approximately 21 months from Notice to Proceed. This schedule shall be equitably adjusted as the Project progresses, allowing for changes in scope or for delays beyond BHC's control. The following is the approximate schedule for this work:

- Notice to Proceed: February 13 (estimated)
- Preliminary Design, and Pre-Application Meeting
  - 60 days after NTP (April 2023)
- 60% Design Submittal
  - 100 days after receiving Shoreline comments on BOD report (August 2023)
- 90% Design Submittal
  - 60 days after receiving Shoreline comments on the 60% submittal (October 2023)
- Final Issued for Bid Documents Submittal
  - 60 days after receiving Shoreline comments on the 90% submittal (January 2024)
- Construction NTP
  - Preliminary NTP early Spring 2024 to allow early procurement of any long lead items
  - Full NTP targeted for May 2024 for major construction to be completed during the dry season

Shoreline Stormwater Pump Station 30  
City of Shoreline, Project 9146

Date: January 9, 2023

		BHC Consultants											Direct Costs					Total Cost		
Task Description	Billing Rate	Project Principal	Project Manager	Stormwater Lead	Electrical Engineer	Structural Engineer	Project Engineer	Senior Planner	CAD/GIS Lead	CAD/GIS Support	Clerical Support	BHC Labor			Direct Costs				Total Cost	
		290.16	264.68	250.53	227.88	236.37	145.79	164.19	184.00	147.20	127.39	Totals		2024 Rate Escalation*	Subs (Landau, KPG, Toole **)	Mileage & Parking	Printing	Direct Cost Markup 10%		Total Directs
		<i>Dorn/Gross</i>	<i>Ochiltree</i>	<i>Talich</i>	<i>Palmatier</i>	<i>Franco</i>	<i>Bryant</i>	<i>Tittelfitz</i>	<i>Simon</i>	<i>Olsoe</i>	<i>Sifferman</i>	Hours	Cost	5%						
<b>100 Project Management</b>		<b>16</b>	<b>114</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>26</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>11</b>	<b>169</b>	<b>\$ 40,420</b>	<b>\$ 935</b>	<b>\$ -</b>	<b>\$ 60</b>	<b>\$ -</b>	<b>\$ 6</b>	<b>\$ 66</b>	<b>\$ 41,421</b>
100.1 PS-30 Design Kickoff Meeting			4				4				8	\$ 1,642	\$ -		\$ 20		\$ 2	\$ 22	\$ 1,664	
100.2 Internal Design Kickoff Meeting			2		1		2		1		7	\$ 1,360	\$ -				\$ -	\$ -	\$ 1,360	
100.3 Coordinate with Shoreline			40								40	\$ 10,587	\$ 265		\$ 40		\$ 4	\$ 44	\$ 10,896	
100.4 Status Reports			20						10		30	\$ 6,567	\$ 164				\$ -	\$ -	\$ 6,732	
100.5 Project Team Coordination			40			20					60	\$ 13,503	\$ 338				\$ -	\$ -	\$ 13,840	
100.6 Project Schedule			8								8	\$ 2,117	\$ 53				\$ -	\$ -	\$ 2,170	
100.7 QA/QC Program		16									16	\$ 4,643	\$ 116				\$ -	\$ -	\$ 4,759	
<b>321 Preliminary Design, PS-30 - Design Phase</b>		<b>0</b>	<b>27</b>	<b>24</b>	<b>25</b>	<b>4</b>	<b>110</b>	<b>2</b>	<b>7</b>	<b>124</b>	<b>4</b>	<b>327</b>	<b>\$ 56,067</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 40</b>	<b>\$ 100</b>	<b>\$ 14</b>	<b>\$ 154</b>	<b>\$ 56,221</b>
321.1 BOD Report Development			8	20	4	2	56			4	94	\$ 17,186	\$ -		\$ 40		\$ 4	\$ 44	\$ 17,230	
321.2 30% Design Drawings			13		17	2	46		6	118	202	\$ 32,818	\$ -				\$ -	\$ -	\$ 32,818	
321.3 Meetings			6	4	4		8	2	1	6	31	\$ 6,064	\$ -			\$ 100	\$ 10	\$ 110	\$ 6,174	
<b>332 Construction Documents, PS-30 - Design Phase</b>		<b>4</b>	<b>71</b>	<b>16</b>	<b>143</b>	<b>28</b>	<b>244</b>	<b>0</b>	<b>23</b>	<b>496</b>	<b>63</b>	<b>1,088</b>	<b>\$ 184,157</b>	<b>\$ -</b>	<b>\$ 10,000</b>	<b>\$ 60</b>	<b>\$ -</b>	<b>\$ 1,006</b>	<b>\$ 11,066</b>	<b>\$ 195,223</b>
332.1 60% Design Drawings and Specifications		0	40	8	70	14	132		12	246	38	558	\$ 94,034	\$ -	\$ 10,000	\$ 20	\$ 1,002	\$ 11,022	\$ 105,056	
332.2 90% Design Drawings, Specifications, and Construction Permits			25	8	59	12	89		10	203	19	424	\$ 71,884	\$ -		\$ 20	\$ 2	\$ 22	\$ 71,906	
332.3 Final Construction Documents and Final Construction Permits		4	7		14	3	23		2	47	6	106	\$ 18,239	\$ -		\$ 20	\$ 2	\$ 22	\$ 18,261	
<b>341 Bid Period Services</b>		<b>0</b>	<b>18</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>4</b>	<b>8</b>	<b>0</b>	<b>62</b>	<b>\$ 11,671</b>	<b>\$ 584</b>	<b>\$ -</b>	<b>\$ 20</b>	<b>\$ -</b>	<b>\$ 2</b>	<b>\$ 22</b>	<b>\$ 12,277</b>
341.1 Pre-bid Meeting			4				4				8	\$ 1,642	\$ 82		\$ 20		\$ 2	\$ 22	\$ 1,746	
341.2 Respond to Bidder Questions			4		2		8				14	\$ 2,681	\$ 134				\$ -	\$ -	\$ 2,815	
341.3 Addenda			8		2		12		4	8	34	\$ 6,236	\$ 312				\$ -	\$ -	\$ 6,548	
341.4 Review Low Bid Documents and Qualifications			2				4				6	\$ 1,113	\$ 56				\$ -	\$ -	\$ 1,168	
<b>401 Engineering Services During Construction</b>		<b>10</b>	<b>220</b>	<b>8</b>	<b>100</b>	<b>20</b>	<b>608</b>	<b>0</b>	<b>12</b>	<b>52</b>	<b>138</b>	<b>1,168</b>	<b>\$ 206,730</b>	<b>\$ 10,337</b>	<b>\$ 17,000</b>	<b>\$ 780</b>	<b>\$ -</b>	<b>\$ 1,778</b>	<b>\$ 19,558</b>	<b>\$ 236,625</b>
401.1 Construction Administration		6	104		60	12	272				128	582	\$ 101,736	\$ 5,087	\$ 5,000	\$ 780	\$ 500	\$ 5,500	\$ 112,323	
401.2 Construction Meetings			40				64					104	\$ 19,918	\$ 996			\$ -	\$ -	\$ 20,913	
401.3 Construction Observation			52		24	8	208					292	\$ 51,447	\$ 2,572	\$ 12,000	\$ 780	\$ 1,278	\$ 14,058	\$ 68,077	
401.4 Record Drawings		2	8		4		24		8	40	2	88	\$ 14,723	\$ 736			\$ -	\$ -	\$ 15,459	
401.5 O&M Manual		2	16	8	12		40		4	12	8	102	\$ 18,907	\$ 945			\$ -	\$ -	\$ 19,852	
<b>500 Mangement Reserve</b>																				<b>\$ 50,000</b>
<b>Totals</b>												<b>2,814</b>	<b>\$ 499,046</b>	<b>\$ 11,856</b>	<b>\$ 27,000</b>	<b>\$ 960</b>	<b>\$ 100</b>	<b>\$ 2,806</b>	<b>\$ 30,866</b>	<b>\$ 591,768</b>

\* 5% rate rate escalation is applied to taks or portions of tasks that will be performed in 2024, to account for annual rate adjustments.

\*\* Subconsultant rates are based on raw labor costs plus overhead rate plus profit (30% on raw labor cost). Landau overhead rate is 212.63%.



# Pump Station 30 Upgrades Project VICINITY MAP

