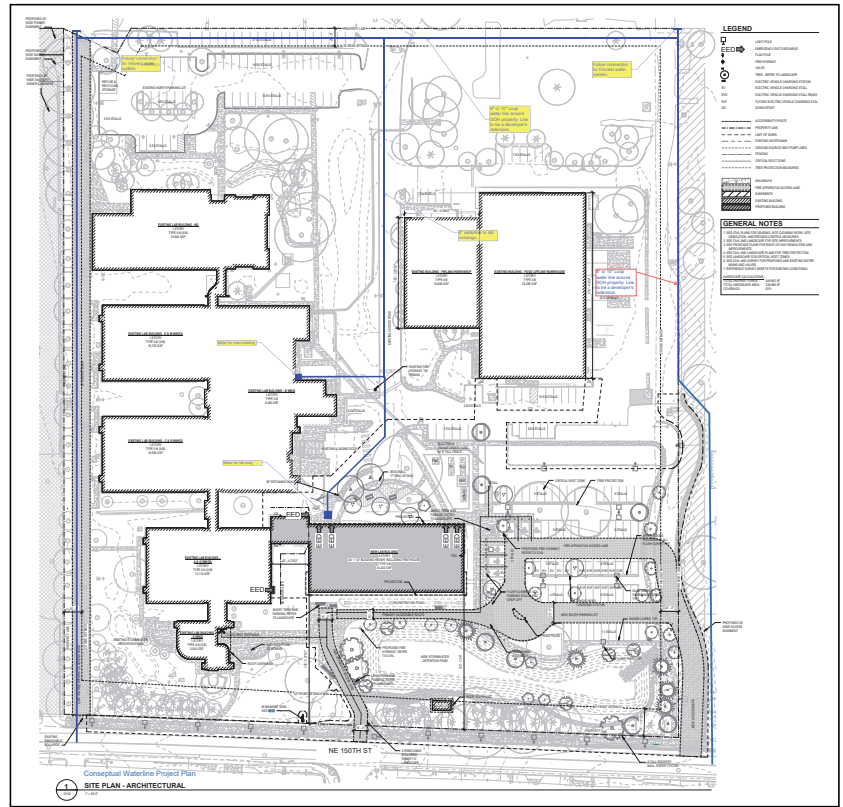


DEPARTMENT OF ENTERPRISE SERVICES

DOH-PHL NEW WATER SUPPLY SYSTEM

PROJECT NO. 2026-222

Date of Submission: November 24, 2025



Submitted to:

DOH - Public Health Laboratories
1610 NE 150th Street
Shoreline, WA 98155-7224

Submitted by:

Century West Engineering Corporation
Trent Ward, PE
Senior Project Manager
208 W 9th Avenue, Suite 3
Ellensburg, WA 98926

November 24, 2025

Department of Health - Public Health Laboratories
1610 NE 150th Street
Shoreline, WA 98155-7224

**RE: STATEMENT OF QUALIFICATIONS – PROJECT NO. 2026-222
DOH-PHL NEW WATER SUPPLY SYSTEM**

Dear Selection Committee:

Century West Engineering Corporation (Century West) offers a focused, technically qualified team ready to support the Department of Enterprise Services (DES) in designing the new looped water supply system that will connect the Department of Health (DOH) – Public Health Laboratories (PHL) property to the North City Water District (NCWD). Our understanding of DOH campus infrastructure and recent collaboration with DES on other state-owned utility projects position us to move this project efficiently from concept through design.

Century West is currently providing services under DES’s Civil Engineering On-Call contract and was recently reselected for a new term. This continued partnership reflects our consistent performance and understanding of DES’s project delivery processes, documentation standards, and coordination requirements. That familiarity will help streamline design and communication for this project.

The DOH-PHL line is beyond its service life, and NCWD will not issue a water availability certificate until it meets current construction standards. This project is an opportunity to deliver a reliable, long-term solution that provides sufficient pressure and fire flow for both the DOH-PHL campus and future expansion onto the Fircrest School site. Trent Ward, PE, our Project Manager, met on-site with DES and DOH project managers to discuss system routing, NCWD requirements, and the importance of minimizing disruption to laboratory operations. His direct engagement ensures our approach reflects the operational realities of the site.

Our approach focuses on:

- **Early coordination** with NCWD, DOH, the City of Shoreline, and Shoreline Fire Department to streamline permitting and confirm system hand-off requirements.
- **Constructability and phasing** that maintain uninterrupted water service to existing DOH-PHL facilities, including active laboratory buildings and the ongoing addition.
- **Full compliance** with NCWD construction standards, including materials, metering, fire flow, and turnover procedures.
- **Clear, complete documentation** to support DOH’s construction funding needs and the transition to construction administration in the 2027–2029 biennium.

We look forward to partnering with DES and DOH to design a system that meets NCWD’s requirements, supports future campus development, and can be implemented with minimal operational impact. If you have any questions or need additional information, please contact Trent at 509.388.9828 or tward@centurywest.com.

Sincerely,

CENTURY WEST ENGINEERING CORPORATION



Trent Ward, PE
Senior Project Manager



Rawley Voorhies, PE
Principal-in-Charge & QA/QC Manager



STATE OF WASHINGTON
DEPARTMENT OF ENTERPRISE SERVICES

*1500 Jefferson St. SE, Olympia, WA 98501
PO Box 41476, Olympia, WA 98504-1476*

Consultant Selection Contact Form

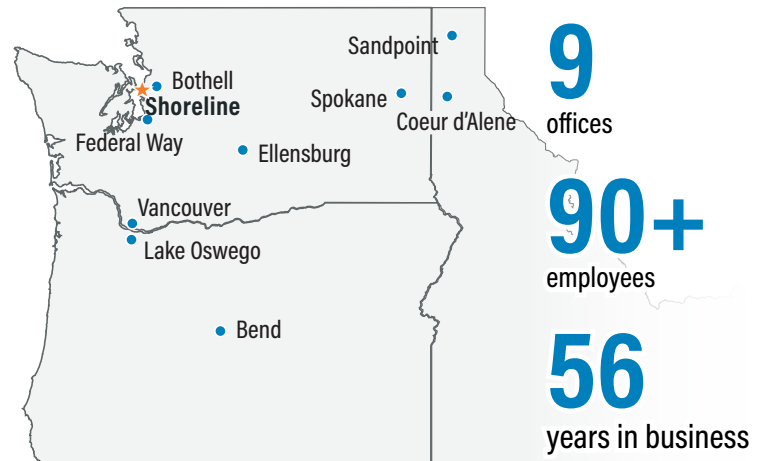
Designated Point of Contact for Statement of Qualifications
For Design Bid Build, Design Build, Progressive Design Build, GC/CM & Job Order Contracting
(JOC) Selections

Firm Name: Century West Engineering Corporation		
UBI: 600-331-057	TIN: 93-0584951	License#: 8711
Point of Contact Name: Trent Ward, PE		
Point of Contact Title: Senior Project Manager		
Email: TWard@centurywest.com	Telephone: 509.795.5870	
Address: 208 W 9th Avenue, Suite 3		
City: Ellensburg	State: WA	Zip: 98926

Executive Summary

Introduction to Century West

Founded in 1969 in the Pacific Northwest, Century West is a trusted civil engineering company with a strong presence across Washington, Oregon, and Idaho. With more than 90 employees in nine locations, we specialize in infrastructure planning, design, and construction management for municipal and public agency clients. Our success is built on understanding client needs and delivering innovative, cost-effective solutions.



Familiarity with DES and SBE Certification

Century West has successfully supported DES through multiple on-call agreements over the past six years, demonstrating our ability to navigate state contracting requirements, project complexities, and funding structures. As a Washington State OMWBE-certified Small Business Enterprise (SBE #S000026280), we actively partner with diverse firms to strengthen project teams and expand opportunities. Our reputation for quality, strong client relationships, and proven performance make us a trusted choice.

Familiarity with the Project

The DOH-PHL campus, located in Shoreline, Washington, has existing waterline infrastructure that is old and in need of repair. DOH is constructing laboratory additions and has plans for future campus improvements, but the NCWD and Shoreline Fire Department will not give a water availability certificate on any future development permits because of substandard water system conditions and low system flow. As such, new water mains and associated appurtenances (i.e., fire hydrants, individual building water meters, fire service connections, backflow prevention facilities, etc.) to replace the existing water infrastructure are required, meeting all NCWD construction requirements and standards, and Shoreline Fire District fire flow requirements.

This project will construct a new water main loop around the DOH-PHL campus and construct replacement domestic and fire services connections to each DOH building on the campus. The new water main loop will connect to the NCWD water main located on NE 150th Street. On the north end of the campus, there will be water main extensions with valving to allow for future expansion onto the Fircrest School Site. Upon completion of the water system construction, the system will be transferred to the NCWD for ownership, maintenance, and operation.

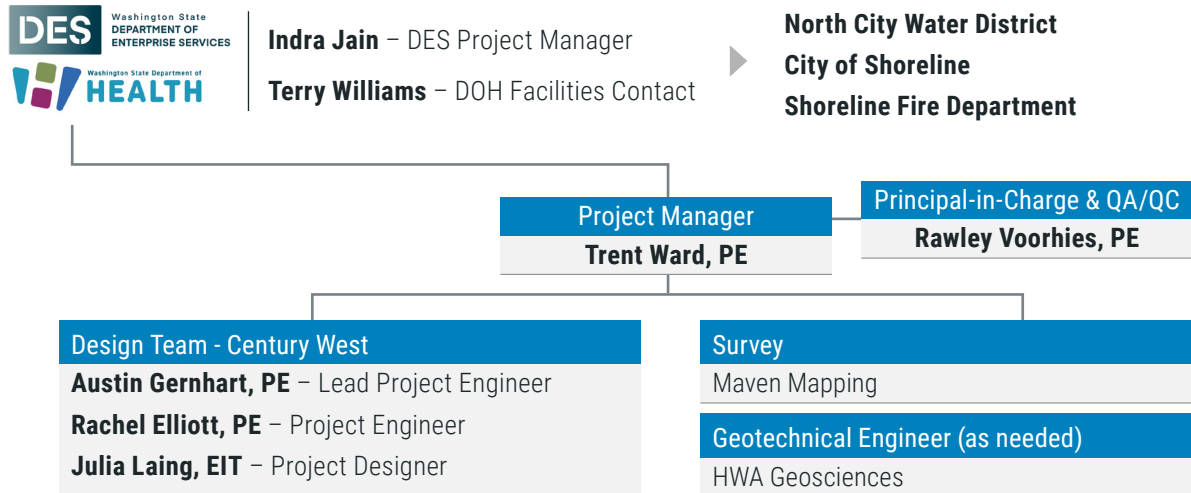
This project will enable the DOH to continue pursuing long-term campus development needs while providing reliable, long-lasting, and adequate supplies of safe drinking water, process water, and fire sprinkler protection in its facilities, as well as ensuring an adequate water supply for the Fircrest School site.

Time is of the essence for this project to be accomplished. DOH currently has funding for the design phase of the project, and construction funding is anticipated in the 2027-2029 biennium. DOH was granted permits for and is currently constructing a laboratory addition to the east of the existing Lab Building – A&Q Wings. Additionally, it will construct an interim water system for that project, which will be replaced with water service from this project once it is completed. It is anticipated that the construction of the new water system upgrades and the addition to the current Laboratory building will occur simultaneously. The water system upgrades project will be developed in a manner that minimizes disruption to DOH-PHL operations and is coordinated with the needs of the laboratory addition project.

Qualifications of Key Personnel

Century West has assembled a project team with the expertise and capacity to deliver the Water Supply System project efficiently and in full coordination with DES, DOH, NCWD, and City of Shoreline. The organization of the team reflects clear roles, reporting relationships, and direct lines of communication from project management through technical design and field coordination. Together, this team offers the technical depth and coordination skills necessary to meet DES objectives for quality, schedule, and compliance with NCWD and City of Shoreline standards.

Reporting Hierarchy



TRENT WARD, PE | Senior Project Manager

Trent brings over 37 years of experience in the design and management of municipal and public infrastructure projects. He works closely with public works staff, planning departments, and permitting agencies to guide projects through environmental review processes (SEPA and NEPA) and land use approvals. Trent has prepared engineering reports, feasibility studies, and construction documents, and has managed construction for a wide range of public improvement projects. He has also supported updates to community comprehensive plans and facilities plans, with a focus on long-range planning for transportation, stormwater, sewer, and water systems.

Proposed Percentage of Time: 20%

Education

BS, Mechanical Engineering, University of Nevada

Registration

Professional Engineer WA (#35711)

Highlights:

- ✓ Experience integrating multiple agency standards
- ✓ Extensive background in water, sewer, & stormwater systems

Relevant Project Experience

DES, Eastern State Hospital Emergency Access Road Design; Medical Lake, WA

Lead Design Engineer for an emergency road project completed within two weeks to restore access following a fire event. Coordinated field survey, utilities, and grading design under steep terrain and environmental constraints near Medical Lake.

Water & Fire Main System Expansion | Bremerton National Airport, WA

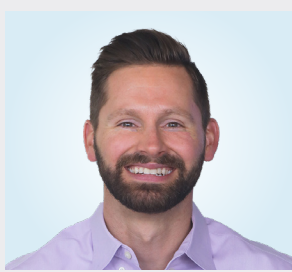
Supported design of domestic water, fire, sanitary sewer, and stormwater systems for a hangar development site. Work included an 8-inch ductile iron water main loop, backflow facilities, and stormwater treatment design meeting WAC and local health standards.

2nd Avenue SE Reconstruction; Quincy, WA

Project Manager overseeing design of roadway, stormwater, ADA-compliant features, and street lighting improvements. Led coordination with city staff, utilities, residents, and schools, and managed survey and geotechnical subconsultants through final PS&E.

Additional Projects

- Gig Harbor, Capital Improvements Program
- Gig Harbor, Storm Water Comprehensive Plan
- Gig Harbor, Wastewater Comprehensive Plan
- Gig Harbor, Water System Plan
- Gig Harbor, Transportation Comprehensive Plan



RAWLEY VOORHIES, PE | Principal-in-Charge & QA/QC

Rawley has 22 years of experience providing municipal engineering services for public clients. He oversees project delivery, ensuring technical accuracy, constructability, and compliance with client standards. His experience providing design, management, and inspection services has given him insight into the cost, functionality, and long-term maintenance of infrastructure. Rawley's expertise spans stormwater analysis, grading, and utility layout, as well as entitlement and permitting coordination for multidisciplinary teams. He also has extensive field experience, providing inspection, field design, and dispute resolution services. His practical understanding of both design and construction allows him to identify potential issues early and maintain quality across all project phases.

Proposed Percentage of Time: 2%

Years of Experience: 22

Education

BS, Civil Engineering,
University of Portland

Registration

Professional Engineer
WA (#49020);
OR (#72533PE)

Relevant Project Experience

DES, Washington State School for the Blind Parking Lots; Vancouver, WA

Provided quality assurance oversight for pavement evaluation and design of maintenance treatments across three campus parking lots. Reviewed condition assessments and coordinated recommendations ranging from crack sealing to full seal coating and re-striping. His QA/QC involvement ensured cost-effective, durable improvements were completed safely and on schedule with minimal disruption to campus operations.

Clairmont Area Waterlines, Phase 2; Oregon City, OR

Project Manager for replacement of 4,885 feet of existing water mains with new 8-inch ductile iron pipe. Oversaw design, permitting, and construction for 108 water service replacements, new hydrants, and pressure-reducing valves funded through the Water Infrastructure Finance and Innovation Act.

Rivercrest Sewer Rehabilitation; Oregon City, OR

Project Engineer for design and construction of 2,000 feet of 8- to 12-inch waterline and 350 feet of sanitary sewer extension. Scope included two pressure-reducing vault assemblies, roadway restoration, and full coordination of construction sequencing and inspection.

Additional Projects

- McDowell/Kaynor Irrigation Ponds; Chiawana Orchards, Ellenburg, WA
- Aviation Technology & Emergency Response Center Utilities; Port of Hood River, OR
- Gwinn Street E Waterline & Sanitary Sewer; Monmouth, OR



AUSTIN GERNHART, PE | Lead Project Engineer

Austin is a professional engineer with six years of experience as a design and production lead, and construction observer for municipal and aviation projects. His project focuses include water and stormwater systems and roadway design. He has spent his entire career at Century West, which has strengthened his understanding of company values in design. Austin prioritizes teamwork and teaching within the office to ensure a healthy working environment and a collaborative design team.

Relevant Project Experience

SE Ridgecrest Road Pipeline; Sunrise Water Authority, Clackamas County, OR

Design lead for nearly 3,000 feet of new waterline, responsible for CAD design, coordination, and internal QA/QC review. Served as primary client contact and provided active construction observation for temporary service installation and system tie-ins at a high-priority location.

Priority 1B Water Improvements; Wilsonville, OR

Served as design and production lead for 1,350 feet of new waterline. Supported construction inspection, ADA ramp review, and pay estimate verification. Contributed to design development, alignment layout, and coordination throughout all project phases.

High Ridge Court Intertie; Sunrise Water Authority, Clackamas County, OR

Supported design and plan production for 1,150 feet of 8-inch ductile iron water main, including hydrant assemblies and service replacements. Managed utility coordination and field verification with Vac-X to confirm crossings and reduce construction risk.

Additional Projects

- Oregon Air National Guard (ORANG) Reversion Area Utilities; Port of Portland, OR
- East 12th Street Storm & Sidewalk Improvements; The Dalles, OR
- OR 224/Monroe Street Waterline Upgrades; Milwaukie, OR
- HIO Stormwater Improvements; Port of Portland, OR

Proposed Percentage of Time: 40%

Years of Experience: 6

Education

BS, Civil Engineering,
Oregon State University

Registration

Professional Engineer
WA (#25010937);
OR (#94590PE)



RACHEL ELLIOTT, PE | Project Engineer

Rachel takes a thorough approach to design, conducting meticulous research to meet the unique needs of each site and client. She also has experience as a field inspector, performing site investigations, and preparing engineering documents and designs using Civil3D. Additionally, she is proficient in multiple programs and methods used for stormwater modeling.

Relevant Project Experience

2nd Avenue SE Reconstruction; Quincy, WA

Rachel's responsibilities included assisting with the design of stormwater facilities and the preparation of detailed design plans. Her attention to detail and technical expertise were integral to the project's success in meeting the City's goals for safety and functionality.

Hangar Development Site Preparation - Phase 1; Port of Port Angeles, WA

Rachel supported design and plan development for the new hangar project at William R. Fairchild International Airport. Her responsibilities included site grading, storm design, utility layout, and preparation of a drainage memo for permit submittal. She also supported other engineers in preparing plan sheets.

Taxiway Reconstruction & Rehabilitation; Port of Port Angeles, WA

This project includes the reconstruction/slurry seal repair of several taxiways at William R. Fairchild International Airport in Port Angeles, WA. Rachel led the downstream analysis and authored the project's drainage report. Her work ensured that proposed improvements aligned with FAA design standards and local hydrologic constraints. Rachel's thorough analysis contributed to identifying cost-effective stormwater solutions and mitigating downstream impacts, supporting both the technical integrity and environmental sustainability of the project.

Additional Projects

- Meridian Avenue E Complex & Roundabout; Edgewood, WA*
- Candlewood Suites Hotel; SeaTac, WA*
* with previous employer

Proposed Percentage of Time: 20%

Years of Experience: 6

Education

BS, Civil Engineering,
Georgia Institute of
Technology

Registration

Professional Engineer
WA (#24019647)



JULIA LAING, PE | Project Designer

Julia has four years of municipal engineering experience, including preparation of plan sets, cost estimates, and construction management support. Her field inspection experience includes highway paving, utility replacement, and street design, giving her a strong understanding of constructability and quality control. Julia supports roadway and utility projects from design through construction, providing detailed, accurate documentation and coordination with project engineers and clients to ensure efficient delivery and compliance with agency standards.

Relevant Project Experience

DES, Eastern State Hospital Emergency Access Road Design; Medical Lake, WA

Designer for a fast-tracked emergency access road project for DES. Produced detailed construction drawings under an accelerated schedule, supporting timely permitting and delivery of this critical facility improvement.

2nd Avenue SE Reconstruction; Quincy, WA

Supported roadway and stormwater design by compiling existing site and utility data, preparing plan sheets, and assisting with construction submittal reviews and site visits. Contributed to improvements enhancing pedestrian access and corridor safety.

2024 Water System Plan Update; Davenport, WA

Assisted with development of the City's updated Water System Plan through system analysis, data collection, and GIS and EPANET modeling to evaluate distribution capacity and integrate updated standards.

Additional Projects

- Tualatin Valley Water District, Willamette Water Supply Project; Washington County, OR
- Shelton Rail Removal & Interim Trail Project; Shelton, WA

Proposed Percentage of Time: 75%

Years of Experience: 4

Education

BS, Civil Engineering,
University of Wyoming

Registration

Engineer-in-Training

Maven Mapping Solutions | Survey

Maven Mapping Solutions (Maven) is an advanced land surveying company that provides professional and specialized services to federal, state, and municipal organizations, as well as private clients needing design mapping services for infrastructure projects. Their services include field to finish mapping and remote sensing 3D modeling. Maven is registered with the Washington State Office of Minority and Women Business Enterprises (OMWBE) as a Veteran-Owned Small Business (VOSB).

Erik Van Buskirk, PLS

Education: Certificate, Basic Land Survey, United States Marine Corps via Palomar Community College, 1993

Credentials: Professional Land Surveyor, WA, #46325, 2009

Erik is a licensed land surveyor in Washington and Idaho with more than 30 years of surveying experience in the Puget Sound and surrounding areas. He has extensive experience supporting public infrastructure projects, including roadway, utility, transit, parks, and trail systems, and he regularly collaborates with engineers to provide accurate, high-quality survey data that informs design and construction. Erik's technical expertise includes topographic mapping, boundary and right-of-way resolution, utility surveys, legal description and exhibit preparation, 3D laser scanning, construction layout, and base map production derived from various sources. Erik has proven management skills and the technical competence to provide surveys and maps using various techniques to locate, identify, and assess existing systems and utilities.

Relevant Project Experience

175th Street – Stone Avenue to I-5 Improvements, City of Shoreline, WA – As Survey Project Manager, Erik supported early design of multimodal corridor upgrades. He prepared base maps for 3,300 feet of topographic and 4,000 feet of planimetric mapping, locating utilities and stormwater infrastructure, and establishing survey control to guide roadway improvements.

Utilities On-Call – AC Water Main Replacement, City of Bellevue, WA – As Survey Project manager, Erik led topographic field surveys for AC water main replacement, identifying above- and below-ground infrastructure in a dense utility corridor. The project replaces asbestos cement (AC) water mains with new ductile iron water mains.

HWA Geosciences | Geotechnical Engineering (as-needed)



Located in Bothell, Washington, HWA GeoSciences Inc. provides a full range of geotechnical and geoscience solutions to public agencies and engineering/architecture firms, for design and construction of bridges, buildings, parks, solid waste, utilities, transportation, waterfront, wastewater, and storm water facilities. Since 1978, HWA's engineers, geologists, environmental scientists, construction inspectors, and laboratory technicians have been helping to create a better, safer, more sustainable built environment in the Pacific Northwest and abroad. HWA has a strong working relationship with DES which is highlighted by their work providing On-Call Geotechnical Engineering Services to the DES from 2019 to 2022. In addition to their engineering and science services, they operate a full-service materials testing laboratory, accredited by the American Association of State Highway and Transportation Officials (AASHTO) and the US Army Corps of Engineers (USACE).

Relevant Project Experience

On-Call Geotechnical Services: Pierce College Fort Steilacoom – Cascade Building Phase 3, Washington State Department of Enterprise Services, Lakewood, WA

HWA provided geotechnical investigation, design recommendations, and construction-phase testing and inspection to support site grading, foundation design, stormwater infiltration, and pavement construction for the new two-story Cascade Building and associated campus improvements.

On-Call Water Pipeline Services, Seattle Public Utilities, Seattle, WA

HWA is providing ongoing geotechnical design support for Seattle Public Utilities' Water Pipeline Services program, including seismic upgrade evaluations for the Cedar River Pipeline system and feasibility and alignment studies for the Tolt Pipeline realignment in an active landslide area.

Relevant Experience

As we have demonstrated through our ongoing work with DES, you can count on Century West's responsiveness and ability to deliver quality designs that meet project goals and schedule expectations. If selected for this project, you will receive the same high level of communication, coordination, and technical expertise that our team brings to every DES assignment. Our experience includes waterline replacement and rehabilitation projects requiring close coordination with local water districts and adherence to municipal construction standards. Below we have included recent DES projects along with examples of our relevant water system and reservoir experience.

Fircrest School Campus Water System Evaluation Shoreline, WA

DOH is expanding lab facilities at the DSHS Fircrest School campus in Shoreline, Washington. The campus and lab are currently served by an intertie with the NCWD, which requires verification that the planned water system improvements meet NCWD design standards and do not substantially alter system capacity.

Century West performed a water system evaluation and certification to ensure compliance with NCWD requirements through our Civil Engineering On-Call Contract with DES. The project included a detailed review of the existing water system, an assessment of the impact of the proposed water main rerouting, and confirmation that the modifications would not reduce fire flow capacity or overall system performance. Our team coordinated with NCWD to establish baseline system conditions, conducted a hydraulic analysis to compare pre- and post-project capacity, and verified that all improvements aligned with NCWD design standards.

Client: Washington Department of Enterprise Services

Client Reference: Shauna Essman
360.584.2332
shauna.essman@dshs.wa.gov

Project Budget: \$1,890
Completed Costs: \$1,890

Delivery Method: On-call Services – Planning

Water & Fire Main System Expansion Bremerton National Airport, WA

Century West provided the domestic water system design, wet and dry fire line system design, sanitary sewer design, and stormwater design for the second phase of this hangar site development project. The water system consisted of an 8-inch diameter ductile iron water main system looped through the site, and the fire line system consisted of designing wet fire lines and DCVA backflow facilities located at each hangar building and fire department connections and dry fire lines to each building sprinkler riser room.

Client: Port of Bremerton

Client Reference: Cole Barnes, Airport Manager | 360-813-0828 | ColeB@PortofBremerton.org

Project Budget: Design - \$318,861
Completed Costs: On-going

Delivery Method: On-call Engineering Services – Design-Bid-Build

High Ridge Court Intertie | Clackamas County, OR

Century West provided the design for a 2,920-foot, 8-inch ductile iron water main extending from SE Mt. Scott Boulevard to SE 132nd Avenue. This project included the replacement of 410 feet of service lines, new hydrants, and a temporary water service plan. Additionally, 530 feet of the main line was filled with Controlled Low Strength Material and abandoned, while the remaining sections and existing water meter assemblies were removed and replaced. The project also involved full-lane pavement rehabilitation where the trench intersected the travel lane to meet City of Happy Valley requirements, requiring 480 tons of asphalt. Century West collaborated closely with the Sunrise Water Authority and neighboring property owners to minimize disruptions and gain support for the project.

Attributes that match DES project goals:

- ✓ Improved system reliability by replacing an undersized and aging waterline.
- ✓ Designed hydrant upgrades, service replacements, and abandonment work to current utility standards.

Client: Sunrise Water Authority

Client Reference: Tyler Wubbena, Engineering Project Manager, 503.683.7410 twubbena@sunrisewater.com

Project Budget: Design - \$31,472
Completed Costs: Design - \$30,107

Delivery Method: On-call Engineering Services – Design-Bid-Build



SE Ridgecrest Road Pipeline | Clackamas County, OR

Century West provided the design for a 2,920-foot, 8-inch ductile iron water main extending from SE Mt. Scott Boulevard to SE 132nd Avenue. This project included the replacement of 410 feet of service lines, new hydrants, and a temporary water service plan. Additionally, 530 feet of the main line was filled with Controlled Low Strength Material and abandoned, while the remaining sections and existing water meter assemblies were removed and replaced. The project also involved full-lane pavement rehabilitation where the trench intersected the travel lane to meet City of Happy Valley requirements, requiring 480 tons of asphalt. Century West collaborated closely with the Sunrise Water Authority and neighboring property owners to minimize disruptions and gain support for the project.

Attributes that match DES project goals:

- ✓ Replaced aging infrastructure to improve reliability and meet current standards.
- ✓ Coordinated with the water district, city staff, and utilities to streamline design.
- ✓ Used temporary water and phased work to maintain continuous service.
- ✓ Minimized impacts through clear communication.

Client: Sunrise Water Authority

Client Reference: Tyler Wubbena,
Engineering Project Manager, 503.683.7410
twubbena@sunrisewater.com

Project Budget: Design & Construction
Services - \$206,659

Completed Costs: Design & Construction
Services - ongoing

Delivery Method: On-Call Engineering
Services – Design-Bid-Build



Priority 1B Water Improvements | Wilsonville, OR

Century West completed the design and construction support services for two new 8-inch water mains serving the Summit/Canyon Creek and Sundial Apartments. The new mains provide essential system looping to improve fire flow capacity, enhance water quality, and reduce ongoing maintenance associated with dead-end flushing. The project included full restoration of disturbed asphalt pavement and concrete curbs to meet current City construction standards.

During construction, an existing stormline was found in conflict with the proposed water valve installation. Because of the waterline depth, proper shoring was required, but the stormline's unexpected location limited the contractor's ability to install the necessary safety measures. Century West coordinated closely with the contractor and City staff to evaluate alternatives and identify a solution that maintained stormline function and provided an acceptable valve location that supports long-term maintenance needs.

Attributes that match DES project goals:

- ✓ Improved system reliability and fire flow through new looping connections.
- ✓ Coordinated closely with the City and contractor to resolve unforeseen utility conflicts.
- ✓ Minimized construction disruptions through rapid field coordination and decision-making.
- ✓ Restored pavement and concrete facilities to current standards in constrained corridors.

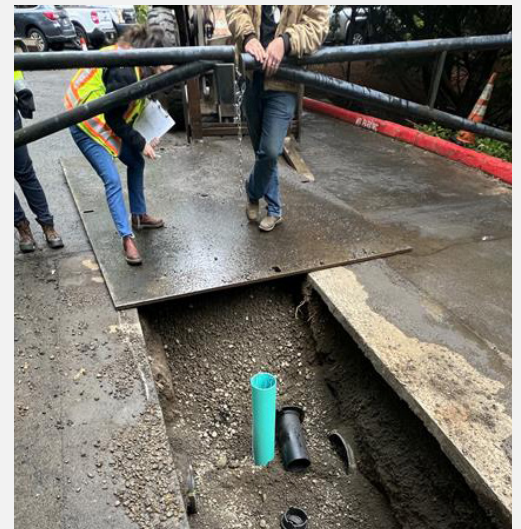
Client: City of Wilsonville

Client Reference: Marissa Rauthause,
Civil Engineer, 503.570.1538 mrauthause@
ci.wilsonville.or.us

Project Budget: Design - \$99,131

Completed Costs: Design - 94,703

Delivery Method: Direct Appoint – Design-
Bid-Build



OR 224/Monroe Street Waterline Upgrades | Milwaukie, OR

Century West provided design and construction phase services for upgrades to the Monroe Street water system, including approximately 250 feet of new water main crossing the intersection of Monroe Street and Oregon Route 224. The project required careful coordination with the Oregon Department of Transportation (ODOT) due to the state highway crossing and the need to meet agency traffic control and construction standards. Century West designed the new alignment utilizing a combination of 12-inch and 14-inch water main and prepared the construction plans, specifications, cost estimates, and traffic control plans.

Construction involved pipe bursting the existing cast iron waterline, installing the new HDPE main, and completing tie-in repairs to ensure a safe and efficient transition to the upgraded system. Century West provided full construction observation, including monitoring implementation of the Traffic Control Plan, verifying utility locations through core drilling, tracking quantities, reviewing invoices, supporting field decision-making, and coordinating directly with City staff throughout the work.

Attributes that match DES project goals:

- ✓ Replaced an aging cast iron main with a new ductile iron waterline to improve system reliability and long-term performance.
- ✓ Coordinated closely with the City and ODOT to integrate waterline work into an active project corridor and minimize construction impacts.
- ✓ Managed utility risks through field verification, potholing, and core-drilling to confirm existing conditions and avoid conflicts.
- ✓ Prepared complete plans, specifications, and cost estimates that met both City and ODOT standards.

Client: City of Milwaukie

Client Reference: Jennifer Garbely, City Engineer, 503.786.7534, garbelyj@milwaukieoregon.gov

Project Budget: Design & CM - \$53,074
Completed Costs: Design & CM - \$53,042

Delivery Method: Direct Appoint – Design-Bid-Build



B Street NE Infrastructure Improvements | Quincy, WA

Century West, as part of a team of consultants, provided design and construction services for this road and utilities improvement project. Our work included the design and implementation of new water mains and services, ensuring seamless integration with the broader roadway reconstruction efforts between Central Avenue North and 6th Avenue Northeast. Century West provided plans, specifications, and estimates (PS&E) for the waterline and stormwater portions of the work in accordance with Washington State Department of Transportation (WSDOT) Standard Specifications.

Attributes that match DES project goals:

- ✓ Designed new water mains and services to replace aging infrastructure, improving system reliability and long-term performance.
- ✓ Provided construction support.

Client: City of Quincy

Client Reference: Ariel Belino, City Engineer 509.787.3523x258 abelino@quincywashington.us

Project Budget: Design & CM - \$154,850
Completed Costs: Design & CM - \$134,061

Delivery Method: Subconsultant



Past Performance

Project Understanding

The purpose of this project is to construct a new water main loop within the DOH-PHL campus including associated appurtenances (i.e. fire hydrants, individual building water meters, fire service connections, backflow prevention facilities, etc.) to replace the existing infrastructure. The project will meet all NCWD and City of Shoreline construction requirements and standards, as well as Shoreline Fire District requirements to improve water distribution reliability, fire flow, and water quality.

The existing NCWD watermain in NE 150th Street in Shoreline, from which this project will connect and loop around the project site, is 8-inch ductile iron (DI). This project involves installing approximately 3,000+/- feet of 8-inch DI water main loop around the site under a developer's extension agreement with NCWD, including adequately sized watermains extended to serve the existing DOH buildings on the site with domestic water, process water, and fire

protection. The two existing Department of Social and Health Services (DSHS) buildings in the northeasterly portion of the site will remain connected to the existing water infrastructure until a future date when their use is re-purposed.

On the northerly end of the campus, there will be extensions with valving from the new water main loop to allow for future expansion of the system into the Fircrest School site. Upon completion of the water system construction, the system will be transferred to the NCWD for ownership and ongoing maintenance and operation.

The goal is to ensure compliance with NCWD construction standards and specifications, and the City's requirements for construction within NE 150th Street right-of-way (ROW), in the most efficient and economical manner, and with the least impact to the DOH operations. Work is to be coordinated with DOH's new Laboratory addition that is currently under construction east of Laboratory A&Q wings.

Key Considerations

Regulatory & Permitting Requirements

- The project will require an approved developer's extension agreement with NCWD, and associated permits and approvals from the City of Shoreline and Shoreline Fire Department to include all necessary ROW permits, roadway restoration requirements, and Fire Marshal requirements. Additionally, DOH approval will be required for the water system extension.
- The project will implement all provisions of the NCWD Developer's Extension agreement and the system will be turned over to NCWD, upon completion, including any applicable easement agreements, for their ownership and ongoing operation and maintenance of the system.
- Utility locates both in ROW and private locates on the DOH campus must be obtained to identify existing infrastructure before construction begins.
- A site topographic and utilities survey will be performed as the basis for the water system design and will be optimized to only involve those areas of the site necessary to support the design and construction phases and to expedite the design schedule and reduce design costs.

Stakeholder Coordination

- Continuous collaboration and coordination with DOH and DSHS will be performed to ensure the design meets the district's expectations.

Engineering & Design Challenges

- Coordination with the current DOH Laboratory building addition east of Lab Building A&Q Wings, which is under construction within the south-central portion of the site.
- Coordination with DOH to review all available records of existing improvements, as well as consider all future campus expansion plans, to determine that the alignment of the new water mains is coordinated with existing utilities and the new lab building project to maintain existing water services to existing buildings until the new water system is ready for connection.
- Adherence to NCWD specifications for material selection and installation techniques.
- Special care and consideration will be taken for the construction processes and procedures used adjacent to existing buildings and within existing access drives to minimize impacts to current site operations
- Coordinate and maintain the function of existing fire apparatus access roadways during construction.
- Consider implications of temporary traffic control on vehicular traffic throughout the project site, and work with DOH and contractor to determine and implement the least impactful routes for traffic and pedestrians through the work area or by use of temporary detours around the work area.

Approach

01 Preliminary Investigations & Planning

- Request utility locates; research DOH records, City ROW, and DOH and adjacent Department of Natural Resources (DNR) and DSHS parcel records, NCWD standards and franchise agreements, City of Shoreline, and Shoreline Fire District standards; and gather all necessary preliminary engineering data.
- Conduct a topographic, utility, boundary, and ROW survey of the project area to map existing utilities and verify existing conditions.
- Identify and assist DOH with potential conflicts or constraints associated with work that needs to occur on adjacent DNR property at the northwest corner of the site, and work that needs to occur on adjacent DSHS property at the southeast portion of the site. Additionally, identify potential conflicts or constraints associated with existing infrastructure and ROW conditions.

02 Engineering Design & Specifications

- Develop preliminary design plans (30% design), specifications, and estimate for the project, ensuring compliance with DOH, NCWD, and City of Shoreline standards.
- Obtain regular and ongoing input from DOH, NCWD, and the City during design development (60% and 90% design) to ensure project needs and standards are being achieved.
- Prepare final construction plans, specifications, and estimate (100% design) and obtain concurrence from DOH, NCWD, and City of Shoreline prior to permitting and bidding.

03 Permitting & Compliance

- Determine City requirements for construction within the ROW.
- Assist with all applicable environmental review/SEPA permitting processes, and ensure all work complies with applicable environmental regulations.
- Assist with obtaining all applicable permits from NCWD, City of Shoreline, Shoreline Fire District, and DOH.

04 Bidding & Contractor Selection

- Prepare the bid package, including plans, specifications, and estimate.

- If desired, available to assist with advertising and managing the bidding process, ensuring fair and competitive selection in accordance with state Public Works bidding practices; address bidder questions and issue addenda as needed; review all contractor bids for completeness, qualifications, responsiveness, and responsibility; provide recommendation to award to DOH; provide presentation to DOH and DES for bid award if needed.

05 Construction Oversight & Coordination (As requested)

- If requested by DES or DOH, provide construction-phase support, including participation in the preconstruction meeting and review of contractor-provided submittals related to water materials, traffic control, and sequencing.
- Provide technical support during construction to verify adherence to the approved plans, specifications, NCWD standards, and City of Shoreline permit conditions.
- Assist with review of temporary traffic control plans to ensure safe pedestrian and vehicle movement during construction.
- Conduct periodic site visits as requested by DOH to observe key construction activities, confirm conformance with the contract documents, and identify any field modifications or unforeseen conditions needing resolution.
- Work closely with DOH and the contractor to address required design adjustments and ensure that changes remain compliant with NCWD and City standards.
- Confirm all pressure testing, disinfection, and water quality testing (including Bac-T) are completed successfully and to the satisfaction of the Health Department, City of Shoreline, and NCWD prior to connecting to the NCWD system and placing the new facilities into service.

06 Final Documentation & Project Closeout (As requested)

- Prepare record drawings (as-builts) and final documentation for district records.
- Verify that the project meets all regulatory and operational requirements.
- Provide final recommendations and acceptance, and ensure seamless system integration.
- Assist DOH and DES with final contract closeout with contractor
- Establish construction maintenance period and assist DOH and DES with maintenance period final inspection and closeout.

General Approach to Delivering Quality Projects

Project Management

Our approach to directing work is to first create a project administration plan that organizes the essential elements of a project and communicate them to the team. The essentials of a successful administration plan include:

- Project Scope & Objectives
- Project Organization
- Stakeholder Identification
- Lines of Communication
- Change Management
- Schedule
- Budget
- Risks/Challenges
- Team Resources
- Quality Control



As the project manager, Trent will be responsible for scoping, contract management, subconsultant coordination, and overall project delivery. His comprehensive awareness of what each team member is responsible for and the basic understanding of the team's overall workload will ensure that critical milestones are achieved for each major phase of the project.

Trent's administration plan will consider the following factors:

- Assigning the most appropriate support staff member for each task—making sure that every person has the right combination of skills and experience for their role.
- Maintaining a consistent team throughout the duration of a project.
- Identifying conflicts, possible challenges, and potential bottlenecks early in the project.
- Developing a schedule with critical milestones that recognizes challenges associated with adverse weather, agency permits and approvals, funding cycles, and other elements.
- Lines of communication between DES, DOH, Century West team members, and stakeholders/regulatory agencies.



Cost Control Measures

Minimizing scope and budget changes in the design phase, without excessive cost overruns, is an indication of how well your consultant communicates with you. The process begins with the preparation of a detailed scope of work. It is critical that we, as the consultant, listen to your concerns and address the goals of the project. In addition, we will ask questions to clarify issues to ensure that we have a clear understanding of what the final product should be and how it should function. Through direct communication, a clear scope of work is developed, from which Century West can provide a realistic and mutually acceptable project design fee.

Century West has a very low incidence of engineering budget changes due to our vetted project development process on a wide variety of municipal projects. When changes are unavoidable, our team will take a direct and proactive approach by notifying you immediately so that a reasonable solution is developed in a timely manner. In this way, budget issues are resolved without impacting overall delivery schedules.

When it comes to construction projects, Century West has a low rate of construction change orders on projects. We attribute this success to our QA/QC program, careful and independent internal review, and our experience on a wide range of projects. In short, we are able to anticipate potential construction issues early to avoid costly change orders and project overruns.

Dealing with Project Challenges & Solutions

Century West recognizes that there are a number of challenges faced by DOH, such as obtaining the most value for the limited DOH capital funds, working through regulatory and partner agencies, unforeseen underground conditions, public perception issues, and addressing traffic concerns.

Our engineering team puts a concerted effort into analyzing risks and developing strong contract documents (plans, specifications, and bid items) to alleviate construction challenges. Whether the challenge occurs during the design stage or the construction stage, Century West can draw from a deep background of engineering knowledge when proposing solutions to these issues.

Regardless of the project stage or the project challenge, one of the key elements that our team uses to address these situations is swift, effective coordination. While project challenges are not always the most pleasant to deal with, our project managers have built a reputation on addressing challenges quickly as they recognize that challenges left unchecked can oftentimes begin to affect budget and schedule.

Our construction inspection field staff have years of experience and use cutting edge communication technology and construction management equipment. Each field staff uses their remotely connectible iPad which can relay field conditions, work progress, and documentation in near real-time conditions. This ability to connect what is happening in the field with our multiple office locations allows us to provide our clients with prompt solutions if/as issues arise and allows us to leverage our vast experience no matter where an individual staff member is located.

Quality Assurance & Quality Control Review

Century West has developed a rigorous quality assurance program that we use daily. Through implementing this quality assurance program on City projects, we can balance quality, consistency, and responsiveness in our service and deliverables. We incorporate QA/QC review into all deliverables and CAD drawings, design calculations, cost estimates, etc. Rawley Voorhies, PE, as our Principal-in-Charge and QA/QC Manager, will be responsible for reviewing projects at key project milestones. Rawley's vast range of project experience will allow Century West to provide thorough reviews of project deliverables to ensure that we uphold a high standard of quality, accuracy, and presentation.

When change orders during construction are unavoidable, we will support DES and DOH staff by providing the information they need to effectively negotiate with the contractor. We recognize our duty is to represent your best interest in the negotiations. Using our experience and bid tabulation library we can quickly determine the reasonableness of cost for contractor change order proposals to ensure you are not paying excessive costs when change orders are required.

We also understand through our experience with previous DES contracts that if the Maximum Allowable Construction Cost (MACC) for a project is more than \$1M, a written Quality Assurance Program (QAP) is required by the Master Contract. We can provide a QAP for any project we complete to be in accordance with this requirement.

Quality Control Plan



**Understand
Scope and
Deliverables**

We work with our clients to establish a mutual understanding of project objectives and communicate these to the entire project team so that expectations are well-defined and understood. Every team member will receive a schedule of deliverables and quality control requirements.



**Tailor the
QA/QC Plan**

Each project is assigned a discipline-appropriate Quality Manager who will ensure that both Century West and client standards are met for each deliverable. The Quality Manager works with the Project Manager to create a project-specific Quality Plan that factors in the appropriate level of complexity and number of disciplines needed.



**QA/QC at All
Levels**

From drafters to principals, quality control measures are built into each role and classification within our multi-disciplinary team. As deliverables work their way to the client, they are reviewed for quality by every person who touches them.



**Meet Client
Standards**

We require all team members to understand client procedures from technical drawings to quality assurance checklists. We will address every comment provided by the client during QA/QC reviews as well as comments from other stakeholder groups or reviewing agencies.

Diverse Business Inclusion Strategies

Century West will complete the majority of work under this contract in-house. We have included [Maven Mapping](#), a Veteran-Owned business, on our team to provide surveying services and we may also engage HWA, a Minority-Owned (MBE) and certified Disadvantaged Business Enterprise (DBE), for geotechnical services, as needed. Their participation strengthens our team and supports the State's aspirational goals for minority-, women-, veteran-, and small-business inclusion.

Century West is registered with the Washington Office of Minority and Women's Business Enterprises (OMWBE) as a Small Business Enterprise (SBE; #S000026280). As a small business, we understand the importance of creating meaningful opportunities for disadvantaged, minority, women-owned, and emerging small business (D/M/W/ESB) firms. Our approach focuses on partnerships with firms that bring strong communication, reliable performance, and shared values.

To support diverse business inclusion on this and future projects, Century West employs the following strategies:

- Identifying certified firms whose capabilities align with the project's scope and maintaining relationships with MBE, WBE, DBE, VOB, and SBE firms.
- Coordinating business development meetings with new and emerging DBE firms—such as our recent collaborations with Maven—to understand capabilities and identify teaming opportunities.
- Following up with DBE firms met at APWA Oregon and Washington chapter conferences and similar industry events.
- Maintaining a teaming partner form on our website that enables diverse firms to submit qualifications for consideration on future work.
- Remaining up to date on U.S. Department of Transportation (USDOT) revisions to FSBE and DBE guidelines and the corresponding changes OMWBE will implement in Washington State.

If selected for this contract, Century West will also promote the use of certified diverse firms during future construction phases by ensuring the project is advertised through OMWBE to reach D/M/W/ESB construction contractors.

