



City Council Meeting Minutes

Vancouver City Hall | Council Chambers | 415 W. 6th St.
PO Box 1995 | Vancouver, WA 98668-1995
cityofvancouver.us

Anne McEnery-Ogle, Mayor • Bart Hansen • Ty Stober • Erik Paulsen • Sarah J. Fox • Diana H. Perez • Kim D. Harless

April 15, 2024

WORKSHOPS

Vancouver City Hall - Council Chambers - 415 W 6th Street, Vancouver WA

WORKSHOPS: 3:00-6:00 p.m.

Vancouver City Hall - Council Chambers - 415 W 6th Street, Vancouver WA

Workshops were conducted in person in the Council Chambers of City Hall. Members of the public were invited to view the meeting in person, via the live broadcast on www.cvtv.org and CVTV cable channels 23 or HD 323, or on the City's Facebook page, or www.facebook.com/VancouverUS.

View the CVTV video recording, including presentations and discussion, for workshops at:

https://www.cvtv.org/vid_link/36391?startStreamAt=0&stopStreamAt=10618

Supporting Small Business

(Approximately 1 hour)

Chris Harder, Deputy Economic Development Director; 360-487-7934

Summary

Staff led Council through a discussion of Supporting Small Business.

Councilmember Fox was late to the workshop. Councilmember Perez was absent from the workshop.

Tiered Rates/Low Income Assistance

(Approximately 1 hour, to immediately follow previous workshop)

Chris Malone, Public Works Finance & Asset Manager, 360-487-7711

Summary

Staff led Council through a discussion of Tiered Rates and Low-Income Assistance.

Councilmember Perez was absent from the workshop.

Charter Review Committee Interim Update

(Approximately 1 hour, to immediately follow previous workshop)

Aaron Lande, Program and Policy Development Manager, 360-487-8612

Summary

Staff led Council through a discussion of the Charter Review Committee Interim Update.

Councilmember Perez was absent from the workshop.

COUNCIL DINNER/ADMINISTRATIVE UPDATES (6:00-6:30 p.m.)

COUNCIL REGULAR MEETING

This meeting was conducted as a hybrid meeting with in person and remote viewing and participation over video conference utilizing a GoToMeeting platform. Members of the public were invited to view the meeting in person, via the live broadcast on www.cvtv.org and CVTV cable channels 23 or HD 323, or on the City's Facebook page, www.facebook.com/VancouverUS. Public access and testimony on Consent Agenda items and under the Community Forum were also facilitated in person and via the GoToMeeting conference call.

Vancouver City Council meeting minutes are a record of the action taken by Council. To view the CVTV video recording, including presentations, testimony and discussion, for this meeting please visit: https://www.cvtv.org/vid_link/36393?startStreamAt=0&stopStreamAt=3303

Electronic audio recording of City Council meetings are kept on file in the office of the City Clerk for a period of six years.

Pledge of Allegiance

Call to Order and Roll Call

The regular meeting of the Vancouver City Council was called to order at 6:30 p.m. by Mayor McEnerny-Ogle. This meeting was conducted as a hybrid meeting, including both in person and remotely over video conference.

Present: Councilmembers Harless, Fox, Paulsen, Stober, Hansen, and Mayor McEnerny-Ogle

Absent: Councilmember Perez

Motion by Councilmember Hansen, seconded by Councilmember Harless, and approved unanimously to excuse Councilmember Perez.

Approval of Minutes

Minutes - April 1, 2024

Motion by Councilmember Hansen, seconded by Councilmember Paulsen, and carried unanimously to approve the meeting minutes of April 1, 2024.

Proclamations: National Preservation Month; Child Abuse Prevention Month

Mayor McEnerny-Ogle read and presented a proclamation to Bradley Richardson, Executive Director of the Clark County Historical Museum, proclaiming April 2024, as National Preservation Month.

Mayor McEnerny-Ogle read and presented a proclamation to Amy Russell, Executive Director of the Arthur D. Curtis Children's Justice Center, proclaiming April 2024, as Child Abuse Prevention Month.

Community Communications

Mayor McEnerny-Ogle opened Community Communication and received testimony from the following community members regarding any matter on the agenda not scheduled for a Public Hearing:

- Kimberlee Goheen Elbon, La Center, WA
- Carmen DeLeon, Vancouver
- Nickeia Hunter, Vancouver

There being no further testimony, Mayor McEnerny-Ogle closed Community Communication.

Consent Agenda (Items 1-7)

Motion by Councilmember Stober, seconded by Councilmember Paulsen, and carried unanimously to approve items 1-7 on the Consent Agenda.

1. **Bid Award - Fircrest Neighborhood Improvements for Water, Sewer,**

and Streets, per ITB 24-21

Staff Report: 074-24

This project will install water, sewer, and transportation improvements within an area of the Fircrest Neighborhood. The project limits are shown on the attached map. The predominant work will be to install a large diameter water transmission main in Northeast 112th Avenue, Northeast 9th Street, and through Haagen park. These water utility improvements are part of a series of larger water transmission main projects identified in the City of Vancouver's 2015 Comprehensive Water System Plan as necessary to supply an adjacent water tower and convey additional water into areas with increasing demand. In addition to the water utility work this project will; extend sewer in Northeast 9th Street to twelve homes currently on septic, upgrade and install new sidewalk and curb ramps along Northeast 9th Street, upgrade crosswalks with the addition of a signalized crosswalk for safety near the Fircrest Elementary School, upgrade traffic calming devices, and repave Northeast 9th Street from curb to curb once all the utility work has been completed.

Coordination within Public Works to meet road, pedestrian, and utility infrastructure needs led to a collaborative effort in developing a single project that provides several infrastructure improvements achieving multiple goals with benefits to the community. There have been several public outreach efforts to surrounding residents during the development of the project through neighborhood meetings, social media, and mailings. City engineers learned of several neighborhood concerns and were able to tailor much of the project around them. For instance, after hearing concerns about construction of the new water main through the forested area of Haagen Park, an alternative project route was chosen that is supported by Parks and Urban Forestry to minimize tree impacts and improve the existing pedestrian path through the west side of Haagen Park.

On March 26, 2024, the City received two bids for the subject project. The bids are as follows:

SUMMARY OF BIDS	
BIDDER	AMOUNT
<i>Tapani, Inc., Battle Ground, Washington</i>	<i>\$6,851,128.55</i>
<i>Nutter Corporation, Vancouver, Washington</i>	<i>\$8,101,651.10</i>
<i>Engineers' Estimate</i>	<i>\$8,950,000</i>

Tapani, Incorporated of Battle Ground, Washington was the lowest responsive and responsible bidder. Tapani, Incorporated has successfully completed at least three similar construction projects of this size and scope within the last ten years.

Tapani, Incorporated intends to meet the minimum required Apprenticeship Utilization goal of 6% by utilizing 400 apprenticeship hours out of the total 6050 project hours projected.

Request: Award a construction contract for the Fircrest Neighborhood

Improvements for Water, Sewer, and Streets project to the lowest responsive and responsible bidder, Tapani, Incorporated of Battle Ground, Washington at their bid price of \$6,851,128.55, which includes Washington State sales tax, and authorize the City Manager or designee to execute the same.

Michelle Henry, Senior Civil Engineer, 360-487-7155

Motion approved the request.

2. Bid Award - 2024 Joint Agency Slurry Seal Project

Staff Report: 075-24

The City of Vancouver and Clark County have solicited a joint bid for each agency's 2024 Joint Agency Slurry Seal Project. Each agency will execute a separate contract for their part of the work.

On March 26, 2024, the City received five bids for the 2024 Joint Agency Slurry Seal Project. Two bidders were non-responsive. The bids ranged from \$669,471.16 to \$1,015,160.52. The low bidder was responsive. The estimated 2024 City of Vancouver part of the work is \$412,030.00.

SUMMARY OF BIDS		
BIDDER	VANCOUVER'S BID	COMBINED BIDS
<i>Blackline, Inc, Vancouver, WA</i>	<i>\$412,030.00</i>	<i>\$669,471.16</i>
<i>Doolittle Construction, LLC, Sacramento, CA</i>	<i>\$518,135.80</i>	<i>\$858,858.00</i>
<i>One Way Trigger, LLC, Sacramento, CA</i>	<i>\$591,810.00</i>	<i>\$1,015,160.52</i>
<i>Engineers' Estimate</i>	<i>\$440,000.00</i>	<i>\$749,285.76</i>

The engineer's estimate of \$440,000.00, which covers the City's portion of the cost, is below the \$500,000.00 threshold requirement set for apprenticeship utilization goals. No apprenticeship utilization goals are required for this project.

Request: On April 15, 2024, award a construction contract for the 2024 Joint Agency Slurry Seal Project to the lowest responsive and responsible bidder, Blackline, Inc, of Vancouver, Washington, at their bid price of \$412,030.00, which includes Washington State sales tax, and authorize the City Manager, designee, to execute the same.

Chris Sneider, Senior Civil Engineer, 360-487-8239

Motion approved the request.

3. Body Armor Purchase for Vancouver Police Department

Staff Report: 076-24

Body armor is associated with vests, helmets, gas masks, and other associated equipment to provide ballistic protection to the vital organs in the torso and

head. Each sworn officer is issued a ballistic vest system, helmet, and gas mask. VPD replaces all ballistic helmets for officers as the helmets near their five-year warranty expiration date. Southwest Washington SWAT Team also utilizes this contract to purchase and replace body armor.

VPD ballistic helmets are expiring in May 2024 and need to be replaced as well as gas masks and associated equipment. VPD would like to continue to piggyback on Sourcewell contract #080922 with Safeware. Purchases are expected to exceed the current \$300,000 threshold, requiring Council Approval. The current contract has been liquidated approximately \$298,571.71 and has a November 7, 2026 expiration with the option to extend one additional year. Increasing this contract threshold to a maximum of \$1,000,000 will enable Vancouver Police Department to continue to purchase body armor while taking advantage of the Sourcewell Contract's competitive pricing.

Request: Authorize the City Manager, or designee, to continue to purchase body armor from Sourcewell under Contract #080922, up to a maximum of \$1,000,000 through November 7, 2027.

Jeff Mori, Police Chief, 360-487-7498

Motion approved the request.

4. Capital Facilities Lease Agreement - City of Vancouver and Washington State Department of Transportation

Staff Report: 077-24

The City of Vancouver's East Precinct facility currently houses both VPD and the Public Works Construction Services Division. VPD occupies 16,178 SF and Construction Services occupies 10,000 SF. VPD growth in staff and space needs requires additional space at VPD East Precinct; relocating Construction Services to alternate space was determined to be appropriate to provide this additional space for VPD.

Washington State Department of Transportation (WSDOT) headquarters building located at 1018 NE 51st Cir, Vancouver, WA 98682, was identified as viable space for Construction Services based on the location, lease rate, square footage availability that meets Construction Services current and projected staffing needs, and synergy and partnership opportunities with WSDOT.

The lease agreement negotiated with WSDOT is for approximately 15,776 square feet for a Five-year (5-year) period. The lease rate will be a fixed rate of \$19.82 per square foot of office and \$10.50 per square foot of secured storage for the five-year term.

VPD East Precinct Background: In 2005, the City of Vancouver Police Department, Public Works and Parks & Recreation collaborated to build the VPD East Police Precinct facility and adjacent neighborhood park.

At that time, both the Police Department and Public Works Construction Services were leasing space at non-city owned facilities. This collaboration

resulted in the ability to build a new east precinct that would accommodate VPD and Construction Service's then current needs and provide future growth space for VPD.

Request: Ratify the attached Capital Facilities Lease Agreement between the Washington State Department of Transportation and City of Vancouver and authorize the City Manager or his designee to execute the document.

Linda Carlson, Property Management Specialist, 360-487-8423

Motion approved the request.

5. 2022 State Homeland Security Program Grant

Staff Report: 078-24

Vancouver Police Department (VPD) and Vancouver Fire Department (VFD) partnered with CRESA to enhance community safety by applying for the 2022 SHSP Grant. Homeland Security Grants provide funding to implement investments that build, sustain, and deliver the core capabilities essential to achieving the National Preparedness Goal of a secure and resilient nation. These core capabilities support five mission areas of prevention, protection, mitigation, response, and recovery based on allowable costs. These grant programs are essential in funding a range of preparedness activities, including planning, organization, equipment purchase, training, exercises, and management and administration.

This federally funded grant will allow VPD to replace grant-funded equipment for the Metro Explosive Disposal Unit (MEDU). Approximately ten years ago, VPD and CCSO each received a grant-funded X-Ray Scanner System through the Portland Police Department to assist our collateral duty explosives technician officers with MEDU responses throughout the Portland-metropolitan area. X-Ray Scanners are used to "develop" images of suspected explosive devices so the appropriate steps can be taken for a safe resolution. The current X-Ray Scanner is nearing end-of-life and needs to be replaced. This asset will also be available as part of the MEDU team response throughout Southwest Washington and the greater Portland Metropolitan area.

This federally funded grant will allow VFD to participate in training activities such as Type 1 & 2 Hazmat, Hazmat equipment, and coordination of joint training and exercises with other fire agencies within Region 4. Region-wide trainings are comprehensive and collaborative in response capabilities which include early detection and screening to maximize communities' life-protection capability during emerging threat situations.

Request: Authorize the City Manager, or designee, to approve the 2022 SHSP Grant and procure the X-Ray Scanner for MEDU as a regional asset for Southwest Washington and the greater Portland Metropolitan area, and authorize regional training for VFD.

Jeff Mori, Police Chief, 360-487-7498

Motion approved the request.

6. **2023-2025 Internet Crimes Against Children (ICAC) Grant**

Staff Report: 079-24

VPD did not submit a grant application for funding. This is a one-time funding award offered through Seattle to the VPD Digital Evidence Cybercrime Unit (DECU) for Internet Crimes Against Children (ICAC) equipment, supplies, overtime, training, staff wellness, and other priorities. VPD intends to use this funding to invest in one-time purchases without any local subsidy or ongoing costs, including staff training, wellness initiatives, operational supplies, and other items approved by the funder.

Request: Authorize the City Manager, or designee, to approve the 2023-2025 ICAC Grant.

Jeff Mori, Police Chief, 360-487-7498

Motion approved the request.

7. **Approval of Claim Vouchers**

Request: Approve claim vouchers for April 15, 2024.

Motion approved claim vouchers in the amount of \$4,004,793.80.

Public Hearings (Item 8-10)

8. **Professional Services Agreement for On-Call Facilitation Services**

Staff Report: 067-24

AN ORDINANCE authorizing the execution of a contract amendment with Kearns & West ("Contractor"), to continue providing facilitation services for a variety of different processes and meetings and other related services on an as needed basis ("Services") to the City of Vancouver, Washington ("City"); authorizing a contract amendment extending the contract beyond its original five-year duration; providing for severability; and setting an effective date.

The City currently utilizes Kearns & West for on-call facilitation services, including the charter review process that is underway.

The current professional services agreement with Kearns & West was entered into on May 1, 2019, and was for a period of five years. The agreement was to provide facilitation services for a variety of different processes and meetings and other related services on an as needed basis and was in response to RFP No. 2-19.

Kearns & West engaged with the City to facilitate the charter review process in October 2023. The process is currently underway with a Council workshop scheduled for May 20, 2024 to present the Charter Review Committee's

recommendations to Council. Depending on Council action on the Committee's recommendations, Kearns & West will be asked to assist staff in preparing ballot materials.

To allow Kearns & West to continue work on the charter review process, staff are requesting an amendment to extend the Kearns & West professional services agreement, currently expiring April 30, 2024, to instead expire July 31, 2024.

City staff have commenced a new procurement process for on-call facilitation services.

Request: On April 15, 2024, subject to second reading and public hearing, approve the ordinance.

Aaron Lande, Program and Policy Development Manager, 360-487-8612

Aaron Lande, Program and Policy Development Manager, provided an overview of the Professional Services Agreement for On-Call Facilitation Services.

Council discussed the item briefly with staff.

Mayor McEnerny-Ogle opened the public hearing and received testimony from the following community members:

- Kimberlee Goheen Elbon, La Center, WA

There being no further testimony, Mayor McEnerny-Ogle closed the public hearing.

Motion by Councilmember Hansen, seconded by Councilmember Paulsen, and carried unanimously to approve Ordinance M-4446. Councilmember Stober abstained due to being out of Council Chambers during the vote.

9. Right-of-way vacation of SE 189th Ave

Staff Report: 062-24

AN ORDINANCE vacating the right-of-way associated with SE 189th Avenue, on the north side of SE 15th Street, located within the Southeast Quarter of Section 31, Township 2 North, Range 3 East, Willamette Meridian, City of Vancouver, Clark County, Washington; and providing for an effective date.

Staff has received a request from Larry Nielsen to vacate a portion of right-of-way associated with SE 189th Avenue, located on the north side of SE 15th Street. The right-of-way is specifically located within the Southeast Quarter of Section 31, Township 2 North, Range 3 East, Willamette Meridian.

This right-of-way area was dedicated as part of the Nielsen Short Plat, which was platted in the jurisdiction of Clark County and recorded in 1992 (Book 2, Page 634). At the time, none of the surrounding properties had been subdivided

yet, and it is assumed that the County intended this right-of-way to be the east half of a right-of-way corridor to accommodate the future construction of SE 189th Avenue northward from SE 15th Street. However, subsequent subdivisions of the abutting properties to the west did not include dedication of the west half of the right-of-way corridor, so it is no longer possible or necessary to construct SE 189th Avenue at this location.

The right-of-way to be vacated contains no public street improvements. Staff has reviewed the City's Transportation Systems Plan and determined there is no future need for this right-of-way to accommodate public travel. Therefore, vacation of this right-of-way will have no adverse impact on the City's transportation assets.

Staff has contacted all utility owners with facilities potentially located within the subject area. The City of Vancouver has no public utilities within the area of the proposed vacation. CenturyLink (Lumen) has indicated that they have no objections to the proposed vacation. Clark Public Utilities (CPU) has indicated that they have no facilities in the vacation area. NW Natural has indicated they have no objections to the vacation.

Generally, under VMC 11.05.130, the property associated with a vacated street belongs to the abutting property owners, one-half to each, subject to established property rights. However, Washington State case law has established precedent that a property owner abutting a street vacation that never possessed the underlying property has no claim to the vacated area, and the vacated area is therefore returned to the originating property. The original dedication of this right-of-way was provided exclusively by the platting of the underlying parent property (Nielsen Short Plat, Book 2, Page 634). Therefore, the entirety of the vacated area will be conveyed back to the originating property which is now owned by the applicant.

RCW 35.79.030 provides for, but does not require, the City to collect compensation for the value of public right-of-way that is vacated. Further, VMC 11.05.120 stipulates provisions for the City to calculate and collect compensation for vacated public right-of-way. As discussed above, this right-of-way was dedicated to Clark County via platting of the underlying parent property; the property was not acquired at public expense. Staff has determined there is no future need for this right-of-way to accommodate public travel. The City has not constructed any street improvements within the subject right-of-way, and is not known to have performed any maintenance of this right-of-way area. Based on these circumstances, pursuant to VMC 11.05.120.D, staff recommends that no compensation be required for the vacated property.

Request: On April 15, 2024, subject to second reading and public hearing, approve the ordinance.

Ryan Lopossa, Transportation Division Manager, 360-487-7706

Ryan Lopossa, Transportation Division Manager, provided an overview of the Right-of-Way Vacation of SE 189th Ave.

Council discussed the item briefly with staff.

Mayor McEnerny-Ogle opened the public hearing and received testimony from the following community members:

- Kimberlee Goheen Elbon, La Center, WA

There being no further testimony, Mayor McEnerny-Ogle closed the public hearing.

Motion by Councilmember Fox, seconded by Councilmember Stober, and carried unanimously to approve Ordinance M-4447.

10. **Right-of-way vacation at Brady Rd & 192nd Ave**

Staff Report: 063-24

AN ORDINANCE vacating the right-of-way associated with SE Brady Road, at the northwest corner of the intersection of SE 192nd Avenue and SE Brady Road, located within the Northwest Quarter of Section 8, Township 1 North, Range 3 East, Willamette Meridian, City of Vancouver, Clark County, Washington; and providing for an effective date.

Staff has received a request from Hawes Ventures, LLC, to vacate a portion of SE Brady Road right-of-way located at the northwest corner of the intersection of SE 192nd Avenue and SE Brady Road. The right-of-way is specifically located within the Northwest Quarter of Section 8, Township 1 North, Range 3 East, Willamette Meridian.

This right-of-way area is a portion of a larger area which was conveyed to the City of Vancouver from the State of Washington with a quitclaim deed dated June 2, 2021, and Turnback Agreement No. TB4-0095, dated April 11, 2019. The terms of the quitclaim deed indicate that written approval must be given by WSDOT to vacate any portion of the turnback right-of-way area for non-transportation uses. Pursuant to this requirement, staff received a Letter of Surplus, dated October 3, 2023, indicating that WSDOT has reviewed and approved the proposed vacation.

The right-of-way to be vacated contains no public street improvements. Staff has reviewed the City's Transportation Systems Plan and determined there is no future need for this right-of-way to accommodate public travel. Therefore, vacation of this right-of-way will have no adverse impact on the City's transportation assets.

Staff has contacted all utility owners with facilities potentially located within the subject area. The City of Vancouver has utilities within the area of the proposed vacation, specifically stormwater structures and stormwater mains. City staff in the stormwater division have provided the applicant a stormwater reconfiguration plan to accommodate the proposed vacation and improve stormwater operations. The applicant has accepted the reconfiguration plan and has agreed to reconfigure the existing stormwater facilities per the direction of staff. The necessary stormwater system alterations must be constructed by the applicant prior to the proposed vacation being finalized.

CenturyLink has indicated that they have no objections to the proposed vacation but stipulated that if any CenturyLink facilities are found within the vacated area, the applicant will be required to relocate them. An existing conditions survey provided by the applicant appears to indicate that Clark Public Utilities (CPU) may have electrical lines running through a portion of the subject area. CPU has indicated that they have no objections to the proposed vacation but stipulated that all CPU facilities must be protected with appropriate easement(s).

Therefore, to accommodate the various utilities located in the vacation area, the applicant will be required to provide public utility easement(s) under and over a portion of the vacated area for the construction, repair and maintenance of public utilities and services. The necessary easement dedication documents must be prepared and recorded by the applicant prior to the proposed vacation being finalized.

Generally, under VMC 11.05.130, the property associated with a vacated street belongs to the abutting property owners, one-half to each, subject to vested property rights. The area proposed to be vacated is surrounded by property owned by the applicant. Therefore, the entirety of the vacated area will be conveyed to the applicant.

RCW 35.79.030 provides for, but does not require, the City to collect compensation for the value of public right-of-way that is vacated. Further, VMC 11.05.120 stipulates provisions for the City to calculate and collect compensation for vacated public right-of-way. As discussed above, this right-of-way was conveyed to the City of Vancouver from the State of Washington via turnback agreement and quitclaim deed. The property was acquired at public expense when WSDOT originally acquired the property. The City has not constructed any street improvements within the subject right-of-way, but has performed basic maintenance of this right-of-way area as necessary to provide access to the existing public utilities. Further, the vacated area will be utilized by the applicant for a proposed commercial development. Based on these circumstances, staff recommends the imposition of compensation equal to 100% of the total appraised property value.

The City commissioned an appraisal of the subject right-of-way, which identified a fair market value of \$120,000. WSDOT reviewed the appraisal and felt that the value was slightly low. WSDOT identified additional property sales comparisons to augment the information in the appraisal, and indicated that they will accept a market value of \$136,000. Per the provisions of VMC 11.05.120, the sum of \$136,000 shall be paid to the City prior to the right-of-way vacation becoming effective.

Request: On April 15, 2024, subject to second reading and public hearing, approve the ordinance.

Ryan Lopossa, Transportation Division Manager, 360-487-7706

Ryan Lopossa, Transportation Division Manager, provided an overview of the Right-of-Way Vacation at Brady Rd and 192nd Ave.

Council discussed the item briefly with staff.

Mayor McEnerny-Ogle opened the public hearing and received testimony from the following community members:

- Kimberlee Goheen Elbon, La Center, WA

There being no further testimony, Mayor McEnerny-Ogle closed the public hearing.

Motion by Councilmember Hansen, seconded by Councilmember Stober, and carried unanimously to approve Ordinance M-4448.

Communications

A. From the Council

B. From the Mayor

C. From the City Manager

Homeless Emergency Response Update #5

Jamie Spinelli, Homeless Response Manager, discussed the Homelessness Emergency Situation Report #5.

EXECUTIVE SESSION RE: REAL ESTATE ACQUISITION (RCW 42.30.120 (1)(b)) 1 HOUR

Mayor McEnerny-Ogle announced the Council would be entering into executive session from 7:30-7:49 p.m. to discuss Real Estate Acquisition.

Adjournment

7:49 p.m.

Anne McEnerny-Ogle, Mayor

Attest:

Natasha Ramras, City Clerk

The written comments below are those of the submitter alone and are not representative of the views of CVTV or the City of Vancouver, its elected or appointed officials, or its employees.



CITY OF
Vancouver
WASHINGTON

2024 First Supplemental Budget

Shannon Olsen
Budget Manager
Financial & Management Services
May 13, 2024

Agenda

- Overview
- Operating Budget
- Capital Budget
- FTE Summary
- Next Steps



Supplemental Budget Overview



2024 First Supplemental

Overview and Budget

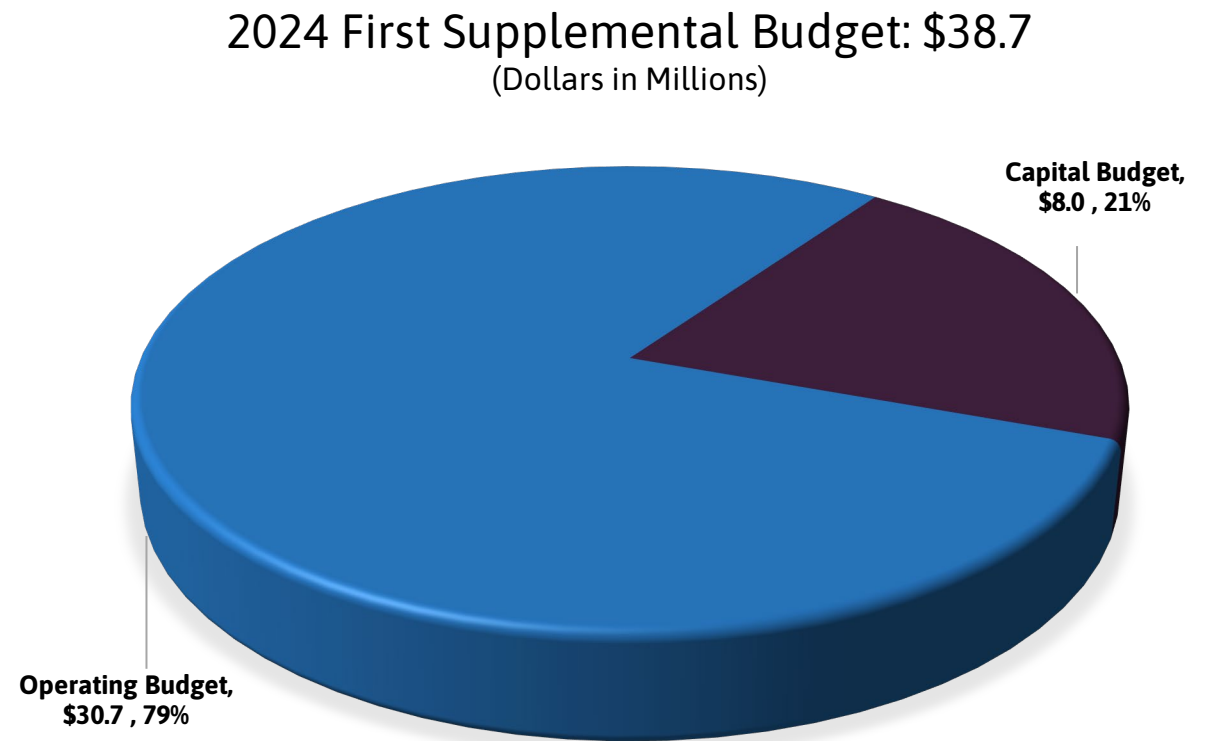
- Background:
 - Supplemental Appropriation - a mid-biennial budget amendment that allows for necessary adjustments to the adopted biennial budget as a result of unanticipated circumstances.
 - Council Approval is required for increases in appropriations and staffing.



2024 First Supplemental

Operating and Capital Budget

- 1.9% increase to the current biennium budget, bringing revised total to \$2.07B overall
- Total net impact: \$9.3M citywide
- Net impact on the General Fund: \$4.9M utilization of undesignated cash balance



2024 First Supplemental

Budget Appropriation

Total 2024 First Supplemental: \$38.7M

Operating Budget
\$30.7M

Capital Budget
\$8.0M

General, Street,
Fire Funds
\$5.3M

Other Operating
Funds
\$25.4M

Capital Projects
-\$1.9M

Funding Transfers
\$9.9M



2024 First Supplemental

General, Street and Fire Funds: \$5.3M

- Grant & Other Revenue Funded: \$0.3M
 - General
 - Burlington Northern Santa Fe Foundation: Vancouver Safe Stay Communities
 - Commerce Planning Grant: Comprehensive Plan & Climate-Related Activities
 - Office of Public Defense Grant: Indigent Defendant Services
 - Environmental Protection Agency (EPA): Brownfield Assessment



2024 First Supplemental

General, Street and Fire Funds: \$5.3M *(continued)*

- Grant & Other Revenue Funded: \$0.2M
 - Public Safety - Police
 - Domestic Violence Stop Grant: Unit Training and Cell Phones for Victims
 - Internet Crimes Against Children Grant: Enhance Investigative Capabilities
 - Public Safety - Fire
 - Anna Hammon: Marine Equipment
 - WA State Department of Health Participation: Pneumothorax Training Simulator
 - Community Foundation Grant: Match for Project Home Safe Grant
 - United Grain Donation: Marine Equipment and Training



2024 First Supplemental

General, Street and Fire Funds: \$5.3M

- New Items: \$1.5M
 - General
 - Fourth Plain Commons Maintenance and Utility Costs
 - Adding Recreation Specialists to Aquatics Program
 - Adding Dual-Certified Water Safety Instructors / Lifeguards
 - Vancouver Arts and Music Festival
 - Personal Property Box Services for Homeless
 - Liability and Workers Compensation Claims Costs and Insurance Increases
 - Fleet Replacements and Model True-Up
 - Cost Allocation Plan Model True-up



2024 First Supplemental

General, Street and Fire Funds: \$5.3M

- New Items: \$3.3M
 - Public Safety
 - Police Timekeeping Software Replacement
 - Vehicle for Assistant Police Chief
 - Fleet Replacement Model True-up
 - Liability and Workers Compensation Claims Costs and Insurance Increases
 - Reserve Fire Truck
 - Fire Marshals Office Temporary Help
 - Cost Allocation Plan Model True-up



2024 First Supplemental

Other Operating Funds: \$25.4M

- Grant & Other Revenue Funded: \$4.0M
 - Community Development Block Grant (CDBG): Additional Coronavirus Funding
 - Connecting Housing to Infrastructure Program (CHIP):
 - Datepark Residence; Lincoln Place II, Parkhouse Vista, Waterfront Gateway
 - Urban Forestry Green Workforce Grant: Summer Green Workforce Training Program
 - 2024 Public Education Grants (PEG): Upgrades to School Studios and Equipment



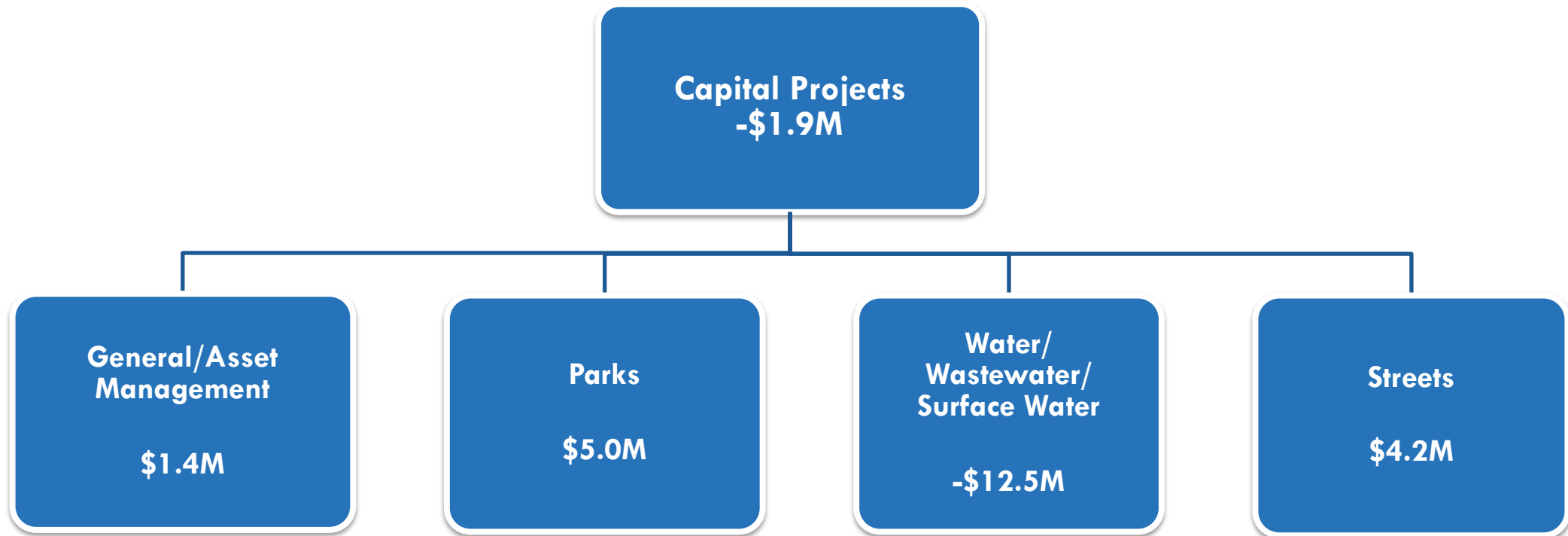
2024 First Supplemental

Other Operating Funds: \$25.4M

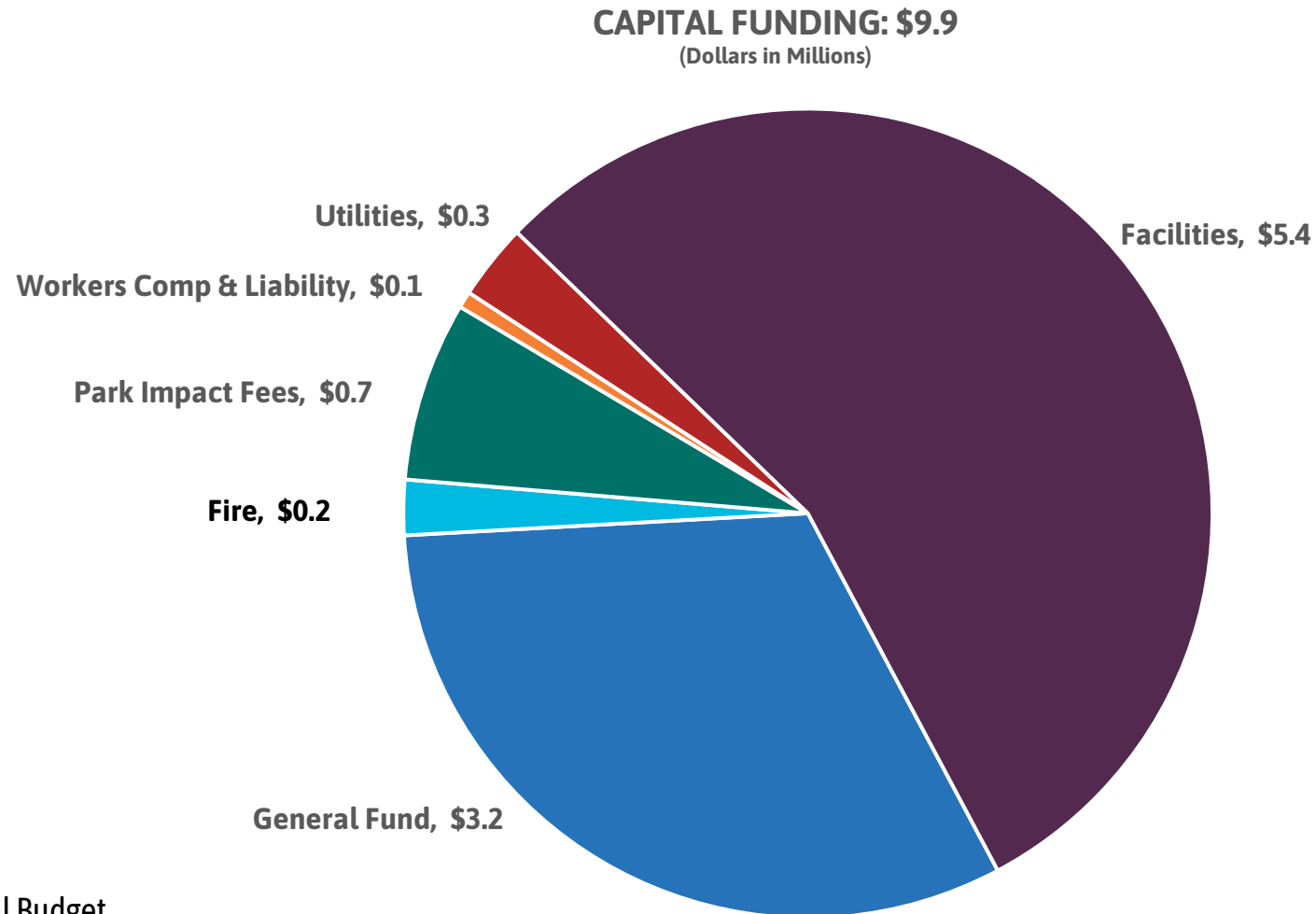
- New Items: \$21.4M
 - New Parking Pay Stations and Installation
 - Increase to Lodging Tax Advisory Committee Grant Program
 - Esther Short Park Bell Tower (funding)
 - Marine Park Building Remodel for Space Needs – Phase 2
 - Fleet Equipment and Vehicle Replacements
 - Fleet Replacement Model True-up
 - Liability and Workers Compensation Claims Costs and Insurance Increases
 - Cost Allocation Plan Model True-up



2024 First Supplemental Capital Projects



2024 First Supplemental Capital Funding



2024 First Supplemental

Capital Budget: General and Parks

- General / Asset Management: \$1.4M
 - Fire Station 5 Logistics Warehouse Increase \$0.8M
 - Fire Station 6 Existing Home Demolition \$0.3M
 - HVAC Replacement (Water Center & Marine Park) \$0.4M
- Parks: \$5.0M
 - Civic Gateway Plaza Construction \$2.6M
 - Heights Plaza Design \$1.5M
 - Oakbrook Community Park (increase) \$0.7M
 - Evergreen School Park Improvements \$0.2M



2024 First Supplemental

Capital Budget: Streets and Transportation

- Streets and Transportation: \$4.2M
 - Heights District Redevelopment \$4.0M
 - Fourth Plain Road Diet (WA Dept of Transportation Grant) \$1.4M
 - First Street Utility Relocation \$0.3M
 - Hazel Dell Ave & Burnt Bridge Creek Trail Crossing Improvements \$0.3M
 - NE 192nd Ave & NE 13th Street Signal Improvement \$0.2M
 - Main Street – 5th to 15 (Transportation Benefit District funding alignment) -\$2.0M



2024 First Supplemental

Capital Budget: Water and Surfacewater

- Water: -\$8.7M
 - Work Plan Budget Alignment:
 - Ellsworth Well Rehabilitation -\$0.1M
 - Water Station 4 Hypochlorite Generation System -\$1.0M
 - Burlington Northern Santa Fe (BNSF) 4th Plain Crossing -\$2.2M
 - Water Station 3 Reservoir Improvements -\$5.4M
- Surfacewater: -\$0.7M
 - Work Plan Budget Alignment:
 - Columbia Way to Columbia River Retrofits -\$0.7M



2024 First Supplemental

Capital Budget: Wastewater

- Wastewater: -\$3.1M
 - Work Plan Budget Alignment:
 - Wastewater Program Funding -\$0.1M
 - East Vancouver - North -\$0.2M
 - Central Vancouver South -\$1.3M
 - Lagoon Upgrade Engineering Design -\$1.5M



2024 First Supplemental

FTE Summary: Net New 4.0 FTEs

Parks (8.5 FTE)	Airport & Public Works (-0.5 FTE)	Public Safety (-3.5 FTE)	Economic Prosperity & Housing (-0.5 FTE)
• Add 4.0 FTE, Recreation Specialists • Add 4.5 FTE, Dual Certified Lifeguards	• Add 0.5 FTE, Program Coordinator (Airport) • Reduce 1.0 FTE, Senior Civil Engineer (Sewer)	• Administrative Correction in Fire (attachment B only; no monetary impact): • Reduce 1.0 FTE, Material Control Coordinator • Reduce 2.0 FTE, Senior Support Specialists • Reduce 0.5 FTE, Support Specialist	• Administrative Correction in Parking (attachment B only; no monetary impact): • Reduce 0.5 FTE, Senior Support Specialist

Position reclassifications and movement between departments are not identified on slide, but are specified on Attachment B.





Next Steps

- First Reading:
 - May 20, 2024
- Public Hearing:
 - June 3, 2024



Discussion



Thank You



shannon.olsen@cityofvancouver.us | 360-487-8497 | cityofvancouver.us





CITY OF
Vancouver
WASHINGTON

Update - PFAS Interim Mitigation Evaluation

Tyler Clary - Water Engineering Manager

Mehrin Selimgir – Civil Engineer

Public Works

May 13, 2024



Agenda

- EPA Regulation
- Interim measure recap
- Current PFAS mitigation projects
- PFAS exposure pathways
- Interim measure discussion



EPA's Finalized Maximum Contaminant Level

Compound	EPA's Final MCL (Enforceable, Requires Treatment)	Washington State Action Level (Superseded)
PFOA	4.0 ppt	10ppt
PFOS	4.0 ppt	15ppt
PFNA	10 ppt	9ppt
PFHxS	10 ppt	65ppt
Gen-X	10ppt	-
Mixtures containing two or more of PFHxS, PFNA, HFPO-DA, and PFBS	Hazard Index of 1 (unitless)	PFBS; 345ppt



Interim Measures Recap

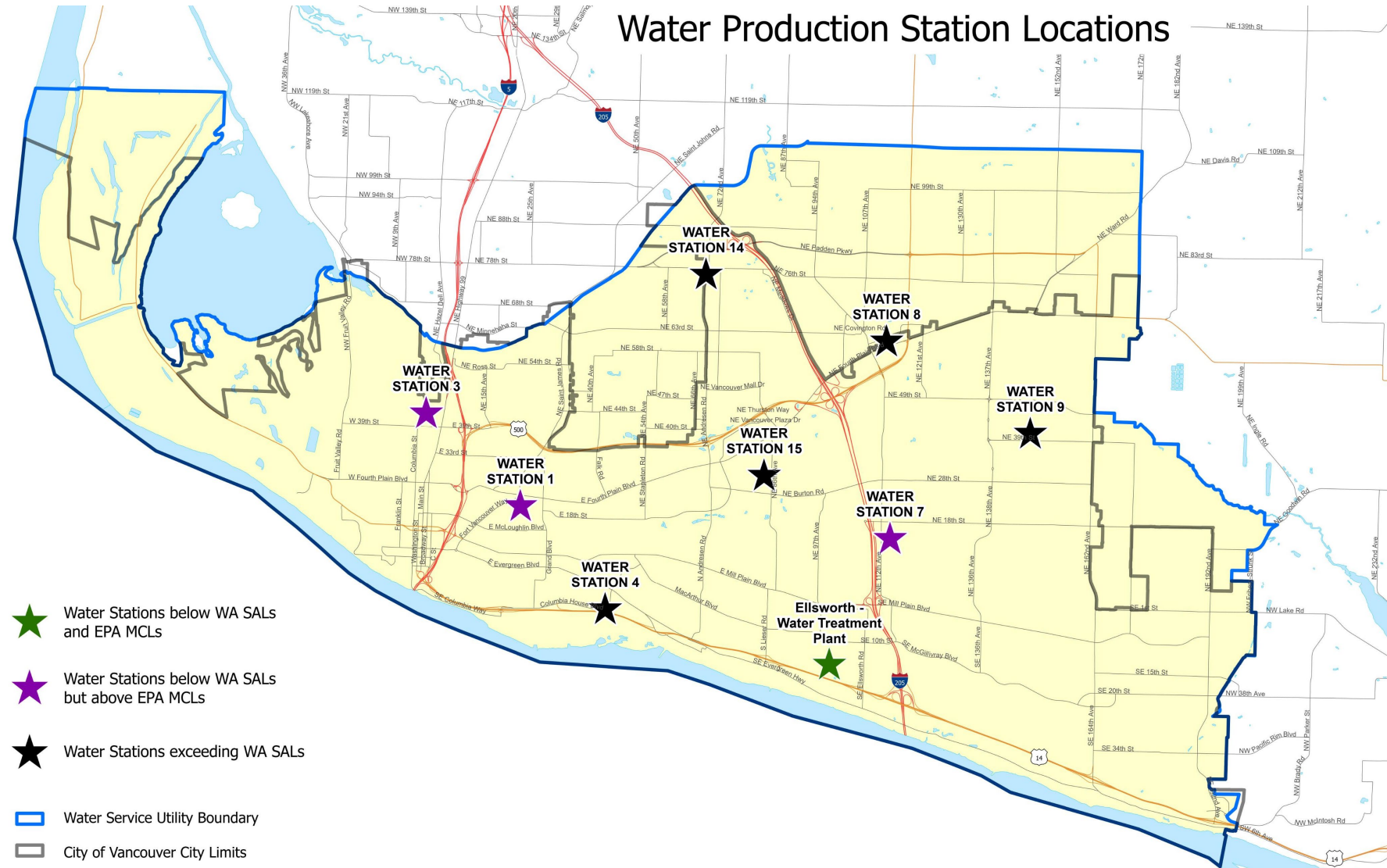


Customer Specific – Low Income

- Point of Use Treatment – Pitcher Filters
- Bottled water
- Rebate program
- Pilot treatment unit
- Water filling station

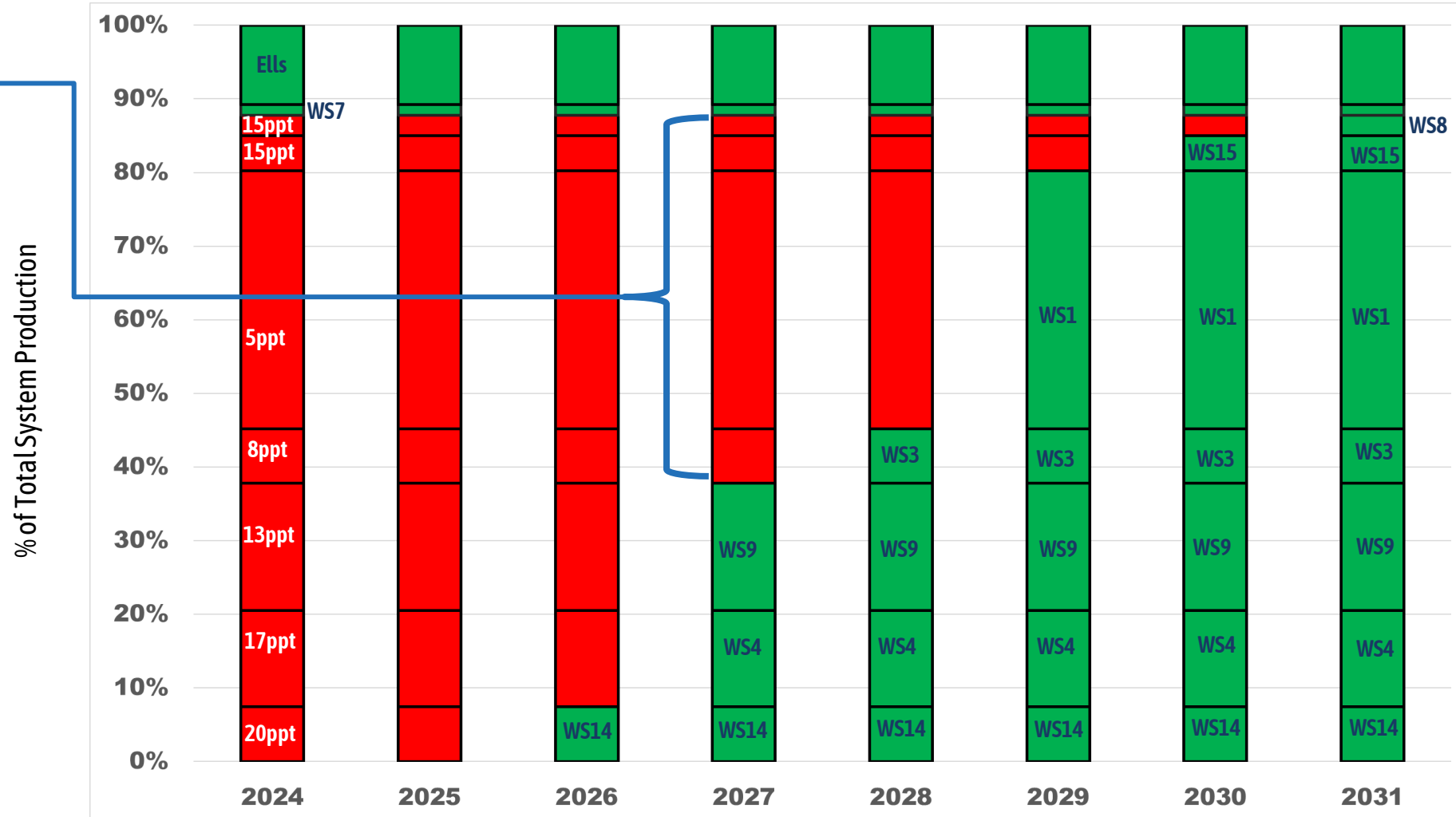


Current Long-Term Mitigation Projects



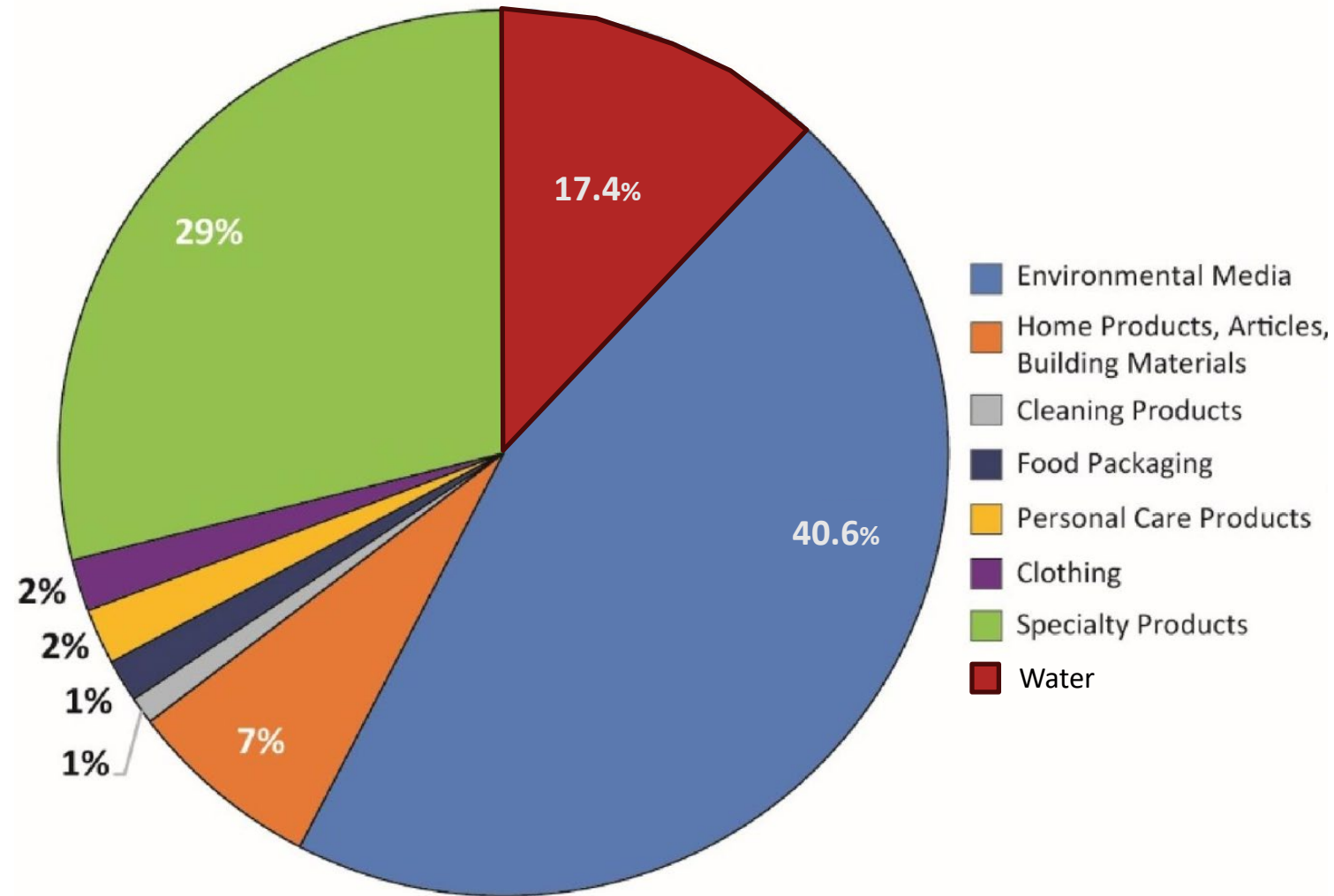
PFOS Concentration in our water system will decrease as long-term mitigation is implemented

By 2027, 52% of water supply meets EPA Regulation



Distribution of PFAS Exposure

A) Exposure Pathway Categories



Pitcher Program Implementation Steps



Pitcher Pilot Testing

Perform water station & in-home pitcher pilot sampling



3rd Party Assistance

Supply, distribute, and track pitcher & replacement cartridges



Communications Plan

Media strategy to customers



Distribution

Assess eligibility and monitor replacement cartridges

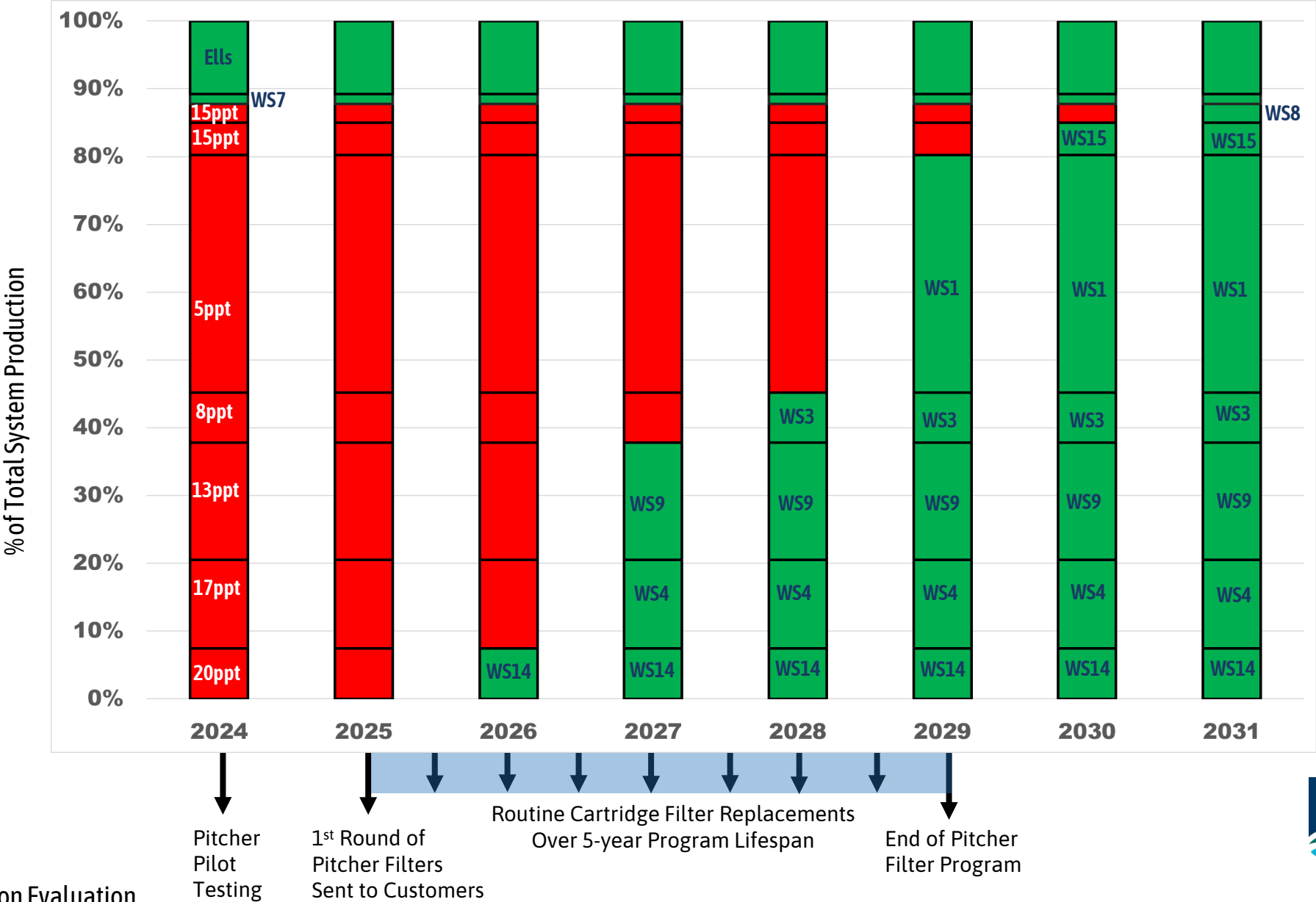


Pitcher Program Eligibility Criteria vs. Cost

Program	Estimated CoV Households	Year 1 Cost	Total 5 Year Cost
LIHEAP	2,300	\$772,800	\$3,532,800
WIC	5,350	\$1,797,600	\$8,217,600
VHA + Vouchers	5,180	\$1,740,480	\$7,956,480
All Programs	12,830	\$4,310,880	\$19,706,880



Pitcher Program vs. Long-Term Mitigation



Focusing on Long-Term Solutions

- ✓ PFAS concentrations will reduce over time regardless of interim measures
- ✓ Minimal benefit vs time and cost to implement pitcher program
- ✓ Additional rate increases required
- ✓ Additional Full-Time Staff required
- ✓ City resources diverted from long-term mitigation and grant/funding pursuits
- ✓ Few pitchers meet EPA's proposed MCL
- ✓ Pitcher filters as an interim measure will only lead to a marginal reduction into a person's overall exposure to PFAS



Staff Report: 090-24

TO: Mayor and City Council

FROM: Eric Holmes, City Manager

DATE: 5/13/2024

SUBJECT Bid Award - E-Interceptor PH1 & PH2 Cured-In-Place Pipe Rehabilitation

Key Points

- The project will install approximately 4,225 linear feet of existing 54-inch as well as 363 lineal feet of existing 48-inch Cured-In-Place Pipe (CIPP).
- The City received 6 bids for the project with one bid being non-responsive.
- Staff proposes awarding a contract to the lowest, responsible bidder, SAK Construction, LLC of O'Fallon, MO.

Strategic Plan Alignment

Safe and Prepared Community – a safe place to live, work, learn, and play.

Present Situation

This project will rehabilitate, with Cured-In-Place Pipe (CIPP), approximately 4,225 lineal feet of 54-inch and 363 lineal feet of 48-inch existing sanitary sewer mains. The E-Interceptor is part of the backbone of the sewer system that transports wastewater from the east side of Vancouver to the Marine Park Wastewater Reclamation Facility. This project is the result of an interceptor condition assessment project completed in 2016 that provided a list of capital projects needed to maintain the wastewater collection system infrastructure.

On April 23, 2024, the City received 6 bids for the subject project. One bid was non-responsive due to no bid form being included. The other bids ranged between \$4,530,818 and \$7,490,697. The bids are as follows:

SUMMARY OF BIDS	
BIDDER	AMOUNT
SAK Construction, LLC, O'Fallon, MO	\$4,530,818.18
Insituform Technologies LLC, Chesterfield, MO	\$4,735,199.18
Iron Horse, LLC, Fairview, OR	\$5,529,045.07
Allied Plumbing & Pumps, Wenatchee, WA	\$5,585,663.64
Michels Trenchless, Brownsville, WI	\$7,490,697.44

Lewisville CPS School	Non-responsive
Engineers' Estimate	\$5,600,000

An Apprenticeship Program Waiver Request has been approved due to the disproportionately high ratio of material costs to labor hours in this project.

Advantage(s)

1. Completion of the project will follow the recommendations of the Interceptor Condition Assessment Study as well as asset management criticality models.
2. Allows for the continuing provision of high-quality reliable sewer service.

Disadvantage(s)

None

Budget Impact

Funds for these sanitary sewer improvements were appropriated in the Sewer Construction Fund, Capital Improvement Program 2023-2024 Budget.

Prior Council Review

Funding previously reviewed by Council as part of the 2023-2024 Sewer Construction Fund Capital Budget.

Action Requested

On May13, 2024 award a contract for the E-Interceptor PH 1 & 2A CIPP Rehabilitation project to the lowest responsive and responsible bidder, SAK Construction, LLC of O'Fallon, MO at their bid price of \$4,530,818.18, which includes Washington State sales tax.

Sheryl Hale, Senior Civil Engineer, 360-487-7151

ATTACHMENTS:

- ▣ Contract
- ▣ E-Interceptor PH1 & PH2 Boundary Map



**CONSTRUCTION CONTRACT # Supplier Contract #
ITB 24-25: E-Interceptor Rehabilitation Phase 1 and 2A CIPP Sewer Rehabilitation**

This Contract (hereinafter referred to as the "Contract") is entered into by and between the City of Vancouver, Washington, a municipal corporation organized under the laws of the State of Washington (hereinafter referred to as the "City") and SAK Construction, LLC, 834 Hoff Road, O'Fallon, MO 63366 (hereinafter referred to as the "Contractor"). The City and Contractor may be collectively referred to herein as the "parties" or individually as a "party".

WHEREAS, the City desires to engage the Contractor to provide public works construction and other related services for the work described herein;

WHEREAS, Contractor has agreed to offer its services to perform said work per the City issued Invitation to Bid (ITB) No. 24-25 and all addenda thereto, Contractor's Bid to said ITB, the Project Plan Set and Special Provisions, and City Council's approval on Month Day, Year per Staff Report No. ##-##; and

WHEREAS, the Contractor represents by entering into this Contract that it is fully qualified to perform the work to which it will be assigned in a competent and professional manner, and to the standards required by the City.

NOW, THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated and made a part hereof, the parties hereto agree as follows:

- 1. STATEMENT OF WORK:** The Contractor hereby agrees to furnish all materials, labor, tools, machinery and implements of every description necessary to complete the work in a professional manner within the time limits stated in this Contract for the construction and installation of the following improvements and will make all necessary arrangements for the obtaining of permits from the United States, State of Washington, and/or any of its agencies as may be necessary to do the work required and covered by this Contract.

The Contractor shall furnish and install approximately 4,225 lineal feet of 54-inch and 363 lineal feet of 48-inch Cured-In-Place Pipe (CIPP) to rehabilitate existing sanitary sewer mains. The CIPP is to be designed as a structural liner for a fully deteriorated (as defined by ASTM F-1216, latest edition) sewer interceptor under gravity flow conditions. The work consists of furnishing all labor, equipment, materials, and incidentals required to rehabilitate the existing sewer mains with either thermal water or ultraviolet (UV) CIPP. This work will also include customer notification, bypass pumping, odor control, cure water treatment, cleaning, root and sediment removal, initial Closed-Circuit Television (CCTV) inspection and assessment, CIPP installation and testing, reinstatement of all laterals, testing, and final CCTV inspection.

Work will also consist of rehabilitation of 9 manholes of various depths (combined 124 vertical feet) with epoxy lining for corrosion prevention in conjunction with the proposed CIPP lining. Cone removal and replacement, lid and frame replacement, and installation of new

intermediate manholes, as needed, to provide Contractor access for CIPP installation is included in the project work.

If necessary, the Contractor may have up to 40 Working Days after the Contract is awarded prior to Notice to Proceed being issued so that they may coordinate with other municipalities on similar projects.

Once construction has begun, the contract Work shall be Physically Complete within 70 Working Days.

2. **EFFECTIVE DATE:** This Contract is effective as of the last signature of the Contract.
3. **E-VERIFY PROGRAM:** Contractor shall register and enter into a Memorandum of Understanding (MOU) with the Department of Homeland Security E-Verify program within sixty (60) days after execution of this Contract. Contractor shall ensure all Contractor employees and any sub-contractor(s) assigned to perform work under this Contract are eligible to work in the United States. Contractor shall provide verification of compliance upon City request. Failure by Contractor to comply with this subsection shall be considered a material breach.
4. **CONTRACTOR RESPONSIBILITIES FOR SUBCONTRACTORS:** The Contractor shall include the language of this section in all tier subcontracts and shall require each of its subcontractors to include the same language of this section in each of their subcontracts, adjusting only as necessary the terms used for the contracting parties. The requirements of this section apply to all subcontractors regardless of tier. The Contractor shall require all subcontractors to comply with all relevant federal, state and municipal laws, rules and regulations whatsoever.

At the time of subcontract execution, the Contractor shall verify that all tier subcontractors meet the following bidder responsibility criteria:

1. Have a current certificate of registration in compliance with chapter 18.27 RCW, which must have been in effect at the time of subcontract bid submittal;
2. Have a current Washington Unified Business Identifier (UBI) number;
3. Have received training on the requirements related to public works and prevailing wage as required by RCW 39.04.350;
4. Within the three-year period immediately preceding the date of the bid solicitation, not have been determined by a final and binding citation and notice of assessment issued by the department of labor and industries or through a civil judgment entered by a court of limited or general jurisdiction to have willfully violated, as defined in RCW 49.48.082, any provision of chapter 49.46, 49.48, or 49.52 RCW.
5. If applicable, have:
 - i. Have Industrial Insurance (workers' compensation) coverage for the subcontractor's employees working in Washington, as required in Title 51 RCW;
 - ii. A Washington Employment Security Department reference number, as required in Title 50 RCW;
 - iii. A Washington Department of Revenue state excise tax registration number, as required in Title 82 RCW;

- iv. An electrical contractor license, if required by Chapter 19.28 RCW;
- v. An elevator contractor license, if required by Chapter 70.87 RCW.
- 6. Not be disqualified from bidding on any public works contract under RCW 39.06.010 or 39.12.065 (3).

5. DELINQUENT STATE TAXES: The Contractor shall not owe delinquent taxes to the Washington State Department of Revenue without a payment plan approved by the Department of Revenue.

6. COMPENSATION AND SCHEDULE OF PAYMENTS: In consideration of the promises and agreements of the Contractor as set forth herein, and in consideration of the faithful performance and furnishing of the work and materials required by this Contract to the satisfaction of the City, the City agrees to pay to the Contractor as prescribed in the solicitation and Contractor's Bid, and in accordance with the ordinances of the City of Vancouver and the laws of the State of Washington, the following sum as indicated, which amount does include 8.7% Washington State Sales Tax (if applicable) \$4,530,818.18 USD.

The amount finally to be paid is, however, variable upon the Work actually performed and final payment will be made upon the basis of the amount of work performed and the materials furnished, and at the lump sum or unit prices fixed in the Contractor's Bid and as modified by any and all approved Change Orders.

7. CONTRACTOR'S INSURANCE: The Contractor agrees to the following requirements relating to insurance coverage. Provide a Certificate of Liability Insurance. Said certificate must be provided on a standard "ACORD" form, or its equivalent, and must provide that coverage shall not be canceled or modified without 30 days prior written notice to the City of Vancouver.

In addition, all policies shall be issued by an insurance company licensed to do business in the State of Washington. The City of Vancouver may inspect all policies and copies shall be provided to the City upon request.

The Contractor agrees to procure insurance coverage as required below:

COVERAGE	LIMITS OF LIABILITY
I. Commercial General Liability:	
Policy shall include Bodily Injury, Property Damage, Personal Injury and Broad Form Contractual Liability	
Each Occurrence	\$1,000,000
General Aggregate Per Occurrence	\$2,000,000
Products & Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Blanket Contractual Liability	\$1,000,000
II. Commercial Automobile Liability	

COVERAGE	LIMITS OF LIABILITY
Policy shall include Bodily Injury and Property Damage, for any owned, Hired, and/or Non-owned vehicles used in the operation, installation and maintenance of facilities under this Contract. Combined Single Limit	\$1,000,000
III. Workers' Compensation (applicable to the State of Washington)	
Per Occurrence	Statutory
Employer's Liability	\$1,000,000
Disease Each Employee	\$1,000,000
Disease Policy Limit	\$1,000,000
Each Claim	\$1,000,000
Annual Aggregate	\$2,000,000
IV. Pollution Legal Liability	
Each Claim	\$3,000,000
Annual Aggregate	\$6,000,000

In addition to the coverage and limits listed above the Contractor's insurance must all contain the following:

- a. City Listed as an Additional Insured. The City of Vancouver, its Agents, Representatives, Officers, Directors, Elected and Appointed Officials, and Employees must be named as an additional insured. The required Additional Insured endorsements shall be at least as broad as ISO CG 20 10 11 85, or its equivalent CG 20 10 07 04 and CG 20 37 07 04 must be included with the Certificate of Insurance.
- b. Either the Commercial General Liability or the Workers' Compensation policy must be endorsed to include "Washington Stop Gap" insurance. The limits and aggregates referenced must apply to the Stop Gap coverage as well and must be indicated on the certificate.
- c. Employment Security. The Contractor shall comply with all employment security laws of the State in which services are provided and shall timely make all required payments in connection therewith.
- d. The City of Vancouver shall be listed on the Certificate as the Certificate Holder.
- e. Coverage Trigger: The insurance must be written on an "occurrence" basis. This must be indicated on the Certificate.

Contractor shall provide evidence of all insurance required, at the City's request, by submitting an insurance certificate to the City on a standard "ACORD" or comparable form.

All policies shall be issued by an insurance company licensed to do business in the State of Washington. The City of Vancouver may inspect all policies and copies shall be provided to the City upon request.

- 8. CONTRACTOR'S BOND:** The Contractor agrees that before it undertakes performance of this Contract, it will file with the City of Vancouver a Performance Bond and Payment Bond, in the forms prescribed by the City of Vancouver, in the full amount of the Contract price with a company authorized to do business in the State of Washington as a surety. The bonds shall comply with the laws of the State of Washington, and especially with the provisions of Chapter 39.08 RCW.
- 9. DISPUTE RESOLUTION:** In the event of a dispute between the Parties which cannot be resolved by the contract managers, the Contractor and the City shall review such dispute and may attempt to resolve the dispute. Any controversy or claim arising out of or relating to this Contract or the alleged breach of this Contract that cannot be resolved by the Parties within 30 days of receipt of written notice may be submitted to mediation. If the dispute cannot be resolved through mediation, either party may initiate litigation pursuant to the governing law and venue provisions of this Contract. The Parties agree to pay their own attorneys' fees and expenses.
- 10. GOVERNING LAW/VENUE:** This Contract shall be deemed to have been executed and delivered within the State of Washington, and the rights and obligations of the parties hereunder shall be construed and enforced in accordance with, and governed by, the laws of the State of Washington without regard to the principles of conflict of laws. Any action or suit brought in connection with this Contract shall be brought in the Superior Court of Clark County, Washington.
- 11. EMPLOYMENT OF LABOR:** The Contractor agrees that all persons employed by Contractor and by any of its subcontractors and any of their lower tier contractors in work performed pursuant to this Contract shall not be employed in excess of eight (8) hours in any one day, except as provided or allowed by Chapter 49.28 RCW and WAC 296-127 and any amendment thereto.
- 12. PAYMENT OF LABOR:** The Contractor agrees that all laborers, workers, or mechanics employed by it or by any subcontractor in the performance of this Contract will be paid not less than the prevailing rate of wage for an hours work, in accordance with the provisions of the Chapter 39.12 RCW, and all rules and regulations promulgated pursuant thereto.

The prevailing wage rates in effect at the time of the bid submittal deadline shall apply for the duration of the project, no matter how long it lasts. However, if the Contract is awarded more than six (6) months after the bids were due, the prevailing wage rates in effect on the award date shall apply.

In case any dispute arises as to what the prevailing rates of wages for work of a similar nature are and such dispute cannot be adjusted by the parties involved, the matter shall be referred to the director of the Department of Labor and Industries of the State of Washington for arbitration, and the director's decision shall be final, conclusive and binding on all parties involved in the dispute.

13. PAYMENT TO THE CONTRACTOR: Progress payments to the Contractor shall be made within 30 days of a fully executed Pay Estimate pending all compliance with all contractual requirements. A sum equal to 5% may be reserved and retained from monies earned by the Contractor in accordance with Chapter 60.28 RCW. The City reserves the right to require Contractor to correct any submitted or paid erroneous invoices according to the rates set forth herein. City and Contractor agree that any amount paid in error by City does not constitute a change in the agreed upon amount; Contractor agrees to issue a refund of any overages paid in error by the City.

Release of the retained percentage or the retainage bond shall be in accordance with Chapter 60.28 RCW. Every person performing labor or furnishing supplies toward the completion of said improvement of work shall have a lien upon said monies so reserved; provided, that such notice of the lien of such claimant shall be given in the manner provided in RCW 39.08.030 and within the time provided in Chapter 60.28 RCW as now existing and in accordance with any amendments that may hereafter be made thereto.

No payment shall be made to the Contractor, however, until the Contractor and all subcontractors who have performed work shall have filed and received approval of a Statement of Intent to Pay Prevailing Wage as required by RCW 39.12.040 from the Washington State Department of Labor and Industries. Said Contractor and all subcontractors shall also keep accurate payroll records for three years from the date of acceptance as described in RCW 39.12.120. A Contractor and all subcontractors shall, file a copy of its certified payroll records using the Department of Labor and Industries online system on a monthly basis. A Contractor's noncompliance with this section shall constitute a violation of RCW 39.12.050.

14. INDEMNIFICATION: Contractor agrees to indemnify, defend, save and hold harmless the City, its officials, employees and agents from any and all liability, including but not limited to demands, claims, causes of action, suits or judgments, claims of copyright or patent infringement, including costs, attorney fees and expenses incurred in connection therewith, or whatsoever kind or nature, arising out of, or in connection with, or incident to, the performance of services by Contractor pursuant to this Contract.

In the event that any suit based on such a claim, demand, loss, damage, cost, or cause of action is brought against the Contractor, the City retains the right to participate in said suit.

This indemnity and hold harmless shall include any claim made against the City by an employee of Contractor or subcontractor or agent of the Contractor, even if Contractor is thus otherwise immune from liability pursuant to the workers' compensation statute, Title 51 RCW. To the extent that such liability arises from the concurrent negligence of both the City and the Contractor, such cost, fees and expenses shall be shared between the City and the Contractor in proportion to their relative degrees of negligence. This indemnity and hold harmless shall NOT apply in the case where liability arises from the sole negligence of the City. Contractor specifically acknowledges that the provisions contained herein have been mutually negotiated by the Parties and it is the intent of the Parties that Contractor provide the broadest scope of indemnity permitted by RCW 4.24.115.

15. OWNERSHIP OF RECORDS AND DOCUMENTS: Any and all work product prepared by the Contractor in the course of performing this Contract shall immediately become the property of the City. In consideration of the compensation provided for by this Contract, the

Contractor hereby further assigns all copyright interests in such work product to the City. A copy may be retained by the Contractor. Previously owned intellectual property of Contractor or any third party, and any know-how, methodologies or processes used by Contractor to provide the services or project deliverables under this Contract shall remain property of the original City.

- 16. PUBLIC DISCLOSURE COMPLIANCE:** The parties acknowledge that the City is an “agency” within the meaning of the Washington Public Records Act, Chapter 42.56 RCW, and that materials submitted by the Contractor to the City become public record. Such records may be subject to public disclosure, in whole or part and may be required to be released by the City in the event of a request for disclosure. In the event the City receives a public record request for any data or deliverable that is provided to the City and that is licensed from the Contractor, the City shall notify the Contractor of such request and withhold disclosure of such information for not less than five (5) business days, to permit the Contractor to seek judicial protection of such information, provided that the Contractor shall be responsible for attorney fees and costs in such action and shall save and hold harmless the City from any costs, attorney fees or penalty assessment under Chapter 42.56 RCW for withholding or delaying public disclosure of such information.
- 17. COOPERATIVE PURCHASING:** The Washington State Inter-local Cooperation Act, Ch. 39.34 RCW, authorizes public agencies to cooperatively purchase goods and services if all parties agree. By having executed this Agreement, the Contractor agrees that other public agencies may purchase goods and services under this solicitation or contract at their own cost and without the City incurring any financial or legal liability for such purchases. The City agrees to allow other public agencies to purchase goods and services under this solicitation or contract, provided that the City is not held financially or legally liable for purchases and that any public agency purchasing under such solicitation or contract file a copy of this invitation and such contract in accordance with RCW 39.34.040.
- 18. AMENDMENTS:** All changes to this Contract, including changes to the statement of work and compensation, must be made by written Change Order and/or Amendment and signed by all parties to this Contract.
- 19. AUTHORIZATION AND COMPLIANCE WITH THE LAW:** The Contractor certifies that the person signing the Contract is legally authorized to enter into this binding Contract and that the Contractor shall fully comply with all relevant, federal, state and municipal laws, rules, regulations and policies.
- 20. CITY BUSINESS AND OCCUPATION LICENSE:** The Contractor will be required to obtain a business license when contracting with the City unless allowable exemptions apply. The Contractor shall contact the State of Washington Business License Service (BLS) at: <http://bls.dor.wa.gov/file.aspx>, or by phone at 800-451-7985, or go to www.bls.dor.wa.gov/cities/vancouver.aspx or www.cityofvancouver.us/businesslicense, to determine whether a business license is required pursuant to the Vancouver Municipal Code (VMC) Chapter 5.04.
- 21. RELATION OF PARTIES:** The Contractor, its subcontractors, agents and employees are independent contractors performing services for The City and are not employees of City; shall not, as a result of this Contract, accrue leave, retirement, insurance, bonding or any other

benefits afforded to City employees; and, shall not have the authority to bind the City in any way except as may be specifically provided in the Statement of Work.

22. ASSIGNMENT: This Contract is binding on each party, its successors, assigns, and legal representatives and may not, under any circumstances, be assigned or transferred by either party without the other party's express written authorization.

23. TERMINATION FOR CONVENIENCE: The City, at its sole discretion, may terminate this Contract for convenience at any time for any reason deemed appropriate. Termination is effective immediately upon notice of termination given by the City.

In the event this Contract is terminated prior to the completion of Work, Contractor will only be paid for the Work completed at the time of termination of the Contract.

24. TERMINATION FOR CAUSE: In the event the Contractor is, or has been, in violation of the terms of this Contract, including the solicitation, the City reserves the right, upon written notice to the Contractor, to cancel, terminate, or suspend this contract in whole or in part for default. Termination shall be effected by serving a notice of termination on the Contractor setting forth the manner in which the Contractor is in default. The Contractor will be paid only the contract price for services performed in accordance with the manner of performance set forth in the Contract.

If it is later determined by the City that the Contractor had an excusable reason for not performing, such as a strike, fire, or flood, or events which are not the fault of or are beyond the control of the Contractor, the City after setting up a new delivery or performance schedule, may allow the Contractor to continue work or treat the termination as a termination for convenience.

25. OPPORTUNITY TO CURE: The City at its sole discretion may in lieu of a termination allow the Contractor to cure the defect(s), by providing a "Notice to Cure" to Contractor setting forth the remedies sought by City and the deadline to accomplish the remedies. If the Contractor fails to remedy to the City's satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within the time stated time, the City shall have the right to terminate the Contract without any further obligation to the Contractor. Any such termination for default shall not in any way operate to preclude the City from also pursuing all available remedies against the Contractor and its sureties for said breach or default, including but not limited to termination of this Contract for convenience.

26. WAIVER AND REMEDIES: City's failure to enforce the terms or conditions herein or to exercise any right or privilege, or the City's waiver of any breach hereunder shall not thereafter waive any other term, condition, or privilege, whether of the same or similar type. Remedies under this Contract are cumulative; the use of one remedy shall not be taken to exclude or waive the right to use another.

27. ENTIRETY OF CONTRACT: This Contract incorporates all the agreements, covenants and understanding between the parties hereto and are merged into this written Contract. No prior agreement or prior understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless set forth in this Contract.

- 28. USE OF CITY'S NAME:** Contractor may not use any of City's name, trademark, service marks, or logo in connection with the services contemplated by this Contract or otherwise without the prior written permission of City, which permission may be withheld for any or no reason and may be subject to certain conditions.
- 29. DEBARMENT:** The Contractor certifies that that it is not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from covered transactions by any Federal, State or local department or agency.
- 30. NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY:** During the term of this Contract, Contractor will not discriminate against any employee or applicant for employment in accordance with RCW Chapter 49.60, including, but not limited to creed, religion, race, color, age, sex, marital status, sexual orientation, sexual identity, pregnancy, military status, political ideology, ancestry, national origin, or the presence of any sensory, mental or physical disability, unless based upon a bona fide occupational qualification. The Contractor will take affirmative action to ensure that applicants and employees are treated fairly, without regard to their creed, religion, race, color, sex, national origin, or the presence of any sensory, mental or physical disability. Such action shall include all terms and conditions of employment, compensation, and benefits, including apprenticeship.
- 31. BINDING EFFECT:** The provisions, covenants and conditions in this Contract bind the parties, their legal heirs, representatives, successors, and assigns.
- 32. RATIFICATION:** Acts taken pursuant to this Contract but prior to its effective date are hereby ratified and confirmed.
- 33. CONTRACT DOCUMENTS AND ORDER OF PRECEDENCE:** The complete Contract includes these parts and any inconsistency in the parts of the contract shall be resolved by following this order of precedence (e.g., 1 presiding over 2, 2 over 3, 3 over 4, and so forth):
1. Amendments to the Contract,
 2. This Contract,
 3. Contractor's Bid including all Addenda to the Solicitation,
 4. Special Provisions,
 5. Contract Plan Set,
 6. City of Vancouver Amendments to the specified WSDOT Standard Specifications,
 7. City of Vancouver General Requirements and Details for the Design and Construction of Public Sanitary Sewers,
 8. City of Vancouver Standard Plans,
 9. WSDOT Standard Specifications,
 10. WSDOT Standard Plans.

On the Contract Plans, Working Drawings, and Standard Plans, figured dimensions shall take precedence over scaled dimensions.

Whenever reference is made in these Specifications or the Special Provisions to codes, rules, specifications, and standards, the reference shall be construed to mean the code, rule,

specification, or standard that is in effect on the Invitation to Bid advertisement date, unless otherwise stated or as required by law.

If any part of the Contract requires Work that does not include a description for how the Work is to be performed, the Work shall be performed in accordance with standard trade practice(s). For purposes of the Contract, a standard trade practice is one having such regularity of observance in the trade as to justify an expectation that it will be observed by the Contractor in doing the Work.

34. NOTICES: All notices which are given or required to be given pursuant to this Contract shall be hand delivered, mailed postage paid, or sent by electronic mail as follows:

For the City:
Anna Vogel
City of Vancouver
415 W 6th Street
P O Box 1995
Vancouver WA 98668-1995
anna.vogel@cityofvancouver.us

For the Contractor:
Boyd Hirtz
SAK Construction, LLC
864 Hoff Road
O'Fallon, MO 63366
bidcippw@sakcon.com

The undersigned, as the authorized representatives of the City and Contractor respectively, agree to all of the terms and conditions contained in this Contract, as of the dates set forth below.

CITY OF VANCOUVER
A municipal corporation

CONTRACTOR:
SAK Construction, LLC

Eric Holmes, City Manager

Signature

Date

Printed Name /Title

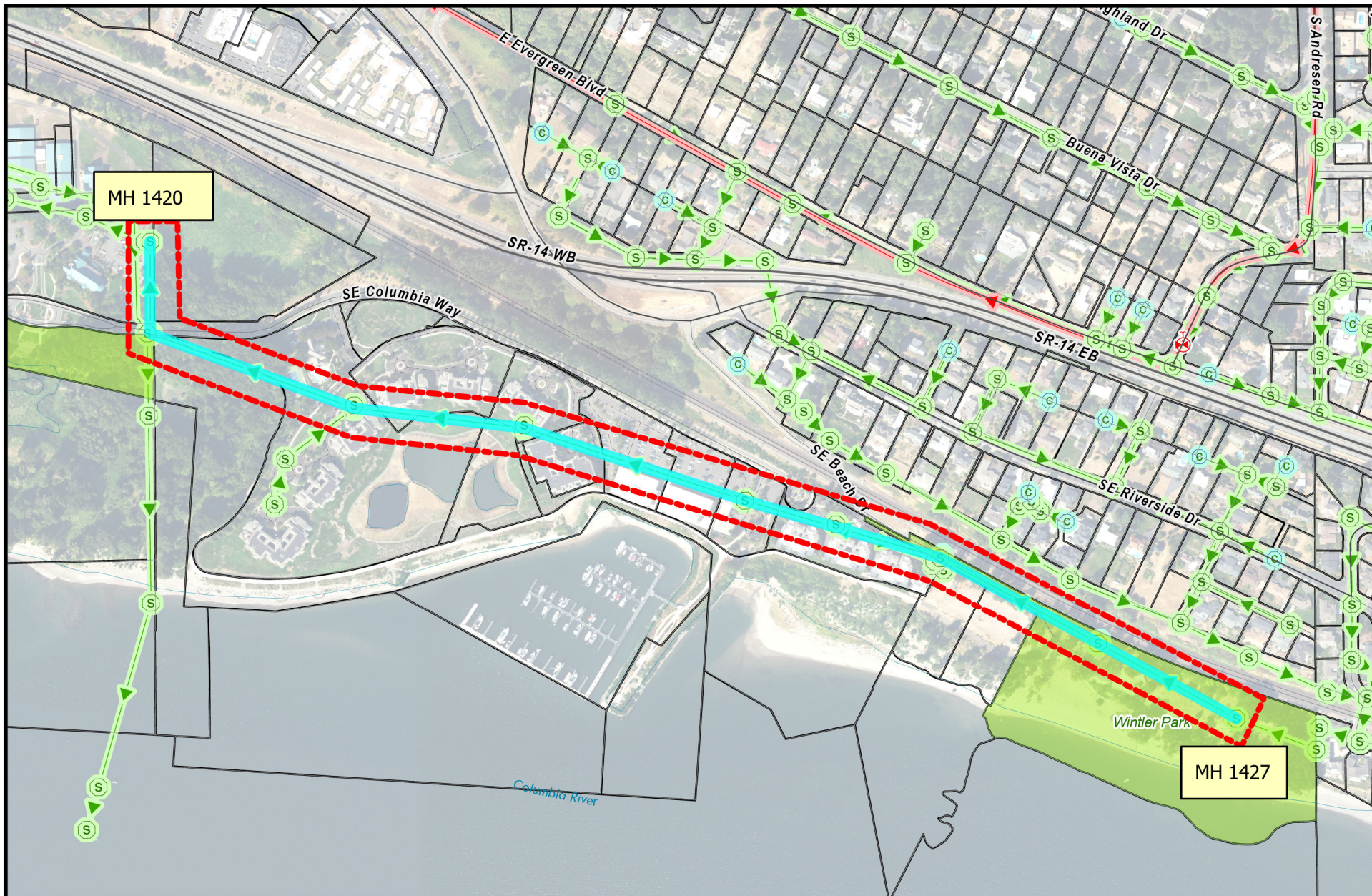
Attest:

Date

Natasha Ramras, City Clerk

Approved as to form:

Jonathan Young, City Attorney



E Interceptor (Phase 1 & 2A)

Staff Report: 091-24

TO: Mayor and City Council

FROM: Eric Holmes, City Manager

DATE: 5/13/2024

SUBJECT Professional Service Agreement for Water Station 14 Per- and polyfluoroalkyl substances (PFAS) Treatment System Final Design (RFQ 32-23)

Key Points

- On 9-18-23, Council approved the Phase 1- Preliminary Design for Water Station 14 contract with Brown and Caldwell, and that 30% design will be complete in May 2024.
- Phase 2 will extend the existing professional services contract to complete design and issue bid documents.
- The City has been awarded \$12.7 million in Drinking Water State Revolving Fund (DWSRF) funding for this project in the form of a forgivable loan (grant).

Strategic Plan Alignment

Safe and Prepared Community – a safe place to live, work, learn, and play.

Present Situation

Water Station 14 is on a 3.35-acre parcel and has been a municipal water facility serving our community with safe clean drinking water since 1980. The site contains three groundwater wells with a combined capacity of 3,200 gallons per minute, an air stripping tower for pH adjustment, a booster pump station that boosts water into the distribution grid, an emergency back-up generator, disinfection and fluoridation systems.

EPA's maximum contaminant level (MCL) for six PFAS compounds was finalized in early April 2024. Water Station 14 sampling has consistently been the highest of all water stations and has exceeded the above-mentioned federal regulations and, as such was identified as a priority for treatment. The new PFAS treatment system will allow the water utility to continue to meet the community's expectation of safe, reliable water service.

A Request for Qualifications (RFQ 32-23) for the Water Station 14 PFAS Treatment System Design was issued on April 21, 2023. The scope of work for the professional services identified in the Request for Qualifications has been divided into three phases to streamline the project scoping; Phase 1 will include the preliminary design and associated initial permitting tasks and

Phase 2 will include final bid-ready plans and specifications for construction. The attached amendment is for the scope of work identified as, 'Phase 2: Water Station 14 PFAS Treatment System Design Project'. This portion of the work is expected to take nine months to complete. A 'Phase 3: Water Station 14 PFAS Treatment System Construction Project' amendment will follow after Phase 2 and provide consultant engineering services to the City's construction department during construction. This Phase 3 contract is expected to go to Council early next year.

Along with standard advertising, firms from the MRSC list, which included veteran-, minority-, and women-owned firms were notified of the solicitation and requested their qualification statements.

The City was awarded \$12.7 million in Drinking Water State Revolving Fund (DWSRF) funding for this project in the form of a forgivable loan (grant). This forgivable loan contract was finalized with Washington State Dept. of Health on 1/9/24. As such, the City is required to have a Water Station 14 construction contract awarded within 18 months of the contract execution date. Therefore, it is important to complete the design and advertise for bid by January 2025. As this project will be federally funded, the professional services work is scoped to follow federal loan requirements.

Brown and Caldwell has proposed an approach that provides a collaborative effort between City staff and their experienced team. They have proven qualifications with the completion of similar municipal water projects of this size and complexity.

Advantage(s)

1. Provides for specialty technical services to complete a comprehensive final design for PFAS Treatment.
2. Provides guidance through a developed permitting plan to comply with federal loan requirements.

Disadvantage(s)

None

Budget Impact

This project will be funded through the \$12.7 million DWSRF loan. Additionally, funding for this project is identified as PRJ100893 in the current 2023-2024 Capital Water Budget. Additional funding in future years is identified in the long-term water capital improvement program as necessary to support the project.

Prior Council Review

Approved in the 2023-2024 Capital Water Budget. Contract was approved on 9/18/23 with SR 176-23.

Action Requested

Authorize the City Manager, or designee, to execute Amendment No. 1 to contract C-101426 between the City of Vancouver and Brown and Caldwell. Increase the not-to-exceed amount by \$1,332,800 to a total of \$2,051,500 and extend the termination date to 4/30/2025.

Mehrin Selimgir, Civil Engineer, 360-487-7128

ATTACHMENTS:

- ▣ Phase 1 Contract
- ▣ Amendment No.1
- ▣ Phase 2 Scope of Work



**CITY OF VANCOUVER
SERVICES AGREEMENT
No. C-101426**

This Services Agreement (hereinafter referred to as the "Agreement") is entered into by and between the City of Vancouver, Washington, a municipal corporation organized under the laws of the State of Washington, (hereinafter referred to as the "City") and Brown and Caldwell (hereinafter referred to as the "Contractor"). The City and Contractor may be collectively referred to herein as the "parties" or individually as a "party".

WHEREAS, the City desires to engage the Contractor to perform services as described in this Agreement; and

WHEREAS, the City advertised and issued a Request for Qualifications, numbered 32-23 (hereinafter referred to as the "solicitation") and after evaluation of the Contractor's responsive proposal, found the Contractor be capable of performing the required services; and

WHEREAS, the Contractor represents by entering into this Agreement that it is fully qualified to perform the services described herein in a competent and professional manner, and to the full satisfaction of the City.

NOW, THEREFORE, in consideration of the terms, conditions, covenants, and performance contained herein, or attached and incorporated and made a part hereof, the parties hereto agree as follows:

- 1. SCOPE OF WORK:** The Contractor agrees to provide the City all services and materials set forth below and in the scope of work identified in Attachment "A", and as further described in the City's solicitation, and the Contractor's responsive proposal to the City's solicitation, (collectively referred to herein as the "work") which are each incorporated herein by this reference, and made a part of this Agreement as if fully set forth herein.

Contractor to provide consulting services to develop final plans and specifications for the design of a PFAS treatment system at Water Station 14.

All work must be authorized and approved by the City's Project Manager before any work can begin. The Contractor shall approach each project in a manner consistent with its usual customary business practices. The Contractor shall actively seek collaborative input from City staff.

2. **COMPENSATION:** Payment to the Contractor for the work described in this Agreement shall not exceed \$718,700.00 USD.

This payment shall be maximum compensation for the work and for all labor, materials, supplies, equipment and incidentals necessary to complete the work as set forth herein, and it shall not be exceeded without the City's prior written authorization in the form of a negotiated and executed amendment.

Compensation is limited to the amount specified for each specific task and/or sub-task, unless amended in writing. The City requires the Contractor to complete the work stated within the number of hours stated for each task, and/or sub-task, or the lump sum amount. If compensation is made on an hourly basis and the work requires fewer hours than those estimated, the Contractor will be paid for the actual worked hours necessary to complete that task and/or sub-task. If the Contractor underestimated the number of hours required to perform the work, the Contractor shall be paid up to the maximum number of hours stated for the task and/or sub-task. Compensation may be amended, at the City's sole discretion, for documentable circumstances not reasonably foreseeable to either party at the time the task and/or subtask is initiated, or for changes to the scope of work or deliverables requested by the City. All deliverables must be acceptable to the City, at the sole discretion of the City.

Travel expenses are limited to airfare, or mileage at the current IRS rate, and lodging at the U.S. General Services Administration rates. The Contractor is solely responsible for its staff's travel time, including travel to and from the City of Vancouver. The City will reimburse only pre-approved miscellaneous Contractor expenses at-cost upon submission of receipts to City.

During the life of this Contract, and in consideration of the City's business needs, the Contractor may make requests for compensation adjustments. In consideration of market conditions, the City may allow an annual adjustment to compensation paid for the actual cost of services. Contractor shall submit the request for consideration, together with supporting documentation, before the anniversary date of this Agreement. The City will review the request and, at its sole discretion, make a decision. If accepted, the adjustment shall become effective on the anniversary date of the Agreement and will be firm for the remainder of the contracted period. All adjustments will be authorized by written contract amendment.

3. **PAYMENT FOR CONTRACTOR SERVICES:** The Contractor shall submit monthly invoices to City covering both professional fees and project expenses, if any, for fees and expenses from the previous month. Payments to Contractor shall be net thirty (30) days.

The City reserves the right to correct any invoices paid in error. The Contractor shall be paid according to the rates set forth below in Attachment “B”, incorporated herein by this reference, and made a part of this Agreement as if fully set forth herein.

City and Contractor agree that any amount paid in error by City does not constitute a rate change in the amount of the contract. The City’s contract/purchase order (PO) number given on the notice to proceed **must** be referenced on any invoice submitted for payment.

4. **TERM OF AGREEMENT:** The term of this Agreement shall commence on October 1, 2023 and continue until June 30, 2024. Unless directed otherwise by the City, Contractor shall perform the work in accordance with any schedules made a part of this Agreement.
5. **ORDER OF PRECEDENCE:** Where there is a conflict among or between any of these documents, the controlling documents shall be the first listed in the following sequence: Amendments to this Agreement; this Agreement; Contract Purchase Orders; the Contractor’s responsive proposal to the City’s solicitation, and the City’s solicitation.
6. **RELATION OF PARTIES:** The Contractor, and its subcontractors, agents, employees, or other vendors contracted by the Contractor to provide services or other work for the purpose of meeting the Contractor’s obligations under this agreement (collectively referred to as “subcontractors”), are independent contractors performing professional services for the City and are not employees of the City. The Contractor and its subcontractors shall not, as a result of this Agreement, accrue leave, retirement, insurance, bonding or any other rights, privileges, or benefits afforded to City employees. The Contractor and its subcontractors shall not have the authority to bind City in any way except as may be specifically provided herein.
7. **SUBCONTRACTING:** The City does not permit subcontractors for the work performed under this Agreement. The Contractor shall not subcontract for the performance of any work under this Agreement without prior written permission of the City.
8. **E-VERIFY:** The Contractor shall enter into and register a Memorandum of Understanding with the Department of Homeland Security E-Verify program within sixty (60) days after execution of this Agreement. The Contractor shall ensure all Contractor employees and any subcontractors assigned to perform work under this Agreement are eligible to work in the United States. The Contractor shall provide verification of compliance upon the request of the

City. Failure by the Contractor to comply with this subsection shall be considered a material breach.

9. DELAYS AND EXTENSIONS OF TIME: If the Contractor is delayed at any time in the progress of the work covered by this Agreement, by any causes beyond Contractor's control, the time for performance may be extended by such time as shall be mutually agreed upon by the Contractor and the City and shall be incorporated in a written amendment to this Agreement. Any request for an extension of time shall be made in writing to the City.

10. OWNERSHIP OF RECORDS AND DOCUMENTS: Any and all work product prepared by the Contractor in the course of performing this Contract shall immediately become the property of the City. In consideration of the compensation provided for by this Agreement, the Contractor hereby further assigns all copyright interests in such work product to the City. A copy may be retained by the Contractor. Previously owned intellectual property of Contractor, and any know-how, methodologies or processes used by the Contractor to provide the services or project deliverables under this Agreement shall remain property of the Contractor.

11. TERMINATION FOR PUBLIC CONVENIENCE: The City, at its sole discretion, may terminate this contract for convenience at any time for any reason deemed appropriate. Termination is effective immediately upon notice of termination given by the City.

In the event this Agreement is terminated prior to the completion of work, the Contractor will only be paid for the portion of the work completed at the time of termination of the Agreement.

12. TERMINATION FOR DEFAULT: If the Contractor defaults by failing to perform any of the obligations of the Agreement, including violating any law, regulation, rule or ordinance applicable to this Agreement, or becomes insolvent or is declared bankrupt or commits any act of bankruptcy or insolvency or makes an assignment for the benefit of creditors, the City may, by depositing written notice to the Contractor in the U.S. mail, postage prepaid, terminate the Agreement, and at the City's option, obtain performance of the work elsewhere.

If the Agreement is terminated for default, the Contractor shall not be entitled to receive any further payments under the Agreement until all work called for has been fully performed. Any extra cost or damage to the City resulting from such default(s) shall be deducted from any money due or coming due to the Contractor. The Contractor shall bear any extra expenses incurred by the City in completing the work, and all damage sustained, or which may be sustained by the City by reason of such default.

If a notice of termination for default has been issued and it is later determined for any reason that the Contractor was not in default, the rights and obligations of the parties shall be the same as if

the notice of termination had been issued pursuant to the termination for public convenience paragraph herein.

- 13. OPPORTUNITY TO CURE:** The City at its sole discretion may in lieu of a termination allow the Contractor to cure the defect(s), by providing a “Notice to Cure” to Contractor setting forth the remedies sought by City and the deadline to accomplish the remedies. If the Contractor fails to remedy to the City’s satisfaction the breach or default of any of the terms, covenants, or conditions of this Contract within the time stated time, the City shall have the right to terminate the Contract without any further obligation to the Contractor. Any such termination for default shall not in any way operate to preclude the City from also pursuing all available remedies against the Contractor and it’s sureties for said breach or default, including but not limited to termination of this Contract for convenience.
- 14. COMPLIANCE WITH THE LAW:** The Contractor agrees to comply with all relevant, Federal, State, and Municipal laws, rules, policies, regulations or ordinances in the performance of work under this Agreement.
- 15. CITY BUSINESS AND OCCUPATION LICENSE:** The Contractor will be required to obtain a business license when contracting with the City unless allowable exemptions apply. The Contractor shall contact the State of Washington Business License Service (BLS) at: <http://bls.dor.wa.gov/file.aspx>, or by phone at 800-451-7985, or go to www.bls.dor.wa.gov/cities/vancouver.aspx or www.cityofvancouver.us/businesslicense, to determine whether a business license is required pursuant to the Vancouver Municipal Code (VMC) Chapter 5.04.
- 16. LIABILITY AND HOLD HARMLESS:** The Contractor agrees to indemnify, defend, save and hold harmless the City, its officials, employees and agents from any and all liability, demands, claims, causes of action, suits or judgments, including costs, attorney fees and expenses incurred in connection therewith, of whatsoever kind or nature (including patent infringement or copyright claims) to the extent arising out of, or in connection with, or incident to, the negligent performance or willful misconduct pursuant to this Agreement. This indemnity and hold harmless shall include any claim made against the City by an employee of Contractor or subcontractor or agent even if Contractor is thus otherwise immune from liability pursuant to the workers’ compensation statute, Title 51 Revised Code of Washington (RCW), except to the extent that such liability arises from the concurrent negligence of both the City and the Contractor, such costs, fees and expenses shall be shared between the City and the Contractor in proportion to their relative degrees of negligence. The Contractor specifically acknowledges the provisions contained herein have been mutually negotiated by the parties and it is the intent of the parties that the Contractor provide the broadest scope of indemnity permitted by RCW 4.24.115. The Contractor is an independent contractor and responsible for the safety of its employees.

17. INSURANCE: The Contractor shall obtain and keep in force during the entire term of this agreement, liability insurance against any and all claims for damages to person or property which may arise out of the performance of this Contract whether such work shall be by the Contractor, subcontractor or anyone directly or indirectly employed by either the Contractor or a subcontractor.

All liability insurance required herein shall be under a Comprehensive or Commercial General Liability and business policies.

COVERAGE	LIMITS OF LIABILITY
I. Commercial General Liability:	
Policy shall include Bodily Injury, Property Damage, Personal Injury and Broad Form Contractual Liability	
Each Occurrence	\$1,000,000
General Aggregate Per Occurrence	\$2,000,000
Products & Completed Operations Aggregate	\$2,000,000
Personal and Advertising Injury	\$1,000,000
Blanket Contractual Liability	\$1,000,000
II. Commercial Automobile Liability	
Policy shall include Bodily Injury and Property Damage, for any owned, Hired, and/or Non-owned vehicles used in the operation, installation and maintenance of facilities under this agreement.	
Combined Single Limit	\$1,000,000
III. Workers' Compensation (applicable to the State of Washington)	
Per Occurrence	
Employer's Liability	\$1,000,000
Disease Each Employee	\$1,000,000
Disease Policy Limit	\$1,000,000
Each Claim	\$1,000,000
Annual Aggregate	\$1,000,000
IV. Umbrella Liability	
Each Claim	\$1,000,000
Annual Aggregate	\$5,000,000
V. Professional Liability	
Policy shall include coverage against any and all claims for damages to person or property which may arise out of the performance of this Contract whether such work shall be by the Contractor, subcontractor or anyone directly or indirectly employed by either the Contractor or a subcontractor	\$1,000,000

In addition to the coverage and limits listed above the Contractor's insurance must all contain the following:

- a. City Listed as an Additional Insured. The City of Vancouver, its Agents, Representatives, Officers, Directors, Elected and Appointed Officials, and Employees must be named as an additional insured. The required Additional Insured endorsements shall be at least as broad as ISO CG 20 10 11 85, or its equivalent CG 20 10 07 04 and CG 20 37 07 04 must be included with the Certificate of Insurance.
- b. Either the Commercial General Liability or the Workers' Compensation policy must be endorsed to include "Washington Stop Gap" insurance. The limits and aggregates referenced must apply to the Stop Gap coverage as well and must be indicated on the certificate.
- c. Employment Security. The Contractor shall comply with all employment security laws of the State in which services are provided and shall timely make all required payments in connection therewith.
- d. The City of Vancouver shall be listed on the Certificate as the Certificate Holder.
- e. Coverage Trigger: The insurance must be written on an "occurrence" basis. This must be indicated on the Certificate.

Contractor shall provide evidence of all insurance required, at the City's request, by submitting an insurance certificate to the City on a standard "ACORD" or comparable form.

All policies shall be issued by an insurance company licensed to do business in the State of Washington. The City of Vancouver may inspect all policies and copies shall be provided to the City upon request.

18. NOTICES: All notices which are given or required to be given pursuant to this Agreement shall be hand delivered, mailed postage paid, or sent by electronic mail as follows:

For the City:
Anna Vogel
City of Vancouver
415 W 6th Street
P O Box 1995
Vancouver WA 98668-1995
Email: anna.vogel@cityofvancouver.us

For the Contractor:
Lynn Stephens
Brown and Caldwell
6500 S Macadam Ave, Suite 200
Portland, OR 97239
Email: LStephens@brwnclald.com

Either party may change the designated contact or any information listed above by giving advance notice in writing to the other party.

- 19. AMENDMENTS:** All changes to this Agreement, including changes to the scope of work and compensation sections, must be made by written amendment and signed by all parties to this Agreement.
- 20. SCOPE OF AGREEMENT:** This Agreement incorporates all the agreements, covenants and understanding between the parties hereto and are merged into this written Agreement. No prior agreement or prior understanding, verbal or otherwise, of the parties or their agents shall be valid or enforceable unless set forth in this Agreement.
- 21. RATIFICATION:** Acts taken pursuant to this Agreement but prior to its effective date are hereby ratified and confirmed.
- 22. GOVERNING LAW/VENUE:** This Agreement shall be deemed to have been executed and delivered within the State of Washington, and the rights and obligations of the parties hereunder shall be construed and enforced in accordance with, and governed by, the laws of the State of Washington without regard to the principles of conflict of laws. Any action or suit brought in connection with this Agreement shall be brought in the Superior Court of Clark County, Washington.
- 23. COOPERATIVE PURCHASING:** The Washington State Inter-local Cooperation Act, Ch. 39.34 RCW, authorizes public agencies to cooperatively purchase goods and services if all parties agree. By having executed this Agreement, the Contractor agrees that other public agencies may purchase goods and services under this solicitation or contract at their own cost and without the City incurring any financial or legal liability for such purchases. The City agrees to allow other public agencies to purchase goods and services under this solicitation or contract, provided that the City is not held financially or legally liable for purchases and that any public agency purchasing under such solicitation or contract file a copy of this invitation and such contract in accordance with RCW 39.34.040.
- 24. PUBLIC DISCLOSURE COMPLIANCE:** The parties acknowledge that the City is an “agency” within the meaning of the Washington Public Records Act, Chapter 42.56 RCW, and that materials submitted by the Contractor to the City become public record. Such records may be subject to public disclosure, in whole or part and may be required to be released by the City in the event of a request for disclosure. In the event the City receives a public record request for any data or deliverable that is provided to the City and that is licensed from the Contractor, the City shall notify the Contractor of such request and withhold disclosure of such information for not less than five (5) business days, to permit the Contractor to seek judicial protection of such information, provided that the Contractor shall be responsible for attorney fees and costs in such action and

shall save and hold harmless the City from any costs, attorney fees or penalty assessment under Chapter 42.17 RCW for withholding or delaying public disclosure of such information.

- 25. DEBARMENT:** The Contractor certifies that that it is not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from covered transactions by any Federal, State or local department or agency.
- 26. CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT:** Supplier must agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).
- 27. BYRD ANTI-LOBBYING AMENDMENT:** Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Suppliers that apply or bid for an award of \$100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.
- 28. PROCUREMENT OF RECOVERED MATERIALS:** Supplier must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.
- 29. WARRANTIES:** All products shall be warranted against defects or faulty workmanship and materials by the Supplier for one (1) year following inspection and acceptance of the products by the City. Warranty shall include all costs incurred, including shipping, for repair or replacement except that which is damaged by misuse or abuse. This one-(1) year warranty shall in no way affect normal extended or manufacturer's warranty exceeding this one (1) year period. Supplier warrants that all goods and services furnished under this Contract are new, conform strictly to the specifications herein, are merchantable, good workmanship, free from defect, comply with all applicable safety and health standards established for such products, all goods are properly packaged, and all appropriate instructions or warnings are supplied. If a defect is found, a component failure occurs, or workmanship is found to cause failure, the Vendor shall replace the product at their own expense, including shipping charges. Any replacement product will be

warranted for one (1) year from the date it is delivered. All implied and expressed warranty provisions of the Uniform Commercial Code are incorporated into this Contract.

30. NONDISCRIMINATION: The City of Vancouver, WA is an equal opportunity employer. In the performance of this Agreement, the Contractor will not discriminate against any employee or applicant for employment on the grounds of race, creed, color, national origin, sex, sexual orientation, marital status, age or the presence of any sensory, mental or physical handicap.

The undersigned, as the authorized representatives of the City and Contractor respectively, agree to all of the terms and conditions contained in this Agreement, as of the dates set forth below.

CITY OF VANCOUVER

A municipal corporation

DocuSigned by:



Eric Holmes, City Manager

9/27/2023

Date

Attest:

DocuSigned by:



Anthony Glenn, Treasurer

For: Natasha Ramras, City Clerk

Approved as to form:

DocuSigned by:

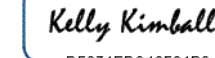


Jonathan Young, City Attorney

CONTRACTOR:

Brown and Caldwell

DocuSigned by:



Signature

kelly kimball

Vice President

Printed Name /Title

9/19/2023

Date



Attachment "A"
Scope of Work

Exhibit A Scope of Work

6500 S Macadam Avenue, Suite 200
Portland, OR 97239
T: 503.244.7005

Water Station 14 PFAS Treatment System Design Project

City of Vancouver

Phase 1 Scope of Work

August 14, 2023

Project Overview

The City of Vancouver (City) has tasked Brown and Caldwell to provide professional engineering services for a PFAS water treatment system design at Water Station 14 (WS-14) located at 6803 NE 78th St, in Vancouver, Washington. This scope of work describes BC ("Consultant") and the City activities that will occur during the WS-14 PFAS Treatment System Design Project ("Project") for treatment of PFAS in groundwater produced from the City's Wells at WS-14. Brown and Caldwell (BC) will subcontract with Shannon & Wilson, Greenworks, MWA Architects, and ESA to provide project support.

Background

The City owns and operates the 3rd largest state-regulated municipal water system in the State of Washington. Vancouver's source of drinking water is 100% groundwater. There are nine well fields with a total of 40 wells in the City's system. These wells produce an average daily demand of 27 million gallons (MG) serving approximately 280,000 people. The City's service area covers approximately 72 square miles incorporating areas within the City limits and extending into unincorporated Clark County.

WS-14 is on a 3.35 acre parcel and has been a municipal water facility serving Vancouver since 1980. The site contains three groundwater wells with a combined capacity of 3,200 gpm.

Water Station 14 consists of the following major components:

- 3 groundwater wells
- Booster pump station with 2 pumps
- On-site sodium hypochlorite generation (OSHG) system for disinfection
- Fluoride dosing equipment
- Single-tower aeration system for pH control
- Emergency generator

Water from the station's wells flows through the single-tower aeration system for pH adjustment, receives disinfection treatment provided via an on-site sodium hypochlorite generation system, and is fluoridated with sodium fluoride. Water pumped from the wells at WS-14 flows through a common flow meter prior to distribution in the Heights High Pressure Zone. The disinfection and fluoride injection points are located within the flow meter vault.



The booster pump station at WS-14 consists of two variable-speed pumps that draw water from a clearwell beneath the current treatment building. The total booster pump capacity is 3,200 gpm (1,600 gpm per pump).

Per- and polyfluoroalkyl substances (PFAS) were first detected in the groundwater at WS-14 in late 2020. Additional testing was completed of all water system wells in 2021. In 2022, the City completed a high-level treatment system conceptual layout and cost estimate to understand the feasibility and cost of adding PFAS treatment at WS-14. The City also completed RSSCT testing and is currently conducting a pilot test with four different filter media. The pilot testing began in early January 2023 and final results are not expected until early 2024, which means design will commence prior to pilot study completion.

The City has received \$12.7 million in State Revolving Fund (SRF) loan funding for this project. This project will need to meet the federally funded project requirements through the SRF program including Build America, Buy America (BABA) requirements, cultural and environmental reviews/SEPA, and the Davis-Bacon Act. The City will sign an SRF contract with the state in mid-2023. The City will have 18 months from signing to have a construction contract awarded.

Approach

BC will complete the project in two phases at the City's direction to incorporate findings from Phase 1 to inform the Phase 2 scope of work. The first phase of the project will include the site evaluation, preliminary design, initial permitting tasks including the cultural review, wetlands delineation, and land use pre-application, and public outreach. Cultural conditions can critically impact schedule, so BC and subconsultant, ESA, will kick off the cultural review immediately following notice-to-proceed. Following an in-person kick-off meeting, our key discipline leads and team will visit the WS-14 site. The site assessment and alternative analysis phases will advance while waiting for the pilot study data.

One objective for Phase 1 is to make important decisions that will lay the basis for a repeatable design for the City for future PFAS treatment systems. The first key task will be to review the piloting data and tour sites to familiarize staff with the available options. This effort will provide the basis for selecting the treatment technology. The effort will also solidify needs around pre-purchasing to inform Phase 2.

Some of the additional key decisions include the location of the treatment system in the process, location of the treatment process on the site, and method for discharge of wastewater. These decisions will be made in alternative assessment meetings and pilot findings meeting. As a part of the meetings, BC will conduct an alternatives analysis that looks at trade-offs and impacts of the design decisions. Once these decisions are made, sizing criteria will be established and the rationale for the decisions will be documented in a Project Engineering Report (PER), including expectations for code requirements. BC will then advance the preliminary design deliverables including the Preliminary drawings under Phase 1.

Phase 2 of the project will include the detailed design and final design efforts to develop construction documents, estimated to take approximately 8 months following Phase 1 based on the design elements listed in this scope of work. Additional design elements could be realized through the preliminary design that may change that assumption and the project schedule. This phase will involve development of the 60 percent and 90 percent design submittals, followed by preparation of the 100% and final bid documents. BC will also provide bid support. Phase 2 will also include construction and commissioning services including services during construction (SDC) support and services following construction (SFC) for on-site construction management and commissioning and start-up.

Scope of Work Summary and Work Breakdown Structure

The BC Team's scope of services for the WS-14 PFAS Treatment System Design Project is divided into the following phases and tasks:

WS-14 PFAS Project Design Tasks		
Contract Phase 1		
Phase 100	Project Management	
	Task 110	Phase 1 Client Meetings
	Task 120	Phase 1 On-going Project Management
Phase 200	Site Assessment	
	Task 210	Survey
	Task 220	Geotechnical Investigation
	Task 230	Review Site Background Information
Phase 300	Alternatives Analysis and Conceptual Design	
	Task 310	Site Tours
	Task 320	Pilot Data Review and Treatment Selection
	Task 330	Alternatives Assessment
	Task 340	Conceptual Layout
	Task 350	Prepurchase Evaluation
Phase 400	Preliminary Design	
	Task 410	Project Engineering Report
	Task 420	Preliminary Design Drawings and Specifications
	Task 430	Preliminary Design Submittal
	Task 440	Cost Estimating
	Task 450	Preliminary Design QA/QC
Phase 500	Permitting & Public Outreach	
	Task 510	SRF Compliance
	Task 520	SEPA
	Task 530	Wetland Delineation
	Task 540	Preapplication Meeting and Support
	Task 550	DOH Engagement and Coordination
	Task 560	Outreach materials development
Phase 800	Unanticipated Services	
	Task 801	Phase 1 Unanticipated Services

WS-14 PFAS Project Design Tasks		
Contract Phase 2		
Phase 100	Project Management	
	Task 120	Phase 2 Project Management
Phase 200	Site Assessment	
	Task 240	Existing Conditions Scan and Modeling
Phase 500	Permitting & Public Outreach ^a	
	Task 510	SRF Compliance
	Task 520	Wetlands Delineation
	Task 550	DOH Engagement and Coordination
	Task 560	Outreach materials development
	Task 570	Land use approval support
	Task 580	Building permitting support
	Task 590	Discharge compliance permitting support
Phase 600	Final Design	
	Task 610	Intermediate (60%) Design
	Task 620	Draft Construction Cost Estimate
	Task 630	Final Design (90%) Design
	Task 640	Final Construction Cost Estimate
	Task 650	Bid Documents (100%)
	Task 660	On-call Bid Support
	Task 670	Final Design QA/QC
Phase 710	Services During Construction	
	Task 711	Submittals
	Task 712	RFIs
	Task 713	Change Orders
	Task 714	Record Drawings
Phase 720	SDC: On-site Construction Management and Observation	
Phase 730	SDC: Commissioning and Start-up (to include testing and optimization)	

a. New subtasks will be created for tasks listed in Phase 500.

This scope of services and level of effort includes the Contract Phase 1 tasks only. Phase 2 will be scoped during Phase 1. This scope, schedule, and budget are expressly developed for the completion of the deliverables summarized herein for Phase 1. We have assumed input and support from City staff and that relevant information and data will be provided by the City. Professional services that may be required beyond this scope may require an amendment.

Contract Phase 1

Phase 1 of the project includes the site assessment, alternatives analysis, preliminary design, initial permitting tasks including the cultural review, wetlands delineation and land use pre-application, and public outreach as detailed in the following phases and tasks:

Phase 100: Project Management

Tasks 110: Phase 1 Client Meetings

Activities: project kick-off and external PM meetings

Assumptions:

- Kick-off meeting will be a 1-hour in-person meeting.
- Key staff from the site assessment team will visit the site for the project kick-off.
- External PM meetings will be virtual and will occur weekly with a duration of 60 minutes, attended by 3 consultant staff. Additional time for meeting prep and circulation of post-meeting materials is included in this task budget.

Meetings:

- External project kick-off meeting and site visit
- Weekly virtual PM calls for duration of this phase (not to exceed 7 months). Preliminary design is anticipated to be delivered in 6 months. Permitting and outreach will be occurring during that last month.

City Responsibilities:

- Participate in project kick-off meeting and site visit
- Communicate issues that impact project at weekly PM meetings
- City Responsibilities:

Deliverables:

- Brief meeting agendas and notes for weekly calls

Tasks 120: Phase 1 Project Management

Activities/Approach: Provide management, direction, coordination, and control of all work associated with the project schedule, budget, technical quality, and monthly invoices for the project, along with project meetings under this phase. This task includes the following activities:

- Task-level project and staff management
- Project file management
- Creation and maintenance of the project schedule
- Tracking project expenditures versus percent complete
- Communication and coordination with City staff
- Monthly invoices and progress reports via cover letters
- Development of a project management plan (PMP)
- Development and maintenance of the change management log

City Responsibilities:

- Review monthly status reports and supporting project documentation for invoice and payment approval

Deliverables:

- Submittal of updated project logs as needed to support key activities and decisions (action/issue/decision logs)
- Monthly progress reports and invoices
- Project schedule

Phase 200: Site Assessment

Task 210: Survey and Basemap Preparation

Activities:

- City to complete survey to prepare a basemap for the treatment improvements with horizontal and vertical datum
- BC to provide prioritized needs for survey effort.
- Survey to include:
 - Existing buildings exterior and roof overhangs
 - Property boundaries
 - Location of existing site underground utilities
 - Location of existing utilities in the right-of-way
 - NE 78th St. and existing stormwater manhole in right-of-way
 - DTM/TIN surface with elevations
 - Existing trees 6" diameter breast height (DBH) and greater on City property and trees on adjacent properties where canopy overhangs City property and root zone could be impacted by improvements, per assumptions under Subtask 423
 - Sewer manhole on NE 76th Circle, owned by Clark Regional Wastewater District (CRWWD), and properties between City site and manhole
- City to survey location and elevation of geotechnical borings, cultural exploration locations, and wetland delineation in a separate trip

Assumptions:

- City will use city-hired staff to conduct the site survey
- City will locate and mark water utilities on the site City will locate all utilities onsite and coordinate with other utilities for locates if there are other non-City owned utilities in an easement through the site.
- City will pothole critical water utilities on the site if required

Deliverables:

- City to provide site survey basemap in Civil 3D format

Task 220: Geotechnical Investigation

Activities:

- Review existing soils data and develop an exploration layout for up to two borings, two test pits for infiltration testing, and two shallow Dynamic Cone Penetrometers for pavement design.
- Develop a laboratory testing program based on the results of the geotechnical borings and test pits. For planning purposes we assume up to 8 grain size analyses, 4 Atterberg limits tests, and corrosion testing on two samples (DIPRA plus chlorides).

- Install a vibrating wire piezometer and one data logger to monitor groundwater levels for up to 6 months.
- Perform geotechnical analysis and provide recommendations to support:
 - Building foundations including both shallow and deep foundations (if required)
 - GAC Backwash/IX Flush Tank foundation
 - Meter vault subgrade/backfill/shoring/lateral earth pressures (including traffic surcharge pressures)/conceptual dewatering alternatives
 - Pipe bedding/backfill/conceptual shoring and dewatering alternatives
 - Pavement
 - Unfactored infiltration rates of soil
- Prepare a geotechnical data report (GDR) containing the boring logs and results of the laboratory testing.
- Evaluate the seismic hazards including the seismic site class, liquefaction potential to the depth explored, and lateral spread, and potential for surface fault rupture.
- Prepare a geotechnical engineering report (GER) containing the results of our geotechnical analyses to support design development and the City's permitting process.
- Review of geotechnical related plans and specs.

Assumptions:

- No contamination will be encountered, and soils can be disposed of at site that accepts clean fill.
- Test pits will be backfilled with soils from the excavation using minimal compactive effort.
- Two borings will be advanced to maximum depths of 45 to 75 below ground surface or practical refusal using mud-rotary drilling techniques.
- Traffic loads will be provided by others for pavement design.
- Structures will have a period of less than 0.5 seconds, and Shannon & Wilson will provide a code-based design spectrum. No site-specific design spectrum will be required.
- If liquefaction is identified as a potential hazard we will provide conceptual mitigation strategies and recommendations and recommendations for shallow and deep foundations (if required). A discussion of conceptual ground improvement options can be provided, but our scope does not include final design of ground improvement systems.
- Dewatering and shoring evaluations will be conceptual in nature and the final design will be performed by the construction contractor and design professionals retained by the contractor.
- City will locate all utilities onsite within a 25-ft radius of the staked boring location. We request any utility plan drawings be provided to us by the City prior to commencement of our exploration program.
- The City of Vancouver will provide access to the site and any permit fees required by drilling will be paid by others.
- New structures will not be buried greater than 10 feet in depth.

Deliverables:

- GDR, Draft and Final
- GER, Draft and Final

Task 230: Review Site Background Information

Activities:

- Collect and review background information:
 - City will provide best available existing site plans which include the electrical service location and other utilities; and data communication.
 - Record drawings for existing WS-14 facilities for all design disciplines
 - Buried utility maps
 - Existing supervisory control and data acquisition (SCADA) communication infrastructure
 - Pump curves for installed pumps
 - Water quality data for WS-14
 - Existing Geotechnical Report(s)

Assumptions:

The City will provide the requested information that is available within 10 days of request in electronic format.

Phase 300: Alternatives Analysis

Task 310: Site Tours

Activities: This task will involve visiting other PFAS installations with City and BC staff. This task will provide the opportunity for City staff to see installed and operating PFAS treatment systems and discuss lessons learned from engineering and operations staff. The following sites are proposed for tours:

- Ponders and Scott Wells sites, Lakewood Water District, Lakewood, WA
- PFAS Treatment System, City of Issaquah, Issaquah, WA
- Virtual tour with South Adams County GAC system and IX Design (currently in 60% Design)

Following the tours, BC will conduct an Operations Workshop to debrief with engineering and operations staff on lessons learned from the site tours.

Assumptions:

- Two tours will be in person, attended by 4 consultant staff.
- The tours of Lakewood Water District and City of Issaquah will occur on the same day.
- One additional tour will be in person attended by 1 consultant staff that will require travel out of the State of Washington.
- One tour will be virtual, attended by 4 consultant staff
- Operations Workshop will be a virtual meeting, 2-hours, attended by 4 consultant staff.

Deliverables:

- Virtual workshop preparation materials summarizing findings of tours
- Operations Workshop and meeting minutes

Task 320: Pilot Data Review and Treatment Selection

Activities: This task will involve helping the City decide on what the BC team should design for PFAS treatment at WS-14 through the following activities:

- Review pilot data and any summaries provided by HDR.
- Review historical water quality data beyond PFAS concentrations
- Based on estimated breakthrough, prepare planning level capital and O&M costs for GAC and IX systems to compare options.
- This assessment of other sites beyond WS-14. This assessment will investigate the desire for flexibility. The BC team will investigate potential for switching media (GAC vs. IX) in the future. It will also look at flexibility for demonstrating different density medias at the same time.
- Treatment Selection Workshop – meet with the City to discuss treatment technology trade-offs and ability to implement alternative technologies later.

Assumptions:

- Pilot breakthrough data from multiple sample events will be available by mid-August.
- Pilot data will only be reviewed once. If additional data is made available after the cut-off time for the assessment, a scope amendment will be prepared to review additional data at the City's request.
- Only IX and GAC treatment will be compared as part of the assessment.
- Treatment Selection Workshop will be a hybrid meeting at City facilities, 2-hour meeting, attended by 4 consultant staff.
- City will confirm approach around treatment design.

Deliverables:

- Coordination meeting with HDR and City to review pilot data
- Treatment Selection TM to summarize of pilot data results for treatment comparison with planning level capital and O&M costs.
- Treatment Selection Workshop preparatory materials and meeting minutes

Task 330: Alternatives Assessment

Activities: BC will conduct an alternatives analysis that provides a summary of the alternatives and rationale for selection. The intended outcome of this assessment will be for the City to make key design decisions ahead of the Preliminary Design. The assessment will look at three primary aspects of the design including treatment location, design features, and washwater discharge as follows:

- **Treatment Location**
 - Treatment location within existing process (i.e., between raw water well pumps and air stripper or after the booster pumps)
 - Treatment location on the site
 - Hydraulic Assessment: Both GAC and IX technologies will remove PFAS, but the hydraulics are an important consideration for energy usage and performance optimization. This task will involve the following activities:
 - Update BC Fathom hydraulic modeling completed as a part of the PFAS Treatment Feasibility Study to determine if the current well pumps or booster pumps are sufficient, if the pumps need to be upgraded, and/or larger impellers or motors need to be installed.

- **Design Features**

- Backwash storage: confirm Treatment Feasibility Study decision to place in an elevated backwash tank versus temporary Baker tank.
- Media Backwash/Flushing Design: Treatment media cleaning is an important consideration for either GAC or IX design. The existing distribution system pressure can be used as the supply to either backwash (GAC) or forward flush (IX). For GAC systems, the backwash design is an important consideration. This task will involve the following:
 - Evaluate system pressure to determine feasibility of backwash supply from system pressure or if additional pumping capacity and storage volumes are needed.
- Level of Automation: determine if vessels will be designed for automated backwash or flushing
- Architectural: whether vessels and/or electrical equipment will be located outside or in a building. There are also decisions around if additional space is provided for storage, lab sink, and/or office space, etc.
- **Washwater Discharge:** In tandem with Phase 500 tasks, BC will explore options and confirm the City's preferred approach for management and discharge of the washwater for GAC or IX as a part of this task. WS-14 has no permitted sewer or stormwater discharge connections, so this task will explore alternative discharge approaches. This task will involve the following activities:
 - Explore the option to discharge to stormwater through a State Waste Discharge Permit to discharge to an infiltration basin for surface dispersion
 - Confirm infiltration basin feasibility based on site-specific soils evaluation. Task to be completed in tandem with Task 220
 - Explore option for a temporary or permanent connection to the nearby stormwater manhole on NE 78th St. near NE Andresen Ave covered under a Water Treatment Plant General Permit.
 - The following sewer options will be explored offsite:
 - Pump to CRWWD manhole in adjacent neighborhood
 - Sewer connection to CRWWD sewer either along NE Andresen Rd (~500 feet) or connect to the East at NE 78th St. & NE 72nd Ave (~1,000 feet)

BC will lead two Alternative Assessment meetings to make decisions on the items highlighted in this task.

Assumptions:

- This task will be completed following Tasks 310 and 320.
- Key Decisions that will be made by the City as a part of this task for the basis of design include:
 - Treatment location physically
 - Two options will be presented.
 - Conceptual layouts will be markups of existing site plan in Bluebeam, prepared in PDF format, and presented during the meeting.
 - Treatment location in process
 - Two options will be evaluated.
 - Level of automation
 - Architectural (building or no building, and what is in it)
- Likely priorities for discharge will be selected, but a proposed outcome may not be finalized.
- Alternative assessment meetings will last 2 hours. One of the two meetings will be in person. Both meetings will be attended by 4 consultant staff.

Deliverables:

- Two alternative assessment meetings
- Alternatives Assessment Technical Memorandum to summarize assessment and key decisions (limited to 10 pages or less) as preface to be incorporated into the PER.

Task 340: Conceptual Design Layout

Activities: This task will establish the proposed site layout. This will involve the following activities:

- Confirm sizing of treatment equipment
- Develop conceptual layout and preliminary pipeline routing Include proposed modifications for paved maintenance routes.
- Discuss underdrain selection and other equipment preferences for manufacturer's, such as valves and instruments
- Determine method of equipment access (i.e., elevated catwalk or mobile boom lift)
- Develop approach for construction phasing
- Considerations for expansion
- Design Workshop – meet with the City to discuss general layout, sizing, and site related considerations, and review preliminary layout and confirm basis of sizing.

Assumptions:

- Conceptual layouts will be markups of existing site plan in Bluebeam, prepared in PDF format, and presented during the meeting.
- Design Workshop will be a virtual, 2-hour meeting, attended by 4 consultant staff.

Deliverables:

- Design Workshop
- Conceptual equipment layouts for PFAS Facility
- Preliminary process flow diagram (PFD)

Task 350: Prepurchase Evaluation

This task will focus on supporting the City in evaluating pre-purchasing.

Activities:

- Evaluate pre-purchasing approaches, such as a separate bid package(s) or developing a master services agreement with a vessel manufacturer that complies with the SRF funding
- Coordinate with SRF staff on compliance of pre-purchase options
- Assess benefits and risks of different approaches based on estimated equipment lead times, long-term standardization, and estimated contractor mark-up.
 - Team will assess specifically vessels, media, and electrical equipment.
- Hold pre-purchasing meeting

Assumptions:

- Pre-purchasing meeting will be a virtual, 2-hour meeting, attended by 4 consultant staff.

Deliverables:

- Pre-purchasing meeting, preparatory materials and meeting minutes. Outcomes will be further documented in the PER.

Phase 400: Preliminary Design

During this phase, BC will develop a PER for DOH approval and preliminary design documents. The PER document will serve as a basis of design decisions for this and future PFAS design projects. The preliminary design will be dependent on the treatment selection decision and decision to include a building as outcomes from Phase 300. Discipline leads will complete a site visit.

Task 410: Project Engineering Report

Subtask 411 PER Preparation

Activities: BC will prepare a written draft of the PER that summarizes the basis for the design activities for the DOH PER, which will be submitted by the City. The primary focus of this PER will be design documentation including the rationale for design decisions, including the following:

- An overall conceptual equipment layout on the site
- Preliminary construction sequencing plan for equipment installation
- Mechanical design criteria, including PFAS treatment system, wash water handling, and piping and discussion of pumps and motors, piping and valves;
- Building mechanical design criteria for ventilation, heating and cooling for equipment rooms, and fire suppression system review [assuming building is included in the design]
- Structural design criteria, including codes and standards, design loads, seismic design requirements, safety factors, and materials.
- Electrical design criteria, including power supply, site lighting, equipment, telemetry, and controls.
- Instrumentation and control (I&C) design criteria including level of automation, instruments and hardware, local and remote networking with existing SCADA.

Subtask 412 Standards Document

Activities:

- BC will develop Standards Technical Memorandums that summarize design standards for key disciplines that the City can leverage for future designs.
- BC will present the City with a questionnaire(s).
- BC will develop draft standards for City review.
- BC will meet with the City to discuss the proposed standards.

Assumptions:

- These standards could be incorporated as appendices in the PER.
- Equipment list itemizing the major pieces of equipment and proposed manufacturer's and/or types
 - Long lead items will be identified and included in the pre-purchase evaluation discussed in Task 350.

Deliverables:

- PER, Draft and Final Draft for DOH
- PER discussion meeting, virtual
- Standards Technical Memorandum

Task 420: Preliminary Design Drawings and Specifications

Activities/Approach: Once the conceptual design work and Draft PER are complete, BC will proceed with developing preliminary design documents. The preliminary design submittal will involve the following design activities, based on the listed activities and assumptions:

- Drawings will be prepared using BC CAD standards with the exception of the cover sheet. A combination of Revit and AutoCAD version 2022 will be used.
- Refer to Attachment A for a list of the anticipated Drawings to be provided with the Preliminary Design package.
- The City will provide a list of standard or preferred manufacturers for major equipment identified in Subtask 412.
- Each discipline lead will attend an internal kick-off meeting and select staff will complete a site visit (civil, process-mechanical, I&C/electrical, architectural, and landscape architect) to capture information not previously covered in the pre-scoping site-visit.
- List of anticipated specifications to be developed during Phase 2. Develop draft specifications for pressure vessel and treatment media.

Preliminary Design Assumptions:

- To be conservative, a new building for the PFAS treatment equipment was assumed for this preliminary design phase. The building will have a footprint roughly 114' x 32', and 40' height.

Preliminary Design Deliverables:

- Preliminary design drawings
- Technical specifications table of contents
- Design review workshop

Subtask 421: Internal Team Meetings and Design Management Coordination

Activities:

- Internal Team Meetings
- Design Management and Coordination
- Building Information Modeling (BIM)/CAD Management and Coordination
 - Produce BIM Execution Plan (BxP) describing CAD and modeling goals
 - Set-up of drawing package general sheets, and coordination between designer leads.
 - Bi-weekly designer coordination meetings
 - Modeling for placement of equipment layout for PFAS Facility.
 - 3D model development to facilitate internal design reviews, and presentation to the City.

This subtask assumes the following team meetings are twice per month as follows:

- Internal kick-off meeting: 1 hour
- Eight, 1-hour internal biweekly design team meetings
- One, in-person 2-hour meeting with the City to discuss 30% design review comments with the City for associated discipline leads.

Subtask 422: Civil**Activities:**

- Develop the site layout, including conceptual yard piping, site drainage, and slopes, based on the project requirements identified in the PER.
- Prepare preliminary civil design of new access road to the new PFAS treatment system that is capable of handling a media slurry truck
- Prepare preliminary civil drawings for the 30 percent design submittal
- Prepare preliminary drainage plan
- Identify construction constraints, sequencing and lay-down areas.

Assumptions:

- Existing conditions base-mapping will be provided by client and will be provided with identifiable horizontal and vertical controls, as well as parcel boundaries and right-of-way. City will provide updated survey for the site.
- Preparation of technical specifications will not be provided.
- Preliminary plan for site landscaping to be coordinated between civil discipline and landscape architect
- Street improvements in the ROW, curb and gutter, a driveway, or pavement is not required.
- The new pollution generating surface will be under 5,000 square-feet and will therefore not require a SWPPP, a drainage Technical Information Report, and stormwater treatment BMPs for site runoff. Detention, storm drain improvements in the ROW, and extensive stormwater quality treatment is not required.
- No changes to pedestrian and vehicular access to the existing buildings will be provided.

Subtask 423: Landscape**Activities:**

- Support pre-application meeting materials.
- Prepare plan for landscape, which is documented in PER.
- Prepare preliminary landscape planting plan for the preliminary design submittal.
- Identify preliminary irrigation point of connection.
- Develop a tree plan to identify species, native, healthy, remove, keep, etc.

Assumptions:

- Existing conditions base-mapping will be provided by client and will be provided with identifiable horizontal and vertical controls, as well as parcel boundaries and right-of-way.
- Tree survey to include location and species of existing trees with 6" diameter breast high (DBH) and greater.
- Preparation of technical specifications will not be provided.
- Preliminary plan for site landscaping to be coordinated between civil discipline and landscape architect.

Subtask 424: Architectural

Activities:

- Assuming a building is selected, work with City and Structural to decide what type of building is most appropriate for the project, balancing construction cost, durability, and constructability.
- Coordinate with process mechanical and building mechanical teams for equipment and systems.
- Coordinate with electrical and lighting teams for systems.
- Provide preliminary building code review and documentation.
- Provide design information for client review (materials, colors, FF&E as needed)
- Provide input on land use pre-app, including descriptions, renderings, etc.
- Provide preliminary design work, including drawings, and draft specifications for the architectural discipline. Assume PER content for code review, basis of design options, and materiality.
- Coordinate work with the work of other disciplines as needed.
- Provide input and participation in land use pre application, including building descriptions and visualizations as needed.
- Provide input and participation in public outreach activities, including architectural overview and visualizations as needed.

Assumptions:

- Include building heating to 50-degrees, and therefore must comply with the Washington State Energy Code for building envelope, air leakage, mechanical systems, ventilation, and lighting.
- Type of building is decided prior to the start of preliminary design
- Building aesthetics will be confirmed after preliminary design
- Provide man doors to meet the exiting requirements for a building.
- Provide an overhead/roll-up door for equipment and material load-in.
- Provide roof hatches over each tank so they can be removed/replaced in the future.
- There will be no interior walls or rooms, except for the electrical room.
- Scope assumes no architectural work for the site or landscaping.

Subtask 425: Structural

Activities:

- Review geotechnical findings under Task 220
- Design new concrete foundation slab for PFAS Facility
- Design new concrete foundation slab for washwater storage tank

Assumptions:

- The building will conform to design criteria per IBC 2018 and ACSE 7-16. Discuss during preliminary design what class of seismic resiliency to design to and what class to submit to the building department.
- Geotechnical findings will not be available during preliminary design.
- The building will be one-story with no mezzanine level.
- The building will not include an equipment platform for the tanks.

Subtask 426: Process/Process-Mechanical

Activities:

- Develop treatment system design concept. The preliminary design drawings will be based on the decisions from Task 330.
- Develop 3D rendering for the GAC or IX treatment system
- Prepare preliminary process/mechanical drawings for the preliminary design submittal
- Prepare draft specifications for primary design elements including GAC or IX contactors and media.

Assumptions:

- Distribution system can provide backwash flow, which will range from 400 to 1,200 gpm, so no backwash pumps are required.
- District has an asset numbering system sufficiently developed for use on this project.

Subtask 427: Building Mechanical and Plumbing

Activities:

- This task will be limited to review of energy and air exchange requirements for the new facility, assuming a building.

Assumptions:

- No building mechanical drawings at Preliminary design.
- Building will need to be heated to 50-degrees and ventilation will be required.
- Alternative analysis for energy code compliance is not required. Building will meet energy code utilizing the Prescriptive Method.
- There is no water heater anticipated for the building. No bathroom or emergency eyewash/shower are anticipated.
- No fire alarm or fire protection systems needed at the unoccupied building.

Subtask 428: Electrical

Activities:

- Review existing facility record drawings and electrical diagrams.
- Conduct site visit to confirm power distribution systems for the existing WTP facilities and loads, and confirm existing one-lines, electrical equipment ratings and capacities, and demolition impacts.
- Provide code review of existing electrical system.
- Determine electrical requirements for PFAS system and new electrical loads/pumps.
- Determine best way to power new PFAS treatment system.
- Determine if existing backup generator is adequate to support the additional loads.
- Develop preliminary design criteria for electrical as part of PER
- Develop preliminary electrical one-line drawing.

Assumptions:

- No electrical power system modelling or coordination/arc flash studies are included as part of this electrical scope.
- Existing utility maximum demand meter readings obtained from the City power utility for the prior 24 months will be provided to the consultant by the City. In addition, 30-day, demand meters may

be requested to be installed on existing electrical distribution equipment, as determined by the consultant during preliminary design, and installed by the City's electrician.

- No yard lighting or lighting modifications will be detailed on the drawings. If included, this will be covered in Phase 2.
- No sound modeling will be performed in Phase 1 of this scope of work. If the generator requires replacement, then sound modeling will be incorporated into Phase 2.

Subtask 429: Instrumentation & Controls

Activities:

- Determine any City preference for instrumentation and controls (I&C).
- Determine communication requirements for PFAS system to interface with City's existing SCADA system.
- Develop preliminary design criteria for I&C and confirm what will be automated versus manual.
- Determine security requirements for new building and remote monitoring by the District.
- Develop:
 - Preliminary communication network drawing
 - Preliminary control descriptions
 - Prepare preliminary P&IDs

Assumptions:

- No SCADA integration programming work is envisioned for this project. The City will leverage their local system integrator for all programming and graphic development.

Task 430 Preliminary Design Submittal

Activities:

- Prepare submittal package for City Review

Assumptions:

- Refer to Attachment A for the Preliminary Design Drawing List and Specifications
- At the conclusion of the Preliminary design review, no changes are expected to the major equipment sizing and locations.
- City comments will be received within 10-working days as one set of comments.
- Comments will be resolved and incorporated into the intermediate design submittal.
- Submittals will be electronically delivered pdf files.

Deliverables:

- Preliminary Design Documents
- Phase 2 scope of work, schedule, and budget

Task 440: Preliminary Cost Estimate

Activities:

- Develop a Class 4 opinion of probable construction cost (OPCC), as defined by the Association for the Advancement of Cost Engineering International (AACEI). The expected accuracy of this Class is from -30 to +50 percent.

Assumptions:

- Will use equipment quotes where available for major equipment.

Deliverables:

- Class 4 Opinion of Probable Construction Cost

Task 450: QA/QC

Develop and implement a quality assurance/quality control (QA/QC) program to review calculations and work products from the project. Based on the Quality Management Plan, provide appropriate calculation and deliverable QA/QC reviews by in-house, senior staff members. Incorporate internal and City review comments to prepare and complete final work products.

Activities:

- Senior review of PER
- Senior review of preliminary design package

Phase 500: Permitting and Outreach

This phase will support the cultural review permitting required for the SRF funding and the permitting process for the new discharge location discussed under Task 330. The City will undertake building permitting and land use. BC will support the pre-application in Phase 1. BC will also support DOH approval for the new PFAS treatment system.

Task 510: SRF Compliance

Subtask 511: Phase 1 SRF Compliance Plan

Activities:

- To meet funding requirements, this task will develop a high-level plan for achieving compliance, outlining requirements, deadlines, and responsible parties
- Support consultant leadership team in tracking requirements and deadlines
- If moving forward with pre-purchasing, then confirm documentation requirements, integration of federal requirements into any pre-purchasing approaches and if sole sourced, identify what will be required to keep eligible.

Assumptions:

- Support incorporation of compliance requirements into specifications
- City will complete quarterly reporting

Deliverables:

- SRF Compliance Plan

Task 520: SEPA

Washington's State Environmental Policy Act (SEPA) (RCW 43.21) requires local and state agencies to

consider possible environmental impacts in their decision-making processes. A SEPA determination on whether environmental impacts are significant must be made by the City Community Development Department prior to issuing permits for the project, and that determination is also needed in order for WADOH to complete its environmental review for SRF funding.

Subtask 521: Draft SEPA Checklist

ESA will complete a Draft SEPA Environmental Checklist during Phase 1 of the project, based on the preliminary design. This would help ensure that the required environmental considerations are addressed in the preliminary design phase.

Activities:

- Conduct research and use information from field investigations for other tasks to complete a Draft SEPA Environmental Checklist for the project's preliminary design.
- Prepare the Draft SEPA Environmental Checklist using the City of Vancouver's template, which is formatted to include the required information stated in WAC 197-11-960 and address subject areas including Earth, Air, Water, Plants, Animals, Energy and Natural Resources, Environmental Health, Noise, Land and Shoreline Use, Housing, Aesthetics, Light and Glare, Recreation, Historic and Cultural Preservation, Transportation, Public Services, and Utilities.

Assumptions:

- The SEPA Environmental Checklist will be finalized in Phase 2 of the project, when design is advanced to a level suitable for permit application submittals.
- The City will prepare and publish a Determination of Non-Significance, based on the Final SEPA Checklist (prepared in Phase 2), if warranted
- It is assumed an Environmental Impact Statement will not be required to satisfy SEPA review/documentation requirements for this project, and EIS preparation is not included in this scope.
- Cultural resources investigation and wetland delineation results will be summarized in the Draft SEPA Checklist based on work completed under separate tasks/contracts.
- SEPA review/filing fees will be paid by City of Vancouver in Phase 2.

Deliverables:

- Draft SEPA Checklist

Task 530: Wetland Delineation

Clark County GIS mapping, National Wetland Inventory (NWI) mapping, and previous site plans for the subject property identify wetlands on the site. Construction and development activities in jurisdictional wetlands are regulated by federal and state agencies, and ground disturbance in wetland buffers is regulated by the City under its Critical Areas Ordinance.

Subtask 531: Phase 1 Wetland Delineation

The following describes a scope of work for identifying and documenting the location and nature of wetland area on the site.

Activities:

- Review existing site data and mapping including previously mapped wetland boundaries, soils information, precipitation and climate data, and NWI mapping.
- Field delineate the boundaries of site wetlands using methods consistent with current U.S. Army Corps of Engineers (Corps) and Washington Department of Ecology (Ecology) guidance.
- Record wetland boundary and wetland/upland plot locations in the field with GPS equipment capable of sub-meter accuracy and/or flag wetland boundaries for survey by others.
- Document wetland findings in a Wetland Delineation Report with figures and site photographs.

Assumptions:

- Wetland field work can be completed by two ESA biologists in one day.
- ESA will flag boundaries and ID points needed to be picked up by City survey for critical area mapping.

Deliverables:

- Draft and Final Wetland delineation report by ESA that meets Corps, Ecology, and City of Vancouver code requirements and which could be used to support future phase permitting efforts.
- Site mapping that shows restricted buffer areas.

Task 540: Pre-application Meeting and Support**Subtask 541: Preapplication Materials Support****Activities:**

- Develop preliminary site plan for pre-application meeting.
- Develop two-page project narrative.
- Participate in pre-application meeting by 2 consultant staff.

Assumptions:

- The City will submit the documentation to the Land Use Planning Department.

Deliverables:

- Develop preliminary site plan for pre-application meeting.
- Develop two-page project narrative.
- Pre-application meeting minutes

Subtask 542: Architectural Support

Support Preapplication materials.

Task 550: DOH Engagement and Coordination

Subtask 551: Phase 1 DOH Engagement and Coordination

BC's approach is to bring DOH along from the beginning to introduce them to the project, meet with them around submittal of the PER, and again at the construction document submittal.

Activities:

- Meet with DOH to discuss PFAS treatment design approach
- Meet with DOH to present preliminary design criteria in a DOH pre-design meeting

Assumptions:

- Initial meeting to discuss any concerns with GAC vs. IX treatment design and introduce design schedule.
- DOH coordination for the 106 determination is accounted for in Task 512.
- PER to be delivered to DOH during Phase 2 and 60% design.

Deliverables:

- Meeting minutes

Task 560: Outreach Materials Development

Given the public interest in PFAS, there may be significant interest in the WS-14 design. The BC team will use our in-house communications team to support neighborhood meetings or additional outreach to the community.

Subtask 561: Phase 1 City Council Support

Activities:

- Develop materials to communicate proposed design for City Council

Assumptions:

- Support - one City Council engagement
- Graphics and presentations support estimated to be not greater than 46 hours.
- No one from the BC team will attend the City Council meeting.

Deliverables:

- Presentation materials to include at least one existing site graphic and one site visualization graphic.
- One handout-type document

Subtask 562: Architectural Support

Support City Council presentation materials.

Phase 800: Unanticipated Services

Objective: Provide budget allowance for potential additional work requested by the City.

Task 801: Phase 1 Unanticipated Services

Activities/Approach: To be determined, based on City requests. No work will be completed under this task without written direction from the City. The budgeted amount for unanticipated services is as provided in Exhibit B.

Task Assumptions

- Brown and Caldwell will prepare a Project Change Request (PCR) describing each additional and identifiable task under this allowance. The PCR will include a short description of the added scope with budget to be authorized prior to proceeding, unless otherwise directed in writing by the City.

City Responsibilities

- Provide direction and authorization for requested additional work.

Meetings

- To be determined.

Work Products

- To be determined.

Contract Phase 2:

Phase 2 will consist of the final design with preparation of drawings and specifications for construction of the proposed PFAS treatment system and associated work, additional permitting and outreach, and construction and commissioning support. Tasks may be refined from this list based on Phase 1 findings.

Schedule

Phase 1 of the project is estimated at 7 months with the key deliverables and meeting milestones dependent on the notice to proceed (NTP) timing. The predesign effort is anticipated to take 6 months with an additional month for permitting support. Phase 2 (final design) duration is estimated at 7 months following the preliminary design. Note that some of the permitting tasks started under Phase 1 will continue under Phase 2. The cultural conditions encountered and the cultural review could cause schedule delays.

A detailed schedule is provided in Attachment B.

Attachment A

Proposed Preliminary Drawing List

Drawing Number	Drawing Title
G-00-001	COVER SHEET
G-00-002	DRAWING INDEX
G-00-101	GENERAL NOTES AND SYMBOLS
G-00-201	ABBREVIATIONS
G-00-501	PROCESS FLOW DIAGRAM
G-00-601	DESIGN CRITERIA SUMMARY
C-00-001	CIVIL LEGEND AND GENERAL NOTES
C-00-101	EXISTING SITE AND DEMOLITION PLAN
C-00-202	TESC PLAN
L-00-101	LANDSCAPE PLAN
A-00-001	ARCHITECTURAL LEGEND AND GENERAL NOTES
A-20-101	PFAS TREATMENT BUILDING FLOOR PLAN
S-00-001	STRUCTURAL LEGEND
S-00-002	STRUCTURAL GENERAL NOTES 1
S-00-003	STRUCTURAL GENERAL NOTES 2
S-20-101	PFAS TREATMENT BUILDING FOUNDATION PLAN
S-20-103	SPENT BACKWASH TANK FOUNDATION PLAN
D-00-001	PROCESS LEGEND AND SYMBOLS
D-10-101	PUMP IMPROVEMENTS PLAN
D-20-101	PFAS TREATMENT BUILDING OVERALL PLAN
D-20-102	SPENT BACKWASH TANK OVERALL PLAN
D-20-301	PFAS TREATMENT SECTION 1
D-20-302	PFAS TREATMENT SECTION 2
D-20-305	SPENT BACKWASH TANK SECTIONS
D-20-901	PFAS TREATMENT ISOMETRIC VIEW 1
D-20-902	PFAS TREATMENT ISOMETRIC VIEW 2
E-00-001	LEGENDS AND SYMBOLS 1
E-00-002	LEGENDS AND SYMBOLS 2
E-00-003	ABBREVIATIONS AND GENERAL NOTES
E-00-101	SITE PLAN
E-20-501	PFAS TREATMENT BUILDING ONE-LINE DIAGRAM
I-00-001	LEGENDS AND SYMBOLS 1
I-00-002	LEGENDS AND SYMBOLS 2
I-00-003	LEGENDS AND SYMBOLS 3
I-00-004	ABBREVIATIONS AND GENERAL NOTES
I-10-101	P&ID - PUMP IMPROVEMENTS
I-20-101	P&ID - PFAS TREATMENT VESSELS 1 AND 2
I-20-102	P&ID - PFAS TREATMENT VESSELS 3 AND 4
I-20-103	P&ID - PFAS TREATMENT VESSELS 5 AND 6
I-20-104	P&ID - SPENT BACKWASH TANK

Proposed Preliminary Specification List

Division 43 – Process Gas and Liquid Equipment

43 23 73 Vertical Turbine Pumps

43 31 13 Vertical Contactors

Division 46 – Water and Wastewater Equipment

46 61 15 PFAS Treatment Media

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Qtr 2, 2023	Qtr 3, 2023	Qtr 4, 2023	Qtr 1, 2024	Qtr 2, 2024
1		Vancouver WS14	181 days	Mon 8/28/23	Mon 5/6/24						
2		NTP	1 day	Mon 9/11/23	Mon 9/11/23						
3		Phase 100: Project Management	170 days	Tue 9/12/23	Mon 5/6/24						
4		Project Initiation and Sub Agreements	10 days	Tue 9/12/23	Mon 9/25/23	2					
5		BC Team Kickoff	0 days	Thu 9/14/23	Thu 9/14/23	2FS+3 days					
6		Prepare BC PMP	5 days	Tue 9/12/23	Mon 9/18/23	2					
7		Ongoing PM	170 days	Tue 9/12/23	Mon 5/6/24	2					
8		Phase 200: Site Investigation	115 days	Mon 8/28/23	Fri 2/2/24						
9		Task 210: Site Survey	41 days	Tue 9/12/23	Tue 11/7/23						
10		Field Survey and Utility Locate	15 days	Tue 9/12/23	Mon 10/2/23	2					
11		Basemap Preparation	20 days	Tue 10/3/23	Mon 10/30/23	10					
12		Survey Boring Location	5 days	Tue 10/31/23	Mon 11/6/23	11					
13		Follow-up Survey if needed	1 day	Tue 11/7/23	Tue 11/7/23	12					
14		Cultural Review by ESA Outside of Contract	115 days	Mon 8/28/23	Fri 2/2/24						
15		Archeological survey, minotring plan, and DAHP/Tribe Consultation	40 days	Mon 8/28/23	Fri 10/20/23						
16		Tribe/DAHP Notification	30 days	Mon 10/23/23	Fri 12/1/23	15					
17		Review Concurrence Letter	15 days	Mon 12/4/23	Fri 12/22/23	16					
18		Public Comment on Published 106 and/or SEPA Findings	30 days	Mon 12/25/23	Fri 2/2/24	17					
19		Task 220: Geotechnical Investigation	65 days	Mon 10/23/23	Fri 1/19/24						
20		Review Existing Information	5 days	Mon 10/23/23	Fri 10/27/23	15					
21		Soil Boring	1 day	Thu 11/9/23	Thu 11/9/23	20FS+8 days					
22		Soil Analysis	5 days	Fri 11/10/23	Thu 11/16/23	21					
23		Prepare GDR	10 days	Fri 11/17/23	Thu 11/30/23	22					
24		Infiltration Lab Testing	1 day	Fri 12/1/23	Fri 12/1/23	23					
25		Infiltration Analysis	5 days	Mon 12/4/23	Fri 12/8/23	24					
26		Prepare Draft GDM	10 days	Mon 12/11/23	Fri 12/22/23	25					
27		Prepare Final GDM	10 days	Mon 1/8/24	Fri 1/19/24	26FS+10 days					
28		Task 230: Review Site Background Info	20 days	Fri 9/15/23	Thu 10/12/23	5					
29		Phase 300: Alternatives Analysis and Conceptual Design	72 days	Wed 9/27/23	Thu 1/4/24						
30		Task 310: Site Tours	6 days	Wed 9/27/23	Wed 10/4/23						
31		WA Site Tours	1 day	Wed 9/27/23	Wed 9/27/23	2FS+11 days					
32		Virtual Site Tour	1 day	Mon 10/2/23	Mon 10/2/23	31FS+2 days					
33		Virtual Operations Workshop	0 days	Wed 10/4/23	Wed 10/4/23	32FS+2 days					
Attachment B: WS14 Proposed Schedule Date: Mon 8/14/23							Task Split Milestone Summary Project Summary Inactive Task Inactive Milestone Inactive Summary Manual Task Duration-only Manual Summary Rollup Manual Summary Start-only Finish-only External Tasks External Milestone Deadline Progress Manual Progress				
							Page 1				

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Qtr 2, 2023	Qtr 3, 2023	Qtr 4, 2023	Qtr 1, 2024	Qtr 2, 2024
34		Task 320: Pilot Data Review and Treatment Selection	25 days	Tue 10/3/23	Mon 11/6/23						
35		Pilot Study Data Review	10 days	Tue 10/3/23	Mon 10/16/23	2FS+15 days					
36		Treatment Selection TM	10 days	Tue 10/17/23	Mon 10/30/23	35					
37		Treatment Selection Workshop	0 days	Mon 11/6/23	Mon 11/6/23	36FS+5 days					
38		Task 330: Alternatives Analysis	7 days	Mon 11/20/23	Wed 11/29/23						
39		Design Decisions Meeting #1: Treatment Location	0 days	Mon 11/20/23	Mon 11/20/23	37FS+10 days, 71					
40		Design Decisions Meeting #2: Design Features	0 days	Wed 11/29/23	Wed 11/29/23	39FS+7 days					
41		Task 340: Conceptual Design Layout	10 days	Thu 11/30/23	Wed 12/13/23						
42		Develop Conceptual Design	10 days	Thu 11/30/23	Wed 12/13/23	40					
43		Conceptual Design Workshop	0 days	Wed 12/13/23	Wed 12/13/23	42					
44		Task 350: Preprocuring Evaluation	26 days	Thu 11/30/23	Thu 1/4/24						
45		Prepurchase Materials	26 days	Thu 11/30/23	Thu 1/4/24	40					
46		Pre-purchase meeting	0 days	Thu 1/4/24	Thu 1/4/24	45					
47		Phase 400: Preliminary Design	69 days	Wed 12/13/23	Tue 3/19/24						
48		Task 410: Project Engineering Report	40 days	Tue 1/2/24	Mon 2/26/24						
49		Develop PER & Standards	15 days	Tue 1/2/24	Mon 1/22/24	43FS+13 days					
50		QA/QC Review	5 days	Tue 1/23/24	Mon 1/29/24	49					
51		Address Comments	5 days	Tue 1/30/24	Mon 2/5/24	50					
52		City Review	10 days	Tue 2/6/24	Mon 2/19/24	51					
53		PER Discussion Meeting, virtual	0 days	Mon 2/12/24	Mon 2/12/24	52SS+5 days					
54		Address Comments	5 days	Tue 2/20/24	Mon 2/26/24	52					
55		Task 420: Preliminary Design (30%)	63 days	Wed 12/13/23	Mon 3/11/24						
56		Discipline Site Visit	0 days	Wed 12/13/23	Wed 12/13/23	43					
57		Develop Drawings	20 days	Tue 1/23/24	Mon 2/19/24	49					
58		Internal QA/QC	5 days	Tue 2/20/24	Mon 2/26/24	57					
59		Address Comments	10 days	Tue 2/27/24	Mon 3/11/24	58					
60		Task 430 Preliminary Design Submittal	21 days	Tue 2/20/24	Tue 3/19/24						
61		Submittal	0 days	Mon 3/11/24	Mon 3/11/24	59, 67					
62		Scope Phase 2	20 days	Tue 2/20/24	Mon 3/18/24	57					
63		Deliver Phase 2 SOW	1 day	Tue 3/19/24	Tue 3/19/24	62					
64		Predesign Workshop	0 days	Mon 3/18/24	Mon 3/18/24	61FS+5 days					
65		Task 440: Preliminary Cost Estimate	15 days	Tue 2/20/24	Mon 3/11/24	57					
66		Develop cost estimate	10 days	Tue 2/20/24	Mon 3/4/24	57					
67		Review and resolve estimate	5 days	Tue 3/5/24	Mon 3/11/24	66					

Attachment B:
WS14 Proposed Schedule
Date: Mon 8/14/23

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress

Page 2

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Qtr 2, 2023	Qtr 3, 2023	Qtr 4, 2023	Qtr 1, 2024	Qtr 2, 2024
68		Phase 500: Permitting and Outreach	157 days	Fri 9/15/23	Mon 4/22/24						
69		Task 510: SRF Compliance	30 days	Fri 9/15/23	Thu 10/26/23	5					
70		Task 520: SEPA	120 days	Mon 10/23/23	Fri 4/5/24	15					
71		Task 530: Wetland Delineation	20 days	Mon 10/23/23	Fri 11/17/23	15					
72		Task 540: Preapplication Meeting and Support	15 days	Tue 3/19/24	Mon 4/8/24	64					
73		Task 550: DOH Engagement and Coordination	30 days	Tue 2/27/24	Mon 4/8/24	54					
74		Task 560: Outreach Materials	10 days	Tue 4/9/24	Mon 4/22/24	72					

Attachment B:
WS14 Proposed Schedule
Date: Mon 8/14/23

Task

Split

Milestone

Summary

Project Summary

Inactive Task

Inactive Milestone

Inactive Summary

Manual Task

Duration-only

Manual Summary Rollup

Manual Summary

Start-only

Finish-only

External Tasks

External Milestone

Deadline

Progress

Manual Progress

Page 3

Brown and Caldwell
Budget

PHASE 1 TOTAL	309	58	328	18	19	39	98	138	70	176	299	43	96	6	28	22	68	52	6	30	8	6	48	62	44	6	52	130	78
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EXHIBIT B: Vancouver WS-14 PFAS Treatment Project

Brown and Caldwell
Budget

		Tracy Eastman	Tyler Pearson	Pepe Vitelli	Tim Cain	Seema Chavan	Emily O'Morrow	Bill Agster	Dan Goodburn	David Shroyer	Holly Tichenor	Rachel Garrett	Ellen Milne	Wendy Pare	Steve Vasquez	Total Labor Hours	Expenses	MWA	Greenworks	S&W	ESA	Total Sub Cost	Total Effort		
Phase	Task	Phase Description	BIM Manager	BIM Lead	BIM IT/DB Support	CAD Visuals	SRF Comp	SRF Support	Senior Cost Est / QA/QC	Cost Estimator	Electrical Cost Estimator	Comms	Comms	Graphic Designer	Word Processing	Biller									
Phase 1			\$222	\$148	\$172	\$148	\$327	\$193	\$259	\$259	\$222	\$327	\$300	\$172	\$148	\$148									
Project Management			0	0	0	0	0	0	0	0	0	0	0	0	0	8	280	\$ 64,790	\$ 4,671	\$ -	\$ -	\$ -	\$ -	\$ 4,671	\$ 69,500
100	110	Client Meetings															120	\$ 29,688	\$ 4,671				\$ -	\$ 4,671	
	120	On-going PM														8	160	\$ 35,102					\$ -	\$ -	
Site Assessment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	\$ 8,178	\$ -	\$ -	\$ 53,400	\$ -	\$ 53,400	\$ -	\$ 61,600
200	210	Survey															22	\$ 4,464			\$ 53,400		\$ 53,400		
	220	Geotechnical Investigation															0	\$ -							
	230	Review Site Background Information															20	\$ 3,714							
Alt Analysis and Conceptual Design			0	0	0	0	0	0	0	0	0	0	0	0	3	0	473	\$ 102,141	\$ 8,200	\$ -	\$ -	\$ -	\$ -	\$ 8,200	\$ 110,300
300	310	Site Tours															76	\$ 19,584	\$ 2,000				\$ -	\$ 2,000	
	320	Pilot Data Review and Treatment Selection													2		116	\$ 24,556	\$ 3,100				\$ -	\$ 3,100	
	330	Alternatives Assessment													1		214	\$ 43,025	\$ 3,100				\$ -	\$ 3,100	
	340	Conceptual Layout															40	\$ 8,285					\$ -	\$ -	
	350	Prepurchase Evaluation															27	\$ 6,691					\$ -	\$ -	
Preliminary Design			13	104	24	4	4	0	4	52	13	0	0	4	8	0	1,683	\$ 322,602	\$ 3,200	\$ 26,114	\$ 8,272	\$ -	\$ 34,385	\$ 3,200	\$ 360,200
400	410	Project Engineering Report															185	\$ 33,346					\$ -	\$ -	
	420	Preliminary Design Drawings and Specifications															1,217	\$ 222,176					\$ -	\$ -	
	430	Preliminary Design Submittal															127	\$ 26,966					\$ -	\$ -	
	440	Cost Estimating							4	52	13						81	\$ 20,406					\$ -	\$ -	
	450	Preliminary Design QA/QC															73	\$ 19,708					\$ -	\$ -	
Permitting & Public Outreach			0	2	0	22	16	24	0	0	0	4	16	8	8	0	194	\$ 41,832	\$ -	\$ 11,456	\$ -	\$ 28,817	\$ 40,273	\$ -	\$ 82,100
500	510	SRF Compliance															64	\$ 14,812					\$ -	\$ -	
	520	SEPA															6	\$ 1,192					\$ -	\$ -	
	530	Wetland Delineation															6	\$ 1,192					\$ 12,342	\$ -	
	540	Preapplication Meeting and Support															66	\$ 12,148				\$ 16,476	\$ -	\$ -	
	550	DOH Engagement and Coordination															66	\$ 12,148				\$ 5,003	\$ -	\$ -	
	560	Outreach Materials Development															6	\$ 1,372					\$ -	\$ -	
Unanticipated Services																	46	\$ 11,116					\$ 6,452	\$ -	\$ 35,000
800	801	Phase 1 Unanticipated Services																\$ 35,000					\$ 35,000	\$ -	\$ 35,000
PHASE 1 TOTAL			13	104	24	26	16	24	4	52	13	4	16	12	19	8	2,672	\$ 539,543	\$ 51,072	\$ 37,569	\$ 8,272	\$ 53,400	\$ 28,817	\$ 128,058	\$ 718,700



SERVICE AGREEMENT #C-101426

AMENDMENT No. 1

Water Station 14 PFAS Treatment System Design

This Agreement amends the Professional Services Agreement number C-101426 by and between the City of Vancouver, hereinafter referred to as "City", and Brown and Caldwell, hereinafter referred to as "Contractor", for services offered.

This amendment amends the original agreement as follows:

1. Increase the authorized amount of the Agreement by \$1,332,800 to a revised authorized amount of \$2,051,500.
2. **Amend** the language contained in Section 1, Scope of Work, with additional language in herein attached and by reference made part of the Contract.
 - Adding Phase 2 to the contract.
3. **Amend** the language contained in Section 4, Term of Agreement, with language in herein as follows.
 - Term date of agreement changed to April 30, 2025.
4. Ratification: Acts taken pursuant to this Amendment but prior to its effective date are hereby ratified and confirmed.

This amendment in no way alters any other provisions of the original agreement.

CITY OF VANCOUVER

A municipal corporation

CONTRACTOR:

Brown and Calwell

Eric Holmes, City Manager

Signature

Date

Printed Name /Title

Attest:

Date

Natasha Ramras, City Clerk

Approved as to form:

Jonathan Young, City Attorney



Exhibit A Phase 2 Scope of Work

6500 S Macadam Avenue, Suite 200
Portland, OR 97239
T: 503.244.7005

Water Station 14 PFAS Treatment System Design Project Contract Amendment 1

City of Vancouver

Phase 2 Scope of Work

April 22, 2024

Project Overview

The City of Vancouver (City) executed a contract in 2023 for Brown and Caldwell (BC) to provide professional engineering services for a PFAS water treatment system design at Water Station 14 (WS-14) located at 6803 NE 78th St, in Vancouver, Washington. This scope of work describes BC's ("Consultant") and the City's activities that will occur during Phase 2 of the WS-14 PFAS Treatment System Design Project ("Project") for treatment of PFAS in groundwater produced from the City's wells at WS-14. BC has completed preliminary design activities during the Phase 1 contract of the Project and will continue subcontracting with Shannon & Wilson, Greenworks, MWA Architects, and ESA to provide project support throughout Phase 2. This scope of work is an amendment to the existing C-101426 contract established during Phase 1 activities.

Background

The City owns and operates the 3rd largest state-regulated municipal water system in the State of Washington. Vancouver's source of drinking water is 100% groundwater. There are nine well fields with a total of 40 wells in the City's system. These wells produce an average daily demand of 27 million gallons (MG) serving approximately 280,000 people. The City's service area covers approximately 72 square miles incorporating areas within the City limits and extending into unincorporated Clark County.

WS-14 is on a 3.35 acre parcel and has been a municipal water facility serving Vancouver since 1980. The site contains three groundwater wells with a combined capacity of 3,200 gpm.

Water Station 14 consists of the following major components:

- 3 groundwater wells
- Booster pump station with 2 pumps
- On-site sodium hypochlorite generation (OSHG) system for disinfection
- Fluoride dosing equipment
- Single-tower aeration system for pH control
- A standby generator

Water from the station's wells flows through the single-tower aeration system for pH adjustment, receives disinfection treatment provided via an on-site sodium hypochlorite generation system, and is fluoridated with sodium fluoride. Water pumped from the wells at WS-14 flows through a common flow



meter prior to distribution in the Heights High Pressure Zone. The disinfection and fluoride injection points are located within the flow meter vault.

The booster pump station at WS-14 consists of two variable-speed pumps that draw water from a clearwell beneath the current treatment building. The total booster pump capacity is 3,200 gpm (1,600 gpm per pump).

Per- and polyfluoroalkyl substances (PFAS) were first detected in the groundwater at WS-14 in late 2020. Additional testing was completed of all water system wells in 2021. In 2022, the City completed a high-level treatment system conceptual layout and cost estimate to understand the feasibility and cost of adding PFAS treatment at WS-14. The City also completed RSSCT testing and conducted a pilot test with four different filter media. BC will have completed Phase 1 in spring 2024 prior to commencement of Phase 2 activities, and included: site evaluation, initial permitting tasks including cultural review, wetlands delineation, land use pre-application, public outreach, and preliminary design.

The City has received \$12.7 million in State Revolving Fund (SRF) loan funding for this project. This project will need to meet the federally funded project requirements through the SRF program including the need to use American iron and steel (AIS), cultural and environmental reviews/SEPA, and the Davis-Bacon Act. However, this project received a Buy America Build America (BABA) waiver. The City signed the SRF contract with the state on January 9, 2024. The City will have 18 months from signing to have a construction contract awarded. Therefore, a construction contractor must be awarded construction by July 9, 2025.

Approach

BC is completing the project in three phases and will utilize findings and deliverables from Phase 1 to establish basis of design in the transition to Phase 2 scope of work. Additional description of Phase 1 work is available in C-101426 contract documents.

This scope of work describes the services to be rendered by BC for the design of additional treatment processes at the WS-14 facility. Work at this site is expected to include the following design elements:

- Installation of a PFAS treatment system with:
 - Three (3) pairs of lead-lag pressure vessels.
 - Granular activated carbon media for each vessel.
 - Inlet piping header and appurtenances.
 - Effluent piping header and appurtenances.
 - Three (3) electrically actuated effluent flow control valves and flow meters, one set dedicated to each pressure vessel pair.
 - Electrically actuated rinse water supply flow control valve and flowmeter
 - Valving and instrumentation for each vessel pair, as indicated in the preliminary design documents.
 - Pipe supports and associated equipment anchoring appurtenances.
- Structural steel catwalk to access upper levels of pressure vessels.
- Rinse water tank with:
 - Electrically actuated effluent control valve, flow meter, level sensor, and appurtenances.

- Concrete equipment pad for pressure vessels and rinse water tank.
- Buried yard piping and appurtenances to connect PFAS treatment system and rinse water tank with existing treatment system.
- Buried vaults for piping tie-in and chemical injection appurtenances.
- Booster pump improvements with:
 - Two (2) upgraded pump impeller and bowl assemblies.
- Restroom including associated plumbing, heating, and ventilation appurtenances.
- Storage facility:
 - Adjacent to restroom
 - Floor drain, heating, and ventilation appurtenances
 - Double doors for tote delivery
- General site improvements including:
 - Roadway expansion and paving improvements.
 - Grading modifications for site accessibility, equipment placement provisions, and new retaining wall.
 - Site fencing replacement and improvements.
 - Stormwater management provisions including discharge and onsite treatment.
 - Site lighting and security fencing provisions.
- Electrical, automation, and network equipment required for PFAS treatment system, pump improvements, and site improvements.

The City is anticipating this project to be delivered via design-bid-build contract vehicle. BC plans to deliver the design following BC design gate standards which consist of preliminary design, intermediate design (60 percent), final design (90% and 100%), and Issued for Construction or conformed documents.

Preliminary design has been completed with the Phase 1 activities, which included preliminary design drawings, technical memoranda, and project engineering report developed for the project. BC will advance this design and submit packages for City review at the intermediate and final design phases and anticipates a submission to Washington Department of Health (DOH) for design review following the intermediate design phase, in addition to submittal for other authorities having jurisdiction (AHJ) such as City Building and Construction, Clark County Building, and local fire and county health departments for approval following final design.

It is anticipated that BC will develop Issued for Construction (IFC) drawings and specifications for the City's request for contractor bids and that BC will provide bid support.

Phase 3, which is not scoped at this time, will include construction and commissioning services including engineering services during construction (SDC) and services following construction (SFC).

Design Reviews

Design review workshops will be conducted with the City's personnel, key individuals from the BC project team and subcontractors, and other internal and external stakeholders as needed. The design

review workshops will be conducted at the intermediate and final design gate. An interim intermediate workshop will be held to review P&IDs, control narrative, and pipe schedules.

- To allow the project to meet delivery milestones, project reviews (comment periods) may need to be expedited on the City's behalf to the extent possible. At a maximum, review duration will be limited to 10 business days.
- The City's PM will compile staff comments and submit in a single comment log in .pdf using Bluebeam format for the drawings and a separate .pdf comment file for the specifications.
- With the exception of the final design review, the project team will not stop work during formal reviews.
- BC will provide responses/resolutions to the comments in the comment log. Changes resulting from comments will be incorporated into the design documents in the next phase of work. Design will proceed without resubmittal of design milestone deliverables.

Deliverables

Specifications

- Brown and Caldwell master specifications will be used as the basis for technical specifications (modified Construction Specification Institute MasterFormat® 2014 – Divisions 01 through 50).
- Divisions 00 and 01 specifications (including Contract Agreement, Bid Forms, etc.) will be provided by the City. BC will coordinate technical specifications with Division 01 and provide 5 of Division 01 sections to compliment City provided sections. BC will review Division 00 and 01 specifications for compliance with Drinking Water State Revolving Fund (DWSRF) requirements.
- All specifications will be delivered to the City in .pdf format.

Drawings

- Drawings will be developed using AutoDesk Revit and Civil 3D. AutoCAD will be used for 2D diagrams such as P&IDs, HVAC, I&C, and electrical one lines.
- The project will use BC's current design standards for all drawing production.
- All full-size drawings will be based on standard ANSI D, 22" x 34" paper, and half-size drawings will be standard tabloid size, 11" x 17" paper.
- All drawings will be delivered to the City in .pdf format. Zipped drawings will also be provided.
- Two hard copies of full-size digitally sealed Bid Documents (100%) will be provided.

Scope of Work Summary and Work Breakdown Structure

The BC Team's scope of services for the WS-14 PFAS Treatment System Design Project is divided into the following phases and tasks:

WS-14 PFAS Project Design Tasks		
Contract Phase 2		
Phase 120	Phase 2 Project Management	
	Task 110	Phase 2 Progress Meetings
	Task 120	Phase 2 Project Management
Phase 220	Phase 2 Geotechnical Support	
	Task 221	Geotechnical Review of Design
	Task 222	Geotechnical Coordination
Phase 460	Preliminary Engineering Report Update	
	Task 461	Project Engineering Report Finalization
	Task 462	Design Standards TM Finalization
Phase 570	Phase 2 Permitting & Public Outreach	
	Task 571	Environmental and Land Use Permit Support
	Task 572	Other Permitting Support
	Task 573	Public Outreach
Phase 610	Intermediate (60%) Design	
	Task 601	Design and BIM Management and Coordination
	Task 602	Internal Meetings
	Task 603	Process Mechanical
	Task 604	Civil
	Task 605	Structural
	Task 606	Architectural
	Task 607	Building Mechanical
	Task 608	Electrical
	Task 609	Instrumentation and Controls
	Task 610	General and Div 00/01
	Task 611	Landscape Architectural
	Task 612	SRF Compliance for Specifications
	Task 613	Quality Assurance/Quality Review
	Task 614	External Meetings/Workshops
Phase 620	Draft Construction Cost Estimate (Intermediate Design)	
Phase 630	Final (90%) Design	

WS-14 PFAS Project Design Tasks		
	Task 601	Design and BIM Management and Coordination
	Task 602	Internal Meetings
	Task 603	Process Mechanical
	Task 604	Civil
	Task 605	Structural
	Task 606	Architectural
	Task 607	Building Mechanical
	Task 608	Electrical
	Task 609	Instrumentation and Controls
	Task 610	General and Div 00/01
	Task 611	Landscape Architectural
	Task 612	SRF Compliance for Specifications
	Task 613	Quality Assurance/Quality Review
	Task 614	External Meetings/Workshops
Phase 640	90% Cost Estimate	
Phase 650	Bid and Construction Documents (100%)	
	Task 601	Design and BIM Management and Coordination
	Task 602	Internal Meetings
	Task 603	Process Mechanical
	Task 604	Civil
	Task 605	Structural
	Task 606	Architectural
	Task 607	Building Mechanical
	Task 608	Electrical
	Task 609	Instrumentation and Controls
	Task 610	General and Div 00/01
	Task 611	Landscape Architectural
	Task 612	SRF Compliance for Specifications
	Task 613	Quality Assurance/Quality Review
	Task 614	External Meetings/Workshops
Phase 660	Bid Support	
Phase 820	Phase 2 Unanticipated Services	
	Task 801	Phase 2 Unanticipated Services

This scope of services and level of effort includes the Contract Amendment Phase 2 tasks only. This scope, schedule, and budget are expressly developed for the completion of the deliverables summarized herein for Phase 2. We have assumed input and support from City staff and that relevant information and data will be provided by the City. Professional services that may be required beyond this scope may require an amendment.

Contract Amendment Phase 2

It is the intent of this scope of work to expand on the preliminary design efforts and prepare contract documents for which a contractor, selected during the bid support period at the end of design, will begin construction.

Phase 2 of the project includes site assessment development in conjunction with design, permitting and public outreach activities, intermediate (60 percent) design submittal package and cost estimate, final (90 percent) design submittal package and cost estimate, bid documents submittal package for bid, and engineering services during bidding, as detailed in the following phases and tasks.

Phase 120: Phase 2 Project Management

Task 110: Progress Meetings

Activities: Detailed design kickoff and external progress meetings

Assumptions:

- Weekly virtual progress/design discussion meetings will occur for the duration of this project phase (not to exceed 8 months, assuming from May through December). Bidding will occur in January through March. An additional three months of biweekly meetings are assumed. The frequency of meetings may decrease, depending on work activities and other meetings (such as review workshops). This time includes a total of 38 progress meetings to be attended by up to 3 BC staff. Additional time for meeting prep and circulation of post-meeting materials is included in this task budget.

Meetings:

- Weekly progress meetings during design and biweekly progress meetings during bidding.

City Responsibilities:

- Communicate issues and make decisions that impact project at progress meetings.

BC Responsibilities:

- Prepare an agenda for each meeting and update to capture notes, decisions, and action items as the meeting progresses. The updated agenda will serve as the meeting minutes and formal meeting minutes will not be issued.

Deliverables:

- Brief meeting agendas

Task 120: Project Management

Activities/Approach: Provide management, direction, coordination, and control of all work associated with the project work plan, controls and progress reports, document management system, change management, subconsultant contracts, schedule, budget, technical quality, and monthly invoices for the project, along with project meetings under this phase. This task includes the following activities:

Updates and revisions to the project work plan, including:

- Project team roles and responsibilities.
- Schedule development and updates in Gantt chart format developed in Microsoft Project.
- Communications plan.
- Risk management plan and risk register to describe, categorize, and mitigate risks associated with the project. This will be a collaborative effort with the City.
- Health and safety plan prepared for BC's staff who will be working on the project and visiting the site.
- QA/QC plan.
- Change management process, including a decision log and action item log.
- Review of progress reports for DWSRF reimbursement requests
- Document management system:
 - BC will maintain a system to manage, track, and store relevant documents produced between the City, BC, and others during the project phases. This includes use of a shared MS Teams folder for logging and tracking correspondence and deliverables.
- Task-level project and staff management throughout the project phases.
- Monthly invoices and progress reports with cover letters including:
 - Summary information tracking project expenditures versus percent complete.
- Communication and coordination with City staff.
- Setting up and managing subconsultant contracts for architectural, permitting support, and geotechnical support.
- Subcontractor contract development.
- Identify scope changes that impact the project budget and schedule and communicate to City Project Manager
- Managing and processing monthly invoices submitted by subcontractors.
- Communication and coordination with subcontractor's staff.
- Project archiving and storage of deliverables, notes, and email correspondence

City Responsibilities:

- Review monthly status reports and supporting project documentation for invoice and payment approval.

Deliverables:

- Monthly progress reports and invoices
- Project schedule
- Submittal of updated project logs as needed to support key activities and decisions (action/issue/decision logs)

Phase 220: Phase 2 Geotechnical Support

Objective: Provide geotechnical engineering services to inform the intermediate and final design.

Task 221: Geotechnical Review of Design

Activities/Approach: This task includes the following activities during design:

- Continue monitoring water levels from previously installed vibrating wire piezometer and monitoring for duration of design.
- Conduct supplemental engineering analysis for geotechnical design including settlement calculations, foundation analysis, and constructability review as information is developed and site configuration and loading is finalized.
- Provide retaining wall design recommendations, as necessary, including lateral earth pressures, bearing capacity, lateral resistance, and evaluation of global stability.
- Develop recommendations and design parameters for contractor designs related to means and methods including but not limited to conceptual dewatering, temporary excavations, settlement, and shoring systems.
- Update Geotechnical Data Report with additional groundwater level measurements.
- Update Geotechnical Engineering Report to include changes to the site layout and/or foundation loading.
 - The preliminary design Geotechnical Engineering Report will be revised, as necessary, as part of intermediate (60%) design.
 - Revised preliminary Geotechnical Engineering Report will be updated following intermediate design and will be finalized.
- Provide input for geotechnical related specifications developed by BC design team.
 - BC developed specifications to including but not limited to Sections 01 11 10 - Geotechnical Information, 31 23 00 - Excavation and Fill, and 31 23 19 - Dewatering, 31 41 00 Shoring.

Assumptions:

- Groundwater monitoring will be performed using existing vibrating wire piezometer to inform excavation and dewatering requirements. Two additional readings will be collected, one during the wet season and one during the dry season, as the project schedule allows.
- New structures will be designed to meet International Building Code 2021 and ASCE 7-16 seismic codes.
- Valve vaults, restroom, rinse water tank, and PFAS treatment foundation will not require design of deep foundations. Additional design budget will be necessary if deep foundations are required.
- Recommendations and design parameters for contractor designs will avoid designing means and methods for the contractor and present their directions as recommendations/suggestions. The contractor shall have ultimate choice on means and methods.
- Decommissioning of the existing vibrating wire piezometer will be performed by the contractor during construction.

City Responsibilities:

- Provides site access for field work.
- Review updated preliminary Geotechnical Engineering Report at intermediate design and final design. Provide review comments to BC for transmittal to Shannon & Wilson and incorporation into the final report.

Meetings:

- BC and Shannon & Wilson meetings including but not limited to:
 - Intermediate design kick-off
 - Final design kick-off

- General coordination meetings through intermediate and final design.
- City check-in meetings on an as-needed basis. Two meetings are assumed for this phase.

Deliverables:

- Updated Geotechnical Data Report, draft and final.
- Updated Preliminary Geotechnical Engineering Report, draft at Intermediate Design, final at Final Design.
- Review project specifications for the intermediate (60%) and final (90%) design gates.

Task 222: Geotechnical Coordination

Objective: Coordinate subconsultant services to support the detailed design.

Activities/Approach: This task includes the following activities:

- Manage services of subconsultants needed to inform design activities.
- Review subconsultant work to provide coordination with overall project goals, standards, guidelines, and deliverables.
- Coordinate subconsultant workshop material development.
- Coordinate subconsultant site visits and attend site visits to support subconsultant activities.
- Coordinate BC and City review of subconsultant work products including but not limited to field collected data, geotechnical data report updates, and geotechnical engineering report updates.

Assumptions:

- Subconsultants and respective scopes of work will be as identified in Task 221.
- Permitting specific subconsultant support is provided under Phase 570.

City Responsibilities:

- None.

Meetings:

- BC will conduct regular coordination meetings with each subconsultant.

Work Products:

- See individual subconsultants work products.

Phase 460: Project Engineering Report and Design Standards TM**Task 461: Project Engineering Report Finalization**

Objective: Submit Project Engineering Report (PER) to WADOH per the Water System Design Manual requirements based on the revised PER prepared as part of Phase 1.

Activities/Approach:

- Incorporate DOH review comments on PER

Assumptions:

- WADOH provides feedback and BC addresses one round of comments for final PER approval.
- PER is submitted to DOH following feedback on the preliminary design submittal

- Final draft PER is submitted to WADOH after City comments on intermediate design are addressed.

City Responsibilities

- Review DOH feedback on PER and provide direction on revisions

Meetings

- 1 hour meeting with DOH to discuss comments.

Work Products

- PER, final draft and final

Task 462: Design Standards TM Finalization

Objective: Update the Design Standards TM that was developed as a part of Phase 1 to inform future designs

Activities/Approach:

- Incorporate City review comments on draft Design Standards TM.
- Update Design Standards TM based on intermediate design.

Assumptions:

- This TM will capture direction on pressure vessel design for WS14 and stance for future projects. Two options presented in Draft PER currently. The pressure vessel design options will be presented in this TM along with a recommendation on a selected approach.
- City provides one round of comments on Revised Draft Design Standards TM.

City Responsibilities

- Provide input on pressure vessel design approach
- Review revised Design Standards TM at intermediate design.

Meetings

- None

Work Products

- PER, revised, final draft and final (depending on whether DOH has comments)
- Design Standards TM, final draft and final

Phase 570: Environmental Permitting and Public Outreach

Task 571: Environmental and Land Use Permit Support

Objectives: Review all applicable state and local environmental and land use permitting requirements for the WS14 PFAS treatment project. Identify project permitting needs. Complete and submit project environmental and land use permit applications prior to the start of construction activities. The following section summarizes activities within the permitting subconsultant's scope of work.

Activities/Approach:

- Conduct a reconnaissance of the site to characterize critical area buffers for the wetlands delineated in Phase 1.

- Complete background research and identify the necessary project permits through communication with state and City permit contacts.
- Develop a permitting matrix that summarizes the project permit requirements, permit triggers, key scheduling milestones, submittal requirements, permitting contacts, and recommended timing of submittals.
- Coordinate with permitting agencies, prepare required permit application forms and supporting materials, and facilitate submission of permit applications to governing agencies.
- Prepare draft and final Land Use application including submittal checklists and supplemental forms.
- Coordinate directly with BC project management and design team as needed to fulfill environmental and land use permit requirements.
- Prepare Final SEPA Checklist. Draft SEPA Checklist will be completed under Phase 1 scope.
- Prepare a Critical Areas Report addressing site wetlands/buffers.
- Attend project workshops and meetings or support development of project meeting materials as needed.

Assumptions:

- Wetlands are present on the project site as identified in Phase 1. The project will be designed to avoid siting project elements or construction activities within wetland boundaries, and this scope assumes that federal/state wetland permits from U.S. Army Corps of Engineers and/or Washington Department of Ecology will not be needed.
- It is assumed the following City land use reviews/permits will be needed: Type I Conditional Use Permit; Type I Site Plan Review; Type I Critical Areas Permit; SEPA Determination. Consultant's scope of work does not include City building permitting. Such permitting will be City led and is assumed to include electrical, building mechanical, plumbing, building and development permits.
- Inadvertent Discovery Plan has already been prepared by others. No additional work required.
- No historic buildings or structures that would require documentation and inventory, and no historic property inventory forms will be required. No cultural sample collection or analysis will be required.
- Development of an Archeological Resources Monitoring Plan is not included.
- No National Register Nominations are included in this scope.
- No Washington State Archaeological Site or Isolate Inventory Form will be needed.

City Responsibilities:

- Fulfill data requests as needed to complete project permit applications.
- Pay land use application fees

Meetings:

- Permitting kick-off meeting (City team, BC, and ESA).
- Two meetings with land use permitting department are assumed along with two prep meetings.

Deliverables:

- Incorporate permitting efforts into overall project schedule
- Critical areas report
- Final SEPA Checklist (Draft to be completed under Phase 1 scope)

- Draft and Final Land Use preliminary application and supplemental forms

Task 572: Other Permitting Support

Objective: Coordinate project permitting needs between City and project permitting subconsultant (ESA). Perform project permitting not completed by environmental subconsultant, including Construction Stormwater NPDES Permits and new Water Treatment Plant General Permit. Permitting subconsultant activities are summarized in Scope of Work Task 571.

Activities/Approach:

- Develop communication plan for permit coordination between BC, permitting subconsultant (ESA), and governing agencies.
- Support and contribute to development of project permitting materials by the City and by the permitting subconsultant. This work includes providing project background information and design documents to the permitting subconsultant. This work may also include drafting permit information or supporting documentation, e.g., for SEPA checklist and Development Permit prior to bidding.
- Organize and attend permitting coordinating meetings with permitting subconsultant, BC design team, and permitting agencies.
- Prepare Construction Stormwater General NPDES Permit application on City's behalf.
- Support application of a new Water Treatment Plant General Permit (NPDES Waste Discharge General Permit for Water Treatment Plants) in compliance with Chapter 90.48 of the Washington Administrative Code (WAC)
- Complete the Construction Stormwater Pollution Prevention Plan (SWPPP) (as required by the NPDES permit).
- Coordinate BC and City review of subconsultant work products including draft environmental permit applications.
- Complete review of City and subconsultant prepared permit applications and supporting documentation.
- Organize subconsultant field work to complete project permit applications.

Task Assumptions:

- Contractor will obtain all building permits, including Public Works, Clearing and Grading, Utility, Building, Plumbing, Mechanical and Electrical.
- A Notice of Construction application to the Southwest Clean Air Agency (SWCAA) is not required. There is no new or revised air pollution generating equipment anticipated.
- Contractor will pay for all building permits through the construction contract.
- Bid document revisions that may be required following bidding stemming for permitting authority applications and approvals are not included. If required, for construction revisions made as a condition of permit approvals will be funded by Phase 800: Unanticipated Services.
- Permit related specification materials will be developed under detailed design and Phases 610, 630, and 650.

City Responsibilities:

- Fulfill requests for information to enable completion and submission of project permits.
- Facilitate communication between City Planning Departments and project permitting subconsultant.
- Attend project permitting meetings.

Meetings

- One meeting with Washington Department of Ecology is required.
- Two land use meetings plus two preparatory meetings.

Deliverables:

- New Water Treatment Plant General Permit
- SWPPP

Task 573: Public Outreach

Objective: Given the public interest in PFAS, there may be significant interest in the WS14 design. The BC team will use our in-house communications team to support neighborhood meetings or additional outreach to the community.

Activities:

- Develop materials to communicate proposed design for City Council

Assumptions:

- Effort will build on outreach from Phase 1. Outreach will cover requirements of land use permitting.
- Support one neighborhood meeting/open house in-person for 2 hours.
- Graphics and presentations support estimated to be not greater than 74 hours.

Deliverables:

- Presentation materials to include at least one existing site graphic and one site visualization graphic.
- One handout-type document

Phases 610, 620, 630, 640. and 650 - Detailed Design

The detailed design will be done in three phases; Phase 610 – Intermediate Design, Phase 630 – Final Design, and Phase 650 – Bid Documents. In Phases 620 and 640, updated probable construction cost estimates will be provided. The key outcomes for these phases will be the following:

- Prepare bid documents for complete construction and commissioning as envisaged by the Preliminary Engineering Report and Preliminary Design.
- Coordinate the execution of the detailed design with the City.
- Manage project resources to meet schedule milestones.

The design standards prepared during the Preliminary Design phase will identify the codes and standards that are the basis of each discipline's design effort. Unless otherwise noted in the design standards, the detailed design will be prepared based on the currently adopted versions of codes and standards in place at the time this scope of work was prepared (March 2024) and the adopted design standards for the Project. New code adoptions prior to completion of the design will be evaluated and may require additional effort.

The Intermediate and Final Design submittals will include unsigned Washington State Professional Engineer seals and be stamped "Preliminary – Not for Construction". The Bid Documents and Conformed Documents will include signed Washington State Professional Engineer seals.

The subtasks under each detailed design phase are generally by discipline and are consistent from phase to phase as shown in the work breakdown structure table above.

Phase 610: Intermediate Design

Objective: Obtain approval from the City on the complete arrangement of the proposed design. The intent/objective is to have all of the major equipment items solidified by this submittal. Civil, structural, architectural, and process mechanical models are largely complete and all major design decisions have been reached and approved. Electrical, instrumentation, and building mechanical models have been progressed. Major construction documents drawings and specifications have been progressed.

Deliverables:

- Agendas and 60% design workshop meeting minutes that captures planned comment resolution in .docx format.
- Drawings and technical specifications in .pdf format
- Three (3) hard copies of stamped drawings in 11" x 17" format for permit applications.
- Three (3) hard copies of technical specifications in 8.5" x 11" format for permit applications.

City on the intermediate design package will be addressed during the final design phase and incorporated into the final design package (refer to Phase 600, Task 630). Revised submittals addressing comment during the intermediate design phase is not included in this task.

Task 601: Design and BIM Management and Coordination

Activities:

- Design Management and Coordination
 - Manage and direct the design process so that the products of the design effort are contract documents suitable for construction and reflect the City standards and preferences. The design process will be managed to provide complete, coordinated, and consistent designs between facilities and disciplines.
 - Check on the design team progress and communicate results to project management.
 - Verify QMP is followed, reviewers concur with work products, and maintain documentation of QA/QC reviews, responses, and resolutions.
 - Conduct internal design team coordination meetings.
 - Manage internal resources to maintain project schedule and achieve contracted milestones.
 - Identify scope changes that impact the project budget and schedule. Notify the Project Manager of potential changes in scope and assist in documenting those changes.
 - Coordinate progress reviews by the City, including collecting comments from the City's review, distributing review comments to facility and discipline leads, facilitating responses to review comments, documenting responses to the City's review comments, addressing any subsequent issues resulting from the City's review and addressing any subsequent issues resulting from the response to the City's review comments.
 - Monitor compliance with project standards such as equipment numbering system, drawing presentation, and previously developed design guides.
 - Maintain equipment list.
 - Administrative support for written deliverables including specifications management.
 - Production support for electronic and printed deliverables.
- BIM Management and Coordination

- Manage compliance with project CAD/BIM software standards, graphics standards, file naming conventions and standards, and revision/iteration control.
- Manage compliance with and update the BIM Execution Plan (BxP) where changes are indicated to guide the use of BIM tools over the life of the project. Identify and document new project goals and BIM objectives, organizational roles and responsibilities, execution process workflows, collaboration procedures and platforms, and model and drawing QC procedures.
- BIM model maintenance and coordination.
- Conduct internal coordination meetings with BIM/CAD production team.
- Plot and compile drawings for reviews and deliverables.

Task 602: Internal Meetings

Activities:

- Biweekly internal design coordination meetings.

Task 603: Process Mechanical

Activities:

- Confirm PFAS treatment system design specific components including:
 - Which underdrains or vessels manufacturers to name in the specification
 - Which provisions for GAC to IX conversion to include.
- Confirm booster pump improvements requirements and coordinate with vendor, including:
 - Whether or not to accommodate IX
 - Impeller and/or bowl assembly replacement
 - Motor and VFD replacement
- Confirm rinse water tank system design basis and coordination with vendor.
- Develop design for rinse water discharge to sewer connection and settled fines handling systems.
- Coordinate with instrumentation and controls (I&C) for control description development, I/O and instrumentation list development and details, and finalization of process and instrumentation diagrams (P&IDs).
- Coordinate with structural for equipment pads, pipe supports, and anchoring design requirements and details.
- Coordinate with civil for project siting, process equipment accessibility considerations, vault design placement and design details, rinse water discharge requirements, and yard piping design.
- Coordinate with electrical for development of one-line diagrams, load list development, and pump improvement specifications.
- Refine and finalize design elements including:
 - Process flow diagrams (PFDs).
 - Hydraulic profile.
 - Pipe alignment and profiles.
 - Process piping schedules.
- Develop intermediate technical specification drafts.
- Develop and refine process and piping design drawings and annotations. Develop standard and project specific design details.

Assumptions:

- The PFAS treatment system will be a prefabricated turnkey (complete and fully operational) system consisting of:
 - Three (3) trains composed of two (2) vessels each able to operate in series (lead-lag).
 - Independently supported valve manifold with all piping, valving, and instrumentation necessary for all operating scenarios detailed in the P&IDs and control descriptions.
 - GAC media for each vessel as specified in the technical specifications of the project. Vessels and major design elements will allow for future use of IX resin media in lieu of GAC media. Minor modifications may be required to change media types.
- No equipment is assumed to be pre-purchased based on the Early Procurement Assessment TM.
- The rinse water tank will be above grade with supernatant being decanted to either nearby sewer or stormwater system, and settled fines designed to have the capability to be vactored out.
- System automation will be limited to manual valves as part of the PFAS treatment system vendor package and include Contractor supplied electrically actuated flow control valves and flow meter appurtenances. An additional flow control valve and flow meter will be included on the rinse water supply line.
- Booster pump improvements will be limited to impeller and/or bowl assemblies.
- Booster pump motors and VFDs are suitable for impeller/bowl replacement. Motor and VFD replacement are not included.

Task 604: Civil

Activities:

- Review updated survey information provided by the City.
- Prepare draft and final stormwater report in accordance with City and state regulations.
- Prepare drawings and specifications in compliance with City of Vancouver design standards and civil engineering review checklists.
- Civil drawings that depict:
 - Plan sheets including survey data and references; floor/control elevations; elevations for finished grading; demolition requirements and limits.
 - Horizontal and vertical design of proposed buried utilities.
 - Erosion and sediment control drawings and details.
 - Project-specific detail drawings.
 - Standard detail drawings (BC and client).
 - Paving Plan.
- Modifications to existing security fencing and proposed new security fencing depicted on drawings.
- Draft version of all specifications

Assumptions:

- Potholing for the location of critical buried infrastructure may be required during design. Coordination for potholing locations is included, but on-site potholing services are not included.

- Coordination with Clark County for discharge of sanitary and storm/wash water discharge to County facilities and approval of such are included in the scope.

Task 605: Structural

Activities:

- Refinement and finalization of basis of design including seismic and wind criteria and all load requirements.
- Review of geotechnical design report (GDR) and geotechnical engineering report (GER) to confirm project design requirements.
- Refinement and finalization of detailed design for new PFAS treatment system concrete foundation slab, structural steel access catwalk, and structural steel pipe support systems.
- Refinement and finalization of detailed design for new rinse water tank concrete foundation slab and structural steel pipe support systems.
- Preparation of detailed design of building modifications, as needed, for any sodium hypochlorite system and electrical improvements.
- Coordination with civil for geotechnical design requirements, siting conditions, and retaining wall as required.
- Coordination with process mechanical and building mechanical for all equipment pads, pipe supports, and anchoring design requirements and details.
- Coordination with architectural for new restroom facility detailed design.
- Coordination with electrical for equipment pads and conduit requirements not in the yard.
- Development of intermediate technical specification drafts.
- Development and refinement of design drawings and annotations. Drawings will include:
 - Plans of all structures with finalized materials of construction, overall dimensions and floor elevations (as applicable).
 - Intermediate foundation drawings.
 - Intermediate sections with reinforcing shown and labeled.
 - Standard details.
- Development of structural calculations for the PFAS concrete pads, rinse water tank concrete foundation, access ladders, cat walks, platforms, retaining walls and rest room facility.

Assumptions:

- The restroom facility will conform to design criteria per IBC 2021 with WAC 51-50 amendments and ACSE 7-16.
- New PFAS treatment system will require an upper-level access catwalk with stairs for accessing vessel top appurtenances and instrumentation. Catwalk system will be designed in coordination with process mechanical design requirements and achieving AIS compliance.
- New rinse water tank will require a guardrail at the top and ladder for access.
- Foundation type is assumed to be shallow footings per geotechnical findings.
- A baker silo concrete tank type will be provided for the rinse water tank. Concrete reinforcement design will be provided by concrete tank provider who will stamp the design.

Task 606: Architectural

Activities:

- Refinement and finalization of basis of design including all applicable code/life safety plans, materials of construction, restroom facility dimensions, and elevations.
- Provide input to structural engineer for specific facets of the design, including handrail appearance, stairway configuration, and application of the architectural guidelines to structural elements.
- Coordination with civil for geotechnical design requirements, siting conditions, and retaining wall as required.
- Development of intermediate technical specification drafts.
- Development and refinement of design drawings and annotations. Drawings will include:
 - Plans of the restroom facility with finalized materials of construction, overall dimensions, and floor and roof elevations.
 - Sections and elevations of the restroom facility with finalized materials of construction, overall dimensions, and details.
 - Door, window, and finishing schedules.
 - Architectural code/life safety plans (as applicable).
- Development of standard and project specific design details.
- Provide final code review, reflect code information on all project deliverables, and review for consistency with applicable codes.
- Perform QA/QC reviews of architectural design documents.
- Provide assistance for intermediate cost estimating efforts.
- Attend biweekly meetings with the project team to present issues, make recommendations, and make decisions necessary to advance the detailed design.

Assumptions:

- The restroom facility will conform to design criteria per IBC 2021 and ACSE 7-16.
- No occupied spaces are included in this project.
- Landscape architectural services are included in Task 612.
- No screening walls will be required.
- Architectural will not have involvement in the design of the PFAS treatment system catwalk.
- The architectural subcontractor will attend 14 design coordination meetings and two design review workshops with the City.
- The architectural subcontractor will attend six meetings with the City during the permit application process.

Task 607: Building Mechanical

Activities:

- Design plumbing, ventilation, and heating systems for new restroom and future chemical storage facility.
- Engage in conversation with the fire marshal on fire suppression requirements with the City taking the lead.
- Develop restroom plumbing floor plan and section, plumbing details, HVAC restroom floor plan and section, air flow diagram and mechanical schedules

Assumptions:

- Storage room will be left empty. An emergency shower and eye wash is not required in current design. Provisions for a future eye wash will be included (i.e., electrical capacity for future water heater, floor drain, and pipe penetrations in walls). No water heater for an eye wash and shower is included in this design.
- Instantaneous electric point of use under sink water heater is adequate.
- Storage room will include floor drain and means to heat for freeze protection.
- Upgrades for conversion of storage room into chemical feed room are not included.

Task 608: Electrical**Activities:**

- Coordination with process mechanical and instrumentation and controls for refinement and finalization of all project loads.
- Confirmation and finalization of existing site power feed and any modifications to accommodate project activities.
- Confirmation of booster pump improvement requirements and coordination with vendor for any upgrades to motors and VFDs required to meet process mechanical hydraulic scenarios.
- Refinement and finalization of electrical improvements to be located in the Well 1 Building, potentially including but not limited to low voltage transformers, motor control centers (MCCs), and appurtenances to accommodate process heat tracing and instrumentation loads.
- Coordination with civil for detailed design of buried conduit and project siting requirements.
- Coordination with process mechanical for development of one-line diagrams, load list development, pump improvement specifications and piping freeze protection via electric heat trace.
- Coordination with instrumentation and controls (I&C) for development of all instrumentation power requirements and details and finalization of process and instrumentation diagrams (P&IDs).
- Refinement and finalization of design elements including:
 - One-line diagrams
 - MCC elevations for new work
 - Conduit schedules
 - Underground conduit routing and handhole details
 - Site and restroom/storage room power and instrumentation location plans and details.
 - Platform and restroom/storage room lighting plans and details.
 - Grounding design
 - Piping Heat Trace system electrical design (performance based) and coordination with Process Mechanical requirements and design documents
 - Specifications
 - Drawings and annotations
- Site lighting updates around new security fencing and PFAS treatment system

Assumptions:

- Assume no hazardous (classified) locations.
- Assumes no fire alarm, paging system, or lightning protection elements are required.
- No modifications to existing lighting.
- An outdoor lighting model that maps out the illumination "contour" levels created by any changes or additions is not required.
- Where required, a Power System Study will be provided in Phase 3 scope of services to address arc flash improvements.

- No improvements to site power feed are required.
- Booster pump improvements will be limited to impeller and/or bowl assemblies.
- No modifications to existing booster pump motors or VFDs.
- The site standby generator is sufficiently sized to handle the new loads and no improvements to this system is required.

Task 609: Instrumentation and Control

Activities:

- Coordination with process mechanical, and electrical for refinement and finalization of all process control automation.
- Confirmation and finalization of existing control system network modifications to accommodate project activities.
- Confirmation of booster pump improvements and any upgrades to motors and VFDs for re-connection of the existing control system.
- Confirmation of booster pump improvements requirements and coordination with vendor
- Coordination with process mechanical for control system automation requirements (detailed in control strategies).
- Coordination with electrical for development of all instrumentation power, control, signal, and data requirements and details and draft of I&C diagrams for control system interconnections.
- Refinement and finalization of design elements including:
 - Process and instrument diagrams (P&IDs).
 - Control descriptions.
 - Control system network diagram.
 - I&C wiring diagrams for IO connections to the control system
 - I&C control system panel drawings
- Development of intermediate technical specification drafts.
- Development and refinement of I&C design drawings and annotations.

Assumptions:

- System automation will be limited to Contractor supplied electrically actuated effluent flow control valves, flow meters, and pressure transmitters. The PFAS treatment system will contain manual valves.
- The rinse water tank will have a level float and level transmitter. The discharge from the rinse water tank will include a flow control valve and flow meter.
- Control system is a programmable logic controller (PLC) based with human machine interface (HMI). The PLC and HMI will be standardized to be Siemens S7 (Portal 7) and Simatic (Portal 7/WinCC).
- An option for control system modification will be finalized as one of the below:
 - Add new PLC SCADA panel with HMI for SCADA
 - Extend existing PLC SCADA panel with remote input/outputs (RIO)
- City will program the PLC and HMI, from an automation perspective using a 3rd party programmer. All network address assignments will be provided by the City during construction to uphold City's network security and avoid network address duplications.
- The existing communication infrastructure for remote access to the process control system will not be modified. Any new network communication will be site specific to add either a new PLC or extension with a new RIO.

- Process control system security will be door and panel proximity switches. No additional security systems or cameras will be included.

Task 610: General and Div 00/01

Activities:

- Modify and add to the City provided Division 00 and 01 specifications to apply to the project and funding requirements. Additions include operation and maintenance, equipment storage, start-up and testing specifications, and forms and procedures related to electrical and equipment.
- Conduct 2 meetings with City to coordinate requirements associated with bidding and contracting procedures and City's construction management team.
- Legends, abbreviations, index of drawings, cover sheet, location and vicinity map.
- Design criteria, hydraulic profiles, and process schematics.

Task 611: Landscape Architecture

Activities:

- Advance landscape plan.
- Develop intermediate technical specifications draft.
- Develop and refine design drawings and annotations. Drawings will include:
 - Plan drawings.
 - Planting schedules and legend.
 - Irrigation plans and details.
- Develop standard and project specific design details.
- Perform QA/QC reviews of landscape architectural design documents.
- Attend monthly meetings with the project team to present issues, make recommendations, and make decisions necessary to advance the detailed design.

Assumptions:

- A new vegetative buffer will be required on the southwest side of the site to create a buffer for the new PFAS treatment system.
- The landscape architectural subcontractor will attend 7 coordination meetings and two design review workshops with the City.

Task 612: SRF Compliance for Specifications

Activities:

- Communicate and coordinate with design disciplines to specify equipment that can meet American Iron and Steel (AIS) requirements.
- Review Divisions 00 and 01 for compliance with SRF funding requirements

Task 613: Quality Assurance/Quality Reviews

Activities:

This task includes the internal reviews for the various design discipline calculations and design deliverables. BC uses a continuous quality process where subject matter experts are involved throughout from the beginning of the work for Quality Assurance and perform a Quality Control review at each design phase. Internal review documentation will consist of recorded comments and their resolution.

Task 614: External Meetings/Workshops

Activities:

Following the submittal of the intermediate design package, BC will facilitate a 3-hour workshop to discuss design progression with the City. The meeting will be held in-person with some team members attending virtually.

Following review of the intermediate design package, it is anticipated that review comments will be issued by the City. It is assumed that these comments will be submitted in a single comment log, preferably in PDF format. BC will review the comments on the drawing and specification files, and a summary of a planned response will be provided in the design workshop meeting minutes. Any critical or unresolved comments will be reviewed in workshops with the City. Workshop attendees from BC will include 3 BC staff. A total of twenty-four (24) additional hours has been assumed for various discipline leads for meeting participation on an as-needed basis.

Meetings:

This task assumes one design review workshop to review the intermediate design package and Class 3 construction cost estimate (described in more detail in Phase 620). BC will provide agendas and meeting minutes for each workshop/design meeting. Agendas will be distributed at least 1 day prior to each workshop/design meeting. Draft 60% workshop minutes will be distributed following receipt of City comments and planned resolution incorporated. City comments on the draft workshop minutes will be incorporated and the notes will be finalized 1 week after receipt of comments.

Phase 620: Draft Construction Cost Estimate (Intermediate Design)

This task includes preparation of a Class 3 opinion of probable construction cost (OPCC), as defined by the Association for the Advancement of Cost Engineering International (AACEI) based on the intermediate design basis subdivided by process area and by major engineering disciplines.

Assumptions:

- Cost estimate will be based upon the drawings and technical specifications included in the intermediate design submittal package.

Deliverables:

- Class 3 cost estimate package organized by specification division and section.

Phase 630: Final (90%) Design

During the final design task series, the intermediate design package will be progressed to finalize the design for DOH approval, final City review, and in preparation for issuing to bid. It is anticipated that the entire design will be advanced as a single package. City comments on the intermediate design package will be addressed and incorporated into this final design package.

The level of development for the final design drawings and specification package is expected to be as follows:

Specifications:

- Final version of all specifications.
- Coordinated Div 01 City and BC provided specifications

Drawings:

- Finalized process mechanical drawings.

- Finalized mechanical drawings (plan, sections, and details) (as applicable) including:
 - Final HVAC and plumbing layouts, sections, and details.
 - Final auxiliary systems layouts, sections, and details.
- Finalized civil and landscape architecture drawings.
- Finalized structural and architectural drawings (plan, sections, and details) (as applicable).
- Finalized electrical and I&C drawings (plan, one-lines, details, P&ID's).

Deliverables:

- Single comment response to 90% design submittal in .pdf format.
- Agendas and meeting notes for two (2) design workshops in .docx format.
- Final design drawings in .pdf format.
- Final design technical specifications in .pdf format.

Tasks 601-613: See Phase 610 Tasks for Detailed Descriptions

Activities:

- Finalize design based on the 60% submittal package, City comments from 60%, and BC internal QA/QC review comments.
- Preparation and refinement of final design drawings, details, and technical specifications to a degree of completion sufficient for project bidding and construction.

Task 614: External Meetings/Workshops

Activities:

Following review of the final design package, it is anticipated that review comments will be issued by the City. It is assumed that these comments will be submitted in a single comment log in .pdf format. BC will review the comments, provide a response/resolution to the comment that is captured in the 90% design workshop meeting minutes. Any critical or unresolved comments will be reviewed in design meetings with the City. Attendees for the 90% design workshop includes Project Manager, Design Manager, Deputy Design Manager, Project Engineer, and key discipline leads (assume three). Design meeting attendees from BC will consist of three BC staff. A total of twenty four (24) additional hours has been assumed for various discipline leads for meeting participation on an as-needed basis.

Meetings:

This task assumes one, three-hour workshop to review the final design package and Class 1 OPCC (described in Phase 640 below). A separate 1-hour design meeting will occur to discuss the comment/response. BC will provide agendas and meeting notes for each workshop/design meeting. Agendas will be distributed at least 1 day prior to each workshop/design meeting. Draft 90% design workshop minutes will be distributed following receipt of comments from the City. City comments on the draft workshop minutes will be incorporated and the notes will be finalized 1 week after receipt of comments.

Phase 640: 90% Cost Estimate

This task includes preparation of a Class 1 opinion of probable construction cost (OPCC), as defined by the Association for the Advancement of Cost Engineering International (AACEI) based on the intermediate design basis subdivided by process area and by major engineering disciplines.

Assumptions:

- Cost estimate will be based upon the drawings and technical specifications included in the final design submittal package.

Meetings:

- One meeting, 1-hour in duration, will be held with the City to discuss the Class 1 OPCC.

Deliverables:

- Class 1 cost estimate package organized by specification division and section.

Phase 650: Bid and Construction Documents (100%)

BC will modify the final design documents to reflect agreed-upon final review comments from the City, DOH, Clark County and City of Vancouver Permitting Departments, and BC's quality control review team. The City's Division 00 and 01 specifications will be added to the technical specifications for a complete project manual. The final documents will be signed and sealed by a licensed professional engineer or architect and submitted to the City as an 'Issue-for-Bid' (IFB) set.

BC will review bid documents that the City prepares for SRF compliance.

Given that this project is utilizing a traditional design-bid-build delivery method, the level of detail for the Bid Documents will be coordinated with the City to provide a complete and fully constructable design. The awarded contractor will be responsible for coordinating final details, scope coordination between trades, and other miscellaneous items to ensure successful construction of the project.

Assumptions:

- The City will lead compliance with SRF requirements. The City will be responsible for submittal of the 100% design documents for DOH SRF review.

Deliverables:

- Stamped and sealed Issue-for-Bid design drawings in .pdf format.
- Stamped and sealed Issue-for-Bid technical specifications in .pdf format.
- Review comments on City prepared bid package.

Phase 660 – Bid Support

This task includes BC support to the City during the bidding for construction services, as requested. The City will lead the bidding process including the advertising, bidder tracking and documentation, publication of the bid documents and addenda, and evaluation and award of the contractor. BC will assist in answering questions and providing technical support during the bidding process.

Activities:

- BC will respond to an estimated 30 bidder questions with an average of two (2) hours to respond to each.
- BC will provide up to two (2) addenda to incorporate additional permitting or technical design requirements received during the bid period. Only select disciplines were assumed to require an addenda.
- Develop conformed documents based on issued addenda. After the contractor has been awarded, BC will integrate any addenda, clarifications, or minor modifications that result from the bidding process for an 'Issue for Construction' (IFC) set signed and sealed by a licensed professional engineer or architect.

Assumptions:

- Memorandum with written responses to bidder questions delivered to the City in electronic format.
- There is no bid protest.
- This task assumes one (1) 2-hour pre-bid conference in-person.

Deliverables:

- Issued for Construction (or conformed) drawings in .pdf format.
- Issued for Construction (or conformed) technical specifications in .pdf format.

Phase 820: Phase 2 Unanticipated Services

Objective: Provide budget allowance for potential additional work requested by the City.

Task 801: Phase 2 Unanticipated Services

Activities/Approach: To be determined, based on City requests. No work will be completed under this task without written direction from the City. The budgeted amount for unanticipated services is as provided in Exhibit B.

Task Assumptions

- Brown and Caldwell will prepare a Project Change Request (PCR) describing each additional and identifiable task under this allowance. The PCR will include a short description of the added scope with budget to be authorized prior to proceeding, unless otherwise directed in writing by the City.

City Responsibilities

- Provide direction and authorization for requested additional work.

Meetings

- To be determined.

Work Products

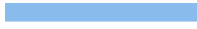
- To be determined.

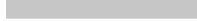
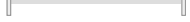
Phase 3: Services During Construction

Phase 3 will consist of engineering services during construction and commissioning support. Phase 3 will begin during the City's review of the 90% design submittal. A finalized Phase 3 scope will be submitted for Council approval during bidding.

Draft Schedule:

A draft schedule is provided on the subsequent page. This schedule will be detailed further and finalized with the City Project Manager during Phase 2 kick-off.

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessors	Aug		Sep	Qtr 4, 2023 Oct	Nov	Dec	Qtr 1, 2024 Jan
1			Vancouver WS14	176 days	Wed 9/27/23	Tue 6/11/24								
2			Phase 1 NTP	1 day	Tue 10/3/23	Tue 10/3/23								
3			Phase 100: Project Management	170 days	Wed 10/4/23	Mon 6/10/24								
8			Phase 200: Site Investigation	171 days	Wed 9/27/23	Tue 6/4/24								
31			Phase 300: Alternatives Analysis and Conceptual Design	102 days	Mon 10/16/23	Fri 3/15/24								
71			Phase 400: Preliminary Design	58 days	Wed 2/14/24	Mon 5/6/24								
92			Phase 500: Permitting and Outreach	166 days	Wed 10/11/23	Tue 6/11/24								
106			Phase 120: Phase 2 Project Management	238 days	Tue 5/7/24	Wed 4/9/25								
107			Phase 220: Phase 2 Geotechnical Support	115 days	Tue 5/21/24	Fri 11/1/24								
108			Task 221: Geotechnical Review of Design	115 days	Tue 5/21/24	Fri 11/1/24	88FS+10 days							
109			Task 222: Geotechnical Coordination	115 days	Tue 5/21/24	Fri 11/1/24	88FS+10 days							
110			Phase 460: Preliminary Engineering Report Update	30 days	Mon 5/13/24	Mon 6/24/24								
111			Task 461: Project Engineering Report Finalization	20 days	Mon 5/13/24	Mon 6/10/24								
112			Task 462: Design Standards TM Finalization	30 days	Mon 5/13/24	Mon 6/24/24								
113			Phase 570: Phase 2 Permitting & Public Outreach	145 days	Tue 5/7/24	Fri 11/29/24								
114			Task 571: Environmental and Land Use Permit Support	81 days	Mon 5/13/24	Fri 9/6/24								
115			City Application Review for Completeness	31 days	Mon 5/13/24	Tue 6/25/24								
116			Critical Areas Report	20 days	Mon 5/13/24	Mon 6/10/24								
117			Finalizing SEPA	11 days	Tue 6/11/24	Tue 6/25/24	111							
118			Submit Application for City Review	0 days	Tue 6/25/24	Tue 6/25/24	117							
119			Time to Generate Resubmission for completeness	20 days	Wed 6/26/24	Thu 7/25/24	117							
120			Review updated submission for completeness	20 days	Fri 7/26/24	Thu 8/22/24	119							
121			Resubmission Review	10 days	Fri 8/23/24	Fri 9/6/24	120							
122			Task 572: Other Permitting Support	145 days	Tue 5/7/24	Fri 11/29/24								
123			Support Land Use Application Materials	20 days	Tue 5/7/24	Tue 6/4/24								
124			TIR Report	10 days	Tue 5/7/24	Mon 5/20/24	88							
125			Finalize Streamlined Planning Checklist - site lighting, lanscape and tree plan, stormwater plan	10 days	Tue 5/21/24	Tue 6/4/24	88FS+10 days							
126			New WTP General Permit	110 days	Wed 6/26/24	Fri 11/29/24	117							
127			Task 573: Public Outreach	20 days	Wed 8/14/24	Wed 9/11/24	128							
128			Phase 610: Intermediate (60%) Design	63 days	Tue 5/14/24	Tue 8/13/24	88FS+5 days							
129			Develop Drawings	30 days	Tue 5/14/24	Tue 6/25/24	88FS+3 days							
130			Internal QA/QC	5 days	Wed 6/26/24	Tue 7/2/24	129							
131			Address Comments	10 days	Wed 7/3/24	Thu 7/18/24	130							
132			Develop Submittal	3 days	Fri 7/19/24	Tue 7/23/24	131							
133			City Review	10 days	Wed 7/24/24	Tue 8/6/24	132							
134			60% Design Workshop	0 days	Tue 7/30/24	Tue 7/30/24	133SS+5 days							
135			Finalize Plan to Address Comments	5 days	Wed 8/7/24	Tue 8/13/24	133							
Attachment B: WS14 Proposed Schedule Date: Mon 4/22/24			Task		Project Summary		Manual Task		Start-only		Deadline			
			Split		Inactive Task		Duration-only		Finish-only		Progress			
			Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress			
			Summary		Inactive Summary		Manual Summary		External Milestone					
Page 1														

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessors	Aug	Sep	Qtr 4, 2023 Oct	Nov	Dec	Qtr 1, 2024 Jan
136			Phase 620: Draft Construction Cost Estimate (Intermediate Design)	18 days	Wed 6/26/24	Tue 7/23/24							
137			Develop Cost Estimate	5 days	Wed 6/26/24	Tue 7/2/24	129						
138			Internal Review of Cost Estimate	5 days	Wed 7/3/24	Thu 7/11/24	137						
139			Submit Cost Estimate	3 days	Fri 7/19/24	Tue 7/23/24	131						
140			Phase 630: Final (90%) Design	71 days	Wed 8/14/24	Thu 11/21/24	128						
141			Develop Drawings	20 days	Wed 8/14/24	Wed 9/11/24	135						
142			Internal QA/QC	7 days	Thu 9/12/24	Fri 9/20/24	141						
143			Address Comments	10 days	Mon 9/23/24	Fri 10/4/24	142						
144			Develop Submittal	3 days	Mon 10/7/24	Wed 10/9/24	143						
145			City Review	10 days	Thu 10/10/24	Wed 10/23/24	144						
146			90% Design Workshop	0 days	Fri 10/11/24	Fri 10/11/24	144SS+5 days						
147			Finalize Plan to Address Comments	5 days	Mon 10/14/24	Fri 10/18/24	146						
148			Submit to DOH Review	24 days	Mon 10/21/24	Thu 11/21/24	147						
149			Phase 640: 90% Cost Estimate	40 days	Wed 8/14/24	Wed 10/9/24							
150			Develop Cost Estimate	5 days	Wed 8/14/24	Tue 8/20/24	135						
151			Internal Review of Cost Estimate	5 days	Wed 8/21/24	Tue 8/27/24	150						
152			Submit Cost Estimate	3 days	Mon 10/7/24	Wed 10/9/24	143						
153			Phase 650: Bid and Construction Documents (100%)	50 days	Mon 10/21/24	Fri 12/27/24							
154			Address 90% Design Comments	15 days	Mon 10/21/24	Fri 11/8/24	147						
155			Final Internal QA/QC	5 days	Mon 11/11/24	Fri 11/15/24	154						
156			Address QA/QC	5 days	Mon 11/18/24	Fri 11/22/24	155						
157			Stamp and Compile Submittal	5 days	Mon 11/25/24	Fri 11/29/24	156						
158			City Review	10 days	Mon 12/2/24	Fri 12/13/24	157						
159			DOH SRF Compliance Review	10 days	Mon 12/16/24	Fri 12/27/24	158						
160			100% Design Review Meeting	0 days	Fri 12/13/24	Fri 12/13/24	158						
161			Phase 660: Bid Support	73 days	Mon 12/30/24	Wed 4/9/25	153						
162			Bid Advertisement	1 day	Mon 1/20/25	Mon 1/20/25	160FS+25 days						
163			Bid Period	27 days	Tue 1/21/25	Wed 2/26/25	162						
164			Negotiation of Construction Contract	30 days	Thu 2/27/25	Wed 4/9/25	163						
165			Scope Phase 3	50 days	Mon 12/30/24	Fri 3/7/25	160						
166			Phase 3: Services During Construction	0 days	Wed 4/9/25	Wed 4/9/25	164						
Attachment B: WS14 Proposed Schedule Date: Mon 4/22/24			Task		Project Summary		Manual Task		Start-only		Deadline		
			Split		Inactive Task		Duration-only		Finish-only		Progress		
			Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress		
			Summary		Inactive Summary		Manual Summary		External Milestone				
Page 2													

Brown and Caldwell
Phase 2 Budget

			Lynn Stephens	Brittany Bax	Joanie Stultz	Kelly Kimball	Bill Persich	Jay Hesby	Rick Long	Tony Actis	Shania Lynch	Kyle Hay	Caylin Cyr	Tom Lemon	Marc Maisonville	Jim Cook	Linnea Lubke	Nila Molodih	Bambang Nursuwito	Dan Stewart	Ashraf Qadan	Dana Henshaw	Evan Schoel	Jacob Faust	Tina Rossillon	
Phase	Task	Phase Description	PM	Project Analyst	Project Engineer	PIC	Senior QA/QC	Procmech QC	Design Manager	Deputy Design Manager	Design Coordinator	Process-Mech / PFAS SME	Process-Mech Engineer	Proc-Mech Designer	Electrical QA/QC	Electrical Lead	I&C Lead	Electrical and I&C Support	Electrical and I&C CAD	Build Mech QA/QC	Struct Engineer	Struct QC	Struct CAD	Civil QC	Civil Lead	
			\$300	\$107	\$193	\$327	\$327	\$327	\$300	\$193	\$148	\$193	\$148	\$193	\$300	\$259	\$300	\$148	\$148	\$300	\$193	\$222	\$193	\$222	\$222	
Phase 2																										
120		Project Management	118	60	68	12	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	110	Progress Meetings	38		38	6				38																
120		Phase 2 On-going PM	80	60	30	6																				
220		Phase 2 Geotechnical Support	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	4	2	0	0	4	
	221	Geotechnical Assessment																								
	222	Geotechnical Coordination and Review								8											4	2			4	
460		Project Engineering Report and Design TM Update	18	0	22	0	0	0	4	8	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	
	461	Preliminary Engineering Report Update	12		18																					
	462	Design Standards TM Finalization	6		4				4	8	4	4														
570		Phase 2 Permitng & Public Outreach	64	0	20	0	0	0	2	8	4	0	0	0	0	0	0	0	0	0	0	0	0	4	24	
	571	Environmental & Land Use Permit Support (ESA)																								
	572	Permitting Support (BC)	44						2	8	4													4	24	
	573	Public Outreach (BC)	20		20																					
610		Intermediate (60%) Design	72	0	61	0	12	28	94	156	49	164	293	181	35	57	84	118	120	4	191	20	161	20	80	
	601	Design and BIM Management and Coordination							26	96	35															
	####	Internal Meetings	####		009.750				006.500	013.000	006.000	009.750	009.750	005.000		009.750	009.750	009.750			009.750				009.750	
	603	Process Mechanical	11		0			16				146	251	98												
	604	Civil																							67	
	605	Structural																			180		161			
	606	Architectural																								
	607	Building Mechanical							49					62												
	608	Electrical														40	69	108	99	21						
	609	Instrumentation and Controls																								
	610	General and Div 00/01	8		24				4	8			8	16												
	611	Landscape Architectural																								
	612	SRF Compliance for Specifications	8		8					8	8															
	613	Quality Assurance /Quality Review	8				12	12	8	8					35						4		20		20	
	614	External Meetings/Workshops	24		19					23		8	24			7	5					1				3
620		Draft Construction Cost Estimate (Intermediate Design)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	621	Draft Construction Cost Estimate (Intermediate Design)																								
630		Final (90%) Design	46	0	25	0	12	8	51	89	51	85	145	89	16	33	45	62	60	4	99	12	81	12	75	
	601	Design and BIM Management and Coordination							13	48	35															
	602	Internal Meetings	10		8				5	10	8		8	8		8	8	8			8				8	
	603	Process Mechanical	5		0							73	125	49												
	604	Civil																							64	
	605	Structural																								
	606	Architectural																			90		81			
	607	Building Mechanical							24					32												
	608	Electrical																								
	609	Instrumentation and Controls														20		54	50	10						
	610	General and Div 00/01															34									
	611	Landscape Architectural																								
	612	SRF Compliance for Specifications	8							8	8															
	613	Quality Assurance /Quality Review	8				12	8	8	8					16						4		12		12	
	614	External Meetings/Workshops	15		17				1	15		4	12			5	3					1				3
640		90% Cost Estimate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	641	90% Cost Estimate																								
650		Bid and Construction Documents (100%)	39	0	12	0	4	4	24	48	56	30	48	32	4	13	17	24	26	2	36	4	33	4	27	
	601	Design and BIM Management Coordination							4	16	46															
	602	Internal Meetings	8		6				4	8	6	6	6	6		6	6	6	6		6		6		6	
	603	Process Mechanical	2		0							24	42	16												
	604	Civil																							21	
	605	Structural																								
	606	Architectural																			30		27			
	607	Building Mechanical							8					10												
	608	Electrical																								
	609	Instrumentation and Controls														7		18	17							
	610	General and Div 00/01															11		3							
	611	Landscape Architectural																								
	612	SRF Compliance for Specifications								8	4															
	613	Quality Assurance /Quality Review	8				4	4	8	8					4						2		4		4	
	614	External Meetings/Workshops	5		6					8																
660		Bid Support	22	0	20	0	0	0	4	12	16	8	0	8	0	8	4	0	8	0	0	0	0	0	8	
	661	Bid Support	22		20				4	12	16	8		8		8	4		8						8	
820		Phase 2 Unanticipated Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	801	Phase 2 Unanticipated Services																								
		Total	379	60	227	12	28	40	179	367	180	290	485	310	55	110	149	203	214	10	329	38	275	40	217	

Brown and Caldwell
Phase 2 Budget

			Natalie Chow	Eric Stiles	Tracy Eastman	Dade Irwin	Pepe Viteri	Tim Cain	Seena Chavan	Emily O'Morrow	Bill Agster	Dan Goodburn	David Shroyer	Holly Tichenor	Rachel Garrett	Ellen Milne	Wendy Pare	Steve Vasquez												
			Civil Engineer	Civil CAD	BIM Manager	BIM Lead	BIM IT/DB Support	CAD Visuals	SRF Comp	SRF Support	Senior Cost Est / QAQC	Cost Estimator	Electrical Cost Estimator	Comms	Comms	Graphic Designer	Word Processing	Biller	Total Labor Hours	Total Labor Effort		Expenses	MWA	Greenworks	S&W	ESA		Total Sub Cost	Total Expense Cost	Total Effort
Phase	Task	Phase Description	\$172	\$193	\$222	\$193	\$172	\$148	\$327	\$193	\$259	\$259	\$222	\$327	\$300	\$172	\$148	\$148												
Phase 2																														
120		Project Management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	312	\$ 68,570	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000	\$ 78,600
	110	Progress Meetings																	120	\$ 28,030	\$ 10,000						\$ -	\$ 10,000		
	120	Phase 2 On-going PM																16	192	\$ 40,540							\$ -	\$ -		
220		Phase 2 Geotechnical Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	\$ 3,648	\$ -	\$ -	\$ -	\$ 23,313	\$ -	\$ 23,313	\$ -	\$ 27,000	
	221	Geotechnical Assessment																	0	\$ -				\$ 23,313			\$ 23,313	\$ -		
	222	Geotechnical Coordination and Review																	18	\$ 3,648							\$ -	\$ -		
460		Project Engineering Report and Design TM Update	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	66	\$ 14,642	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,600
	461	Preliminary Engineering Report Update																6		36	\$ 7,962						\$ -	\$ -	\$ -	\$ 8,000
	462	Design Standards TM Finalization																		\$ 6,680									\$ 6,700	
570		Phase 2 Permitting & Public Outreach	40	8	0	0	0	6	0	0	0	0	0	4	16	8	0	0	0	208	\$ 48,808	\$ 1,500.00	\$ -	\$ -	\$ -	\$ 35,000	\$ 35,000	\$ 1,500.00	\$ 85,300	
	571	Environmental & Land Use Permit Support (ESA)																	0	\$ -					\$ 35,000	\$ 35,000	\$ -	\$ -		
	572	Permitting Support (BC)	40	8															134	\$ 30,576							\$ -	\$ -		
	573	Public Outreach (BC)						6						4	16	8			74	\$ 18,232	\$ 1,500						\$ -	\$ 1,500		
610		Intermediate (60%) Design	82	187	14	113	6	0	8	0	0	0	0	0	16	8	0	0	0	2,407	\$ 481,530	\$ 3,700	\$ 32,293	\$ 14,452	\$ -	\$ -	\$ 46,745	\$ 3,700	\$ 532,000	
	601	Design and BIM Management and Coordination			14	103	6													280	\$ 55,527		12%				\$ -	\$ -		
	####	Internal Meetings	009.750			009.750														141.000	\$ 29,917		6%				\$ -	\$ -		
	603	Process Mechanical																		522	\$ 92,772		19%				\$ -	\$ -		
	604	Civil	67	187																321	\$ 62,489		13%	\$ 200			\$ -	\$ 200		
	605	Structural																		341	\$ 65,813		14%				\$ -	\$ -		
	606	Architectural																		0	\$ -		0%	\$ 32,293			\$ 32,293	\$ -		
	607	Building Mechanical																		111	\$ 26,666		6%				\$ -	\$ -		
	608	Electrical																		247	\$ 40,996		9%				\$ -	\$ -		
	609	Instrumentation and Controls																		90	\$ 23,808		5%	\$ 1,000			\$ -	\$ 1,000		
	610	General and Div 00/01																		68	\$ 14,048		3%				\$ -	\$ -		
	611	Landscape Architectural																		0	\$ -		0%	\$ 14,452			\$ 14,452	\$ -		
	612	SRF Compliance for Specifications							8											40	\$ 9,288		2%				\$ -	\$ -		
	613	Quality Assurance /Quality Review																		127	\$ 34,772		7%				\$ -	\$ -		
	614	External Meetings/Workshops	5																	119	\$ 25,434		5%	\$ 2,500			\$ -	\$ 2,500		
620		Draft Construction Cost Estimate (Intermediate Design)	0	0	0	0	0	0	0	0	5	46	38	0	0	0	0	0	0	89	\$ 21,645	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,600	
	621	Draft Construction Cost Estimate (Intermediate Design)									5	46	38							89										
630		Final (90%) Design	93	94	7	60	3	0	24	0	0	0	0	0	0	0	0	0	0	1,375	\$ 277,508	\$ 2,500	\$ 18,905	\$ 14,452	\$ -	\$ -	\$ 33,357	\$ 2,500	\$ 313,400	
	601	Design and BIM Management and Coordination			7	52	3													158	\$ 30,450		11%				\$ -	\$ -		
	602	Internal Meetings	8			8														115	\$ 24,145		9%				\$ -	\$ -		
	603	Process Mechanical																		252	\$ 43,546		16%				\$ -	\$ -		
	604	Civil	80	94																238	\$ 46,110		17%				\$ -	\$ -		
	605	Structural																		171	\$ 33,003		12%				\$ -	\$ -		
	606	Architectural																		0	\$ -		0%	\$ 18,905			\$ 18,905	\$ -		
	607	Building Mechanical																		56	\$ 13,376		5%				\$ -	\$ -		
	608	Electrical																		124	\$ 20,572		7%				\$ -	\$ -		
	609	Instrumentation and Controls																		44	\$ 11,680		4%				\$ -	\$ -		
	610	General and Div 00/01																		0	\$ -		0%				\$ -	\$ -		
	611	Landscape Architectural																		0	\$ -		0%	\$ 14,452			\$ 14,452	\$ -		
	612	SRF Compliance for Specifications							24											48	\$ 12,976		5%				\$ -	\$ -		
	613	Quality Assurance /Quality Review																		88	\$ 24,212		9%				\$ -	\$ -		
	614	External Meetings/Workshops	5																	81	\$ 17,438		6%	\$ 2,500			\$ -	\$ 2,500		
640		90% Cost Estimate	0	0	0	0	0	0	0	0	3	35	34	0	0	0	0	0	0	72	\$ 17,390	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,400	
	641	90% Cost Estimate									3	35	34																	
650		Bid and Construction Documents (100%)	33	37	2	23	1	0	16	0	0	0	0	0	0	0	0	0	0	599	\$ 122,312	\$ -	\$ 17,399	\$ 7,226	\$ -	\$ -	\$ 24,625	\$ -	\$ 146,900	
	601	Design and BIM Management Coordination			2	17	1													86	\$ 14,993		12%				\$ -	\$ -		
	602	Internal Meetings	6	6		6														110	\$ 22,520		18%				\$ -	\$ -		
	603	Process Mechanical																		84	\$ 14,536		12%				\$ -	\$ -		
	604	Civil	27	31																										



Exhibit A Phase 2 Scope of Work

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Water Station 14 PFAS Treatment System Design Project Contract Amendment 1

City of Vancouver

Phase 2 Scope of Work

April 22, 2024

Project Overview

The City of Vancouver (City) executed a contract in 2023 for Brown and Caldwell (BC) to provide professional engineering services for a PFAS water treatment system design at Water Station 14 (WS-14) located at 6803 NE 78th St, in Vancouver, Washington. This scope of work describes BC's ("Consultant") and the City's activities that will occur during Phase 2 of the WS-14 PFAS Treatment System Design Project ("Project") for treatment of PFAS in groundwater produced from the City's wells at WS-14. BC has completed preliminary design activities during the Phase 1 contract of the Project and will continue subcontracting with Shannon & Wilson, Greenworks, MWA Architects, and ESA to provide project support throughout Phase 2. This scope of work is an amendment to the existing C-101426 contract established during Phase 1 activities.

Background

The City owns and operates the 3rd largest state-regulated municipal water system in the State of Washington. Vancouver's source of drinking water is 100% groundwater. There are nine well fields with a total of 40 wells in the City's system. These wells produce an average daily demand of 27 million gallons (MG) serving approximately 280,000 people. The City's service area covers approximately 72 square miles incorporating areas within the City limits and extending into unincorporated Clark County.

WS-14 is on a 3.35 acre parcel and has been a municipal water facility serving Vancouver since 1980. The site contains three groundwater wells with a combined capacity of 3,200 gpm.

Water Station 14 consists of the following major components:

- 3 groundwater wells
- Booster pump station with 2 pumps
- On-site sodium hypochlorite generation (OSHG) system for disinfection
- Fluoride dosing equipment
- Single-tower aeration system for pH control
- A standby generator

Water from the station's wells flows through the single-tower aeration system for pH adjustment, receives disinfection treatment provided via an on-site sodium hypochlorite generation system, and is fluoridated with sodium fluoride. Water pumped from the wells at WS-14 flows through a common flow



meter prior to distribution in the Heights High Pressure Zone. The disinfection and fluoride injection points are located within the flow meter vault.

The booster pump station at WS-14 consists of two variable-speed pumps that draw water from a clearwell beneath the current treatment building. The total booster pump capacity is 3,200 gpm (1,600 gpm per pump).

Per- and polyfluoroalkyl substances (PFAS) were first detected in the groundwater at WS-14 in late 2020. Additional testing was completed of all water system wells in 2021. In 2022, the City completed a high-level treatment system conceptual layout and cost estimate to understand the feasibility and cost of adding PFAS treatment at WS-14. The City also completed RSSCT testing and conducted a pilot test with four different filter media. BC will have completed Phase 1 in spring 2024 prior to commencement of Phase 2 activities, and included: site evaluation, initial permitting tasks including cultural review, wetlands delineation, land use pre-application, public outreach, and preliminary design.

The City has received \$12.7 million in State Revolving Fund (SRF) loan funding for this project. This project will need to meet the federally funded project requirements through the SRF program including the need to use American iron and steel (AIS), cultural and environmental reviews/SEPA, and the Davis-Bacon Act. However, this project received a Buy America Build America (BABA) waiver. The City signed the SRF contract with the state on January 9, 2024. The City will have 18 months from signing to have a construction contract awarded. Therefore, a construction contractor must be awarded construction by July 9, 2025.

Approach

BC is completing the project in three phases and will utilize findings and deliverables from Phase 1 to establish basis of design in the transition to Phase 2 scope of work. Additional description of Phase 1 work is available in C-101426 contract documents.

This scope of work describes the services to be rendered by BC for the design of additional treatment processes at the WS-14 facility. Work at this site is expected to include the following design elements:

- Installation of a PFAS treatment system with:
 - Three (3) pairs of lead-lag pressure vessels.
 - Granular activated carbon media for each vessel.
 - Inlet piping header and appurtenances.
 - Effluent piping header and appurtenances.
 - Three (3) electrically actuated effluent flow control valves and flow meters, one set dedicated to each pressure vessel pair.
 - Electrically actuated rinse water supply flow control valve and flowmeter
 - Valving and instrumentation for each vessel pair, as indicated in the preliminary design documents.
 - Pipe supports and associated equipment anchoring appurtenances.
- Structural steel catwalk to access upper levels of pressure vessels.
- Rinse water tank with:
 - Electrically actuated effluent control valve, flow meter, level sensor, and appurtenances.

- Concrete equipment pad for pressure vessels and rinse water tank.
- Buried yard piping and appurtenances to connect PFAS treatment system and rinse water tank with existing treatment system.
- Buried vaults for piping tie-in and chemical injection appurtenances.
- Booster pump improvements with:
 - Two (2) upgraded pump impeller and bowl assemblies.
- Restroom including associated plumbing, heating, and ventilation appurtenances.
- Storage facility:
 - Adjacent to restroom
 - Floor drain, heating, and ventilation appurtenances
 - Double doors for tote delivery
- General site improvements including:
 - Roadway expansion and paving improvements.
 - Grading modifications for site accessibility, equipment placement provisions, and new retaining wall.
 - Site fencing replacement and improvements.
 - Stormwater management provisions including discharge and onsite treatment.
 - Site lighting and security fencing provisions.
- Electrical, automation, and network equipment required for PFAS treatment system, pump improvements, and site improvements.

The City is anticipating this project to be delivered via design-bid-build contract vehicle. BC plans to deliver the design following BC design gate standards which consist of preliminary design, intermediate design (60 percent), final design (90% and 100%), and Issued for Construction or conformed documents.

Preliminary design has been completed with the Phase 1 activities, which included preliminary design drawings, technical memoranda, and project engineering report developed for the project. BC will advance this design and submit packages for City review at the intermediate and final design phases and anticipates a submission to Washington Department of Health (DOH) for design review following the intermediate design phase, in addition to submittal for other authorities having jurisdiction (AHJ) such as City Building and Construction, Clark County Building, and local fire and county health departments for approval following final design.

It is anticipated that BC will develop Issued for Construction (IFC) drawings and specifications for the City's request for contractor bids and that BC will provide bid support.

Phase 3, which is not scoped at this time, will include construction and commissioning services including engineering services during construction (SDC) and services following construction (SFC).

Design Reviews

Design review workshops will be conducted with the City's personnel, key individuals from the BC project team and subcontractors, and other internal and external stakeholders as needed. The design

review workshops will be conducted at the intermediate and final design gate. An interim intermediate workshop will be held to review P&IDs, control narrative, and pipe schedules.

- To allow the project to meet delivery milestones, project reviews (comment periods) may need to be expedited on the City's behalf to the extent possible. At a maximum, review duration will be limited to 10 business days.
- The City's PM will compile staff comments and submit in a single comment log in .pdf using Bluebeam format for the drawings and a separate .pdf comment file for the specifications.
- With the exception of the final design review, the project team will not stop work during formal reviews.
- BC will provide responses/resolutions to the comments in the comment log. Changes resulting from comments will be incorporated into the design documents in the next phase of work. Design will proceed without resubmittal of design milestone deliverables.

Deliverables

Specifications

- Brown and Caldwell master specifications will be used as the basis for technical specifications (modified Construction Specification Institute MasterFormat® 2014 – Divisions 01 through 50).
- Divisions 00 and 01 specifications (including Contract Agreement, Bid Forms, etc.) will be provided by the City. BC will coordinate technical specifications with Division 01 and provide 5 of Division 01 sections to compliment City provided sections. BC will review Division 00 and 01 specifications for compliance with Drinking Water State Revolving Fund (DWSRF) requirements.
- All specifications will be delivered to the City in .pdf format.

Drawings

- Drawings will be developed using AutoDesk Revit and Civil 3D. AutoCAD will be used for 2D diagrams such as P&IDs, HVAC, I&C, and electrical one lines.
- The project will use BC's current design standards for all drawing production.
- All full-size drawings will be based on standard ANSI D, 22" x 34" paper, and half-size drawings will be standard tabloid size, 11" x 17" paper.
- All drawings will be delivered to the City in .pdf format. Zipped drawings will also be provided.
- Two hard copies of full-size digitally sealed Bid Documents (100%) will be provided.

Scope of Work Summary and Work Breakdown Structure

The BC Team's scope of services for the WS-14 PFAS Treatment System Design Project is divided into the following phases and tasks:

WS-14 PFAS Project Design Tasks		
Contract Phase 2		
Phase 120	Phase 2 Project Management	
	Task 110	Phase 2 Progress Meetings
	Task 120	Phase 2 Project Management
Phase 220	Phase 2 Geotechnical Support	
	Task 221	Geotechnical Review of Design
	Task 222	Geotechnical Coordination
Phase 460	Preliminary Engineering Report Update	
	Task 461	Project Engineering Report Finalization
	Task 462	Design Standards TM Finalization
Phase 570	Phase 2 Permitting & Public Outreach	
	Task 571	Environmental and Land Use Permit Support
	Task 572	Other Permitting Support
	Task 573	Public Outreach
Phase 610	Intermediate (60%) Design	
	Task 601	Design and BIM Management and Coordination
	Task 602	Internal Meetings
	Task 603	Process Mechanical
	Task 604	Civil
	Task 605	Structural
	Task 606	Architectural
	Task 607	Building Mechanical
	Task 608	Electrical
	Task 609	Instrumentation and Controls
	Task 610	General and Div 00/01
	Task 611	Landscape Architectural
	Task 612	SRF Compliance for Specifications
	Task 613	Quality Assurance/Quality Review
	Task 614	External Meetings/Workshops
Phase 620	Draft Construction Cost Estimate (Intermediate Design)	
Phase 630	Final (90%) Design	

WS-14 PFAS Project Design Tasks		
	Task 601	Design and BIM Management and Coordination
	Task 602	Internal Meetings
	Task 603	Process Mechanical
	Task 604	Civil
	Task 605	Structural
	Task 606	Architectural
	Task 607	Building Mechanical
	Task 608	Electrical
	Task 609	Instrumentation and Controls
	Task 610	General and Div 00/01
	Task 611	Landscape Architectural
	Task 612	SRF Compliance for Specifications
	Task 613	Quality Assurance/Quality Review
	Task 614	External Meetings/Workshops
Phase 640	90% Cost Estimate	
Phase 650	Bid and Construction Documents (100%)	
	Task 601	Design and BIM Management and Coordination
	Task 602	Internal Meetings
	Task 603	Process Mechanical
	Task 604	Civil
	Task 605	Structural
	Task 606	Architectural
	Task 607	Building Mechanical
	Task 608	Electrical
	Task 609	Instrumentation and Controls
	Task 610	General and Div 00/01
	Task 611	Landscape Architectural
	Task 612	SRF Compliance for Specifications
	Task 613	Quality Assurance/Quality Review
	Task 614	External Meetings/Workshops
Phase 660	Bid Support	
Phase 820	Phase 2 Unanticipated Services	
	Task 801	Phase 2 Unanticipated Services

This scope of services and level of effort includes the Contract Amendment Phase 2 tasks only. This scope, schedule, and budget are expressly developed for the completion of the deliverables summarized herein for Phase 2. We have assumed input and support from City staff and that relevant information and data will be provided by the City. Professional services that may be required beyond this scope may require an amendment.

Contract Amendment Phase 2

It is the intent of this scope of work to expand on the preliminary design efforts and prepare contract documents for which a contractor, selected during the bid support period at the end of design, will begin construction.

Phase 2 of the project includes site assessment development in conjunction with design, permitting and public outreach activities, intermediate (60 percent) design submittal package and cost estimate, final (90 percent) design submittal package and cost estimate, bid documents submittal package for bid, and engineering services during bidding, as detailed in the following phases and tasks.

Phase 120: Phase 2 Project Management

Task 110: Progress Meetings

Activities: Detailed design kickoff and external progress meetings

Assumptions:

- Weekly virtual progress/design discussion meetings will occur for the duration of this project phase (not to exceed 8 months, assuming from May through December). Bidding will occur in January through March. An additional three months of biweekly meetings are assumed. The frequency of meetings may decrease, depending on work activities and other meetings (such as review workshops). This time includes a total of 38 progress meetings to be attended by up to 3 BC staff. Additional time for meeting prep and circulation of post-meeting materials is included in this task budget.

Meetings:

- Weekly progress meetings during design and biweekly progress meetings during bidding.

City Responsibilities:

- Communicate issues and make decisions that impact project at progress meetings.

BC Responsibilities:

- Prepare an agenda for each meeting and update to capture notes, decisions, and action items as the meeting progresses. The updated agenda will serve as the meeting minutes and formal meeting minutes will not be issued.

Deliverables:

- Brief meeting agendas

Task 120: Project Management

Activities/Approach: Provide management, direction, coordination, and control of all work associated with the project work plan, controls and progress reports, document management system, change management, subconsultant contracts, schedule, budget, technical quality, and monthly invoices for the project, along with project meetings under this phase. This task includes the following activities:

Updates and revisions to the project work plan, including:

- Project team roles and responsibilities.
- Schedule development and updates in Gantt chart format developed in Microsoft Project.
- Communications plan.
- Risk management plan and risk register to describe, categorize, and mitigate risks associated with the project. This will be a collaborative effort with the City.
- Health and safety plan prepared for BC's staff who will be working on the project and visiting the site.
- QA/QC plan.
- Change management process, including a decision log and action item log.
- Review of progress reports for DWSRF reimbursement requests
- Document management system:
 - BC will maintain a system to manage, track, and store relevant documents produced between the City, BC, and others during the project phases. This includes use of a shared MS Teams folder for logging and tracking correspondence and deliverables.
- Task-level project and staff management throughout the project phases.
- Monthly invoices and progress reports with cover letters including:
 - Summary information tracking project expenditures versus percent complete.
- Communication and coordination with City staff.
- Setting up and managing subconsultant contracts for architectural, permitting support, and geotechnical support.
- Subcontractor contract development.
- Identify scope changes that impact the project budget and schedule and communicate to City Project Manager
- Managing and processing monthly invoices submitted by subcontractors.
- Communication and coordination with subcontractor's staff.
- Project archiving and storage of deliverables, notes, and email correspondence

City Responsibilities:

- Review monthly status reports and supporting project documentation for invoice and payment approval.

Deliverables:

- Monthly progress reports and invoices
- Project schedule
- Submittal of updated project logs as needed to support key activities and decisions (action/issue/decision logs)

Phase 220: Phase 2 Geotechnical Support

Objective: Provide geotechnical engineering services to inform the intermediate and final design.

Task 221: Geotechnical Review of Design

Activities/Approach: This task includes the following activities during design:

- Continue monitoring water levels from previously installed vibrating wire piezometer and monitoring for duration of design.
- Conduct supplemental engineering analysis for geotechnical design including settlement calculations, foundation analysis, and constructability review as information is developed and site configuration and loading is finalized.
- Provide retaining wall design recommendations, as necessary, including lateral earth pressures, bearing capacity, lateral resistance, and evaluation of global stability.
- Develop recommendations and design parameters for contractor designs related to means and methods including but not limited to conceptual dewatering, temporary excavations, settlement, and shoring systems.
- Update Geotechnical Data Report with additional groundwater level measurements.
- Update Geotechnical Engineering Report to include changes to the site layout and/or foundation loading.
 - The preliminary design Geotechnical Engineering Report will be revised, as necessary, as part of intermediate (60%) design.
 - Revised preliminary Geotechnical Engineering Report will be updated following intermediate design and will be finalized.
- Provide input for geotechnical related specifications developed by BC design team.
 - BC developed specifications to including but not limited to Sections 01 11 10 - Geotechnical Information, 31 23 00 - Excavation and Fill, and 31 23 19 - Dewatering, 31 41 00 Shoring.

Assumptions:

- Groundwater monitoring will be performed using existing vibrating wire piezometer to inform excavation and dewatering requirements. Two additional readings will be collected, one during the wet season and one during the dry season, as the project schedule allows.
- New structures will be designed to meet International Building Code 2021 and ASCE 7-16 seismic codes.
- Valve vaults, restroom, rinse water tank, and PFAS treatment foundation will not require design of deep foundations. Additional design budget will be necessary if deep foundations are required.
- Recommendations and design parameters for contractor designs will avoid designing means and methods for the contractor and present their directions as recommendations/suggestions. The contractor shall have ultimate choice on means and methods.
- Decommissioning of the existing vibrating wire piezometer will be performed by the contractor during construction.

City Responsibilities:

- Provides site access for field work.
- Review updated preliminary Geotechnical Engineering Report at intermediate design and final design. Provide review comments to BC for transmittal to Shannon & Wilson and incorporation into the final report.

Meetings:

- BC and Shannon & Wilson meetings including but not limited to:
 - Intermediate design kick-off
 - Final design kick-off

- General coordination meetings through intermediate and final design.
- City check-in meetings on an as-needed basis. Two meetings are assumed for this phase.

Deliverables:

- Updated Geotechnical Data Report, draft and final.
- Updated Preliminary Geotechnical Engineering Report, draft at Intermediate Design, final at Final Design.
- Review project specifications for the intermediate (60%) and final (90%) design gates.

Task 222: Geotechnical Coordination

Objective: Coordinate subconsultant services to support the detailed design.

Activities/Approach: This task includes the following activities:

- Manage services of subconsultants needed to inform design activities.
- Review subconsultant work to provide coordination with overall project goals, standards, guidelines, and deliverables.
- Coordinate subconsultant workshop material development.
- Coordinate subconsultant site visits and attend site visits to support subconsultant activities.
- Coordinate BC and City review of subconsultant work products including but not limited to field collected data, geotechnical data report updates, and geotechnical engineering report updates.

Assumptions:

- Subconsultants and respective scopes of work will be as identified in Task 221.
- Permitting specific subconsultant support is provided under Phase 570.

City Responsibilities:

- None.

Meetings:

- BC will conduct regular coordination meetings with each subconsultant.

Work Products:

- See individual subconsultants work products.

Phase 460: Project Engineering Report and Design Standards TM**Task 461: Project Engineering Report Finalization**

Objective: Submit Project Engineering Report (PER) to WADOH per the Water System Design Manual requirements based on the revised PER prepared as part of Phase 1.

Activities/Approach:

- Incorporate DOH review comments on PER

Assumptions:

- WADOH provides feedback and BC addresses one round of comments for final PER approval.
- PER is submitted to DOH following feedback on the preliminary design submittal

- Final draft PER is submitted to WADOH after City comments on intermediate design are addressed.

City Responsibilities

- Review DOH feedback on PER and provide direction on revisions

Meetings

- 1 hour meeting with DOH to discuss comments.

Work Products

- PER, final draft and final

Task 462: Design Standards TM Finalization

Objective: Update the Design Standards TM that was developed as a part of Phase 1 to inform future designs

Activities/Approach:

- Incorporate City review comments on draft Design Standards TM.
- Update Design Standards TM based on intermediate design.

Assumptions:

- This TM will capture direction on pressure vessel design for WS14 and stance for future projects. Two options presented in Draft PER currently. The pressure vessel design options will be presented in this TM along with a recommendation on a selected approach.
- City provides one round of comments on Revised Draft Design Standards TM.

City Responsibilities

- Provide input on pressure vessel design approach
- Review revised Design Standards TM at intermediate design.

Meetings

- None

Work Products

- PER, revised, final draft and final (depending on whether DOH has comments)
- Design Standards TM, final draft and final

Phase 570: Environmental Permitting and Public Outreach

Task 571: Environmental and Land Use Permit Support

Objectives: Review all applicable state and local environmental and land use permitting requirements for the WS14 PFAS treatment project. Identify project permitting needs. Complete and submit project environmental and land use permit applications prior to the start of construction activities. The following section summarizes activities within the permitting subconsultant's scope of work.

Activities/Approach:

- Conduct a reconnaissance of the site to characterize critical area buffers for the wetlands delineated in Phase 1.

- Complete background research and identify the necessary project permits through communication with state and City permit contacts.
- Develop a permitting matrix that summarizes the project permit requirements, permit triggers, key scheduling milestones, submittal requirements, permitting contacts, and recommended timing of submittals.
- Coordinate with permitting agencies, prepare required permit application forms and supporting materials, and facilitate submission of permit applications to governing agencies.
- Prepare draft and final Land Use application including submittal checklists and supplemental forms.
- Coordinate directly with BC project management and design team as needed to fulfill environmental and land use permit requirements.
- Prepare Final SEPA Checklist. Draft SEPA Checklist will be completed under Phase 1 scope.
- Prepare a Critical Areas Report addressing site wetlands/buffers.
- Attend project workshops and meetings or support development of project meeting materials as needed.

Assumptions:

- Wetlands are present on the project site as identified in Phase 1. The project will be designed to avoid siting project elements or construction activities within wetland boundaries, and this scope assumes that federal/state wetland permits from U.S. Army Corps of Engineers and/or Washington Department of Ecology will not be needed.
- It is assumed the following City land use reviews/permits will be needed: Type I Conditional Use Permit; Type I Site Plan Review; Type I Critical Areas Permit; SEPA Determination. Consultant's scope of work does not include City building permitting. Such permitting will be City led and is assumed to include electrical, building mechanical, plumbing, building and development permits.
- Inadvertent Discovery Plan has already been prepared by others. No additional work required.
- No historic buildings or structures that would require documentation and inventory, and no historic property inventory forms will be required. No cultural sample collection or analysis will be required.
- Development of an Archeological Resources Monitoring Plan is not included.
- No National Register Nominations are included in this scope.
- No Washington State Archaeological Site or Isolate Inventory Form will be needed.

City Responsibilities:

- Fulfill data requests as needed to complete project permit applications.
- Pay land use application fees

Meetings:

- Permitting kick-off meeting (City team, BC, and ESA).
- Two meetings with land use permitting department are assumed along with two prep meetings.

Deliverables:

- Incorporate permitting efforts into overall project schedule
- Critical areas report
- Final SEPA Checklist (Draft to be completed under Phase 1 scope)

- Draft and Final Land Use preliminary application and supplemental forms

Task 572: Other Permitting Support

Objective: Coordinate project permitting needs between City and project permitting subconsultant (ESA). Perform project permitting not completed by environmental subconsultant, including Construction Stormwater NPDES Permits and new Water Treatment Plant General Permit. Permitting subconsultant activities are summarized in Scope of Work Task 571.

Activities/Approach:

- Develop communication plan for permit coordination between BC, permitting subconsultant (ESA), and governing agencies.
- Support and contribute to development of project permitting materials by the City and by the permitting subconsultant. This work includes providing project background information and design documents to the permitting subconsultant. This work may also include drafting permit information or supporting documentation, e.g., for SEPA checklist and Development Permit prior to bidding.
- Organize and attend permitting coordinating meetings with permitting subconsultant, BC design team, and permitting agencies.
- Prepare Construction Stormwater General NPDES Permit application on City's behalf.
- Support application of a new Water Treatment Plant General Permit (NPDES Waste Discharge General Permit for Water Treatment Plants) in compliance with Chapter 90.48 of the Washington Administrative Code (WAC)
- Complete the Construction Stormwater Pollution Prevention Plan (SWPPP) (as required by the NPDES permit).
- Coordinate BC and City review of subconsultant work products including draft environmental permit applications.
- Complete review of City and subconsultant prepared permit applications and supporting documentation.
- Organize subconsultant field work to complete project permit applications.

Task Assumptions:

- Contractor will obtain all building permits, including Public Works, Clearing and Grading, Utility, Building, Plumbing, Mechanical and Electrical.
- A Notice of Construction application to the Southwest Clean Air Agency (SWCAA) is not required. There is no new or revised air pollution generating equipment anticipated.
- Contractor will pay for all building permits through the construction contract.
- Bid document revisions that may be required following bidding stemming for permitting authority applications and approvals are not included. If required, for construction revisions made as a condition of permit approvals will be funded by Phase 800: Unanticipated Services.
- Permit related specification materials will be developed under detailed design and Phases 610, 630, and 650.

City Responsibilities:

- Fulfill requests for information to enable completion and submission of project permits.
- Facilitate communication between City Planning Departments and project permitting subconsultant.
- Attend project permitting meetings.

Meetings

- One meeting with Washington Department of Ecology is required.
- Two land use meetings plus two preparatory meetings.

Deliverables:

- New Water Treatment Plant General Permit
- SWPPP

Task 573: Public Outreach

Objective: Given the public interest in PFAS, there may be significant interest in the WS14 design. The BC team will use our in-house communications team to support neighborhood meetings or additional outreach to the community.

Activities:

- Develop materials to communicate proposed design for City Council

Assumptions:

- Effort will build on outreach from Phase 1. Outreach will cover requirements of land use permitting.
- Support one neighborhood meeting/open house in-person for 2 hours.
- Graphics and presentations support estimated to be not greater than 74 hours.

Deliverables:

- Presentation materials to include at least one existing site graphic and one site visualization graphic.
- One handout-type document

Phases 610, 620, 630, 640. and 650 - Detailed Design

The detailed design will be done in three phases; Phase 610 – Intermediate Design, Phase 630 – Final Design, and Phase 650 – Bid Documents. In Phases 620 and 640, updated probable construction cost estimates will be provided. The key outcomes for these phases will be the following:

- Prepare bid documents for complete construction and commissioning as envisaged by the Preliminary Engineering Report and Preliminary Design.
- Coordinate the execution of the detailed design with the City.
- Manage project resources to meet schedule milestones.

The design standards prepared during the Preliminary Design phase will identify the codes and standards that are the basis of each discipline's design effort. Unless otherwise noted in the design standards, the detailed design will be prepared based on the currently adopted versions of codes and standards in place at the time this scope of work was prepared (March 2024) and the adopted design standards for the Project. New code adoptions prior to completion of the design will be evaluated and may require additional effort.

The Intermediate and Final Design submittals will include unsigned Washington State Professional Engineer seals and be stamped "Preliminary – Not for Construction". The Bid Documents and Conformed Documents will include signed Washington State Professional Engineer seals.

The subtasks under each detailed design phase are generally by discipline and are consistent from phase to phase as shown in the work breakdown structure table above.

Phase 610: Intermediate Design

Objective: Obtain approval from the City on the complete arrangement of the proposed design. The intent/objective is to have all of the major equipment items solidified by this submittal. Civil, structural, architectural, and process mechanical models are largely complete and all major design decisions have been reached and approved. Electrical, instrumentation, and building mechanical models have been progressed. Major construction documents drawings and specifications have been progressed.

Deliverables:

- Agendas and 60% design workshop meeting minutes that captures planned comment resolution in .docx format.
- Drawings and technical specifications in .pdf format
- Three (3) hard copies of stamped drawings in 11" x 17" format for permit applications.
- Three (3) hard copies of technical specifications in 8.5" x 11" format for permit applications.

City on the intermediate design package will be addressed during the final design phase and incorporated into the final design package (refer to Phase 600, Task 630). Revised submittals addressing comment during the intermediate design phase is not included in this task.

Task 601: Design and BIM Management and Coordination

Activities:

- Design Management and Coordination
 - Manage and direct the design process so that the products of the design effort are contract documents suitable for construction and reflect the City standards and preferences. The design process will be managed to provide complete, coordinated, and consistent designs between facilities and disciplines.
 - Check on the design team progress and communicate results to project management.
 - Verify QMP is followed, reviewers concur with work products, and maintain documentation of QA/QC reviews, responses, and resolutions.
 - Conduct internal design team coordination meetings.
 - Manage internal resources to maintain project schedule and achieve contracted milestones.
 - Identify scope changes that impact the project budget and schedule. Notify the Project Manager of potential changes in scope and assist in documenting those changes.
 - Coordinate progress reviews by the City, including collecting comments from the City's review, distributing review comments to facility and discipline leads, facilitating responses to review comments, documenting responses to the City's review comments, addressing any subsequent issues resulting from the City's review and addressing any subsequent issues resulting from the response to the City's review comments.
 - Monitor compliance with project standards such as equipment numbering system, drawing presentation, and previously developed design guides.
 - Maintain equipment list.
 - Administrative support for written deliverables including specifications management.
 - Production support for electronic and printed deliverables.
- BIM Management and Coordination

- Manage compliance with project CAD/BIM software standards, graphics standards, file naming conventions and standards, and revision/iteration control.
- Manage compliance with and update the BIM Execution Plan (BxP) where changes are indicated to guide the use of BIM tools over the life of the project. Identify and document new project goals and BIM objectives, organizational roles and responsibilities, execution process workflows, collaboration procedures and platforms, and model and drawing QC procedures.
- BIM model maintenance and coordination.
- Conduct internal coordination meetings with BIM/CAD production team.
- Plot and compile drawings for reviews and deliverables.

Task 602: Internal Meetings

Activities:

- Biweekly internal design coordination meetings.

Task 603: Process Mechanical

Activities:

- Confirm PFAS treatment system design specific components including:
 - Which underdrains or vessels manufacturers to name in the specification
 - Which provisions for GAC to IX conversion to include.
- Confirm booster pump improvements requirements and coordinate with vendor, including:
 - Whether or not to accommodate IX
 - Impeller and/or bowl assembly replacement
 - Motor and VFD replacement
- Confirm rinse water tank system design basis and coordination with vendor.
- Develop design for rinse water discharge to sewer connection and settled fines handling systems.
- Coordinate with instrumentation and controls (I&C) for control description development, I/O and instrumentation list development and details, and finalization of process and instrumentation diagrams (P&IDs).
- Coordinate with structural for equipment pads, pipe supports, and anchoring design requirements and details.
- Coordinate with civil for project siting, process equipment accessibility considerations, vault design placement and design details, rinse water discharge requirements, and yard piping design.
- Coordinate with electrical for development of one-line diagrams, load list development, and pump improvement specifications.
- Refine and finalize design elements including:
 - Process flow diagrams (PFDs).
 - Hydraulic profile.
 - Pipe alignment and profiles.
 - Process piping schedules.
- Develop intermediate technical specification drafts.
- Develop and refine process and piping design drawings and annotations. Develop standard and project specific design details.

Assumptions:

- The PFAS treatment system will be a prefabricated turnkey (complete and fully operational) system consisting of:
 - Three (3) trains composed of two (2) vessels each able to operate in series (lead-lag).
 - Independently supported valve manifold with all piping, valving, and instrumentation necessary for all operating scenarios detailed in the P&IDs and control descriptions.
 - GAC media for each vessel as specified in the technical specifications of the project. Vessels and major design elements will allow for future use of IX resin media in lieu of GAC media. Minor modifications may be required to change media types.
- No equipment is assumed to be pre-purchased based on the Early Procurement Assessment TM.
- The rinse water tank will be above grade with supernatant being decanted to either nearby sewer or stormwater system, and settled fines designed to have the capability to be vactored out.
- System automation will be limited to manual valves as part of the PFAS treatment system vendor package and include Contractor supplied electrically actuated flow control valves and flow meter appurtenances. An additional flow control valve and flow meter will be included on the rinse water supply line.
- Booster pump improvements will be limited to impeller and/or bowl assemblies.
- Booster pump motors and VFDs are suitable for impeller/bowl replacement. Motor and VFD replacement are not included.

Task 604: Civil

Activities:

- Review updated survey information provided by the City.
- Prepare draft and final stormwater report in accordance with City and state regulations.
- Prepare drawings and specifications in compliance with City of Vancouver design standards and civil engineering review checklists.
- Civil drawings that depict:
 - Plan sheets including survey data and references; floor/control elevations; elevations for finished grading; demolition requirements and limits.
 - Horizontal and vertical design of proposed buried utilities.
 - Erosion and sediment control drawings and details.
 - Project-specific detail drawings.
 - Standard detail drawings (BC and client).
 - Paving Plan.
- Modifications to existing security fencing and proposed new security fencing depicted on drawings.
- Draft version of all specifications

Assumptions:

- Potholing for the location of critical buried infrastructure may be required during design. Coordination for potholing locations is included, but on-site potholing services are not included.

- Coordination with Clark County for discharge of sanitary and storm/wash water discharge to County facilities and approval of such are included in the scope.

Task 605: Structural

Activities:

- Refinement and finalization of basis of design including seismic and wind criteria and all load requirements.
- Review of geotechnical design report (GDR) and geotechnical engineering report (GER) to confirm project design requirements.
- Refinement and finalization of detailed design for new PFAS treatment system concrete foundation slab, structural steel access catwalk, and structural steel pipe support systems.
- Refinement and finalization of detailed design for new rinse water tank concrete foundation slab and structural steel pipe support systems.
- Preparation of detailed design of building modifications, as needed, for any sodium hypochlorite system and electrical improvements.
- Coordination with civil for geotechnical design requirements, siting conditions, and retaining wall as required.
- Coordination with process mechanical and building mechanical for all equipment pads, pipe supports, and anchoring design requirements and details.
- Coordination with architectural for new restroom facility detailed design.
- Coordination with electrical for equipment pads and conduit requirements not in the yard.
- Development of intermediate technical specification drafts.
- Development and refinement of design drawings and annotations. Drawings will include:
 - Plans of all structures with finalized materials of construction, overall dimensions and floor elevations (as applicable).
 - Intermediate foundation drawings.
 - Intermediate sections with reinforcing shown and labeled.
 - Standard details.
- Development of structural calculations for the PFAS concrete pads, rinse water tank concrete foundation, access ladders, cat walks, platforms, retaining walls and rest room facility.

Assumptions:

- The restroom facility will conform to design criteria per IBC 2021 with WAC 51-50 amendments and ACSE 7-16.
- New PFAS treatment system will require an upper-level access catwalk with stairs for accessing vessel top appurtenances and instrumentation. Catwalk system will be designed in coordination with process mechanical design requirements and achieving AIS compliance.
- New rinse water tank will require a guardrail at the top and ladder for access.
- Foundation type is assumed to be shallow footings per geotechnical findings.
- A baker silo concrete tank type will be provided for the rinse water tank. Concrete reinforcement design will be provided by concrete tank provider who will stamp the design.

Task 606: Architectural

Activities:

- Refinement and finalization of basis of design including all applicable code/life safety plans, materials of construction, restroom facility dimensions, and elevations.
- Provide input to structural engineer for specific facets of the design, including handrail appearance, stairway configuration, and application of the architectural guidelines to structural elements.
- Coordination with civil for geotechnical design requirements, siting conditions, and retaining wall as required.
- Development of intermediate technical specification drafts.
- Development and refinement of design drawings and annotations. Drawings will include:
 - Plans of the restroom facility with finalized materials of construction, overall dimensions, and floor and roof elevations.
 - Sections and elevations of the restroom facility with finalized materials of construction, overall dimensions, and details.
 - Door, window, and finishing schedules.
 - Architectural code/life safety plans (as applicable).
- Development of standard and project specific design details.
- Provide final code review, reflect code information on all project deliverables, and review for consistency with applicable codes.
- Perform QA/QC reviews of architectural design documents.
- Provide assistance for intermediate cost estimating efforts.
- Attend biweekly meetings with the project team to present issues, make recommendations, and make decisions necessary to advance the detailed design.

Assumptions:

- The restroom facility will conform to design criteria per IBC 2021 and ACSE 7-16.
- No occupied spaces are included in this project.
- Landscape architectural services are included in Task 612.
- No screening walls will be required.
- Architectural will not have involvement in the design of the PFAS treatment system catwalk.
- The architectural subcontractor will attend 14 design coordination meetings and two design review workshops with the City.
- The architectural subcontractor will attend six meetings with the City during the permit application process.

Task 607: Building Mechanical

Activities:

- Design plumbing, ventilation, and heating systems for new restroom and future chemical storage facility.
- Engage in conversation with the fire marshal on fire suppression requirements with the City taking the lead.
- Develop restroom plumbing floor plan and section, plumbing details, HVAC restroom floor plan and section, air flow diagram and mechanical schedules

Assumptions:

- Storage room will be left empty. An emergency shower and eye wash is not required in current design. Provisions for a future eye wash will be included (i.e., electrical capacity for future water heater, floor drain, and pipe penetrations in walls). No water heater for an eye wash and shower is included in this design.
- Instantaneous electric point of use under sink water heater is adequate.
- Storage room will include floor drain and means to heat for freeze protection.
- Upgrades for conversion of storage room into chemical feed room are not included.

Task 608: Electrical**Activities:**

- Coordination with process mechanical and instrumentation and controls for refinement and finalization of all project loads.
- Confirmation and finalization of existing site power feed and any modifications to accommodate project activities.
- Confirmation of booster pump improvement requirements and coordination with vendor for any upgrades to motors and VFDs required to meet process mechanical hydraulic scenarios.
- Refinement and finalization of electrical improvements to be located in the Well 1 Building, potentially including but not limited to low voltage transformers, motor control centers (MCCs), and appurtenances to accommodate process heat tracing and instrumentation loads.
- Coordination with civil for detailed design of buried conduit and project siting requirements.
- Coordination with process mechanical for development of one-line diagrams, load list development, pump improvement specifications and piping freeze protection via electric heat trace.
- Coordination with instrumentation and controls (I&C) for development of all instrumentation power requirements and details and finalization of process and instrumentation diagrams (P&IDs).
- Refinement and finalization of design elements including:
 - One-line diagrams
 - MCC elevations for new work
 - Conduit schedules
 - Underground conduit routing and handhole details
 - Site and restroom/storage room power and instrumentation location plans and details.
 - Platform and restroom/storage room lighting plans and details.
 - Grounding design
 - Piping Heat Trace system electrical design (performance based) and coordination with Process Mechanical requirements and design documents
 - Specifications
 - Drawings and annotations
- Site lighting updates around new security fencing and PFAS treatment system

Assumptions:

- Assume no hazardous (classified) locations.
- Assumes no fire alarm, paging system, or lightning protection elements are required.
- No modifications to existing lighting.
- An outdoor lighting model that maps out the illumination "contour" levels created by any changes or additions is not required.
- Where required, a Power System Study will be provided in Phase 3 scope of services to address arc flash improvements.

- No improvements to site power feed are required.
- Booster pump improvements will be limited to impeller and/or bowl assemblies.
- No modifications to existing booster pump motors or VFDs.
- The site standby generator is sufficiently sized to handle the new loads and no improvements to this system is required.

Task 609: Instrumentation and Control

Activities:

- Coordination with process mechanical, and electrical for refinement and finalization of all process control automation.
- Confirmation and finalization of existing control system network modifications to accommodate project activities.
- Confirmation of booster pump improvements and any upgrades to motors and VFDs for re-connection of the existing control system.
- Confirmation of booster pump improvements requirements and coordination with vendor
- Coordination with process mechanical for control system automation requirements (detailed in control strategies).
- Coordination with electrical for development of all instrumentation power, control, signal, and data requirements and details and draft of I&C diagrams for control system interconnections.
- Refinement and finalization of design elements including:
 - Process and instrument diagrams (P&IDs).
 - Control descriptions.
 - Control system network diagram.
 - I&C wiring diagrams for IO connections to the control system
 - I&C control system panel drawings
- Development of intermediate technical specification drafts.
- Development and refinement of I&C design drawings and annotations.

Assumptions:

- System automation will be limited to Contractor supplied electrically actuated effluent flow control valves, flow meters, and pressure transmitters. The PFAS treatment system will contain manual valves.
- The rinse water tank will have a level float and level transmitter. The discharge from the rinse water tank will include a flow control valve and flow meter.
- Control system is a programmable logic controller (PLC) based with human machine interface (HMI). The PLC and HMI will be standardized to be Siemens S7 (Portal 7) and Simatic (Portal 7/WinCC).
- An option for control system modification will be finalized as one of the below:
 - Add new PLC SCADA panel with HMI for SCADA
 - Extend existing PLC SCADA panel with remote input/outputs (RIO)
- City will program the PLC and HMI, from an automation perspective using a 3rd party programmer. All network address assignments will be provided by the City during construction to uphold City's network security and avoid network address duplications.
- The existing communication infrastructure for remote access to the process control system will not be modified. Any new network communication will be site specific to add either a new PLC or extension with a new RIO.

- Process control system security will be door and panel proximity switches. No additional security systems or cameras will be included.

Task 610: General and Div 00/01

Activities:

- Modify and add to the City provided Division 00 and 01 specifications to apply to the project and funding requirements. Additions include operation and maintenance, equipment storage, start-up and testing specifications, and forms and procedures related to electrical and equipment.
- Conduct 2 meetings with City to coordinate requirements associated with bidding and contracting procedures and City's construction management team.
- Legends, abbreviations, index of drawings, cover sheet, location and vicinity map.
- Design criteria, hydraulic profiles, and process schematics.

Task 611: Landscape Architecture

Activities:

- Advance landscape plan.
- Develop intermediate technical specifications draft.
- Develop and refine design drawings and annotations. Drawings will include:
 - Plan drawings.
 - Planting schedules and legend.
 - Irrigation plans and details.
- Develop standard and project specific design details.
- Perform QA/QC reviews of landscape architectural design documents.
- Attend monthly meetings with the project team to present issues, make recommendations, and make decisions necessary to advance the detailed design.

Assumptions:

- A new vegetative buffer will be required on the southwest side of the site to create a buffer for the new PFAS treatment system.
- The landscape architectural subcontractor will attend 7 coordination meetings and two design review workshops with the City.

Task 612: SRF Compliance for Specifications

Activities:

- Communicate and coordinate with design disciplines to specify equipment that can meet American Iron and Steel (AIS) requirements.
- Review Divisions 00 and 01 for compliance with SRF funding requirements

Task 613: Quality Assurance/Quality Reviews

Activities:

This task includes the internal reviews for the various design discipline calculations and design deliverables. BC uses a continuous quality process where subject matter experts are involved throughout from the beginning of the work for Quality Assurance and perform a Quality Control review at each design phase. Internal review documentation will consist of recorded comments and their resolution.

Task 614: External Meetings/Workshops

Activities:

Following the submittal of the intermediate design package, BC will facilitate a 3-hour workshop to discuss design progression with the City. The meeting will be held in-person with some team members attending virtually.

Following review of the intermediate design package, it is anticipated that review comments will be issued by the City. It is assumed that these comments will be submitted in a single comment log, preferably in PDF format. BC will review the comments on the drawing and specification files, and a summary of a planned response will be provided in the design workshop meeting minutes. Any critical or unresolved comments will be reviewed in workshops with the City. Workshop attendees from BC will include 3 BC staff. A total of twenty-four (24) additional hours has been assumed for various discipline leads for meeting participation on an as-needed basis.

Meetings:

This task assumes one design review workshop to review the intermediate design package and Class 3 construction cost estimate (described in more detail in Phase 620). BC will provide agendas and meeting minutes for each workshop/design meeting. Agendas will be distributed at least 1 day prior to each workshop/design meeting. Draft 60% workshop minutes will be distributed following receipt of City comments and planned resolution incorporated. City comments on the draft workshop minutes will be incorporated and the notes will be finalized 1 week after receipt of comments.

Phase 620: Draft Construction Cost Estimate (Intermediate Design)

This task includes preparation of a Class 3 opinion of probable construction cost (OPCC), as defined by the Association for the Advancement of Cost Engineering International (AACEI) based on the intermediate design basis subdivided by process area and by major engineering disciplines.

Assumptions:

- Cost estimate will be based upon the drawings and technical specifications included in the intermediate design submittal package.

Deliverables:

- Class 3 cost estimate package organized by specification division and section.

Phase 630: Final (90%) Design

During the final design task series, the intermediate design package will be progressed to finalize the design for DOH approval, final City review, and in preparation for issuing to bid. It is anticipated that the entire design will be advanced as a single package. City comments on the intermediate design package will be addressed and incorporated into this final design package.

The level of development for the final design drawings and specification package is expected to be as follows:

Specifications:

- Final version of all specifications.
- Coordinated Div 01 City and BC provided specifications

Drawings:

- Finalized process mechanical drawings.

- Finalized mechanical drawings (plan, sections, and details) (as applicable) including:
 - Final HVAC and plumbing layouts, sections, and details.
 - Final auxiliary systems layouts, sections, and details.
- Finalized civil and landscape architecture drawings.
- Finalized structural and architectural drawings (plan, sections, and details) (as applicable).
- Finalized electrical and I&C drawings (plan, one-lines, details, P&ID's).

Deliverables:

- Single comment response to 90% design submittal in .pdf format.
- Agendas and meeting notes for two (2) design workshops in .docx format.
- Final design drawings in .pdf format.
- Final design technical specifications in .pdf format.

Tasks 601-613: See Phase 610 Tasks for Detailed Descriptions

Activities:

- Finalize design based on the 60% submittal package, City comments from 60%, and BC internal QA/QC review comments.
- Preparation and refinement of final design drawings, details, and technical specifications to a degree of completion sufficient for project bidding and construction.

Task 614: External Meetings/Workshops

Activities:

Following review of the final design package, it is anticipated that review comments will be issued by the City. It is assumed that these comments will be submitted in a single comment log in .pdf format. BC will review the comments, provide a response/resolution to the comment that is captured in the 90% design workshop meeting minutes. Any critical or unresolved comments will be reviewed in design meetings with the City. Attendees for the 90% design workshop includes Project Manager, Design Manager, Deputy Design Manager, Project Engineer, and key discipline leads (assume three). Design meeting attendees from BC will consist of three BC staff. A total of twenty four (24) additional hours has been assumed for various discipline leads for meeting participation on an as-needed basis.

Meetings:

This task assumes one, three-hour workshop to review the final design package and Class 1 OPCC (described in Phase 640 below). A separate 1-hour design meeting will occur to discuss the comment/response. BC will provide agendas and meeting notes for each workshop/design meeting. Agendas will be distributed at least 1 day prior to each workshop/design meeting. Draft 90% design workshop minutes will be distributed following receipt of comments from the City. City comments on the draft workshop minutes will be incorporated and the notes will be finalized 1 week after receipt of comments.

Phase 640: 90% Cost Estimate

This task includes preparation of a Class 1 opinion of probable construction cost (OPCC), as defined by the Association for the Advancement of Cost Engineering International (AACEI) based on the intermediate design basis subdivided by process area and by major engineering disciplines.

Assumptions:

- Cost estimate will be based upon the drawings and technical specifications included in the final design submittal package.

Meetings:

- One meeting, 1-hour in duration, will be held with the City to discuss the Class 1 OPCC.

Deliverables:

- Class 1 cost estimate package organized by specification division and section.

Phase 650: Bid and Construction Documents (100%)

BC will modify the final design documents to reflect agreed-upon final review comments from the City, DOH, Clark County and City of Vancouver Permitting Departments, and BC's quality control review team. The City's Division 00 and 01 specifications will be added to the technical specifications for a complete project manual. The final documents will be signed and sealed by a licensed professional engineer or architect and submitted to the City as an 'Issue-for-Bid' (IFB) set.

BC will review bid documents that the City prepares for SRF compliance.

Given that this project is utilizing a traditional design-bid-build delivery method, the level of detail for the Bid Documents will be coordinated with the City to provide a complete and fully constructable design. The awarded contractor will be responsible for coordinating final details, scope coordination between trades, and other miscellaneous items to ensure successful construction of the project.

Assumptions:

- The City will lead compliance with SRF requirements. The City will be responsible for submittal of the 100% design documents for DOH SRF review.

Deliverables:

- Stamped and sealed Issue-for-Bid design drawings in .pdf format.
- Stamped and sealed Issue-for-Bid technical specifications in .pdf format.
- Review comments on City prepared bid package.

Phase 660 – Bid Support

This task includes BC support to the City during the bidding for construction services, as requested. The City will lead the bidding process including the advertising, bidder tracking and documentation, publication of the bid documents and addenda, and evaluation and award of the contractor. BC will assist in answering questions and providing technical support during the bidding process.

Activities:

- BC will respond to an estimated 30 bidder questions with an average of two (2) hours to respond to each.
- BC will provide up to two (2) addenda to incorporate additional permitting or technical design requirements received during the bid period. Only select disciplines were assumed to require an addenda.
- Develop conformed documents based on issued addenda. After the contractor has been awarded, BC will integrate any addenda, clarifications, or minor modifications that result from the bidding process for an 'Issue for Construction' (IFC) set signed and sealed by a licensed professional engineer or architect.

Assumptions:

- Memorandum with written responses to bidder questions delivered to the City in electronic format.
- There is no bid protest.
- This task assumes one (1) 2-hour pre-bid conference in-person.

Deliverables:

- Issued for Construction (or conformed) drawings in .pdf format.
- Issued for Construction (or conformed) technical specifications in .pdf format.

Phase 820: Phase 2 Unanticipated Services

Objective: Provide budget allowance for potential additional work requested by the City.

Task 801: Phase 2 Unanticipated Services

Activities/Approach: To be determined, based on City requests. No work will be completed under this task without written direction from the City. The budgeted amount for unanticipated services is as provided in Exhibit B.

Task Assumptions

- Brown and Caldwell will prepare a Project Change Request (PCR) describing each additional and identifiable task under this allowance. The PCR will include a short description of the added scope with budget to be authorized prior to proceeding, unless otherwise directed in writing by the City.

City Responsibilities

- Provide direction and authorization for requested additional work.

Meetings

- To be determined.

Work Products

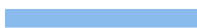
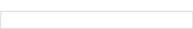
- To be determined.

Phase 3: Services During Construction

Phase 3 will consist of engineering services during construction and commissioning support. Phase 3 will begin during the City's review of the 90% design submittal. A finalized Phase 3 scope will be submitted for Council approval during bidding.

Draft Schedule:

A draft schedule is provided on the subsequent page. This schedule will be detailed further and finalized with the City Project Manager during Phase 2 kick-off.

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessors	Aug		Sep	Qtr 4, 2023 Oct	Nov	Dec	Qtr 1, 2024 Jan
1			Vancouver WS14	176 days	Wed 9/27/23	Tue 6/11/24								
2			Phase 1 NTP	1 day	Tue 10/3/23	Tue 10/3/23								
3			Phase 100: Project Management	170 days	Wed 10/4/23	Mon 6/10/24								
8			Phase 200: Site Investigation	171 days	Wed 9/27/23	Tue 6/4/24								
31			Phase 300: Alternatives Analysis and Conceptual Design	102 days	Mon 10/16/23	Fri 3/15/24								
71			Phase 400: Preliminary Design	58 days	Wed 2/14/24	Mon 5/6/24								
92			Phase 500: Permitting and Outreach	166 days	Wed 10/11/23	Tue 6/11/24								
106			Phase 120: Phase 2 Project Management	238 days	Tue 5/7/24	Wed 4/9/25								
107			Phase 220: Phase 2 Geotechnical Support	115 days	Tue 5/21/24	Fri 11/1/24								
108			Task 221: Geotechnical Review of Design	115 days	Tue 5/21/24	Fri 11/1/24	88FS+10 days							
109			Task 222: Geotechnical Coordination	115 days	Tue 5/21/24	Fri 11/1/24	88FS+10 days							
110			Phase 460: Preliminary Engineering Report Update	30 days	Mon 5/13/24	Mon 6/24/24								
111			Task 461: Project Engineering Report Finalization	20 days	Mon 5/13/24	Mon 6/10/24								
112			Task 462: Design Standards TM Finalization	30 days	Mon 5/13/24	Mon 6/24/24								
113			Phase 570: Phase 2 Permitting & Public Outreach	145 days	Tue 5/7/24	Fri 11/29/24								
114			Task 571: Environmental and Land Use Permit Support	81 days	Mon 5/13/24	Fri 9/6/24								
115			City Application Review for Completeness	31 days	Mon 5/13/24	Tue 6/25/24								
116			Critical Areas Report	20 days	Mon 5/13/24	Mon 6/10/24								
117			Finalizing SEPA	11 days	Tue 6/11/24	Tue 6/25/24	111							
118			Submit Application for City Review	0 days	Tue 6/25/24	Tue 6/25/24	117							
119			Time to Generate Resubmission for completeness	20 days	Wed 6/26/24	Thu 7/25/24	117							
120			Review updated submission for completeness	20 days	Fri 7/26/24	Thu 8/22/24	119							
121			Resubmission Review	10 days	Fri 8/23/24	Fri 9/6/24	120							
122			Task 572: Other Permitting Support	145 days	Tue 5/7/24	Fri 11/29/24								
123			Support Land Use Application Materials	20 days	Tue 5/7/24	Tue 6/4/24								
124			TIR Report	10 days	Tue 5/7/24	Mon 5/20/24	88							
125			Finalize Streamlined Planning Checklist - site lighting, lanscape and tree plan, stormwater plan	10 days	Tue 5/21/24	Tue 6/4/24	88FS+10 days							
126			New WTP General Permit	110 days	Wed 6/26/24	Fri 11/29/24	117							
127			Task 573: Public Outreach	20 days	Wed 8/14/24	Wed 9/11/24	128							
128			Phase 610: Intermediate (60%) Design	63 days	Tue 5/14/24	Tue 8/13/24	88FS+5 days							
129			Develop Drawings	30 days	Tue 5/14/24	Tue 6/25/24	88FS+3 days							
130			Internal QA/QC	5 days	Wed 6/26/24	Tue 7/2/24	129							
131			Address Comments	10 days	Wed 7/3/24	Thu 7/18/24	130							
132			Develop Submittal	3 days	Fri 7/19/24	Tue 7/23/24	131							
133			City Review	10 days	Wed 7/24/24	Tue 8/6/24	132							
134			60% Design Workshop	0 days	Tue 7/30/24	Tue 7/30/24	133SS+5 days							
135			Finalize Plan to Address Comments	5 days	Wed 8/7/24	Tue 8/13/24	133							
Attachment B: WS14 Proposed Schedule Date: Mon 4/22/24			Task		Project Summary		Manual Task		Start-only		Deadline			
			Split		Inactive Task		Duration-only		Finish-only		Progress			
			Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress			
			Summary		Inactive Summary		Manual Summary		External Milestone					
Page 1														

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessors	Aug	Sep	Qtr 4, 2023 Oct	Nov	Dec	Qtr 1, 2024 Jan
136			Phase 620: Draft Construction Cost Estimate (Intermediate Design)	18 days	Wed 6/26/24	Tue 7/23/24							
137			Develop Cost Estimate	5 days	Wed 6/26/24	Tue 7/2/24	129						
138			Internal Review of Cost Estimate	5 days	Wed 7/3/24	Thu 7/11/24	137						
139			Submit Cost Estimate	3 days	Fri 7/19/24	Tue 7/23/24	131						
140			Phase 630: Final (90%) Design	71 days	Wed 8/14/24	Thu 11/21/24	128						
141			Develop Drawings	20 days	Wed 8/14/24	Wed 9/11/24	135						
142			Internal QA/QC	7 days	Thu 9/12/24	Fri 9/20/24	141						
143			Address Comments	10 days	Mon 9/23/24	Fri 10/4/24	142						
144			Develop Submittal	3 days	Mon 10/7/24	Wed 10/9/24	143						
145			City Review	10 days	Thu 10/10/24	Wed 10/23/24	144						
146			90% Design Workshop	0 days	Fri 10/11/24	Fri 10/11/24	144SS+5 days						
147			Finalize Plan to Address Comments	5 days	Mon 10/14/24	Fri 10/18/24	146						
148			Submit to DOH Review	24 days	Mon 10/21/24	Thu 11/21/24	147						
149			Phase 640: 90% Cost Estimate	40 days	Wed 8/14/24	Wed 10/9/24							
150			Develop Cost Estimate	5 days	Wed 8/14/24	Tue 8/20/24	135						
151			Internal Review of Cost Estimate	5 days	Wed 8/21/24	Tue 8/27/24	150						
152			Submit Cost Estimate	3 days	Mon 10/7/24	Wed 10/9/24	143						
153			Phase 650: Bid and Construction Documents (100%)	50 days	Mon 10/21/24	Fri 12/27/24							
154			Address 90% Design Comments	15 days	Mon 10/21/24	Fri 11/8/24	147						
155			Final Internal QA/QC	5 days	Mon 11/11/24	Fri 11/15/24	154						
156			Address QA/QC	5 days	Mon 11/18/24	Fri 11/22/24	155						
157			Stamp and Compile Submittal	5 days	Mon 11/25/24	Fri 11/29/24	156						
158			City Review	10 days	Mon 12/2/24	Fri 12/13/24	157						
159			DOH SRF Compliance Review	10 days	Mon 12/16/24	Fri 12/27/24	158						
160			100% Design Review Meeting	0 days	Fri 12/13/24	Fri 12/13/24	158						
161			Phase 660: Bid Support	73 days	Mon 12/30/24	Wed 4/9/25	153						
162			Bid Advertisement	1 day	Mon 1/20/25	Mon 1/20/25	160FS+25 days						
163			Bid Period	27 days	Tue 1/21/25	Wed 2/26/25	162						
164			Negotiation of Construction Contract	30 days	Thu 2/27/25	Wed 4/9/25	163						
165			Scope Phase 3	50 days	Mon 12/30/24	Fri 3/7/25	160						
166			Phase 3: Services During Construction	0 days	Wed 4/9/25	Wed 4/9/25	164						
Attachment B: WS14 Proposed Schedule Date: Mon 4/22/24			Task		Project Summary		Manual Task		Start-only		Deadline		
			Split		Inactive Task		Duration-only		Finish-only		Progress		
			Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress		
			Summary		Inactive Summary		Manual Summary		External Milestone				
Page 2													

Brown and Caldwell
Phase 2 Budget

			Lynn Stephens	Brittany Bax	Joanie Stultz	Kelly Kimball	Bill Persich	Jay Hesby	Rick Long	Tony Actis	Shania Lynch	Kyle Hay	Caylin Cyr	Tom Lemon	Marc Maisorville	Jim Cook	Linnea Lubke	Nila Molodih	Bambang Nursuwito	Dan Stewart	Ashraf Qadan	Dana Henshaw	Evan Schoel	Jacob Faust	Tina Rossillon
Phase	Task	Phase Description	PM	Project Analyst	Project Engineer	PIC	Senior QA/QC	Procmech QC	Design Manager	Deputy Design Manager	Design Coordinator	Process-Mech / PFAS SME	Process-Mech Engineer	Proc-Mech Designer	Electrical QA/QC	Electrical Lead	I&C Lead	Electrical and I&C Support	Electrical and I&C CAD	Build Mech QA/QC	Struct Engineer	Struct QC	Struct CAD	Civil QC	Civil Lead
			\$300	\$107	\$193	\$327	\$327	\$327	\$300	\$193	\$148	\$193	\$148	\$193	\$300	\$259	\$300	\$148	\$148	\$300	\$193	\$222	\$193	\$222	\$222
Phase 2																									
120		Project Management	118	60	68	12	0	0	0	38	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	Progress Meetings	38		38	6				38															
	120	Phase 2 On-going PM	80	60	30	6																			
220		Phase 2 Geotechnical Support	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	4	2	0	0	4
	221	Geotechnical Assessment																							
	222	Geotechnical Coordination and Review								8											4	2			4
460		Project Engineering Report and Design TM Update	18	0	22	0	0	0	4	8	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0
	461	Preliminary Engineering Report Update	12		18																				
	462	Design Standards TM Finalization	6		4				4	8	4	4													
570		Phase 2 Permitting & Public Outreach	64	0	20	0	0	0	2	8	4	0	0	0	0	0	0	0	0	0	0	0	0	4	24
	571	Environmental & Land Use Permit Support (ESA)																							
	572	Permitting Support (BC)	44						2	8	4													4	24
	573	Public Outreach (BC)	20		20																				
610		Intermediate (60%) Design	72	0	61	0	12	28	94	156	49	164	293	181	35	57	84	118	120	4	191	20	161	20	80
	601	Design and BIM Management and Coordination							26	96	35														
	####	Internal Meetings	####		009.750				006.500	013.000	006.000	009.750	009.750	005.000		009.750	009.750	009.750			009.750				009.750
	603	Process Mechanical	11		0			16					146	251	98										
	604	Civil																							67
	605	Structural																			180		161		
	606	Architectural																							
	607	Building Mechanical							49					62											
	608	Electrical														40		108	99	21					
	609	Instrumentation and Controls															69								
	610	General and Div 00/01	8		24				4	8			8	16											
	611	Landscape Architectural																							
	612	SRF Compliance for Specifications	8		8					8	8														
	613	Quality Assurance /Quality Review	8				12	12	8	8					35					4		20		20	
	614	External Meetings/Workshops	24		19					23		8	24			7	5				1				3
620		Draft Construction Cost Estimate (Intermediate Design)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	621	Draft Construction Cost Estimate (Intermediate Design)																							
630		Final (90%) Design	46	0	25	0	12	8	51	89	51	85	145	89	16	33	45	62	60	4	99	12	81	12	75
	601	Design and BIM Management and Coordination							13	48	35														
	602	Internal Meetings	10		8				5	10	8		8	8	8		8	8	8		8				8
	603	Process Mechanical	5		0								73	125	49										
	604	Civil																							64
	605	Structural																							
	606	Architectural																			90		81		
	607	Building Mechanical							24					32											
	608	Electrical																							
	609	Instrumentation and Controls														20		54	50	10					
	610	General and Div 00/01															34								
	611	Landscape Architectural								8	8														
	612	SRF Compliance for Specifications	8																						
	613	Quality Assurance /Quality Review	8				12	8	8	8					16					4		12		12	
	614	External Meetings/Workshops	15		17				1	15		4	12			5	3				1				3
640		90% Cost Estimate	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	641	90% Cost Estimate																							
650		Bid and Construction Documents (100%)	39	0	12	0	4	4	24	48	56	30	48	32	4	13	17	24	26	2	36	4	33	4	27
	601	Design and BIM Management Coordination							4	16	46														
	602	Internal Meetings	8		6				4	8	6	6	6	6	6		6	6	6		6		6		6
	603	Process Mechanical	2		0								24	42	16										
	604	Civil																							21
	605	Structural																							
	606	Architectural																			30		27		
	607	Building Mechanical							8					10											
	608	Electrical																							
	609	Instrumentation and Controls														7		18	17	3					
	610	General and Div 00/01															11		3						
	611	Landscape Architectural																							
	612	SRF Compliance for Specifications	16							8	4														
	613	Quality Assurance /Quality Review	8				4	4	8	8					4					2		4		4	
	614	External Meetings/Workshops	5		6					8															
660		Bid Support	22	0	20	0	0	0	4	12	16	8	0	8	0	8	4	0	8	0	0	0	0	0	8
	661	Bid Support	22		20				4	12	16	8		8		8	4		8						8
820		Phase 2 Unanticipated Services	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	801	Phase 2 Unanticipated Services																							
		Total	379	60	227	12	28	40	179	367	180	290	485	310	55	110	149	203	214	10	329	38	275	40	217

Brown and Caldwell
Phase 2 Budget

			Natalie Chow	Eric Stiles	Tracy Eastman	Dade Irwin	Pepe Viteri	Tim Cain	Seena Chavan	Emily O'Morrow	Bill Agster	Dan Goodburn	David Shroyer	Holly Tichenor	Rachel Garrett	Ellen Milne	Wendy Pare	Steve Vasquez												
Phase	Task	Phase Description	Civil Engineer	Civil CAD	BIM Manager	BIM Lead	BIM IT/DB Support	CAD Visuals	SRF Comp	SRF Support	Senior Cost Est / QAQC	Cost Estimator	Electrical Cost Estimator	Comms	Comms	Graphic Designer	Word Processing	Biller	Total Labor Hours	Total Labor Effort		Expenses	Architecture	Landscape Architecture	Geotech	Permitting Support	Total Sub Cost	Total Expense Cost	Total Effort	
			\$172	\$193	\$222	\$193	\$172	\$148	\$327	\$193	\$259	\$259	\$222	\$327	\$300	\$172	\$148	\$148												
Phase 2																														
120		Project Management	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16	312	\$ 68,570	\$ 10,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,000	\$ 78,600	
	110	Progress Meetings																	120	\$ 28,030	\$ 10,000						\$ -	\$ 10,000		
	120	Phase 2 On-going PM																	16	192	\$ 40,540						\$ -	\$ -		
220		Phase 2 Geotechnical Support	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18	\$ 3,648	\$ -	\$ -	\$ -	\$ 23,313	\$ -	\$ 23,313	\$ -	\$ 27,000	
	221	Geotechnical Assessment																	0	\$ -				\$ 23,313			\$ 23,313	\$ -		
	222	Geotechnical Coordination and Review																	18	\$ 3,648							\$ -	\$ -		
460		Project Engineering Report and Design TM Update	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	66	\$ 14,642	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 14,600	
	461	Preliminary Engineering Report Update																6	36	\$ 7,962							\$ -	\$ -		
	462	Design Standards TM Finalization																		\$ 6,680								\$ 8,000		
570		Phase 2 Permitting & Public Outreach	40	8	0	0	0	6	0	0	0	0	0	4	16	8	0	0	0	208	\$ 48,808	\$ 1,500.00	\$ -	\$ -	\$ -	\$ 35,000	\$ 35,000	\$ 1,500.00	\$ 85,300	
	571	Environmental & Land Use Permit Support (ESA)																	0	\$ -					\$ 35,000	\$ 35,000	\$ -	\$ -		
	572	Permitting Support (BC)	40	8																134	\$ 30,576						\$ -	\$ -		
	573	Public Outreach (BC)						6						4	16	8				74	\$ 18,232	\$ 1,500					\$ -	\$ 1,500		
610		Intermediate (60%) Design	82	187	14	113	6	0	8	0	0	0	0	4	16	8	0	0	0	2,407	\$ 481,530	\$ 3,700	\$ 32,293	\$ 14,452	\$ -	\$ -	\$ 46,745	\$ 3,700	\$ 532,000	
	601	Design and BIM Management and Coordination			14	103	6													280	\$ 55,527	12%					\$ -	\$ -		
	####	Internal Meetings	009.750			009.750														141.000	\$ 29,917	6%					\$ -	\$ -		
	603	Process Mechanical																		522	\$ 92,772	19%					\$ -	\$ -		
	604	Civil	67	187																321	\$ 62,489	13%	\$ 200				\$ -	\$ 200		
	605	Structural																		341	\$ 65,813	14%					\$ -	\$ -		
	606	Architectural																		0	\$ -	0%	\$ 32,293			\$ 32,293	\$ -	\$ -		
	607	Building Mechanical																		111	\$ 26,666	6%					\$ -	\$ -		
	608	Electrical																		247	\$ 40,996	9%					\$ -	\$ -		
	609	Instrumentation and Controls																		90	\$ 23,808	5%	\$ 1,000				\$ -	\$ 1,000		
	610	General and Div 00/01																		68	\$ 14,048	3%					\$ -	\$ -		
	611	Landscape Architectural																		0	\$ -	0%		\$ 14,452		\$ 14,452	\$ -	\$ -		
	612	SRF Compliance for Specifications							8											40	\$ 9,288	2%					\$ -	\$ -		
	613	Quality Assurance /Quality Review																		127	\$ 34,772	7%					\$ -	\$ -		
	614	External Meetings/Workshops	5									5	46	38	0	0	0	0	0	119	\$ 25,434	5%	\$ 2,500				\$ -	\$ 2,500		
620		Draft Construction Cost Estimate (Intermediate Design)	0	0	0	0	0	0	0	0	5	46	38	0	0	0	0	0	0	89	\$ 21,645	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 21,600	
	621	Draft Construction Cost Estimate (Intermediate Design)									5	46	38							89										
630		Final (90%) Design	93	94	7	60	3	0	24	0	0	0	0	0	0	0	0	0	0	1,375	\$ 277,508	\$ 2,500	\$ 18,905	\$ 14,452	\$ -	\$ -	\$ 33,357	\$ 2,500	\$ 313,400	
	601	Design and BIM Management and Coordination			7	52	3		24	0	0	0	0							158	\$ 30,450	11%					\$ -	\$ -		
	602	Internal Meetings	8			8														115	\$ 24,145	9%					\$ -	\$ -		
	603	Process Mechanical																		252	\$ 43,546	16%					\$ -	\$ -		
	604	Civil	80	94																238	\$ 46,110	17%					\$ -	\$ -		
	605	Structural																		171	\$ 33,003	12%					\$ -	\$ -		
	606	Architectural																		0	\$ -	0%	\$ 18,905			\$ 18,905	\$ -	\$ -		
	607	Building Mechanical																		56	\$ 13,376	5%					\$ -	\$ -		
	608	Electrical																		124	\$ 20,572	7%					\$ -	\$ -		
	609	Instrumentation and Controls																		44	\$ 11,680	4%					\$ -	\$ -		
	610	General and Div 00/01																		0	\$ -	0%					\$ -	\$ -		
	611	Landscape Architectural																		0	\$ -	0%		\$ 14,452		\$ 14,452	\$ -	\$ -		
	612	SRF Compliance for Specifications							24											48	\$ 12,976	5%					\$ -	\$ -		
	613	Quality Assurance /Quality Review																		88	\$ 24,212	9%					\$ -	\$ -		
	614	External Meetings/Workshops	5									3	35	34	0	0	0	0	0	81	\$ 17,438	6%	\$ 2,500				\$ -	\$ 2,500		
640		90% Cost Estimate	0	0	0	0	0	0	0	0	3	35	34	0	0	0	0	0	0	72	\$ 17,390	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 17,400	
	641	90% Cost Estimate									3	35	34																	
650		Bid and Construction Documents (100%)	33	37	2	23	1	0	16	0	0	0	0	0	0	0	0	0	0	599	\$ 122,312	\$ -	\$ 17,399	\$ 7,226	\$ -	\$ -	\$ 24,625	\$ -	\$ 146,900	
	601	Design and BIM Management Coordination			2	17	1													86	\$ 14,993	12%					\$ -	\$ -		
	602	Internal Meetings	6	6		6														110	\$ 22,520	18%					\$ -	\$ -		
	603	Process Mechanical																		84	\$ 14,536	12%					\$ -	\$ -		
	604	Civil	27	31																79	\$ 15,289	13%					\$ -	\$ -		
	605	Structural																		57	\$ 11,001	9%					\$ -	\$ -		
	606	Architectural																												

VOUCHER APPROVAL

We, the undersigned council members of the City of Vancouver, Clark County, Washington, do hereby certify that the merchandise or services hereinafter specified have been received and that the vouchers listed below are approved for payment in the amount of:

\$ 8,777,686.69 this 13th day of May 2024.

MAYOR

COUNCILMEMBER

AUDITING OFFICER

COUNCILMEMBER

DATE	INCLUSIVE CHECK NUMBERS	CHECK TOTAL
April 29, 2024 - May 05, 2024	Accounts Payable Checks (see attached)	\$ 8,336,991.38
April 29, 2024 - May 05, 2024	Hansen City Payments (see attached)	\$ 438,806.10
April 29, 2024 - May 05, 2024	Visa Refunds (see attached)	\$ 1,889.21
April 29, 2024 - May 05, 2024	Payroll Checks (see attached)	\$ -
TOTAL		\$ 8,777,686.69

INVOICE PAYMENTS REPORT

Payment Category	Payment Type	Transaction Reference	Payment Date	Payment Amount	Payment Payee	Memo
Ad Hoc Payment	Check	18374	5/1/2024	145.84	Bunn,Johnathan	Utility Refunds: 0006074079-05
Ad Hoc Payment	Check	18375	5/1/2024	23.41	Castillo,Jose	Utility Refunds: 0007033000-26
Ad Hoc Payment	Check	18376	5/1/2024	26.63	Davis,Luann T or Robert M	Utility Refunds: 0129001090-05
Ad Hoc Payment	Check	18377	5/1/2024	27.48	Hozark,Brandon or Sarah	Utility Refunds: 0109005201-02
Ad Hoc Payment	Check	18378	5/1/2024	208.00	Hux,Janelle	Utility Refunds: 0057038200-22 Consolidated refund created from multiple refunds
Ad Hoc Payment	Check	18379	5/1/2024	67.71	Lacy,Marc or Paula	Utility Refunds: 0072016900-03
Ad Hoc Payment	Check	18380	5/1/2024	221.94	Lycanthrope Holdings LLC	Utility Refunds: 0000009371-02 Consolidated refund created from multiple refunds
Ad Hoc Payment	Check	18381	5/1/2024	132.64	Maxwell,Catherine Ann	Utility Refunds: 0019075100-07
Ad Hoc Payment	Check	18382	5/1/2024	302.42	McAndrew,Brian	Utility Refunds: 0500002175-02
Ad Hoc Payment	Check	18383	5/1/2024	87.00	McCampbell,James A or Eleanor F	Utility Refunds: 0000006050-06
Ad Hoc Payment	Check	18384	5/1/2024	165.44	McFarlane,Stephanie	Utility Refunds: 0069015200-04 Consolidated refund created from multiple refunds
Ad Hoc Payment	Check	18385	5/1/2024	178.04	Purchasing Fund 2023-1 LLC	Utility Refunds: 0112001090-03
Ad Hoc Payment	Check	18386	5/1/2024	181.37	RL Davis Properties LLC	Utility Refunds: 0129001090-05
Ad Hoc Payment	Check	18387	5/1/2024	7.54	Roland,Douglas or Cathi	Utility Refunds: 0027019500-15
Ad Hoc Payment	Check	18388	5/1/2024	681.95	Shin Etsu Handotai America	Utility Refunds: 0000007621-17
Ad Hoc Payment	Check	18389	5/1/2024	328.09	The Galliano Living Trust	Utility Refunds: 0111010072-02 Consolidated refund created from multiple refunds
Ad Hoc Payment	Check	18390	5/1/2024	99.87	Zenith Properties NW LLC	Utility Refunds: 0500001276-01
Supplier Payment	Check	18391	5/1/2024	75.60	Airgas, Inc	
Supplier Payment	Check	18392	5/1/2024	1,151.03	AL VAN EQUIP NW INC	
Supplier Payment	Check	18393	5/1/2024	1,240.00	Amex Products Inc	
Supplier Payment	Check	18394	5/1/2024	38,548.28	AM Signal LLC	
Supplier Payment	Check	18395	5/1/2024	3,591.43	Anderson Glass Co	
Supplier Payment	Check	18396	5/1/2024	7,022.02	Arborscape Ltd Inc	
Supplier Payment	Check	18397	5/1/2024	9,768.72	AT & T Mobility National Accounts LLC	
Supplier Payment	Check	18398	5/1/2024	62,362.50	Barran Liebman LLP	
Supplier Payment	Check	18399	5/1/2024	61,272.02	Bud Clary Chevrolet, Cadillac Inc	
Supplier Payment	Check	18400	5/1/2024	13,800.00	Cascade Inn	
Supplier Payment	Check	18401	5/1/2024	5,261.34	CECO Inc	
Supplier Payment	Check	18402	5/1/2024	780.46	Cellco Partnership - Remit-To: Cellco - Dallas	
Supplier Payment	Check	18403	5/1/2024	3,375.70	Cintas	
Supplier Payment	Check	18404	5/1/2024	91.00	City of Vancouver - Remit-To: COV Main	
Supplier Payment	Check	18405	5/1/2024	17,898.75	Clark County Fire District 5	
Supplier Payment	Check	18406	5/1/2024	313,410.74	Clark County - Remit-To: Clark County - Treasurer Vancouver	
Supplier Payment	Check	18407	5/1/2024	400.00	Clark County Title Company - Remit-To: Clark County - Reconveyance Fees	
Supplier Payment	Check	18408	5/1/2024	19.18	Clark Public Utility District No. 1	
Supplier Payment	Check	18409	5/1/2024	105.43	Clark Public Utility District No. 1	
Supplier Payment	Check	18410	5/1/2024	106.90	Clark Public Utility District No. 1	
Supplier Payment	Check	18411	5/1/2024	92.07	Clark Public Utility District No. 1	
Supplier Payment	Check	18412	5/1/2024	45.21	Clark Public Utility District No. 1	
Supplier Payment	Check	18413	5/1/2024	260,231.54	Clary Longview LLC	
Supplier Payment	Check	18414	5/1/2024	3,885.00	Columbia Industrial Training & Education LLC	
Supplier Payment	Check	18415	5/1/2024	821,948.84	Columbia Non-Profit Housing	
Supplier Payment	Check	18416	5/1/2024	64.95	Comcast Holdings Corporation - Remit-To: Comcast Business - City of Industry	

INVOICE PAYMENTS REPORT

Supplier Payment	Check	18417	5/1/2024	7,946.15	Community Mediation Services - Remit-To: Community Mediation Services - Vancouver
Supplier Payment	Check	18418	5/1/2024	271,718.06	Consort North America Inc
Supplier Payment	Check	18419	5/1/2024	1,025.78	Courier Northwest
Supplier Payment	Check	18420	5/1/2024	1,439.08	Datec Inc
Supplier Payment	Check	18421	5/1/2024	268.00	Dex Media West
Supplier Payment	Check	18422	5/1/2024	2,504.45	Emerald Services Inc - Remit-To: Emerald - Pittsburgh
Supplier Payment	Check	18423	5/1/2024	1,658.60	Esix Sportswear
Supplier Payment	Check	18424	5/1/2024	9,120.00	ESRI Inc - Remit-To: Los Angeles PO Box
Supplier Payment	Check	18425	5/1/2024	56.52	Experian Marketing Solutions - Remit-To: Experian - Los Angeles
Supplier Payment	Check	18426	5/1/2024	20,543.97	Ferguson Enterprises - Remit-To: Ferguson - Dallas
Supplier Payment	Check	18427	5/1/2024	3,920.00	Financial Consulting Solutions Group Inc
Supplier Payment	Check	18428	5/1/2024	517.81	First-Citizens Bank & Trust Company
Supplier Payment	Check	18429	5/1/2024	22,046.48	Fourth Plain Forward
Supplier Payment	Check	18430	5/1/2024	3,100.28	Genuine Parts Company - Remit-To: NAPA - Vancouver
Supplier Payment	Check	18431	5/1/2024	237.00	Global Payments Inc
Supplier Payment	Check	18432	5/1/2024	46,994.69	Grade Werks Excavating LLC
Supplier Payment	Check	18433	5/1/2024	19,165.70	Harper Houf Peterson Righellis Inc
Supplier Payment	Check	18434	5/1/2024	8,205.00	Hawks Ridge Assisted Living
Supplier Payment	Check	18435	5/1/2024	4,743.61	H D Fowler Company Inc
Supplier Payment	Check	18436	5/1/2024	8,666.67	Hispanic Metropolitan Chamber
Supplier Payment	Check	18437	5/1/2024	4,014.14	HMI Oregon - Remit-To: Pacific WRO
Supplier Payment	Check	18438	5/1/2024	3,656.33	Howmedica Osteonics Corp
Supplier Payment	Check	18439	5/1/2024	239.27	J-2 Blueprint Supply Co.
Supplier Payment	Check	18440	5/1/2024	1,466.10	Jamestown Networks
Supplier Payment	Check	18441	5/1/2024	21,408.21	Janus Youth Programs Inc
Supplier Payment	Check	18442	5/1/2024	50.00	J D Fulwiler & Company Insurance Inc.
Supplier Payment	Check	18443	5/1/2024	4,559.97	KGS Northwest LLC
Supplier Payment	Check	18444	5/1/2024	50,964.08	L.N. Curtis & Sons - Remit-To: Supplier L.N. Curtis & Sons
Supplier Payment	Check	18445	5/1/2024	1,957.88	Lakeside Industries Inc - Remit-To: Lakeside - LB Seattle
Supplier Payment	Check	18446	5/1/2024	2,370.09	Lakeyland Inc
Supplier Payment	Check	18447	5/1/2024	1,967.16	McFarlanes Bark Inc
Supplier Payment	Check	18448	5/1/2024	160.00	Nadezhda Astanin
Supplier Payment	Check	18449	5/1/2024	1,329.45	Pacific Northwest Pollution Prevention Resources Center
Supplier Payment	Check	18450	5/1/2024	140.00	Porter W Yett Company
Supplier Payment	Check	18451	5/1/2024	12,606.00	Portland Adventist Medical Center
Supplier Payment	Check	18452	5/1/2024	11,098.00	Prestige Care & Rehabilitation - Camas
Supplier Payment	Check	18453	5/1/2024	12,013.50	Public Safety Testing Inc
Supplier Payment	Check	18454	5/1/2024	13.69	Qwest Corporation - Remit-To: CenturyLink - Phoenix
Supplier Payment	Check	18455	5/1/2024	3,319.97	Rampart USA Corp
Supplier Payment	Check	18456	5/1/2024	13,977.31	Rexel USA Inc - Remit-To: Rexel USA Inc
Supplier Payment	Check	18457	5/1/2024	227.18	S&B Inc
Supplier Payment	Check	18458	5/1/2024	586.69	SeaWestern Inc
Supplier Payment	Check	18459	5/1/2024	400.00	Sheldon Wong
Supplier Payment	Check	18460	5/1/2024	159,611.90	State of Washington Department of Labor and Industries - Remit-To: Self-Insurance Section
Supplier Payment	Check	18461	5/1/2024	290.91	State of Washington Department of Transportation
Supplier Payment	Check	18462	5/1/2024	3,391.44	Sunbelt Controls Inc - Remit-To: Sunbelt Controls - Pasadena
Supplier Payment	Check	18463	5/1/2024	13,481.00	Tapani Electric, LLC
Supplier Payment	Check	18464	5/1/2024	67,026.46	TCF Architecture, PLLC
Supplier Payment	Check	18465	5/1/2024	14,884.83	Technical Imaging Systems Inc.
Supplier Payment	Check	18466	5/1/2024	3,565.43	The ADT Security Corporation
Supplier Payment	Check	18467	5/1/2024	7,533.50	The Loudenback Corporation
Supplier Payment	Check	18468	5/1/2024	702.79	Thrive2Survive
Supplier Payment	Check	18469	5/1/2024	5,000.00	Tinnakorn Properties LLC

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INVOICE PAYMENTS REPORT

Supplier Payment	Check	18470	5/1/2024	2,405.73	TMG Services Inc	
Supplier Payment	Check	18471	5/1/2024	436.98	Towing & Recovering Services Inc	
Supplier Payment	Check	18472	5/1/2024	1,307.49	Trilogy MedWaste West, LLC	
Supplier Payment	Check	18473	5/1/2024	1,778.75	Triple J Enterprises	
Supplier Payment	Check	18474	5/1/2024	10,000.00	United States Postal Service - Remit-To: USPS - First Data/Remitco - 52940558	
Supplier Payment	Check	18475	5/1/2024	4,620.40	Univar Solutions USA Inc - Remit-To: Supplier Univar Solutions USA Inc	
Supplier Payment	Check	18476	5/1/2024	323.20	Vancouver Aire LLC	
Supplier Payment	Check	18477	5/1/2024	214.24	Vestis Group, Inc - Remit-To: Vestis - Pasadena	
Supplier Payment	Check	18478	5/1/2024	505.48	W.B. Sprague Co. Inc.	
Supplier Payment	Check	18479	5/1/2024	3,450.00	Wahl and Associates LLC	
Supplier Payment	Check	18480	5/1/2024	2,284.78	Walter E Nelson Company	
Supplier Payment	Check	18481	5/1/2024	69.16	XPO Logistics Enterprise Services, Inc - Remit-To: XPO - Portland	
Miscellaneous Payment	Check	18482	5/1/2024	908.00	Aleksandr Medvedev	PIR-84273 (Parcel ID 37300955)
Miscellaneous Payment	Check	18483	5/1/2024	500.00	Anthony Glenn, Treasurer	Increase to Customer Services Change Fund
Miscellaneous Payment	Check	18484	5/1/2024	50.00	Brook Austin	Damage Deposit Refund
Miscellaneous Payment	Check	18485	5/1/2024	120.00	Cascade Southeast Neighborhood Association	2023 RecycleU
Miscellaneous Payment	Check	18486	5/1/2024	500.00	Charlie Vialau	Damage Deposit Refund
Miscellaneous Payment	Check	18487	5/1/2024	1,159.09	Fire Systems West, Inc.	FRI-353486 (jobsite 505 NE 87th Ave)
Miscellaneous Payment	Check	18488	5/1/2024	465.26	Guardian Fire Protection, Inc.	FRI-352822 (jobsite: 14602 NE Fourth Plain Blvd D)
Miscellaneous Payment	Check	18489	5/1/2024	29.35	Jeff Shull	Refund parking permit no longer needed.
Miscellaneous Payment	Check	18490	5/1/2024	12.50	Kellie Budnick	Refund for cancelled class
Miscellaneous Payment	Check	18491	5/1/2024	62.50	Kellie Budnick	Class cancelled due to staffing
Miscellaneous Payment	Check	18492	5/1/2024	19,849.24	Kenneth Voight	Claim Payment - DOI: 12/27/2022 - Risk
Miscellaneous Payment	Check	18493	5/1/2024	21.88	Michelle Clayton	Refund for cancelled class
Miscellaneous Payment	Check	18494	5/1/2024	56.24	Michelle Clayton	Refund for class not satisfied with
Miscellaneous Payment	Check	18495	5/1/2024	62.50	Michelle Clayton	Class cancelled due to staffing
Miscellaneous Payment	Check	18496	5/1/2024	100.00	Northfield Neighborhood Association	2024 Resource Conservation Challenge
Miscellaneous Payment	Check	18497	5/1/2024	91.00	Pye-Barker Fire and Safety LLC	Refund of duplicate payment to INV#77062895
Miscellaneous Payment	Check	18498	5/1/2024	1,000.00	Suzanne Rosenquist	Fire LEOFF1 Pension Funeral Benefit
Miscellaneous Payment	Check	18499	5/1/2024	21.50	TIFFANY HICKENLOOPER	Refund for cancelled class
Miscellaneous Payment	Check	18500	5/1/2024	129.00	TIFFANY HICKENLOOPER	Class cancelled due to staffing
Miscellaneous Payment	Check	18501	5/1/2024	100.00	Village at Fisher's Landing Neighborhood Association	2024 Resource Conservation Challenge
Miscellaneous Payment	Check	18502	5/1/2024	91.00	Western States Fire Protection	Refund duplicate payment of INV#77061732
Miscellaneous Payment	Check	18503	5/1/2024	100.00	West Minnehaha Neighborhood Association	2024 Resource Conservation Challenge
			Check	2,540,150.48		
Expense Payment	Direct Deposit	EFT-00243911	5/2/2024	305.00	Matthew Hanns	Employee Reimbursement
Expense Payment	Direct Deposit	EFT-00243912	5/2/2024	11.70	Patrick Kennedy	Employee Reimbursement
Expense Payment	Direct Deposit	EFT-00243913	5/2/2024	40.87	Andrew Nevue	Employee Reimbursement
Expense Payment	Direct Deposit	EFT-00243914	5/2/2024	88.50	Colin Smith	Employee Reimbursement
Expense Payment	Direct Deposit	EFT-00243915	5/2/2024	49.50	Erik Jennings	Employee Reimbursement
Expense Payment	Direct Deposit	EFT-00243916	5/2/2024	200.00	Tyler Brawand	Employee Reimbursement
Expense Payment	Direct Deposit	EFT-00243917	5/2/2024	417.62	Chad Eiken	Employee Reimbursement
Expense Payment	Direct Deposit	EFT-00243918	5/2/2024	554.47	Pete Adams	Employee Reimbursement
Cash Advance Payment	Direct Deposit	EFT-00243919	5/2/2024	696.50	Justin Thomas	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243920	5/2/2024	696.50	Elena Miron	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243921	5/2/2024	237.50	Tony Fletcher	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243922	5/2/2024	400.76	Taylor Hallvik	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243923	5/2/2024	109.75	Troy Price	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243924	5/2/2024	696.50	Nick Copley	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243925	5/2/2024	128.25	Brian Wilson	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243926	5/2/2024	147.50	Colton Price	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243927	5/2/2024	147.50	Shane Hall	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243928	5/2/2024	147.50	Aaron Yoder	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243929	5/2/2024	110.81	Brian Taylor	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243930	5/2/2024	147.50	Keli Balada	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243931	5/2/2024	696.50	Nicole Vigil	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243932	5/2/2024	147.50	Spencer Harris	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243933	5/2/2024	696.50	Andrea Bauman	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243934	5/2/2024	235.50	Dustin Goudschaal	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243935	5/2/2024	696.50	Sean Suarez	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243936	5/2/2024	235.50	Deanna Watkins	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243937	5/2/2024	235.50	Brian Billingsley	Travel Advance

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INVOICE PAYMENTS REPORT

Cash Advance Payment	Direct Deposit	EFT-00243938	5/2/2024	128.25	Timothy Buck	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243939	5/2/2024	696.50	Jamie Haske	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243940	5/2/2024	235.50	Max Musich	Travel Advance
Cash Advance Payment	Direct Deposit	EFT-00243941	5/2/2024	128.25	Brian Potter	Travel Advance
			Direct Deposit	9,466.23		
Supplier Payment	EFT	EFT-00243942	5/2/2024	15,588.06	Hermanson Company, LLC - Remit-To: Hermanson Company, LLC	
Supplier Payment	EFT	EFT-00243943	5/2/2024	3,200.75	Hermanson Company, LLC - Remit-To: Hermanson Company, LLC	
Supplier Payment	EFT	EFT-00243944	5/2/2024	36,188.64	Family Solutions, Inc.	
Supplier Payment	EFT	EFT-00243945	5/2/2024	1,553.34	PC Specialists Inc	
Supplier Payment	EFT	EFT-00243946	5/2/2024	7,862.58	Columbia West Engineering	
Supplier Payment	EFT	EFT-00243947	5/2/2024	47,413.96	Rotschy Inc	
Supplier Payment	EFT	EFT-00243948	5/2/2024	15,458.12	Jacobs Engineering Group Inc	
Supplier Payment	EFT	EFT-00243949	5/2/2024	482.00	Universal Field Services Inc	
Supplier Payment	EFT	EFT-00243950	5/2/2024	5,853.54	Commonstreet Consulting, LLC	
Supplier Payment	EFT	EFT-00243951	5/2/2024	22,629.05	Council for the Homeless	
Supplier Payment	EFT	EFT-00243952	5/2/2024	145,943.58	MacKay Sposito Inc	
Supplier Payment	EFT	EFT-00243953	5/2/2024	11,900.85	Lifeline Connections	
Supplier Payment	EFT	EFT-00243954	5/2/2024	47,500.00	City Electric Co of WA	
Supplier Payment	EFT	EFT-00243955	5/2/2024	2,453.48	Consolidated Supply Co	
Supplier Payment	EFT	EFT-00243956	5/2/2024	3,781.09	Bound Tree Medical LLC	
Supplier Payment	EFT	EFT-00243957	5/2/2024	15,114.88	Northwest Staffing Resources Inc - Remit-To: Northwest Staffing Resources	
Supplier Payment	EFT	EFT-00243958	5/2/2024	1,774.00	Marten Law LLP	
Supplier Payment	EFT	EFT-00243959	5/2/2024	620.20	Western Water Works Supply Co Inc	
Supplier Payment	EFT	EFT-00243960	5/2/2024	27,326.91	Pacific Landscape Services Inc	
Supplier Payment	EFT	EFT-00243961	5/2/2024	11,829.01	Waxie's Enterprises Inc	
Supplier Payment	EFT	EFT-00243962	5/2/2024	6,453.75	Del Sol Inc	
Supplier Payment	EFT	EFT-00243963	5/2/2024	216,453.17	Odyssey Contracting LLC	
Supplier Payment	EFT	EFT-00243964	5/2/2024	4,933.91	Distinctive Landscape LLC	
Supplier Payment	EFT	EFT-00243965	5/2/2024	63,146.40	Alta Planning & Design	
Supplier Payment	EFT	EFT-00243966	5/2/2024	15,656.68	Power Systems West	
Supplier Payment	EFT	EFT-00243967	5/2/2024	6,156.15	Loma Media Partners	
Supplier Payment	EFT	EFT-00243968	5/2/2024	1,074.00	Otak Inc	
Supplier Payment	EFT	EFT-00243969	5/2/2024	19,775.79	SDB Inc	
Supplier Payment	EFT	EFT-00243970	5/2/2024	11,732.50	Pacifica Law Group LLP	
Supplier Payment	EFT	EFT-00243971	5/2/2024	15,648.01	YWCA Clark County	
Supplier Payment	EFT	EFT-00243972	5/2/2024	898.98	Share	
Supplier Payment	EFT	EFT-00243973	5/2/2024	117,358.25	Brown and Caldwell - Remit-To: Brown & Caldwell - San Francisco	
Supplier Payment	EFT	EFT-00243974	5/2/2024	4,087.13	Lasko Printing Specialties Inc	
Supplier Payment	EFT	EFT-00243975	5/2/2024	40.81	Ziply Fiber	
Supplier Payment	EFT	EFT-00243976	5/2/2024	12,826.60	TMC Contractors LLC	
Supplier Payment	EFT	EFT-00243977	5/2/2024	9,796.58	Copiers Northwest Inc.	
Supplier Payment	EFT	EFT-00243978	5/2/2024	1,116.48	Junk It JunkRemoval LLC	
Supplier Payment	EFT	EFT-00243979	5/2/2024	6,820.93	Fire Systems West	
Supplier Payment	EFT	EFT-00243980	5/2/2024	24,869.94	Clark EMS Physicians, LLC	
Supplier Payment	EFT	EFT-00243981	5/2/2024	6,039.37	Vatten Plumbing LLC - Remit-To: Vatten Plumbing LLC	
Supplier Payment	EFT	EFT-00243982	5/2/2024	108,217.50	Clark and Sons Excavating Inc	
			EFT	1,077,576.97		
Supplier Payment	Manual Wire		4/26/2024	45,222.51	State of Oregon Department of Revenue	
Supplier Payment	Manual Wire		4/26/2024	1,281,401.10	Internal Revenue Service	
Supplier Payment	Manual Wire		4/29/2024	18,297.25	Washington Dental Service	
Supplier Payment	Manual Wire		4/29/2024	225,663.32	Blue Cross Blue Shield of Oregon	
Supplier Payment	Manual Wire		4/29/2024	13,273.84	Bank Of America N.A. - Remit-To: Charlotte NC	
Supplier Payment	Manual Wire		4/30/2024	2,138,529.00	Fidelity National Title Co of Washington	
Supplier Payment	Manual Wire		5/1/2024	3,030.12	Internal Revenue Service	
Supplier Payment	Manual Wire		5/1/2024	48,915.28	State of Washington Department of Revenue	
Supplier Payment	Manual Wire		5/3/2024	13,974.39	VSP Vision Care Inc	
Supplier Payment	Manual Wire		5/3/2024	631,752.00	Vancouver Firefighters Union Health & Welfare Trust	
Supplier Payment	Manual Wire		5/3/2024	208,496.48	Western States Health & Welfare Trust	
Supplier Payment	Manual Wire		5/3/2024	81,242.41	Liberty Mutual Group Inc.	
			Manual Wire	4,709,797.70		
			Checks	2,540,150.48		
			Direct Deposit	9,466.23		
			EFT	1,077,576.97		

INVOICE PAYMENTS REPORT

			5/6/2024	438,806.10	City Payments	Posted 04-29-24 to 05-05-24
			Hansen Total	438,806.10		
			5/6/2024	730.00	Miscellaneous	Parks Class Refunds FCC 04-29-24 to 05-05-24
			5/6/2024	1,159.21	Miscellaneous	Parks Class Refunds MCC 04-29-24 to 05-05-24
			VISA Total	1,889.21		
			Payroll Total	0.00		
			GRAND TOTAL	8,777,686.69		

City of Vancouver
Payroll Council Report
April 29, 2024 - May 05, 2024

Check No.	Date	Explanation	Amount
		No payroll this period.	

\$ -

Property Tax Exemption

FOR SENIORS AND PERSONS WITH DISABILITIES

Peter Van Nortwick, Clark County Assessor
Holly Hill, Program Outreach Coordinator

Clark County Assessor's Office
Assessment Services Team

May 13, 2024



CLARK COUNTY WASHINGTON
ASSESSOR'S OFFICE

A G E N D A

- Program Overview
- Qualifications and Eligibility
- Income Thresholds
- Income, explained
- Deductions, explained
- Required Documents
- How to Apply
- Conclusion/Contact
- Questions



OVERVIEW

Washington State Program

- Administered by each county Assessor's office within WA state, with guidance from the Department of Revenue
- Rules of the program are set by State Legislature

Purpose

- Reduce property taxes for senior citizens and people with disabilities, allowing them to remain in their home despite increasing property taxes.

How it works

- Freezes the assessed value of the home and land
- Exempts taxpayers from paying voter -approved levies and part 2 of the state school tax
- Reduces the taxable value of the property based on income
- No obligation for repayment, no lien on the property
- Applications are renewed every 6 years maximum



CLARK COUNTY WASHINGTON
ASSESSOR'S OFFICE

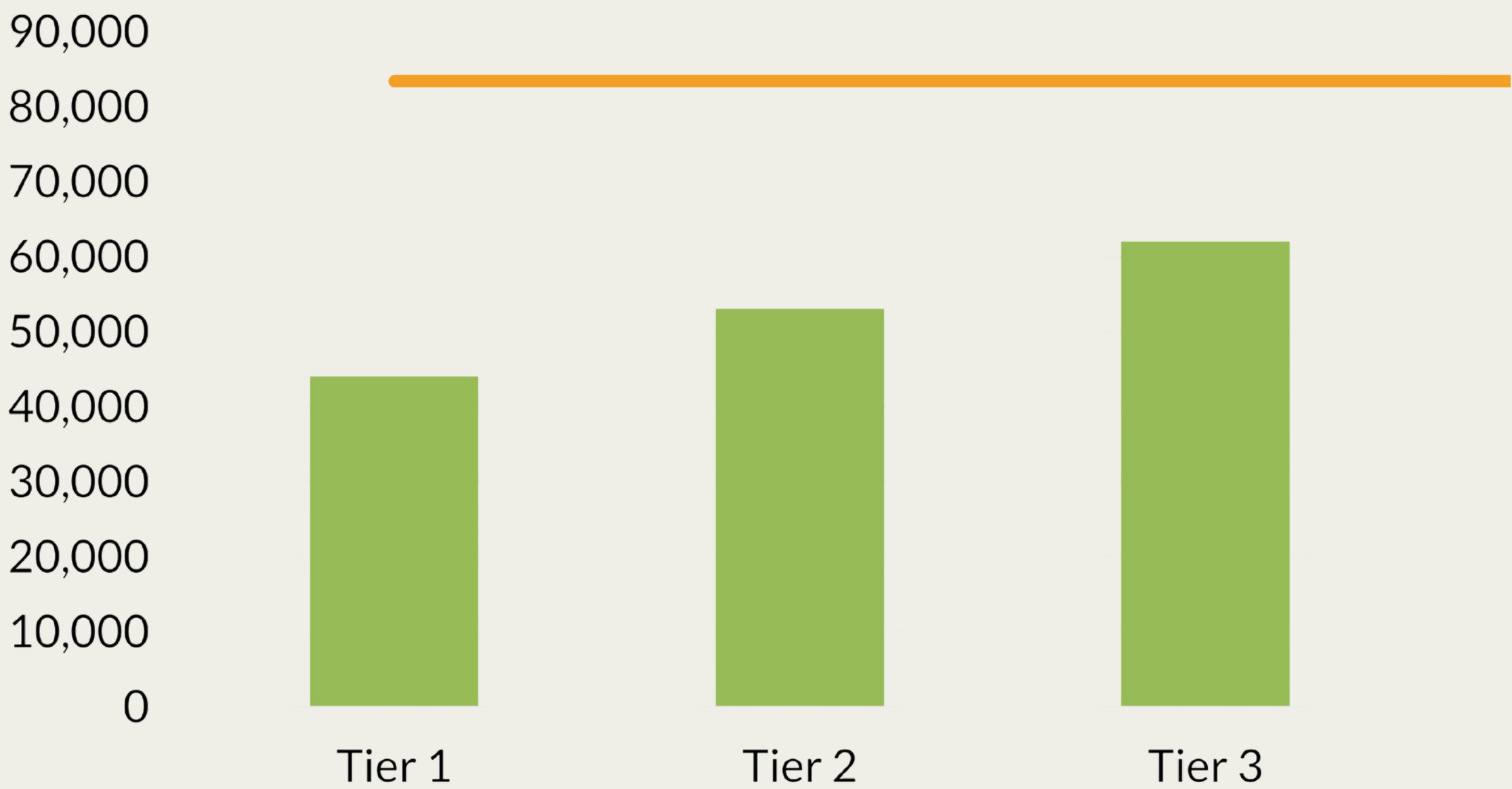
QUALIFICATIONS

To be eligible you must meet the following requirements on December 31st of the year before the tax is due.

- Own the home by December 31 of the assessment year.
- Reside in the home as your primary residence for 6 months of the assessment year and each year going forward
- Must qualify based on either age (61+)
 - OR disability status



INCOME THRESHOLD REQUIREMENTS



TIER 1: 0 - 44,000

Exempt from paying regular property tax on a portion of your assessed taxable value.
Exempt from voter approved levies. Home and land value are frozen in qualifying year.

TIER 2: 44,001 - 53,000

Exempt from paying regular property tax on a portion of your assessed taxable value.
Exempt from voter approved levies. Home and land value are frozen in qualifying year.

TIER 3: 53,001 - 62,000

Exempt from paying excess/voter-approved levies. Home and land value are frozen in the qualifying year.

Income Thresholds

Median County Income (\$83,387)



CLARK COUNTY WASHINGTON
ASSESSOR'S OFFICE

WHAT COUNTS AS INCOME?

Income includes:

- Wages (from W -2s)
- Pensions (1099s)
- Annuities (1099s)
- Social Security Benefits (1099s)
- Social Security Disability (1099s)
- IRAs (1099s)
- Interest (1099s)
- Dividends
- V.A. Retirement

Income excludes:

- V.A. Disability payments
- DSHS Payments
- Federal Stimulus Payments
- IRA Rollovers
- Reverse mortgages
- Must see documentation to support the income exclusion



WHAT COUNTS AS A DEDUCTION?

Allowable Deductions

- Out-of-pocket prescription drug expenses
- Medicare premiums (All “Parts”)
- In Home Care expenses
- Nursing or Adult family home expenses
- Medical/ Mobility equipment expenses
- Long Term Care Insurance Premiums paid
- Health Insurance cost sharing out of pocket expenses
- Naturopathic treatments from Washington licensed naturopath
- Disposable medical supplies
- Prosthetic device expenses

Contact our office for a full list of deductions!



CLARK COUNTY WASHINGTON
ASSESSOR'S OFFICE

REQUIRED DOCUMENTS

With application, please provide:

- Drivers License or State ID Card
- Disability Award Letter
- Complete Tax Return including all schedules (if filed)
- Pension/Annuity 1099s
- Social Security 1099s
- If you don't file taxes – provide all W2's and all 1099's showing income
- Any expenses for allowed deductions

If applicable:

- Death Certificate for any owners
- Divorce Decree
- Copy of entire trust (with declaration of trust)



CLARK COUNTY WASHINGTON
ASSESSOR'S OFFICE

HOW TO APPLY

- Online: Clark.wa.gov/Assessor
- Email : taxreduction@clark.wa.gov
- Mail : Send to -

Senior Exemption
Clark County Assessor's Office
PO Box 5000
Vancouver WA 98666

Assessor's Office:

- 2nd floor of the Public Service Center
- Monday – Thursday 9:00am to 4:00pm
- Appointments available select days - call for more information
- 564 -397 -2391

Drop Box:

- Located at the Clark County Public Service Center
- 1300 Franklin St, First Floor
- Monday – Friday between the hours of 9:00am to 5:00pm



CLARK COUNTY WASHINGTON
ASSESSOR'S OFFICE

Thank you!

QUESTIONS?

Clark County Assessor's Office
Assessment Services Team
12 February 2024



CLARK COUNTY WASHINGTON
ASSESSOR'S OFFICE

OVERVIEW

Under the exemption program, the assessed value of your property is frozen (for tax purposes) and you may be eligible for a reduction in your property taxes. This could be worth thousands of dollars in savings for you and a lien will not be placed on your property. The program is retroactive, as applicants can apply for previous years to get a refund as well. Contact us and we will walk you through the process to determine your eligibility and the level of your exemption.

VISIT

1300 FRANKLIN ST,
PUBLIC SERVICE CENTER
2ND FLOOR

EMAIL

TAXREDUCTION@CLARK.WA.GOV

CALL

564.397.2391

WEBSITE

CLARK.WA.GOV/ASSESSOR

MAIL

CLARK COUNTY ASSESSOR'S OFFICE
P.O. BOX: 5000
VANCOUVER WA
98666-5000



CLARK COUNTY WASHINGTON

ASSESSOR'S OFFICE

2024 - 2026



PROPERTY TAX EXEMPTION FOR SENIOR CITIZENS AND PEOPLE WITH DISABILITIES

PROGRAM OVERVIEW

*Public Service Center, 2nd Floor.
1300 Franklin St. Vancouver, WA 98660*

ELIGIBILITY

To be eligible, you must meet the following requirements on December 31 of the year before the taxes are due.

The requirements are determined by income, age **or** disability, residency, and ownership:

Income Requirement:
\$62,000 or less

Age Requirement:
61+

Disability Requirement:

Unable to work due to disability OR a veteran entitled to and receiving compensation from the V.A. at an 80% disability rating for a service-connected disability

Residency:

You must reside in the home as your primary residence for a minimum of 6 months out of the year.

Ownership:

You must own your home by Dec. 31 of the assessment year.

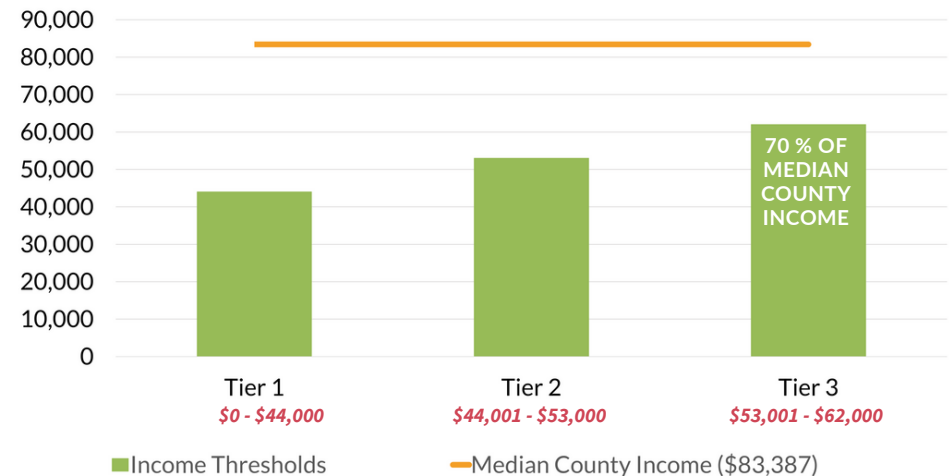


Beth Conyers

For more information, visit clark.wa.gov/assessor

INCOME THRESHOLDS

Note: All income levels listed are for years 2024-2026.



Median county income is based off the most recent data from 2022.
Our maximum income threshold is 70% of this number.

Tier 1: Exempt from paying regular property tax on whichever is greater: \$60,000 or 60% of the assessed taxable value. Home and land value are frozen.

Tier 2: Exempt from paying regular property tax on whichever is greater: \$50,000 or 35% of the assessed taxable value. This may not exceed \$70,000. Home and land value are frozen.

Tier 3: Exempt from paying excess levies. Home and land value are frozen.



Household income is calculated using the combined disposable income earned during the application year for you, your spouse, your domestic partner, or/and any co-tenants.

MEMORANDUM

DATE: May 2, 2024

TO: Anne McEnerny-Ogle, Mayor
City Council

FROM: Eric J. Holmes, City Manager
Jeff Mori, Police Chief

RE: **Photo Traffic Enforcement Law – ESHB 2384**

Earlier this spring, City Council expressed interest in the recently enacted changes to Washington states automatic traffic safety camera law. This memorandum provides background on the new law.

Executive Summary

Until ESHB 2384 was passed, the authorized use of cameras to enforce traffic laws was extremely limited in Washington. The new law substantially broadens that authority. Based on the expanded authorities in the new law, establishment of a photo traffic enforcement program may be a viable part of an overall community safety initiative.

Under the new law, cities may now deploy unlimited cameras in qualifying speed, school, and work zones. In addition, they may deploy 1 camera per 10,000 population, plus 1 bonus camera, with a qualifying plan. Based on Vancouver's most recent population estimate, approximately 22 cameras outside of school, speed, or work zones could be deployed here.

- This bill authorizes law enforcement officers, *as well as civilian employees that work for a law enforcement agency or public or a public works department*, to review infractions detected by traffic safety cameras. Deployment and operations of cameras themselves may be contracted to the third-party vendor.
- Fines arising from violations detected by traffic safety cameras are capped at \$175 (indexed to inflation). Recipients of infractions that are on certain public assistance are eligible for a 50% reduction in the fine.
- An ordinance to implement a traffic safety program will need to be supported by data demonstrating an increased risk of crashes due to excessive vehicle speed.
- Notably, law enforcement vehicles are not among the vehicles exempted from receiving notices of infractions (only marked fire engines and ambulances are exempt).

A bit more detail on Primary elements of the new law are:

- **Authorized Uses and Requirements for Automated Traffic Safety Cameras.** The use of automated traffic safety cameras (traffic cameras) is permitted at red light intersections that meet minimum yellow change interval requirements, at railroad crossings, and in school speed zones, school walk areas, public park speed zones, hospital speed zones, and select locations in cities that are identified as priority locations in a local road safety plan
- **Automated Traffic Safety Camera Pilot Program.** A pilot program is in effect through June 30, 2025, which authorizes cities with populations greater than 500,000 residents to adopt an ordinance authorizing the use of traffic cameras to detect one or more of the following violations: stopping at an intersection or crosswalk (20-intersection maximum); stopping when traffic obstructed; public transportation-only lane use; and stopping or traveling in a restricted lane.
- **Restrictions on the Use of Automated Traffic Safety Cameras.** Traffic cameras may only take pictures of a vehicle and vehicle's license plate while an infraction is occurring, and the pictures taken must not reveal the face of the driver or passengers in the vehicle. Photos and electronic images captured by a camera may only be used for the enforcement of traffic infractions for which their use has been authorized, and may not be retained longer than would be necessary for these enforcement purposes. Photos and electronic images are not available to the public, and may not be used in court in a pending action or proceeding unless that action or proceeding relates to a traffic infraction for which their use has been authorized.
- **Automated Traffic Safety Camera-Captured Infractions.** A notice of traffic infraction must be mailed to the registered owner of a vehicle within 14 days of the violation (or to its renter within 14 days of his or her name and address being established). The law enforcement officer issuing the notice must include a certificate or copy of a certificate stating the facts supporting the notice, which serves as prima facie evidence of the facts contained in it. The photographs or electronic images that serve as evidence of the violation must be available for inspection and admission into evidence in a proceeding on the infraction.
- **Modification of Authorized Uses for Automated Traffic Safety Cameras.** Traffic cameras may be used to detect speed violations on state routes within city limits that are classified as city streets and in work zones on county roads and city streets, including on state highways also classified as city streets. A city government must notify the WSDOT when it installs a traffic camera on a state highway classified as a city street. For work zone camera speed violations, a worker must be present at the time the violation is captured by the traffic camera. A "work zone" means an area of a county or city roadway, including state highways also classified as city streets, with construction, maintenance, or utility work occurring for at least 30 calendar days.
- **Modification of Requirements for Automated Traffic Safety Cameras.** The analysis required of a city or county prior to the installation of traffic cameras must include an assessment of equity considerations, including the impact on livability, accessibility, economics, education, and environmental health. The analysis must consider the results of this equity assessment when identifying where to locate traffic cameras. The analysis must also show a demonstrated need

for traffic cameras based on rates of collision, reports of near collisions, travel by vulnerable roadway users, evidence of vehicles speeding, and anticipated or actual ineffectiveness or infeasibility of other mitigation measures.

- **Additions to Restrictions on Automated Traffic Safety Cameras.** Traffic cameras are prohibited from being used on an on-ramp to a limited access facility.
- **Automated Traffic Safety Camera-Captured Infractions.** A civilian employee who works for a law enforcement agency or a local public works or transportation department, and who is sufficiently trained and certified by peace officers or traffic engineers, is authorized to review traffic infractions detected through the use of traffic cameras, including those detected through the use of automated school bus safety cameras, and to issue notices of infraction for these violations. This authorization does not impair state law governing decision and effects collective bargaining rights.
- **Automated Traffic Safety Camera Revenue Use.** Revenues generated from traffic camera infractions (excluding cameras in use on school buses), may only be used by a city or county for traffic safety activities related to construction and preservation projects and related to maintenance and operations, and for the costs to administer, install, operate, and maintain traffic cameras, including costs associated with the processing of infractions.

[A full synopsis of session law can be found here](#), and [the session law itself can be found here](#).