

**RESOLUTION NO. 3225**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, PIERCE COUNTY, WASHINGTON, AUTHORIZING A PROFESSIONAL SERVICES AGREEMENT WITH BHC CONSULTANTS FOR STORMWATER IMPROVEMENTS PROJECT DESIGN AND CONSTRUCTION CONTRACT DOCUMENT DELIVERABLES.**

**WHEREAS**, authorization of American Rescue Plan Act (ARPA) funds was approved per AB23-69 on May 23, 2023, to complete Stormwater improvement projects; and

**WHEREAS**, Stormwater improvement projects were identified in the City of Bonney Lake Watershed Protection Plan; and


**WHEREAS**, the City received a quote from BHC Consultants to perform the Stormwater improvements project design; and

**WHEREAS**, this Professional Services Agreement will authorize BHC Consultants to provide all construction contract documents required to advertise the Stormwater Improvements Projects for construction contracts.


**NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF BONNEY LAKE, WASHINGTON DOES HEREBY RESOLVE AS FOLLOWS:**

That the City Council of the City of Bonney Lake does hereby authorize the Mayor to sign the attached Professional Services Agreement with BHC Consultants for Stormwater Improvements Project Design and Construction Contract Document Deliverables in the amount of \$437,654.

**PASSED** by the City Council this 23rd day of July 2024.

DocuSigned by:  
  
339AD7C13E9E492...  
Terry Carter, Mayor

AUTHENTICATED:

DocuSigned by:  
  
975A05652D794C6...  
Sadie A. Schaneman, CMC, City Clerk

City of Bonney Lake, Washington  
**City Council Agenda Bill (AB)**

<b>Agenda Item Type:</b> Resolution	<b>Agenda Bill Number &amp; Ordinance/Resolution/Motion Number:</b> AB24-83 & R24-83	
<b>Department/Division Submitting:</b> Engineering	<b>Presenter:</b> Andrew Fonda	<b>City Strategic Goal Category:</b> <b>DON'T FILL OUT YET</b>

**Agenda Subject:** Authorizing A Professional Services Agreement With BHC Consultants For Stormwater Improvements Project Design And Construction Contract Document Deliverables.


**Full Title/Motion:** A Resolution Of The City Council Of The City Of Bonney Lake, Pierce County, Washington, Authorizing A Professional Services Agreement With BHC Consultants For Stormwater Improvements Project Design and Construction Contract Document Deliverables.

**Administrative Recommendation:** Approve.

**Short Background Summary:** Authorization of American Rescue Plan Act (ARPA) funds was approved per AB23-69 on May 23, 2023, to complete stormwater improvement projects identified in the City of Bonney Lake Watershed Protection Plan including swale retrofit and conveyance improvements. City staff is requesting authorization of \$437,654 of these ARPA funds for a professional services agreement with BHC Consultants to perform the stormwater improvements project design and provide all construction contract documents required to advertise the Stormwater Improvements Project for a construction contract.

**Attachments:** Resolution 24-83, Professional Services Agreement, And Scope Of Work.

<b>BUDGET INFORMATION</b>			
Budgeted Amount	Current Balance	Expenditure Amount Needed	Budgeted Balance Difference
\$1,039,580.00	\$996,852.00	\$437,654.00	\$559,198.00
<b>Budget Explanation:</b> Total 2023/2024 Swale Retrofit And Conveyance Budget Is \$1,039,580.00 Of Which \$627,555.00 Is designated As ARPA funds.			

<b>COMMITTEE, BOARD &amp; COMMISSION REVIEW</b>					
Public Hearing Date:		Name Of Committee/Commission Public Hearing Was Done At:			
Date & Name Of Committee/ Commission Meeting	Return To Committee/ Commission/Board	Council Workshop Discussion	Consent Agenda	Council Full Issues	Chair's Signature For Approval Of Next Steps
Date: 7/16/2024 Name: CDC	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> Yes	
Date: Name:	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Date: Name:	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
Date: Name:	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	<input type="checkbox"/> Yes	
<b>Hearing Examiner Review:</b>					

<b>COUNCIL ACTION</b>	
Workshop Date(s):	Public Hearing Date(s):
Meeting Date(s): 7/23/2024	Tabled To:

<b>APPROVALS</b>		
<b>Department Director:</b> Jason Sullivan	<b>Mayor:</b> Terry Carter	<b>Date Reviewed By City Attorney (if applicable):</b>

**PROFESSIONAL SERVICES AGREEMENT BETWEEN  
THE CITY OF BONNEY LAKE AND BHC CONSULTANTS, LLC**

**THIS PROFESSIONAL SERVICES AGREEMENT** is entered into by and between the City of Bonney Lake, Washington, a municipal corporation (“**City**”) and BHC Consultants, LLC, organized under the laws of the State of Washington, located and doing business at 950 Pacific Ave, Tacoma, WA 98402 (hereinafter the “**Consultant**”).

**RECITALS:**

**WHEREAS**, the City desires to have design services for stormwater improvements performed; and

**WHEREAS**, the City has selected the Consultant to perform such services pursuant to certain terms and conditions; and

**WHEREAS**, the City complied with the requirements for hiring Consultant contained in Chapter 39.80 RCW;

**NOW, THEREFORE**, in consideration of the mutual benefits and conditions set forth below, the Parties agree as follows:

**AGREEMENT:**

**1. Scope of Services to be Performed by Consultant.**

The Consultant shall perform those services described on Exhibit “A,” which is attached hereto and incorporated herein by this reference as if set forth in full. In performing such services, the Consultant shall at all times comply with all federal, state, and local statutes, rules and ordinances applicable to the performance of such services and the handling of any funds used in connection therewith. The Consultant shall perform the services diligently and completely and in accordance with professional standards of conduct and performance. The Consultant shall request and obtain prior written approval from the City if the scope or schedule is to be modified in any way.

**2. Compensation and Method of Payment.**

The City shall pay the Consultant for services rendered a sum not to exceed Four Hundred Thirty-Seven Thousand Six Hundred Fifty-Four Dollars (\$437,564) for the work set forth in Exhibit “A”. The City shall pay the Consultant within a reasonable amount of time once an invoice is received, provided that the Consultant is making steady progress on the work and meeting its deadlines. Such installments shall be paid on the first and/or third Thursday of the month with the final installment being paid after delivery of Bid Support of Package No. 2. The City further reserves the right to direct the Consultant's compensated services before reaching the maximum amount.

**3. Duration of Agreement.** This Agreement shall be in full force and effect for a period commencing on the date the last Party executes this Agreement and ending upon completion

unless sooner terminated under the provisions of this Agreement or extended by mutual agreement of the Parties. Time is of the essence of this Agreement in each and all of its provisions in which performance is required.

**4. Ownership and Use of Documents.**

A. *Ownership.* Any records, files, documents, drawings, specifications, data, or information, regardless of form or format, and all other materials produced by the Consultant in connection with the services provided to the City, shall be the property of the City whether the project for which they were created is executed or not. Reuse of materials produced by the Consultant other than as contemplated by this Agreement shall be without liability to the Consultant.

B. *Records preservation.* Consultant understands that this Agreement is with a government agency and thus all records created or used in the course of Consultant's work for the City are considered "public records" and may be subject to disclosure by the City under the Public Records Act, Chapter 42.56 RCW ("the Act"). Consultant agrees to safeguard and preserve records in accordance with the Act. The City may be required, upon request, to disclose the Agreement, and the documents and records submitted to the City by Consultant, unless an exemption under the Public Records Act applies. If the City receives a public records request and asks Consultant to search its files for responsive records, Consultant agrees to make a prompt and thorough search through its files for responsive records and to promptly turn over any responsive records to the City's public records officer at no cost to the City.

**5. Independent Consultant.** The Parties intend that an independent contractor-client relationship will be created by this Agreement. As the Consultant is customarily engaged in an independently established trade which encompasses the specific service provided to the City hereunder, no agent, employee, representative or sub-consultant of the Consultant shall be or shall be deemed to be the employee, agent, representative or sub-consultant of the City. In the performance of the work, the Consultant is an independent contractor with the ability to control and direct the performance and details of the work, the City being interested only in the results obtained under this Agreement. None of the benefits provided by the City to its employees, including, but not limited to, compensation, insurance, and unemployment insurance are available from the City to the employees, agents, representatives, or sub-consultants of the Consultant. The City shall not be responsible for withholding or otherwise deducting federal income tax or social security or contributing to the State Industrial Insurance Program, or otherwise assuming the duties of an employer with respect to the Consultant, or any employee of the Consultant. The Consultant will be solely and entirely responsible for its acts and for the acts of its agents, employees, representatives, and sub-consultants during the performance of this Agreement. The City may, during the term of this Agreement, engage other independent contractors to perform the same or similar work that the Consultant performs hereunder.

**6. Indemnification.** Consultant shall defend, indemnify, and hold the City, its officers, officials, employees, agents, and volunteers harmless from any and all claims, injuries, damages, losses or suits including reasonable attorneys' fees, to the extent arising out of or resulting from the

negligent acts, errors or omissions of the Consultant in performance of this Agreement, except for injuries and damages caused by the sole negligence of the City.

Should a court of competent jurisdiction determine that this Agreement is subject to RCW 4.24.115, then, in the event of liability for damages arising out of bodily injury to persons or damages to property caused by or resulting from the concurrent negligence of the Consultant and the City, its officers, officials, employees, and volunteers, the Consultant's liability, including the duty and cost to defend, hereunder shall be only to the extent of the Consultant's negligence.

It is further specifically and expressly understood that the indemnification provided herein constitutes the Consultant's waiver of immunity under Industrial Insurance, Title 51 RCW, solely for the purposes of this indemnification. This waiver has been mutually negotiated by the Parties.

The provisions of this section shall survive the expiration or termination of this Agreement.

**7. Insurance.** The Consultant shall procure and maintain for the duration of the Agreement, insurance against claims for injuries to persons or damage to property which may arise from or in connection with the performance of the work hereunder by the Consultant, its agents, representatives, or employees.

A. *Minimum Scope of Insurance.* Consultant shall obtain insurance of the types described below:

- i. Automobile Liability insurance covering all owned, non-owned, hired and leased vehicles. Coverage shall be written on Insurance Services Office (ISO) form CA 00 01 or a substitute form providing equivalent liability coverage. If necessary, the policy shall be endorsed to provide contractual liability coverage.
- ii. Commercial General Liability insurance shall be written on ISO occurrence form CG 00 01 and shall cover liability arising from premises, operations, independent Consultants and personal injury and advertising injury. The City shall be named as an insured under the Consultant's Commercial General Liability insurance policy with respect to the work performed for the City.
- iii. Workers' Compensation coverage as required by the Industrial Insurance laws of the State of Washington.
- iv. Professional Liability insurance appropriate to the Consultant's profession.

B. *Minimum Amounts of Insurance.* Consultant shall maintain the following insurance limits:

- i. Automobile Liability insurance with a minimum combined single limit for bodily injury and property damage of \$1,000,000 per accident.

- ii. Commercial General Liability insurance shall be written with limits no less than \$1,000,000 each occurrence, \$2,000,000 general aggregate.
- iii. Professional Liability insurance shall be written with limits no less than \$1,000,000 per claim and \$1,000,000 policy aggregate limit.

C. *Other Insurance Provision.* The Consultant's Automobile Liability and Commercial General Liability insurance policies are to contain, or be endorsed to contain, that they shall be primary insurance as respect the City. Any Insurance, self-insurance, or insurance pool coverage maintained by the City shall be excess of the Consultant's insurance and shall not contribute with it.

D. *Acceptability of Insurers.* Insurance is to be placed with insurers with a current A.M. Best rating of not less than A-VII.

E. *Verification of Coverage.* The Consultant shall furnish the City with original certificates and a copy of the amendatory endorsements, including but not necessarily limited to the additional insured endorsement, evidencing the insurance requirements of the Consultant before commencement of the work.

F. *Notice of Cancellation.* The Consultant shall provide the City with written notice of any policy cancellation, within two business days of their receipt of such notice.

G. *Failure to Maintain Insurance.* Failure on the part of the Consultant to maintain the insurance as required shall constitute a material breach of contract, upon which the City may, after giving five business days' notice to the Consultant to correct the breach, immediately terminate the contract or, at its discretion, procure or renew such insurance and pay any and all premiums in connection therewith, with any sums so expended to be repaid to the City on demand, or at the sole discretion of the City, offset against funds due the Consultant from the City.

H. *No Limitation.* Consultant's maintenance of insurance as required by the agreement shall not be construed to limit the liability of the Consultant to the coverage provided by such insurance, or otherwise limit the City's recourse to any remedy available at law or in equity.

## **8. Record Keeping and Reporting.**

A. The Consultant shall maintain accounts and records, including personnel, property, financial, and programmatic records, which sufficiently and properly reflect all direct and indirect costs of any nature expended and services performed pursuant to this Agreement. The Consultant shall also maintain such other records as may be deemed necessary by the City to ensure proper accounting of all funds contributed by the City to the performance of this Agreement.

B. The foregoing records shall be maintained for a period of seven (7) years after termination of this Agreement unless permission to destroy them is granted by the Office of the Archivist in accordance with Chapter 40.14 RCW and by the City.

**9. City's Right of Inspection and Audit.**

A. Even though the Consultant is an independent contractor with the authority to control and direct the performance and details of the work authorized under this Agreement, the work must meet the approval of the City and shall be subject to the City's general right of inspection to secure the satisfactory completion thereof. The Consultant agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now effective or become applicable within the terms of this Agreement to the Consultant's business, equipment, and personnel engaged in operations covered by this Agreement or accruing out of the performance of such operations.

B. The records and documents with respect to all matters covered by this Agreement shall be subject at all times to inspection, review or audit by the City during the performance of this Agreement. All work products, data, studies, worksheets, models, reports, and other materials in support of the performance of the service, work products, or outcomes fulfilling the contractual obligations are the products of the City.

**10. Consultant to Maintain Records to Support Independent Contractor Status.** On the effective date of this Agreement (or shortly thereafter), the Consultant shall comply with all federal and state laws applicable to independent contractors including, but not limited to the maintenance of a separate set of books and records that reflect all items of income and expenses of the Consultant's business, pursuant to the Revised Code of Washington (RCW) Section 51.08.195, as required to show that the services performed by the Consultant under this Agreement shall not give rise to an employer-employee relationship between the Parties which is subject to RCW Title 51, Industrial Insurance.

**11. Work Performed at the Consultant's Risk.** The Consultant shall take all precautions necessary and shall be responsible for the safety of its employees, agents, and sub-consultants in the performance of the work hereunder and shall utilize all protection reasonably necessary for that purpose. All work shall be done at the Consultant's own risk, and the Consultant shall be responsible for any loss of or damage to materials, tools, or other articles used or held by the Consultant for use in connection with the work.

**12. Termination.**

A. The City reserves the right to terminate or suspend this Agreement at any time, with or without cause, upon seven (7) days' prior written notice. In the event of termination or suspension, all finished or unfinished documents, data, studies, worksheets,

models, reports, or other materials prepared by the Consultant pursuant to this Agreement shall promptly be submitted to the City.

B. In the event this Agreement is terminated or suspended, the Consultant shall be entitled to payment for all services performed and reimbursable expenses incurred to the date of termination.

C. This Agreement may be canceled immediately if the Consultant's insurance coverage is canceled for any reason, or if the Consultant is unable to perform the services called for by this Agreement.

D. The Consultant reserves the right to terminate this Agreement with not less than fourteen (14) days written notice, or in the event that outstanding invoices are not paid within sixty (60) days.

E. This provision shall not prevent the City from seeking any legal remedies it may otherwise have for the violation or nonperformance of any provisions of this Agreement.

**13. Force Majeure.** Notwithstanding anything to the contrary in this Agreement, any prevention, delay or stoppage due to strikes, lockouts, labor disputes, acts of God, acts of war, terrorist acts, inability to obtain services, labor, or materials or reasonable substitutes therefor, governmental actions, governmental laws, regulations or restrictions, civil commotions, Casualty, actual or threatened public health emergency (including, without limitation, epidemic, pandemic, famine, disease, plague, quarantine, and other significant public health risk), governmental edicts, actions, declarations or quarantines by a governmental entity or health organization, breaches in cybersecurity, and other causes beyond the reasonable control of the Party obligated to perform, regardless of whether such other causes are (i) foreseeable or unforeseeable or (ii) related to the specifically enumerated events in this paragraph (collectively, a "**Force Majeure**"), shall excuse the performance of such Party for a period equal to any such prevention, delay or stoppage. To the extent this Agreement specifies a time period for performance of an obligation of either Party, that time period shall be extended by the period of any delay in such Party's performance caused by a Force Majeure. Provided however, that the current COVID-19 pandemic shall not be considered a Force Majeure unless constraints on a Party's performance that result from the pandemic become substantially more onerous after the effective date of this Agreement. In order to claim Force Majeure, the Party claiming must provide notice to the other Party within fourteen (14) days of the event which constitutes Force Majeure or such claim shall be waived for any period in which notice was due.

**14. Discrimination Prohibited.** The Consultant shall not discriminate against any employee, applicant for employment, or any person seeking the services of the Consultant under this Agreement, on the basis of race, color, religion, creed, sex, sexual orientation, age, national origin, marital status, presence of any sensory, mental or physical disability, or other circumstance prohibited by federal, State or local law or ordinance, except for a bona fide occupational qualification.

**15. Assignment and Subcontract.** The Consultant shall not assign or subcontract any



portion of the services contemplated by this Agreement without the prior written consent of the City. Any assignment made without the prior approval of the City is void.

**16. Conflict of Interest.** The Consultant represents to the City that it has no conflict of interest in performing any of the services set forth in Exhibit "A." In the event that the Consultant is asked to perform services for a project with which it may have a conflict, Consultant will immediately disclose such conflict to the City.

**17. Confidentiality.** All information regarding the City obtained by the Consultant in performance of this Agreement shall be considered confidential. Consultant shall not disclose any such information to any third parties without (1) the prior written consent of the City or (2) legal process requiring disclosure, provided advance notice is provided to the City. Breach of confidentiality by the Consultant shall be grounds for immediate termination.

**18. Non-Appropriation of Funds.** If sufficient funds are not appropriated or allocated for payment under this Agreement for any future fiscal period, the City will so notify the Consultant and shall not be obligated to make payments for services or amounts incurred after the end of the current fiscal period. This Agreement will terminate upon the completion of all remaining services for which funds are allocated. No penalty or expense shall accrue to the City in the event that the terms of the provision are effectuated.

**19. Employment of State Retirees.** The City is a "DRS-covered employer" which is an organization that employs one or more members of any retirement system administered by the Washington State Department of Retirement Systems (DRS). Pursuant to RCW 41.50.139(1) and WAC 415-02-325(1), the City is required to elicit on a written form if any of the Consultant's employees providing services to the City retired using the 2008 Early Retirement Factors (ERFs), or if the Consultant is owned by an individual who retired using the 2008 ERFs, and whether the nature of the service and compensation would result in a retirement benefit being suspended. Failure to make this determination exposes the City to significant liability for pension overpayments. As a result, before commencing work under this Agreement, Consultant shall determine whether any of its employees providing services to the City or any of the Consultant's owners retired using the 2008 ERFs, and shall immediately notify the City and shall promptly complete the form provided by the City after this notification is made. This notification to DRS could impact the payment of retirement benefits to employees and owners of Consultant. Consultant shall indemnify, defend, and hold harmless the City from any and all claims, damages, or other liability, including attorneys' fees and costs, relating to a claim by DRS of a pension overpayment caused by or resulting from Consultant's failure to comply with the terms of this provision. This provision shall survive termination of this Agreement.

**20. Entire Agreement.** This Agreement contains the entire agreement between the Parties, and no other agreements, oral or otherwise, regarding the subject matter of this Agreement shall be deemed to exist or bind either of the Parties. If there is a conflict between the terms and conditions of this Agreement and the attached exhibit, then the terms and conditions of this Agreement shall prevail over the exhibit. Either Party may request changes to the Agreement. Changes which are mutually agreed upon shall be incorporated by written amendments to this Agreement.

**21. Notices.** All notices or other communications required or permitted under this Agreement shall be in writing and shall be (a) personally delivered, in which case the notice or communication shall be deemed given on the date of receipt at the office of the addressee; (b) sent by registered or certified mail, postage prepaid, return receipt requested, in which case the notice or communication shall be deemed given three (3) business days after the date of deposit in the United States mail; or (c) sent by overnight delivery using a nationally recognized overnight courier service, in which case the notice or communication shall be deemed given one business day after the date of deposit with such courier. In addition, all notices shall also be emailed, however, email does not substitute for an official notice. Notices shall be sent to the following addresses:

Notices to the City of Bonney Lake shall be sent to the following address:

City Clerk  
City of Bonney Lake  
9002 Main Street E.  
Bonney Lake WA 98391

Notices to the Consultant shall be sent to the following address:

BHC Consultants, LLC  
950 Pacific Ave  
Tacoma WA 98402

**22. Applicable Law; Venue; Attorneys' Fees.** This Agreement shall be governed by and construed in accordance with the laws of the State of Washington. In the event any suit, arbitration or other proceeding is instituted to enforce any term of this Agreement, the Parties specifically understand and agree that venue shall be exclusively in Pierce County, Washington. The prevailing party in any such action shall be entitled to its reasonable attorneys' fees and costs of suit, which shall be fixed by the judge hearing the case and such fee shall be included in the judgment.

**23. Compliance with Laws.** The Consultant agrees to comply with all federal, state, and municipal laws, rules, and regulations that are now effective or in the future become applicable to Consultant's business, equipment, and personnel engaged in operations covered by this Agreement or accruing out of the performance of those operations.

**24. Counterparts.** This Agreement may be executed in any number of counterparts, each of which shall constitute an original, and all of which will together constitute this one Agreement.

**25. Severability.** Any provision or part of this Agreement held to be void or unenforceable under any law or regulation shall be deemed stricken and all remaining provisions shall continue to be valid and binding upon the City and the Consultant, who agree that the Agreement shall be reformed to replace such stricken provision or part with a valid and enforceable provision that comes as close as reasonably possible to expressing the intent of the stricken

provision.

**IN WITNESS WHEREOF**, the City and the Consultant have executed this Agreement as of the dates listed below.

**CITY OF BONNEY LAKE**

DocuSigned by:  
*John Vodopich*  
BC1D8DB49C4C40C...

Name: John Vodopich

Title: City Administrator

Date: July 23, 2024

**BHC CONSULTANTS, LLC**

DocuSigned by:  
*Tom Giese*  
1E70FFDC6A114AE...

Name: Tom Giese, P.E.

Title: Vice President

Date: 7/24/2024 | 1:09 PM PDT

**ATTEST**

DocuSigned by:  
*Sadie A. Schaneman*  
975A85C52D794C6...

Sadie A. Schaneman, CMC  
City Clerk

**APPROVED AS TO FORM**

DocuSigned by:  
*Jennifer S. Robertson*  
3CED824BC20444F...

Jennifer S. Robertson, City Attorney

## **EXHIBIT A**

**Scope of Services to be Provided by Consultant. The Scope of Services is described in the attached Proposal dated June 26, 2024, which is attached hereto and incorporated herein.**

**EXHIBIT B**  
**Rates of Service**

## EXHIBIT A

### SCOPE OF WORK

#### City of Bonney Lake

#### Stormwater Improvements

#### Statement of Understanding

The City of Bonney Lake owns and operates a stormwater conveyance and treatment system comprising pipes, manholes, catch basins, inlets, culverts, stormwater ponds, vaults, dry wells, and other components.

The City's Comprehensive Plan features a Watershed Protection Plan identifying stormwater capital projects. The Watershed Protection Plan includes:

- Solutions for chronic, known flooding and drainage problems.
- Regional or neighborhood stormwater management facilities to support existing and future development.
- Habitat or stream restoration.
- Capital acquisition, such as land or equipment.
- Studies to address potential needs, such as floodplain modeling.

Twenty capital projects were developed for the Watershed Protection Plan and they cover several of the typical categories listed above.

The City selected **one** of the twenty capital project areas (Capital Project 1-7) for this project. However, the City expanded the extent of this project based on the City's operations staff observations. The City has also identified **two** new drainage projects that were not previously included in the Watershed Protection Plan. These projects were identified due to complaints from property owners about persistent drainage issues. The goal for these two projects is to replace the open channel conveyance for Right-of-Way surface drainage between the residential properties with a closed pipe conveyance for discharge into Lake Tapps. The City believes that if these drainage issues are not addressed, the properties may experience basement flooding. Therefore, the City intends to prioritize the resolution of these issues.

The three projects are:

- SR-410 208th to 211th Swale/Conveyance Improvements (Expanded Capital Project 1-7 FredMeyer at Tall Firs) (Figure 1).
- 67th St E/67th Ct E Stormwater Improvements (Figure 2).
- S. Island Dr. Conveyance – Inlet Island Stormwater Improvements (Figure 3).

#### **SR-410 208<sup>th</sup> to 211<sup>th</sup> Swale/Conveyance Improvements:**

Stormwater improvements for this project area include approximately 1,200 feet of swale/culvert construction along the south side of SR-410, between 208th Avenue E and 211th Avenue E. This includes

connecting the swale to an existing culvert at the intersection of SR-410 and 211th Avenue E, and minor grading and cleanup work on approximately 400 feet of swale downstream of the 211th Avenue E culvert. The scope does not include water quality treatment design, capacity evaluation, existing culvert modifications, or hydrologic and hydraulic modeling.

#### **67<sup>th</sup> St E/67<sup>th</sup> Ct E Stormwater Improvements:**

Stormwater improvements for this project area include installing approximately 2,300 feet of storm pipe along 67<sup>th</sup> St. E and 67<sup>th</sup> Ct. E to collect overflow water from an existing pond located on a private property (6532 194<sup>th</sup> Ave. E) and diverting ponding water at a private property (19405 67<sup>th</sup> St. E), conveying it along 67<sup>th</sup> St. E and 67<sup>th</sup> Ct. E, and connecting to an existing storm system along W Tapps Hwy E at two locations. The scope includes water quality treatment component along 67<sup>th</sup> Ct. E proposed pipes to satisfy ARPA funding requirements. The scope does not include existing road-side ditch and culvert improvements, which will continue to be maintained by the City. The scope does not include capacity evaluation of the existing storm system along W Tapps Hwy E. The scope assumes that no in-water work will be performed.

#### **S. Island Dr. Conveyance Stormwater Improvements:**

Stormwater improvements for this project area include installing approximately 330 feet of storm pipe to replace an existing open conveyance between two private properties (6362 S. Island Dr. E and 6364 S. Island Dr. E) and connecting the new storm pipe to an existing culvert system that discharges into Lake Tapps. The scope does not include water quality treatment design, capacity evaluation of the existing storm system, existing culvert modifications, or hydrologic and hydraulic modeling. The scope assumes that no in-water work will be performed. The City will coordinate with the Washington State Department of Transportation (WSDOT) regarding requirements for the construction of the swale/culvert system adjacent to SR-410 and submit the required permit applications.

The purpose of this project is to develop a design for stormwater improvements that will effectively address the current drainage issues. Under this Scope of Work (SOW), BHC Consultants, LLC (Consultant) will:

- Perform geotechnical site reconnaissance.
- Develop contract documents, including Drawings, Specifications, and Opinion of Probable Construction Cost (OPCC).

The City has funds from the American Rescue Plan Act (ARPA) available to support a portion of these projects. These funds must be committed by December 31, 2024, and a construction contract must be signed to obligate the funds. The City has requested the Consultant to prepare two design packages. Package 1 will utilize the 2024 ARPA fund, and Package 2 is proposed for construction in 2025.

Package No. 1 will include the following:

1. 67<sup>th</sup> St E/67<sup>th</sup> Ct E Stormwater Improvements (Package 1): Installing approximately 900 feet of storm pipe along 67<sup>th</sup> Ct. E Right-of-Way and water quality treatment facility. The remaining work described in the 67<sup>th</sup> St E/67<sup>th</sup> Ct E Stormwater Improvements Section will be included in Package No. 2.

Package No. 2 will include the following:

1. S.R. 410 208th to 211th Swale/Conveyance Improvements work,
2. The remaining portion of 67th St E/67th Ct E Stormwater Improvements work that is not included in Package No.1, and
3. S. Island Dr. Conveyance Stormwater Improvements.

## Scope of Work

The Scope of Work tasks are separated into four components where applicable:

1. Work Tasks: tasks that will be completed by the Consultant.
2. Receivables: elements that will be provided by the City.
3. Assumptions: assumptions used to develop each work task.
4. Deliverables: the draft and/or finished product(s) that will be delivered to the City.

## Project Approach and Scope

The following scope of services outlines the Consultants' tasks associated with the design of the stormwater improvements. The consultant will generally prepare construction bid documents for the proposed improvements. The City will lead the utility locates, topographic survey, permitting, temporary and permanent easement acquisition, Right of Entry (ROE), and public outreach efforts. Ancillary services to be provided by the Consultant via sub-consultants include geotechnical engineering.

The stormwater improvements will be designed and constructed per the 2021 Pierce County Stormwater Management and Site Development Manual (Pierce County Manual), the City of Bonney Lake Municipal Code for Stormwater Management, and the City's Development Policies and Public Works Design Standards. Construction of the stormwater improvements may temporarily disrupt service, so such repairs will be planned for periods when little to no rainfall is expected. Temporary facilities may be required during construction, including temporary bypass pumping and pipelines. The design documents will provide the information the Contractor will need to design the temporary facilities.

The team is comprised of the following firms and will be referenced throughout this scope by their abbreviated name:

<b>Firm</b>	<b>Abbreviated Name</b>	<b>Role</b>
BHC Consultants, LLC	BHC (Consultant)	Prime Consultant / Overall Project Management / Storm Design Services
HWA Geosciences, Inc.	HWA	Geotechnical Engineering

## Task 1 – Project Management

Task 1 includes project management activities to facilitate the design of the stormwater improvements.

Work Tasks:

- 1.1 *Project Initiation and Work Plan.* Input task and budget information into the Consultant's management software for progress tracking and invoicing.



- 1.2 Client and Team Coordination. Coordinate with City staff through regular status reports, status meetings, telephone communications, and e-mail correspondence during the project. Assumed sixteen (16) typically bi-weekly conference call status meetings to discuss project progress and coordinate work execution. Client participation in status meetings will be established based on desire, need, and agenda.
- 1.3 Monthly Invoices and Progress Reports. Prepare up to eight (8) monthly progress reports and monthly invoices.
- 1.4 Quality Assurance/Quality Control (QA/QC) Program. Conduct quality control reviews of project deliverables. In adherence with BHC's company policy, the Project Manager will engage an independent technical reviewer who is not directly involved in the project to perform each review. A record of internal redlines and resultant revisions will be maintained in the project file.

Receivables:

- Notice-to-Proceed (NTP) and executed agreement.

Assumptions:

- Project duration from NTP will be no longer than eight (8) months.
- Quality control reviews will be supported for each of the major deliverable work products.

Deliverables:

- Scope and budget proposal.
- Monthly invoicing and progress reports.
- Meeting agendas/Meeting minutes.

## **Task 2 – Data Collection and Review**

Task 2 includes collecting and reviewing data to inform the design of the stormwater improvements.

Work Tasks:

- 2.1 Information Request and Review. Provide the City with a list of requested data for the design of the stormwater improvements. The following is a preliminary list of the requested information. Some of this information may have already been received during scoping. The actual request will vary based on information already obtained by or available publicly to the Consultant or if additional information is deemed useful.
- Record Drawings – Utilities, existing easements, and building information for the three project areas.
  - Closed Circuit Television (CCTV) – CCTV video inspection records.
  - Geographic Information System (GIS) files – stormwater system information including but not limited to pipelines, catch basins, manholes, topographic information, ditches, and streams.
  - CAD – City's CAD Design Standards.
  - City's Standards and Templates – City's preferred templates and borders for Plans, Specifications, and Estimates (PSEs) as well as other design standards.

- Geotechnical Reports – Available geotechnical reports in the vicinity of the project areas.
- Survey and Utility Basemaps – Survey basemap for the three project areas developed for the City by others.

2.2 Site Visit. The Consultant will attend up to one (1) site visit to observe field conditions with the City staff.

Receivables:

- Requested information as detailed in Task 2.1.

Assumptions:

- Two (2) representatives from the Consultant's firm will attend the site visit. The site visit will last two (2) hours.

Deliverables:

- List of requested data.

### **Task 3 – Geotechnical Site Reconnaissance**

This task will be used to conduct a site reconnaissance for each project area. The following tasks will be included.

3.1 Conduct a Site Reconnaissance. Compile and review readily available geologic and geotechnical subsurface data for each project site. Complete a site reconnaissance for each project site. This will include visiting each site, documenting site conditions, and determining site exploration needs.

Receivables:

- ROE for private properties to perform the site reconnaissance.

Assumptions:

- None.

Deliverables:

- Draft Site Reconnaissance Memorandum.
- Final Site Reconnaissance Memorandum.

### **Task 4 – Package No. 1 Design**

This task will be used to develop the base drawings and contract documents for the stormwater improvements – Package No.1. The design of the elements, such as erosion control plans and restoration plans will also be completed under this task.

Work Tasks:

4.1 Attend Kickoff Meeting. Attend a virtual kickoff meeting with the City.

4.2 Attend Design Coordination Meetings. Attend two (2) virtual design coordination meetings with the City to discuss the design elements, including stormwater improvements and water quality treatment design, for inclusion in the 90% design package.

4.3 Develop 90% Design Documents (Package No. 1). Prepare a 90% design package for the project.

For the 90% design, the Consultant will:

- Visit the site to perform a field reconnaissance of the existing features and verify the locations of existing features and conditions related to the design.
- Prepare 90% Contract Drawings showing base drawing information (existing topographic survey, utility locations, and parcel/right-of-way line information), survey stationing and control, proposed alignment of manholes, storm sewers, catch basins, and existing utilities to be abandoned or removed, Temporary Erosion and Sediment (TESC) and surface/pavement restoration drawings. The 90% drawings will also include the necessary project-specific details, notes, and information to address the TESC requirements, surface/pavement restoration plans and requirements, and standard construction and TESC notes.
- Obtain and incorporate the City's standard details into the design drawings.
- Obtain a copy of the City's draft of Division 1 and boilerplate documents for the Advertisement for Bids, Instructions to Bidders, the Bid Proposal, the Bid and Performance Bond forms, the Non-Collusion Declaration Form, the Certification of Compliance with Wage Payment Statutes Form, and the Contract Agreement. These documents will include placeholders for dates as necessary.
- Prepare the 90% Contract Specifications excluding Division 1 and boilerplate documents; the City will prepare Division 1 and boilerplate documents and incorporate them into the 90% Specifications.
- Prepare the 90% OPCC showing bid items, quantities, unit costs, and total probable costs for constructing proposed improvements.
- Submit 90% design documents to the City for review and comment.
- Participate in a virtual design review meeting with the City to discuss the City's review comments.

**4.4 Develop 100% Design Documents (Package No. 1).** Prepare 100% design documents for the proposed utility improvements.

- Address the City's 90% design review comments.
- Prepare 100% Contract Drawings. These documents are intended as a final check for the City prior to advertising for bids, and they will be suitable for obtaining bids from Contractors to construct the proposed improvements once the drawings are stamped and signed. It is anticipated that City comments will be minor.
- Prepare 100% Contract Specifications. These documents are intended as a final check for the City prior to advertising for bids will be suitable to obtain bids from Contractors to construct the proposed improvements once the document is stamped and signed. It is anticipated that City comments will be minor.
- Prepare 100% OPCC showing bid items, quantities, unit costs, and total probable costs for construction of proposed improvements.
- Submit the 100% design documents to the City as a final check set for review and comment. The city's review at this stage is for the purpose of verifying that comments transmitted at 90% completion were incorporated into the 100% documents, as mutually agreed. It is assumed

that significant “additional” design comments will not be generated at this stage.

- Because review comments are expected to be minor, no design review meeting will be required to discuss those comments. Instead, the City will email the pertinent comments to the Consultant to address.

4.5 Develop Issued for Bid Documents (Package No.1). Prepare Issued for Bid (IFB) Documents (Bid Documents) for the proposed utility improvements.

- Address the City’s 100% design review comments.
- Prepare, stamp, and sign the IFB Contract Drawings that the City may use to solicit bids from Contractors.
- Prepare, stamp, and sign the IFB Contract Specifications that the City may use to solicit bids from Contractors.
- Prepare the final OPCC that may be used to evaluate bids received from Contractors.
- Submit the IFB Documents to the City.

Receivables:

- Provide survey basemap (CAD).
- Provide electronic copies (PDF) of the City’s current Standard Details for inclusion in the contract documents.
- Provide electronic copies (MS Word) of the City’s standard Bidding Documents, the first draft of Division 1, the current Standard General Special Provisions, and the Standard Construction Notes.
- Research, obtain, and provide copies of all existing easements within the Project area for which a storm pipe or structure is located that will need to be accessed or modified as part of this project’s design and/or construction.
- Update the Division 1 and boilerplate documents to make them project-specific.
- The City shall respond with review comments on each submittal as follows:
  - Within one week for the 90% Submittal.
  - Within three days for the 100% Submittal.
- Provide a consolidated set of written review comments on each design submittal. The City will provide the consultant with written and consolidated review comments at least three days prior to each design review meeting. Note that the Consultant will continue to work on the next submittal while the City is reviewing in order to meet the tight schedule.

Assumptions:

- Two (2) representatives from the Consultant’s firm will attend the kickoff meeting, design coordination meetings, site visit, and design review meetings.
- No capacity issues have been identified, and the pipe will be replaced in kind. No stormwater modeling will be performed to determine the conveyance pipe sizing.
- Neither permits nor a Stormwater Site Plan (Drainage Report) are required for this project per the information provided by the City.

- Stormwater improvements will be shown on plan and profile drawings.
- Details for the stormwater improvements will be shown on separate sheets with scales as required.
- The existing and proposed stormwater system will be shown on profiles.
- Drawings will be prepared using AutoCAD/Civil 3D 2020 and meet the following standards:
  - Developed for plotting at full size (22" x 34") and half size (11" x 17"). Except for the TESC plans, full-size plan view drawings will be drawn at a 1" = 20' scale. Full-size TESC plans will be drawn at a 1" = 40' scale. Details generated for the improvements may use other scales as needed.
  - Plan and profile drawing will address approximately 450 lineal feet of improvements per sheet. The plan and profile drawings will have the plan view improvements shown in one viewport along the top half of the sheet with the profile along the bottom half of the sheet in a second viewport. Pertinent notes and details may be located along the right-hand side of the sheet or on separate sheets as appropriate. Profiles will show the existing and proposed utilities, including utilities that will be abandoned in place to identify and resolve potential conflicts.
  - The TESC plans will be plan view only and will address approximately 1,800 lineal feet of improvements per sheet, where feasible. Pertinent notes and details will be added to the sheets as appropriate.
- The surface/pavement restoration plans will be plan view only and will address approximately 900 lineal feet of improvements per sheet. Pertinent notes and details will be added to the sheets or on new sheets as appropriate.
- A total of 17 design drawings will be provided. A preliminary drawing list was prepared for scoping purposes and is presented in the table below.

Drawing No.	Title
1	Cover Sheet, Project Location Map, Vicinity Map
2	Index of Drawings and Project Notes
3	Legend, Abbreviations, Symbols and Designations
4	Stationing and Survey Control 1 of 2
5	TESC Key Maps
6	TESC Legend and Standard Notes
7	67th Ct E Stormwater Improvements TESC Plan
8	Erosion and Sedimentation Control Details
9	Storm Drain Key Map
10	Storm Drain Key Map, Legend, and Standard Notes
11	67th Ct E Stormwater Improvements Plan & Profile 1 of 2
12	67th Ct E Stormwater Improvements Plan & Profile 2 of 2
13	Storm Details 1 of 2
14	Storm Details 2 of 2
15	Pavement/Surface Restoration Key Maps
16	Pavement/Surface Restoration Legend and Standard Notes
17	67th Ct E Pavement Improvements Plan & Profile Plan

- One set of Contract Documents (Package No.1) will be prepared to cover one improvement project identified under Package No.1 section. If the projects need to be broken up into separate construction contracts, additional scope and budget is anticipated to be needed and will be requested in writing through a contract amendment. Alternatively, the City may authorize additional scope and budget through Task 99 – Management Reserve.
- OPCCs prepared by the Consultant represent the Consultant’s best judgment as a design professional familiar with the construction industry. The consultant will make reasonable efforts to provide an accurate OPCC with each submittal. However, the Consultant has no control over the cost of labor, materials, equipment, the Contractor’s methods of determining bid prices, or competitive bidding, market, or negotiating conditions. Accordingly, the Consultant cannot and does not warrant or represent that bids or negotiated prices will not vary from the OPCC or evaluation prepared or agreed to by the Consultant. The OPCCs will contain the following contingencies:
  - 90% Design OPCC will include a 10% contingency.
  - 100% (Check Set) Design OPCC will not include a contingency.
  - Final Design OPCC will not include a contingency.
  - Association for the Advancement of Cost Engineering (AACE) estimating methods and classifications are not required.
  - The City will be responsible for adding budgetary contingencies to the OPCC to address potential change orders or other costs that might impact the City’s budgetary process.
- Conformed documents will not be required for the design phase services.
- Improvements will be made within public Rights-of-Way.
- Special Provisions will be based on the current Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction.
- Construction restoration will consist of hot mix asphalt (HMA) patches within the traveled Right-of-Way and in-kind restoration of surface features outside the traveled Right-of-Way. Information obtained via potholing conducted by the City will be used to inform the depth of the necessary HMA patch. The management reserve includes a contingency should the improvements require a full-thickness replacement of the street surfacing. Written authorization from the City’s project manager will be obtained before full-thickness street restoration drawings are prepared.

### **Task 5 – Package No. 2 Design**

This task will be used to develop the base drawings and contract documents for the stormwater improvements – Package No. 2. The design of the elements, such as erosion control plans and restoration plans will also be completed under this task.

#### **Work Tasks:**

- 5.1 *Develop 30% Design Documents.* Prepare a 30% design package for the project. The 30% Design Drawings will be conceptual and used to identify the pipes and structures intended to be replaced. For the 30% design, the Consultant will:
  - Attend a virtual kickoff meeting with City.
  - Visit the site to perform a field reconnaissance of the existing features and verify the locations

of existing features and conditions related to the design.

- Prepare 30% Contract Drawings showing base drawing information (existing topographic survey, utility locations, and parcel/right-of-way line information), survey stationing and control, and proposed alignment of manholes, storm sewers, catch basins, and existing utilities to be abandoned or removed. No TESC and pavement/surface restoration will be developed as part of the 30% design.
- Obtain a copy of the City's draft of Division 1 and boilerplate documents for the Advertisement for Bids, Instructions to Bidders, the Bid Proposal, the Bid and Performance Bond forms, the Non-Collusion Declaration Form, the Certification of Compliance with Wage Payment Statutes Form, and the Contract Agreement. These documents will include placeholders for dates as necessary. Special contract provisions will not be prepared as part of the 30% design activities and will not be included in the 30% design submittal.
- Prepare a 30% design OPCC using conceptual unit costs based on historical bid results for the proposed upgrades. Detailed quantity takeoffs will not be conducted for the 30% OPCC.
- Submit the 30% design documents to the City for review and comment.
- Participate in a virtual design review meeting with the City to discuss the City's review comments.

5.2 Develop 90% Design Documents. Prepare the 90% Design Contract Documents for the proposed stormwater improvements.

- Address the City's 30% design review comments.
- Obtain and incorporate the City's standard details into the design drawings.
- Prepare the 90% Contract Drawings showing the proposed stormwater improvements, TESC, and surface/pavement restoration drawings. The 90% drawings will also include the necessary project-specific details, notes, and information to address the TESC requirements, surface/pavement restoration plans and requirements, and standard construction and TESC notes.
- Prepare the 90% Contract Specifications excluding Division 1 and boilerplate documents; the City will prepare Division 1 and boilerplate documents and incorporate them into the 90% Specifications.
- Prepare the 90% OPCC showing bid items, quantities, unit costs, and total probable costs for constructing proposed improvements.
- Submit 90% design documents to the City for review and comment.
- Participate in a virtual design review meeting with the City to discuss the City's review comments.

5.3 Develop 100% Design Documents. Prepare 100% design documents for the proposed utility improvements.

- Address the City's 90% design review comments.
- Prepare 100% Contract Drawings. These documents are intended as a final check for the City prior to advertising for bids, and they will be suitable for obtaining bids from Contractors to construct the proposed improvements once the drawings are stamped and signed. It is

anticipated that City comments will be minor.

- Prepare 100% Contract Specifications. These documents are intended as a final check for the City prior to advertising for bids will be suitable to obtain bids from Contractors to construct the proposed improvements once the document is stamped and signed. It is anticipated that City comments will be minor.
- Prepare 100% OPCC showing bid items, quantities, unit costs, and total probable costs for construction of proposed improvements.
- Submit the 100% design documents to the City as a final check set for review and comment. The city's review at this stage is for the purpose of verifying that comments transmitted at 90% completion were incorporated into the 100% documents, as mutually agreed. It is assumed that significant "additional" design comments will not be generated at this stage.
- Because review comments are expected to be minor, no design review meeting will be required to discuss those comments. Instead, the City will email the pertinent comments to the Consultant to address.

5.4 Develop Issued for Bid Documents. Prepare IFB Documents (Bid Documents) for the proposed utility improvements.

- Address the City's 100% design review comments.
- Prepare, stamp, and sign the IFB Contract Drawings that the City may use to solicit bids from Contractors.
- Prepare, stamp, and sign the IFB Contract Specifications that the City may use to solicit bids from Contractors.
- Prepare the final OPCC that may be used to evaluate bids received from Contractors.
- Submit the IFB Documents to the City.

Receivables:

- Provide survey basemap (CAD).
- Provide electronic copies (PDF) of the City's current Standard Details for inclusion in the contract documents.
- Provide electronic copies (MS Word) of the City's standard Bidding Documents, the first draft of Division 1, the current Standard General Special Provisions, and the Standard Construction Notes.
- Research, obtain, and provide copies of all existing easements within the Project area for which a storm pipe or structure is located that will need to be accessed or modified as part of this project's design and/or construction.
- Update the Division 1 and boilerplate documents to make them project-specific.
- The City shall respond with review comments on each submittal as follows:
  - Within one week for the 30% Submittal.
  - Within one week for the 90% Submittal.
  - Within three days for the 100% Submittal.



- Provide a consolidated set of written review comments on each design submittal. The City will provide the consultant with written and consolidated review comments at least three days prior to each design review meeting. Note that the Consultant will continue to work on the next submittal while the City is reviewing in order to meet the tight schedule.

Assumptions:

- Two (2) representatives from the Consultant’s firm will attend the kickoff meeting, site visit, and design review meetings.
- No capacity issues have been identified, and the pipe will be replaced in kind. No stormwater modeling will be performed to determine the conveyance pipe sizing.
- Neither permits nor a Stormwater Site Plan (Drainage Report) are required for this project per the information provided by the City.
- Stormwater improvements will be shown on plan and profile drawings.
- Details for the stormwater improvements will be shown on separate sheets with scales as required.
- The existing and proposed stormwater system will be shown on profiles.
- Drawings will be prepared using AutoCAD/Civil 3D 2020 and meet the following standards:
  - Developed for plotting at full size (22” x 34”) and half size (11” x 17”). Except for the TESC plans, full-size plan view drawings will be drawn at a 1” = 20’ scale. Full-size TESC plans will be drawn at a 1” = 40’ scale. Details generated for the improvements may use other scales as needed.
  - Plan and profile drawing will address approximately 450 lineal feet of improvements per sheet. The plan and profile drawings will have the plan view improvements shown in one viewport along the top half of the sheet with the profile along the bottom half of the sheet in a second viewport. Pertinent notes and details may be located along the right-hand side of the sheet or on separate sheets as appropriate. Profiles will show the existing and proposed utilities, including utilities that will be abandoned in place to identify and resolve potential conflicts.
  - The TESC plans will be plan view only and will address approximately 1,800 lineal feet of improvements per sheet, where feasible. Pertinent notes and details will be added to the sheets as appropriate. No TESC drawings will be provided at the 30% design submittal.
  - The surface/pavement restoration plans will be plan view only and will address approximately 900 lineal feet of improvements per sheet. Pertinent notes and details will be added to the sheets or on new sheets as appropriate. No restoration plan drawings will be provided at the 30% design submittal.
- A total of 30 design drawings will be provided. A preliminary drawing list was prepared for scoping purposes and is presented in the table below.

<b>Drawing No.</b>	<b>Title</b>
1	Cover Sheet, Project Location Map, Vicinity Map
2	Index of Drawings and Project Notes
3	Legend, Abbreviations, Symbols and Designations
4	Stationing and Survey Control 1 of 2
5	Stationing and Survey Control 2 of 2



- Association for the Advancement of Cost Engineering (AACE) estimating methods and classifications are not required.
- The City will be responsible for adding budgetary contingencies to the OPCC to address potential change orders or other costs that might impact the City's budgetary process.
- Conformed documents will not be required for the design phase services.
- Improvements will be made within public rights of way or within existing or new easements.
- Special Provisions will be based on the current Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction.
- Construction restoration will consist of hot mix asphalt (HMA) patches within the traveled Right-of-Way and in-kind restoration of surface features outside the traveled Right-of-way. Information obtained via potholing conducted by the City will be used to inform the depth of the necessary HMA patch. The management reserve includes a contingency should the improvements require a full-thickness replacement of the street surfacing. Written authorization from the City's project manager will be obtained before full-thickness street restoration drawings are prepared.

#### **Task 6 – Bid Support (Packages No.1 and 2)**

This task will be used to assist the City in obtaining bids from contractors to construct the proposed improvements.

##### Work Tasks:

- 6.1 Respond to Bidders' Questions. During the Bid Advertisement Period, develop written responses to bidder questions when requested by the City.
- 6.2 Prepare Addendums. Assist the City in preparing up to two (2) addendums to the Bid Documents for Package No. 1 and 2 each.

##### Receivables:

- Provide consolidated bid results on a bid tab spreadsheet.
- Provide bidder questions that need the Consultant's response.

##### Assumptions:

- The City will administer the advertisement and distribution of the Bid/Contract Documents to prospective bidders.
- The City will handle aspects of the bid opening and the Consultant will not attend the bid opening.

##### Deliverables:

- One (1) electronic copy of (PDF format) of written responses to bidder questions for each package.
- One (1) electronic copy (PDF format) of an addendum to the Bid Documents for each package.

## **Task 99 – Management Reserve**

Due to unknown site conditions in advance of preliminary design explorations, the Consultant recommends that the City establish an owner-controlled 12% management reserve for design budgeting purposes. This may include geotechnical explorations as described in Exhibit B-1. Should unanticipated project efforts become necessary to complete the development of the design package, the Consultant would communicate the additional additional-scope work required and propose the management reserve be used to support those efforts without project delays. Request(s) and authorization(s) of management reserve funds will be agreed upon in writing via email in advance of the work.

## **Services not Included**

The following services are not a part of this agreement. If the City chooses to add one or more of the following services to this Scope of Design Services, then a contract amendment that addresses the additional required compensation, as well as an appropriate extension of time, will be necessary. These excluded services include, but are not limited to the following:

- Utility locates topographic survey, and basemap preparation.
- Cultural resources services.
- Wetland delineation, critical areas mapping, and associated reporting.
- Environmental services.
- Permitting services and investigations.
- Stormwater Site Plan preparation services.
- Agency coordination (including but not limited to Pierce County, WSDOT).
- Public outreach services.
- ROE and Easement acquisition.
- Potholing.
- Distributing bid/contract document sets to prospective bidders, receiving bids, preparing the bid tabulation, reviewing apparent low bidder references, and preparing recommendations for contract award.
- Development of design drawings for replacement of sidewalks, curb ramps, and driveway approaches except as described and budgeted above.

Construction phase services, which occur after bid opening, are not included in the scope and budget for the design phase. Engineering services during construction will be negotiated later with the City and will require a contract amendment.

## **Estimated Fee**

The budget for this Scope of Services is attached as Exhibit B and stated to be \$437,654. It includes a 10 percent markup on sub-consultant services. The Consultant may reallocate the budget between tasks, except contingent tasks, using the Change Management Log to identify and track these transfers.

The Consultant will review the scope and budget status during the preparation of monthly status reports. If scope and budget issues are identified, the Consultant will notify the City in a timely manner.

## **Schedule**

The preliminary design phase project milestones are listed below; a detailed baseline schedule will be developed after NTP. The proposed project schedule allows for approximately eight (8) months between NTP and the final contract documents deliverable. This schedule shall be equitably adjusted as the project progresses, allowing for changes in scope or delays beyond the Consultant's control, including but not limited to the time required to obtain rights of entry, easements, and permits.

The following Package No. 1 milestone targets are expected:

- NTP – July 15, 2024.
- Topographic and Utility Locates (to be performed by others) – July 15, 2024.
- 90% Design – August 9, 2024.
- 100% Design – August 28, 2024.
- Issued for Bid – September 11, 2024.
- Bid Support and Contractor Contract Award – December 31, 2024.

The following Package No. 2 milestone targets are expected:

- NTP – July 15, 2024.
- 30% Design – September 27, 2024.
- 90% Design – November 15, 2024.
- 100% Design – December 27, 2024.
- Issued for Bid – February 7, 2025.
- Bid Support and Contractor Contract Award – March 2025.

## **Exhibits**

- Exhibit A-1: Figure 1 – SR-410 208<sup>th</sup> to 211<sup>th</sup> Swale/Conveyance Improvements (Expanded Capital Project 1-7 Fred Meyer At Tall Firs).
- Exhibit A-2: Figure 2 – 67<sup>th</sup> St E/67<sup>th</sup> Ct E Stormwater Improvements.
- Exhibit A-3: Figure 3 – S. Island Dr. Conveyance – Inlet Island Stormwater Improvements.
- Exhibit B: Project Budget
  - Exhibit B-1: Sub-consultant Fee Estimates
    - Exhibit B-1A: HWA Fee Estimate

**EXHIBIT A-1**

**Figure 1 – SR-410 208th to 211th Swale/Conveyance Improvements (Expanded Capital Project 1-7 Fred Meyer At Tall Firs).**



Approx. Scale 1 in=126 feet

FIGURE 1 - SR-410 208th to 211th SWALE/CONVEYANCE IMPROVEMENTS (EXPANDED CAPITAL PROJECT 1-7 FREDMEYER AT TALL FIRS)

**EXHIBIT A-2**

**Figure 2 – 67th St E/67th Ct E Stormwater Improvements.**



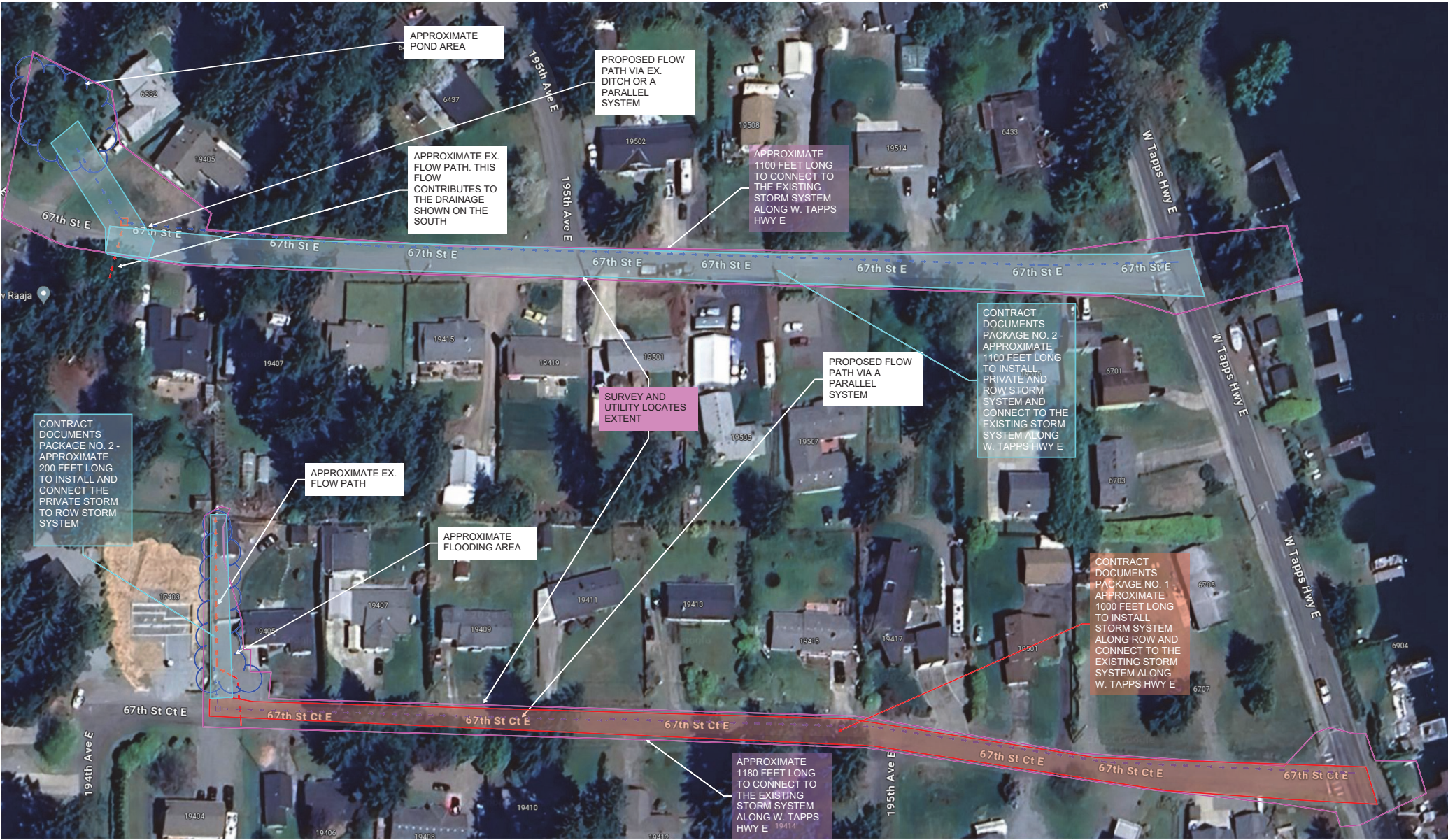


FIGURE 2 - 67 TH ST E/67TH ST CT E STORMWATER IMPROVEMENTS

Approx. Scale 1 in= 68 feet

**EXHIBIT A-3**

**Figure 3 – S. Island Dr. Conveyance – Inlet Island Stormwater Improvements.**



FIGURE 3 - S. ISLAND DR. CONVEYANCE - INLET ISLAND STORMWATER IMPROVEMENTS

◀ 1 IN = 86 FEET ▶  
 APPROX. SCALE

**EXHIBIT B**

**Project Budget**

**Exhibit B - Project Budget**

**City of Bonney Lake  
Stormwater Improvements**

Task	Description	Principal in Charge/QA/QC		Project Manager/Project Engineer		Staff Engineer		GIS Technician		CAD		Clerical Support		Subconsultants		TOTAL	
		\$270		\$210		\$155		\$150		\$168		\$135		KPG+APS	HWA	Hours	Cost
		Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost				
<b>1</b>	<b>Project Management</b>																
1.1	Project Initiation and Work Plan	10	\$ 2,700	40	\$ 8,400	0	\$ -	0	\$ -			8	\$ 1,080			58	\$ 12,180
1.2	Client and Team Coordination	1	\$ 270	40	\$ 8,400	0	\$ -	0	\$ -			4	\$ 540			45	\$ 9,210
1.3	Monthly Invoice and Progress Reports	0	\$ -	8	\$ 1,680	0	\$ -	0	\$ -			16	\$ 2,160			24	\$ 3,840
1.4	Quality Assurance/Quality Control (QA/QC) Program	54	\$ 14,553	0	\$ -	0	\$ -	0	\$ -			0	\$ -			54	\$ 14,553
	<b>Sub-Total</b>	<b>65</b>	<b>\$ 17,523</b>	<b>88</b>	<b>\$ 18,480</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>			<b>28</b>	<b>\$ 3,780</b>			<b>181</b>	<b>\$ 39,783</b>
<b>2</b>	<b>Data Collection and Review</b>																
2.1	Information Request and Review	0	\$ -	6	\$ 1,260	12	\$ 1,860	0	\$ -			0	\$ -			18	\$ 3,120
2.2	Site Visit	0	\$ -	4	\$ 840	4	\$ 620	0	\$ -			0	\$ -			8	\$ 1,460
	<b>Sub-Total</b>	<b>0</b>	<b>\$ -</b>	<b>10</b>	<b>\$ 2,100</b>	<b>16</b>	<b>\$ 2,480</b>	<b>0</b>	<b>\$ -</b>			<b>0</b>	<b>\$ -</b>			<b>26</b>	<b>\$ 4,580</b>
<b>3</b>	<b>Geotechnical Site Reconnaissance</b>																
3.1	Conduct Site Reconnaissance	0	\$ -	6	\$ 1,260	0	\$ -	0	\$ -			0	\$ -		\$ 17,678	6	\$ 18,938
	<b>Sub-Total</b>	<b>0</b>	<b>\$ -</b>	<b>6</b>	<b>\$ 1,260</b>	<b>0</b>	<b>\$ -</b>	<b>0</b>	<b>\$ -</b>			<b>0</b>	<b>\$ -</b>		<b>\$ 17,678</b>	<b>6</b>	<b>\$ 18,938</b>
<b>4</b>	<b>Package No. 1 Design</b>																
4.1	Attend Kickoff Meeting	0	\$ -	3	\$ 630	1	\$ 155	0	\$ -			0	\$ -			4	\$ 785
4.2	Attend Design Coordination Meetings	0	\$ -	6	\$ 1,260	2	\$ 310	0	\$ -			0	\$ -			8	\$ 1,570
4.2	Develop 90% Design Documents	22	\$ 5,954	173	\$ 36,241	120	\$ 18,554	0	\$ -	194	\$ 32,659	14	\$ 1,944			523	\$ 95,351
4.3	Develop 100% Design Documents	2	\$ 463	13	\$ 2,819	9	\$ 1,443	0	\$ -	15	\$ 2,540	1	\$ 151			41	\$ 7,416
4.4	Develop IFB Documents	1	\$ 198	6	\$ 1,208	4	\$ 618	0	\$ -	6	\$ 1,058	0	\$ 65			17	\$ 3,148
	<b>Sub-Total</b>	<b>25</b>	<b>\$ 6,615</b>	<b>201</b>	<b>\$ 42,158</b>	<b>136</b>	<b>\$ 21,080</b>	<b>0</b>	<b>\$ -</b>	<b>216</b>	<b>\$ 36,258</b>	<b>16</b>	<b>\$ 2,160</b>			<b>593</b>	<b>\$ 108,270</b>
<b>5</b>	<b>Package No. 2 Design</b>																
6.1	Develop 30% Design Documents	9	\$ 2,381	133	\$ 27,830	41	\$ 6,371	0	\$ -	142	\$ 23,890	5	\$ 648			329	\$ 61,120
6.2	Develop 90% Design Documents	18	\$ 4,763	265	\$ 55,661	82	\$ 12,741	0	\$ -	284	\$ 47,779	10	\$ 1,296			659	\$ 122,240
6.3	Develop 100% Design Documents	2	\$ 556	31	\$ 6,494	10	\$ 1,486	0	\$ -	33	\$ 5,574	1	\$ 151			77	\$ 14,261
6.4	Develop IFB Documents	1	\$ 238	13	\$ 2,783	4	\$ 637	0	\$ -	14	\$ 2,389	0	\$ 65			33	\$ 6,112
	<b>Sub-Total</b>	<b>29</b>	<b>\$ 7,938</b>	<b>442</b>	<b>\$ 92,768</b>	<b>137</b>	<b>\$ 21,235</b>	<b>0</b>	<b>\$ -</b>	<b>474</b>	<b>\$ 79,632</b>	<b>16</b>	<b>\$ 2,160</b>			<b>1098</b>	<b>\$ 203,733</b>
<b>6</b>	<b>Bid Support (Packages No. 1 and 2)</b>																
6.1	Respond to Bidders' Questions	4	\$ 1,080	12	\$ 2,520	0	\$ -	0	\$ -	0	\$ -	0	\$ -			16	\$ 3,600
6.2	Prepare Addendums	2	\$ 540	8	\$ 1,680	16	\$ 2,480	0	\$ -	40	\$ 6,720	0	\$ -			66	\$ 11,420
	<b>Sub-Total</b>	<b>6</b>	<b>\$ 1,620</b>	<b>20</b>	<b>\$ 4,200</b>	<b>16</b>	<b>\$ 2,480</b>	<b>0</b>	<b>\$ -</b>	<b>40</b>	<b>\$ 6,720</b>	<b>0</b>	<b>\$ -</b>			<b>82</b>	<b>\$ 15,020</b>
<b>99</b>	<b>Management Reserve</b>																
99.1	Management Reserve																\$ -
	<b>Sub-Total</b>																<b>\$ 46,830</b>
	<b>Total Direct Labor</b>	<b>125</b>	<b>\$ 33,696</b>	<b>767</b>	<b>\$ 160,965</b>	<b>305</b>	<b>\$ 47,275</b>	<b>0</b>	<b>\$ -</b>	<b>730</b>	<b>\$ 122,610</b>	<b>60</b>	<b>\$ 8,100</b>	<b>\$ -</b>	<b>\$ 17,678</b>	<b>1986</b>	<b>\$ 437,154</b>
	<b>Other Direct Costs (Travel/Mileage)</b>																\$ 500
<b>TOTAL: \$ 437,654</b>																	

**EXHIBIT B-1**

**Sub-consultant Fee Estimates**

**EXHIBIT B-1A**

**HWA Fee Estimate**

May 10, 2024  
HWA Proposal No. 2024-P150-21

BHC Consultants, LLC.  
1601 5<sup>th</sup> Avenue, Suite 500  
Seattle, Washington 98101

Attention: Ms. Kranti Maturi, Project Manager

**Transmitted via email to:** *Kranti.Maturi@bhccconsultants.com*

**Subject: PROPOSAL FOR GEOTECHNICAL ENGINEERING SERVICES  
Bonney Lake Stormwater Improvements  
Bonney Lake, Washington**

Dear Ms. Maturi:

HWA Geosciences Inc. (HWA) is pleased to submit this proposal for geotechnical engineering services to BHC Consultants, LLC, (BHC; prime engineer) to support design of the City of Bonney Lake (City; project owner) Stormwater Improvements project in Bonney Lake, Washington (site).

## **PROJECT BACKGROUND**

The City proposes to replace or improve existing stormwater systems at the following locations within the City:

- Project Area 1: SR-410 208<sup>th</sup> to 211<sup>th</sup> Swale/Conveyance Improvements (Expanded Capital Project 1-7 Fred Meyer at Tall Firs).
- Project Area 2: 67<sup>th</sup> St E/67<sup>th</sup> Ct E Stormwater Improvements.
- Project Area 3: S Island Dr. Conveyance – Inlet Island Stormwater Improvements.

Stormwater improvements for Project Area 1 include approximately 1,100 linear feet (ft) of swale/culvert construction along the south side of SR-410, between 208<sup>th</sup> Avenue E and 211<sup>th</sup> Avenue E. This will include connecting the swale to an existing culvert at the intersection of SR-410 and 211<sup>th</sup> Ave E, and minor grading and cleanup work on approximately 400 ft of swale downstream of the 211<sup>th</sup> Ave E culvert. The scope excludes capacity evaluation, existing culvert modifications, and hydrologic and hydraulic modeling.



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Stormwater improvements for Project Area 2 include installing approximately 2,280 linear ft of storm pipe along 67<sup>th</sup> St E and 67<sup>th</sup> Ct E to collect overflow water from an existing pond located on a private property (6532 194<sup>th</sup> Ave E), and diverting ponding water at a private property (19405 67<sup>th</sup> St. E), conveying it along 67<sup>th</sup> St. E and 67<sup>th</sup> Ct. E, and connecting to an existing storm system along W Tapps Hwy E at two locations. The scope does not include existing road-side ditch and culvert improvements, which will continue to be maintained by the City. The scope excludes capacity evaluation of the existing storm system along W Tapps Hwy E and assumes that no in-water work will be performed.

Stormwater improvement for Project Area 3 include installing approximately 360 feet of storm pipe to replace an existing open conveyance between two private properties (6362 S. Island Dr. E and 6364 S. Island Dr. E) and connecting the new storm pipe to an existing culvert system that discharges into Lake Tapps. The scope excludes capacity evaluation of the existing storm system, culvert modifications, and hydrologic and hydraulic modeling. The scope assumes that no in-water work will be performed.

HWA understands that the stormwater conveyance system improvements will generally be located 5 to 10 ft bgs or less.

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## **SCOPE OF SERVICES**

The following sections present HWA's proposed scope of services to support design of the stormwater conveyance system replacements and improvements.

### **Task 1: Site Reconnaissance**

HWA will conduct a site reconnaissance for each project. The following tasks will be included:

- Compile and review readily available geologic and geotechnical subsurface data for each project site.
- Complete a site reconnaissance for each project site. This will include visiting each site, documenting site conditions, and determining site exploration needs.

### **Task 2 - Optional: Geotechnical Investigation**

Based on the results of Task 1: Site Reconnaissance and at the City's option, HWA can conduct a geotechnical field investigation program for each project. The following tasks will be included in the programs:

- Develop a Geotechnical Subsurface Exploration Plan that identifies the type, location, and extent of proposed field explorations. This plan will also be used to assist in development of traffic control plans.
- Prior to beginning the field exploration programs, mark the proposed exploration locations and arrange for public utility locates using the Washington State Utility Notification Center.
- Because explorations will be located within the travel lanes or shoulders of publicly owned streets, HWA will coordinate with the City of Bonney Lake to obtain right-of-way/traffic control permits. HWA will coordinate a traffic control subcontractor to provide appropriate traffic control personnel and devices when working within public right-of-way.
- Complete explorations along each project alignment, as presented below in Table 1. Borings will be completed using the hollow-stem auger drilling method by a drilling contractor under subcontract to HWA, and hand tools by a member of HWA's engineering group. Samples will be collected at 2.5 or 5 ft intervals using the Standard Penetration Test procedure when collecting samples in borings. Grab samples will be collected when changes in soil types are observed and at the field engineer's discretion in the hand tool explorations. Groundwater levels (if observed) will be noted at the time of exploration.
- Prepare summary exploration logs and assign laboratory testing on selected soil samples to aid in classifying site soils. HWA has included budget for the laboratory testing program presented in Table 1.

**Table 1: Proposed Field Explorations and Laboratory Testing**

Project	Field Explorations	Laboratory Testing
Project Area 1	Six 10-ft borings along the stormwater conveyance replacement alignment. Borings will be spaced approximately every 500 ft for the stormwater conveyance line.	Six moisture content and six grain size distribution or Atterberg limits tests.
Project Area 2	One 15-ft boring will be completed along the stormwater conveyance replacement alignment.	Two moisture content and one grain size distribution or Atterberg limits tests.
Project Area 3	One day of hand tool explorations by an HWA field representative along the stormwater conveyance improvement alignment.	Three moisture content and three grain size distribution or Atterberg limits tests.

- Participate in conference calls with the BHC and City design team.

**Task 3: Geotechnical Engineering Analyses and Reporting**

Information from the field investigations will be analyzed by a geotechnical engineer from HWA to develop geotechnical engineering conclusions and recommendations for design and construction of the proposed stormwater conveyance system improvements. The results of HWA’s field explorations, laboratory testing, engineering analyses, and geotechnical conclusions and recommendations will be summarized in a single draft geotechnical report that addresses the three project alignments. The draft geotechnical report will include the following:

- Site plans identifying the approximate locations of the explorations, if Task 2 is completed.
- Summary exploration logs and the results of the geotechnical laboratory tests completed by HWA, if Task 2 is completed.
- A summary table of pavement thicknesses observed at exploration locations, if Task 2 is completed.
- A discussion of near surface soil and groundwater conditions along each project alignment, if Task 2 is completed.
- An evaluation of the moisture sensitivity of soils along each project alignment, if Task 2 is completed.
- Conclusions regarding the anticipated need to dewater temporary excavations, including a discussion related to potential dewatering methods that may be used if it is anticipated that dewatering will be required.
- Recommendations related to trench excavation and temporary shoring.
- Recommendations related to maximum allowable slopes for temporary excavations.

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- Recommendations related to retaining wall(s) for swale construction within Project Area 1.
- Recommendations for pipe foundation support, pipe bedding, and initial backfill materials.
- Recommended trench backfill compaction criteria.
- An evaluation of the suitability of excavated soil for use as trench backfill.
- Recommendations for monitoring and testing during construction.
- After review and comments by BHC, HWA will issue a final geotechnical report addressing the comments.

## **ASSUMPTIONS**

HWA made the following assumptions when preparing this scope of services and cost estimate:

- No more than two hours of a Senior Geotechnical Engineer's time for conference calls between BHC and City design team.
- All field explorations for Project Areas 1 and 3 will be performed within the City of Bonney Lake right-of-way. The fees for the City of Bonney Lake right-of-way permit and traffic control permit applications are assumed to not exceed \$500.
- The field exploration for Project Area 2 will likely be performed within an adjacent property. Right-of-entry will be obtained by others.
- The geotechnical field investigation will be conducted during daylight workdays and hours, with at least 8 hours available per day for on-street work.
- The geotechnical field investigations for Project Areas 1, 2, and 3 will be completed under one mobilization.
- The soil and groundwater along the project alignments are assumed to be free of contamination.
- Traffic control and flagging, in the form of a temporary 1-lane closure, will be required for the proposed borings. HWA will be responsible for preparing Traffic Control Plans (TCP). TCPs will be developed in accordance with WSDOT standard TCPs. TCPs will be submitted to the City of Bonney Lake for approval and permitting.
- Utility locates, completed via the Washington Utility Locate Center, will be comprehensive and accurate enough to allow for reliable and safe location of borings.
- The City of Bonney Lake will allow the pavement at the boring locations to be patched with fast-setting concrete.
- Portland cement concrete pavement is not present below the asphalt concrete pavement at proposed exploratory boring locations (i.e., no concrete coring will be required).

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- Maximum trench depths for the proposed stormwater improvements will be 5 ft bgs or less.
- Piezometers will not be installed in any of the exploratory borings; however, groundwater levels will be noted at time of drilling, if observed.
- Upon completion of sampling and logging, boreholes will be decommissioned in accordance with the requirements of WAC 173-160.
- Excess cuttings from the exploratory borings will be properly disposed of off-site.
- HWA will keep all soil samples collected during these investigations until issuance of the draft geotechnical report. Prior to disposal, HWA will inform BHC and BHC may direct HWA to store the samples, to dispose of the samples, or to deliver the samples to the City. If requested, HWA will store the samples for the City at a rate of \$1.00/sample/month (\$25.00/month minimum charge). HWA can deliver the samples to the City for a maximum charge of \$100. HWA will notify BHC of the monthly rate for storage prior to disposal or in-house storage. The proposed project budget presented below does not include the cost of sample storage.

## PROJECT BUDGET

HWA estimates that the scope of services proposed herein will require a budget of **\$41,689** to accomplish the geotechnical engineering tasks proposed herein, including the optional geotechnical field exploration task, as detailed on the attached project cost estimate spreadsheet. HWA will not exceed the above cost estimate without your prior authorization. However, if during the evaluation of the available data unanticipated subsurface conditions are revealed that would require a level of effort beyond the scope of study, HWA will contact you immediately to discuss any necessary modifications to our scope of services and/or budget estimate. A breakdown of the cost estimate for each project and the optional geotechnical field investigation task is provided in Table 2.

Task 5.1 plus 10%  
sub-consultant services fee

**Table 2:** Fee Estimate Breakdown

Task	Estimated Fee
Task 1: Site Reconnaissance	\$5,256
Task 2 – Optional: Geotechnical Field Investigation	\$25,618
Task 3: Engineering Analyses and Reporting	\$10,815
<b>Total Estimated Fee (including optional task)</b>	<b>\$41,689</b>

The budgets presented in this proposal reflect an estimate based on our current understanding of the project requirements for a scope of work developed from the information provided. HWA

Memorandum

May 10, 2024  
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reserves the right to transfer hours and budgeted dollars between tasks to satisfy project requirements. Our budget also reflects estimated direct costs to the project for testing, drilling, equipment rental, etc. HWA may also transfer funds allocated for direct costs to professional/technical hours or vice versa, to satisfy project requirements.



Thank you for the opportunity to provide this proposal for geotechnical engineering services. Should you have any questions regarding this proposal, or require additional services, please contact us at your convenience. If you agree with the scope of services and budget described herein, please authorize by preparing a subconsultant services agreement consistent with previous agreements between BHC and HWA.

Sincerely,

**HWA GEOSCIENCES INC.**

Handwritten signature of Steven R. Wright in blue ink.

Steven R. Wright, P.E.  
Geotechnical Engineer, Vice President

Handwritten signature of Tyler Cartwright in black ink.

Tyler Cartwright, E.I.T.  
Geotechnical Engineer

Enclosures: Project Cost Estimate

TGC/SRW

**Scope of Work**

Refer to proposal dated May 10, 2024 for this estimate.

**ESTIMATED HWA LABOR:**

WORK TASK DESCRIPTION	PERSONNEL & 2024 BILLING RATES									TOTAL HOURS	TOTAL AMOUNT
	Principal IX \$345.00	Geotechnical Engineer VIII \$315.00	Geotechnical Engineer V \$210.00	Geotechnical Engineer II \$145.00	Geologist III \$140.00	Geologist II \$105.00	Administrative Support \$120.00	CAD \$155.00	Contracts Administration \$165.00		
Project Setup and Coordination			2						2	4	\$750
Task 1: Site Reconnaissance										0	\$0
Desktop Review			4	12						16	\$2,580
Site Visit			2	10						12	\$1,870
Task 2: Field Investigation										0	\$0
Utility Locates				8						8	\$1,160
Prepare ROW/TCP Application			1	8						9	\$1,370
Geotechnical Field Investigation			2	30						32	\$4,770
Boring Log Preparation			1	2						3	\$500
Task 3: Engineering and Reporting										0	\$0
Engineering Analyses			3	6				4		13	\$2,120
Draft Report	4		6	20				2		32	\$5,850
Final Report	1		2	4						7	\$1,345
Meetings			2							2	\$420
Project Management			4						2	6	\$1,080
<b>TOTAL LABOR COSTS</b>	5	0	29	100	0	0	2	6	2	144	<b>\$23,815</b>

**LABORATORY TEST SUMMARY:**

Test	Est. No Tests	Unit Cost	Total Cost
Moisture Content	11	\$25.00	\$275
Grain Size Distribution	5	\$135.00	\$675
Atterberg Limits (plasticity index)	5	\$260.00	\$1,300

**LABORATORY TOTAL:**

**\$2,250**

**ESTIMATED DIRECT EXPENSES:**

Driller Expenses	\$10,900
Traffic Control	\$4,000
ROW Permit	\$500
Mileage IRS Rate	\$224
<b>TOTAL DIRECT EXPENSES:</b>	<b>\$15,624</b>

**PROJECT TOTALS AND SUMMARY:**

Total Labor	\$23,815
Laboratory Testing	\$2,250
Direct Expenses	\$15,624
<b>GRAND TOTAL:</b>	<b>\$41,689</b>

Notes/Assumptions

1. All costs are estimated, and may be increased or decreased within the limits of the total budget at the discretion of HWA's project manager.