

Qualifications for the Department of Social and Health Services

Project No. 2020-403: WSH — West Campus Water System Improvements and

Project No. 2023-425: WSH — Water System Assessment and Improvements

> Name of Firm: RH2 Engineering

Date of Submission: February 2, 2024

RH2 Managing Office

22722 29th Drive SE Suite 210 Bothell, WA 98021

> P: 425.951.5400 www.rh2.com



Dear Selection Committee,

Thank you for the opportunity to present our qualifications to assist the Washington State Department of Social and Health Services (DSHS) with the following projects: Project No. 2020-403: WSH – West Campus Water System Improvements and Project No. 2023-425: WSH – Water System Assessment and Improvements. With 46 years of providing similar services for Washington State clients, our long history with the Lakewood Water District, our specific experience with DSHS in evaluating the Western State Hospital's (WSH) water system, and our local team of diverse in-house experts, we believe RH2 Engineering is exceptionally qualified to assist with this work.

RH2 works closely with a variety of clients to provide a full suite of engineering services related to water system planning and design, including transmission main infrastructure design, hydraulic modeling, and improvement planning. RH2 recently assisted DSHS with the WSH Water Distribution Disinfection and Inventory and Condition Assessment project. This involved building and calibrating a hydraulic model of the WSH water system and performing physical flow tests. I served as project lead and coordinated with DSHS, WSH, the adjacent water district, the local fire authority, and the Washington State Department of Health throughout the project. We look forward to continuing our relationship with DSHS and working in coordination with one of our oldest clients, Lakewood Water District.

As the Planning Project Manager and Principal-in-Charge, I have dedicated more than two decades to analyzing water system models and performing water system planning in the Pacific Northwest. I will be working alongside Edwin Halim, PE, who will be the Design Project Manager. He will utilize his 26 years of experience to oversee the design elements of the project and will provide QA/QC support. We will be supported by Dylan Bright, EIT, as our planning lead, who is currently working on the DSHS WSH hydraulic modeling and has supported numerous other water system modeling and planning projects. Our design lead, Max Freimund, PE, has a strong background collaborating with numerous water districts and engaging in projects within dynamic urban environments, where navigating stakeholder concerns and infrastructure conflicts must be carefully managed. Our other in-house areas of expertise include licensed civil, structural, electrical, chemical, and mechanical engineers, allowing us to seamlessly coordinate across disciplines.

This RH2 team will be supported by four subconsultant firms who excel in providing clients with specialized services we may need for this project. Sitts & Hill have extensive experience working with both Western State Hospital and Lakewood Water District and will lead the survey and easements tasks. Aspect Consulting, a leading water rights consulting firm in Washington State, will provide water rights support. Hydrevo will perform leak detection evaluations. We have successful partnered with Drayton Archaeology in the past and they will support the project team by guiding compliance with the WSH Cultural Resource Management Plan and support historic preservation on the campus.

We appreciate the opportunity to submit our qualifications and look forward to hearing from you about this work. If you have any questions or need additional information, please contact me.

Sincerely and on behalf of our entire team,

Auto KCampbell

Michele Campbell PE

Planning Project Manager and Principal-in-Charge 425.951.5394 | mcampbell@rh2.com

South Edwin Halim PF

Design Project Manager 425.951.5332 | ehalim@rh2.com



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: RH2 Engineering, Inc.										
Point of Contact Name & Title: Michele Campbell, PE, Planning Project Manager and Principal-in-Charge										
Email: mcampbell@rh2.com		Telephone: 425.951.5394								
Address: 22722 29 th Drive SE, Suite 210										
City: Bothell	State	: WA	Zip: 98021							

Executive Summary

Our executive summary below is organized based on the SOQ Evaluation form on page 6 of the DSHS RFQ. We are confident that our team would provide exceptional value to your project.

Qualifications of Key Personnel

Familiarity with DSHS: Michele Campbell brings invaluable experience working with DSHS through the disinfection improvements and infrastructure assessment projects. Aspect and Sitts & Hill also have specific experience with DSHS through their work on parking areas, Building 28, and a Boundary Line Adjustment (Sitts & Hill,) and the Farm Well water right change application (Aspect).

Background Knowledge on Project: Our unmatched background on this project will enable our team to get started quickly, which will be essential to meeting the requested schedule.

Experience with Lakewood Water District: Through RH2's decades of experience working with Lakewood Water District, our planning and design staff have exceptional knowledge of the District's design standards. This will be advantageous when collaborating for potential solutions and developing the details of the design elements.

Relevant Experience

Diverse In-House Services: With a comprehensive range of in-house services, our team can skillfully and efficiently adapt and respond to the project's unique needs.

Successful Experience on Similar Projects: Our team specializes in evaluating potential scenarios, conducting thorough water system planning analyses, and offering insights through alternatives and needs assessments. This will help DSHS be confident in finding the preferred solutions.

Experience Coordinating with Reviewing Agencies: Our strong relationships with the Washington State Departments of Health and Ecology underscore our commitment to navigating regulatory landscapes seamlessly. With our well-established processes, we can commence work immediately, aligning with your schedule to meet project milestones effectively.

Past Performance

Proven Approach: Michele and Edwin have a proven approach to managing successful projects through efficient in-house collaboration and utilizing detailed task tracking spreadsheets and other tools for complex projects. Michele also has experience with similar assumptions studies and can help DSHS navigate the process of transferring the water system.

Diverse Business Inclusion Strategies

Commitment to supporting Diverse Business owned firms: Our team includes Drayton Archaeology, which is a certified Washington Veteran Owned Business (Certification # WDVADAAR15) and will assist with cultural resource management in alignment with the Western State Hospital Cultural Resource Management Plan.



Qualifications of Key Personnel



Team Organization

Our team has worked side-by-side with each other on many similar planning and design projects, bringing familiarity and efficiency to our team. RH2's goal in staffing any project is to provide a dedicated team from conceptual planning through design and construction. We have honed our ability to rely on each other to leverage our areas of expertise and we know how to utilize the appropriate specialty at the right phase of the project to efficiently progress the design and implement quality assurance and quality control.

Michele will continue to lead the planning, water rights, and modeling tasks that are already underway. Edwin will step in early in this contract to manage the initial design-related tasks that are required by July 2024 and will carry momentum from those tasks through the design and construction phases. Michele and Edwin will coordinate closely as the project

transitions through the many phases needed to successfully transition the water system to the District.

The following illustrates the organization of the remainder of our team, including the roles of the key personnel who are available to assist with this project. Also noted in the chart is an estimate of the percentage of time that each individual or subconsultant is anticipated to contribute to the project. In addition to our key staff, RH2 has a wide array of talented engineers and other supporting staff to complete the variety of design and planning efforts that may be needed for this project. It is estimated that these additional supporting staff will contribute the remaining 25 percent of this project effort. If the need arises, our team has additional lead personnel who are available to add breadth of expertise and redundant support to help meet DSHS' schedule.

Department of Enterprise Services and Department of Social and Health Services

	Manager	ment Team					
Michele Campbell Planning Project Manager and Princ 3% Assigned	PE ipal-in-Charge	Edwin Halim PE Design Project Manager 5% Assigned					
	Tean	n Leads					
Dylan Bright EIT Planning Lead 15% Assigned		М	AX Freimund Design Lead 25% Assigned	PE			
Ir	-House Spe	cialty Resource	S				
Barney Santiago PE Water Quality Engineer 3% Assigned	Andy Dunn Water Rig 3% A	nn LG, LHG, CWRESteve Nelson LG, LHG, LEGRights ExpertHydrogeologist and Well Review% Assigned3% Assigned					
Stuart Greenberge Condition Assessment E 2% Assigned	r PE xpert	Alex Fussell PE Condition Assessment Engineer 6% Assigned					
	Subcor	nsultants					
Aspect Consulting Si Water Rights Support Survey	tts & Hill and Easements	Drayton Archa Cultural Resource Ma 3% Assigne	Hydrevo Leak Detection				

| RHZ Engineering

Team Resume Summaries

We have included brief summaries for our core team members in the remainder of this section, and more information on how our team's expertise relates to this project can be found in the Relevant Experience matrix on <u>page 7</u>.



Michele Campbell PE

Planning Project Manager and Principal

Michele has been a dynamic contributor to RH2 since 1999, and is committed to providing creative and cost-effective strategies for complex engineering challenges. Highly experienced in hydraulic modeling, engineering planning, and design, she functions as a key member of our leadership team. Her background includes various municipal engineering planning efforts, including 50 water system plans, as well as general sewer plans, emergency management plans, and detailed, project-specific plans. She is currently overseeing a hydraulic analysis and planning project for DSHS's WSH water system. Michele effectively bridges the gap between engineering, planning, and design to guide her clients in making financially responsible investments towards their aging infrastructure.

Representative Project Experience

- Western State Hospital Disinfection Improvements Design, Washington State Department of Social and Health Services
- Wholesale Transmission Main Extension, Lakewood Water District
- Utility Assumption Study, City of Issaquah
- Pump Condition and Energy Efficiency Evaluation, Lakewood Water District
- Water System Plan Update, City of Kent
- Leak Row and Wilder Elementary School Water Main Improvements, Woodinville Water District
- Hydraulic Model Development and Calibration, Woodinville Water District

Education

BS Civil and Environmental Engineering University of Washington 2000

Licenses

Professional Engineer 41414 (WA), 86637PE (OR)

Experience

25 years of experience; 25 years at RH2

Design Project Manager



Edwin Halim PE

Edwin is a mechanical engineer with 26 years of experience designing water facilities. He specializes in the design of transmission mains, reservoirs, booster pump stations, and water treatment facilities. In addition, Edwin has extensive experience managing and inspecting projects during construction. Edwin and Michele have worked together for more than two decades and are highly skilled at collaborating with diverse teams and challenging projects. Edwin also has extensive experience designing booster pump stations that require complex controls for serving closed zones. All of the closed zone booster pump stations he has designed required multiple control and relief valves.

Representative Project Experience

- Wholesale Transmission Main Extension, Lakewood Water District
- Wholesale Supply, Lakewood Water District
- Highlands 435 Pressure Zone Reservoirs, Water Mains, and Emergency Generator, City of Renton
- 455 Zone Expansion, Lakewood Water District
- Leak Row and Wilder Elementary School Water Main Improvements, Woodinville Water District
- Westside Water Main Replacement, City of Kelso
- Water System Interties Upgrades, City of Renton
- East Ridge Elementary School Water Main Improvements, Woodinville Water District
- Water Main Improvements, City of Bremerton

Education

MS Mechanical Engineering University of Washington 1998

BS Mechanical Engineering University of Washington 1997

Licenses

Professional Engineer 38889 (WA), 94954PE (OR)

Experience

26 years of experience; 26 years at RH2





Dylan Bright EIT

Design Lead

In Dylan's tenure at RH2, he has worked on a variety of water and sewer systems, and he specializes in hydraulic modeling and planning projects. His experience also includes the WSH system. He has experience utilizing a variety of modeling software, including WaterCAD, SewerCAD, InfoWater Pro, and PCSWMM. As a part of RH2's Planning and Analysis group, he supports several on-call utility clients and has developed experience with many types of projects, including water system seismic resilience planning, booster pump station design, and developing comprehensive water and sewer system plans. Dylan's technical abilities and knowledge provide our team with quality and valuable deliverables that can be produced in a timely and budget-efficient manner.

Representative Project Experience

- Western State Hospital Disinfection Improvements Design, Washington State Department of Social and Health Services
- Wholesale Transmission Main Extension, Lakewood Water District
- Water System Plan Update, City of Kent
- Water and Sewer Hydraulic Modeling, City of Kirkland
- Water Model Update, City of Kirkland
- On-Call Water Modeling, City of Port Angeles
- Water System Plan Update, City of Woodland
- Hydraulic Modeling Services Contract, Tacoma Water
- Water Main Replacement Donovan Avenue Phase 2, City of Bellingham

Education

BS Civil Engineering Washington State University 2019

Licenses

Engineer-in-Training 37114 (WA)

Experience 5 years of experience; 5 years at RH2



Max Freimund PE

Working across multiple disciplines for municipal clients for 10 years, Max is an experienced, well-rounded engineer. His depth of experience provides him with an excellent perspective on how each phase of a project is related to the other, and has given him the necessary communication skills needed to accurately address issues and respond to our clients' concerns. Max has contributed and/or overseen multiple projects during the design and construction phases. His work, which includes water transmission and distribution main design and improvements, reservoir design, and water treatment plant improvements, gives him the opportunity to interface with our other in-house experts in electrical, mechanical, and structural engineering when developing a design. With this experience, he has been able to incorporate the interests of various parties to finish his projects on time and within budget.

Representative Project Experience

- On-Call District Engineering, Lakewood Water District
- Spanaway Transmission Main Extension, Lakewood Water District
- Wholesale Transmission Main Extension, Lakewood Water District
- Leak Row and Wilder Elementary School Water Main Improvements, Woodinville Water District
- East Ridge Elementary School Water Main Improvements, Woodinville Water District
- Water Main Replacement Program, Northshore Utility District
- Water System Improvements, City of Yelm
- Water System Plan Update, City of Bonney Lake
- NE 140th ST Repair and Replacement Project, Woodinville Water District
- Hydraulic and Sewer Modeling, City of Kirkland

Education

MS Civil Engineering Washington State University 2013

BS Civil Engineering Washington State University 2012

Licenses

Professional Engineer 54888 (WA)

Experience

10 years of experience; 10 years at RH2





Barney Santiago PE

Water Quality Engineer

Water Rights Expert

Barney is a potable water treatment expert and project engineer. His experience with all aspects of a treatment project allows him to creatively approach treatment problems in a holistic way. He is adept at bench scale testing, and conducting and operating pilot plants that are used to size treatment equipment and determine chemical doses. Although the facilities themselves can be large and complex, the 3D to scale drawings allow our clients to easily see how their facilities will look and operate. Barney has also assisted plant operators with troubleshooting problems with their treatment process. Most recently, Barney assisted DSHS with the design of the chlorination systems for the East Campus and Farm Wells and obtaining approval of the project from DOH. Barney will provide support for any treatment-related concerns such as PFAS contamination in the East Campus Well.



Andy Dunn LG, LHG

Andy is a hydrogeologist and water rights expert. He assists our clients with water rights analyses, aquifer testing and analysis, and hydrologic/hydrogeologic testing and field measurements. Prior to joining RH2, Andy served as a Section Manager and a hydrogeologist/permit writer for the Washington State Department of Ecology's Water Resources Program in the Northwest Regional Office. His background and excellent working relationship with Ecology's staff gives him unique insight, allowing him to advise clients on the pathways to success that will be viewed most favorably by Ecology and stakeholders. Andy is currently assisting DSHS with the Farm Well water right change application and will continue to support water rights actions as needed.



Steve Nelson LG, LHG, LEG

Hydrogeologist and Well Review

Condition Assessment Expert

Condition Assessment Engineer

Steve is a licensed hydrogeologist and engineering geologist with technical and project management experience involving infrastructure siting investigations, geologic hazards, foundation studies, dewatering, watershed planning, hydrology, and infiltration studies. He works with our design teams to contribute his knowledge and expertise of the soil, rock, groundwater, and watershed conditions that will affect the design, construction, and operation of water infrastructure. Steve participates in analysis and design decisions involving siting, geohazards, constructability, resilience, and integration of infrastructure with the environment to minimize risk and cost and maximize reliability and performance of water and sewer systems. Steve will assist the project team with hydrogeological tasks that may be needed if the wells are required to be relocated.



Stuart Greenberger PE

With 44 years of experience, Stuart is considered an industry expert in corrosion control, utility protection and relocation, and rehabilitation and maintenance of a variety of water and wastewater infrastructure, marine structures, and industrial process equipment. His experience includes the maintenance of dams, deep wells, conduits, supply and distribution mains, pump stations, reservoirs, and tanks. He is responsible for material specifications, design and installation details, surveys and inspections, rehabilitation work, cathodic protection and stray current electrolysis mitigation, coating and linings, facility and equipment maintenance, and related water quality and environmental issues. Stuart will lead the condition assessment of the existing WSH water infrastructure.



Alex Fussell PE

Since joining RH2 11 years ago, Alex has designed numerous water and sewer system projects for our municipal clients. Her experience includes concrete and steel tank construction and rehabilitation, pump selection, gravity and pressurized piping design, site planning, booster pump station design, and sewer lift station design. Alex also specializes in corrosion protection for infrastructure, including cathodic protection design, coatings and linings, and material selection. Alex will support the condition assessment of the existing WSH water infrastructure.

Qualifications of Key Personnel

Sitts & Hill



Gary Letzring PLS

Survey and Easements

Gary has more than 40 years of land surveying experience with an extensive knowledge of the AutoCAD drafting platform, including Civil 3D. He has extensive experience in boundary, topographic, cadastral, construction and right-of-way surveys throughout Washington State. Sitts & Hill recently completed surveys and civil designs of the parking areas, Building 28, and a boundary line adjustment for WHS. Additionally, they performed numerous surveys for the Lakewood Water District, including boundary line adjustments, rights-of-way and topographic surveys for design, lot combinations and monument destruction permits, and survey construction staking. Sitts & Hill also has a strong working relationship with RH2, having worked together for many years now.

Aspect Consulting

Jill Van Hulle CWRE

Water Rights Support

Jill brings a wealth of experience from employment with the Water Resources Program at Ecology and ongoing work in the water resource field. Jill specializes in complicated water rights and water supply projects, and has a reputation as an innovative problem solver. She is an expert in Washington's water laws, implementation of cost reimbursement projects for water right applications, evaluation of existing water rights (beneficial use analysis and water right portfolio assessments), developing mitigation plans, and strategic water use management. She has a strong relationship and working knowledge with State regulators (Ecology, Health, and Fish and Wildlife) and an excellent understanding of tribal water law. Jill will continue her current DSHS work on the Farm Well water right change application and can support other water right changes as needed.

Drayton Archaeology

Ryan Schmidt PHD

Cultural Resource Management

Drayton offers complete archaeological and cultural resource management services. They specialize in compliance management to meet the regulatory requirements of the various state, federal, and tribal laws and regulations to protect the finite resources associated with our shared human heritage. They have extensive experience working with WSDOT and federally funded projects. Ryan is Drayton's project manager. He is responsible for daily scheduling, task management, report writing and editing, as well as preparing cultural resource assessment proposals and estimating costs for clients ranging from property owners to state and government agencies. Drayton will carry out the requirements of the Western State Hospital Cultural Resource Management Plan throughout the duration of the project.

Drayton is certified in Washington State as a Veteran Owned Business (certification number WDVADAAR15).

Hydrevo, LLC

Rob Meston

Rob specializes in water system leak detection and training programs on distribution and transmission systems. Rob has more than 33 years of acoustic leak detection experience and has completed multiple leak detection training classes across the US. Rob has clients ranging from small water systems to systems with thousands of miles of distribution and transmission mains. Every water system is different, and as such, he tailors Hydrevo's programs to meet the specific needs, requirements, and required scope to create or enhance any existing or new water system leak detection program. Hydrevo began providing leak detection surveys in 1990. Since then, they have surveyed thousands of water systems of every shape, size, and type. They have surveyed systems across the US, as well as many international locations.

Leak Detection

Relevant Experience



Team Technical Qualifications

The table below summarizes our technical knowledge and qualifications as they relate to the key elements that will be required for this project. Although we have only included the primary project team, RH2 has staff ranging across nine offices in three states to offer project support, as needed.

		Key Personnel, Roles, and Level of Expertise												
Key Elements Listed in the RFQ	Highest Level of Expertise	Michele Campbell, Planning PM and Principal	Edwin Halim, Design PM	Max Freimund, Design Lead	Dylan Bright, Planning Lead	Barney Santiago, Water Quality Engineer	Andy Dunn, Water Rights	Steve Nelson, Well Review and Hydrogeologist	Alex Fussell, Condition Assessment	Stuart Greenberger, Condition Assessment	Aspect	Sitts & Hill	Hydrevo	Drayton
Knowledge of Existing WSH Water System	*	*	0	0	*	*	*		0		*	*		
Knowledge of Lakewood Water District Standards	*	*	\bigstar	\bigstar	0	*	\bigstar	*	*		0	\bigstar		
Water System Plans, Project Reports, and Department of Health Coordination	*	*	*	*	*	*	*	*			0			
Wellhead Protection Programs	*	*	0	0		*	*	*	0		\bigstar			
Operations and Maintenance Programs	*	*	*			*	0	0		*	0			
Cross Connection Control Programs	*	*	0	0			0	0	0	*				
Water System Hydraulic Modeling and Calibration	*	*	0		*									
Water Rights Evaluation	\star		0		0	0	\star			0	\bigstar			
Transmission and Distribution Piping Assessment	*				0				*	*			0	
Survey and Determination of Easements	\star	0	\star	\star	0	0						×		
Leak Detection Evaluation	*	0	0						0	0			*	
System Valuation and Cost Estimating	\star	*	\bigstar	\star		\star	\star	\star	\star	*				
CIP Planning and Future Improvements Phasing	*	*	*			*	*	*	*	*	*			
Cost-Benefit Analyses	*	*	\bigstar			*	\star	\star		\star	\bigstar			
Water Main and Water System Design	*		\bigstar	\bigstar	0			*	*	*				
Replacement Well Studies and Design (if needed)	*		\bigstar	0		\star	\star	\star		0	\bigstar			
PFAS Assessment and Treatment Design (if needed)	*	0	0	0		\bigstar					\bigstar			
Cultural Resource Management	*		0	0						0				*

★ Expert

Significant Experience

O Limited Experience

Water System Planning Experience

Water system planning, modeling, and design are major components of RH2's consulting practice. Our team has worked on numerous water systems, and our breadth and depth of experience in Washington State makes us uniquely qualified and knowledgeable. The matrix below summarizes some of our experience related to the key planning elements of this project.

				Key I	Key Elements								
Project Name, Client, and Year	Water System Plans, Project Reports, and DOH Coordination	Wellhead Protection Program	Operations and Maintenance Program	Cross Connection Control Program	Hydraulic Modeling and Calibration	Water Rights Evaluation	Transmission and Distribution Piping Assessment	System Valuation and Cost Estimating	Cost-Benefit Analyses				
WSP, City of Kirkland (1998, 2007, 2015, 2022)	•	•	•	•	•	•	•	•	•				
Combined Utility Comprehensive Plans, City of Snoqualmie (2023)	•	•	•	•	•	•		•					
WSP, City of Kent (2019)	•	•	•	•	•	•	•	•	•				
WSP Update, City of Marysville (2017, 2024)	•	•	•	•	•	•		•	•				
Water Supply Operational Strategy, City of Marysville (2020)	•				•	•	•	•	•				
Water Model Update and Calibration, Tacoma Water (2018)					•								
Hydraulic Model Development and Calibration, Woodinville WD (2018)		•	•	•	•	•		•					
WSP Update, City of Stahwood (2002, 2006, 2009, 2010, 2015, 2024)													
On Call Hydraulic Modeling, Tacoma Water (2022, 2024)		-	-			-		-					
WSP Lindata City of Volm (2014, 2022)													
WSP Undate Town of Fatonville (2005, 2013, 2021)	•	-	•	•	•	•		•	•				
WSP Update City of Kelso (2021)	•		•	•	•	•		•					
WSP Update and Transmission Main Analyses, City of Snohomish (2012, 2017, 2020)	٠		•	٠	•	•	٠	٠	٠				
WSP Update, City of Woodland (2023)	•	•	•	٠	٠	٠		٠					
Wholesale Supply System Planning, Lakewood Water District (2020)	•				•	٠	•	•	•				
Water Model Update and Calibration, City of Port Angeles (2020)					•		•						
WSP Update, City of Bonney Lake (1997, 2007, 2009, 2016, 2020)	•	٠	•	•	•	٠		•					
WSP, City of Sultan (2012, 2019)	•		•	•	•	٠	•	•					
WSP, City of Arlington (2004, 2012, 2016, 2018)	•	٠	•	•	•	•		•					
WSP Update, Riviera Community Club (1998, 2006, 2014, 2018)	•	٠	•	•	•	٠		٠					
WSP, Crystal Mountain, Inc. (2017)	•		•	•	•	•	•	•	•				
WSP Update, City of Fife (2009, 2013, 2017)	•		•	•	•	٠		•					
Risk and Resilience Assessment and Emergency Response Plan, City of Marysville	•						•						
Distribution System Seismic Resilience Plan, City of Kirkland (2022)	•				•		•	•					
Risk and Resilience Assessment and Emergency Response Plan, City of Snoqualmie	•						•						
Reclaimed Water System Plan, City of Snoqualmie (2024)	•		•	•	•			•					
457 Zone Conversion, City of Bellingham (2018)	•				•		•	•					

Water Main Design Experience

Water main assessment and design projects have been a cornerstone of RH2's work for more than four decades. We understand the specific challenges that arise with these types of projects, including locating and coordinating with existing utilities, evaluating existing facilities, cathodic protection, addressing neighborhood concerns, and maintaining service during construction. The following matrix demonstrates how some of our recent water main improvement projects relate directly to the key elements of your project. On the following pages you will find descriptions with project details.

		k	s				
Project Name, Client, and Year	Water Main Design/ Replacement	Transmission and Distribution Piping Assessment	Survey and Determination of Easements	Plans, Specifications, and Cost Estimates	Environmental Permitting	Corrosion Control	Services During Construction
Highlands 435 Zone Reservoir and Off-Site Water Main Improvements,	•		•	•	•		
Water Main Repair and Replacement Program, Northshore Utility District*	•	•	•	•	•	•	•
Spring Lake Water Main Replacement, Cedar River Water and Sewer District*	٠		•	•			
Francis Folsom Street Water Main Replacement, Lakewood Water District*	•		•	•			
121st Street SW Water Main Replacement, Lakewood Water District*	•		•	•			
Pump Stations No. 8 and No. 9 and Water Mains, Highline Water District (2022)	•		٠	•	٠	٠	٠
200th Street Water Main Improvements, City of Lynnwood (2021)	•		•	•			٠
SR 169 Water Main Extension, City of Black Diamond (2021)	•		٠	•	٠		٠
20th Street East Water Main Replacement, City of Fife (2021)	•		•	•	٠		
Leak Row and Wilder Elementary School Water Main Projects, Woodinville Water District (2020)	•	•	•	•	•		•
Donovan Avenue Water Main Phases 1 and 2, City of Bellingham (2020)	•	•	•	•	٠		•
Oak Harbor Water Main Replacement Design, City of Oak Harbor (2020)	•		•	•		٠	•
Water Main Corrosion Evaluation, City of Kelso (2019)		•				٠	
54-Inch Transmission Main Relocation, Seattle Public Utilities (2019)	•		•			•	
Salmon Springs Water Main Replacement, Phase 2, City of Puyallup (2019)	•		•	•	٠		•
Wholesale Transmission Main Extension, Lakewood Water District (2018)	•	•	•	•	•	•	•
Oyster Bay Avenue North 24-Inch Transmission, City of Bremerton (2018)	•		•	•	•		•
Silcox Street Water Main, Lakewood Water District (2018)	•		•	•			
South Kelso Drive Water Main Extension, City of Kelso (2017)	•		•		٠		٠
Thorne Lane Water Main Replacement, Lakewood Water District (2017)	•		٠				•
112th Street and "A" Street Intersection Utility Relocation, Parkland Light and Water Company (2016)	•		•	•			•
Leaky Water Main, City of Bonney Lake (2015)	•	•	•	•	•		•
PZ2 Water System Improvements, City of Stanwood (2014)	•		•				
Ridge Road Water Main Replacement, Water District 19 (2013)	٠		٠	٠	٠		٠
Evergreen Point Water Main Replacement, City of Bonney Lake (2013)	•		•	•			٠

*In progress



Wholesale Transmission Main Extension

Lakewood Water District | COMPLETED 2018

Key Elements: Water Main Design, DOH Coordination, Hydraulic Modeling, Phased Approach Plan, Piping Assessment, Easement Acquisition, Subsurface Exploration, Permitting Assistance, Geotechnical Exploration, and Services During Bidding and Construction

Relevant Project Team Members: Michele Campbell, PE, Edwin Halim, PE, Max Freimund, PE, Alex Fussell, PE, Stuart Greenberger, Barney Santiago, PE, and Steve Nelson, LG, LHG, LEG

RH2 originally designed 24,000 LF of 20-inch ductile iron pipe through Joint Base Lewis-McChord, Lakewood, and Pierce County, along a largely dry and flat alignment in 2008 to bring water from Lakewood to another water purveyor in Pierce County. In 2017, RH2 was then hired to design the Wholesale Transmission Main Extension, which added an additional 36,000 LF of 20-inch ductile iron pipe to the end of the existing pipe, to bring water to two additional water purveyors in Pierce County, with a future connection designed for a third. The project included two interties to the water systems of the additional water purveyors.

The project design included extensive geotechnical and environmental assessment to determine the optimal route for the pipeline alignment to minimize permitting timeframes and construction costs. RH2 also provided coordination regarding easement acquisition to facilitate water main construction through private property to reduce the total distance of water main required to meet the project goals. RH2 was closely involved in the coordination between a number of wholesale customers, including providing the design for a parallel distribution pipeline to convey water to a neighboring water purveyor. The overall project was designed and constructed on an accelerated schedule to meet the District's timeframe for sales to customers.

Client Contact: Randy Black, District General Manager, 253.588.4423 Design Budget: Original: \$2.6M | Final: \$2.6M



Leak Row and Wilder Elementary School Water Main Projects

Woodinville Water District | COMPLETED 2020

Key Elements: Water Main Design, Water Services, Permitting Assistance, Stakeholder Coordination, Cost Estimates, and Services During Construction

Relevant Project Team Members: Edwin Halim, PE, Michele Campbell, PE, Max Freimund, PE, Dylan Bright, EIT, Alex Fussell, PE

The Woodinville Water District is upgrading and upsizing their existing infrastructure to reduce leaks within their system and ensure that schools served by the District are being supplied with the state-mandated fire flow. The mandates have changed and the fire flow requirements for schools are higher than they have been historically, which has resulted in the existing infrastructure being undersized to meet the requirements. The District hired RH2 to upgrade their existing system by replacing all of the water services and existing blow off on a stretch of road and cul-de-sac along 127th Place, south of NE 140th Street, which accounted for a significant portion of the reports of leaks in their system. This portion of the project was completed fall of 2019.

The water main upsizing included installing approximately 3,800 LF of water main along NE 133rd Street between 218th Avenue East and Wilder Elementary School, as well as around the elementary school property. The project budget for the initial project were higher than anticipated during the planning process. Value engineering was performed during the design to reduce the cost of the project, while still accomplishing the project goals. During design, RH2 coordinated with several divisions of King County for various permits, as well as the Lake Washington School District to ensure that the project had a minimal impact to the school operations, while still restoring the impacted area to better than existing conditions. This portion of the project was completed fall of 2020.

Client Contact: Christian Hoffman, PE, District Engineer, 425.487.4142

Design Budget: Original: \$298,000 | Final: \$298,000



Water System Master Plan and System Optimization

City of Marysville | COMPLETED 2017

Key Elements: Water Provider Transfer, Condition Assessment, DOH Coordination, Hydraulic Modeling, Cost Benefit Analysis, Cost Estimates, Phased Approach Plan, Water Production Cost Analysis, Water System Planning

Relevant Project Team Members: Michele Campbell, PE, Edwin Halim, PE, Andy Dunn, LG, LHG, CWRE, Barney Santiago, PE, and Steve Nelson, LG, LHG, LEG

The City of Marysville's pressure zone boundaries and their interconnectivity has been regularly modified over the years as the system and customers have evolved. A recent assumption of a large portion of Snohomish County PUD's water system necessitated a detailed evaluation of the pressure zones as part of the water system plan project. RH2 performed hydraulic analyses to optimize the overall hydraulic operation of the system, maximize turnover in the City's reservoirs and reduce operating expenses. To accomplish this, our team completed pump efficiency testing, energy evaluations, and a detailed water resource analysis, and used these results to refine the operational strategy. We also performed hydraulic transients in the system. Our analyses determined that modifying system operations and increasing utilization of Marysville's own sources would result in the City having to purchase less water from the City of Everett, which would bring significant cost savings.

Our recommendations included pump and control valve staging and pressure reducing valve adjustments, which, once implemented, is estimated to save nearly half a million dollars annually. Since the optimization analyses were performed in conjunction with Marysville's WSP update effort, our team easily incorporated the recommendations and results of the analyses into the WSP CIP to establish appropriate funding for the improvements.

Client Contact: Adam Benton, Project Engineer, 360.363.8283

Design Budget: Original: \$441,000 | Final: \$441,000



Water System Plan

City of Kent | COMPLETED 2019

Key Elements: DOH Coordination, Hydraulic Modeling, Cost Estimates, Phased Approach Plan, Water System Planning, Model Calibration, Seismic Vulnerability Analysis, Treatment Plant Analysis, Water Rights Review

Relevant Project Team Members: Michele Campbell, PE, Dylan Bright EIT, Andy Dunn LG, LHG, CWRE, Barney Santiago PE, Steve Nelson LG, LHG, LEG

The City of Kent selected RH2 to prepare the 2019 WSP to help plan for future population and economic growth. For each of the City's operating areas and the City as a whole, RH2 performed assessments to identify capacity and regulatory deficiencies in areas of water supply, including water rights, water quality, and water treatment, as well as storage, transmission, operations and maintenance (O&M), and fire flow. RH2 also prepared a seismic vulnerability analysis of the water system. The analyses were coordinated with the Regional Fire Authority to inform first responders to the vulnerabilities of the system in the event of a seismic event and to establish integrated planning for the risk. RH2 evaluated seismically vulnerable locations to determine the risk and resilience of the water system to pipeline failures at each. One particular challenge was with the City's West Hill operating area, a particularly vulnerable area. The West Hill water system lacks redundancy and is supplied by a single transmission main that crosses the Green River on a seismically critical bridge. RH2 developed a detailed improvement plan that is currently being implemented which includes the addition of a new 6 MG reservoir, new booster pump station (BPS), and transmission main crossing at a more reliable location.

Client Contact: Sean Bauer, Water and Sewer Utility Manager, 253.856.5610

Design Budget: Original: \$384,000 | Final: \$384,000



Additional Relevant Experience

Extensive Experience with Reviewing Agencies

RH2's substantial experience preparing water system planning documentation and assisting municipal Washington State clients with water system infrastructure projects gives us unparalleled insight to navigating through DOH's and the Washington State Department of Ecology's (Ecology) rigorous regulations and approval processes.

Department of Health

Through our long history of working on WSPs, our team has developed relationships with DOH staff and regularly receive recognition and praise for our WSPs. Michele Campbell has extensive experience coordinating project approvals directly with DOH Northwest Regional Office planning and engineering staff. This also allows us to stay informed of future regulations, and how these will be implemented and will affect our clients.

Our approach for compliance with DOH regulations and permitting requirements is simple:

- Meet early with DOH to discuss specific needs/goals.
- Focus on and address areas of concern for DOH.
- Coordinate with stakeholders early in the process to promote plan consistency.

Department of Ecology

When it comes to meeting Ecology's regulations, RH2 has in-house professionals who have intimate knowledge of these standards. Our key team member, Andy Dunn, is a hydrogeologist and water rights expert, and was formerly a regional manager for Ecology. His background and excellent working relationship with Ecology's staff gives him unique insight, allowing him to advise clients on the pathways to success that will be viewed most favorably by Ecology and stakeholders.



Past Performance and References



Our proposed project managers, Michele Campbell and Edwin Halim, are skilled at organizing team resources to complete a variety of project needs. Edwin will be your main point of contact for the initial design-related tasks that are required by July 2024, which include the Transmission and Distribution Piping Assessment, Leak Detection Evaluation, and budget level cost estimates. Edwin will coordinate these tasks with Michele and the other RH2 team members, as well as the subconsultants. Edwin has led dozens of water system design projects and has worked with Michele for more than two decades. Similarly, Michele has experience with many utility planning projects including WSH, and has worked extensively on water planning projects throughout her career.

Michele's and Edwin's longevity at RH2 is another strong factor of their ability to lead, as they have worked with all of our proposed staff for many years on similar projects and understand when coordination needs to happen for the various components of water system planning and design.

Project Management Approach

We believe that our approach to project management is what makes RH2 so successful and efficient in delivering projects. We are deeply dedicated to assisting our clients by meeting their needs and goals, and establishing and growing long-lasting working relationships. We have found that everything else falls into place when this is at the forefront of our approach. Because RH2 understands the importance of putting the client first, our project managers make a point of including you every step of the way and are committed to meeting your expectations.



Michele and Edwin have collaborated on projects at RH2 for more than two decades. Their longevity and expertise will be valuable for this effort.

Phase 1 Initiation and Conception	Phase 2 Planning	Phase 3 Launch and Execution	Phase 4 Monitoring and Control	Phase 5 Project Closeout
 Meet with stakeholders Define project goals Identify project challenges 	 Develop scope and budget Identify deadlines Develop schedule Determine team roles Communication plan Risk identification and management plan 	 Budget management Resource planning Team meetings Risk management Communications facilitation Project status reports 	 Track project goals Review quality of deliverables Monitor team performance 	 Project review and analysis Client feedback Project closeout

At the heart of RH2's project management approach is our dedication to assisting clients with meeting their needs and goals and establishing and growing long-lasting working relationships. Our Project Management Professionals (PMPs) have developed and tailored this 5-phase approach to meet our clients' needs based on our actual project experience. This management process is then applied to each project and specifically tailored to the individual project based on the size and needs of the project and client.

Past Performance and References



Similar Example of System Assessment and Service Transfer

Portions of the City of Issaquah's corporate limits were within the boundaries of the City of Bellevue and the Sammamish Plateau Water and Sewer District's (District) utility service areas. Issaguah desired to serve all residents within the city limits from Issaguah-owned water and sewer systems to provide a uniform level of service and allow customers efficient access to policymakers. RH2 assisted Issaguah with the development of an assumption study to identify a plan for the transfer of utility service, which included coordination with Bellevue, the District, and other stakeholders, hydraulic modeling, CIP planning, impact mitigation, improvement phasing, and valuation of assets. An evaluation was also conducted to identify the administrative impacts of the service transfer on service policies, water rights, and revenues and expenses of the three utilities.

RH2's experience with other utility assumptions, water system planning, utility policies, and regulatory requirements benefited the scoping of the Issaquah assumption study. Drawing from this past experience, we developed a scope of work and budget that anticipated the various tasks required by the regulatory agencies for the utilities to implement the water service transfer. Key to the system assessment was careful consideration of the unique needs of each utility, which allowed us to successfully complete the project within the proposed budget. This water system planning and design effort will be approached as a collaboration, and not an exclusive experience for DSHS staff and RH2. Our team includes you, your staff, and key stakeholders, such as DOH, Lakewood Water District, Pierce County Fire and Rescue, as well as your team that is building the New Forensic Hospital. The fact that we have successfully developed many WSPs and water system design projects as a cooperative partnership proves that this approach is effective in developing highly useful, implementable planning documents and plan sets that our clients are proud to have helped develop.

This collaboration also provides a smooth and expeditious review process by regulatory agencies. Michele and Edwin have facilitated this process many times during their careers, coordinating in the early planning and pre-design stages of a project, and smoothly facilitating the handoff of the project and management duties into the design and construction phases.

Managing Scope, Maintaining Schedule, and Controlling Costs

Michele and Edwin will work with you to develop a detailed scope of work, schedule, and budget to clearly articulate RH2's role and tasks for the project. These items will be refined during contract development, and will then serve as a guide for carrying out the project. Michele, Edwin, and our team will frequently refer to these documents to keep the project on track.

The schedule and scope of work will also be used to track project status. For DOH submittals such as Project Reports and Water System Plans, each individual chapter and appendix are listed and tracked in our WSP Project Tracking worksheet and are updated regularly. The form traces the development of each WSP element, noting the primary assigned staff, whether it has been drafted, when the quality control review was performed, the transmittal date to the client, and the date that review comments were addressed in the chapter. **This tool provides a quick and effective snapshot for our clients and the project manager to determine project status.**

RH2's project management software provides our project managers with up-to-the-minute status reports on project progress and budgets. It utilizes earned value management to quickly provide our project managers with a realistic view of schedule, budget, and scope of work remaining to be completed. From this data, we can easily see any variances from the planned approach to assess project performance. Michele and Edwin use these reports, along with project tracking tools such as the one on the next page, to maintain the schedule and to communicate project progress with our clients. We have found that regularly scheduled monthly check-in meetings with our clients provide active time for collaborating on project tasks and managing the budget and schedule. As the project transitions to pre-design services, a project schedule will be compiled in Microsoft Project to articulate the critical path schedule from concept to construction of the proposed improvements. The schedule will reflect the dependencies of various tasks, decisions, and external factors such as water rights decisions, DOH mandates, funding limitations, etc. The Project schedule will be updated as the design is refined and the interrelationship between each project element is more clearly detailed in the design plans and specifications.

Quality Assurance/Quality Control Process

Each project is unique in size and complexity, and every client has their own standards and preferences for balancing efficiency with the highest quality deliverables. While RH2 typically follows the process shown in the graphic to the right, we adjust our methods to meet the goals of each project and client, as needed. For instance, some reviews may be best served with simply marking comments in a PDF review as "checked" or replying to revisions in tracked changes to acknowledge they have been reviewed and addressed. For more complex reviews, we may utilize advanced tracking spreadsheets to monitor and log each comment, revision, who is responsible, the date of finalization, and other information that may be requested by our clients.



	Reviewed Date Final City Date Final Ready for					- Mi	che	ele has	tound t	hat uti	ilizing													
					by	Proofed and	Sent	Receive	edits	Sent	Final and	Ready for	Print in	Include on										
	Title	Date Due	Prepared B	le l	Michele?	Formatted?	to City	from C	complete?	to City	PDF?	Production	? Color?	CD Only?		Notes		WSP-specific tracking documents						
Chapters									1			1					Vv~							
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1	Introduction	3/10/2018	Zach	Х	х	х	03/09/18	03/29/	x	03/30/18	Х	х					- III a	аке	s it eas	sy to up	uate ne	er cliei	ILS	
2	Water System Description	9/30/2017	City	Х	х	х		09/30/	x	03/30/18	Х	х	Х		print in color					1				
3	Land Use and Population	7/31/2017	City	Х	х	х		07/31/	X	03/30/18	Х	х	Х		print in color		on on	the	e proie	ect statu	s and s	see wr	iat	
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5	Policies and Design Criteria	10/31/2017	City	Х	Х	Х		10/31/	х	03/30/18	Х	х						tivit	ties are	o comin	σ nevt			
6	Water Source and Quality	11/30/2017	Andy/Barney	Х	Х	Х	11/29/17	12/19/	X	03/30/18	X	х					uc	civi	ucs un	c comm	Succes	•		
7	Water System Analysis	11/30/2017	Ryan/Zach	X	Х	Х	11/29/17	12/19/	X	03/30/18	Х	X												
8	Operations and Maintenance	11/30/2017	City	X	Х	Х		11/30/	X	03/30/18	Х	X												
9	Water System Improvements	1/31/2018	Ryan/Zach	Х	X	X	01/30/18	02/19/	X	03/30/18	Х	X												
10	Financial Analysis	3/10/2018	City	Х	X	X			X	.02/20/19	Y	×			linclude Mater	Study Einancial Anney	odiv20						-	
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A	Water Facilities Inventory (WFI) Form	3/15/2018	City	X	X			03/15/18	s x	+									by	Proofed and	Sent	Received	edits	Sent
В	Retail Water Service Area Agreements	3/15/2018	City	X	X			03/15/18	s x	+											bene	1.000.000	cuito	bene
C	Agreements with Other Systems	3/15/2018	Zach	X	X		01/15/18	02/04/18	s x	+			Tr	tle		Date Due	Prepared B	y	Michele?	Formatted?	to City	from City	complete?	to City
6	Contingency Plan	3/15/2018	City	X	<u>.</u>			03/15/18	5 X	Chap	ters													
6	SEPA Chacklist	2/15/2018	City	Ŷ	Ŷ		01/15/10	02/04/18	2		Ev	ocutivo Su	mman			3/10/2018	Zach	X	Y	Y	03/00/18	03/20/18	Y	03/30/18
G	Water Use Efficiency Program	2/15/2018	Zach	X	Ŷ		01/15/18	02/04/19	Y Y	+	L.A	ecutive Sul	minary			5/10/2010	2001	~	~	~	03/03/10	03/23/10	^	03/30/10
н	Cross-Connection Control Program	3/15/2018	Zach	X	Ŷ		01/15/18	02/04/18	X	- 1	. In	roduction				3/10/2018	Zach	Х	Х	Х	03/09/18	03/29/18	Х	03/30/18
	Water System Construction Standards	3/15/2018	City	X	x			03/15/18	1 X		w	ater Syster	n Descri	ption		9/30/2017	City	X	х	х		09/30/17	х	03/30/18
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K	Water Quality Monitoring Plan	3/15/2016	Barney/Zach	Х	х						La	nu ose and	i Fopula			//31/201/	City	<u>^</u>	^	^		07/31/17	^	03/30/18
L	Watershed Control Plan	3/15/2016	Zach/Andy	х						4	4 Water Demands			9/30/2017	Ryan/Zach	х	х	х	09/29/17	10/19/17	х	03/30/18		
M	Wellhead Protection Program	3/15/2016	Zach/Andy	Х							5 Policies and Design Criteria		10/31/2017	City	Х	Х	Х		10/31/17	Х	03/30/18			
N	Consumer Confidence Report	3/15/2016	City	Х	х						6 Water Source and Quality		11/20/2017	Andu/Parnov	v	v	v	11/20/17	12/10/17	v	02/20/19			
0	IDSE Report	3/15/2016	City	Х	х						VV	water source and Quality		11/30/2017	Alluy/Balley	<u>^</u>	^	^	11/29/17	12/19/17	^	03/30/18		
Р	Hydraulic Model Node Diagram	3/15/2016	Zach	Х	х						W	ater Syster	n Analy	515		11/30/2017	Ryan/Zach	х	х	Х	11/29/17	12/19/17	Х	03/30/18
Q	DOH Notices	3/15/2016	Zach	Х	х				1	1 8	3 01	perations a	nd Mair	ntenance		11/30/2017	City	х	х	х		11/30/17	Х	03/30/18
R	Water Ordinances	3/15/2016	City	X	X) \\/	ator Syster	n Imnro	vements		1/31/2018	Ryan/Zach	×	Y	Y	01/20/18	02/10/18	Y	03/30/18
S	Drought Response Plan	3/16/2016	City	Х								ater Syster		venients		1/31/2010	Nyany Zach	<u>^</u>	~	~	01/30/10	02/15/10	~	03/30/10
1	Agency Review Comments	3/15/2016	N/A							1 1	U Fii	nancial Ana	alysis			3/10/2018	City	Х	Х	Х		03/10/18	X	03/30/18
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2-1	Existing Water System	11/1/2015	Kevin/Zach	X	~	×	~	~	~	÷ · · · /	14/	ator Eacilit	ios Invo	ntory (WEI)	Form	3/15/2018	City	X	Y			03/15/18	Y	03/30/18
2.2	Service Area and Adjacent Systems	11/1/2015	Kevin/Zach	Ŷ	^	^	^	^	<u>^</u>			aterraciiit		11019 (111)	TUIII	5/15/2010	City	<u>^</u>	~			03/13/10	~	03/30/10
2.1	Land Like	11/1/2015	Kevin/Zach	Y							8 Re	tail Water	Service	Area Agree	ements	3/15/2018	City	х	Х			03/15/18	X	03/30/18
3.2	Critical Areas	11/1/2015	Zach	Ŷ							: As	reements	with Ot	her System	s	3/15/2018	Zach	X	х		01/15/18	02/04/18	х	03/30/18
7.1	Available Fire Flow	1/1/2016	Zach	X						- T	0 0	ntingency	Plan			3/15/2018	City	×	Y			03/15/18	Y	03/30/18
7-2	Existing Pressure	1/1/2016	Zach	X								intiligency	Tian			5/15/2010	City	^ 	~			03/13/10	~	03/30/10
8-1	Org Chart			Х	х	х	Х	Х	х		. Co	insistency S	Stateme	nt Checklis	sts	3/15/2018	Zach	х	Х		01/15/18	02/04/18	X	03/30/18
9-1a	Proposed Water System Improvements	2/1/2016	Zach	X							SE	PA Checkli	st			3/15/2018	City	х	х			03/15/18	х	03/30/18
9-1b	Proposed Water System Improvements	2/1/2016	Zach	Х						(: \A/	ator Liso Ef	ficiency	Program		3/15/2018	Zach	×	Y		01/15/18	02/04/18	Y	03/30/18
9-2	Proposed Improvements Hydraulic Profile	•	Zach	Х	х	х	Х	Х	х			atel 03e Li	neiency	Tiogram		5/15/2010	2801	^ 	~		01/15/10	02/04/10	~	03/30/10
App L 28	3 Watershed Control Figures		Others	Х	х	х	Х	Х	х	T F	i Cr	oss-Conne	ction Co	ntrol Progr	ram	3/15/2018	Zach	х	х		01/15/18	02/04/18	х	03/30/18
App M F	1 Wellhead Protection Areas		Michele	Х							W	ater Syster	n Const	ruction Sta	ndards	3/15/2018	City	Х	Х			03/15/18	Х	03/30/18
App P-A	A Hydraulic Model Node Diagram	3/15/2016	Zach	Х							_	,												
App P-B	B Hydraulic Model Node Diagram	3/15/2016	Zach	х							Х		Х		Pocket for full	l size only								
Addition	al Items																							
	Cover and Spine	3/15/2016	Kristi	Х							Х		х											
	Title Page		Michele	Х							Х		х											
	DOH WSP Submittal Form	3/15/2016	Zach	1		1	L	-	1	1	-	1	1		l									
	DOH WSP Checklist	3/15/2016	Zach																					
	Transmittal Letter to DOH	3/15/2016	Zach						-															
⊨—	Transmittal Letter to County	3/15/2016	Zach	-								+	+											

Diverse Business Inclusion Strategies



RH2 is committed to supporting Diverse Business enterprises by creating opportunities for these businesses within our community.

While RH2 is not a Diverse Business, we understand the importance of creating additional opportunities for these enterprises. As such, our team member Drayton Archaeology is a Veteran Owned Business and we have many successful examples of utilizing disadvantaged business enterprises (DBE) in Washington. The table at the bottom of the page highlights some of these partnerships.

In addition to maintaining our own in-house list of M/W/ESB and Veteran or Service Member Owned firms that we have established relationships with, RH2 also utilizes

state and local agency online databases to find M/W/ESB and Veteran or Service Member Owned firms who provide the services we're looking for. After vetting their experience, we reach out and create new connections with these firms who then stay on our list of potential partnering companies for that area of expertise. There are also many instances of RH2 supporting firms that would fall under the category of M/W/ ESB, but do not yet have their certification. This has proved to be beneficial for the firms as well as RH2, as we have broadened our network of companies we enjoy working with and help spread project dollars throughout our community.

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Certification	RH2 Project(s)	Contract \$ Spent										
ESB	(1) North Transmission Line Intertie, City of Beaverton	(1) \$30,170										
ACDBE, DBE, WBE	(1) Waterline Replacement Projects, City of Oregon City; (2) Hazelwood Drive Sewer Replacement, City of Oregon City	(1) \$300 (2) \$740										
DBE, MBE	(1) Cedar Hills, Jenkins Walker Water Main, City of Beaverton	(1) \$6,400										
DBE, WBE	(1) TAP Emergency Intertie, City of Ashland	(1) \$3,500										
SBE	(1) Smugglers Slough Habitat Restoration, Lummi Indian Nation	(1) \$16,640										
DBE, MWBE	(1) McMicken Heights Groundwater Treatment Plant, Highline Water District; (2) On-Call Services, Grant County PUD; (3) WRIA 40A Watershed Planning Improvements, Chelan County Natural Resources; (4) Issaquah Highlands, City of Issaquah; (5) Misty Cove Lift Station Replacement, City of Renton	 \$800 \$3,100 \$1,000 \$7,700 \$800 										
DBE, WBE	(1) Bayshore Drive, Kitsap County (2) Highlands 435 Reservoir, City of Renton	(1) \$13,900 (2) \$2,600										
SBE	 Bellefield Pump Station Capacity Improvements, City of Bellevue, (2) Tank Analyses, Lakewood Water District, Seismic Design, Lakewood Water District (4) Tank No. 2 Improvements, Spanaway Water Company 	 (1) \$950 (2) \$6,600 (3) \$25,500 (4) \$5,600 										
WBE	(1) The Loop Sewer Main, Valley View Sewer District	(1) \$23,850										
WBE	(1) Cable Street, Ranch House, and Afternoon Beach Sewer Pump Station Improvements, Lake Whatcom Water and Sewer District; (2) H Street Downtown Revitalization Project, City of Blaine	(1) \$4,000 (2) \$9,600										
SBE, SEDBE	(1) Water Transmission Line Design, City of Blaine	(1) \$7,200										
DBE, MBE	(1) On-Call Services, Grant County PUD; (2) CWM and CRL Water System Analyses, Waste Management	(1) \$2,100 (2) \$8,200										
	Certification ESB ACDBE, DBE, WBE DBE, MBE DBE, WBE SBE DBE, WBE SBE SBE WBE WBE WBE SBE, SEDBE DBE, MBE	CertificationRH2 Project(s)ESB(1) North Transmission Line Intertie, City of BeavertonACDBE, DBE,(1) Waterline Replacement Projects, City of Oregon City; (2)WBE(1) Cedar Hills, Jenkins Walker Water Main, City of BeavertonDBE, MBE(1) Cedar Hills, Jenkins Walker Water Main, City of BeavertonDBE, WBE(1) TAP Emergency Intertie, City of AshlandSBE(1) Smugglers Slough Habitat Restoration, Lummi Indian NationDBE, MWBE(1) McMicken Heights Groundwater Treatment Plant, HighlineWater District; (2) On-Call Services, Grant County PUD; (3) WRIA40A Watershed Planning Improvements, Chelan County NaturalResources; (4) Issaquah Highlands, City of Issaquah; (5) MistyCove Lift Station Replacement, City of RentonDBE, WBE(1) Bellefield Pump Station Capacity Improvements, City of Bellevue, (2) Tank Analyses, Lakewood Water District, (3) Seismic Design, Lakewood Water OmpanyWBE(1) Cable Street, Ranch House, and Afternoon Beach Sewer Pump Station Improvements, Lake Whatcom Water and Sewer District; (2) H Street Downtown Revitalization Project, City of BlaineSBE, SEDBE(1) Water Transmission Line Design, City of Blaine DBE, MBEDBE, MBE(1) On-Call Services, Grant County PUD; (2) CWM and CRL Water System Analyses, Waste Management										

M/W/ESB Partnerships

*While we only list 5 projects here, RH2 has partnered with HWA on more than 20 projects.



ARCHITECT-ENGINEER QUALIFICATIONS

c. NAME AND TITLE

Michele Campbell, PE (Project Manager and Principal-in-Charge)

1. SOLICITATION NUMBER (If any)

		F	PART II - C	ENERAL		IFIC		 S					
	(1)	f a firm has branch o	ffices, con	nplete for e	each s	pecific	branci	- h office seeking	work.)				
2a. FIRM (o RH2 Eng	<i>r Branch Office</i>) NA gineering, Inc.	ME						3. YEAR ESTABLISHED 4. UNIQUE ENTITY IDENTIFIER 1978 ∎ 098560162					
2b. STREET	r							5	. OWNERSH	IP			
22722 2	9th Drive SE,	Suite 210						a. TYPE					
2c. CITY				2d. STA	TE 2e.	ZIP CO	DE	C - Corporatio	n				
Bothell				VVA	+ 98	021		b. SMALL BUSINES	S STATUS				
6a. POINT (E AND TITLE						541330 Engine	eering Servic				
Michele	Campbell, PE	, Project Manager al	nd Principa	al-In-Charg	je			7. NAME OF FIRM (II BIOCK 28 IS 8 BI	anch Olice)			
6b TELEPH		le		ORESS				-					
425.951.5	5394		mcampbel	l@rh2.com									
		8a. FORMER FIRM	NAME(S) (If	any)			8b. YEA	AR ESTABLISHED	Bc. UNIQUE EN	NTITY IDENTIFIER			
			() (
	9 EM						10. PF	ROFILE OF FIRM	S EXPERIEN	CE			
	9. Livii				AI	ND AN	NUAL A	VERAGE REVE	ST 5 YEARS				
a. Function	b	. Discipline	c. Number o	f Employees	a. Pro	file		b. Experience		c. Revenue Index Number			
Code		•	(1) FIRM	(2) BRANCH	Cod			· ·	(see below)				
02	Administrativ	/e	23	12	W0	3 V	Vater S	upply, I reatmer	8				
10	Chemical Er	igineer	2	2	P04		'ipeline	S Chrante	/=				
14			05	21			lignway	<u>3</u> ∓					
14		ngineer	3	2	S02		storm M	Jater Handling	aimeni				
21	Electrical En	ngineer	10	2		2 1	Itilities		4 4				
24	Environmen	tal Scientist	4	4	C18	$\frac{1}{3}$	Cost Est	timating: Cost F	naineerina	3			
30	Geologist		4	2	E12	2 E		mental Remedia	tion	2			
42	Mechanical	Engineer	14	4	R03	- <u>-</u> 3 F	Railroad	2					
57	Structural Er	ngineer	2	1	00	1 C	Office B	uildings; Industr	2				
		0			S05	5 S	Soils & (Geologic Studie	s	2+			
					H1 ⁻	1 -	lousing			2+			
					P06	β P	lanning	g (Site, Installati	on, Project	2+			
					W0	2 V	Vater R	esources; Grou	nd Water	2+			
					101	lr	ndustria	al Buildings		1=			
					R04	1 F	Recreat	ion Facilities		10			
							batety E		Dealer -1	<u>1</u> ∎			
							<u>iannin</u>	<u>q (Community, F</u>	(kegional)				
							ducatio	nal Facilities		1			
	Other Employ	ees			S1		nviron	mental Planning		1			
		Total			106	i L	rigation	n: Drainage		1m			
11 AN	NUAL AVERAG												
SEI	RVICES REVE	NUES OF FIRM		PROF	ESSIC	NAL S	SERVICI	ES REVENUE IN		२			
	FOR LAST :	3 YEARS	1. Les	s than \$100	0,000			6. \$2 millio	n to less than	\$5 million			
(Insert re	evenue index nu	mber shown at right)		0,000 to le	ss than	\$250,	000	7. \$5 million	n to less than	\$10 million			
a. Federa	al Work	2 ≞	3. \$25 4 ¢50		ss inan ss than	ֆԵՍՍ, \$1 mi	llion	ο. \$10 Milli ο \$25 milli	on to less that	ı ş∠ə million \$50 million			
b. Non-Fe	ederal Work	9 	5. \$1	million to le	ss than	\$2 mi	illion	10. \$50 millio	on or areater				
c. Total V	Nork	9+						-	9.04.01				
			12. AUTH	HORIZED R		SENT/	ATIVE acts						
a. SIGNATU	RE			<u></u> io a d					b. DATE				
	-moul	Kandell							2/1/2024				