



September 4, 2025

BCC Agenda Date/Item: _____

Board of County Commissioners
Acting as the governing body of Water Environment Services
Clackamas County

**Approval of a Personal Services Contract with Water Systems Consulting for on-call engineering services. Contract Value is \$1,000,000 for 5 years. Funding is through Water Environment Services Construction Fund and Operating Fund.
No County General Funds are involved.**

Previous Board Action/Review	N/A		
Performance Clackamas	1. This project supports the WES Strategic Plan Goal to strategically plan and execute capital projects to meet the growth, reliability, and regulatory needs of our service area at the lowest-life cycle cost. 2. This project supports the County's Strategic Priorities of Strong Infrastructure, Vibrant Economy, and Safe, Secure and Livable Communities.		
Counsel Review	Yes	Procurement Review	Yes
Contact Person	Jeff Stallard	Contact Phone	503-742-4694

EXECUTIVE SUMMARY: WES frequently encounters unanticipated projects and urgent engineering needs that arise outside of the annual planning and capital improvement process. These can include emergency repair design, regulatory compliance support, specialty technical analysis, and smaller capital or operational projects.

Under the current procurement process, engaging engineering services for these smaller or urgent projects often requires repetitive contracting efforts, which can be time-consuming and delay project delivery. Establishing on-call contracts will allow WES to streamline procurement, improve efficiency, and ensure timely response to our needs.

We conducted a competitive solicitation process to identify qualified engineering firms capable of providing services in four categories, Wastewater Conveyance and Treatment Engineering, Water Resources Engineering, Engineering Construction Services, and Wastewater Process Engineering and Operational Support. Work in these categories will include a wide range of services, including planning, design, permitting, and construction support. Multiple firms were selected to ensure adequate availability,

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specialized expertise, and competitive pricing.

The on-call contracts do not obligate funding at the time of award. Task orders issued under these contracts will be funded through approved operating or capital project budgets.

RECOMMENDATION: Staff recommends that the Board of County Commissioners of Clackamas County, acting as the governing body of Water Environment Services, approve Contract #1289 with Water Systems Consulting, Inc. for engineering on-call services.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Greg Geist", with a stylized flourish extending to the right.

Greg Geist
Director, WES

Attachment: Contract #1289 Water Systems Consulting, Inc.



**WATER ENVIRONMENT SERVICES
PERSONAL SERVICES CONTRACT
Contract # 0000001289**

This Personal Services Contract (this "Contract") is entered into between Water Systems Consulting, Inc. ("Contractor"), and Water Environment Services, an intergovernmental entity formed pursuant to ORS Chapter 190 ("District").

ARTICLE I.

- 1. Effective Date and Duration.** This Contract shall become effective upon signature of both parties. Unless earlier terminated or extended, this Contract shall expire on **June 30, 2030**.
- 2. Scope of Work.** Contractor shall provide On-Call Engineering Services ("Work"), further described in **Exhibit A**. The Contractor is approved to provide services for the following classes of Work:

- ☒ 1) Wastewater Conveyance and Treatment Engineering
- ☐ 2) Water Resources Engineering
- ☐ 3) Engineering Construction Services
- ☐ 4) Wastewater Process Engineering and Operational Support

This Contract is on an "on-call" or "as-needed basis" for Work.

When the District wishes Contractor to perform the Work, the District will submit an official Clackamas District Task Order form (found at: <https://www.clackamas.us/finance/terms.html>) detailing the scope of Work, the entity on whose behalf the Work will be performed, and the total compensation, pursuant to the fee schedule set forth in this Contract. Contractor may not perform Work until the County Task Order form has been executed by the parties. In the event a project authorized under the County Task Order extends beyond the expiration of this Contract, the County Task Order shall remain in effect under the terms of this Contract until the completion or expiration of the authorized task.

No task order shall modify or amend the terms and conditions of this Contract.

- 3. Consideration.** The District agrees to pay Contractor, from available and authorized funds, a sum not to exceed **one million dollars (\$1,000,000.00)** for accomplishing the Work required by this Contract. Because this is an on-call or as-needed contract, and the exact amount of Work needed, if any, is unknown, nothing herein shall be construed as a promise to pay Contractor the full \$1,000,000.00 authorized herein. Consideration rates are on a time and materials basis in accordance with the rates and costs specified in Exhibit A. If any interim payments to Contractor are made, such payments shall be made only in accordance with the schedule and requirements in Exhibit A.
- 4. Invoices and Payments.** Unless otherwise specified, Contractor shall submit monthly invoices for Work performed. Invoices shall describe all Work performed with particularity, by whom it was performed, and shall itemize and explain all expenses for which reimbursement is claimed. The invoices shall include the total amount billed to date by Contractor prior to the current invoice. If Contractor fails to present invoices within sixty (60) calendar days after the end of the month in which the services were rendered, Contractor waives any rights to present such invoice thereafter and to receive payment therefor. Payments shall be made in accordance with ORS 293.462 to Contractor following the District's review and approval of invoices submitted by Contractor. Contractor shall not submit invoices for, and the District will not be obligated to pay, any amount in excess of the maximum compensation amount set forth above. If this maximum compensation amount is increased by amendment of this Contract, the amendment must be fully effective before Contractor performs Work subject to the amendment.

Invoices shall reference the above Contract Number and be submitted to: Wes-Payables@clackamas.us

5. Travel and Other Expense. Authorized: ☐ Yes ☒ No

If travel expense reimbursement is authorized in this Contract, such expense shall only be reimbursed at the rates in the Clackamas County Contractor Travel Reimbursement Policy, hereby incorporated by reference and found at: <https://www.clackamas.us/finance/terms.html>. Travel expense reimbursement is not in excess of the not to exceed consideration.

6. Contract Documents. This Contract consists of the following documents, which are listed in descending order of precedence and are attached and incorporated by reference, this Contract, Exhibit A, and Exhibit B. Unless explicitly agreed to by the parties in this Contract, any additional terms and conditions that may be contained in Exhibit A are void.

7. Contractor and District Contacts.

Contractor	District
Administrator: Scott Duren Phone: 503-419-6339 ext 400 Email: sduren@wsc-inc.com	Administrator: TDB Phone: Email:

Payment information will be reported to the Internal Revenue Service (“IRS”) under the name and taxpayer ID number submitted. (See I.R.S. 1099 for additional instructions regarding taxpayer ID numbers.) Information not matching IRS records will subject Contractor payments to backup withholding.

ARTICLE II.

- 1. Access to Records.** Contractor shall maintain books, records, documents, and other evidence, in accordance with generally accepted accounting procedures and practices, sufficient to reflect properly all costs of whatever nature claimed to have been incurred and anticipated to be incurred in the performance of this Contract. District and their duly authorized representatives shall have access to the books, documents, papers, and records of Contractor, which are directly pertinent to this Contract for the purpose of making audit, examination, excerpts, and transcripts. Contractor shall maintain such books and records for a minimum of six (6) years, or such longer period as may be required by applicable law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy or litigation arising out of or related to this Contract, whichever date is later.
- 2. Availability of Future Funds.** Any continuation or extension of this Contract after the end of the fiscal period in which it is written is contingent on a new appropriation for each succeeding fiscal period sufficient to continue to make payments under this Contract, as determined by the District in its sole administrative discretion.
- 3. Captions.** The captions or headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any provisions of this Contract.
- 4. Compliance with Applicable Law.** Contractor shall exercise the Standard of Care to comply with all applicable federal, state and local laws, regulations, executive orders, and ordinances, as such may be amended from time to time.
- 5. Counterparts.** This Contract may be executed in several counterparts (electronic or otherwise), each of which shall be an original, all of which shall constitute the same instrument.

6. **Governing Law.** This Contract, and all rights, obligations, and disputes arising out of it, shall be governed and construed in accordance with the laws of the State of Oregon and the ordinances of Clackamas County without regard to principles of conflicts of law. Any claim, action, or suit between District and Contractor that arises out of or relates to the performance of this Contract shall be brought and conducted solely and exclusively within the Circuit Court for Clackamas County, for the State of Oregon. Provided, however, that if any such claim, action, or suit may be brought in a federal forum, it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the District of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. Contractor, by execution of this Contract, hereby consents to the personal jurisdiction of the courts referenced in this section.
7. **Indemnity, Responsibility for Damages.** Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay which may be caused by, or result from, the negligent act, or omission of Contractor, its subcontractors, agents, or employees. The Contractor agrees to indemnify and defend the District and Clackamas County, and their officers, elected officials, agents and employees from and against all claims, actions, losses, liabilities, including reasonable attorney and accounting fees, and all expenses incidental to the investigation and defense thereof, arising out of or based upon Contractor's negligent acts or omissions in performing under this Contract. Provided, however, that pursuant to ORS 30.140(4), Contractor's duty to defend obligations arising from or related to Contractor's professional negligence, or related to professional services provided by Contractor, are limited to reimbursement of reasonable defense costs (including reasonable attorney fees) of District and Clackamas County in an amount not to exceed the proportionate fault of Contractor, as determined by adjudication, alternative dispute resolution, or otherwise resolved by settlement agreement.

However, neither Contractor nor any attorney engaged by Contractor shall defend the claim in the name of District or Clackamas County ("County"), purport to act as legal representative of District or County, or settle any claim on behalf of District or County, without the approval of the Clackamas County Counsel's Office. District or County may assume their own defense and settlement at their election and expense.

8. **Independent Contractor Status.** The service(s) to be rendered under this Contract are those of an independent contractor. Although the District reserves the right to determine (and modify) the delivery schedule for the Work to be performed and to evaluate the quality of the completed performance, District cannot and will not control the means or manner of Contractor's performance. Contractor is responsible for determining the appropriate means and manner of performing the Work. Contractor is not to be considered an agent or employee of District for any purpose, including, but not limited to: (A) The Contractor will be solely responsible for payment of any Federal or State taxes required as a result of this Contract; and (B) This Contract is not intended to entitle the Contractor to any benefits generally granted to District employees, including, but not limited to, vacation, holiday and sick leave, other leaves with pay, tenure, medical and dental coverage, life and disability insurance, overtime, Social Security, Workers' Compensation, unemployment compensation, or retirement benefits.
9. **Insurance.** Contractor shall secure at its own expense and keep in effect during the term of the performance under this Contract the insurance required and minimum coverage indicated below. The insurance requirements outlined below do not in any limit the amount of scope of liability of Contractor under this Contract. Contractor shall provide proof of said insurance and name the District and Clackamas County as an additional insureds on all required liability policies. Proof of insurance and notice of any material change should be submitted to the following address: Clackamas County Procurement Division, 2051 Kaen Road, Oregon City, OR 97045 or the County Contract Analyst.

Required - Workers Compensation: Contractor shall comply with the statutory workers' compensation requirements in ORS 656.017, unless exempt under ORS 656.027 or 656.126.
☒ Required – Commercial General Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per claim, with an annual aggregate limit of \$2,000,000 for Bodily Injury and Property Damage.
☒ Required – Professional Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence, with an annual aggregate limit of \$2,000,000 for damages caused by error, omission or negligent acts.
☒ Required – Automobile Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per accident for Bodily Injury and Property Damage.

The policy(s) shall be primary insurance as respects to the District. Any insurance or self-insurance maintained by the District shall be excess and shall not contribute to it. Any obligation that District agree to a waiver of subrogation is hereby stricken.

- 10. Limitation of Liabilities.** This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent. Except for liability arising under or related to Article II, Section 13 or Section 20 neither party shall be liable for (i) any indirect, incidental, consequential or special damages under this Contract or (ii) any damages of any sort arising solely from the termination of this Contract in accordance with its terms.
- 11. Notices.** Except as otherwise provided in this Contract, any required notices between the parties shall be given in writing by personal delivery, email, or mailing the same, to the Contract Administrators identified in Article 1, Section 6. If notice is sent to District, a copy shall also be sent to: Clackamas County Procurement, 2051 Kaen Road, Oregon City, OR 97045. Any communication or notice so addressed and mailed shall be deemed to be given five (5) days after mailing, and immediately upon personal delivery, or within 2 hours after the email is sent during District's normal business hours (Monday – Thursday, 7:00 a.m. to 6:00 p.m.) (as recorded on the device from which the sender sent the email), unless the sender receives an automated message or other indication that the email has not been delivered.
- 12. Ownership of Work Product.** All work product of Contractor that results from this Contract (the "Work Product") is the exclusive property of District. District and Contractor intend that such Work Product be deemed "work made for hire" of which District shall be deemed the author. If for any reason the Work Product is not deemed "work made for hire," Contractor hereby irrevocably assigns to District all of its right, title, and interest in and to any and all of the Work Product, whether arising from copyright, patent, trademark or trade secret, or any other state or federal intellectual property law or doctrine. Contractor shall execute such further documents and instruments as District may reasonably request in order to fully vest such rights in District. Contractor forever waives any and all rights relating to the Work Product, including without limitation, any and all rights arising under 17 USC § 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications. Notwithstanding the above, District shall have no rights in any pre-existing Contractor intellectual property provided to District by Contractor in the performance of this Contract except to copy, use and re-use any such Contractor intellectual property for District use only.
- 13. Representations and Warranties.** Contractor represents and warrants to District that (A) Contractor has the power and authority to enter into and perform this Contract; (B) this Contract, when executed and delivered, shall be a valid and binding obligation of Contractor enforceable in accordance with its terms; (C) Contractor shall at all times during the term of this Contract, be qualified, professionally competent, and duly licensed to perform the Work; (D) Contractor is an independent contractor as defined in ORS 670.600; and (E) the Work under this Contract shall be performed in accordance with

the standard of professional skill and care ordinarily provided by firms for a project of similar size, location, scope, and complexity, during the time in which the Work is being performed (herein the “Standard of Care”). The warranties set forth in this section are in addition to, and not in lieu of, any other warranties provided. The Contractor shall be responsible for the general technical accuracy of its services and documents resulting therefrom, and District shall not be responsible for discovering deficiencies therein. The Contractor shall correct such deficiencies without additional compensation if due to its negligence, excluding if such action is directly attributable to deficiencies in information furnished by the District.

- 14. Survival.** All rights and obligations shall cease upon termination or expiration of this Contract, except for the rights and obligations set forth in Article II, Sections 1, 6, 7, 10, 12, 13, 14, 15, 17, 20, 21, 25, 27, 28 and 32, and all other rights and obligations which by their context are intended to survive. However, such expiration shall not extinguish or prejudice the District’s right to enforce this Contract with respect to: (a) any breach of a Contractor warranty; or (b) any default or defect in Contractor performance that has not been cured.
- 15. Severability.** If any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.
- 16. Subcontracts and Assignments.** Contractor shall not enter into any subcontracts for any of the Work required by this Contract, or assign or transfer any of its interest in this Contract by operation of law or otherwise, without obtaining prior written approval from the District, which shall be granted or denied in the District’s sole discretion. In addition to any provisions the District may require, Contractor shall include in any permitted subcontract under this Contract a requirement that the subcontractor be bound by this Article II, Sections 1, 7, 8, 13, 16, and 27 as if the subcontractor were the Contractor. District’s consent to any subcontract shall not relieve Contractor of any of its duties or obligations under this Contract.
- 17. Successors in Interest.** The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective authorized successors and assigns.
- 18. Tax Compliance Certification.** The Contractor shall comply with all federal, state and local tax laws, regulation, executive orders and ordinances applicable to this Contract. Contractor represents and warrants that it has complied, and will continue to comply throughout the duration of this Contract and any extensions, with all tax laws of this state or any political subdivision of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318. Any violation of this section shall constitute a material breach of this Contract and shall entitle District to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract or applicable law.
- 19. Termination.** This Contract may be terminated for the following reasons: (A) by mutual agreement of the parties or by the District (i) for convenience upon thirty (30) days written notice to Contractor, or (ii) at any time the District fails to receive funding, appropriations, or other expenditure authority as solely determined by the District; or (B) if Contractor breaches any Contract provision or is declared insolvent, District may terminate after thirty (30) days written notice with an opportunity to cure.
Upon receipt of written notice of termination from the District, Contractor shall immediately stop performance of the Work. Upon termination of this Contract, Contractor shall deliver to District all documents, Work Product, information, works-in-progress and other property that are or would be deliverables had the Contract Work been completed. Upon District’s request, Contractor shall surrender to anyone District designates, all documents, research, objects or other tangible things needed to complete the Work.

- 20. Remedies.** If terminated by the District due to a breach by the Contractor, then the District shall have any remedy available to it in law or equity. If this Contract is terminated for any other reason, Contractor's sole remedy is payment for the goods and services delivered and accepted by the District, less any setoff to which the District is entitled.
- 21. No Third Party Beneficiaries.** District and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.
- 22. Time is of the Essence.** Contractor agrees that time is of the essence in the performance this Contract.
- 23. Foreign Contractor.** If the Contractor is not domiciled in or registered to do business in the State of Oregon, Contractor shall promptly provide to the Oregon Department of Revenue and the Secretary of State, Corporate Division, all information required by those agencies relative to this Contract. The Contractor shall demonstrate its legal capacity to perform these services in the State of Oregon prior to entering into this Contract.
- 24. Force Majeure.** Neither District nor Contractor shall be held responsible for delay or default caused by events outside the District or Contractor's reasonable control including, but not limited to, fire, terrorism, riot, acts of God, or war. However, Contractor shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall upon the cessation of the cause, diligently pursue performance of its obligations under this Contract.
- 25. Waiver.** The failure of District to enforce any provision of this Contract shall not constitute a waiver by District of that or any other provision.
- 26. Public Contracting Requirements.** Pursuant to the public contracting requirements contained in Oregon Revised Statutes ("ORS") Chapter 279B.220 through 279B.235, Contractor shall:
- a. Make payments promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the work provided for in the Contract.
 - b. Pay all contributions or amounts due the Industrial Accident Fund from such Contractor or subcontractor incurred in the performance of the Contract.
 - c. Not permit any lien or claim to be filed or prosecuted against District on account of any labor or material furnished.
 - d. Pay the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
 - e. As applicable, the Contractor shall pay employees for work in accordance with ORS 279B.235, which is incorporated herein by this reference. The Contractor shall comply with the prohibitions set forth in ORS 652.220, compliance of which is a material element of this Contract, and failure to comply is a breach entitling District to terminate this Contract for cause.
 - f. If the Work involves lawn and landscape maintenance, Contractor shall salvage, recycle, compost, or mulch yard waste material at an approved site, if feasible and cost effective.
- 27. No Attorney Fees.** In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys' fees and expenses.
- 28. Reserved.**

29. Reserved.

30. Key Persons. Contractor acknowledges and agrees that a significant reason the District is entering into this Contract is because of the special qualifications of certain Key Persons set forth in the contract. Under this Contract, the District is engaging the expertise, experience, judgment, and personal attention of such Key Persons. Neither Contractor nor any of the Key Persons shall delegate performance of the management powers and responsibilities each such Key Person is required to provide under this Contract to any other employee or agent of the Contractor unless the District provides prior written consent to such delegation. Contractor shall not reassign or transfer a Key Person to other duties or positions such that the Key Person is no longer available to provide the District with such Key Person's services unless the District provides prior written consent to such reassignment or transfer.

31. Reserved.

32. Merger. THIS CONTRACT CONSTITUTES THE ENTIRE AGREEMENT BETWEEN THE PARTIES WITH RESPECT TO THE SUBJECT MATTER REFERENCED THEREIN. THERE ARE NO UNDERSTANDINGS, AGREEMENTS, OR REPRESENTATIONS, ORAL OR WRITTEN, NOT SPECIFIED HEREIN REGARDING THIS CONTRACT. NO AMENDMENT, CONSENT, OR WAIVER OF TERMS OF THIS CONTRACT SHALL BIND EITHER PARTY UNLESS IN WRITING AND SIGNED BY ALL PARTIES. ANY SUCH AMENDMENT, CONSENT, OR WAIVER SHALL BE EFFECTIVE ONLY IN THE SPECIFIC INSTANCE AND FOR THE SPECIFIC PURPOSE GIVEN. CONTRACTOR, BY THE SIGNATURE HERETO OF ITS AUTHORIZED REPRESENTATIVE, IS AN INDEPENDENT CONTRACTOR, ACKNOWLEDGES HAVING READ AND UNDERSTOOD THIS CONTRACT, AND CONTRACTOR AGREES TO BE BOUND BY ITS TERMS AND CONDITIONS.

By their signatures below, the parties to this Contract agree to the terms, conditions, and content expressed herein.

Water Systems Consulting, Inc.

Water Environment Services



7/30/2025

Authorized Signature

Date

Scott Duren, Vice President

Name / Title (Printed)

1212691-95

Oregon Business Registry #

FBC/California

Entity Type / State of Formation

Signature

Date

Name: _____

Title: _____

Approved as to Form:



County Counsel

7/30/2025

Date

EXHIBIT A
RFP 2025-01
Water Environment Services Engineering Master Contract
On-Call Engineering Services
Published January 27, 2025



CLACKAMAS
WATER
ENVIRONMENT
SERVICES



REQUEST FOR PROPOSALS #2025-01

FOR

**Water Environment Services Engineering Master Contract
On-Call Engineering Services**

BOARD OF COUNTY COMMISSIONERS

CRAIG ROBERTS, Chair

PAUL SAVAS, Commissioner

MELISSA FIRESIDE, Commissioner

MARTHA SCHRADER, Commissioner

BEN WEST, Commissioner

**Gary Schmidt
County Administrator**

**Ryan Rice
Contract Analyst**

PROPOSAL CLOSING DATE, TIME AND LOCATION

DATE: February 20, 2025

TIME: 2:00 PM, Pacific Time

PLACE: Email: <https://bidlocker.us/a/clackamascounty/BidLocker>

SCHEDULE

Request for Proposals Issued.....	January 27, 2025
Protest of Specifications Deadline.....	February 3, 2025, 5:00 PM, Pacific Time
Deadline to Submit Clarifying Questions.....	February 13, 2025, 5:00 PM, Pacific Time
Request for Proposals Closing Date and Time.....	February 20, 2025, 2:00 PM, Pacific Time
Deadline to Submit Protest of Award.....	Seven (7) days from the Intent to Award

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Section 1 – Notice of Request for Proposals
Section 2 – Instructions to Proposers
Section 3 – Scope of Work
Section 4 – Evaluation and Selection Criteria
Section 5 – Proposal Content (Including Proposal Certification)

SECTION 1 NOTICE OF REQUEST FOR PROPOSALS

Notice is hereby given that Water Environment Services (“WES”), through its Board of County Commissioners, will receive sealed Proposals per specifications until **2:00 PM, February 20, 2025** (“Closing”), to provide On-Call Engineering Services. No Proposals will be received or considered after that time.

RFP Documents can be downloaded from the state of Oregon procurement website (“OregonBuys”) at the following address <https://oregonbuys.gov/bsa/view/login/login.xhtml>, Document No. S-C01010-00012654.

Prospective Proposers will need to sign in to download the information and that information will be accumulated for a Plan Holder's List. Prospective Proposers are responsible for obtaining any Addenda, clarifying questions, and Notices of Award from OregonBuys. Sealed Proposals are to be emailed to <https://bidlocker.us/a/clackamascounty/BidLocker>.

Submitting Proposals: Bid Locker

Proposals will only be accepted electronically thru a secure online bid submission service, **Bid Locker**. *Email submissions to Clackamas County email addresses will no longer be accepted.*

- A. Completed proposal documents must arrive electronically via Bid Locker located at <https://bidlocker.us/a/clackamascounty/BidLocker>.
- B. Bid Locker will electronically document the date and time of all submissions. Completed documents must arrive by the deadline indicated in Section 1 or as modified by Addendum. **LATE PROPOSALS WILL NOT BE ACCEPTED.**
- C. Proposers must register and create a profile for their business with Bid Locker in order to submit for this project. It is free to register for Bid Locker.
- D. Proposers with further questions concerning Bid Locker may review the Vendor’s Guide located at <https://www.clackamas.us/how-to-bid-on-county-projects>.

Contact Information

Procurement Process and Technical Questions: Ryan Rice, rrice@clackamas.us

The Board of County Commissioners reserves the right to reject any and all Proposals not in compliance with all prescribed public bidding procedures and requirements, and may reject for good cause any and all Proposals upon the finding that it is in the public interest to do so and to waive any and all informalities in the public interest. In the award of the contract, the Board of County Commissioners will consider the element of time, will accept the Proposal or Proposals which in their estimation will best serve the interests of Clackamas County and will reserve the right to award the contract to the contractor whose Proposal shall be best for the public good.

Clackamas County encourages proposals from Minority, Women, and Emerging Small Businesses.

SECTION 2 INSTRUCTIONS TO PROPOSERS

Clackamas County (“County”) reserves the right to reject any and all Proposals received as a result of this RFP. County Local Contract Review Board Rules (“LCRB”) govern the procurement process for the County.

2.1 Modification or Withdrawal of Proposal: Any Proposal may be modified or withdrawn at any time prior to the Closing deadline, provided that a written request is received by the County Procurement Division Director, prior to the Closing. The withdrawal of a Proposal will not prejudice the right of a Proposer to submit a new Proposal.

2.2 Requests for Clarification and Requests for Change: Proposers may submit questions regarding the specifications of the RFP. Questions must be received in writing on or before 5:00 p.m. (Pacific Time), on the date indicated in the Schedule, at the Procurement Division address as listed in Section 1 of this RFP. Requests for changes must include the reason for the change and any proposed changes to the requirements. The purpose of this requirement is to permit County to correct, prior to the opening of Proposals, RFP terms or technical requirements that may be unlawful, improvident or which unjustifiably restrict competition. County will consider all requested changes and, if appropriate, amend the RFP. No oral or written instructions or information concerning this RFP from County managers, employees or agents to prospective Proposers shall bind County unless included in an Addendum to the RFP.

2.3 Protests of the RFP/Specifications: Protests must be in accordance with LCRB C-047-0730. Protests of Specifications must be received in writing on or before 5:00 p.m. (Pacific Time), on the date indicated in the Schedule, or within three (3) business days of issuance of any addendum, at the Procurement Division address listed in Section 1 of this RFP. Protests may not be faxed. Protests of the RFP specifications must include the reason for the protest and any proposed changes to the requirements.

2.4 Addenda: If any part of this RFP is changed, an addendum will be provided to Proposers that have provided an address to the Procurement Division for this procurement. It shall be Proposers responsibility to regularly check OregonBuys for any notices, published addenda, or response to clarifying questions.

2.5 Submission of Proposals: Proposals must be submitted in accordance with Section 5. All Proposals shall be legibly written in ink or typed and comply in all regards with the requirements of this RFP. Proposals that include orders or qualifications may be rejected as irregular. All Proposals must include a signature that affirms the Proposer’s intent to be bound by the Proposal (may be on cover letter, on the Proposal, or the Proposal Certification Form) shall be signed. If a Proposal is submitted by a firm or partnership, the name and address of the firm or partnership shall be shown, together with the names and addresses of the members. If the Proposal is submitted by a corporation, it shall be signed in the name of such corporation by an official who is authorized to bind the contractor. The Proposals will be considered by the County to be submitted in confidence and are not subject to public disclosure until the notice of intent to award has been issued.

No late Proposals will be accepted. Proposals submitted after the Closing will be considered late and will be returned unopened. Proposals may not be submitted by telephone or fax.

2.6 Post-Selection Review and Protest of Award: County will name the apparent successful Proposer in a Notice of Intent to Award published on OregonBuys. Identification of the apparent successful Proposer is procedural only and creates no right of the named Proposer to award of the contract. Competing Proposers shall be given seven (7) calendar days from the date on the Notice of Intent to Award to review the file at the Procurement Division office and file a written protest of award, pursuant to LCRB C-047-0740. Any award protest must be in writing and must be delivered by hand-delivery or mail to the address for the Procurement Division as listed in Section 1 of this RFP.

Only actual Proposers may protest if they believe they have been adversely affected because the Proposer would be eligible to be awarded the contract in the event the protest is successful. The basis of the written protest must

be in accordance with ORS 279B.410 and shall specify the grounds upon which the protest is based. In order to be an adversely affected Proposer with a right to submit a written protest, a Proposer must be next in line for award, i.e. the protester must claim that all higher rated Proposers are ineligible for award because they are non-responsive or non-responsible.

County will consider any protests received and:

- a. reject all protests and proceed with final evaluation of, and any allowed contract language negotiation with, the apparent successful Proposer and, pending the satisfactory outcome of this final evaluation and negotiation, enter into a contract with the named Proposer; OR
- b. sustain a meritorious protest(s) and reject the apparent successful Proposer as nonresponsive, if such Proposer is unable to demonstrate that its Proposal complied with all material requirements of the solicitation and Oregon public procurement law; thereafter, County may name a new apparent successful Proposer; OR
- c. reject all Proposals and cancel the procurement.

2.7 Acceptance of Contractual Requirements: Failure of the selected Proposer to execute a contract and deliver required insurance certificates within ten (10) calendar days after notification of an award may result in cancellation of the award. This time period may be extended at the option of County.

2.8 Public Records: Proposals are deemed confidential until the “Notice of Intent to Award” letter is issued. This RFP and one copy of each original Proposal received in response to it, together with copies of all documents pertaining to the award of a contract, will be kept and made a part of a file or record which will be open to public inspection. If a Proposal contains any information that is considered a **TRADE SECRET** under ORS 192.345(2), **SUCH INFORMATION MUST BE LISTED ON A SEPARATE SHEET CAPABLE OF SEPARATION FROM THE REMAINING PROPOSAL AND MUST BE CLEARLY MARKED WITH THE FOLLOWING LEGEND:**

“This information constitutes a trade secret under ORS 192.345(2), and shall not be disclosed except in accordance with the Oregon Public Records Law, ORS Chapter 192.”

The Oregon Public Records Law exempts from disclosure only bona fide trade secrets, and the exemption from disclosure applies only “unless the public interest requires disclosure in the particular instance” (ORS 192.345). Therefore, non-disclosure of documents, or any portion of a document submitted as part of a Proposal, may depend upon official or judicial determinations made pursuant to the Public Records Law.

2.9 Investigation of References: County reserves the right to investigate all references in addition to those supplied references and investigate past performance of any Proposer with respect to its successful performance of similar services, its compliance with specifications and contractual obligations, its completion or delivery of a project on schedule, its lawful payment of subcontractors and workers, and any other factor relevant to this RFP. County may postpone the award or the execution of the contract after the announcement of the apparent successful Proposer in order to complete its investigation.

2.10 RFP Proposal Preparation Costs and Other Costs: Proposer costs of developing the Proposal, cost of attendance at an interview (if requested by County), or any other costs are entirely the responsibility of the Proposer, and will not be reimbursed in any manner by County.

2.11 Clarification and Clarity: County reserves the right to seek clarification of each Proposal, or to make an award without further discussion of Proposals received. Therefore, it is important that each Proposal be submitted initially in the most complete, clear, and favorable manner possible.

2.12 Right to Reject Proposals: County reserves the right to reject any or all Proposals or to withdraw any item from the award, if such rejection or withdrawal would be in the public interest, as determined by County.

2.13 Cancellation: County reserves the right to cancel or postpone this RFP at any time or to award no contract.

2.14 Proposal Terms: All Proposals, including any price quotations, will be valid and firm through a period of one hundred and eighty (180) calendar days following the Closing date. County may require an extension of this firm offer period. Proposers will be required to agree to the longer time frame in order to be further considered in the procurement process.

2.15 Oral Presentations: At County's sole option, Proposers may be required to give an oral presentation of their Proposals to County, a process which would provide an opportunity for the Proposer to clarify or elaborate on the Proposal but will in no material way change Proposer's original Proposal. If the evaluating committee requests presentations, the Procurement Division will schedule the time and location for said presentation. Any costs of participating in such presentations will be borne solely by Proposer and will not be reimbursed by County. **Note:** Oral presentations are at the discretion of the evaluating committee and may not be conducted; therefore, **written Proposals should be complete.**

2.16 Usage: It is the intention of County to utilize the services of the successful Proposer(s) to provide services as outlined in the below Scope of Work.

2.17 Review for Responsiveness: Upon receipt of all Proposals, the Procurement Division or designee will determine the responsiveness of all Proposals before submitting them to the evaluation committee. If a Proposal is incomplete or non-responsive in significant part or in whole, it will be rejected and will not be submitted to the evaluation committee. County reserves the right to determine if an inadvertent error is solely clerical or is a minor informality which may be waived, and then to determine if an error is grounds for disqualifying a Proposal. The Proposer's contact person identified on the Proposal will be notified, identifying the reason(s) the Proposal is non-responsive. One copy of the Proposal will be archived and all others discarded.

2.18 RFP Incorporated into Contract: This RFP will become part of the Contract between County and the selected contractor(s). The contractor(s) will be bound to perform according to the terms of this RFP, their Proposal(s), and the terms of the Sample Contract.

2.19 Communication Blackout Period: Except as called for in this RFP, Proposers may not communicate with members of the Evaluation Committee or other County employees or representatives about the RFP during the procurement process until the apparent successful Proposer is selected, and all protests, if any, have been resolved. Communication in violation of this restriction may result in rejection of a Proposer.

2.20 Prohibition on Commissions and Subcontractors: County will contract directly with persons/entities capable of performing the requirements of this RFP. Contractors must be represented directly. Participation by brokers or commissioned agents will not be allowed during the Proposal process. Contractor shall not use subcontractors to perform the Work unless specifically pre-authorized in writing to do so by the County. Contractor represents that any employees assigned to perform the Work, and any authorized subcontractors performing the Work, are fully qualified to perform the tasks assigned to them, and shall perform the Work in a competent and professional manner. Contractor shall not be permitted to add on any fee or charge for subcontractor Work. Contractor shall provide, if requested, any documents relating to subcontractor's qualifications to perform required Work.

2.21 Ownership of Proposals: All Proposals in response to this RFP are the sole property of County, and subject to the provisions of ORS 192.410-192.505 (Public Records Act).

2.22 Clerical Errors in Awards: County reserves the right to correct inaccurate awards resulting from its clerical errors.

2.23 Rejection of Qualified Proposals: Proposals may be rejected in whole or in part if they attempt to limit or modify any of the terms, conditions, or specifications of the RFP or the Sample Contract.

2.24 Collusion: By responding, the Proposer states that the Proposal is not made in connection with any competing Proposer submitting a separate response to the RFP, and is in all aspects fair and without collusion or fraud. Proposer also certifies that no officer, agent, elected official, or employee of County has a pecuniary interest in this Proposal.

2.25 Evaluation Committee: Proposals will be evaluated by a committee consisting of representatives from County and potentially external representatives. County reserves the right to modify the Evaluation Committee make-up in its sole discretion.

2.26 Commencement of Work: The contractor shall commence no work until all insurance requirements have been met, the Protest of Awards deadline has been passed, any protest have been decided, a contract has been fully executed, and a Notice to Proceed has been issued by County.

2.27 Best and Final Offer: County may request best and final offers from those Proposers determined by County to be reasonably viable for contract award. However, County reserves the right to award a contract on the basis of initial Proposal received. Therefore, each Proposal should contain the Proposer's best terms from a price and technical standpoint. Following evaluation of the best and final offers, County may select for final contract negotiations/execution the offers that are most advantageous to County, considering cost and the evaluation criteria in this RFP.

2.28 Nondiscrimination: The successful Proposer agrees that, in performing the work called for by this RFP and in securing and supplying materials, contractor will not discriminate against any person on the basis of race, color, religious creed, political ideas, sex, age, marital status, sexual orientation, gender identity, veteran status, physical or mental handicap, national origin or ancestry, or any other class protected by applicable law.

2.29 Intergovernmental Cooperative Procurement Statement: Pursuant to ORS 279A and LCRB, other public agencies shall have the ability to purchase the awarded goods and services from the awarded contractor(s) under terms and conditions of the resultant contract. Any such purchases shall be between the contractor and the participating public agency and shall not impact the contractor's obligation to the County. Any estimated purchase volumes listed herein do not include other public agencies and County makes no guarantee as to their participation. Any Proposer, by written notification included with their Proposal, may decline to extend the prices and terms of this solicitation to any and/or all other public agencies. County grants to any and all public serving governmental agencies, authorization to purchase equivalent services or products described herein at the same submitted unit bid price, but only with the consent of the contractor awarded the contract by the County.

SECTION 3 SCOPE OF WORK

3.1. INTRODUCTION

Clackamas County on behalf of Clackamas Water Environment Services (“District”) is seeking Proposals from vendors to provide On-Call Engineering Services. This Contract is on an “on-call” or “as-needed basis” for work. When the District wishes Contractor to perform the Work, the District will submit an official County Task Order form (found at: <https://www.clackamas.us/finance/terms.html>) detailing the scope of work, the entity on whose behalf the Work will be performed, and the total compensation, pursuant to the fee schedule set forth in this contract. Contractor may not perform work until the County Task Order form has been executed by the parties. In the event a project authorized under the County Task Order extends beyond the expiration of this contract, the County Task Order shall remain in effect under the terms of this contract until the completion or expiration of the authorized task.

No task order shall modify or amend the terms and conditions of this contract.

Please direct all Technical/Specifications or Procurement Process Questions to the indicated representative referenced in the Notice of Request for Proposals and note the communication restriction outlined in Section 2.19.

3.2 BACKGROUND

Clackamas Water Environment Services (WES, District), an intergovernmental partnership formed pursuant to ORS 190, owns and operates over 340 miles of wastewater conveyance infrastructure and five wastewater treatment facilities serving more than 150,000 residents. WES operates and maintains this critical infrastructure in order to collect and treat waste and storm water. The engineering services resulting from this RFP will play a vital role in ensuring the continuous and safe operation of WES facilities, and ensure that WES goals are met as part of the adopted Capital Improvement Plan, Facility Plans, Sanitary Sewer System Master Plan, and Storm System Master Plan. Access to those plans can be found here: <https://www.clackamas.us/wes/wes-projects>.

3.3. SCOPE OF WORK

3.3.1. Scope:

Water Environment Services (District) wishes to select several consultants to provide services in one or more of the following categories:

SCOPE OF SERVICES

1) Wastewater Conveyance and Treatment Engineering

Wastewater engineering consultants to provide professional engineering services in support of projects involving the planning, design, and construction of wastewater treatment facilities, treatment processes, pump stations and force mains, gravity conveyance systems, and related facilities.

2) Water Resources Engineering

Water resources engineering to provide management, development, and conservation of water resources to ensure their sustainability and availability. It involves the design and implementation of systems for stormwater, water recovery, and sustainable watershed management.

3) Engineering Construction Services

Construction services to provide management and inspection of construction projects to ensure they are completed efficiently and safely. It involves overseeing the construction process, which includes, but is not limited to: project management, attending meetings on WES' behalf, review of work/inspection services, independent testing, survey, regulation compliance, contractor coordination, pay application support, substantial and final completion, RFI's, document management, and startup/commissioning.

4) Wastewater Process Engineering and Operational Support

Engineering services for wastewater treatment process engineering and operational support include providing expert consultation and technical assistance on an as-needed basis to optimize treatment processes and ensure compliance with regulatory requirements. Tasks may include evaluating plant performance, troubleshooting operational issues, developing process improvement strategies, preparing technical reports, and conducting data analysis to enhance efficiency and reliability. Additional responsibilities involve recommending equipment upgrades, reviewing and designing process modifications, and offering training to operational staff. The service provider must also be available to respond promptly to urgent operational challenges and collaborate with stakeholders to maintain continuous and effective treatment operations.

Firms may submit a Statement of Qualifications (SOQ) for one or all categories. WES will assess the submitted SOQs and select the most qualified firm(s) for each category. Each selected firm will enter into a Master Contract and will be eligible to provide services in support of WES tasks, initiatives and projects under the terms of the Contract. The specific work to be performed under these Master

Contracts will be defined, budgeted, and scheduled on a task-by-task basis through Task Order sub-agreements.

Interested firms must submit SOQs. A single SOQ is required for each category the consultant is applying. Each SOQ must apply to only one company; no "teaming" of companies is permitted.

WES may reject any SOQ not in compliance with all prescribed procedures and requirements, and may cancel this solicitation or reject, for good cause, any or all SOQs upon a finding that it is in the public's best interest to do so.

3.3.2. Term of Contract:

The term of the contract shall be from the effective date through **June 30, 2030**.

3.3.3. Sample Contract: Submission of a Proposal in response to this RFP indicates Proposer's willingness to enter into a contract containing substantially the same terms (including insurance requirements) of the sample contract identified below. No action or response to the sample contract is required under this RFP. Any objections to the sample contract terms should be raised

in accordance with Paragraphs 2.2 or 2.3 of this RFP, pertaining to requests for clarification or change or protest of the RFP/specifications, and as otherwise provided for in this RFP. This RFP and all supplemental information in response to this RFP will be a binding part of the final contract.

The applicable Sample Personal Services Contract for this RFP can be found at <https://www.clackamas.us/finance/terms.html>.

Personal Services Contract (unless checked, item does not apply)

The following paragraphs of the Professional Services Contract will be applicable:

- ☐ Article I, Paragraph 5 – Travel and Other Expense is Authorized
- ☐ Article II, Paragraph 27 – Confidentiality
- ☐ Article II, Paragraph 28 – Criminal Background Check Requirements
- ☒ Article II, Paragraph 29 – Key Persons
- ☒ Exhibit A – On-Call Provision

The following insurance requirements will be applicable:

- ☒ Commercial General Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence, with an annual aggregate limit of \$2,000,000 for Bodily Injury and Property Damage.
- ☒ Professional Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence, with an annual aggregate limit of \$2,000,000 for damages caused by error, omission or negligent acts.
- ☒ Automobile Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence for Bodily Injury and Property Damage.
- ☐ Cyber Liability: combined single limit, or the equivalent, of not less than \$1,000,000 per occurrence for network security (including data breach), privacy, interruption of business, media liability, and errors and omissions

Additional Personal Services Contract Terms:

Max Multiplier: 3.15

Rate Cap: \$260.00

Technical Expert: Negotiated.

Subcontractor Markup: 5%

Expenses Markup: 0%

Accounting, Technology and Safety program charges are considered to be business expenses and included in the multiplier.

SECTION 4 EVALUATION PROCEDURE

- 4.1** An evaluation committee will review all Proposals that are initially deemed responsive and they shall rank the Proposals in accordance with the below criteria. The evaluation committee may recommend an award based solely on the written responses or may request Proposal interviews/presentations. Interviews/presentations, if deemed beneficial by the evaluation committee, will consist of the highest scoring Proposers. The invited Proposers will be notified of the time, place, and format of the interview/presentation. Based on the interview/presentation, the evaluation committee may revise their scoring.

Written Proposals must be complete and no additions, deletions, or substitutions will be permitted during the interview/presentation (if any). The evaluation committee will recommend award of a contract to the final County decision maker based on the highest scoring Proposal. The County decision maker reserves the right to accept the recommendation, award to a different Proposer, or reject all Proposals and cancel the RFP.

Proposers are not permitted to directly communicate with any member of the evaluation committee during the evaluation process. All communication will be facilitated through the Procurement representative.

4.2 Evaluation Criteria

Category	Points available:
Firm Resources	0-10
Local Experience	0-35
Project Team	0-40
Approach	0-15
Available points	0-100

- 4.3** Once a selection has been made, the Proposer will be required to submit its proposed fees for completion of the project. The proposed fees must be on a time and material basis with a not to exceed for each phase of the work. The proposed fees must be reasonable and fair to the County, as determined solely by the County.

During negotiation, the County may require any additional information it deems necessary to clarify the approach and understanding of the requested services. Any changes agreed upon during contract negotiations will become part of the final contract. The negotiations will identify a level of work and associated fee that best represents the efforts required. If the County is unable to come to terms with the highest scoring Proposer, negotiations shall be terminated and negotiations will begin with the next highest scoring Proposer. If the resulting contract contemplates multiple phases and the County deems it is in its interest to not authorize any particular phase, it reserves the right to return to this solicitation and commence negotiations with the next highest ranked Proposer to complete the remaining phases.

SECTION 5 PROPOSAL CONTENTS

5.1. Vendors must observe submission instructions and be advised as follows:

5.1.1. Complete Proposals must be emailed to <https://bidlocker.us/a/clackamascounty/BidLocker>. The subject line of the email must identify the RFP title. Proposers are encouraged to contact Procurement to confirm receipt of the Proposal.

5.1.2. County reserves the right to solicit additional information or Proposal clarification from the vendors, or any one vendor, should the County deem such information necessary.

5.1.3. The Proposal's Statements of Qualifications (SOQ) consists of the proposer's Firm Resources, Local Experience, Project Team, and Approach, as defined below in sections 5.3, 5.4, 5.5 and 5.6 respectively. To maintain the fairness and integrity of the selection process, limit the entire SOQ to the following page limit requirements:

- Limit entire SOQ for each category to 10 pages (five double-sided sheets of paper).
- Use 8 ½ x 11 paper size, in a minimum of 12 pt. font, with one-inch margins.
- Blank pages, cover letter, section separators, resumes, and the Proposal Certification do not count towards the SOQ page limit.

Provide the following information in the order in which it appears below:

5.2. Introduction:

- a. Indicate the complete legal name, address, and telephone numbers (voice and fax) of your company.
- b. Provide the name and telephone number of the contact person for your SOQ.
- c. Provide the name and title of the person who is legally authorized to sign the Master Contract, if it is awarded to your firm.
- d. State that your SOQ will be valid for a period of ninety days.
- e. State the categories covered by the SOQ.

5.3. Firm Resources (10 Points):

Provide a profile of your firm and the firm-wide resources that will be available to support the performance of the work. Provide the firm's length of time in business, number of employees, and the locations of key offices supporting the project. Describe the firm's overall experience with providing professional services. Provide a brief profile of the firm and available firm resources.

5.4. Local Experience (35 Points):

Describe your company's local (Pacific Northwest Region) experience in performing the services you are proposing. Describe similar services your company has performed for a minimum of three local customers in the past five years and include the names and telephone numbers for contact persons for each of these customers. District will use the information required in this paragraph, along with the District's prior experience with the consultant, to evaluate the Local Experience selection criterion.

5.5. Project Team (40 Points):

Describe your proposed team's capability to perform the services within the category. Include the number of employees who are available to perform the work and their qualifications and level of expertise. Describe any specialized equipment or software your company owns that would be used in performing the work. Describe

specific skills and experience of key staff that provide the professional services outlined in the categories section of the RFP. Provide resumes for key staff that will have responsibility for the work. (The resumes should be included in the Appendix.) List any licenses, certifications or accreditations your company or staff holds that are relevant to the services to be performed.

5.6. Approach (15 Points)

Describe your company's approach to providing the on-call services. Describe how projects will be managed. WES will use the information required in this paragraph to evaluate the "Approach" selection criterion.

5.7 Appendices

Include resumes for staff that will be responsible for performing the proposed services, up to 12 pages in this appendix.

5.8 Completed Proposal Certification (see the below form).

EXHIBIT B
CONTRACTOR'S PROPOSAL



Water Environment Services Engineering Master Contract

ON-CALL ENGINEERING SERVICES
RFP NO. 2025-01

Category 1: Wastewater Conveyance and
Treatment Engineering





Ryan Rice

Contract Analyst
150 Beaver Creek Rd,
Oregon City, OR 97045

Scott Duren ^{PE}

Principal in Charge and
Authorized Signatory
4640 S. Macadam Ave.
Suite 110
Portland, OR 97239
P: 503.419.6336 ext. 400
C: 916.764.7824
E: sduren@wsc-inc.com

Susan Schlangen ^{PE}

Project Manager
4640 S. Macadam Ave.
Suite 110
Portland, OR 97239
P: 503.419.6336 ext. 404
C: 612.644.3011
E: sschlangen@wsc-inc.com

Category 1: Wastewater Conveyance and Treatment Engineering

Dear Ryan,

We understand that the Clackamas Water Environment Services (WES or District) is looking for consulting firms that can provide responsive service and high-quality solutions to address wastewater engineering needs within your service area. Water Systems Consulting, Inc. (WSC) has a proven record of providing responsive, high-quality, and efficient service through on-call engineering contracts. Our team understands how an on-call can be used to provide the most value to your rate-payers, which includes the following elements:

Responsiveness. The on-call process streamlines the ability to add consultant support, but this only works when consultants are responsive. We push ourselves to provide rapid response to requests for scope, fee, and schedule so that work can begin to help you meet your commitments. The Tualatin Valley Water District (TVWD) has appreciated our responsiveness and repeatedly comes to WSC for on-call design projects.

Flexibility. For on-call work, a flexible approach can provide substantial savings. We use an initial meeting with your team to understand which aspects of a task are best suited to the consultant and which are best performed in-house, and we adapt our approach to suit the availability of your resources. This approach saves consultant fees and schedule and we successfully used it to support the City of Milwaukie, Oak Lodge Water Services, Clean Water Services, and TVWD.

Collaboration. The best on-call consultant is one that understands how you do business. WSC is currently embarking on a new project with WES and we have supported internal strategic planning in the past. We will work hard to understand how you deliver on-call projects so that we can function effectively as an extension of your staff.

WSC is committed to delivering the required resources and personnel to meet WES's project requirements. If you have any questions about our proposal, please reach out to our proposed Principal in Charge, Scott Duren, or Project Manager, Susan Schlangen, for additional information.

Sincerely,

Water Systems Consulting

A stylized, handwritten signature in black ink, appearing to be 'SS'.

Susan Schlangen ^{PE}
Project Manager

A stylized, handwritten signature in black ink, appearing to be 'SD'.

Scott Duren ^{PE}
Principal in Charge

Introduction & Firm Resources

We Are Responsive Wastewater Experts

WSC is a **certified Minority Business Enterprise (MBE) engineering firm** that specializes in the assessment, analysis, planning, design, construction, and optimization of wastewater treatment facilities, treatment processes, pump stations, force mains, and gravity conveyance systems. WSC has **supported more than 70 wastewater and water agencies** through on-call engineering service agreements. Our Oregon team is made up of principal and associate engineers, project managers, and communications specialists with a **proven record** of delivering responsive service and tailor-made solutions. We are a **full-service office** with the flexibility to collaborate with other WSC office locations in ways that other firms find challenging.

Firm Resources and Resource Management

WSC has assembled a robust and experienced team to provide on-call services to the District. Our team members have extensive experience working on local wastewater engineering projects together. Our primary team members are based out of our Portland office. In addition, we bring firm-wide staff resources that we can pull in as-needed. These staff include planning, design, funding, construction management, hydrogeology, and strategic communications experts.

We hold internal workload planning meetings so that we can meet our commitments to the District. We also hold internal team check-ins with our subconsultants to keep them abreast of project schedule so that they are available to deliver without delay. We are committed to providing reliable service and confirm that we have the capacity to provide the required services in addition to other workload.

WSC's on-call success is built on our core commitments:

Listen to Understand. We will listen to the District with an open, unbiased ear to connect to others' experience and perspective.

Nurture Trust. We continually model integrity, transparency, and humility to forge trust in every interaction.

Deliver Value. We courageously ask "what if" to surpass expectations and deliver value that can move us and the District forward.

Leave it Better. We acknowledge our responsibility to leave everything we touch better than we found it.



Water Systems Consulting, Inc.

4640 S Macadam Ave., Suite 110
Portland, OR 97239
P | 503.419.6336
F | 971.275.1911

Scott Duren ^{PE}

Contact Person and
Authorized Signatory
P | 503.419.6336 ext. 400
C | 916.764.7824
E | sduren@wsc-inc.com

WSC's SOQ will be valid for
a period of 90 days.

Oregon Minority Business

Enterprise Certified Firm
(Certificate #14627)

Category 1: Wastewater Conveyance and Treatment Engineering

17
Years in Business

Founded in 2007

68
Employees
Located Across 7 Offices

Portland, OR | Laguna Hills, CA
San Diego, CA | San Luis
Obispo, CA | Fresno, CA |
Folsom, CA | Ontario, CA

Local Experience

We Bring Local Wastewater Experience

Lift Station Rehabilitation Projects | CITY OF PORTLAND BES, OR

WSC provided preliminary design and design services for three lift station projects as part of the City's pump station on-call contract.

Elk Rock Pump Station. WSC developed civil site design, stormwater design, and storage facility alternatives for the pump station. Located on a constrained site with a small footprint, a complex and robust land use permitting effort was required. The project involved converting the station's dry pump pits to submersible pumps; thus, doubling the station's holding capacity and allowing longer emergency response times to potential sanitary sewer overflows. The capacity limited station required analysis of future flows, available storage, and alternatives for improving active and emergency storage. To balance complicated requirements with future pump station needs, WSC provided decision-making frameworks and recommendations to guide internal BES stakeholders toward preferred solutions.



SE 101st Pump Station. WSC completed the evaluation of alternatives and design of pump station upgrades for the SE 101st Pump Station, a sewage pump station serving southeast Portland. Critical improvements included conversion to a submersible pumping station, construction of a valve vault with flow meter, site drainage and stormwater improvements, evaluation and modification of a retaining wall, and evaluation of additional property acquisition to expand the site footprint. Located adjacent to Kelly Butte Park, the site required complex land use permitting processes and was subject to environmental zoning.

Inverness Pump Station. WSC developed a Short-Term Risk Management Plan for the Inverness Pump Station and Force Main while a longer-term facility plan was being developed and implemented. The 22 MGD pump station discharges through 11 miles of 36-inch diameter force main that has experienced multiple failures in the past 10 years. WSC developed and evaluated strategies for managing risk at the pump station in the 5 to 15 year interim period before a long-term facility replacement can be implemented. Strategies include the use of existing infrastructure at the former treatment facility to provide additional emergency storage and to route sewer overflows away from the environmentally sensitive Columbia Slough. WSC's collaborative approach provided clear guidance and prioritization for future actions by the District.

Measures of Success:

- Adapted civil site design to complex permitting requirements and constrained site boundaries.
- Provided cost-benefit analysis to support City decision-making around risk of sanitary overflows.
- Coordinated directly with operations staff to understand their needs for safe facility access.

Client Reference: Michael Szwaya,
Supervising Engineer, 503.823.5274,
michael.szwaya@portlandoregon.gov

Project Dates: November 2021 to Present

Key Staff: Susan Schlangen (Design Manager and Civil Design Lead), Scott Duren (Principal in Charge), Lauren Greulich (Civil/Mechanical Designer)

Local Experience

Pump Station Decommissioning Design | CITY OF BEND, OR

WSC worked with the City to decommission 10 pump stations by implementing over 8,600 lineal feet (LF) of new gravity sewer over four project phases to reroute flows into the southeast interceptor. WSC prepared life cycle comparisons of decommissioning versus replacing or upgrading the stations and helped the City obtain nearly \$500,000 in loan forgiveness through the State Revolving Fund by qualifying for energy efficiency improvements. Additional cost savings were realized by constructing new sewers within existing alignments to reduce the volume of required rock excavation. Suggested bypassing and sequencing plans were prepared to provide guidance to bidders for maintaining continuous sewer service and neighborhood access throughout construction. In some cases, property and easement acquisition was necessary to secure new sewer alignments within private property. WSC also leveraged ground penetrating radar and electromagnetic tools to accurately locate buried utilities on private property. Phase 4 of the project involved trenchless installation of gravity sewer piping to cross an irrigation canal by jack and bore.



Measures of Success:

- Completed the project on time and under budget.
- Secured nearly \$500,000 in loan forgiveness.
- Developed bypassing and sequencing plans that allowed new gravity mains to be placed in existing alignments, reducing the volume of rock excavation required.

Client Reference: Alex Doza, Project Engineer, 541.323.8595, adoza@bendoregon.gov

Project Dates: May 2018 to December 2023

Key Staff: Scott Duren (Project Manager), Rob Natoli (Technical Advisor), Susan Schlangen (Project Engineer/ Project Manager - Phase 3 & 4), Lauren Greulich (Project Engineer Phase 3 & 4), Adam Donald (Engineering Support)

On-Call Engineering Services | OAK LODGE WATER SERVICES, OR

Through our on-call contract, WSC has provided a wide range of services including formatting the 6-year CIP to promote better public understanding, modeling water projects to confirm sizing requirements, smoke testing high infiltration and inflow (I/I) sewer basins to identify sources of infiltration, wet weather flow monitoring to quantify base flows and I/I at the subbasin level, value engineering for wastewater treatment projects to meet DEQ CWSRF requirements, alternatives analysis and preliminary design for a new emergency intertie pump station, and updates to the water and wastewater master plans.

Measures of Success:

- Responsiveness has helped with developer requests during staff turnover periods.
- Flexibility in scoping and sequencing work to meet aggressive schedule and annual budgeting.
- Well organized deliverables that make information easy to access and use.
- Identified 48 locations contributing inflow into the Lift Station 2 basin.

Client Reference: Brad Albert, General Manager, 503.490.0016, brada@olwsd.org

Project Dates: July 2024 - July 2028

Key Staff: Adam Donald (Project Manager), Scott Duren (Principal in Charge) Patrick Finn (Project Engineer), Jason Rice (Project Manager Engineer)

Local Experience

Sanitary Sewer Master Plan | OAK LODGE WATER SERVICES, OR

WSC developed a comprehensive master plan that covered the treatment, pumping, and collections systems for Oak Lodge. A new Waste Discharge Permit was received earlier than anticipated and included more stringent discharge requirements for total suspended solids, resulting in the need to evaluate additional tertiary treatment options. Significant operational modifications from the original intent had been made to correct processes that were not performing as planned which necessitated updated plant models to determine if future improvements to the headworks, aeration basins, secondary clarifiers, or solids systems would be needed. Field work in the collections system included performing flow monitoring and smoke testing to evaluate wet weather flows for model calibration to assess I/I mitigation. An extensive communications strategy was enacted to pave the way for approving a robust capital improvement plan that would reduce I/I across the system while investing in the necessary improvements to meet new permit requirements.

Measures of Success:

- An extended period simulation model was developed and workshopped with engineering and operations staff to confirm results matched experience.
- Workshops with operations, engineering, finance, and board members engaged staff and collect input throughout the process.
- The plan was unanimously adopted by the Oak Lodge board.

Client Reference:

Brad Albert, General Manager,
503.490.0016, brada@olwsd.org

Project Dates: April 2021 to
December 2023

Key Staff: Scott Duren (Project
Manager), Adam Donald (Project
Engineer)

WWTP Value Engineering Studies | OAK LODGE WATER SERVICES, CITY OF GRESHAM, & CITY OF CLATSKANIE, OR

WSC provided independent value engineering (VE) studies to review design documents and identify recommended opportunities for cost savings and reliability improvements at three different treatment plants.

Oak Lodge Water Services. Improvements included the excavation and demolition of an existing chlorine contact basin; construction of a new building to house the Tertiary Treatment Facility (TTF); construction of new piping systems to connect the existing secondary treatment process to the TTF, and the TTF to existing ultraviolet (UV) light disinfection channels; and the temporary bypassing of plant flows while pipeline connections are completed.

City of Gresham. Improvements included upgrades to its Aeration Basin No. 4, mixed liquor return, and control systems; construction of a proposed filtrate pump station and chemical feed station; and installation of an emergency standby generator.

City of Clatskanie. Improvements included construction of a new headworks facility and sequencing batch reactor (SBR) treatment system; replacement of an existing UV disinfection system with a new, upsized UV disinfection system, relocation of an existing screw press sludge dewatering system to an existing enclosure; and construction of new buildings for administrative services, maintenance shop, electrical and controls equipment, and aeration blowers.

Measure of Success:

- Summarized recommended value engineering alternatives and that complied with funding requirements.

Client References: Brad Albert, General Manager, 503.490.0016, brada@olwsd.org | Rob Chapler, Engineer, 503.618.3458, rob.chapler@greshamoregon.gov | Greg Hinkelman, City Manager, 503.728.2622, Ghinkelman@cityofclatskanie.com

Project Dates: September 2024 to Present

Key Staff: Susan Schlangen (Civil/Mechanical Lead), Scott Duren (Principal in Charge), Jon Ganz (Project Manager)

Local Experience

Additional Experience Performed by WSC's Core Team

WWTP and Field Stations Condition Assessment | SOUTH TAHOE PUBLIC UTILITY DISTRICT, CA

WSC provided condition assessments and alternatives analysis for the South Tahoe PUD's WWTP and pump stations. WSC assisted the South Tahoe PUD in addressing aging infrastructure and assets and planning for improvements that systematically increase system reliability in a predictive and affordable manner. The initial project phases included developing a business case evaluation approach for implementing asset management strategies, including condition assessment and immediate versus planned replacement to maximize asset life cycles. WSC's collaborative approach provided clear guidance and prioritization for future actions by the District. This included actively engaging District staff and leveraging their system knowledge, interactive and thoughtfully planned workshops, and Business Case Screenings to provide an early look at asset values and assessment priorities.

Pump Station System Plan | CITY OF PORTLAND BES, OR

WSC worked closely with BES to develop a strategic asset management program to invest \$11 million annually in addressing aging pump station assets. The program was developed to assess condition, estimate monetized risks, prioritize pump stations for repair, identify optimal scopes for rehabilitation at individual stations, and estimate project costs to support CIP planning for the City's 97 lift stations. WSC developed sustainable tools specifically tailored to BES's operating standards, data collection and management practices, and geospatial relationships that can be readily updated and refreshed on an annual basis. We are continuing to support the program through integrated facility planning and rehabilitation design of prioritized stations.

Recycled Water Master Plan | CLEAN WATER SERVICES, OR

CWS has a long history of delivering recycled water to several customers within their service area in close proximity to their water resource recovery facilities (WRRF) to comply with increasingly strict water quality criteria. In order to expand the program, WSC is leading a master planning effort that will characterize the existing system, prepare a market assessment of potential opportunities, define the regulatory drivers and needs, and prepare engineering planning analysis that supports a well-defined CIP for the recycled water program. WSC is coordinating a multidisciplinary team working within numerous departments across the District to develop a comprehensive, defensible, and repeatable planning process that will support the ever-evolving need for one water management in rapidly growing Washington County.

Nye Beach Pump Station | CITY OF NEWPORT, OR

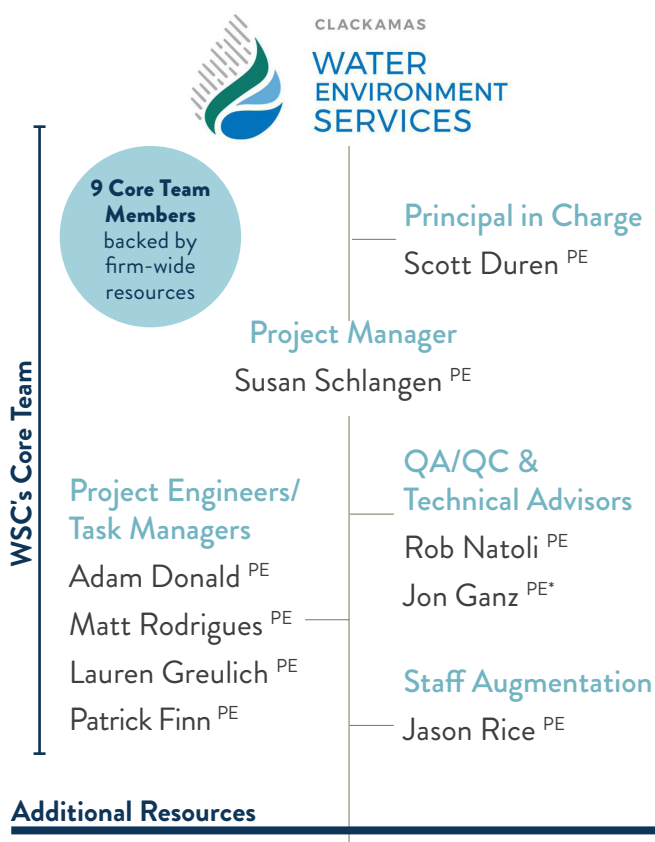
The Nye Beach Pump Station had no bypass, would overflow to the beach within two minutes if an outage occurred, and received frequent clogging material from the Lincoln County Jail. It was also located within the primary access route for a popular beach. WSC prepared a design to improve the reliability of the 2 MGD pump station and associated infrastructure. WSC identified alternatives to improve reliability by increasing system storage and adding a grinder to reduce the risk of clogging from objects entering the sewer from the county jail. Project work included the rerouting of 18-inch diameter sewers, sewer bypassing plans, road restoration, and easement acquisition. WSC designed an Inserta valve and hot-tap to allow bypassing, rerouted gravity sewer flows through an in-line grinder, modified electrical power and controls to accommodate new equipment, and replaced pumps within the dry well. Since completion, the City has reported no clogs or SSOs, resulting in a dramatic improvement.

Prior Experience Working with WES. WSC provided strategic planning services for WES in 2023. We were also recently selected to deliver your Reuse Feasibility Study and are excited to continue to work with the WES team.

Project Team

Meet Your Wastewater Systems Engineering Team

WSC specializes in assessing, rehabilitating, and renewing aging wastewater infrastructure to maximize the ratio of risk reduction per capital dollar spent.



Our team of experts have diverse design experience that includes wastewater treatment design, sewer system design, pump station rehabilitation and replacement, and treatment process optimization. Our core team members highlighted below have all worked together on similar wastewater projects. Resumes for our core team members are included in the appendix.

Specialized Equipment and Software

WSC brings the following specialized equipment and software that will be available to our team: ArcGIS, SewerGems, InfoSewer, InfoWater, Optimatics, SketchUp, Revit, AutoCAD Civil 3D, Ajera, Revu Bluebeam, Microsoft Office Suite, Zoom and Teams meetings, Conceptboard, and Egnyte.

Engineering Support

Peter Kvam ^{PE*}
Stephanie Ard ^{PE*}
Ashley Poole ^{PE*}
Cameron Ripple ^{PE*}
Michelle Heinrichs
Michael Goymerac ^{PE*}
Heather Freed ^{PE*}
Kendall Houghton ^{PE*}
Michael Steele ^{PE*}
Phillip Medlock ^{PE*}
Patricia Parks ^{PE*}

Technical Experts

Dylan Wade ^{PE*, CCM}
Rob Morrow ^{PE*}
Chris Malejan ^{PE*, CCM}
Laine Carlson ^{PE*}
Chris Deiter ^{PE*}
Jeroen Olthof ^{PE}
Michael Cruikshank ^{PG, CI}

CAD Drafting

Paul D'Santi
Mary Harrington
Colby Harrington

** Indicates California PE & ability to obtain an OR PE within 2 months*

Subconsultants

WSC has developed strong working relationships with a variety of subconsultants. Based on the task order, WSC can pull upon these partners for specialty services within each category.

“We would without a doubt recommend WSC. They have always completed deliverables on time, have graciously assisted us by providing additional technical support, and have contributed innovative ideas during the course of the project. The WSC staff was an absolute pleasure to work with; they were responsive, excellent collaborators, and went above and beyond to ensure that the project was successful.”

Brittany Park, PE, Former Project Manager, City of Bend

Project Team



Susan Schlangen ^{PE} | Project Manager
Portland, OR | 93692 OR PE | 40% Availability

Susan is a professional engineer with 12 years of experience focused on wastewater treatment and collection system planning and design. She has designed gravity and pressure pipelines, provided facility planning and design services for sewage pump stations and treatment plants, and designed recycled water storage and conveyance systems. Susan is also serving as Civil/Mechanical Lead for two treatment plant value engineering studies. Additionally, she has experience in both water and wastewater design and construction management, and brings unique insights to potential construction risks that benefit alignment selection and preparation of contract documents that reduce the risk of change orders. Her attention to detail and strong communication skills have enabled her to deliver every project that she has ever managed within budget.

- Delivered dozens of wastewater projects
- Designed six miles of seismically resilient pipeline in the past two years
- Performed condition assessments and VE studies for WWTP facilities
- Analyzed, designed, and/or decommissioned 25+ pump stations
- Working on projects at the largest WWTP in Oregon



Scott Duren ^{PE} | Principal in Charge
Portland, OR | 89922 OR PE | 25% Availability

Scott has 22 years of engineering experience specializing in wastewater pumping stations, treatment, and conveyance design. He approaches wastewater system design from a holistic perspective and creatively sequences upgrades to fit the needs of each project, resulting in cost effective, implementable solutions delivered on schedule. Scott has completed the design, planning, and/or construction of more than 35 pump stations and 100 miles of pipeline.



Adam Donald ^{PE} | Project Engineer
Portland, OR | 95325 OR PE | 40% Availability

Adam is a PACP certified engineer with eight years of experience. He specializes in wastewater design and planning projects. His experience includes master planning, cost, and life-cycle analyses for sewer systems, and CIP development. He is also adept at pipeline design for gravity sewers and force mains, as well as sewer pipeline and manhole rehabilitation. His recent experience includes assessing I/I issues and conducting seismic risk assessments.



Lauren Greulich ^{PE} | Project Engineer
Portland, OR | 100055 OR PE | 40% Availability

Lauren is a skilled design engineer with experience focused on water and sewer hydraulic analysis, distribution and collection system design, and construction management support. She has worked on utility projects specializing in GIS spatial data analytics and hydraulic analysis and is competent in AutoCAD Civil 3D and Revit. Lauren brings experience as an engineer and drafter in pipeline utility design, civil site design, land development, and facility layout and design.

Project Team



Patrick Finn ^{PE} | Project Engineer
Portland, OR | 97653 OR PE | 40% Availability

Patrick has eight years of engineering experience specializing in water, wastewater, and stormwater planning and modeling projects. His work experience includes asset management and long-range plans, WWTP process design, pump station design, pressure reducing facility design, gravity sewer pipe design, construction inspection and management for municipal and industrial treatment upgrades, and solids dewatering upgrades. Patrick has worked on water main projects for Portland Water Bureau, City of Gresham, and Oregon City alongside the WSC's Portland team.



Jason Rice ^{PE} | Staff Augmentation
Portland, OR | 74479 OR PE | 20% Availability

Jason brings 17 years of capital project management experience in wastewater, water, stormwater, transportation, and parks. For 11 of those 17 years, he directed engineering departments and at times, planning departments, building departments, administrative staff, and an entire district as Interim General Manager. Jason has built his career on bridging departments and agencies to deliver successful projects for the communities he works with. Jason is currently providing staff extension and project management services for utilities with staffing constraints.



Matt Rodrigues ^{PE} | Project Engineer
Laguna Hills, CA | 84311 CA PE | 30% Availability

Matt brings 10 years of experience in wastewater treatment process design and operational optimization, maintenance of wastewater treatment systems, evaluation of wastewater treatment system capacity and treatment performance, water and wastewater master planning, development and calibration of water distribution system hydraulic models, optimization of pumping stations and design of water production and distribution systems.



Rob Natoli ^{PE} | QA/QC & Technical Advisor
Folsom, CA | 96253 OR PE | 30% Availability

Rob brings 16 years of engineering experience in the wastewater industry. His primary focus is on the design, repair and rehabilitation of wastewater pipelines, pump stations, and treatment plant infrastructure. He is skilled at directing and managing multi-disciplinary teams to meet and exceed client expectations. Rob has worked closely with the Portland team on several wastewater projects and is able to provide focused and streamlined support.



Jon Ganz ^{PE} | QA/QC & Technical Advisor
Laguna Hills, CA | 58474 CA PE | 30% Availability

Jon has 28 years of experience in the design, construction, and rehabilitation of both wastewater and water treatment and conveyance facilities. He is WSC's Wastewater Treatment Practice Lead and excels in leading multidisciplinary design teams to deliver complex projects within active, operating water and wastewater facilities. He has managed capital improvements projects with a total estimated construction cost of over \$2 billion. He is currently working with the Portland team to deliver several VE studies.

Approach

Wastewater Conveyance, Treatment, and Pump Station System Design Approach

The District maintains complex infrastructure systems and numerous facilities that provide wastewater collections and water resource recovery services across a broad geography. To continue providing a high level of service, the District routinely upgrades system facilities and components to maintain reliability, improve efficiencies, and support growth.

WSC offers an experienced team that is well-versed in infrastructure planning and design. In recent years, we have supported our clients in navigating challenging pipeline projects that involve crowded utility corridors, complex traffic control, trenchless installations, and more. We know that when it comes to working in the public right-of-way there are many competing factors that often present greater challenges than the technical design. Our approach to infrastructure design begins by building a strong foundation based on project objectives, followed by an increasing level of detail with each design deliverable to engage the appropriate level of effort while facilitating informed decision-making and reducing the risk of rework.

Facility upgrades in particular often present several challenges:

- Site footprint limitations
- Need for bypassing and/or minimizing facility downtime
- Lack of documentation related to site utilities and minor replacement projects
- Facilitating safe site access

WSC understands that facility planning and design projects need to involve close consultation with operations staff in order to be successful. Operations staff provide important insight on the facility performance and condition, but it is also critical to understand their perspective on considerations for staff safety, access, and ease of operation. WSC will typically propose to engage operational staff early and often throughout the planning or design project through site visits and discussions around improvement concepts. We will work with the District's project manager to identify a team of internal stakeholders and establish communication protocols to solicit input from the right staff at the right time. Small group focus meetings, large collaborative workshops, site walks and field meetings are all strategies that we employ to support productive discussions in the appropriate environment.

WSC's design team is well-equipped to support projects of varying sizes and complexity. Our local team has experience working together in large and small teams and is flexible to support the District's needs on a wide range of project types. Scott, Susan, Adam, Patrick, and Lauren all routinely work together to deliver projects on schedule and within budget, while observing high standards for quality. We have completed numerous projects within Clackamas County, most recently the Molalla Avenue Transmission Main in Oregon City, and we understand the permitting environment.

More often than not, facility projects require multidisciplinary teams. WSC has developed excellent relationships with specialty discipline firms providing services related to structural design, electrical design, land use permitting, architecture and landscape design, as well as additional specialized practice areas. We provide integrated civil and process mechanical design services to assure that the layout of the site and proposed operational features are well coordinated. We establish routine progress meetings and/or interim deadlines, depending on the complexity of the project, to optimize facility components and reduce the risk of conflicts. We require discipline-specific quality control as well as a complete quality control review to further strengthen the cohesiveness of the design.

Approach

WSC's approach to quality control includes quality checks and reviews throughout the project life-cycle. During early phases of work, our quality reviewers will assess conceptual ideas, assumptions, and preliminary results and work products to make sure the project is aligned with the District's needs and expectations. As the project progresses, WSC will conduct QC reviews at pre-established milestones. Proven tools and experienced staff drive QC processes, assuring review comments are discussed, tracked, and addressed before deliverables are submitted to you.

Project Management Keys to Success

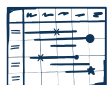
Our Project Manager, Susan Schlangen, will use a few simple tools to manage the project, keep an eye on potential problems, and work collaboratively to develop solutions.



Keeping Goals Front and Center. Projects can miss the mark if success is not defined and commonly understood. Beginning with the scoping meeting, Susan will work with the City to define project goals and key desired outcomes, referencing them routinely during workshops and design reviews to keep the team on track. Re-articulating these goals supports the purposeful engagement of all team members, but especially those outside the core team.



Frequent and Structured Communications. We typically schedule routine progress meetings with the City's project manager with a standard, but flexible, agenda to review upcoming tasks and discuss and resolve potential challenges, and identify and track additional coordination needs. These meetings drive project schedule and maintain open lines of communication, supplemented by ad hoc meetings, email coordination, and collaboration on interim work products between deliverables.



Continuous Resource Management. One of the biggest challenges in the water industry today is that everyone is resource limited. WSC has managed this by meeting at the office and company-wide level on a weekly basis to make sure that every project is adequately staffed. We have also brought on teaming partners that give our project teams a deeper bench and improve our ability to deliver on multiple projects in parallel, if needed.



Schedule and Budget Visibility. WSC's integrated project management and accounting system, Ajera, enables real-time tracking of project progress and budget so that our project manager has immediate access to key performance metrics. We use earned value management at the sub-task level to identify discrepancies between planned and actual project progress for WSC tasks and for our subconsultants, enabling corrective measures to be implemented before cost overruns or schedule delays occur.



Clear Responsibility for Actions. On every project, Susan maintains a running action item log for both internal and external actions to keep track of the small steps that are necessary to move the project to completion. Each item identifies a responsible party, the date the action was identified, and the due date. The log is used during regularly scheduled internal consultant team meetings to make sure nothing falls between the cracks and everyone on the team is clear on expectations and responsibilities.

PROPOSAL CERTIFICATION
RFP #2025-01

Submitted by: Water Systems Consulting, Inc., California

(Must be entity's full legal name, and State of Formation)

Each Proposer must read, complete and submit a copy of this Proposal Certification with their Proposal. Failure to do so may result in rejection of the Proposal. By signature on this Proposal Certification, the undersigned certifies that they are authorized to act on behalf of the Proposer and that under penalty of perjury, the undersigned will comply with the following:

SECTION I. OREGON TAX LAWS: As required in ORS 279B.110(2)(e), the undersigned hereby certifies that, to the best of the undersigned's knowledge, the Proposer is not in violation of any Oregon Tax Laws. For purposes of this certification, "Oregon Tax Laws" means the tax laws of the state or a political subdivision of the state, including ORS 305.620 and ORS chapters 316, 317 and 318. If a contract is executed, this information will be reported to the Internal Revenue Service. Information not matching IRS records could subject Proposer to 24% backup withholding.

SECTION II. NON-DISCRIMINATION: That the Proposer has not and will not discriminate in its employment practices with regard to race, creed, age, religious affiliation, sex, disability, sexual orientation, gender identity, national origin, or any other protected class. Nor has Proposer or will Proposer discriminate against a subcontractor in the awarding of a subcontract because the subcontractor is a disadvantaged business enterprise, a minority-owned business, a woman-owned business, a business that a service-disabled veteran owns or an emerging small business that is certified under ORS 200.055.

SECTION III. CONFLICT OF INTEREST: The undersigned hereby certifies that no elected official, officer, agent or employee of Clackamas County is personally interested, directly or indirectly, in any resulting contract from this RFP, or the compensation to be paid under such contract, and that no representation, statements (oral or in writing), of the County, its elected officials, officers, agents, or employees had induced Proposer to submit this Proposal. In addition, the undersigned hereby certifies that this proposal is made without connection with any person, firm, or corporation submitting a proposal for the same material, and is in all respects fair and without collusion or fraud.

SECTION IV. COMPLIANCE WITH SOLICITATION: The undersigned further agrees and certifies that they:

1. Have read, understand and agree to be bound by and comply with all requirements, instructions, specifications, terms and conditions of the RFP (including any attachments); and
2. Are an authorized representative of the Proposer, that the information provided is true and accurate, and that providing incorrect or incomplete information may be cause for rejection of the Proposal or contract termination; and
3. Will furnish the designated item(s) and/or service(s) in accordance with the RFP and Proposal; and
4. Will use recyclable products to the maximum extent economically feasible in the performance of the contract work set forth in this RFP.

Name: Scott Duren

Date: 2/20/2025

Signature: 

Title: Vice President

Email: sduren@wsc-inc.com

Telephone: (503) 419-6336 ext. 400

Oregon Business Registry Number: 1212691-95

OR CCB # (if applicable): _____

Business Designation (check one):

☒ Corporation ☐ Partnership ☐ Sole Proprietorship ☐ Non-Profit ☐ Limited Liability Company

☒ Resident Quoter, as defined in ORS 279A.120

☐ Non-Resident Quote. Resident State: _____

Susan Schlangen PE

PROJECT MANAGER

Susan is a professional engineer with 12 years of experience focused on wastewater treatment and collection system planning and design. She has designed gravity and pressure pipelines, provided facility planning and design services for sewage pump stations and treatment plants, and designed recycled water storage and conveyance systems. Susan is also serving as Civil/Mechanical Lead for three treatment plant value engineering studies. Additionally, she has experience in both water and wastewater design and construction management, and brings unique insights to potential construction risks that benefit alignment selection and preparation of contract documents that reduce the risk of change orders. Her attention to detail and strong communication skills have enabled her to deliver every project that she has ever managed on or under budget.

REPRESENTATIVE PROJECTS

SE 101st Avenue Pump Station Improvements, City of Portland BES, OR. Deputy Project Manager/Civil Engineer. Evaluation of alternatives and design of pump station upgrades for SE 101st Pump Station, a City sewage pump station serving Southeast Portland. Critical improvements include conversion to a submersible pumping station, construction of a valve vault with flow meter, site drainage and stormwater improvements, evaluation and modification of a retaining wall, and evaluation of additional property acquisition to expand the site footprint. Located adjacent to Kelly Butte Park, the site requires complex land use permitting processes and is subject to environmental zoning. Susan is leading the development of site layout alternatives, storm water management and design, and other civil components as well as supporting additional project elements as a deputy project manager.

WWTP Value Engineering Study, City of Clatskanie, OR. Civil/Mechanical Lead. Coordinated a value engineering study for the WWTP Improvements, which included construction of a new headworks facility and sequencing batch reactor (SBR) treatment system; replacement of an existing ultraviolet light (UV) disinfection system with a new, upsized UV disinfection system, relocation of an existing screw press sludge dewatering system to an existing enclosure; and construction of new buildings for administrative services, maintenance shop, electrical and

controls equipment, and aeration blowers. The study culminated in a report that summarized recommended value engineering alternatives and that complied with funding requirements.

WWTP Value Engineering Study, Oak Lodge Water Services, OR. Civil/Mechanical Lead. Coordinated a value engineering study for the WWTP Tertiary Treatment Facility (TTF), which included the excavation and demolition of an existing chlorine contact basin; construction of a new building to house the TFF; construction of new piping systems to connect the existing secondary treatment process to the TFF, and the TFF to existing UV light disinfection channels; and the temporary bypassing of plant flows while pipeline connections are completed. The study culminated in a report that summarized recommended value engineering alternatives and that complied with funding requirements.

Value Engineering Study for WWTP Upper Plant Nitrification Improvements, City of Gresham, OR. Civil/Mechanical Lead. Prepared a value engineering study for the WWTP Upper Plant Nitrification Improvements, which included upgrades to its Aeration Basin No. 4, mixed liquor return, and control systems; construction of a proposed filtrate pump station and chemical feed station; and installation of an emergency standby generator. The study culminated in a report that summarized recommended value engineering alternatives and that complied with funding requirements.



EDUCATION

M.Eng., Environmental Engineering,
Portland State University,
Portland, OR

BS, Civil Engineering, University of
Minnesota, Minneapolis, MN

PROFESSIONAL REGISTRATIONS

Professional Engineer - Civil,
Oregon, No. 93692

Professional Engineer - Civil,
Washington, No. 56785

“Clean water is essential to life and provides a sense of place and identity to our communities, and I am proud to play a part in protecting this vital resource.”

Susan Schlangen

Inverness Pump Station Integrated Facility Plan, City of Portland BES, OR. Project Engineer. WSC participated in the first Integrated Planning approach developed for a BES pump station site and lead the development of a Risk Management Plan to identify and recommend strategies for maintaining operations during planning, design, and construction of site improvements. Inverness is one of the most complex and crucial pump station sites owned and operated by BES. As project engineer, Susan helped lead development of the decision-making framework used to recommend risk management strategies. She conducted site walks and observed operations, interviewed PUMA staff, performed desktop analysis, and supported team workshops to define the risk management strategies. A series of evaluations including risk quantification, planning level cost estimates, benefit/cost analysis, level of confidence were used to select and prioritize recommendations.

Elk Rock Pump Station Improvements, City of Portland BES, OR. Civil Design Lead. Leading development of civil site design, stormwater design, and storage facility alternatives for the Elk Rock Pump Station. The station is capacity limited, requiring analysis of future flows, available storage, and alternatives for improving active and emergency storage. It is located on a significantly constrained site with a small footprint and requiring a complex and robust land use permitting effort. To balance complicated requirements with future pump station needs, Susan provided decision-making frameworks and recommendations to guide internal BES stakeholders toward preferred solutions.

WWTP and Field Station Condition Assessment, South Tahoe Public Utilities District, CA. Project Engineer. Evaluating critical electrical, structural, and piping assets at the Districts wastewater treatment plant and pump stations. The project includes asset prioritization, development of condition assessment budgets for each asset, replacement cost analysis, and rankings for assets. To meet the District's goals, final deliverables include an asset roadmap that provides clear guidance and prioritization for future actions by the District. This includes actively engaging District staff, leveraging institutional system knowledge, and Business Case Screenings (BCSs) to provide an early look at asset values and assessment priorities.

Recycled Water Master Plan, Clean Water Services, Hillsboro, OR. Project Manager. Leading a master planning effort that will characterize the existing system, prepare a market assessment of potential opportunities, define the regulatory drivers and needs, and prepare engineering planning analysis that supports a well-defined CIP for the recycled water program. WSC is coordinating a multidisciplinary team working within numerous departments across the District to develop a comprehensive, defensible, and repeatable planning process that will support the ever-evolving need for one water management in rapidly growing Washington County.

Pump Station System Plan, Bureau of Environmental Services, Portland, OR. Project Engineer. Developed a condition-based rehabilitation prioritization program for Bureau of Environmental Services pumping stations. Desktop evaluations using existing data from the Computerized Maintenance Management System (CMMS), GIS databases, and other sources prioritized pumping stations for detailed field assessments based on risk. Digital forms utilized to collect field data and establish condition and

performance ratings for individual pump station components. Developed an aggregate risk cost for each station based on remaining useful life calculations, and time-based consequences of failure. Results were summarized in standard operating procedures that will be used by City staff for future assessments, along with a georeferenced database for visually accessing system connectivity and component data. Short- and long-term funding and staffing recommendations provided for the program.

Pump Station Decommissioning Design, City of Bend, OR. Phase 1&2 Project Engineer/Phase 3&4 Project Manager. Worked with the City to decommission 10 pump stations by implementing over 8,600 lineal feet of new gravity sewer over four project phases to reroute flows into the southeast interceptor. Prepared lifecycle comparisons of decommissioning versus replacing or upgrading the stations and helped the City obtain nearly \$500,000 in loan forgiveness through the State Revolving Fund by qualifying for energy efficiency improvements. Additional cost savings were realized by constructing new sewers within existing alignments to reduce the volume of required rock excavation. Suggested bypassing and sequencing plans were prepared to provide guidance to bidders for maintaining continuous sewer service and neighborhood access throughout construction. In some cases, property and easement acquisition was necessary to secure new sewer alignments within private property. WSC also leveraged ground penetrating radar and electromagnetic tools to accurately locate buried utilities on private property. Phase 4 of the project involved trenchless installation of gravity sewer piping to cross an irrigation canal by jack and bore.

Toro Creek Bridge Replacement Pipeline Improvements, Cayucos Sanitary District, CA. Engineering Support. Prepared carrier system loading calculations, technical specifications, cost estimates, and permitting documents for a phased design accommodating a California state highway bridge replacement for the Cayucos Sanitary District, which currently supports a sanitary force main crossing. Supported the team in coordinating design approval from Caltrans and is coordinating final design reviews prior to bidding and construction. The project includes multiple design packages that will implement transition from a dual force main system to a single plant effluent pipeline in coordination with ongoing sanitary system projects; installation of a temporary utility bridge to provide a bypass during bridge construction; permanent pipeline and carrier system; and implementation of corrosion control measures.

Columbia Boulevard WWTP Resource Recovery Plan, City of Portland BES, Portland, OR. Recycled Water Lead. WSC is leading the analysis of potential for recycled water opportunities in support of the development of a Resource Recovery Plan for Columbia Boulevard WTP. The Plan development will empower BES to build on the existing resource recovery program and guide diversification, expansion, and investments in existing and proposed processes. As part of the recycled water analysis, WSC will evaluate the local commodity market for opportunities to provide recycled water to external customers as well as opportunities for the Bureau to reuse plant effluent for City functions. In support of the market assessment, WSC will also provide analysis of the regulatory environment, available technology, infrastructure costs, and revenue potential to characterize feasible alternatives for future implementation.

Scott Duren PE

PRINCIPAL IN CHARGE

Scott has 22 years of engineering experience specializing in wastewater pumping stations, treatment, and conveyance design. He approaches wastewater system design from a holistic perspective and creatively sequences upgrades to fit the needs of each project, resulting in cost effective, implementable solutions delivered on schedule. Scott has completed the design, planning, and/or construction of more than 35 pump stations and 100 miles of pipeline.

REPRESENTATIVE PROJECTS

Inverness Pump Station Integrated Facility Plan, City of Portland BES, OR. Project Manager.

WSC participated in the first Integrated Planning approach developed for a BES pump station site and lead the development of a Risk Management Plan to identify and recommend strategies for maintaining operations during planning, design, and construction of site improvements. Inverness is one of the most complex and crucial pump station sites owned and operated by BES.

101st Avenue Pump Station Improvements, City of Portland BES, OR. QA/QC & Technical Advisor.

Evaluation of alternatives and design of pump station upgrades for SE 101st Pump Station, a City sewage pump station serving Southeast Portland. Critical improvements include conversion to a submersible pumping station, construction of a valve vault with flow meter, site drainage and stormwater improvements, evaluation and modification of a retaining wall, and evaluation of additional property acquisition to expand the site footprint. Located adjacent to Kelly Butte Park, the site requires complex land use permitting processes and is subject to environmental zoning.

Elk Rock Pump Station Improvements, City of Portland BES, OR. QA/QC & Technical Advisor.

Leading development of civil site design, stormwater design, and storage facility alternatives for the Elk Rock Pump Station. The station is capacity limited, requiring analysis of future flows, available storage, and alternatives for improving active and emergency storage. It is located on a significantly constrained site with a small footprint and requiring a complex and robust land use permitting effort.

Engineering Design Services for the Creek Crossing Project, Sacramento Area Sewer District, CA. Principal in Charge.

Overseeing an alternatives evaluation for mitigating the risks of 12 exposed sewer crossings of creeks across the County service area. WSC is evaluating alternatives and will design, permit, and assist in construction of 12 creek crossing repairs which included obtaining necessary easements, U.S. Army Corp of Engineers (USACE) and Regional Water Quality Control Board Section 404/401 permits, California Department of Fish and Wildlife (DFW) Lake and Streambed Alteration Agreements, and supporting public outreach. Sizes ranged from 4-inch to 48-inch sewers. Repairs and replacements will include protections in place from ongoing erosion within the creek, additional structural protections for aerial crossings, and CIPP linings. Several locations were designed as aerial crossings using drilled piers. WSC's team will also assist in obtaining property easements, assisting CEQA Initial Study preparation, obtaining permits for work within the creeks, and supporting outreach to affected stakeholders.

Pump Station Decommissioning Design, City of Bend, OR. Project Manager.

Oversaw the evaluation and design of the decommissioning of 10 pump stations. Phase 1 involved preparing a detailed design of approximately for gravity sewers at seven pump stations, allowing the decommissioning of the stations to occur. Phase 2 included additional design of gravity sewers for three stations including rerouting of pressure sewer systems. Business case evaluations were developed for each station to quantify the life-cycle benefits for decommissioning. Costs savings were realized through rerouting sewers within



EDUCATION

BS, Civil and Environmental Engineering, UC Davis

PROFESSIONAL REGISTRATIONS

Professional Engineer- Civil, Oregon, No. C89922

Professional Engineer- Civil, California, No. C68058

Professional Engineer- Civil, Washington, No. C52308

“I love working to solve the water challenges in our communities because I’m constantly learning new things and I get to work with so many passionate and purpose-driven people.”

Scott Duren

existing alignments to minimize hard rock excavation. Bypass pumping strategies were developed for each site to maintain continuous service to customers. Traffic detour and parking plans were developed to facilitate communications with homeowners prior to construction. Property and easement acquisition was necessary to secure new sewer alignments within private property. Private property utility location utilized ground penetrating radar and electromagnetic tools to accurately locate buried utilities. Restoration of private property and demolition of existing stations considered neighborhood aesthetics and homeowner concerns. Coordination with franchise utility owners provided additional opportunities to protect other services and facilitate necessary repairs and installation concurrently to minimize neighborhood disruption. The project also facilitated the City's septic to sewer conversions through provisions for lateral service connections allowing homeowners to abandon pressure sewer connections and private septic tanks.

Headworks Grit System Rehabilitation Project, Big Bear Area Regional Wastewater Agency (BBARWA), CA. QA/QC. Reviewed design, specifications, and front-ends for the rehabilitation and replacement of BBARWA's existing aerated grit system which had reached the end of its useful life. Design included covering of grit chamber and channels with covered FRP grating, extension of odor control ductwork to the chamber and channels to remove and treat hazardous gases from process, replacement of hazardous air monitoring system, replacement of valves and piping, replacement of aerated grit blower, replacement of grit classifier and installation of new electrical, instrumentation and control equipment.

Sanitary Sewer Master Plan, Oak Lodge Water Services District, OR. Project Manager. Leading the development of a Sanitary Sewer Master Plan for the District. Utilizing the District's GIS data, WSC is developing an all-pipes collection system hydraulic model to evaluate the City's collection system for capacity deficiencies. Performing flow monitoring and smoke testing to evaluate wet weather flows for model calibration and identify sewer basins with high infiltration and inflow (I/I). Work will include the evaluation of existing and future flows, development of an I/I reduction strategy, identification capacity deficient pipes, an evaluation of pump station capacity, and an evaluation of collection system condition based on PACP scores. The water reclamation facility will be evaluated to determine capacity and the ability to meet future regulatory requirements. A financial analysis will be performed to determine system development charges. Based on the findings of the Work, a capital improvement plan will be developed.

Wastewater Treatment Plant and Field Station Condition Assessment, South Tahoe Public Utilities District, CA. Principal in Charge. Oversight for evaluating critical electrical, structural, and piping assets at the Districts wastewater treatment plant and pump stations. The project includes asset prioritization, development of condition assessment budgets for each asset, replacement cost analysis, and rankings for assets. To meet the District's goals, final deliverables include an asset roadmap that provides clear guidance and prioritization for future actions by the District. This includes actively engaging District staff, leveraging institutional system knowledge, and Business Case Screenings (BCSs) to provide an early look at asset values and assessment priorities.

Pump Station System Plan, City of Portland Bureau of Environmental Services, Portland, OR. Project Manager. Oversaw the development of a condition-based rehabilitation prioritization program for pumping stations. Performed desktop evaluations using existing data from the CMMS, GIS databases, and other sources were used to prioritize pumping stations for detailed field assessments based on risk. Digital forms collected field data and established condition and performance ratings for individual pump station components. An aggregate risk cost was developed for each station based on remaining useful life calculations, and time-based consequences of failure. Results were summarized in standard operating procedures that will be used by City staff for future assessments, along with a georeferenced database for visually accessing system connectivity and component data. Short- and long-term funding and staffing recommendations were provided for the program.

Wastewater Main Rehabilitation, City of Santa Barbara, CA. Technical Advisor. Conducted technical reviews of plans, specifications, and cost estimates and participated in client workshops for determining rehabilitation repairs for over 80 sewer mains with Grade 4 and 5 PACP ratings, spread across the City. Repair methods included CIPP, slip-lining, spiral-wound PVC, and fold-and-form methods for pipes ranging from 6- to 27-inch diameter. Impacts to traffic, private property, and sewer bypassing were considered for each segment, and used to develop a bidding strategy to maximize competition.

Nye Beach Pump Station Grinder Project, City of Newport, OR. Project Manager. Led the alternatives analysis, design plans, bidding services, and engineering services during construction for the retrofit of a 1,400 gpm pumping station. The project included a bypass that will keep the system operational during construction and a controls upgrade. The modifications will extend response time for operators before the system experiences sanitary sewer overflows, which are currently being rerouted to the ocean at the popular tourist destination Nye Beach.

Battleground Force Main Repair Project, Discovery Clean Water Alliance, WA. Project Manager. Managed the inspection, planning, and design of repairs to the 10-mile long Battleground Force Main. The 16-inch diameter PVC pipeline began experiencing frequent odor complaints and failures of combination air release valves (CAVs) after 20 plus years of service. And his team inspected all of the CAVs, pig launching, and drainage facilities to determine condition and remaining useful service life. A workshop with Alliance team members was held to determine the design criteria, and preliminary design of repairs to the force main facilities is currently underway.

Large Scale Sewer Rehab Program Montavilla North & South, Portland Bureau of Environmental Services, OR. Project Manager. Managed the preliminary design task for identifying pipe segments within the Montavilla neighborhood to be included in rehabilitation project. Over 250 pipe segments and associated service laterals were inspected and recommendations made for rehabilitation methods including cured in place pipe, pipe bursting, and open cut replacement. Coordination with various BES divisions is required to consider long-term capacity, maintenance, and non-conforming sewer requirements within the neighborhood.

Adam Donald PE, PACP

PROJECT ENGINEER

Adam is a PACP certified engineer with eight years of experience. He specializes in wastewater design and planning projects. His experience includes master planning, cost, and life-cycle analyses for sewer systems, and CIP development. He is also adept at pipeline design for gravity sewers and forcemains, as well as sewer pipeline and manhole rehabilitation. His recent experience includes assessing I/I issues and conducting seismic risk assessments.

REPRESENTATIVE PROJECTS

Wastewater Treatment Plant and Field Station Condition Assessment, South Tahoe Public Utilities District, CA. *Engineering Support.*

Evaluating critical electrical, structural, and piping assets at the District's wastewater treatment plant and pump stations. The project includes asset prioritization, development of condition assessment budgets for each asset, replacement cost analysis, and rankings for assets. To meet the District's goals, final deliverables include an asset roadmap that provides clear guidance and prioritization for future actions by the District. This includes actively engaging District staff, leveraging institutional system knowledge, and Business Case Screenings (BCSs) to provide an early look at asset values and assessment priorities.

Sanitary Sewer Master Plan, Oak Lodge Water Services, Oak Grove, OR. *Project Engineer.* Utilizing the District's GIS data, WSC developed an all-pipes collection system hydraulic model to evaluate the City's collection system for capacity deficiencies. Performed flow monitoring and smoke testing to evaluate wet weather flows for model calibration and identify sewer basins with high infiltration and inflow (I/I). Work included the evaluation of existing and future flows, development of an I/I reduction strategy, identification capacity deficient pipes, an evaluation of pump station capacity, and an evaluation of collection system condition based on PACP scores. The water reclamation facility was evaluated to determine capacity and the ability to meet future regulatory requirements. A financial analysis was performed to determine system development charges. Based on the findings of the Work, a capital improvement plan was developed.

Wastewater System Master Plan, City of Milwaukie, OR. *Project Engineer.* Preparing and updating the City's existing wastewater system master plan. Utilizing the City's GIS data to develop an all-pipes collection system hydraulic model to evaluate the City's collection system for capacity deficiencies. Performed flow monitoring to determine dry weather and wet weather flows for model calibration. Work will include evaluation of existing and future flows, infiltration and inflow, and treatment plant capacity. The collection system's critical infrastructure will be evaluated for resiliency to seismic geohazards and climate change. A financial analysis will be performed to determine system development charges. Based on the findings of the Work, a capital improvement plan will be developed.

Creek Crossing Project, Sacramento Area Sewer District, CA. *Engineering Support.* WSC oversaw an alternatives evaluation for mitigating the risks of 12 exposed sewer crossings of creeks across the County service area. WSC designed, provided permitting support, and assisted in construction of the creek crossing repairs of gravity sewers which included obtaining necessary easements, U.S. Army Corp of Engineers and Regional Water Quality Control Board Section 404/401 permits, and California Department of Fish and Wildlife Lake and Streambed Alteration Agreements. Sizes ranged from 4-inch to 48-inch sewers. Repairs and replacements will include protections in place from ongoing erosion within the creek, additional structural protections for aerial crossings, and CIPP linings. Several locations were designed as aerial crossings using drilled piers. WSC assisted in obtaining property easements, CEQA Initial Study preparation, obtaining permits for work within the creeks, and supporting outreach to affected stakeholders.



EDUCATION

MS, Civil and Environmental Engineering, Stanford University

BS, Environmental Engineering, California Polytechnic State University, San Luis Obispo

PROFESSIONAL REGISTRATIONS

Professional Engineer – Civil, Oregon, No. 95325

Professional Engineer – Civil, California, No. 89089

Professional Engineer – Civil, Washington, No. 57893

PACP/MACP/LACP – Certificate U-0520-70309436

“I’m passionate about helping our clients meet the needs of their communities through tailored, best-fit solutions.”

Adam Donald

Auburn Ravine Force Main Replacement, Placer County, CA. Engineering Support.

Evaluation of alternatives to address condition deficiencies within the 12-inch diameter, 6,500 foot long asbestos cement pipeline. Alternatives included rerouting the pipeline, rehabilitation in place, or installation of a parallel pipeline. Designed a parallel pipeline that included the installation of a permanent bypass into the neighboring City of Auburn collection system, allowing significant cost savings by reusing the existing alignment in sections to avoid hard rock removal. A variance from separation requirements with potable water utilities was obtained from the Division of Drinking Water through the use of DR17 14-inch diameter butt-fusion welded HDPE pipe with a pressure rating exceeding the project requirements. Utility location was critical within the narrow corridor, and both ground penetrating radar, electromagnetic sounding, and hydraulic potholing were used to positively locate utilities along the alignment. An 800 foot long horizontal directional drill installation was required to avoid an environmentally sensitive Auburn Ravine creek, and required a Lake and Streambed Alteration Agreement. Supported the development of a CEQA Initial Study and declaration of Mitigated Negative Declaration. Coordination with Caltrans was required for connection to existing pipelines within the Highway 49 right-of-way.

Cayucos Sustainable Water Project, Cayucos Sanitary District, CA. Process Design Lead.

Provided planning, design services for a 1.2 mgd greenfield Water Resource Recovery Facility that will create a sustainable water source from a resource previously disposed through an ocean outfall. The facility includes a membrane bioreactor and UV disinfection treatment processes for CA Title 22 compliance, four pump stations, two tanks, and distribution piping. Supported the project by preparing design plans and technical specifications for the onsite potable water system and onsite drainage system. The design consisted of designing a 16 gpm potable water booster pump station, distribution piping network, and potable water storage tank to provide water to buildings onsite. Site drainage design consisted of designing a lift station to handle screw press filtrate and waste from the maintenance building and selecting three packaged grinder pump stations to serve additional buildings on site. He provided engineering services during construction for each of these process areas including submittal reviews and responding to RFIs.

Pump Station Decommissioning Design, City of Bend, OR. Staff Engineer.

Evaluated 10 lift stations for decommissioning for the City of Bend. Phase 1 involved preparing a detailed design to abandon the four most problematic stations operating beyond useful life. Phase 2 consisted of preparing business cases for the remaining pump stations to determine a cost-effective solution and the design and construction to decommission 3 pump stations in addition to Phase 1 sites. Phases 1 & 2 were constructed in 2019-2020, while Phase 3 (currently in design phase) will abandon 3 additional pump stations. The project is currently tracking on schedule and under budget, and City preferences were incorporated to promote ease of sewer maintenance. Supported the project through developing the business cases for decommissioning the pump stations and providing technical reviews of design plans.

Paso Robles Lift Station Discharge Piping Replacement, Paso Robles, CA. Staff Engineer. Providing design services for replacement of existing discharge piping with stainless steel discharge piping at five of the City's lift

stations. Project consisted of developing design drawings, specifications and engineer's opinion of probable construction cost as well as the development of site-specific bypass plans for construction.

FY23 Sewer Main Rehabilitation Project. City of Santa Barbara, CA.

Project Engineer. Project includes evaluating 2.3 miles of gravity sewer main ranging from 6" to 18" in diameter and preparing construction documents. Rehabilitation strategies included dig and replace, trenchless rehabilitation through cured-in-place pipe (CIPP) or spiral wound PVC pipe liner, point repairs, rehabilitation of manholes, and replacement of cleanouts with new manholes. Prepared technical specifications and engineer's opinion of probable construction cost.

FY22 Sewer Main Rehabilitation Project. City of Santa Barbara, CA.

Project Engineer. Project includes evaluating 2.4 miles of gravity sewer main ranging from 6" to 16" in diameter and preparing construction documents. Rehabilitation strategies included dig and replace, trenchless rehabilitation through cured-in-place pipe (CIPP) or spiral wound PVC pipe liner, point repairs, rehabilitation of manholes, and replacement of cleanouts with new manholes. Prepared technical specifications and engineer's opinion of probable construction cost. Reviewed the exhibits prepared by the City and provided input on rehabilitation strategy. Provided engineering services during construction including submittal review, response to requests for information, CCTV review and tracking of all work completed.

FY 20 Sewer Main Rehabilitation Project. City of Santa Barbara, CA.

Project Engineer. Project includes evaluating 3.5 miles of gravity sewer main, recommending rehabilitation strategies for each segment, and preparing construction documents. Rehabilitation strategies included dig and replace, trenchless rehabilitation through cured-in-place pipe (CIPP) or spiral wound PVC pipe liner, point repairs, rehabilitation of manholes, and replacement of cleanouts with new manholes. Prepared the technical specifications and engineer's opinion of probable construction cost and reviewed design plans. Will assist the City during the bidding phase by preparing addenda and evaluating products. Will assist the City during Construction by evaluating pre-lining CCTV videos.

Clarifier Rehabilitation, City of Pismo Beach, CA. Staff Engineer.

Prepared the design and construction documents for a rehabilitation of two secondary clarifiers at the City's Wastewater Treatment Plant (WWTP). Assisted the City in preparing contract documents to clean and inspect as well as coat, replace, and repair mechanical components. Assisted with preparation of contract specifications for rehabilitation work including coordination of taking the clarifiers offline, cleaning, and inspection.

Sludge Dewatering Alternatives Analysis, Big Bear Area Regional Wastewater Agency, CA. Engineering Support.

Performed an alternatives analysis for replacing BBARWA's existing belt press. Analyzed historic sludge flows and current operational challenges. Evaluated a belt press, rotary press, screw press, and centrifuge on variety of economic and non-economic criteria that included operator attention required, maintenance required, reliability, energy required, polymer consumption, and life cycle cost. Assisted in coordinating pilot testing for final selection decision.

Lauren Greulich ^{PE}

PROJECT ENGINEER

Lauren is a skilled design engineer with experience focused on water and sewer hydraulic analysis, distribution and collection system design, and construction management support. She has worked on utility projects specializing in GIS spatial data analytics and hydraulic analysis and is competent in AutoCAD Civil 3D and Revit. Lauren brings design experience as an engineer and drafter in pipeline utility design, civil site design, land development, and facility layout and design.

REPRESENTATIVE PROJECTS

Elk Rock Pump Station Improvements, City of Portland BES, OR. *Engineering Support and Revit Designer.* Supporting development of civil site design, stormwater design, and storage facility alternatives for the Elk Rock Pump Station. The station is capacity limited, requiring analysis of future flows, available storage, and alternatives for improving active and emergency storage. It is located on a significantly constrained site with a small footprint and requiring a complex and robust land use permitting effort.

SE 101st Avenue Pump Station Improvements, City of Portland BES, OR. *Engineering Support and Revit Designer.* Evaluation of alternatives and design of pump station upgrades for SE 101st Pump Station, a City sewage pump station serving Southeast Portland. Critical improvements include conversion to a submersible pumping station, construction of a valve vault with flow meter, site drainage and stormwater improvements, evaluation and modification of a retaining wall, and evaluation of additional property acquisition to expand the site footprint. Located adjacent to Kelly Butte Park, the site requires complex land use permitting processes and is subject to environmental zoning. Supporting the development of site layout alternatives, storm water management and design, and other civil components.

Influent/Effluent Pumping Rehabilitation Project, Sonoma Valley County Sanitation District, CA. *Project Engineer and Revit Designer.* Supported design to rehabilitate the aging Influent/Effluent Pump building and infrastructure at the District's wastewater treatment plant. Originally constructed in 1966, the facility houses four influent and three

effluent pumps, the influent pumps are vertical non-clog centrifugal pumps (125 hp), and the effluent pumps are two Allis-Chalmers vertical non-clog pumps (75 hp). There is also a fifth swing pump for influent or effluent pumping. This project will entirely replace the influent and effluent pumps, all exposed influent suction and discharge piping, valves and flow meters within the building basement, and associated electrical and controls equipment. For the influent pumping, the design process includes reevaluating the existing pump design and integrating the controls to better meet flow changes; optimize performance of new perforated plate screens; protect against corrosion and/or erosion of the influent discharge pipe; and determine the best use of the fifth (swing) pump. For the effluent pumping and piping, the project includes an alternatives evaluation for reconfiguring the facilities in a new location outside of the existing building to address exceedingly complex and difficult to access discharge piping.

FY22 Sewer Main Rehabilitation Project. City of Santa Barbara, CA. *Engineering Support.* Project included evaluating 2.4 miles of gravity sewer main ranging from 6" to 16" in diameter and preparing construction documents. Rehabilitation strategies included dig and replace, trenchless rehabilitation through cured-in-place pipe (CIPP) or spiral wound PVC pipe liner, point repairs, rehabilitation of manholes, and replacement of cleanouts with new manholes. Prepared technical specifications and engineer's opinion of probable construction cost. Reviewed the exhibits prepared by the City and provided input on rehabilitation strategy. Provided engineering services during construction including submittal review, response to requests for information, CCTV review and tracking of all work completed.



EDUCATION

MS., Civil Engineering,
Virginia Tech, Blacksburg, VA

BS, Civil Engineering,
Virginia Tech, Blacksburg, VA

PROFESSIONAL REGISTRATIONS

Professional Engineer - Civil,
Oregon, No. 100055

"I'm passionate about helping keep clean water a renewable and accessible resource."

Lauren Cetin

Patrick Finn ^{PE}

PROJECT ENGINEER

Patrick has worked in water resource consulting for over 7 years with experience in the study, design, construction and permitting of municipal water, wastewater, and stormwater projects. Pat's work experience includes nine water system asset management and long-range plans, pump station design, pressure reducing facility design, gravity sewer pipe design, construction inspection and management for municipal and industrial treatment upgrades and industrial solids dewatering upgrades. Skills include hydraulic modeling, pump design, WWTP process design, construction management and administration, cost estimating, capital improvement and long-term planning, and technical writing.

REPRESENTATIVE PROJECTS

Kellogg Creek Construction Management, County of Clackamas Water Environment Services, Clackamas, OR . Construction Inspector.

Construction management and inspection services for Kellogg Creek Water Resource Recovery Facility Improvements Project. Responsibilities included conducting on-site observations to assist the District in determining if the work conformed with contract documents, managed, tracked, and stored relevant documents between Contractor, Engineer, and District using EADOC, communicated daily progress to the District, and served as the District's liaison with the Contractor.

Hattan Road Pump Station Construction Services, Clackamas River Water, Clackamas, OR . Construction Administration.

Project included engineering design and construction services for a new booster pump station to improve the ability to deliver water to their District's south service area and to meet future demand. Responsibilities included reviewing equipment submittals, overseeing equipment startup, and developing an O&M manual for the station.

Stormwater System Plan, City of Milwaukie, OR.

Project Engineer. WSC is leading an update for the City's Stormwater System Plan. Since the last plan update, the City received a new National Pollutant Discharge Elimination System (NPDES) permit. They are also anticipating a new Underground Injection Control (UIC) Water Pollution Control Facility (WPCF) permit as well as other City-wide planning documents that could impact the

stormwater system. WSC is performing the following services: developing a resiliency strategy; preparing for a new UIC permit, planning for future growth, updating the hydraulic model; aligning with SAFE improvements, assessing and prioritizing existing system and maintenance needs; engaging the public; prioritizing spending; and helping the City meet their tree coverage goal.

Three Rivers WWTP Improvements, Three Rivers Regional Wastewater Authority, Longview, WA .

Project Team Member. Project included predesign and final design services for a wastewater treatment upgrade including a new hauled waste station, aerobic digester, clarifier replacement, and dryer. Led design tasks focused primarily in predesign services and final design of the hauled waste station, clarifier, yard piping, pump design, and headworks expansion.

Nehalem Bay Wheeler Pump Station and Forcemain Upgrade, Nehalem Bay Wastewater Agency, Nehalem, OR.

Project Engineer. Project included preliminary, final design and bid services for upgrades to an existing wastewater lift station and discharge forcemain. Responsibilities included design of the lift station mechanical upgrades and the new forcemain alignment.

Construction Management for Industrial Wastewater Treatment Improvements, Georgia-Pacific, LLC, Camas, WA . Construction Manager.

Provided construction management services to Georgia-Pacific LLC (GP) Camas Mill (Mill) in support of the upgrades to the Industrial Wastewater Treatment Plant (IWTP).



EDUCATION

BS, Civil Engineering, University of Vermont

PROFESSIONAL REGISTRATIONS

Professional Engineer - Civil, Oregon, No. 97653PE

"I am passionate about serving municipalities and making a difference in these communities by providing quality, long term solutions to their water and wastewater needs."

Patrick Finn

Jason Rice PE

STAFF AUGMENTATION

Jason brings 17 years of capital project management experience in wastewater, water, stormwater, transportation, and parks. For 11 of those 17 years, he directed engineering departments and at times, planning departments, building departments, administrative staff, and an entire district as Interim General Manager. Jason has built his career on bridging departments and agencies to deliver successful projects for the communities he works with. Jason is currently providing staff extension and project management services for utilities with staffing constraints.

REPRESENTATIVE PROJECTS

Staff Augmentation Services, City of Wilsonville, OR. Project Manager. Providing project management services for a variety of capital improvement projects. The City is facing a staffing shortage and sought out a staff augmentation services contract to help deliver projects. Work has included plan reviews, staff reports, bid coordination, invoicing, and consultant management for a variety of utility projects.

Sanitary Sewer Master Plan, Oak Lodge Water Services, Oak Grove, OR. Client Project Manager/ Senior Engineer. Utilizing the District's GIS data, WSC developed an all-pipes collection system hydraulic model to evaluate the City's collection system for capacity deficiencies. Performed flow monitoring and smoke testing to evaluate wet weather flows for model calibration and identify sewer basins with high infiltration and inflow (I/I). Work included the evaluation of existing and future flows, development of an I/I reduction strategy, identification capacity deficient pipes, an evaluation of pump station capacity, and an evaluation of collection system condition based on PACP scores. The water reclamation facility was evaluated to determine capacity and the ability to meet future regulatory requirements. A financial analysis was performed to determine system development charges. Based on the findings of the Work, a capital improvement plan was developed.

Staff Augmentation Services, Oak Lodge Water Services, OR. Interim District Engineer. Jason served as Interim District Engineer through a staff augmentation contract. Duties included: Capital Improvement Plan development, including preparing justification for projects and prioritization

scheduling for alignment with annual budgeting process; coordination amongst all District departments; coordination with affected agencies and other utilities, including partners and regulators; oversight of transition of agency designation to an authority with navigation of necessary approval processes through Clackamas County; and management of critical path schedules and quality control reviews on multiple planning, preliminary design, design, and construction projects. Jason also oversaw the consultant selection process for a diverse range of professional services and was responsible for identifying the best process for consultant selection ranging from direct appoint, selection of on-call master services agreements and contracting through task orders, and RFPs.

Willow Lake Boiler Replacement, City of Salem, OR. Project Manager. Assisted the City as a Contract Project Manager, Jason oversaw the finalization of a bid package that installs a new boiler, relocates an existing on-site boiler, provides necessary piping, electrical, control and ancillary facilities into what was the City's Cogeneration Building at the Willow Lake Wastewater Pollution Control Facility. This project will allow for the campus to continue enjoying heat for many of its buildings, independent from the electrical grid.

SE Old Orchard and Jade Courts Sewer Water Main Replacements, Oak Lodge Water Services, OR. Project Manager. Originally planned as a sanitary sewer project to fix multiple locations of I/I, Jason discovered that the water main in Old Orchard Court had already had multiple main breaks fixed and need replacement. He used this opportunity to quickly replace both lines and give the neighborhood a freshly paved road.



EDUCATION

BS, Forestry Engineering, Oregon State University, Corvallis, OR

PROFESSIONAL REGISTRATIONS

Professional Engineer – Civil
Oregon, No. 74479

“I can’t think of anything better to do with my career than to carry the responsibility of providing safe drinking water for generations to come.”

Jason Rice

Matt Rodrigues^{PE}

PROJECT ENGINEER

Matt brings 10 years of experience with an emphasis in wastewater treatment processes. His experience includes wastewater treatment process design and operational optimization, maintenance of wastewater treatment systems, evaluation of wastewater treatment system capacity and treatment performance, water and wastewater master planning, development and calibration of water distribution system hydraulic models, optimization of pumping stations and design of water production and distribution systems. He has spent considerable time managing pilot plant operations at wastewater reclamation facilities, allowing him to apply hands-on engineering to unexpected process interruptions and develop effective operational methods for wastewater facilities.

REPRESENTATIVE PROJECTS

Water Reclamation Facility Upgrade, Heritage Ranch Community Services District, Paso Robles, CA.

Design Engineer. Providing design services for upgrading the District's WRF for compliance with National Pollutant Discharge Elimination System (NPDES) requirements and a Time Schedule Order (TSO) for copper, un-ionized ammonia, and nitrate effluent limits. The project replaces the District's secondary wastewater treatment pond system with a new membrane bioreactor (MBR) system. Critical project elements include selecting the optimal site configuration and process options; procuring equipment quickly, competitively, and cost-effectively; efficiently navigating environmental and permitting requirements; providing accurate cost estimating; integrating lifecycle costs; and assisting in meeting United States Department of Agriculture (USDA) requirements and identifying other funding/financing opportunities.

Replenish Big Bear, Big Bear Area Regional Water Agency, Big Bear, CA.

Engineering Support. Evaluating conceptual recycled water use alternatives to retain treated water and create a sustainable water resource to augment the potable water supply. Alternatives are being analyzed based on treatment and regulatory requirements of use, water supply yield, social and environmental benefits, and life cycle cost. Project includes assisting in the procurement of state and federal funding to support the implementation of a cost-effective project.

Wastewater Master Plan Update & Treatment Alternatives, Camarillo Sanitary District, Camarillo, CA.

Engineering Support. Preparing a wastewater plan to evaluate the District's collections system and water reclamation plant. The collections system evaluation consists of developing land-use based loading factors, an all-pipes collection system hydraulic model to identify capacity constrained pipes, pump station evaluations, and a pipe age analysis for determining a long-term pipe replacement strategy. The water reclamation plant evaluation consists of a regulatory review, a site planning study, wastewater characterization, liquid streams and solids stream analysis, condition assessment, and development of treatment alternatives to meet future regulations. A capital improvement plan is being developed to incorporate the recommended projects.

Seismic Retrofit of Secondary Clarifiers at Sonoma Valley County Sanitation District WWTP, Sonoma Valley County Sanitation District, Sonoma, CA.

Project Engineer. Prepared basis of design report to identify structural and mechanical improvements and upgrades for two 140-foot secondary clarifiers to comply with current seismic codes. Prepared demolition plans and specifications for existing clarifier mechanisms. Specified and designed new clarifier mechanisms. Prepared design drawings, specifications, and engineer's opinion of probable construction cost. Assisted with project administration and management.



EDUCATION

MS, Civil and Environmental Engineering, California Polytechnic State University, San Luis Obispo, CA

MS, Engineering Management, University of California, Los Angeles Los Angeles, CA

BS, Environmental Engineering, California Polytechnic University, San Luis Obispo, CA

CERTIFICATIONS

Professional Engineer - Civil, No. 84311

“Water shapes our natural environment and its characteristics influence the health of those along its path. I am driven by any opportunity I have to protect and improve the role of water in our world.”

Matt Rodrigues

Rob Natoli PE

QA/QC & TECHNICAL ADVISOR

Rob brings 16 years of engineering experience in the wastewater industry. His primary focus is on the design, repair and rehabilitation of wastewater pipelines, pump stations, and treatment plant infrastructure. He is skilled at directing and managing multi-disciplinary teams to meet and exceed client expectations. Rob has worked closely with the Portland team on several wastewater projects and is able to provide focused and streamlined support.

REPRESENTATIVE PROJECTS

Pump Station Decommissioning Design, City of Bend, OR. QA/QC.

Provided QA/QC support to decommission 10 pump stations by implementing over 8,600 lineal feet of new gravity sewer over four project phases to reroute flows into the southeast interceptor. WSC prepared lifecycle comparisons of decommissioning versus replacing or upgrading the stations and helped the City obtain nearly \$500,000 in loan forgiveness through the State Revolving Fund by qualifying for energy efficiency improvements. Additional cost savings were realized by constructing new sewers within existing alignments to reduce the volume of required rock excavation. Suggested bypassing and sequencing plans were prepared to provide guidance to bidders for maintaining continuous sewer service and neighborhood access throughout construction. In some cases, property and easement acquisition was necessary to secure new sewer alignments within private property. WSC also leveraged ground penetrating radar and electromagnetic tools to accurately locate buried utilities on private property. Phase 4 of the project involved trenchless installation of gravity sewer piping to cross an irrigation canal by jack and bore.

Wastewater Treatment Plant and Field Station Condition Assessment, South Tahoe Public Utilities District, CA. Project Manager.

Leading the evaluation of critical electrical, structural, and piping assets at the District's wastewater treatment plant and pump stations. The project includes asset prioritization, development of condition assessment budgets for each asset, replacement cost analysis, and rankings for assets. To meet the District's goals, final deliverables include an asset roadmap that provides clear guidance and prioritization for future actions by the District. This includes actively engaging District staff, leveraging institutional

system knowledge, and Business Case Screenings (BCSs) to provide an early look at asset values and assessment priorities.

Engineering Design Services for the Creek Crossing Project, Sacramento Area Sewer District, CA. Project Manager.

Leading an alternatives evaluation for mitigating the risks of 12 exposed sewer crossings of creeks across the County service area. WSC is evaluating alternatives and will design, permit, and assist in construction of 12 creek crossing repairs which included obtaining necessary easements, U.S. Army Corp of Engineers (USACE) and Regional Water Quality Control Board Section 404/401 permits, California Department of Fish and Wildlife (DFW) Lake and Streambed Alteration Agreements, and supporting public outreach. Sizes ranged from 4-inch to 48-inch sewers. Repairs and replacements will include protections in place from ongoing erosion within the creek, additional structural protections for aerial crossings, and CIPP linings. Several locations were designed as aerial crossings using drilled piers. WSC's team will also assist in obtaining property easements, assisting CEQA Initial Study preparation, obtaining permits for work within the creeks, and supporting outreach to affected stakeholders.

Seismic Retrofit of Secondary Clarifiers at Sonoma Valley County Sanitation District WWTP, Sonoma Valley County Sanitation District, Sonoma, CA. Project Manager.

Leading the development of a design report to identify structural and mechanical improvements and upgrades for two 140-foot secondary clarifiers to comply with current seismic codes. Prepared demolition plans and specifications for existing clarifier mechanisms. Specified and designed new clarifier mechanisms. Prepared design drawings, specifications, and engineer's opinion of probable construction cost.



EDUCATION

BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, CA

REGISTRATIONS

Professional Engineer - Civil, California, No. C78271

Professional Engineer - Civil, Nevada, No. 23188

Professional Engineer - Civil, Oregon, No. 96253

“I enjoy the personal and technical aspects of being a water engineer and being a part of finding great solutions on projects. I strive to communicate well, take initiative and bring a high level of quality to everything I do.”

Rob Natoli

Jon Ganz PE, BCEE, PMP

QA/QC & TECHNICAL ADVISOR

Jon Ganz has 27 years of experience in the design, construction, and rehabilitation of both wastewater and water treatment and conveyance facilities. He excels in leading multidisciplinary design teams to deliver complex projects within active, operating water and wastewater facilities. He has managed capital improvements projects with a total estimated construction cost of over \$2 billion. In addition, he has provided field construction management for the construction and rehabilitation of conveyance and treatment facilities and supervised engineering and maintenance programs totaling over \$30 million annually to support the operation of a large wastewater collection system.

REPRESENTATIVE PROJECTS

Value Engineering (VE) Study for WWTP Upper Plant Nitrification Improvements, City of Gresham, OR. Project Manager. Managed a value engineering study for the WWTP Upper Plant Nitrification Improvements, which included upgrades to its Aeration Basin No. 4, mixed liquor return, and control systems; construction of a proposed filtrate pump station and chemical feed station; and installation of an emergency standby generator. The study culminated in a report that summarized recommended value engineering alternatives and that complied with funding requirements.

VE Study for WWTP Improvements, City of Clatskanie, OR. Project Manager. Managed a value engineering study for the WWTP Improvements, which included construction of a new headworks facility and sequencing batch reactor (SBR) treatment system; replacement of an existing ultraviolet light (UV) disinfection system with a new, upsized UV disinfection system, relocation of an existing screw press sludge dewatering system to an existing enclosure; and construction of new buildings for administrative services, maintenance shop, electrical and controls equipment, and aeration blowers. The study culminated in a report that summarized recommended value engineering alternatives and that complied with funding requirements.

VE Study for WWTP Tertiary Treatment, Oak Lodge Water Services, OR. Project Manager. Managed a value engineering study for the WWTP Tertiary Treatment Facility (TTF), which included

the excavation and demolition of an existing chlorine contact basin; construction of a new building to house the TFF; construction of new piping systems to connect the existing secondary treatment process to the TFF, and the TFF to existing UV light disinfection channels; and the temporary bypassing of plant flows while pipeline connections are completed. The study culminated in a report that summarized recommended value engineering alternatives and that complied with funding requirements.

Advanced Water Purification Facility-Phase I, City of Los Angeles Bureau of Sanitation, CA. Project Manager. Jon managed design and engineering support during the first phase of this design-build project, which included demolition of the existing Dissolved Air Flootation structures and relocation of associated electrical, instrumentation and control facilities to allow construction of a proposed 1.5-mgd Advanced Water Purification Facility (AWPF) at the City's Hyperion Water Reclamation Plant in El Segundo, California.

Civic Center Wastewater Treatment Facility-Phase 1, City of Malibu, CA. Project Manager. Managed engineering support during the construction of this \$44-million project that included a centralized wastewater collection and treatment system, recycled water distribution system, and injection wells for management of treated effluent. Engineering services included responding to RFIs, reviewing shop drawings, evaluating claims for extra work and delays, development of an integrated SCADA system for the proposed facilities, and field support for injection well drilling activities and final design of wells and wellheads.



EDUCATION

MS, Environmental Engineering and Science, Stanford University

BS, Civil Engineering, Stanford University

PROFESSIONAL REGISTRATIONS

Professional Engineer — Civil, California, No. 58474

Board Certified Environmental Engineer

Project Management Professional

creating
**A BETTER
WATER
FUTURE[®]**



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