

**City of Sweet Home
Personal Services Contract for
City Engineering Services**

This Contract is by and between the City of Sweet Home (“City”) and West Yost Associates (“Engineer”) for the performance of general city engineering services for City, on an as needed basis.

A. RECITALS

City has conducted a formal solicitation for proposals from engineering firms pursuant to Public Contracting law.

Engineer submitted its proposal, having examined the Request for Proposals (RFP), and was chosen as the most highly qualified engineer, best suited to meet City’s needs pursuant to the RFP criteria.

City has awarded the contract to Engineer.

B. CONTRACT EXHIBITS

The following exhibits are hereby incorporated by reference into this Contract:

- Exhibit A – Scope of Work
- Exhibit B – Oregon Personal Services Public Contracting Code Requirements
- Exhibit C – Request for Proposal
- Exhibit D – Engineer’s Proposal
- Exhibit E – Engineer’s Schedule of Rates and Charges

C. AGREEMENT

1. Term

The term of this Contract shall be from its execution to September 1, 2021, for an initial one (1) year term. Thereafter, it may be extended up to an additional three (3) years upon written consent of both parties. Such extension(s) will consider adjustments to Engineer’s schedule of charges attached within Exhibit E to this Agreement.

2. Scope of Work

Engineer shall provide all services and deliver all materials as specified in the attached Exhibits A, C and D, which are hereby incorporated into this Contract by this reference, and as may be described by future addenda to this Contract.

3. Compensation

3.1 Compensation. For the services described and performed by Engineer, the City agrees to pay, and the Engineer agrees to accept, compensation in accordance with the Schedule of Rates and Charges, attached within Exhibit E.

3.2 Invoices. Invoices for services of Engineer shall be billed to the City in summary form, itemized by projects and/or work tasks, on or about the 10th day of each month for all services performed through the last day of the previous month. Reimbursable expenses shall be itemized and backup invoices provided if required by City.

3.3 Payments.

- a. City will review Engineer's invoice and within ten (10) days of receipt notify Engineer in writing if there is a disagreement or dispute with the invoice. If there are no such disputes with the invoice, City shall pay the invoice amount in full within thirty (30) days of invoice date.
- b. If City fails to make any payment due Engineer for services and expenses within thirty (30) days of the date on Engineer's invoice therefore, late fees will be added to amounts due Engineer at the rate of 1.0 percent per month from original invoice date. Invoices in dispute are not subject to such late fees until such time as they are no longer in dispute. In addition, Engineer may, after giving seven (7) days written notice to City, suspend services under this Contract until Engineer has been paid in full all amounts due for services, expenses, and charges, except any invoices in dispute.

4. Contractor Is an Independent Contractor

Engineer shall be an independent contractor for all purposes and shall be entitled to no compensation other than the compensation provided for under this Contract. While City reserves the right to set various schedules and evaluate the quality of Engineer's completed work, City cannot and will not control the means and manner of Engineer's performance. Engineer is responsible for determining the appropriate means and manner of performing work. Engineer is responsible for all federal and state taxes applicable to compensation and payment paid to Engineer under the Contract and will not have any amounts withheld by City to cover Engineer's tax obligations. Engineer is not eligible for any City fringe benefit plans.

5. Notices

All notices provided for hereunder shall be in writing and shall be deemed to be duly served on the date of delivery if delivered in person, when receipt of transmission is generated by the transmitting facsimile machine if delivered by facsimile transmission, on the day after deposit if delivered by overnight courier, or three days after deposit if delivered by placing in the U.S. mail, first-class, postage prepaid. Any notice delivered by facsimile transmission shall be followed by a hard copy. All notices shall be addressed as follows:

City: Greg Springman
City of Sweet Home
1400 24th Ave
Sweet Home, OR 97386
Phone: (541) 367-6359
Fax: (541) 367-7592

Engineer: West Yost Associates
5 Centerpointe Drive, Suite 130
Lake Oswego, OR 97035
Phone: 503.451.4500

6. Indemnification

Engineer shall indemnify and hold harmless City and its representatives, officers, directors, and employees from any loss or claim made by third parties to the extent arising directly or indirectly from Engineer's negligent performance and/or fault of Engineer, its employees, representatives, or subcontractors. If the loss or claim is caused by the joint concurrent negligence or other fault of City and Engineer, the loss or claim shall be borne by each in proportion to the degree of negligence or other fault attributable to each.

For claims based upon professional negligence, Consultant's obligation to indemnify indemnitees for defense costs (as defined) is not immediate and shall be satisfied at the time of any settlement or judgment as to Consultant's indemnity obligations under this Agreement.

7. Insurance Requirements

7.1 During the term of this Contract, Engineer shall maintain, at its own expense, the following types of insurance in the following amounts:

- a. Commercial general liability insurance, including coverage for premises operations, independent contractors, protected products, completed operations, contractual liability, personal injury, and broad form for property damage (including coverage for explosion, collapse, and underground hazards, if applicable):
 - \$1,000,000 – each occurrence (bodily injury)
 - \$2,000,000 – general aggregate
 - \$1,000,000 – property damage, contractual, etc.
 - \$2,000,000 – umbrella liability coverageCoverage shall also include contractual liability coverage for the indemnity provided under this contract.
- b. Automobile Liability insurance limit shall not be less than \$1,000,000 combined single limit per accident.
- c. Workers' Compensation and employer's liability insurance per ORS Chapter 656. The employer's liability limit shall not be less than \$1,000,000 per occurrence.
- d. Errors and Omissions insurance covering Engineer's liability arising out of negligent acts, errors or omissions in its performance of work or services under this Contract. Such policy will have a combined single limit of not less than \$2,000,000 per each claim, incident or occurrence for the term of the Project. Such policy will be on a claims made basis and will have an extended claims reporting period of five (5) years after final completion.

- e. The limits required in this Section 7.1 may be met with a combination of underlying and umbrella coverage.

7.2 Except as required in 7.1(d) above, if any of the above required insurance is arranged on a “claims made” basis, “tail” coverage will be required at final completion or termination of this Contract for a duration of two (2) years.

7.3 Policies shall provide that City, its council, officers, representatives, employees, and agents will be included as an additional insured with respect to the coverages required in Section 7.1(a) and a waiver of subrogation against them shall be obtained for all coverages.

7.4 All coverages under Section 7.1 shall be primary over any insurance City may carry on its own.

7.5 City shall be solely responsible for any loss, damage or destruction to its own property, equipment, and materials used in conjunction with the work or services under this Contract.

7.6 All policies of insurance shall be issued by good, responsible companies, with a rating reasonably acceptable to City and that are qualified to do business in the state of Oregon.

7.7 Engineer shall furnish City with certificates of insurance evidencing all required coverages prior to commencing any work or services under this Contract. If requested by City, Engineer shall furnish City with executed copies of such policies of insurance. Engineer shall furnish City with at least 30 days’ written notice of cancellation of, or any modification to, the required insurance coverages. Failure to maintain any required insurance coverages in the minimum required amounts shall constitute a material breach of this Contract and shall be grounds for immediate termination of this Contract.

7.8 All liability insurance, except for Workers’ Compensation, Professional Liability, and Network Security and Privacy Liability (if applicable), required under this Contract must include an additional insured endorsement with the certificate of insurance specifying the City of Sweet Home, its officers, employees and agents as Additional Insureds, including additional insured status with respect to liability arising out of ongoing operations and completed operations, but only with respect to Contractor’s activities to be performed under this Contract. Coverage shall be primary and non-contributory with any other insurance and self-insurance. The Additional Insured endorsement with respect to liability arising out of your ongoing operations must be on ISO Form CG 20 10 07 04 or equivalent and the Additional Insured endorsement with respect to completed operations must be on ISO form CG 20 37 04 13 or equivalent and attached to Certificate of Insurance.

8. Workers’ Compensation

8.1 Engineer, its subcontractors, if any, and all employers working under this Contract are subject employers under the Oregon Workers’ Compensation Law and shall comply

with ORS 656.017, which requires them to provide workers' compensation coverage for all subject workers.

8.2 Engineer warrants that all persons engaged in Contract work and subject to the Oregon Workers' Compensation Law are covered by a workers' compensation plan or insurance policy that fully complies with Oregon law. Engineer shall indemnify City for any liability incurred by City as a result of Engineer's breach of the warranty under this paragraph.

9. Hours of Employment

Engineer shall comply with all applicable state and federal laws regarding employment.

10. Assignments and Subcontractors

Engineer may not assign or subcontract any of its responsibilities under this Contract without City's prior written consent. Engineer's assigning or subcontracting of any of its responsibilities under the Contract without City's consent shall constitute a material breach of this Contract. Regardless of any assignment or subcontract, Engineer shall remain liable for all of its obligations under this Contract.

11. Labor and Material

Engineer shall provide and pay for all labor, materials, equipment, tools, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of all Contract work, all at no cost to City other than the compensation provided in this Contract.

12. Ownership of Work and Documents

All work performed by Engineer and compensated by City pursuant to this Contract shall be the property of City upon full compensation for that work performed or document produced to Engineer, and it is agreed by the parties that such documents are works made for hire. Engineer hereby conveys, transfers and grants to City all rights of reproduction and the copyright to all such documents. City shall not be limited in any way in its use of the Documents and Data at any time, provided that any such use not within the purposes intended by this Agreement shall be at City's sole risk.

13. Termination for Convenience

13.1 This Contract may be terminated by mutual consent of the parties upon written notice. In addition, City may terminate all or part of this Contract upon determining that termination is in the best interest of City by giving seven (7) days' prior written notice of intent to terminate, without waiving any claims or remedies it may have against Engineer. Upon termination under this paragraph, Engineer shall be entitled to payment in accordance with the terms of this Contract for Contract work completed and accepted before termination less previous amounts paid and any claim(s) City has against Engineer. Pursuant to this paragraph, Engineer shall submit an itemized invoice for all unreimbursed Contract work completed before termination and all Contract closeout costs actually incurred by Engineer. City shall not be liable for any costs invoiced later

than thirty (30) days after termination unless Engineer can show good cause beyond its control for the delay.

13.2 City may unilaterally order Engineer to suspend all or part of the services under this Contract. If City suspends certain services under this Contract and later orders Engineer to resume those services, Engineer will be entitled to reimbursements for the costs actually and reasonably incurred, if any, in re-starting the suspended services.

14. Termination for Cause

City may terminate this Contract effective upon delivery of written notice to Engineer, or at such later date as may be established by City, under any of the following conditions:

14.1 If City funding is not obtained and continued at levels sufficient to allow for purchases of the indicated quantity of services. The Contract may be modified to accommodate a reduction in funds.

14.2 If federal or state regulations or guidelines are modified, changed, or interpreted in such a way that the services are no longer allowable or appropriate for purchase under this Contract or are no longer eligible for the funding proposed for payments authorized by this Contract.

14.3 If any license or certificate required by law or regulation to be held by Engineer to provide the services required by this Contract is for any reason denied, revoked, or not renewed.

15. Termination for Default

Either City or Engineer may terminate this Contract in the event of a breach of the Contract by the other. Prior to such termination, the party seeking termination shall give to the other party written notice of the breach and intent to terminate. If the party committing the breach has not entirely cured the breach within fifteen (15) days of the date of the notice, then the party giving the notice may terminate the Contract at any time thereafter by giving a written notice of termination.

If Engineer fails to perform in the manner called for in this Contract or if Engineer fails to comply with any other provisions of the Contract, City may terminate this Contract for default. Termination shall be effected by serving a notice of termination on Engineer setting forth the manner in which Engineer is in default. Engineer shall be paid the Contract price only for services performed in accordance with the manner of performance as set forth in this Contract.

16. Remedies

In the event of breach of this Contract the parties shall have the following remedies:

16.1 If terminated under paragraph 15 by City due to a breach by Engineer, City may complete the work either itself, by agreement with another contractor, or by a combination thereof. If the cost of completing the work exceeds the remaining unpaid balance of the total compensation provided under this Contract, then Engineer shall pay to City the amount of the reasonable excess.

16.2 In addition to the above remedies for a breach by Engineer, City also shall be entitled to any other equitable and legal remedies that are available.

16.3 If City breaches this Contract, Engineer's remedy shall be limited to termination of the Contract and receipt of Contract payments to which Engineer is entitled.

16.4 City shall not be liable for any indirect, incidental, consequential, or special damages under the Contract or any damages arising solely from terminating the Contract in accordance with its terms.

16.5 Upon receiving a notice of termination, and except as otherwise directed in writing by City, Engineer shall immediately cease all activities related to the services and work under this Contract. As directed by City, Engineer shall, upon termination, deliver to City all then existing work product that, if the Contract had been completed, would be required to be delivered to City.

17. Nondiscrimination

During the term of this Contract, Engineer shall not discriminate against any employee or applicant for employment on the basis of any protected class as defined in ORS279A.112(b).

18. Governing Law; Jurisdiction; Venue

This Contract shall be governed by and construed in accordance with the laws of the state of Oregon without regard to principles of conflicts of law. Any claim, action, suit or proceeding (collectively "Claim") between City and Engineer that arises from or relates to this Contract which results in litigation shall be brought and conducted solely and exclusively within the Circuit Court of Linn County for the state of Oregon; provided, however, if a Claim must be brought in a federal forum, then it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. ENGINEER BY EXECUTION OF THIS CONTRACT, HEREBY CONSENTS TO THE IN PERSONAM JURISDICTION OF SAID COURTS. Nothing herein shall be construed as a waiver of City's protections under the Oregon Tort Claims Act.

19. Compliance with Laws and Regulations

Engineer shall comply with all federal, state and local laws, regulations, executive orders and ordinances applicable to the services under this Contract. Without limiting the generality of the foregoing, Engineer expressly agrees to comply with: (i) ORS 659a.142; (ii) all regulations and administrative rules established pursuant to the foregoing laws; and (iii) City's performance under this Contract is conditioned upon Engineer's compliance with all applicable provisions of the Oregon Public Contracting Code, as more particularly set forth in Exhibit B and incorporated herein by this reference. Engineer, its sub-consultants and all employers providing work, labor or materials under this Contract are subject employers under the Oregon workers' compensation law and shall comply with ORS 656.017, which requires them to provide Oregon workers' compensation coverage that satisfies Oregon law for all their subject workers. Engineer shall adhere to all safety standards and regulations established by City for work performed on its premises or under its auspices.

20. Experience, Capabilities and Resources

By execution of this Contract, the Engineer agrees that:

Engineer is an experienced engineering firm having the skill, legal capacity, and professional ability necessary to perform all the services required under this Contract to design or administer any work within the scope and complexity contemplated by this Contract.

Engineer has the capabilities and resources necessary to perform the obligations of this Contract.

Engineer is familiar with all current laws, rules, and regulations which are applicable to the design and construction of work which may fall within the scope of this Contract, and that all drawings, specifications, and other documents prepared by Engineer shall be prepared in a manner consistent with the professional skill and care ordinarily provided by firms practicing in the same or similar locality under the same or similar circumstances (herein the "Standard of Care") and shall exercise the Standard of Care in complying with applicable and non-conflicting laws, rules, and regulations.

21. Drawings, Specifications and Other Documents

Engineer hereby agrees that it will, in a manner consistent with its standard of care defined in above in Section 20, prepare all drawings, specifications, and other documents pursuant to this Contract so that they are complete and that any project, if constructed in accordance with the intent established by such drawings, specifications, and other documents, shall be structurally sound and a complete and properly functioning facility.

22. Errors and Omissions

Engineer shall be responsible for correcting any errors or omissions in the drawings, specifications, and/or other documents which deviate from the standard of care set forth in Section 21. Engineer shall correct at no additional cost to City any and all such errors and omissions in the drawings, specifications, and other documents prepared by Engineer or its sub-consultants. Engineer further agrees to assist City in resolving problems relating to any project designs or specified materials that are caused by deviations from the Standard of Care

23. Contract Performance

Engineer shall at all times carry on the services diligently, without delay and punctually fulfill all requirements herein. Engineer shall not be liable for delays that are beyond Engineer's control. Contract expiration shall not extinguish, prejudice, or limit either party's right to enforce this Contract with respect to any breach of Engineer's warranties or a default or defect in performance by Engineer that has not been cured.

24. Access to Records

For not less than three (3) years after the Contract expiration and for the purpose of making audit, examination, excerpts, and transcripts, City, and its duly authorized representatives shall have access to Engineer's books, documents, papers, and records that are pertinent to this Contract. If, for any reason, any part of this Contract, or any resulting construction contract(s) is involved in litigation, Engineer shall retain all pertinent records for not less than three years or until all litigation is resolved, whichever is longer. Engineer shall provide full access to these records to City, and City's duly authorized representatives in preparation for and during litigation.

25. Representations and Warranties

Engineer represents and warrants to City that (1) Engineer has the power and authority to enter into and perform this Contract, (2) when executed and delivered, this Contract shall be a valid and binding obligation of Engineer enforceable in accordance with its terms, (3) Engineer shall, at all times during the term of this Contract, be duly licensed to perform the services, and if there is no licensing requirement for the profession or services, be duly qualified and competent, (4) the services under this Contract shall be performed in accordance with the professional skill, care and standards ordinarily used by professionals performing similar services under similar conditions. No other warranties are expressed or implied in this Agreement.

26. City Obligations

26.1 City shall provide full information in a timely manner regarding requirements for and limitations on projects and work tasks. With regard to subcontractor liens, City shall furnish to Engineer, within fifteen (15) days after receipt of a written request, information necessary and relevant for Engineer to evaluate, give notice of, or enforce lien.

26.2 City shall establish and update, if necessary, overall project budgets, including engineering and construction costs.

26.3 City shall furnish the services of consultants, including geotechnical engineers, when such services are requested by Engineer, reasonably required by the scope of a project, and agreed to by City.

26.4 City shall furnish all testing as required by law or the contract documents.

26.5 City shall furnish all legal accounting, auditing and insurance services as necessary for projects to meet the City's needs and interests, after Engineer has performed requisite project management and oversight duties.

26.6 City shall provide prompt written notice to Engineer if City becomes aware of any fault or defect in a project, including any errors, omissions or inconsistencies in Engineer's design or performance under the contract.

26.7 City shall pay Engineer in accordance with paragraph 3 and Exhibit E of this Contract, upon receipt of Engineer's submission of monthly invoices, and satisfactory progress and performance made in accordance with the scope of work. Payments shall reflect work completed, or progress made on a project to date, on a pro rata basis.

26.8 City shall report the total amount of all payments to Engineer, including any expenses, in accordance with federal Internal Revenue Service and State of Oregon Department of Revenue regulations.

26.9 City shall guarantee access to, and make all provisions for Engineer to enter upon public and private property necessary for performance of the Scope of Work over which City exercises control.

26.10 Extra work or work on contingency tasks is not permitted unless authorized by the City in writing. Failure of Engineer to secure written authorization for extra work shall constitute a waiver of all rights to an adjustment in the Agreement price or Agreement time.

27. Arbitration

All claims, disputes, and other matters in question between the City and Engineer arising out of, or relating to this Contract, including rescission, reformation, enforcement, or the breach thereof except for claims which may have been waived by the making or acceptance of final payment, may be decided by binding arbitration in City's sole discretion, in accordance with Uniform Oregon Arbitration Act ORS 36.600 et seq. and any additional rules mutually agreed to by both parties. If the parties cannot agree on rules within ten (10) days after the notice of demand, the presiding judge of the Linn County Circuit Court will establish rules to govern the arbitration. The City shall have the sole discretion as to whether or not dispute will be decided by arbitration rather than through the court process.

A claim by Engineer arising out of, or relating to this Contract must be made in writing and delivered to the City Manager not less than 30 days after the date of the occurrence giving rise to the claim. Failure to file a claim with the City Manager within 30 days of the date of the occurrence that gave rise to the claim shall constitute a waiver of the claim. A claim filed with the City Manager will be considered by the City Council at the Council's next regularly scheduled meeting. At that meeting the Council will render a written decision approving or denying the claim. If the claim is denied by the Council, the Engineer may file a written request for arbitration with the City Manager. No demand for arbitration shall be effective until the City Council has rendered a written decision denying the underlying claim. No demand for arbitration shall be made later than thirty (30) days after the date on which the City has rendered a written decision on the underlying claim. The failure to demand arbitration within said 30 days shall result in the City Council's decision being binding upon the City and Engineer.

Notice of demand for arbitration shall be filed in writing with the other party to the agreement. The demand for arbitration shall be made within the 30-day period specified above. The City, if not the party demanding arbitration, has the option of allowing the matter to proceed with binding arbitration or by written notice within five (5) days after receipt of a demand for arbitration, to reject arbitration and require the Engineer to proceed through the courts for relief. If arbitration is followed, the parties agree that the award rendered by the arbitrators will be final, judgment may be entered upon it in any court having jurisdiction thereof, and will not be subject to modifications or appeal except to the extent permitted by Oregon law.

28. Attorney Fees

If suit, action or arbitration is brought either directly or indirectly to rescind, reform, interpret or enforce the terms of this contract to the extent due to the negligent performance of the Engineer's employees, representatives or subcontractors, the prevailing party shall recover and the losing party hereby agrees to pay reasonable attorney's fees incurred in such proceeding, in both the trial and appellate courts, as well as the costs and disbursements. Further, if it becomes necessary for City to incur the services of an attorney to enforce any provision of this contract without initiating litigation, Engineer agrees to pay City's attorney's fees so incurred. Such costs and fees shall bear interest at the maximum legal rate from the date incurred until the date paid by losing party.

29. Successors and Assigns

The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective successors and assigns.

30. Limitation of Liabilities

City shall not be liable for (i) any indirect, incidental, consequential, or special damages under the Contract or (ii) any damages of any sort arising solely from the termination of this Contract in accordance with its terms. Engineer shall not be liable for any consequential damages under this Contract.

31. Foreign Contractor

If Engineer is not domiciled in or registered to do business in the state of Oregon, Engineer shall promptly provide to the Oregon Department of Revenue and the Secretary of State Corporation Division all information required by those agencies relative to this Contract. Engineer shall demonstrate its legal capacity to perform the work under this Contract in the state of Oregon prior to entering into this Contract.

32. Confidentiality

Engineer shall maintain the confidentiality of any of City's information that has been so marked as confidential, unless withholding such information would violate the law, create the risk of significant harm to the public or prevent Engineer from establishing a claim or defense in an adjudicatory proceeding. Engineer shall require similar agreements from City's and/or Engineer's sub-consultants to maintain the confidentiality of information of City.

33. Force Majeure

Engineer shall not be deemed in default hereof nor liable for damages arising from its failure to perform its duties or obligations hereunder if such is due to causes beyond its reasonable control, including, but not limited to, acts of God, acts of civil or military authorities, fires, floods, windstorms, earthquakes, strikes or other labor disturbances, civil commotion or war, epidemics, pandemics, declared states of emergency, closing or reduction of force by the contractors or governmental permit reviewing entities, the enactment of governmental actions which cause delays or limit travel..

34. Waivers

No waiver by City of any provision of this Contract shall be deemed to be a waiver of any other provision hereof or of any subsequent breach by Engineer of the same or any other provision. City's consent to or approval of any act by Engineer requiring City's consent or approval shall not be deemed to render unnecessary the obtaining of City's consent to or approval of any subsequent act by Engineer, whether or not similar to the act so consented to or approved.

35. Severability

Any provision of this Contract which shall prove to be invalid, void or illegal shall in no way affect, impair or invalidate any other provision hereof, and such remaining provisions shall remain in full force and effect.

36. Survival

All provisions of this Agreement that would reasonably be expected to survive the termination of this Agreement will do so.

37. Headings

The captions contained in this Contract are for convenience only and shall not be considered in the construction or interpretation of any provision hereof.

38. Integration and Modification

This Contract, including the attached exhibits referenced in Section B, contains the entire agreement between the parties regarding the matters referenced herein and supersedes all prior written or oral discussions or agreements regarding the matters addressed by this Contract. Any modifications or amendments to this Contract will only be effective when made in writing and signed by authorized parties for each party to this Contract.

39. Authority

The representatives signing on behalf of the parties certify that they are duly authorized by the party for which they sign to make this Contract.


40. Certificate of Compliance with Oregon Tax Laws

By executing this Contract, Engineer certifies under penalty of perjury that Engineer is, to the best of Engineer's knowledge, not in violation of any Oregon tax laws described in ORS 305.385(6) and (7).

41. Time is of the Essence

Time is of the essence under this Contract.

CITY OF SWEET HOME

By: 

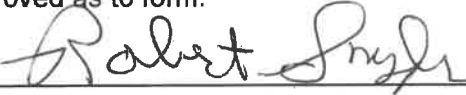
Name: Ray Towry

Title: City Manager

Date: 01 SEPT 2020

Authorized & Approved by the City Council.
City Manager approves contract.

Approved as to form.

By: 

Name: Robert Snyder

Title: City Attorney

Date: September 2, 2020

ENGINEER

By: 
Authorized Signature

Name: Bob Ward, P.E.

Title: Vice President

Date: August 31, 2020

Exhibit A

Scope of Work

SERVICES AND RESPONSIBILITY OF ENGINEER

- A. Services shall be provided pursuant to City work task requests or as otherwise requested by City in writing. When authorized by City, the specific services which the Engineer shall furnish will generally consist of, but not be limited to, the following itemized services:
1. Engineering services for municipal systems including studies, master plans, designs and construction administration.
 2. Consultation with the City Manager and staff members on specific problems related to the City's facilities.
 3. Attend meetings, when requested by the City Manager, or when necessitated by project work underway.
 4. Project reviews, construction observation, and field surveying services.
 5. Miscellaneous technical services requested by the City Manager.
 6. Preparation of Federal and State Funding applications, as authorized by the City Manager.
 7. Plan review.
 8. Feasibility studies and facilities plans.
 9. Apprise City of applicable changes in state or federal law regarding engineering or design services where such changes in state and federal law directly affect the Engineer's work or the City's projects, and public works.
- B. Basic engineering services. When authorized by the City, Engineer will provide engineering services for improvement projects. These will generally consist of, but not be limited to, the following itemized services:
1. Preparation of plans and specifications ready for a call for bids.
 2. Tabulation of bids at bid opening, report same to the City, and assist in awarding Contracts for Construction.
 3. General observation of the work by observation trips to the job site on a periodic basis, as agreed with the City.
 4. Preparation and submittal of proposed contract change orders.
 5. Preparation of monthly progress payments to the Contractor.
 6. Final review of the project by the Engineer.
 7. Final acceptance of the project by the Engineer and recommendations accordingly to the City.
 8. Submission to the City of final quantities and costs.
 9. Furnish a set of "record" reproducible mylars, or other mutually agreed format suitable for long term preservation and storage.
- C. Special Services. In addition to the basic services provided under Section B above, special services of varying types may be required upon City's written request. Included in these services, but not limited to, are:

1. Resident observation – Provide the services of an observer, acceptable to the City, as requested when contracts have been let by the City for construction. The Observer shall keep a daily diary of work progress. The Observer shall check and approve all construction work, prepare record drawings of the construction work, and prepare the monthly progress payments to the Contractor. As used in this document, the term “record drawings” means a set of documents consisting of record specifications and record drawings showing the reported location of the work.
Record drawings are based on information provided by persons other than the Engineer, and the Engineer does not warrant their accuracy.
2. Redesigns – As ordered by the City after final plans have been completed.
3. Appearances before courts or boards on matters of litigation related to a project.
4. Preparation of operation and maintenance manuals and cost of duplication.
5. Printing of plans and specifications.
6. Preparation of planning studies or reports, including costs of duplication.
7. Coordinating and obtaining permits and arranging agency reviews. Fees for permits or agency review are excluded from Engineer’s services, and will be paid by others.
8. Miscellaneous other technical services as may be assigned and for which Engineer has qualifications and/or expertise.
9. Consultant Services – (Various technical services for which City requires Engineer to manage, monitor or direct):
 - a. Field engineering – Survey crew to stakeout construction work, provide preliminary design surveys and design land surveys. Survey crew shall furnish all necessary equipment, instruments, transportation, stakes and subsistence required for field engineering.
 - b. Soils investigations – including test borings, related analysis and recommendations by the Engineer.
 - c. Laboratory tests, well tests, borings, specialized geological, or other studies recommended by the Engineer.
 - d. Other consultant services requested by City, such as mechanical, electrical, architectural, wetland, permitting and cost estimation services.

Exhibit B

Oregon Public Contracting Requirements

ORS CHAPTERS 279B AND 279C REQUIREMENTS

(1) Consultant shall pay promptly, as due, all persons supplying labor or materials for the prosecution of the work provided for in the contract, and shall be responsible for such payment of all persons supplying such labor or material to any Subcontractor.

(2) Consultant shall promptly pay all contributions or amounts due the Industrial Accident Fund from such Consultant or Subcontractor incurred in the performance of the contract.

(3) Consultant shall not permit any lien or claim to be filed or prosecuted against the City on account of any labor or material furnished and agrees to assume responsibility for satisfaction of any such lien so filed or prosecuted.

(4) Consultant and any Subcontractor shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.617.

(5) If Consultant fails, neglects or refuses to make prompt payment of any claim for labor or materials furnished to the Consultant or a Subcontractor by any person in connection with the contract as such claim becomes due, the City may pay such claim to the persons furnishing the labor or material and charge the amount of payment against funds due or to become due Consultant by reason of the contract. The payment of a claim in the manner authorized hereby shall not relieve the Consultant or his surety from his or its obligation with respect to any unpaid claim. If the City is unable to determine the validity of any claim for labor or material furnished, the City may withhold from any current payment due Consultant an amount equal to said claim until its validity is determined and the claim, if valid, is paid.

(6) Consultant shall promptly, as due, make payment to any person, copartnership, association, or corporation, furnishing medical, surgical and hospital care or other needed care and attention, incident to sickness or injury, to employees of such Consultant, of all sums which the Consultant agrees to pay for such services and all monies and sums which the Consultant collected or deducted from the wages of employees pursuant to any law, contract or agreement for the purpose of providing or paying for such service.

(7) Consultant shall pay Consultant's employees who work under the public contract at least time and a half for all overtime the employees work in excess of 40 hours in any one week, except for employees under a personal services public contract who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. 201 to 209 from receiving overtime.

(8) The Consultant must give notice to employees who work on this contract in writing, either at the time of hire or before commencement of work on the contract, or by posting a notice in a location frequented by employees, of the number of hours per day and the days per week that the employees may be required to work.

(9) All subject employers working under the Consultant are either employers that will comply with ORS 656.017, or employers that are exempt under ORS 656.126.

(10) All sums due the State Unemployment Compensation Fund from the Consultant or any Subcontractor in connection with the performance of the contract shall be promptly so paid.

(11) The contract may be canceled at the election of City for any willful failure on the part of Consultant to faithfully perform the contract according to its terms.

(12) Consultant certifies compliance with all applicable Oregon tax laws, in accordance with ORS 305.385.

(13) Consultant certifies that it has not discriminated against minorities, women or emerging small business enterprises in obtaining any required subcontractors.

Exhibit C
Request for Proposals



CITY OF SWEET HOME, OREGON

**REQUEST FOR PROPOSALS
CITY ENGINEER OF RECORD SERVICE**

Closes 4:00 pm, June 26, 2020

REQUEST FOR PROPOSALS

CITY ENGINEER OF RECORD SERVICE

I. GENERAL INFORMATION

A. INTRODUCTION

The City of Sweet Home (City) is soliciting proposals for an Engineer of Record (City Engineer) to provide engineering services as an independent contractor to the City. Services typically conducted by the City Engineer include, but are not necessarily limited to the items listed in Article I.D of this RFP. Services may include supervising work produced by the City which is subject to ORS 672. Work shall be provided to City on an as-needed basis, as authorized by the City Manager or the Public Works Director.

Proposers shall be licensed to practice engineering in the State of Oregon and be members in good standing with the Oregon State Board of Examiners for Engineering and Land Surveying (OSBEELS). The City will consider proposals from engineering firms as well as individual engineers.

This RFP, issued in accordance with the provisions of the laws including statutes, ordinances, resolutions, and rules, of the State of Oregon and the City of Sweet Home, invites qualified firms (Proposers) to submit their Proposals to provide the services described.

B. BACKGROUND

The City of Sweet Home is an Oregon municipal corporation with city limits covering approximately 6 square miles. The population of the City is approximately 9,225. The City is located in Linn County, 25 miles east of I-5, and is the third largest city in the county. The City Council consists of the Mayor and six council members elected from the city at large. The Council acts as the local contract review board for the City. The City operates under a City Manager form of government.

The City has an annual expenditure budget of over \$14.3 million with revenue from a variety of sources. The funding is derived primarily from property tax support, fees, grants and contracts.

The City currently contracts out Engineer of Record services with an expiration date of July 23, 2020. The City desires to evaluate the consultant market to provide this service.

The City's day to day Planning and Public Works Engineering services are generally performed by City staff, with Oregon Cascades West Council of Governments contracted to provide additional Planning services. Due to demands on staff time or other factors City may require the City Engineer to perform general engineering services to assist with day to day issues at the City's discretion or to perform specific task-based engineering projects on the City's behalf.

Through the Public Works Department, the City owns and operates various utility systems and infrastructure that serve the residents including the water system, the wastewater system, the storm drainage system, and the local street system. The Public Works Department also provides operation and maintenance for City Parks and general City-owned building maintenance.

The City owns and operates a number of public facilities including the following:

- A. Water treatment plant (Trident HS package filter, 6 mgd)
- B. Water storage reservoir (5), booster pump station (2), and distribution system (54 miles of pipe)
- C. Wastewater collection system (49 miles of gravity pipe).
- D. Wastewater treatment plant (activated sludge).
- E. Storm water conveyance system discharging to Ames Creek, Wiley Creek, and the South Santiam River (42 miles of pipe and ditches).
- F. Transportation system (44 centerline miles).
- G. Parks system (8 owned, 9 managed, 336 acres).

C. ANTICIPATED SELECTION SCHEDULE

The City anticipates the following general timeline for its selection process. The City reserves the right to change this schedule.

- RFP Advertised May 27, 2020
- **Proposal Due Date** **4:00 pm, June 26, 2020**
- Interviews (if needed) July 6-10, 2020
- Begin negotiations with selected Proposer July 14, 2020
- Award Contract August 11, 2020
- Commencement of Contract August 17, 2020

D. SCOPE OF SERVICES

- Serve as the City Engineer of Record.
- Consult with State and federal agencies having jurisdictional authority over the project as warranted. Work with City staff to review or complete federal, state or county permits, applications, or agency notifications.
- Attend pre-application, construction, Planning Commission, City Council or other meetings as requested by the City.
- Review City Council meeting packet material and comment as needed and/or requested.
- Perform engineering work pertaining to public records, property acquisitions, condemnations, forfeiture activities, public improvements and improvement districts, public rights of ways, easements, code enforcement, and matters relating to special assessments and public utilities.
- Review contracts, intergovernmental agreements, and developer/construction agreements relative to public utilities (water, sewer, and storm sewer), transportation improvements and other general activities.
- Work with City staff, organizations and funding agencies to help develop competitive and complete grant applications or funding proposals.
- Identify needed code updates and long range needs. Perform updates as needed for Public Works-related ordinances, resolutions, construction specifications, and contracts (new or amendments) and ensure that same are prepared in compliance with the City Charter, ORS, and OAR.

- Assist with budgeting, planning, and rate studies. Review City rate structures and make recommendations.
- Serve as the City's representative as needed and/or requested during the review, plan approval, construction management, and project closeout phases of any development or planning project prepared by other engineers and submitted to the City for approval. This includes land development projects such as subdivisions or site specific developments. Provide written recommendations and/or conditions of approval from an infrastructure perspective when requested. Assist with providing construction oversight and inspection services of public improvements installed as part of private development projects.
- Work with architects, engineers and contractors concerning technical interpretations and applications of the City's Public Works ordinances, construction standards and specifications, laws, engineering codes and any other policy matter compliance.
- Provide infrastructure impact analysis.
- Establish and/or update system development charges.
- Update utility master plans and feasibility studies.
- Review engineering construction plans/design drawings and design calculations prepared by other professionals for conformance with state, county, and City requirements and sound engineering practices.
- Provide engineering for City facilities. Troubleshoot issues with City facilities and make recommendations for improvements.
- Perform final construction observations and punch lists for completion of private developments and for City project sites, including review of as-built drawings, testing results, as-built certification, project closeout and initiation of the required construction warranty period.
- Provide various construction services for selected City public works construction and maintenance projects; e.g. project management, engineering design and construction specifications, pre-qualification, preparation of bid documents, solicitation, procurement, construction oversight/inspection, and as-builts.
- Subconsultants may be used, subject to written approval by the City, on design projects or where supplemental expertise is desired.
- Perform additional basic engineering and special services which cannot be fully described at this time, as requested by the City.
- It is further understood that in addition to the general and recurring activities listed above, ad hoc duties including verbal communications with the Mayor, City Council, City Manager, or authorized department heads and City employees in elements of prudent administration of the city's infrastructure systems.

The City Engineer reports directly to the Public Works Director. Much of the work occurs via telephone conferences and e-mail. Inquiries from the general public and/or press are outside the purview of the City Engineer. Any and all inquiries for the City Engineer's time shall be channeled through the Public Works Director or the City Manager, who must authorize such request prior to the City Engineer taking any action.

The City Engineer may be directed to undertake specific projects for the City that have a finite scope of work, are relatively large in scale, or for any other reason the City wishes to assign the work on a task-basis to the City Engineer. For such projects, the City Engineer shall provide a

work order upon written request from the City. The work order shall include a detailed proposal and scope of work, schedule and cost proposal.

The City intends to undertake a number of projects over the next few years. These projects may include, but are not limited to:

- Water system projects.
- Review water distribution system; identify and design corrections to deficiencies.
- Street projects.
- I&I rehab projects.
- Establish and/or update system development charges.
- Update of system master plans.

II. PROPOSAL INSTRUCTIONS

A. PROPOSAL SUBMITTAL AND DUE DATE

Proposers shall provide four (4) hard copies and one (1) digital copy in .PDF format of proposer's proposal in a sealed envelope clearly marked: "Confidential: City of Sweet Home City Engineer of Record Proposal". Proposals shall be submitted by **4:00 p.m. on June 26, 2020** to:

Greg Springman
Public Works Director
1400 24th Ave
Sweet Home, OR 97386

Proposals shall be organized as specified in Article II.E, Proposal Contents. The City of Sweet Home assumes no responsibility for delayed or undelivered mail or express packages. Proposals which are not delivered by the above specified time and date will not be considered. Faxed or electronically transmitted proposals will be rejected as non-responsive.

B. INQUIRIES

Questions concerning this RFP should be submitted in writing to:

Greg Springman
Public Works Director
1400 24th Ave
Sweet Home, OR 97386
Email: gspringman@sweethomeor.gov

C. RESERVATION OF RIGHTS

The City reserves the right to: 1) seek clarifications of each proposal; 2) negotiate a final contract that is in the best interest of the City and the public; 3) reject any or all proposals; 4) cancel this RFP at any time if doing so would be in the public interest, as determined by City in its sole discretion; 5) award the contract to any proposer based on the evaluation criteria set forth in this RFP; 6) waive minor informalities contained in any proposal, when, in the City's sole judgment, it is in the City's best interest to do so; and 7) request any additional information City

deems reasonably necessary to allow City to evaluate, rank and select the most qualified proposer to perform the services described in this RFP.

D. PROTESTS

Proposers are directed to the protest procedures contained in Public Contracting Rule OAR 137-048-0240.

Protests of Solicitation

Proposers are directed to the protest procedures contained in OAR 137-048-0240. Proposers may submit a written protest of anything contained in an RFP and may request a change to any provision, specification or Contract term contained in an RFP, no later than seven (7) calendar days prior to the date Proposals are due. Each protest and request for change must include the reasons for the protest or request, and any proposed changes to the RFP provisions, specifications or Contract terms.

Protests of Contract Award

Proposers are directed to the protest procedures contained in OAR 137-048-0240. A Proposer who claims to have been adversely affected or aggrieved by the selection of the highest ranked Proposer may submit a written protest of the selection to the Contracting Agency no later than seven (7) calendar days after the date of the selection notice. A Proposer submitting a protest must claim that the protesting Proposer is the highest ranked Proposer because the proposals of all higher ranked Proposers failed to meet the requirements of the RFP or because the higher ranked Proposers otherwise are not qualified to perform the Engineering Services described in the RFP.

E. PROPOSAL CONTENTS

Minimum Qualifications: Proposers must meet the following minimum qualifications to be evaluated.

- A Civil Engineer licensed to work in the State of Oregon.
- Good legal standing.
- Ability to provide the engineering work needed by the City to the standards required by the City, County and State.
- Demonstrate the ability to furnish insurance coverage as specified in Section 7 of the attached contract form.

Desired Qualifications: Proposers shall demonstrate their ability to undertake the City's projects by providing the technical qualifications of the Proposer, individual team members and principal subcontractors, if applicable. The City reserves the right to conduct an independent investigation of the Proposer's technical qualifications by contacting references, accessing public information or contacting independent parties. Additional information may be requested during the evaluations of technical qualifications. The Proposer shall provide the following sections to demonstrate its technical qualifications:

Corporate Profile & Legal Qualifications

- Include the full name, tax identification number, main office address and telephone and facsimile numbers of the Proposer and the principal contact person. This shall include a description of the firm or organization (corporation, partnership, etc.) that will serve as the contracting party.

- The name of the person(s) authorized to represent the proposer in negotiating and signing any agreement which may result from the proposal.
- Name and license number of the individual who will serve as the City Engineer project lead.
- Identify proposed subcontractors, if applicable.
- Demonstrate good legal standing in Oregon and in home state (no bankruptcy in the last 10 years, no fraud, no illegal activities).
- If applicable, identify ownership status and/or employment practices regarding disadvantaged business enterprises, minority-owned businesses, woman-owned businesses, businesses that service-disabled veterans own, emerging small businesses or historically underutilized businesses.

Technical Experience & Qualifications

- A current résumé for the individual who will serve as the City Engineer project lead, including a description of qualifications, skills, and responsibilities.
- The names of professional persons who will assist the City Engineer in performing the work and a current résumé for each, including a description of qualifications, skills, and responsibilities. The City is interested in professionals with experience serving small governmental entities and especially serving cities comparable in size to Sweet Home.
- Explanation of proposer's facilities and availability of support staff.
- A list of the tasks, responsibilities, and qualifications of any subconsultants proposed to be used on a routine basis and proof of adequate professional liability insurance for any subconsultants.
- Specifically address proposer's familiarity with laws and regulations governing public water, wastewater, storm water, and transportation systems, including operations, construction and maintenance of the City's current systems.
- Description of Proposer's project management techniques.
- Explanation of proposer's workload capacity and level of experience commensurate with the level of service required by the City.
- Description of Proposer's expertise in the following areas:
 - Civil, Electrical, Mechanical and Transportation Engineering;
 - Water distribution systems;
 - Municipal surface water rights acquisition and maintenance of;
 - Pump station and gravity wastewater collection systems;
 - Activated sludge wastewater treatment with land applied effluent disposal;
 - WPCF and NPDES permit regulations and compliance;
 - Municipal transportation systems involving state and federal highways;
 - Road maintenance techniques and applications;
 - Oregon land use law/planning and development related infrastructure issues;
 - Public improvement contracting and administration;
 - Contract law and intergovernmental agreements;
 - Public finance and infrastructure financing.
- Description of similar previous work demonstrating quality of work, ability to meet schedules, cost control and contract administration.
- A list of at least three references from government clients of similar size for whom similar services have recently been provided, if available. (For all references, please include names, phone numbers, and description of work performed.)
- Written affirmation that the firm has a policy of nondiscrimination in employment because of race, age, color, sex, religion, national origin, mental or physical handicap, political affiliation, marital status or other protected class, and has a drug-free workplace policy.

- An explanation of any potential or actual conflicts of interest within the jurisdictional boundaries of the City. Conflict of interest is defined for purposes of this RFP and any resulting contract as proposer’s provision of professional engineering services to any private property owner or developer within the City’s jurisdictional boundaries.

F. PUBLIC RECORDS

All proposals submitted are the property of the City of Sweet Home, thus subject to disclosure pursuant to the public records law, as qualified by ORS 279C.107. Accordingly, proposals received and opened shall not be available for public inspection until after City’s notice of intent to award this contract is issued. Thereafter, except for information marked “Proprietary”, all documents received by City shall be available for public disclosure. The City will attempt to maintain the confidentiality of materials marked “Proprietary” to the extent permitted under the Oregon Public Records law.

G. COSTS

Proposers responding to this RFP do so solely at their own expense.

III. PROPOSAL EVALUATION

A. EVALUATION CRITERIA

In evaluating the proposal, the City will utilize the requirements outlined in this section to identify the contractor best qualified to perform the services.

Completeness & Responsiveness (all must be yes)

- Timeliness of submittal
- Satisfies minimum qualifications
 - A Civil Engineer licensed to work in the State of Oregon.
 - Good legal standing
 - Ability to provide the engineering work needed by the City to the standards required by the City, County and State.
 - Documentation of ability to provide required insurances.
- Includes all required sections
 - Corporate profile
 - Technical Experience & Qualifications

Scoring Criteria

Proposals meeting the above Completeness & Responsiveness requirements will be evaluated by the City using the following criteria:

(20%) Specialized experience, capabilities and technical competence, which the prospective consultant may demonstrate with the prospective consultant’s proposed approach and methodology to meet the project requirements.

(20%) Resources committed to perform the services and the proportion of the time that the prospective consultant’s staff would spend to perform services for the contracting agency, including time for specialized services, within the applicable time limits.

(15%) Record of past performance, including but not limited to price and cost data from previous projects, quality of work, ability to meet schedules, cost control and contract administration.

(2%) Ownership status and employment practices regarding disadvantaged business enterprises, minority-owned businesses, woman-owned businesses, businesses that service-disabled veterans own, emerging small businesses or historically underutilized businesses.

(20%) Availability to the project locale.

(15%) Familiarity with the project locale.

(8%) Proposed project management techniques.

B. SELECTION

The City is using a qualifications based selection (QBS) process for engineering contracts anticipated to exceed \$100,000 in accordance with ORS 279C.110. As a result, selection of the most qualified candidate will be made without regard to the price of the services. Only after selection of the most qualified candidate will the City and selected candidate enter into contract negotiations for the price of the services.

Each member of the evaluation committee shall complete an evaluation sheet ranking each qualified proposer against the weighted criteria set forth in Article III.B of this RFP. Completed evaluations shall be combined and tallied. The City reserves the right to interview one or more of the highest ranked candidates. Upon completion of its evaluation process, results of the evaluation will be posted to the RFP listing on the City website and will be emailed to the primary contact identified in each proposal, and the City will begin negotiating a contract with the highest ranking candidate. The City shall direct negotiations toward obtaining written agreement on the Engineer's performance obligations, a payment methodology that is fair and reasonable to the City, and any other provisions the City believes to be in the City's best interest to negotiate.

If the City and the selected candidate are unable for any reason to negotiate a contract at a compensation level that is reasonable and fair to the City, the City shall, either orally or in writing, formally terminate negotiations with the selected candidate. The City may then negotiate with the next most qualified candidate. The negotiation process may continue in this manner through successive candidates until an agreement is reached or the City terminates this RFP.

Upon reaching agreement, the notice of intent to award will be posted and the contract will be presented to City Council for approval. If City Council approves the award of the contract as presented, then the agreement will be executed.

It is the desire of the City to have a new engineering contract in place no later than August 17, 2020.

C. CONTRACT

The City desires to enter into a professional services agreement in the form attached, which includes all services necessary for this position, whether or not the services are specifically outlined in this RFP.

The selected proposer will be expected to sign the attached written agreement, which will incorporate this RFP and awardee's proposal. Any open terms in the attached contract will be completed, based upon awardee's proposal. Negotiations shall be limited to cost and any other terms the City chooses to negotiate, in City's sole discretion.

The City anticipates payment for services on an hourly basis. However, the City will also consider alternative proposals. The City reserves the right to negotiate a compensation package that is fair and reasonable to the City, as determined solely by City.

It is anticipated that the City of Sweet Home will enter into a one (1) year agreement, which thereafter may be extended upon written consent of both parties for additional three (3) year terms.

Any contract requires that awardee will comply with all applicable federal and state laws, rules and regulations.

The City of Sweet Home is an Equal Opportunity/Affirmative Action Employer.
Women, Minorities and Disabled Persons are encouraged to apply.

This RFP is issued in accordance with the provisions of the laws including statutes, ordinances, resolutions, and rules, of the State of Oregon and the City of Sweet Home. Authorized & approved for posting by the City Council and the City Manager. Staff can amend the RFP and contract form to meet the best interests of the City with the approval of the City Manager.

THIS SOLICITATION IS NOT AN IMPLIED CONTRACT AND MAY BE MODIFIED OR REVOKED WITHOUT NOTICE.

Exhibit D
Engineer's Proposal



CITY OF SWEET HOME

Proposal for City Engineer of Record Service

WEST YOST

ASSOCIATES



June 26, 2020

Mr. Greg Springman
Public Works Director
City of Sweet Home
1400 24th Avenue
Sweet Home, OR 97386

SUBJECT: Proposal for City Engineer-of-Record Services

Dear Mr. Springman:

West Yost Associates (West Yost) is ready to assist the City of Sweet Home (City) with Engineer of Record (City Engineer) service on an as-needed basis. West Yost has a strong reputation for serving our clients as a trusted advisor on similar on-call services contracts and are well-equipped to serve the City as City Engineer of Record. Our team offers the following key benefits:

- **Deep understanding of the City and your needs that will allow our team to “hit the ground running”.** Preston Van Meter has served as the City Engineer-of-Record for the past year and managed the City’s current \$28 Million WWTP expansion design through the majority of the 60% design. His re-engagement on the City’s current SDC update, water projects and potentially the WWTP project will be an asset for the City moving forward.
- **A local team focused on delivering you responsive and affordable engineering services.** West Yost offers local support from our offices in Eugene and Lake Oswego, within 1 hour of the City. Our partner firms are also located in close proximity to the City of Sweet Home with Civil West (transportation and stormwater lead) in Albany, TAG (SCADA/Programming) in Eugene and Udell Engineering (surveying) in Lebanon and Galardi/Rothstein (Rates/SDCs) in Portland.
- **Comprehensive resources and technical expertise to support your needs on projects of all type and complexity.** As highlighted in our proposal, West Yost and our partners offer a deep bench of experts and resources on the broad range of services that may be required in serving as the City Engineer-of-Record. Our team is available to support the City on all tasks of all types and complexity, ranging from general services and development review support to utility master planning and construction management.

West Yost appreciates this opportunity to serve the City of Sweet Home as your City Engineer-of-Record. We have reviewed the City’s standard contract and would like to discuss potential changes to the indemnification and warranties to better align with our insurance coverage, reducing risk for all parties under the agreement. If you have any questions or need additional information, please call Preston at 503.784.9536.

Sincerely,

WEST YOST ASSOCIATES

A blue ink signature of Preston Van Meter, written in a cursive style.

Preston Van Meter, PE
Contract Manager

A blue ink signature of Bob Ward, written in a cursive style.

Bob Ward, PE
Vice President

Corporate Profile & Legal Qualifications

Full Legal Name

WEST YOST ASSOCIATES, INC.

Federal Tax ID: 68-0370826

Description of Firm: Corporation (California)

Main Office: Davis, CA (Corporate Headquarters)



2020 Research Park Drive, Suite 100
Davis, CA 95618

☎ 530.756.5905

📠 530.756.5991

🌐 www.westyost.com

Local Office: Lake Oswego, OR



5 Centerpointe Drive, Suite 130
Lake Oswego, OR 97035

☎ 503.451.4500

📠 530.756.5991

Contact Authorized to Bind West Yost Contractually

BOB WARD, PE, VICE PRESIDENT



☎ 503.451.2150

📠 530.756.5991

🌐 bward@westyost.com

Licenses: PE • Oregon • 58810
PE • Washington • 43096

Contact Authorized to Represent West Yost and Serve as City Engineer

PRESTON VAN METER, PE, CONTRACT MANAGER



☎ 503.784.9536

📠 530.756.5991

🌐 pvanmeter@westyost.com

Licenses: PE • Oregon • 51615
PE • Washington • 43828

Proposed Subcontractors

West Yost has included seven subconsultants to provide the City with comprehensive as-needed services:

The Automation Group: Electrical, SCADA, Programming
Civil West Engineering Services: Transportation, Development Review

Galardi Rothstein Group: Rates and System Development Charges (SDCs)

Leeway Engineering Solutions: Pipeline Rehabilitation

Strongwork Architecture: Architecture

Udell Engineering and Land Surveying: Surveying

Waterdude Solutions: Operations Support

West Yost is in Good Legal Standing

- West Yost has had no pending bankruptcy, lien, stop payment notice, judgment, lawsuit, foreclosure, or any similar action filed or resolved in the past 10 years related to any project contract.
- West Yost has never been named in a lawsuit associated with one of our design or construction management projects.
- West Yost has no reported lost-time injuries or fatalities in the last 10 years.
- West Yost has been registered to conduct business in Oregon since 1997 (Registry No. 570552-88).

Ownership Status

West Yost is a private, employee-owned California corporation and does not qualify as a disadvantaged business enterprise (DBE), minority-owned business (MBE), woman-owned business (WBE), business that service-disabled veterans (SDV), emerging small business (ESB) or historically underutilized business (HUB). West Yost strives to include disadvantaged businesses on our team in meaningful and growth-oriented roles. Our team includes several registered disadvantaged subconsultants.

Insurance

West Yost is able to furnish coverage equal to, or in excess of the City requirements. We have included our team's proof of insurance in Appendix B.

Conflict of Interest

West Yost is aware of no actual, apparent, direct, or potential conflicts of interest that may exist with respect to West Yost, its employees, subconsultants, or other persons providing the services described in this proposal.

Technical Experience & Qualifications

Technical Experience & Qualifications

Approach, Methodology and Capabilities



This section summarizes West Yost’s understanding, approach, and methodology to be used in providing efficient, cost-effective engineering services as City Engineer-of-Record for the City of Sweet Home. For many areas of practice, we also provide additional information to augment the project experience section of our proposal.

In reviewing the City’s RFP, this section is structured to provide information on the following Scoring Criteria, as summarized on pages 8 and 9 of the RFP:

- Familiarity with the project locale (15%)
- Proposed project management techniques (8%)
- Specialized experience, capabilities, and technical competence, which the prospective consultant may demonstrate with the prospective consultant’s proposed approach and methodology to meet the project requirements. (20%)

Introduction and Section Overview

West Yost has a strong reputation for working alongside our clients as a trusted advisor, building lasting relationships and partnerships. In fact, we have been working with many of our clients for our company’s entire 30 year history. These long term partnerships offer deep understanding of our clients needs and allow us to “hit the ground running” providing support on the emergency and short-term projects that often come up for municipalities like the City of Sweet Home.

We currently have on-call contracts with over 60 agencies covering a wide range of service areas. Our success working on these on-call or as-needed assignments comes from our culture of responsiveness and client service, as well as our depth of resources that allows us to couple the right blend of staff for projects of any type and size.

CURRENT ON-CALL CLIENTS

- City of Corvallis
- Clean Water Services
- City of Portland BES
- Portland Water Bureau
- Clackamas River Water
- Eugene Water and Electric Board
- Sunrise Water Authority

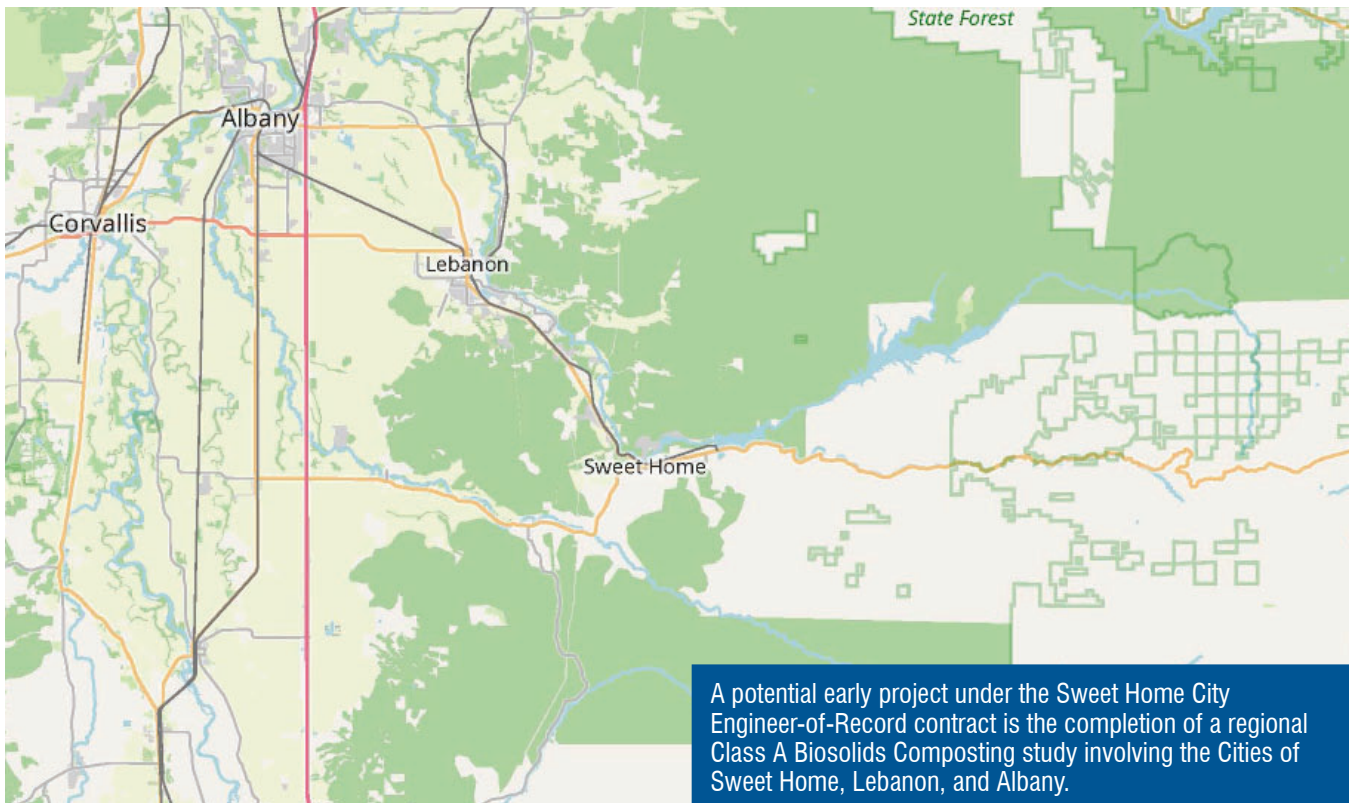
This section summarizes West Yost’s approach, methodology and capabilities for providing the wide range of services required to serve as the Sweet Home City Engineer-of-Record, including:

- Project Understanding and Familiarity with Project Locale
- Project Management Approach for On-Call Services Contracts
- Approach to General City Engineering Services, Rates/SDCs, and Permitting
- Approach to Transportation/Roadway and Stormwater Projects
- Approach to Utility Master Planning and Modeling Projects
- Approach to Pipelines, Pump Stations and Trenchless Projects;
- Approach to Pipeline Rehabilitation Projects;
- Approach to Water Storage Tank Projects
- Approach to Water and Wastewater Facility Projects
- Approach to Cybersecurity, SCADA/Programming and AWIA Compliance
- Approach to Cost Estimating, Constructability Reviews and Value Engineering
- Approach to Construction Management

Project Understanding and Familiarity with the Project Locale

Sweet Home is situated in a beautiful location at the base of Oregon’s Cascade mountain range, where tourism and recreation are aplenty. Foster Lake is one of Oregon’s prime boating and camping sites, and also provides the City’s drinking water that is treated at the City’s water treatment plant that provides ample capacity to support community growth. Treated water is distributed to the City’s residents through a water storage and distribution system that is in need of some improvements to address water loss and better serve several low-pressure areas in the City’s water system.

Wastewater from the City’s approximately 10,000 residents is collected through a sewer collection system that serves as one of the finest examples of the benefits of collection system rehabilitation. Over the course of multiple phases, the City’s investment in collection system rehabilitation reduced estimated peak flows at the wastewater treatment plant (WWTP) nearly in half from 22 MGD to approximately 13 MGD. The City is now embarking on a major \$28 Million wastewater treatment plant expansion that will increase WWTP capacity to match design peak flows while continuing collection system rehabilitation to provide capacity for future growth.



Great things are happening in the City of Sweet Home, and West Yost is excited about the opportunity to partner with City staff to continue building on recent successes such as the opening of the City's new City Hall that is a testament to the "get 'er done" spirit of City staff and the community.

Yet, there is still much to do! West Yost offers a team to support the City as City Engineer-of-Record on a wide variety of upcoming projects:

- Infrastructure Planning
 - ◆ Continuing work on the water system model and preparing a Water Master Plan that will, in part, address storage deficiencies and low-pressure areas in the City's water system.
 - ◆ Preparing a Wastewater Collection System Master Plan update to refine ongoing collection system rehabilitation further needs as the City's new WWTP approaches construction.
 - ◆ Updating the City's Transportation System Plan (TSP) to provide an approach to upgrading the City's deteriorating streets.
- Infrastructure Design
 - ◆ Implementing infrastructure projects identified in the master plan updates.
 - ◆ Replacing aging water mains to help address the City's high water loss and provide improved pressure and fire flows throughout the City.
 - ◆ Continuing the City's successful wastewater collection system rehabilitation program to help control WWTP peak flows and provide for future growth.
- Updating the City's utility rates and system development charges (SDCs).
- Supporting the City as needed in the final design and construction of the new wastewater treatment plant.
- Completing upgrades at the City's Water Treatment Plant to optimize the process for current system demands.
- Providing ongoing SCADA and programming services at the City's water and wastewater facilities.
- Providing development review services for private development projects.

Project Management Approach for On-Call Services Contracts

West Yost's project management approach allows us to serve as a valuable extension of your staff. In serving as City Engineer-of-Record, our team will be working closely with City staff through all phases of project development. This process of supporting projects from initial budgeting and capital planning through design and construction will improve project implementation and cost control while also adding insight and innovation into the process to help maximize the City's investments. An example of these efficiencies could be in combining sewer rehabilitation work along with a planned water main replacement project on the same section of roadway that will soon be overlaid.

OUR AS-NEEDED CONTRACT SUCCESS IS BASED ON OUR ABILITY TO RESPOND QUICKLY TO PROJECT NEEDS, WORK SEAMLESSLY AS AN EXTENSION OF YOUR STAFF, AND BRING INNOVATIVE SOLUTIONS TO PROJECTS BOTH LARGE AND SMALL. OUR ON-CALL CONTRACTS ALSO BENEFIT FROM OUR DEPTH OF EXPERTISE IN WATER AND WASTEWATER INFRASTRUCTURE AND TREATMENT, TRANSPORTATION, AND STORMWATER, RATES AND SDCs, DEVELOPMENT REVIEW, SURVEY, SCADA, AND ARCHITECTURE. OUR LARGE RESOURCES OF LOCAL STAFF, AND OUR COMMITMENT TO QUALITY PRODUCTS AND SERVICES WILL BE AVAILABLE TO THE CITY OF SWEET HOME.

We use clear and effective communication and budget and scheduling tools to manage projects. Under the leadership of proposed City Engineer Preston Van Meter, who is well known to the City and has previously served as the City Engineer-of-Record for the past year, we will assign experienced project managers to lead projects throughout all phases to minimize schedule disruptions, maximize understanding by all parties, and keep the project moving forward. Through open communications and regular project check-in meetings, we will foster an efficient team environment.

Project Management Plan (PMP)

West Yost uses demonstrated project management tools on all projects to monitor project budget and schedule, allocate staff resources and identify critical items that may impact the project early. We develop a Project Management Plan (PMP) at the start of every project to help assure project goals and objectives are well understood and to establish clear lines of communication between the City and our team. The foundation of our project management approach is communication, which includes regular check-ins with City staff and actively engaging the City in formal and informal project meetings and discussions to help assure the project stays on track from a budget and schedule perspective.

For every project and task we begin, our project management best practices are vital to success.



Fully understand your project objectives, opportunities, and challenges before we develop the project scope and budget to verify that the proposed work plan will address the project needs.



Assemble the best project team to focus on your project issues and efficiently assess project needs.



Develop a detailed work plan that identifies specific tasks, task interdependencies, data needs, deliverables, meetings, schedule and budget to create a clear understanding of the proposed work plan, schedule, and project responsibilities.



Collaborate with your project team—including operations staff who know the systems the best—throughout the project to leverage your existing system knowledge and experience.



Regularly coordinate with your project manager to discuss project status and progress and oversee that the project stays on schedule and on budget.



Identify innovative and implementable solutions that meet your project objectives.



Prepare documents that clearly and concisely describe requirements.

Quality Assurance/Quality Control Program

West Yost provides quality assurance and quality control through formal internal reviews prior to submitting every project deliverable. The internal review is led by a principal engineer that is not involved in the project on a day-to-day basis and provides detailed cross-reference checks of the documents, checks calculations, addresses constructability issues, and offers constructive suggestions for any design improvements.

Quality Assurance	Quality Control
Prevent	Detect
Plan	Correct
Verify	Validate
Process	Product
Proactive	Reactive
Company Level	Project Level

At West Yost, QA/QC is everyone's responsibility and we empower our teams to improve our systems for identifying and addressing quality issues in all phases of design and delivery.

Project Communications and Controls

Project communications and controls include the process for continuing communications with the City to assure West Yost's services meet the City's needs while also establishing the means for executing and monitoring progress on specific projects and tasks such as establishing the project work breakdown structure, maintaining and tracking the project schedule, tracking the project budget and expenditures, providing document controls, preparing monthly project status reports, and managing sub-consultants. For some projects, a project SharePoint site will also be established for use by the full project team.

Project Staffing Meetings and Client Check-ins. Bi-weekly internal workload staffing meetings provide a forward look at upcoming workload forecasting to help make sure we meet our commitments to the City and can rapidly respond to upcoming needs as your City Engineer-of-Record.

Regular Client Check-ins and Wellness Checks. Our proposed City Engineer, Preston Van Meter, has a strong reputation for responsive client service. Preston will maintain active communications with City staff to help

make sure West Yost’s services are delivered cost-effectively and to the City’s expectations at all times. Client wellness check-ins are conducted by other West Yost senior staff to obtain feedback on the overall performance of our team.

Work Breakdown Structure (WBS). The WBS provides the foundation for organizing project information. The WBS will be used to format project schedules, cost estimates, and document management systems.

Schedule Tracking. For all projects, West Yost maintains a project baseline schedule reflecting the detailed work activities and staffing. The baseline schedule is typically developed in MS Project, which is then loaded into our project tracking software, Deltek Vision. Our active schedule management allows early identification of potential delays and analysis of their impacts on the project.

Budget Tracking and Earned Value Analysis (EVA). West Yost will develop a project cost baseline at the start of each project along with setting the baseline schedule. These tools allow our project managers to complete earned value analyses on a monthly basis that are included in monthly project status reports.

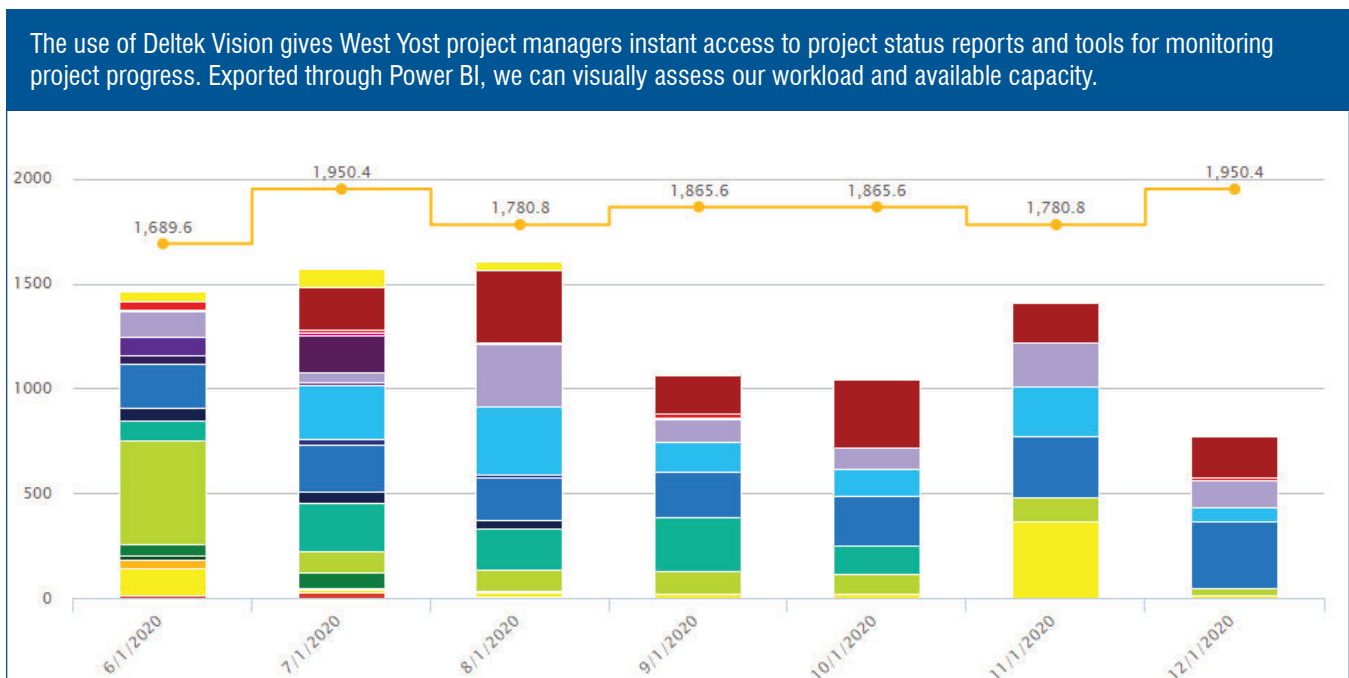
Document Controls and Record Drawings. Effective management of all records associated with the project is important for historical documentation, confidentiality, and quality assurance purposes. Document control encompasses the recording, control, storage, retrieval,

and reporting of all types of written documentation. Of primary importance, and the key to an effective document control system, is the retrieval of documents after they have been filed or archived.

Sub-Consultant Coordination. West Yost will coordinate with all subconsultants shown in our organization chart to ensure seamless project management, incorporating subconsultant invoices in our standard invoice format and monitoring budget, schedule and EVA. If warranted, West Yost will identify required changes in the subconsultants contracts for consideration by City staff.

Monthly Project Status Reports. These monthly reports will serve as an informational tool for City staff and as a management tool for the City’s Project Manager. West Yost will provide a monthly comprehensive report covering the status of the total project. This report will include:

- Narratives of work accomplished during the month and work scheduled for the following month
- Contract expenditures to date
- Project schedule update identifying progress at the task and subtask level
- Contract budget updates and EVA showing actual and projected expenditure by task, variances to date, projected cost at completion, and estimated budget surplus or deficit
- Areas of specific focus and/or concern, including any proposed corrective actions



Approach to General City Engineering Services, Rates/SDCs and Permitting

West Yost's approach to providing general City Engineering Services is three-fold:

- 1. Responsiveness and Immediate Response.** A key in serving as the City Engineer-of-Record is very quick response to all City requests and needs. Our proposed City Engineer, Preston Van Meter, has a strong reputation for delivering highly responsive service and is committed to responding to all City requests and inquiries within just a few hours and deploying a team to a project site within 24 hours if needed.
- 2. Team collaboration with City staff.** West Yost and our team will serve as an extension of City staff and are committed to maintaining strong relationships and working closely with all City departments, especially the City's highly capable public works staff.
- 3. Engaging our full team capabilities.** West Yost and our partners offer complete City Engineering services. We will engage our team of experts in support of the City and in a way that maximizes the City's investments and the quality of our services provided.

Several key elements of the near-term general engineering support services the City may require through the City Engineer-of-Record contract are summarized in the sections that follow.

GENERAL INQUIRIES AND QUESTIONS

Often a short phone call will solve a problem without a large response from an engineering team. The deep experience of our proposed City Engineer Preston Van Meter will often allow questions from City staff to be answered with a short phone call. If warranted, Preston will enlist support of our larger team to address a simple question or larger problem.

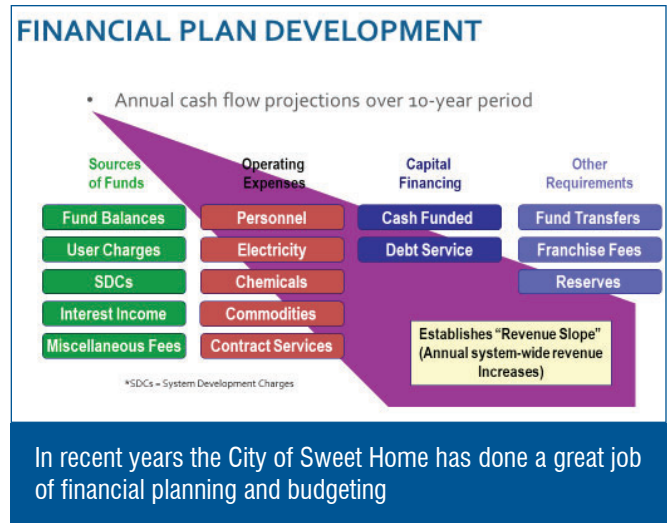


Preston Van Meter, PE

Proposed City Engineer, Preston Van Meter, has served as the City Engineer for nine different Oregon communities throughout his career and has in the past provided all of the support services being requested by the City.

UTILITY RATES AND SYSTEM DEVELOPMENT CHARGES (SDCs) AND FINANCIAL PLANNING

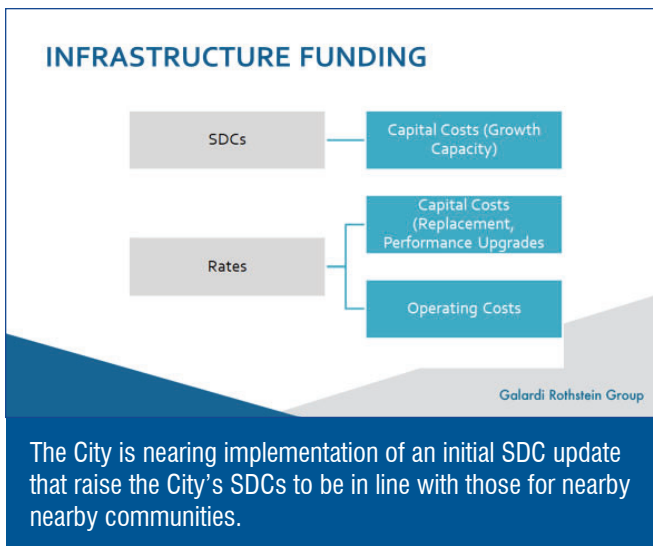
The City of Sweet Home has done a great job of increasing utility rates in a responsible way that helps fund important infrastructure projects. For example, the City anticipates contributing over \$7 Million of local funds to the upcoming wastewater treatment plant expansion project. The City has also recently raised water rates to allow additional funding to support important needed upgrades to the City's water system.



In keeping with the spirit of increasing revenues to provide for necessary infrastructure upgrades, the City is also working diligently to make sure the new development pays its fair share. The City is in the middle of implementing the first phase of an SDC update process that will increase SDCs paid by new development projects. The SDC updates will follow a two-phase process:

Phase 1 SDC Updates: The initial phase will use the City's adopted 5-year Capital Improvement Program (CIP) with some potential modifications and updates to update SDCs in the near term.

Future SDC Updates: In the future, as utility master plans are updated, the City will then use the SDC methodology along with the updated utility capital plans to update SDCs in support of growth over the long term.



Knowledge of Oregon Laws and Permitting Support Services Approach

The process of obtaining environmental clearance for any project can be difficult and time-consuming. If environmental issues are not addressed early in the design process, the construction of a project can be delayed for months or even years. West Yost staff have extensive experience successfully completing projects with a multitude of environmental issues, including developing documentation for obtaining CEQA clearance, and obtaining permits from agencies, such as the Oregon Department of Environmental Quality (DEQ), Oregon Health Authority (OHA), Oregon Department of Fish and Wildlife (ODFW), Oregon Department of State Lands (DSL), Environmental Protection Agency (EPA) Region 10, US Fish and Wildlife (USFW), National Marine Fisheries Service (NMFS), Department of Fish and Wildlife, U.S. Army Corps of Engineers, City permitting authorities, local building officials and other agencies.

At the start of a project, the West Yost team develops a Permitting Road Map that summarizes the permits required, permit application forms, permit fees, information required, design stage and other pertinent information to make sure projects are kept on track to start construction on time. Typically, early coordination with permitting agencies, such as attending an Oregon regional permitting agency review will speed the permitting process and help assure important permitting considerations are incorporated into designs.

West Yost's Walt Meyer, based in our Eugene office, is one of Oregon's foremost permitting experts. Walt has helped dozens of Oregon agencies negotiate complex environmental and regulatory permitting challenges, including:

- **Lebanon, OR WWTP:** Assisted with NPDES Permit compliance associated with the WWTP outfall.
- **Corvallis, OR Taylor WTP and WRP:** On-call contract for NPDES permit negotiations and led permitting and design for the Taylor WTP Intake Modifications and Dredging Project.
- **Cottage Grove, OR WWTP:** Assisted with NPDES permit compliance and updating the City's Recycled Water Use Plan.
- **Clackamas County Water Environment Services:** Regulatory Lead for current facility plan update.
- **Clean Water Services:** Assisted with NPDES permit evaluations and DEQ negotiations.
- **Medford, OR WWTP:** On-call contract to assist with NPDES permit negotiations, including temperature compliance plan and implementation of a temperature trading program.
- **Salem, OR Willow Lake WPCF:** Permitting lead for the City's "bubble" NPDES permit covering Willow Lake WPCF and North River Road Peak Excess Flow Facility.
- **South Suburban Sanitary District:** Assisting with current NPDES permit negotiations with DEQ.
- **Stayton, OR WWTP:** Assisted City with NPDES permit compliance and DEQ negotiations.
- **Portland BES:** Assisted with NPDES permit negotiations associated with the Columbia Blvd. WWTP outfall.
- **Wilsonville, OR WWTP:** Regulatory Lead for the current facility plan update.

Approach to Transportation/Roadway and Stormwater Projects

Transportation and roadway projects are the most publicly visible projects the City will undertake and an important part of the demonstrating the City’s commitment to investing and maintaining its infrastructure systems. These projects also serve as a daily reminder to residents of the wise investments being made by the City in the future of the Sweet Home community. West Yost approach to transportation and storm water projects includes:

1. **Development of Long Range Plans and Updating the City’s 5-year CIP.** Updating the City’s long-range plans will help inform the projects that need to be included in the City’s 5-year Capital Improvement Program that is reviewed and approved by City Council. For transportation and stormwater, these plan updates include the City’s Transportation System Plan (TSP) and Storm Water Master Plan (SWMP).
2. **Identifying CIP needs early and seeking outside funding sources.** Establishing project budgets through master plans and setting appropriate rate structures will help encourage outside funding agencies like Business Oregon to provide additional funding through local, state and federal programs. The City of Sweet Home is one of Oregon’s leaders in obtaining outside funding which the West Yost team will continue to support as City Engineer-of-Record.
3. **Consolidating and coordinating projects will maximize City investments.** Consolidating projects from multiple utilities into a single project will improve project coordination, reduce the impact of construction on Sweet Home residents and maximize the City’s investments. For example, consolidating a planning water main replacement along with a sanitary sewer rehabilitation and street overlay on a specific street would maximize the City’s infrastructure investments from three separate master plans.

TRANSPORTATION AND ROADWAY PROJECTS

Civil West, with offices located nearby in Albany, will lead transportation and storm water projects under the City Engineer-of-Record contract. Civil West offers extensive experience providing transportation and stormwater management services to communities throughout Western Oregon, placing a heavy importance on the needs and expectations of the end users to deliver projects that are safe, meet standards, and are well-received by the community. Key elements of Civil West’s transportation design approach and experience include:

- Roadway geometric design
- Surface Restoration
- Striping plans
- Intersection design
- ADA- compliant pedestrian facility planning and design

STORMWATER PROJECTS

As streets are widened or construction occurs in undeveloped areas of the City, the expanded impervious surface area increases stormwater runoff that must be collected and potentially treated prior to discharge into local creeks, streams and rivers. Civil West is working on innovative stormwater collection and treatment projects for many western Oregon communities that are designed to handle up to 60 inches of annual rainfall. Our team has experience planning and designing a variety of stormwater management solutions. Key elements of Civil West’s stormwater design approach and experience include:

- Master planning and modeling
- Stormwater runoff calculations
- Collection system piping and inlet design
- Culvert and box designs
- Stormwater quality facilities
- Local TMDL implementation plan development and regulatory reporting

Recent Civil West Transportation and Roadway Projects:

- City of Central Point:** ADA Improvements
- City of Coos Bay:** Roadway Reconstruction; Roadway Rehabilitation; Traffic Planning ; Sidewalk Improvements; Roadway Striping
- City of Florence:** Roadway Rehabilitation
- City of Lowell:** Pavement Preservation Planning; Roadway Rehabilitation
- City of Newport:** Roadway Reconstruction
- City of Toledo:** Roadway Improvements; ADA Improvements

Recent Civil West Stormwater Projects:

- City of Adair Village:** Drainage Improvements; TMDL Implementation Plan Support
- City of Coos Bay:** Storm Drain Improvements; Tide Gate Replacement
- City of Florence:** Stormwater Master Plan Update, Storm Drain Improvements
- City of Halsey:** Stormwater Master Plan
- City of Lowell:** Stormwater Master Plan
- City of Monroe:** Stormwater Master Plan
- City of Newport:** Stormwater Master Plan; Storm Drain Improvements
- City of Myrtle Point:** TMDL Implementation Plan Support

Approach to Utility Master Planning, Modeling and Asset Management

West Yost uses a collaborative approach with our clients to document master planning criteria, prepare water/recycled water demand projections, evaluate the distribution systems to identify deficiencies and prepare a capital improvement plan. Through this collaboration, West Yost develops a thorough understanding of the facilities and deficiencies and identifies the most important CIP projects.

With recent declines in water usage and sewage flows due to continuing conservation efforts, the planning of facility improvements and future system needs can be very sensitive to projected demands and flows. West Yost's planning team has addressed these challenges for many clients by integrating water demands and sewer history and projections by area and land use, providing a more detailed understanding of how conservation (or increased water usage) impacts facility improvement needs and timing. This method of analysis provides a more detailed and sophisticated analysis of user data that provides greater insight into conservation measures and leakage for water systems as well as insights into wastewater collection system management strategies, including targeting specific areas that may be subject to high Inflow and Infiltration (I&I). Because water demands and sewer flow projections drive capital projects, sizing and timing we often support clients in completing water and wastewater master plans concurrently.



West Yost uses InfoWater as our primary water system modeling tool, allowing us to quickly and efficiently begin using the City's existing water model in preparing a Water Master Plan Update.

EVALUATIONS TO OPTIMIZE SYSTEM PERFORMANCE

In addition to master planning and facilities evaluations, West Yost also uses hydraulic modeling for specialized evaluations, such as energy and water quality analyses. These services can be provided through the City Engineer-of-Record contract at the same time the City's water system pressure issues are investigated.

- **Energy Efficiency Analyses:** Energy efficiency information can be used to assess pump station energy use for extended period simulation scenarios, comparing existing pump operations with alternative pumping schemes, or replacing them with more efficient pumps.
- **Water Quality Analyses:** Water quality modeling includes water age and chloramines residual modeling to identify areas potentially at-risk for water quality problems under different operational scenarios. Once at-risk areas are identified, potential solutions, such as operational changes (seasonally lowering distribution storage reservoir water levels, changing pumping sequences, implementing flushing), or mechanical changes (adding mixers in reservoirs or reconfiguring tank inlet/outlets), can be evaluated.

Key steps in preparing a successful Water Master Plan Update.



Master Planning: Create strategic and dynamic master plans with substantial depth, detail, and flexibility.



Hydraulic Modeling: Develop, calibrate, and employ hydraulic models to perform site-specific assessments, identify seismic and operational vulnerabilities and solutions, address water quality challenges, and identify and evaluate new infrastructure needs and best approaches to infrastructure repair and replacement.



GIS: Integrate model data with GIS to facilitate the analysis and presentation of modeling results.



Asset Management: Conduct facility condition assessments, establish life cycle cost metrics and infrastructure replacement cycle curves, integrate system data with computerized maintenance and management systems, and use criticality-based methodology to plan for repair and rehabilitation programs.



Project Management: Assign experienced staff members to manage projects and give them the tools they need to keep projects on track and to maintain work flow, schedules, and budgets.

MODELING INTEGRATION WITH GIS

West Yost offers extensive expertise in integrating model data with GIS data, use of third-party extensions to complete spatial and 3D analysis, and using GIS for the presentation of modeling data and results. We complete modeling analyses within the ArcGIS environment, which will allow us to use and build on the City’s existing GIS data to quickly establish pressure zone boundaries, locations of services, and high and low-pressure service agreements. Once the modeling results are interpreted, capital improvement projects can be identified using the data-driven pages feature of ArcGIS and then be used to create map books for the display of area-wide results and cut sheets for individual projects that can be used in the City’s 5-year Capital Improvement Plan Updates.

ASSET MANAGEMENT

West Yost provides a full suite of asset management services ranging from asset management program planning to detailed program implementation. Our asset management practitioners have supported our municipal clients with education, prioritization of asset management initiatives to establish a program, development of asset registries, establishment of risk policy, selection of Computerized Maintenance Management Systems (CMMS), and asset management program audits. We embrace the vision of asset management as collaborative decision-making guided by risk principles. This begins with planning and design and is fulfilled in construction start-up extending through the asset life. We interact with all operational groups in our asset management initiatives to develop and implement programs to satisfy the agencies needs as whole.

West Yost Staff’s Recent Water Planning and Modeling Experience	HYDRAULIC MODELING	LAND USE/DEMAND ANALYSIS	CONDITION/CAPACITY ASSESSMENT	VULNERABILITY ANALYSIS	WHOLESALE/ RESALE INTERFACE	STORAGE OPTIMIZATION/SITING	CIP DEVELOPMENT	WATER QUALITY/ WATER AGE ANALYSIS	CONSERVATION/ CLIMATE CHANGE	CONJUNCTIVE-USE SYSTEMS
California Water Service Company – Water Supply & Facilities Master Plan for Stockton, Livermore, Chico-Hamilton, Bakersfield, Willows, Marysville, Dixon, & Visalia Districts	■	■	■		■	■	■		■	■
City of Fresno – Integrated Water Resources Plan, Water System Master Plan	■	■	■	■		■	■		■	■
City of Modesto – Water System Planning, Engineer’s Report	■	■	■	■	■	■	■	■	■	■
City of Napa – Water Master Plan, Hydraulic Modeling Update	■	■	■	■		■	■	■		
City of Redwood City – Water Distribution System Master Plan	■	■	■		■	■	■	■		
City of Rialto – Water and Recycled Water Master Plans	■	■	■		■		■			
City of Sacramento – Water Master Plan & Water Supply Master Plan	■	■	■	■	■	■	■		■	
City of Tracy – Water & Recycled Water System Master Plan	■	■	■	■		■	■		■	■
City of Woodland – Water Focus Study	■	■	■	■		■	■	■	■	■
Dublin San Ramon Services District – Water & Recycled Water Master Plan Update	■	■	■	■	■	■	■	■	■	■
Eastern Municipal Water District – 2015 Water Facilities Master Plan and On-Call Services	■	■	■	■	■	■	■	■		■
Eastern Municipal Water District – San Jacinto Valley Recycled Water Integration Study	■		■				■			
Golden State Water Company – Region 3 Master Plans	■	■	■		■	■	■	■		
Irvine Ranch Water District – Hydraulic Modeling, Energy Impacts, Sub-Area Master Plans	■	■	■	■	■	■	■	■		
Placer County Water Agency – Water Quality Modeling & Planning	■	■	■				■	■		
Vallecitos Water District – Water and Recycled Water Master Plans	■	■	■		■	■	■	■	■	
Western Municipal Water District – Murrieta Retail Areas Water Master Plan	■	■	■		■	■	■			

West Yost Staff's Recent Wastewater Collection System Planning Experience	CAPACITY ASSESSMENT/HYDRAULIC MODELING	GROWTH/DEVELOPMENT PROJECTIONS	DEVELOPMENT IMPACT ANALYSIS	I/I REDUCTION ANALYSIS/TESTING	PRIORITIZED CAPITAL IMPROVEMENT PLAN	CIP IMPLEMENTATION PLAN	FUNDING	REGULATORY COMPLIANCE/SSMP IMPROVEMENTS/POLICY DEVELOPMENT
Castro Valley Sanitary District – CIP and Financing Plan Validation and Master Plan	■	■	■	■	■	■	■	
City of Folsom – Sanitary Sewer Inflow and Infiltration (I/I) Reduction Study				■	■	■		■
City of Millbrae – Wet Weather Alternatives Analysis, Capacity Assurance Report	■	■		■	■	■	■	■
City of Redwood City – Sewer Master Plan Update	■	■	■		■	■		
City of Rialto – Wastewater Collection System Master Plan	■	■	■		■			
City of Richmond – Sewer Hydraulic Model and Master Plan Update	■	■		■	■	■		■
City of San Mateo – Inflow and Infiltration (I/I) Reduction Study/Wet Weather Capacity	■			■	■	■		■
City of Vacaville – Wastewater Collection System Master Plan and I/I Program	■	■	■	■	■	■	■	
City of West Sacramento – Sanitary Sewer Master Plan Update	■	■	■	■	■	■	■	■
Eastern Municipal Water District – French Valley/Winchester Sub-Regional Master Plan	■	■	■					
Eastern Municipal Water District – Old Town Temecula Sanitary Sewer Study	■	■	■		■	■		
Eastern Municipal Water District – Southern Division Sewer Study	■	■		■	■	■	■	
Irvine Ranch Water District – InfoSWMM Conversion/San Diego Creek Interceptor Capacity	■		■					
Western Municipal Water District – Murrieta Sewer Flow Study and Sewer Master Plan	■	■		■	■	■		



City of Yuba City Wastewater Master Plan. Although there was a limited available data set, West Yost was able to develop a characterization of plant return streams that helped the City of Yuba City understand how current operations are impacting plant capacity. The Master Plan also considered a potential range of future industrial discharge scenarios, providing the City with costs associated with treating high-strength food processing flows.

Approach to Pipelines, Pump Stations and Trenchless Projects

West Yost offers deep experience in all aspects and phases of water and wastewater utility infrastructure design and delivery, including: feasibility studies and planning; water quality analysis and pilot studies; economic and life cycle cost analysis; hydraulic system modeling and transient analysis; regulatory and permitting assistance; treatment and advanced treatment facilities; gravity and pressure pipeline design; grants and funding support; operational support and troubleshooting; and, construction management and inspection.

Working as a trusted advisor, and extension of staff as the City's Engineer-of-Record, West Yost brings an understanding of the City's infrastructure and needs for thoughtful and cost efficient projects and designs, from project conceptualization through construction. We offer a strong local team in our offices in Eugene and Lake Oswego, with the ability to leverage additional resources and expertise as required from our other offices. When needed, our team has experts who can be pulled in on projects for value engineering, constructability and operations reviews that will improve project cost estimating and reduce risk.

In addition to the key design considerations identified above, another key component for delivering cost-effective design services for pipelines and pump stations as the City Engineer-of-Record is the collecting and use of background information and standards, such as:

- **GIS Mapping.** The City has a solid foundation with City GIS base maps that will help with master planning and system analyses in support of developing infrastructure projects for the City's 5-year CIP.
- **Surveying.** Udell Engineering, based in nearby Lebanon, will provide topographic and boundary surveying services as part of the West Yost team.
- **Design Standards and Details.** Developing and maintaining standards is an important element of infrastructure design and delivery. West Yost has in-house CAD standards, a extensive database of CAD details and a library of standard specifications that speeds our delivery and reduces costs for projects of all types and sizes.
- **Public Works Standards.** In addition to design standards, West Yost will work with the City to update and implement public works design and construction

standards so that all infrastructure projects are delivered to City standards.

- **Record Drawings and Mapping Updates.** A final, often overlooked, step in the design process is the development of "as-built" or record drawings for projects. This is a critical deliverable West Yost makes a point of developing for every project to help make sure the City's GIS mapping updates after the project reflect what was actually installed and to make sure that elements like abandoned pipelines are identified correctly for future projects.

Pipeline/Pump Station Design Considerations. West Yost will work with stakeholders to identify the key issues to be evaluated, which typically include:

- | | |
|-------------------------------------|--|
| ▪ Traffic impacts | ▪ Rehabilitation and replacement options |
| ▪ Utility conflicts | ▪ Total project costs |
| ▪ Geotechnical (soil) conditions | ▪ Capacity needs |
| ▪ Property acquisition | ▪ Low flow impacts |
| ▪ Community impacts | ▪ Site accessibility for construction |
| ▪ Environmental/permitting concerns | ▪ O&M accessibility |
| ▪ Alignment options | ▪ Constructability |

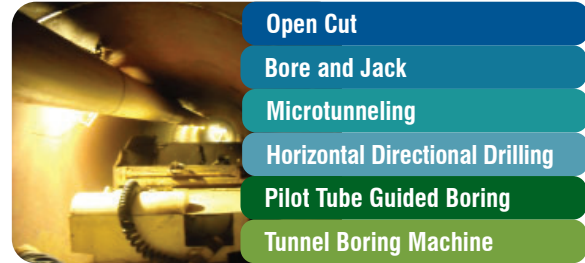


West Yost's design for the City of Albany's Riverfront Interceptor Lift Station successfully addresses significant operational and regulatory risks from sanitary sewer overflows (SSOs).

TRENCHLESS PIPELINE PROJECTS

The City of Sweet Home is divided by ODOT Highway 20, which presents many coordination and construction challenges for the City. In general, open-cut construction in Oregon highways is discouraged. Instead, trenchless technologies are frequently used to speed the permitting and project delivery process. The West Yost team offers deep experience in trenchless technologies with projects ranging from simple jack-and-bore crossings to auger boring, horizontal directional drilling (HDD), micro-tunneling and tunneling. We routinely complete risk assessments and risk registers for trenchless installation and rehabilitation projects to help manage construction risk and control cost.

Pipeline replacement options may include:



West Yost's experience on trenchless pipelines.

CLIENT - PROJECT	TRENCHLESS CROSSING METHOD	PIPE DIAMETER (INCHES)	TOTAL PROJECT LENGTH (FEET)
City of Modesto, Tier I Water Transmission Main	4 Bore and Jack Crossings	16 - 24	47,520
City of Fresno, SW and NE Large Diameter Water Transmission Mains	6 Bore and Jack Crossings	16 - 36	42,240
Placer County Water Agency, Ophir Road Pipelines	3 Bore and Jack Crossings	36 - 60	25,900
Placer County Water Agency, Ophir Road Pipeline	Tunneling (Tunnel Boring Machine)	60	800
Union Sanitary District, Stevenson Boulevard Corridor Sewer	1 Microtunneling, 3 Bore, and Jack Crossings	15 - 21	17,000
Sacramento County Water Agency, Bradshaw Pipeline	3 Bore and Jack Crossings	48	14,000
Union Sanitary District, I-680 at Sabercat Road	Tunneling (Tunnel Boring Machine)	12 / 48 Casing	1,000
Union Sanitary District, Boyce Road Sanitary Sewer Project	Microtunneling	21 - 36	6,500
Union Sanitary District, Newark Subbasin Lower Relief Sewer Design	Microtunneling	36	6,000
Union Sanitary District, Warren Avenue Sewer	Microtunneling	21	5,000
City of Petaluma, East Washington Street Water Main Replacement	Bore and Jack Crossing	18	5,000
Union Sanitary District, Upper Fremont Boulevard Sewer Replacement	Microtunneling	21	4,800
City of Milpitas, South Milpitas Water Main Replacement	Bore and Jack Crossing	16	4,000
Woodland Davis Clean Water Agency, Water Supply Pipeline	Horizontal Directional Drilling	36	2,400
Sac. County Regional Sanitation District, Yolo Forcemain	Microtunneling	66 / 84 Casing	1,000
Union Sanitary District, Mission Blvd/I-680 Sanitary Sewer Relocation	Pilot Tube Guided Boring	10	900
City of Vacaville, Lower Lagoon Valley	Horizontal Directional Drilling	8	800

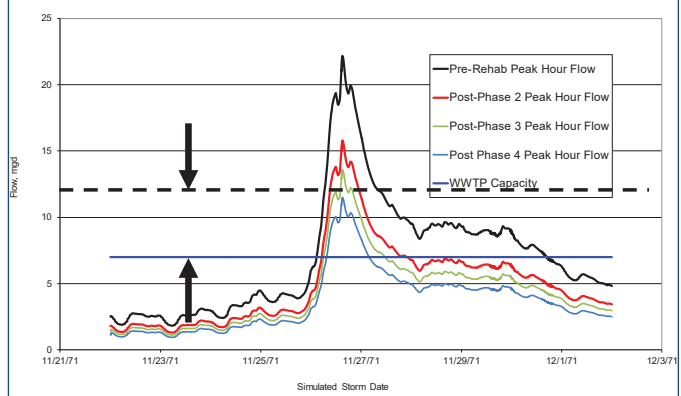
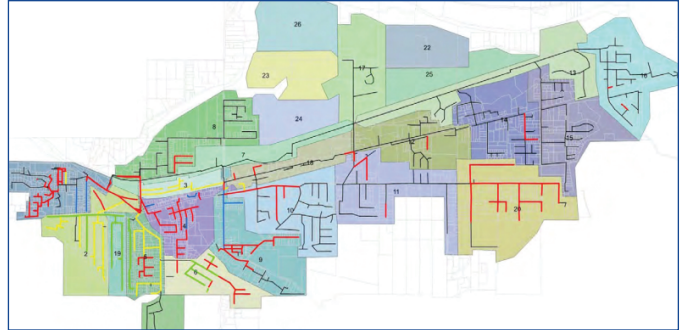
Approach to I/I Reduction and Pipeline Rehabilitation

West Yost and our team member Leeway Engineering Solutions (Leeway) offer deep experience in wastewater collection system rehabilitation to address infiltration and inflow, including a history working on the City's highly successful I/I reduction program. As part of the ongoing planning for the City's major wastewater treatment plant expansion, the City has set a design peak flow of 12.4 MGD, which will require continuing pipeline and manhole rehabilitation in certain areas of the City's collection system.

Given the City's long history with collection system rehabilitation efforts completed over four phases of work, our team will approach the City's ongoing sewer rehabilitation program with collaboration at the forefront. These collaborations may range from simple consultations for manhole repairs to larger projects requiring full design services.

Alternative delivery approaches may make sense on many of the continuing system rehabilitation efforts. These approaches will take advantage of the City's public works resources, and reduce project cost without sacrificing quality. West Yost and Leeway will work with City staff to evaluate traditional and alternative delivery methods for specific rehabilitation project types and sizes, including traditional design-bid-build (DBB), design-build (DB), progressive design build (PDB) or construction manager/general contractor (CM/GC). The contracting structure for these delivery methods is summarized in the table below.

The City's highly successful 4-phase, \$12.6M collection system rehabilitation program reduced modeled WWTP peak flows from 22 MGD to 12 MGD, making planned WWTP upgrades now under design affordable.



Source: Proceedings, PNCWA2018, www.pncwa.org

Potential Delivery Methods for Rehabilitation Projects	Contracting Structure			
	DBB	DB	PDB	CM/GC
Construction Scope of Work / Design Responsibility	City	Contractor	Contractor	Joint
CCTV Responsibility	City	Contractor	Contractor	Joint (can be put on Contractor)
Lateral Investigation	City	Contractor	Contractor	Joint (can be put on Contractor)
City Staff/Consultant Level of Involvement	Highest	Lowest	Moderate	Moderate
Permits and Easements	City	Joint	City	Joint
Potential for high construction costs	Normal	Highest	Higher	Normal (greater cost certainty)
Availability of firms/bidders	Best	Low	Low	Good
Quality of construction	High	Medium	Medium	High
Public safety	Normal	High	High	High

CM/GC delivery may make sense for upcoming City rehabilitation projects, such as manhole rehabilitation. Recently, in serving as Owner's Representative for the City of Sandy wastewater program, Leeway recommended the use of a modified CM/GC delivery method for planned wastewater collection system rehabilitation in two of the City's largest sewersheds. The benefits of this CM/GC delivery approach for rehabilitation projects includes:

- Reduced design/engineering cost;
- Accelerated construction schedule;
- Higher cost certainty and quality;
- Gaining Contractor input and resources; and
- Reduced burden on City staff.

These approaches all seem to benefit the City of Sweet Home based on the deep experience gained by City staff in completing the City's 4-phase, and highly successful, I/I Abatement Program. For upcoming projects, our team will work with the City to evaluate potential alternate delivery approaches along with benefits and challenges. Potential approach examples for CM/GC delivery of a rehabilitation project are shown below.

Rehabilitation Project CM/GC Implementation Steps	
Step	Benefit to City
Simplify design approach (with readily available GIS, no pipe profiles or CAD, minimal geotech and survey)	<ul style="list-style-type: none"> ▪ Cost savings in design work ▪ Quicker project completion
Use the consulting engineer on-hand for design	<ul style="list-style-type: none"> ▪ Reduces procurement ▪ Time savings in that consultant is already on board and ready to begin work ▪ Simplified Design
Bring the CM/GC contractor on board at 30%. Early Work Package will include preconstruction inspection and selecting rehab methods	<ul style="list-style-type: none"> ▪ Relieves city staff from additional involvement in things like investigations and CCTV ▪ Speeds up construction process as investigations are done during design
The designer and CM/GC contractor work together to develop final design package, contract drawings and requirements	<ul style="list-style-type: none"> ▪ Contractor working with design engineer means more confidence in plans and constructability, right construction methods

Approach to Water Storage Tank Projects

As part of the water system master planning process, fire flows, pressure and treated water storage needs are evaluated in all water system pressure zones. The Sweet Home water system has several low pressure areas with normal operating pressures that are very low, perhaps lower than required for adequate fire suppression. Water storage capacity is a key component for providing fire flows and stabilizing water system pressures.

Currently, the City has the 10th Street and 49th Street tanks that provide the majority of water system storage. These tanks are located relatively close to each other, but the City has a very long footprint along Highway 20 that makes it difficult for the existing reservoirs to adequately stabilize pressures under normal and peak day demands.

EARLY PROJECT: SWEET HOME NEW WATER STORAGE TANK SITING STUDY

An early project anticipated under the City Engineer-of-Record contract will be a siting study for a new water storage tank to identify the optimum location for addressing as many of the lower pressure zones in the City's water system as possible. Placement of the new tank could be at a number of different locations in the City. The storage tank siting study will also need to consider the current operations of the City's water treatment plant and the impacts of backwash operations on downstream distribution system pressures.



An early project to be evaluated by the City Engineer is the location of a new water storage tank to help address ongoing pressure issues in several areas of the City.

West Yost is a leading expert in water storage tank design with a deep history in designing tanks that meet all seismic and structural code requirements. For each tank project, we have developed designs and standards for storage tank design meeting Oregon Health Authority requirements and considering:

- Seismic forces and impacts;
- Sloshing and sidewall loading;
- Inlet/outlet piping configuration;
- Overflow and air gap compliance;
- Visible level monitoring and SCADA system integration;

- Chlorine residual management, mixing and water quality;
- Corrosion control and interior/exterior coating systems;
- Safety and access; and
- Civil/Site design, access, drainage and surface treatments.

A few of West Yost’s many water storage tank projects are summarized in the table below along with our engineering services provided for each.

Water Storage Tank Experience									
Project/Owner	Location	CAPACITY (MG)	BACKFILL CONDITION	PUMP STATION CAPACITY (MGD)	HYDRAULIC MODELING	PRELIMINARY DESIGN REPORT	DESIGN	CONSTRUCTION SUPPORT	PERMITTING
Grahbhorn Reservoir, Tualatin Valley Water District	Beaverton, OR	5.0	Freestanding	n/a	■	■		■	■
Washington Park Reservoir, Portland Water Bureau	Portland, OR	11.0	Fully Buried	n/a			■	■	■
Glenview Tank 3 Replacement, City of San Bruno	San Bruno, CA	2.0	Freestanding	n/a	■		■	■	■
East Area Tank & Pump Station, City of Davis	Davis, CA	4.0	Partially buried	8.6	■	■	■	■	■
North Tank 11 & Pump Station, City of Modesto	Modesto, CA	6.0	Partially buried	18.0	■	■	■	■	■
San Juan Reservoir & Pump Station, City of Sacramento	Sacramento, CA	3.0	Freestanding	15.0		■	■	■	
Shasta Park Reservoir & Booster Pump Station, City of Sacramento	Sacramento, CA	4.0	Partially buried	16.0	■	■	■	■	■
Southwest Tank & Pump Station, City of Woodland	Woodland, CA	3.0	Partially buried	8.6	■	■	■	■	■
Linne Road Reservoir & Pump Station, City of Tracy	Tracy, CA	7.2	Buried with the court on top	21.0	■	■	■	■	■
Northeast Industrial Storage Reservoir & Pump Station, City of Tracy	Tracy, CA	2.4	Partially buried	6.0	■	■	■	■	■
Potable Water Storage Tank 1A Design and CM, City of St. Helena	St. Helena, CA	1.4	Freestanding	n/a			■	■	■
Graham Hill Water Treatment Plant Tank Replacement, City of Santa Cruz	Santa Cruz, CA	2.5	3 Partially buried	3.0	■	■	■	■	■
Miguelito Reservoir Replacement, San Jose Water	San Jose, CA	1.6	2 Partially buried	1.6		■	■	■	■

Approach to Water and Wastewater Treatment Projects

The West Yost team offers deep experience in water and wastewater treatment to support the City’s water and wastewater treatment facilities in an ongoing basis as the City Engineer-of-Record. Our water treatment experts have designed facilities for groundwater and surface water systems for many clients throughout Oregon and California. Our wastewater treatment experts, many located in Oregon, have designed all types of facilities ranging from small facility retrofits to major greenfield conventional and membrane treatment facilities.

Our approach to water and wastewater treatment facility projects is founded on delivering cost-effective solutions to our clients that maximize ratepayer investments, including:

Accurate Flow and Load Projections and Facility Expansion Phasing. Growth projections often drive inflated flow projections that can lead to over-sizing facilities for the near-term. Our team focuses on “right-sizing” growth estimates and flow projections, while also providing phasing and equipment layouts that can accommodate a full range of potential flows from startup to buildout.

Rehabilitation. Our team focuses on rehabilitating, reusing and re-purposing existing treatment assets and processes to reduce overall cost and deliver facilities with less complexity, and that are easy to operate. We also work carefully to manage the potential risk of invasive rehabilitation projects through constructability and cost reviews at key stages in the design process.

Balanced Investments Between Infrastructure and Treatment. Our planning teams develop Capital Improvements Plans focused on balanced investments in infrastructure and treatment. For example, water and wastewater treatment plant sizing can often be reduced by focusing on water loss in the water distribution system and reducing inflow/infiltration in the wastewater collection system.

Understanding of Future Regulations. Our experts are actively involved in supporting water and wastewater clients in permitting and regulatory projects that offer us a unique ability to identify potential future regulatory issues and incorporate potential solutions into designs cost-effectively.

Water Treatment

West Yost’s team includes experts in surface water and groundwater treatment systems with experience designing a broad range of water treatment facilities. West Yost has recently completed design of a membrane water treatment plant expansion for the City of Cottage Grove, Oregon which is augmented by many current water treatment projects being designed and delivered by our team in California.

For the City of Sweet Home, optimization of the City’s existing and oversized water filtration plant is anticipated to be a key focus area under the City Engineer-of-Record contract. West Yost’s water treatment experts specialize in water system and treatment optimization studies of this nature along with implementing cost-effective facility retrofits to reduce energy demand, optimize chemical inputs and address taste and odor issues. A list of several recent water treatment projects is summarized in the table below.

Water Treatment Experience		
PROJECT	CAPACITY	TREATMENT PROCESS DESIGN PLANNING & SERVICES
City of Fairfield North Bay Regional WTP	40 mgd	Ozonation, residuals management, and chemical systems
Woodland-Davis Clean Water Agency Regional WTP	30 mgd	Pretreatment, ozonation, filtration, chlorination, residuals, and chemical systems
Stanislaus Regional Water Authority WTP	15 mgd	Pretreatment, ozonation, filtration, chlorination, residuals, and chemical systems
City of Cottage Grove Row River WTP	6 mgd	Membrane filtration
City of Redding Foothill WTP	36 mgd	Filtration
City of Redding Buckeye WTP	14 mgd	Flocculation and sedimentation, and plant water system
City of Fairfield Waterman WTP (Pending)	30 mgd	Ozonation
City of Santa Cruz Graham Hill WTP	18 mgd	Water quality support, chlorination, residuals management, and storage tanks
City of Benicia WTP	12 mgd	Chlorine gas conversion to hypochlorite



West Yost's team recently assisted the City of Cottage Grove in the design and construction of an expansion of the City's Row River membrane water treatment facility.

Wastewater Treatment

West Yost's wastewater treatment experience encompasses every type of wastewater facility and process, offering a full service team delivering projects involving technical studies, hydraulic and biological modeling, regulatory and permitting assistance, funding support, facility planning and design, and construction management. Our unique ability and experience working with clients in all phases of project development allows our teams to leverage knowledge gained from permitting and regulatory processes into the planning and design of facilities that will meet the City of Sweet Home's needs. Our wastewater treatment and reuse services include:

- Permitting and Regulatory Compliance
- Treatment Process Modeling
- Wastewater Facility Planning
- Treatment Plant Design
- Reuse/Recycling Planning and Design
- Funding Strategies and Assistance

Our local wastewater treatment team is led by Walt Meyer and Preston Van Meter, offering 50 years and 26 years of experience, respectively. Our team is supported by a deep local bench located in our offices in Eugene and Lake Oswego as well as staff in California who specialize in regulatory permitting, nutrient removal, TMDLs, facility condition assessment and all wastewater treatment unit processes.

A list of several recent projects and unit process design elements is provided in the table below.

OREGON

- City of Creswell, Wastewater Treatment System Improvements
- City of Canyonville, Wastewater Treatment Plant Improvements
- City of Medford, Facilities Plan for the Regional Water Reclamation Facility
- City of Portland Bureau of Environmental Services, Columbia Boulevard Wastewater Treatment Plant Solids Improvements
- Metropolitan Wastewater Management Commission, Eugene/Springfield, Wastewater Treatment Plant Improvements
- City of Lebanon, Wastewater Facility Planning
- South Suburban Sanitary District, Wastewater Facilities Plan
- Clean Water Services of Washington County, West Basin Facilities Plan

CALIFORNIA

- City of Corning, Wastewater Treatment Plant Expansion
- City of Davis, Strategic Master Plan, and Wastewater Treatment & Reuse Improvements
- City of Atwater, Regulatory Compliance, Facility Planning, and New Bert Crane WWTP Design
- City of Stockton, Wastewater Planning and Design
- City of Galt, Regulatory Compliance, Special Studies, Facility Planning, and Tertiary Improvement Project Design
- City of Lodi, White Slough Wastewater Treatment Plant Improvements, Facility and Reuse Master Planning, and Permitting Assistance
- City of Vacaville, Easterly Wastewater Treatment Plant Facility Planning, Expansion Design & NPDES Permit Assistance
- City of Vacaville, Easterly Wastewater Treatment Plant, Facility Planning and Design for Tertiary Treatment Improvements
- City of Woodland, Wastewater Treatment Plant Expansion and Tertiary Upgrade
- City of Fresno, Odor Control at Wastewater Treatment Plant Headworks
- City of St. Helena, Wastewater Treatment Facility Upgrade and Water Recycling Project
- Mt. View Sanitary District, Wastewater Treatment Plant Systems Reliability Evaluation
- San Joaquin County, Flag City Wastewater Treatment Plant Facilities Planning, NPDES Permit Assistance, Design
- United States Coast Guard Training Center Petaluma, California, Planning and Permitting
- California Department of Corrections and Rehabilitation, Wastewater Treatment Facilities (14 sites)
- Central Valley Clean Water Association, Permitting and Regulatory Advocacy Special Project
- City of Healdsburg, Recycled System

Approach to Cybersecurity, SCADA/ Programming and AWIA Compliance

West Yost and The Automation Group each have deep resources for providing SCADA and programming support to the City of Sweet Home. In addition, West Yost is a leading expert in cyber-informed Engineering for agencies throughout the United States. This section discusses CIE, SCADA Programming Services and AWIA compliance for the City of Sweet Home that may be desired under the City Engineer-of-Record contract.

CYBER-INFORMED ENGINEERING

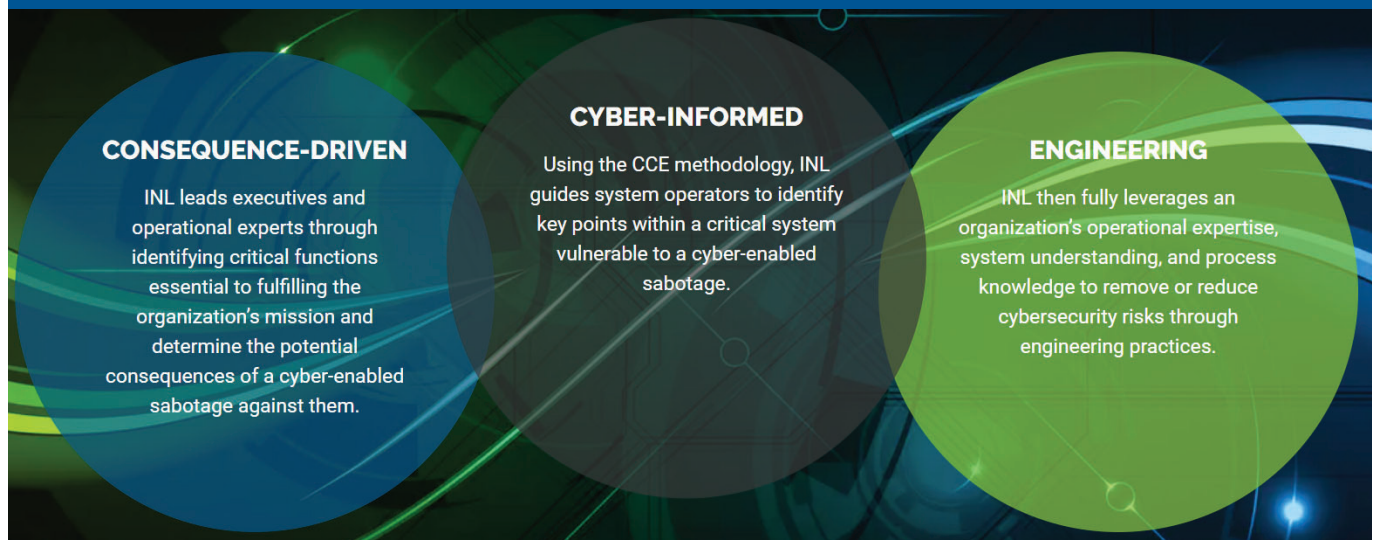
Cyber-informed engineering (CIE) is a framework developed by Idaho National Laboratory (INL) to bridge the gap between engineering design and cybersecurity to identify cyber vulnerabilities at the earliest stages in the system development life cycle. CIE applies both engineering solutions and information technology to minimize cyber attack vulnerabilities across the entire system during the engineering process. This methodology focuses on aiding engineering staff who traditionally envision, plan, design, implement, operate, and maintain such systems to understand cyber risk (without becoming cyber experts) and to integrate the subject matter expertise of cybersecurity specialists into project planning and design.

West Yost's Operation Technology, Cybersecurity, and Resilience (OTCR) staff work within the design team to deliver designed-in cyber resilience. Working closely with design disciplines such as process/mechanical, electrical, instrumentation and controls, SCADA/programming, and communication network design, West Yost will incorporate CIE concepts into the full design process.

The cyber-informed engineering process includes four steps in the development of a secure platform, that would be desired for the City's water and wastewater treatment facilities:

1. Consequence Prioritization to select operations that must not fail (e.g. WWTP IPS).
2. System Analysis to identify interdependencies between critical system components.
3. Consequence targeting to determine the highest impact security threats; and
4. Protective actions to remove or disrupt a cyberattack to the maximum extent possible.

West Yost conducts CCE reviews throughout the design life-cycle to ensure that cybersecurity is designed into the project rather than addressed as a bolt-on approach after the design has been completed.



WTP and WWTP SCADA Programming Services

West Yost and TAG will provide SCADA planning, implementation and programming services on the Sweet Home City Engineer-of-Record contract. TAG provides a complete hardware and software integrations package which includes most major manufacturing brands, such as: Rockwell, GE, Siemens, Cimplicity, iFix and Wonderware. TAG has a strong reputation for providing SCADA/PLC programming support on a 24 hours per day, 7 days per week basis for many Oregon water and wastewater utilities. TAG has a large staff located in Eugene who can be at the City of Sweet Home within 1 hour of a call from City staff.

West Yost and TAG have experts with proven experience providing assistance in all phases and elements of SCADA system development, ranging from initial platform selection through SCADA system design, construction, programming and startup. TAG has the resources and proven experience to provide assistance in the concept and design for both the WTP and WWTP operations. In addition, TAG staff have been out to the Sweet Home facilities on numerous occasions in the past and understand the requirements and needs for both facility operations.

Currently, Sweet Home WTP and WWTP operations are comprised of different pieces of equipment running several different programmed systems. The West Yost/TAG vision is to pull together all of these disparate systems into a single SCADA system. TAG was involved with the Sweet Home WTP SCADA system programming and assisted with startup activities for the project. This experience gives TAG a solid foundation on the needs at the WTP.

Integrating the WTP and upcoming WWTP SCADA systems will require selection of a common hardware and software platform for both facilities so that the upcoming WWTP upgrades can then be transferred over to the WTP, as funding allows. The SCADA platform for both facilities should be selected thoughtfully. West Yost and TAG can support the City in this process, if desired.

AMERICA'S WATER INFRASTRUCTURE ACT (AWIA) COMPLIANCE

In response to passage of the America's Water Infrastructure Act (AWIA), West Yost immediately assembled an AWIA Strike Team to assist utilities in meeting the aggressive compliance timelines for completing the required Risk and Resilience Assessments (RRAs) and Emergency Response Plans (ERPs). We

have assisted nearly 20 clients with AWIA compliance, including eight current projects for Oregon agencies with 2020 compliance deadlines.

With a population nearing 10,000, the City of Sweet Home falls into the third wave of compliance periods for communities with populations under 50,000. The AWIA deadlines for the City to complete the RRA and ERP are:

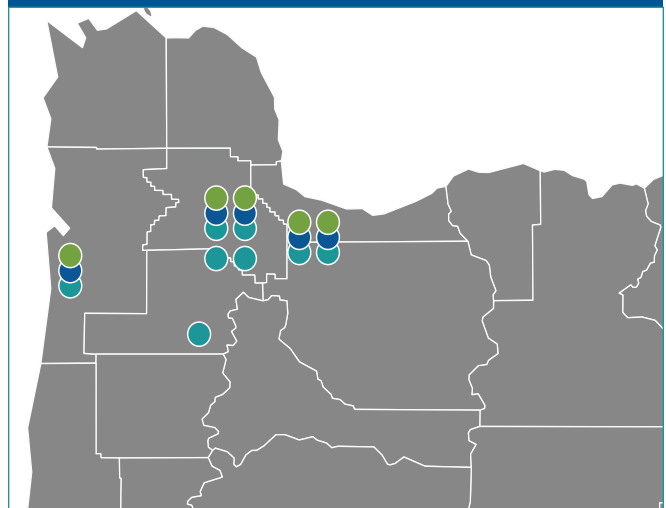
Completion of Risk and Resilience Assessment:
June 30, 2021

Completion of Emergency Response Plan:
December 31, 2021

The West Yost AWIA team has been deeply involved in the industry response to the legislation and work closely with the AWWA to develop tools and methodologies for developing and implementing RRAs and ERPs.

For each project, West Yost completes a thorough gap analysis after reviewing and organizing previously completed RRA- and ERP-related resources. Frequently our services on AWIA projects are coupled with other service offerings of our sector-leading all-hazards resilience services including cybersecurity assessments, instrumentation and controls (I&C), SCADA Master Planning, networking, and data management.

The City of Sweet Home will eventually be required to complete a water system risk assessment and emergency response plan in compliance with the American Water Infrastructure Act (AWIA). West Yost has the most experienced AWIA team in the PNW and is currently completing 8 AWIA projects for Oregon agencies.



- - Risk and Resilience Assessments
- - Emergency Response Plans
- - Cybersecurity/SCADA

Approach to Cost Estimating, Constructability Reviews and Value Engineering

West Yost maintains an up-to-date cost estimating database for all types and sizes of projects along with cost estimating standards that help our engineers consistently produce accurate cost estimates to help our clients budget construction projects effectively. We also engage our experts in constructability and value engineering reviews frequently that reduce risk, improve constructability and enhance client satisfaction.

COST ESTIMATING

West Yost maintains a detailed cost estimating database for infrastructure and treatment projects of all types and sizes and uses other industry tools to augment construction cost estimates where needed. The foundation of a good cost estimate is the quantities takeoff, which relies heavily on a robust design with details that can easily be pulled and organized into assemblies by one of our experience cost estimating experts.

One successful technique that we have used, is inviting O&M personnel to participate as members of our cost-effectiveness review team.

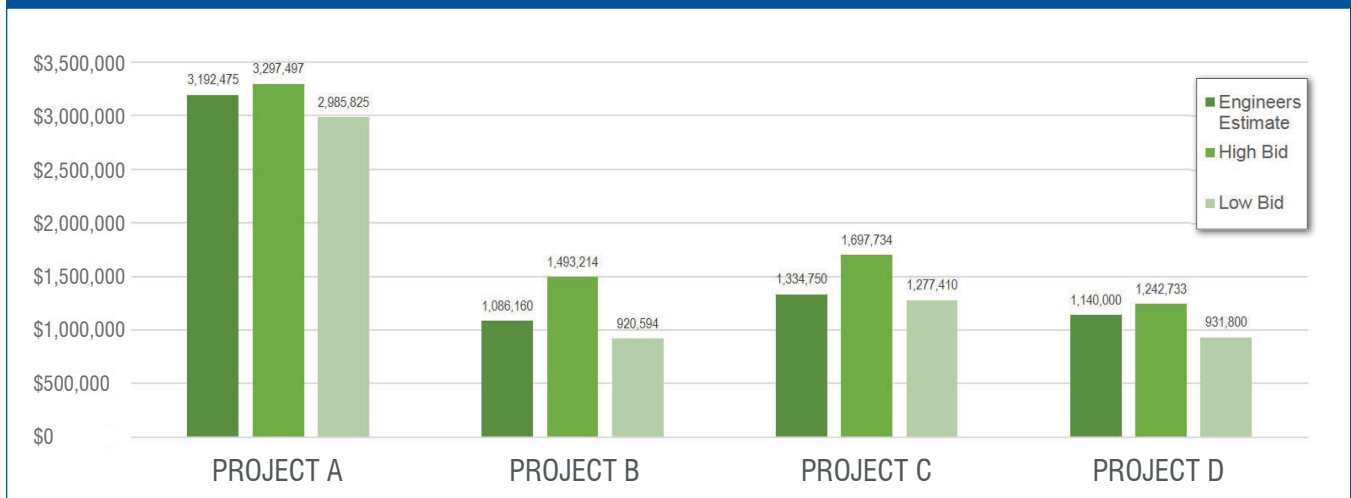
LEVERAGING OUR CM EXPERIENCE TO ENHANCE DESIGN

West Yost CM experts are frequently called in to support our design teams to help address constructability and construction sequencing issues, often implementing design changes to help reduce the risk of change orders during construction. For example, our CM staff have assisted in the preparation of preliminary construction sequencing plans to provide contractors insights into the execution of the project while being careful not to drive “means and methods” that falls firmly under the responsibility of the prime contractor. Our engineering and construction services experience includes construction of water and wastewater treatment plants, pipelines, pumping stations, reservoirs and storage tanks, floodwalls, and drainage facilities.

COST-EFFECTIVENESS AND CONSTRUCTABILITY REVIEWS IMPROVE DESIGNS AND REDUCE RISK

Cost-effectiveness and constructability reviews can be completed at various stages of project development, but are typically conducted at the 30 to 60 percent design completion level. This collaboration generally results in significant project savings and improvements to the overall design. We also leverage our experienced staff to complete constructability reviews where appropriate, to make small design adjustments that can greatly simplify construction. We will offer these reviews as an optional task for your consideration, where appropriate.

The figure below provides the engineer’s estimate and low and high construction bids received for four recent sewer pipeline projects completed by West Yost. We typically see low bids on projects come in within 5% of the Engineers Estimate of most of our projects. As shown in the figure, we try to make sure we are not the low bid so that the project is not at risk of being underfunded.



APPROACH TO VALUE ENGINEERING

Funding agencies such as the Oregon DEQ and USDA typically require a value engineering study to be completed for projects with an estimated construction value of over \$10 Million. These studies typically are conducted following a “full immersion” process over one week with the following a five-step process.

West Yost treatment expert Tim Banyai has completed many VE Studies for complex projects like the City’s upcoming WWTP expansion and would be available to lead the City’s WWTP VE Study, if desired by the City. Tim would be able to assemble a team of West Yost and outside experts with a deep understanding of treatment facility projects who would be focused on maximizing the value of the City’s investments while also being careful not to simply strip away the operator-friendly additions to projects that typically become the target of VE studies led by outside facilitators who are not necessarily an expert in municipal water and wastewater facilities.

Approach to Construction Management

West Yost has an established Construction Management (CM) group with resources that match those of many larger firms. We are able to perform projects of all sizes and complexity, including the recently-completed and award-winning \$100 million City of Modesto WWTP Phase 2 BNR/Tertiary Project. Our services and past experience includes construction for water and wastewater treatment plants, pipelines, pumping stations, reservoirs and storage tanks, floodwalls, and drainage facilities.

Unlike many firms, our CM team specializes in supporting delivery of water, wastewater and stormwater infrastructure and treatment projects offering an

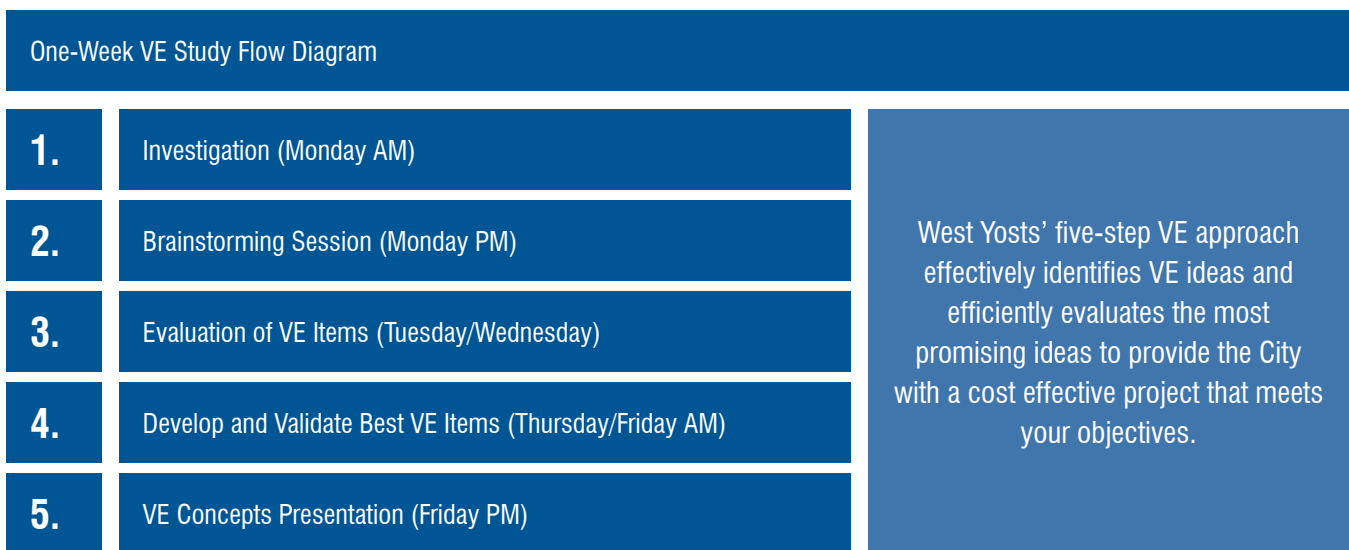
experienced team that includes licensed professional engineers, certified construction managers, and certified special inspectors. We are currently providing CM services on projects throughout the Western United States ranging in size from under \$1 Million to over \$220 Million.

Our CM specialization allows our staff to focus on the unique aspects of municipal water, wastewater and stormwater projects, such as regulatory reporting, funding applications, contract closeout and related special construction services.

Our construction management expertise includes:

- Construction Management
- Construction Contract Administration
- Constructability Reviews
- Cost Estimating
- Cost Control Monitoring
- Document Control and Management
- Construction Schedule Management
- Field Inspection
- Claims Management
- Project Close-Out
- Funding/Prevailing Wage
- Start-up/Commissioning

West Yost has recent experience with on-call contracts with over two dozen clients, covering a wide range of disciplines. Our success working on as-needed contracts comes from our ability to respond quickly with the right blend of staff, creating teams that have the appropriate skills and experience to bring innovative solutions to our clients’ projects.



Construction Management and Inspection Experience Summary

PROJECT	PROJECT COST (IN MILLIONS)	CONSTRUCTION MANAGEMENT	INSPECTION	TREATMENT PLANT	STORMWATER INFRASTRUCTURE	PUMP / LIFT STATION	PIPELINE / CONVEYANCE	WATER STORAGE
Water and Wastewater Treatment Facilities								
WWTP BNR / Tertiary Treatment Upgrades, City of Modesto, CA	\$102.4	■	■	■	■	■	■	■
EchoWater WWTP Expansion Project, Sacramento, CA Regional CSD	\$91.6	■	■	■	■	■	■	■
WTP Phases 1 and 2, Mountain House, CA CSD	\$56.0	■	■	■	■	■	■	
Midwestern Placer Regional Wastewater Project, City of Lincoln	\$38.0	■	■	■	■	■	■	
Jamieson Canyon Water Treatment Plant, City of Napa	\$36.0	■	■	■	■	■		
WWTP Phases 1 and 2, Mountain House, CA CSD	\$26.4	■	■	■		■	■	
Headworks, Dryden Box, & Influent Flume, City of Modesto, CA	\$17.5	■	■	■	■	■	■	
Treatment Plant Expansion and Tertiary Upgrade, City of Woodland, CA	\$25.0	■	■	■				
Easterly WWTP Tertiary Project Completion Phase, City of Vacaville, CA	\$10.0	■	■	■				■

Construction Management and Inspection Experience Summary

PROJECT	PROJECT COST (IN MILLIONS)	CONSTRUCTION MANAGEMENT	INSPECTION	TREATMENT PLANT	STORMWATER INFRASTRUCTURE	PUMP / LIFT STATION	PIPELINE / CONVEYANCE	WATER STORAGE
W/WW Infrastructure (Pipelines, Pump Stations, Reservoirs, Wells)								
Ophir Road Pump Station, Placer County Water Agency	\$38.7	■	■			■	■	
North Valley Recycled Water Pipeline, City of Turlock	\$28.1	■	■				■	
Wastewater Collection System 9, City of Stockton	\$14.0	■	■			■	■	
Mountain House, CA CSD College Park Water Booster PS & Tanks	\$10.0	■	■			■	■	■
Downtown Sewer Backyard Conversion, City of Yuba City	\$9.7	■	■			■	■	
Aquifer Storage Recharge Wells, City of Roseville	\$3.6	■	■			■	■	
First Ground Level Tank, City of Woodland	\$6.2	■	■			■	■	■
Dry Creek WWTP Levee Relocation, City of Roseville	\$6.2	■	■	■	■		■	■
Pond A, City of Dixon, CA	\$4.5	■	■		■	■	■	
Bair Island Storm Pump Station, City of Redwood City	\$1.9	■	■		■	■	■	
Valley Glen Stormwater Pump Station, City of Dixon	\$2.20	■	■		■	■	■	

Corporate Profile & Legal Qualifications

Project Team

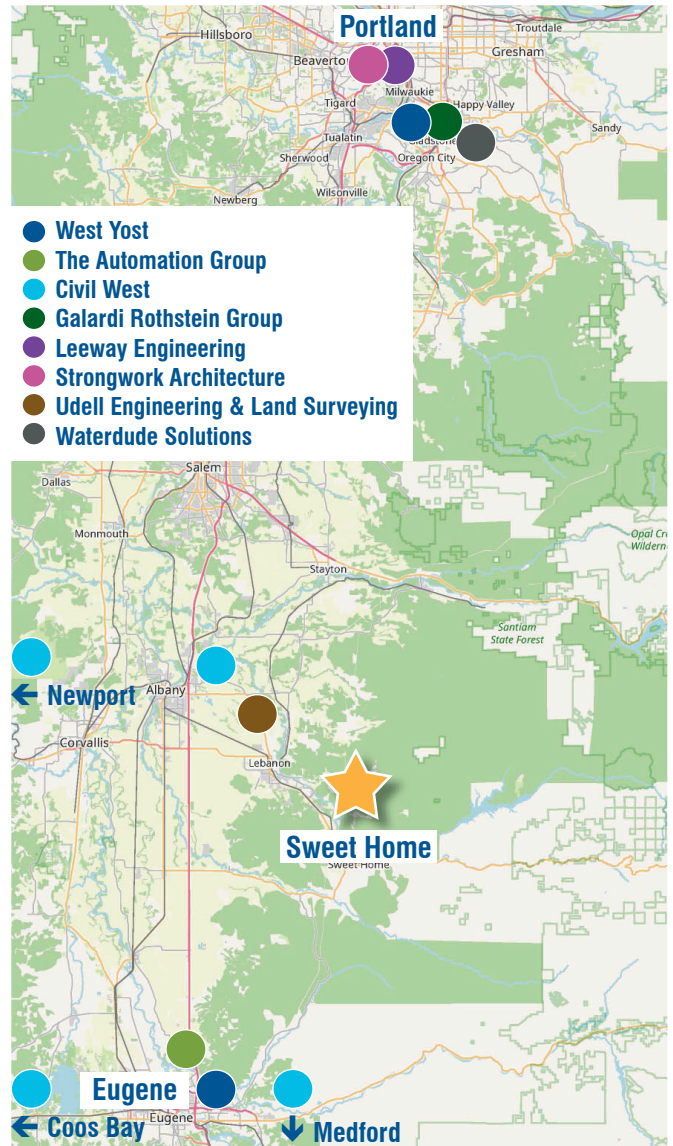


This section addresses, in part, the following Scoring Criteria from the City's RFP:

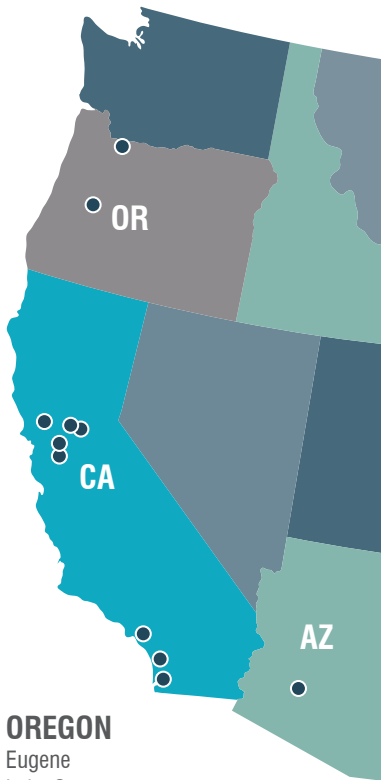
- Resources committed to perform the services and the proportion of the time that the prospective consultant's staff would spend to perform services for the contracting agency, including time for specialized services, within the applicable time limits. (20%)
- Availability to the project locale. This section introduces our proposed Project Team, providing an introduction and overview of West Yost and our partner firms, an Organization Chart and Core Team Member biographies. Two-page resumes are included in the Appendix. (20%)
- Ownership status and employment practices regarding disadvantaged business enterprises, minority-owned businesses, woman-owned businesses, businesses that service-disabled veterans own, emerging small businesses or historically underutilized businesses. (2%)

Availability to the Project Locale

As shown in the map to the right, West Yost and our partners are all located in close proximity to the City of Sweet Home. We are committed to being highly responsive to City needs and will do our best to have a team member onsite within one hour when needed. For example, during a construction project when a General Contractor may be standing by awaiting engineering consultation.



Introduction to West Yost



OREGON

Eugene
Lake Oswego

CALIFORNIA

Carlsbad
Concord
Davis (Corporate HQ)
Irvine
Pleasanton
Sacramento
San Diego
Santa Rosa

ARIZONA

Phoenix



West Yost Associates (West Yost) is a consulting engineering firm that was formed in 1990 to provide quality client services in water supply, wastewater, recycled water, groundwater, and stormwater. In these areas, we provide planning, design, construction management and program management services.

West Yost is employee-owned and has two Oregon offices, eight California offices, and one Arizona office. Our 180 staff members include certified or registered professionals in civil, mechanical, electrical, environmental, and control systems engineering; geology, engineering geology, and hydrogeology; stormwater pollution protection plan design; and construction management and inspection services.

As an industry leader in water planning, engineering and construction, West Yost offers comprehensive technical services throughout the project life-cycle. West Yost has the experience and resources to successfully complete any task order assigned by the City and described in the request for proposal scope of work. We have included seven subconsultants on our team to provide additional services to the City; these include: The Automation Group, Civil West Engineering Services, the Galardi Rothstein Group, Leeway Engineering Solutions, Strongwork Architecture, Udell Engineering and Land Surveying, and Waterdude Solutions.

West Yost has a long history of providing as-needed technical services. We currently assist more than 60 municipal clients and utilities with a wide-range of expertise. Our success working on as-needed contracts comes from our ability to respond quickly with the right blend of staff, creating teams that have the appropriate skills and experience to bring innovative solutions to our clients' projects. Our qualifications include numerous clients with whom our relationship has extended over many years and many projects. In Oregon, this includes:

- City of Corvallis
- Clean Water Services
- City of Portland BES
- Portland Water Bureau
- Clackamas River Water
- Eugene Water and Electric Board
- Sunrise Water Authority

Capacity and Availability

The West Yost team is ready to commit our time and talent to the City of Sweet Home. The strategy we have developed to provide you with as-needed engineering services is well within our staff and resource capacity. As Project Manager, Preston will continually monitor schedules and workloads with well-established management tools and systems to accurately and efficiently gauge staff resource allocation and workload coordination. These tools include Deltek Vision, a centralized real-time resource for projecting workload for staff members down to the hour and task level.

Our on-call contract success is based on our ability to respond quickly to project needs; create a team whose skills match the unique needs of each project; commit staff through completion; and provide the communication and collaboration needed to work seamlessly as an extension of the City's team.

West Yost Facilities and Resources

Additional Resources

In addition to our proposed team, the City will have access to, and the support of all of West Yost. We currently employ more than 180 water and wastewater specialists and are continually growing.



West Yost has more than 180 staff members available to support the City of Sweet Home.

Operational Resources

Software and Technology

West Yost holds and uses a wide variety of software to deliver top-quality products for our clients. We keep these licenses up-to-date to offer compatibility to clients and end users. In cases where West Yost does not carry a license to our client's preferred software, we can add it to meet their needs. A sample of our common software includes:

- Innovyze Analysis, Modeling and Design Software Suites
- HEC-RAS and Extensions
- esri ArcGIS Spatial Analyst and 3D
- Bentley Systems WaterCAD and MicroStation
- Adobe Creative Cloud 2020
- Microsoft Office 365

Proprietary Tools and Systems

West Yost has developed internal processes to best serve our clients. Some of the proprietary tools and systems we have developed include our Project Management Plan, QA/QC Plan, SharePoint websites, and Deltek databases.



One of our new collaboration tools used is our "Site Visit in a Bag" (SVIB). The SVIB combines standard virtual meeting software with a mobile tablet to allow our team to deploy multiple specialists for site visits, virtually. The SVIB can be shipped directly to your site and is ready to use. The SVIB configuration is security focused and includes encryption technology to protect sensitive information or photos gathered during the site visit. Using the SVIB allows our team to participate in fully interactive virtual site visits, allowing our team to keep your project on schedule due to unforeseen restrictions. The SVIB is also useful during construction activities to enable as-needed virtual site visits during construction to assess field conditions and questions quickly by making specialists available while limiting the need for travel.

Equipment, Fleet and Real Estate

Our clients also benefit from the physical resources that West Yost owns and maintains. This includes company vehicles, field equipment (including GPS units and cameras), office equipment and office space. These resources are commonly shared with our clients to keep project cost down and ensure high-quality project delivery.

Women and Minority Business Contracting and Workforce

This section summarizes West Yost’s active engagement providing opportunities for women and minority businesses, and our commitment to workforce diversity.

Women and Minority Business Contracting

West Yost frequently provides opportunities for Disadvantaged Business, Minority Owned, Women Owned, Service-Disabled Veteran and Emerging Small Business (D/M/W/SDV/ESB) enterprises on many of our projects. We maintain close relationships with many D/M/W/SDC/ESB firms and are sub-contracting a significant percentage of work on several current projects for the City of Portland, including:

- Portland BES Treatment On-Call: 35% contracted to D/M/W/SDV/ESB firms
- Portland BES Pump Stations On-Call: 31% contracted to D/M/W/SDV/ESB firms
- Portland Water Bureau On-Call: 30% contracted to D/M/W/SDV/ESB firms
- Portland Water Bureau Washington Park Reservoir CM: 21% contracted to D/M/W/SDV/ESB firms

In sum, these contracts represent nearly \$3 Million in work contracting to D/M/W/SDV/ESB firms. As part of these contracts, West Yost implements a D/M/W/SDV/ESB mentoring program that provides contracting support to our partners to reduce their risk and exposure, identifies targeted tasks that fit their firm capabilities and provides technical training and continuing education. We also seek other opportunities to engage our D/M/W/SDC/ESB partners on projects for other clients throughout Oregon and Southwest Washington.

Workforce Diversity

West Yost is proud to be a diverse firm. Minorities and women account for 23% and 42% of our total staff, respectively. In addition, women also account for 34% of our managers firm-wide.

At West Yost, women account for 33% (46 of 140) of our current engineering and sciences workforce, 31% (15 of 48) of our Principal/Senior Staff, and 42% (76 of 179) of the total West Yost workforce. ¹

Our workforce composition of 42% women nearly triples the National Science Foundation’s national average estimate of 15% women engineers in the workforce. Complete diversity statistics are summarized in the table below. To further our commitment to diversity, West Yost practices a strong non-discrimination policy for employees and applicants for race, color, religion, sex, national origin, handicap, or any other protected category. Affirmative action is taken to ensure applicants are provided with equal opportunity.

JOB CATEGORIES	OVERALL TOTALS	Hispanic		Male						Female					
		MALE	FEMALE	WHITE	BLACK	ASIAN	INDIAN	HWN*	2+	WHITE	BLACK	ASIAN	INDIAN	HWN*	2+
02 Professionals	111	3	2	59	2	4			5	29		6			1
03 Technicians	15	1		6		2				2	1	1	1		1
05 Admin Support	20		2	1					1	13		3			
1.1 Exec/Senior-Level Officials	9			5		2				2					
1.5 First/Mid-level Officials	24		1	10	1				1	10			1		
FIRM TOTALS	179	4	5	81	3	8	0	0	7	56	1	10	2	0	2

¹ As of June 1, 2020 *HWN (Hawaiian)

Subconsultant Responsibilities and Qualifications



The Automation Group (TAG)

TAG is a products and services company located in Eugene, Oregon. Capabilities include in-house UL508a/UL698a panel shop, Allen Bradley and GE Systems Integrator status, field technicians experienced in water, wastewater and pump station start-up and commissioning, and Project Management systems in place to ensure a successful project. TAG is a recognized system integrator with multiple manufacturers as well as a representative for products such as Endress & Hauser, Hach, Chemtrac (analytical instruments), Antx (Autodialers), Walchem (Metering Pumps) and in-house products produced by TAG including the RA-1100 MTU/RTU, Cellular Dialer System, Mobile Monitoring System for external Plant Control and chemical feed systems. TAG can provide 24/7 Support and Onsite Tech support within 24 hrs. TAG has in-house Electrical Design for SCADA/PLC Systems and Panels and can provide Certified Startup for VFD Systems and Flow/Level Devices. TAG can also provide instrument calibration to meet State requirements for certification/verification.

Civil West Engineering



Civil West Engineering Services, Inc. is a locally owned and operated, private engineering consulting firm specializing in multi-disciplinary engineering projects and services. With 4 office locations throughout Oregon, we strive to provide small communities with local support in the following disciplines: Municipal Engineering; Stormwater Infrastructure Engineering; Roadway and ADA Infrastructure Engineering; Development Review Support; Wastewater Infrastructure Engineering; Water Infrastructure Engineering; Funding and Planning Assistance.

We pride ourselves on the relationships we build with our clients and our goal is to be considered part of their internal team. Consistent contact and communication have been the key for the successful completion of all our projects. With our Albany office 30 miles from the city of Sweet Home, we are easily accessible in person, by phone or via electronic communication.



Galardi Rothstein Group

Galardi Rothstein Group (GRG) provides strategic financial and management consulting services to government agencies and special districts worldwide. We provide sound solutions to management, economic, and financial challenges associated with the development and delivery of major infrastructure services. In most communities, skilled technical work is only part of the solution. GRG also emphasizes conducting analyses and developing recommendations with an understanding of community values. The firm is committed to performing its work in a manner that encourages public participation and balances feedback from a variety of stakeholders. GRG was established in 1996 and is a certified Woman-Owned Business Enterprise in the State of Oregon.

Galardi Rothstein Group is a registered Woman-Owned Business (WBE #621).



Leeway Engineering Solutions

Leeway Engineering Solutions was founded in 2019 on decades of experience in the public works consulting sector. Our staff has successfully delivered projects and programs for the largest water and wastewater agencies in the Pacific Northwest. Our staff has successfully delivered pipeline design and rehab projects ranging from \$100k up to \$20M in construction value, including the City of Sweet Home's I/I Abatement Program, still touted by DEQ as the most successful I/I reduction program in the state. As a small firm, Leeway is extremely nimble and able to respond quickly to the City's needs. Leeway is serving as Owner's Representative for the City of Sandy, OR, providing similar "extension of staff" services for another small community.

Leeway Engineering Solutions is a registered Minority/Disadvantage/Emerging Small Business (MBE/DBE/ESB #12476).

STRONGWORK ARCHITECTURE

Strongwork Architecture

Strongwork's infrastructure project motto is "People over pipes." Yes, of course the pipes are important, but let's not forget about the people who pay for the plant, manage the plant, and operate it 24/7/365 come heck or turbid water. In his almost ten years of experience guiding and designing the architectural portions of large infrastructure projects, Alan has developed a knack for facilitating cost-effective buildings that are appropriate for process, pleasing for people, and functional for both.

Strongwork Architecture is a registered Emerging Small Business (ESB #10962).



Udell Engineering & Land Surveying, LLC

Udell Engineering and Land Surveying, LLC has a competent surveying staff that includes 3 Professional Land Surveyors registered in the State of Oregon, two land surveying technicians and support staff. Our company owner has worked in Sweet Home and with Sweet Home staff for over 25 years and has developed a very respected working relationship with them. The experience working for the City of Sweet Home includes performing boundary and topographic surveys for pre-design data, wetland surveys, elevation surveys and FEMA Letter of Map Amendment surveys. We know the staff at Sweet Home very well and work well with them.



Waterdude Solutions

Waterdude Solutions specializes in wastewater operations, maintenance, and management technical support to a variety of clients. WDS experience working with the City of Sweet Home includes development of a water and wastewater system operation staffing study and draft budget. WDS also provided O&M pre-design review of the current WWTP improvement project. Most recently WDS provided technical support in the development of the City's RFP for contract operations, maintenance, and management services.

Waterdude Solutions is a registered Emerging Small Business (ESB #10792).

Introduction to Key Team Members

Below is an introduction to our key team members. Preston will serve as the City Engineer of Record and lead for treatment-related projects. Preston will be supported by Matt Wadlington, from Civil West and Corie Moolenkamp, as leads for transportation/stormwater and infrastructure, respectively. Our leads will be backed up by a deep bench of engineers and support staff from West Yost and our partner firms.

City Engineer and Treatment Lead - Preston Van Meter, PE



YEARS OF EXPERIENCE: 26

PROFESSIONAL REGISTRATIONS

- Professional Civil Engineer, Oregon No. 51615
- Professional Engineer, Washington No. 43828

EDUCATION

- MS, Civil Engineering, University of Michigan
- BS, Civil Engineering, Oregon State University
- BS, Business Administration, Oregon State University

PERCENT AVAILABLE FOR PROJECT

- Available: 50%

Preston will serve as the City Engineer for Sweet Home to help alleviate demands on City engineering staff. In this role, he will assist City staff with day-to-day issues and to perform specific task-based engineering projects on the City's behalf. **Preston has served as a contract City Engineer for nine different Oregon communities in his career, including most recently working as the City of Sweet Home.** Preston is excited about the opportunity to continue working with City staff and to support the many important projects the City will be completing in the coming years. He has led many continuing services contracts similar to the City Engineer-of-Record contract and maintains a strong reputation for superior client service and responsiveness. Preston's experience includes the design and delivery of all types of projects including:

- Street improvement projects for local, collector and arterial streets;
- Water, Wastewater and Stormwater Master Planning and GIS;
- Water and wastewater pipelines and pump stations;
- Stormwater pipelines and outfalls;
- Trenchless technologies;
- Water storage reservoirs;
- Water and wastewater treatment facilities; and
- Regulatory and environmental permitting.

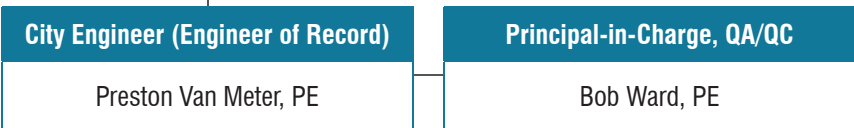
Preston is also a recognized wastewater treatment expert who has delivered major upgrade projects for 12 Oregon communities that have included initial planning and conceptual design, permitting, final design, bidding and construction administration. He has also participated in and led value engineering studies for a number of wastewater treatment and infrastructure projects.

Project Team Assisting the City Engineer

This section introduces our proposed Project Team, an Organization Chart, and key team member biographies. Full resumes are included in Appendix A.



Ray Towry, City Manager
Greg Springman, Public Works Director
Trish Rice, Staff Engineer
Steven Haney, Utilities Manager



Subconsultants

- | | |
|---|--|
| TAG The Automation Group | SA Strongwork Architecture |
| CW Civil West Engineering Services | UE Udell Engineering and Land Surveying |
| GRG Galardi Rothstein Group | WDS Waterdude Solutions |
| LES Leeway Engineering Solutions | |

West Yost Knows How to Deliver On-Call and As-Needed Engineering Services



More than:
30+ years of successful delivery on as-needed projects and tasks.



More than:
60+ Current on-call and as-needed contracts for municipal clients and utilities.

Project Team Assisting the City Engineer (Continued)

Below is an introduction to our key team members. Preston will be supported by Matt Wadlington from Civil West in and Corie Moolenkamp, as leads for infrastructure and transportation/stormwater, respectively. Our leads will be backed up by a deep bench of engineers and support staff from West Yost and our partner firms.



BOB WARD, PE

Role: Principal-in-Charge, QA/QC

Firm: West Yost

Percent Available for Project: 20%

Bob will serve as Principal and review all draft and final work products before they are sent to the City for review or acceptance. Bob is a West Yost Vice President who provides design, project management, and construction supervision on water facilities projects in the Portland region. Bob is experienced in water treatment, operations, management and has been working on water quality and regulatory compliance issues throughout his career. Bob has served as project manager or principal-in-charge for work on the five largest water treatment facilities in Oregon as well as seven Construction Management/General Contractor (GC/CM) and Design-Build projects. One of his water treatment projects was completed and on budget in 27 months using progressive design build. Bob is also managing several AWIA RRA and ERP projects



CORIE MOOLENKAMP, PE

Role: Infrastructure Lead

Firm: West Yost

Percent Available for Project: 40%

Corie is a professional engineering manager who has progressive experience in the management, design and construction management of water storage, water and wastewater pumping and conveyance facilities, as well as water and wastewater treatment. She has been involved in several planning projects including work on wastewater facilities plans, water supply and distribution plans and water rights. She brings a significant amount of local knowledge to the team, as all of her professional work has been municipal in nature and focused in Oregon, primarily in the Portland metropolitan area. In addition to technical work, Corie has successfully managed projects from \$5,000 to \$15 million in fees. She is well-versed in the financial, organizational, and resource allocation aspects of public works projects.



MATT WADLINGTON, PE

Role: Transportation/Stormwater Lead

Firm: Civil West Engineering Services

Percent Available for Project: 50%

During his 23 years as a professional engineer, Matt has managed the planning and design for municipal transportation, water, wastewater, stormwater, and site development projects. He has coordinated with clients, local government agencies and subconsultant staff for successful completion of over 300 different projects in Oregon, Washington, California and Arizona.



DAPHNE MARCYAN, PE

Role: Water Infrastructure

Firm: West Yost

Percent Available for Project: 30%

Daphne is project manager and water system design engineer who focuses on analyzing hydraulic systems for efficient and complete water pump station and system designs. Her broad background also includes strategic land use permitting land development, road design, grading of challenging sites, water and sewer line design, and implementation of innovative storm water management techniques such as Low Impact Development Approaches (LIDA) to detention and water quality facility design. Her experience has her ready to efficiently tackle projects and deliver successful solutions for a variety of clients.

Project Team Assisting the City Engineer (Continued)



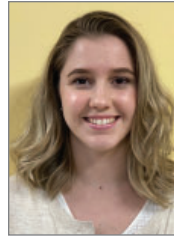
BROOKE BARRY, PE

Role: Water Infrastructure

Firm: West Yost

Percent Available for Project: 30%

Brooke Barry has engineering experience, including preparing final design documents for water transmission, distribution, and sewer pipeline design projects. Brooke worked on several large diameter water transmission projects including the preliminary design for the Willamette Water Supply Program. On this project, Brooke completed routing analysis to select the final 33-mile route for the proposed 30- to 66-inch welded steel pipe water transmission main, including working with geotechnical engineers to analyze over 40 trenchless crossings. She performed the hydraulic analysis to confirm pipeline sizing for the gravity side of the system. She was one of two main staff engineers who completed final design drawings for the 66-inch 124th Avenue Water Transmission Pipeline.



MARYNA ASUNCION, EIT

Role: Wastewater Infrastructure

Firm: West Yost

Percent Available for Project: 30%

Maryna Asuncion is a civil engineer whose work has focused primarily on wastewater infrastructure and stormwater treatment and conveyance. Maryna has a broad background including civil site design (grading and layout), wastewater pump station design, wastewater treatment plant condition assessment and facility plan development, storm and sanitary sewer design, stormwater management techniques and water quality facility (LIDA) design. Maryna's skills include project delivery, technical writing, construction administration and management, AutoCAD Civil 3D, and AutoCAD Storm and Sanitary Analysis.



RILEY MURNANE, EIT

Role: Wastewater Infrastructure

Firm: West Yost

Percent Available for Project: 40%

Riley Murnane is an environmental engineer with experience in infrastructure services during construction, project planning and permitting, developing cost estimates, and microbial metabolism. Infrastructure projects include lift stations, storage reservoirs, and treatment tanks. Project planning and permitting includes work on multiple Facilities Plans as well as the development of Recycled Water Use Plans and site authorizations. Riley is also familiar with state and federal requirements regarding Recycled Water, Dam Safety, and certified organic farming.



ROB LEE, PE, PMP

Role: Pipeline Rehabilitation

Firm: Leeway Engineering Solutions

Percent Available for Project: 30%

Rob has 22 years of experience providing engineering services for projects involving wastewater collection, conveyance, and treatment. Rob's experience includes trenchless rehabilitation and condition assessment, inflow/infiltration studies and infrastructure evaluations, design, preparation of contract drawings and specifications, preparation of as-built plans, shop drawing, and submittal reviews, and construction oversight and management. Rob's experience gained from leading large municipal pipeline condition assessment, planning, design, and rehabilitation projects and programs will be leveraged to quickly and effectively develop solutions for the City of Sweet Home.

Project Team Assisting the City Engineer (Continued)



WALT MEYER, PE

Role: Treatment

Firm: West Yost

Percent Available for Project: 20%

Walt Meyer is an engineer with experience in water and wastewater planning, design, and construction. He has managed multi-disciplined project teams for various water, wastewater, storm water, and environmental services projects. Walt has directed facilities planning for wastewater programs for many communities and also has extensive design experience including wastewater treatment plants, pumping stations, large diameter pipelines, and water facilities. He has managed infiltration/inflow assessments, sludge management evaluations, financial plans, environmental assessments, and rate studies for many communities. Walt is very familiar with Oregon's water quality standards and has a history of successful negotiation with regulatory agencies on behalf of clients.



CRAIG THOMPSON, PE, BCEE

Role: Treatment

Firm: West Yost

Percent Available for Project: 25%

Craig Thompson is a civil engineer who primarily focuses on water supply, including major involvement in 26 water treatment facilities with a total capacity of over 1,000 mgd and with capacities between 1 and 220 mgd. His experience includes regulatory compliance evaluations and training; condition assessments; award-winning designs; construction inspection; start-up training and assistance; process optimization studies; and design, construction, and operation of pilot plants.



TIM BANYAI, PE, PMP

Role: Treatment

Firm: West Yost

Percent Available for Project: 25%

Timothy Banyai is a registered civil engineer and project management professional with experience managing and designing water and wastewater treatment plants and pumping stations. His direct project experience includes design and preparation of drawings and specifications, assisting clients in bidding-phase services, and performing construction-phase duties. Tim has a record of developing cost-effective and innovative designs for projects, and is known for managing multi-disciplinary teams for water and sewer infrastructure improvement projects.



WILL DAWSON, QSP

Role: Transportation/Stormwater

Firm: Civil West Engineering Services

Percent Available for Project: 30%

Will brings over 18 years of experience in engineering design, project management, contract administration, and facilities plan preparation to the City of Sweet Home. His experience is rooted in transportation engineering and drainage design methods. Will has coordinated with clients, local government agencies and sub-consultant staff for successful completion of over 400 different projects in Northern California and Southwest Oregon.

Project Team Assisting the City Engineer (Continued)



DOUG MOORE, PE

Role: Transportation/Stormwater

Firm: West Yost

Percent Available for Project: 30%

Doug Moore is an engineer with experience in storm drainage facility master planning, stormwater computer modeling, facilities planning, preliminary design, design and specifications, construction and capital cost estimating, project permitting, and project management. He has hydrologic and hydraulic modeling expertise with XPSWMM (1 and 2 dimensional modeling), Sacramento SWMM, HEC-1, HEC-2, HEC-HMS, HEC-RAS, MOUSE, MIKE URBAN, and RiverFLO-2D. He has provided initial planning, detailed design, and construction period engineering services for four large detention basin projects, each of which created significant wildlife habitat areas.



ANNA REIMER, GIT

Role: Transportation/Stormwater

Firm: West Yost

Percent Available for Project: 30%

Anna certified geologist-in-training who has worked on most of West Yost's groundwater resources projects over the past decade. Her experience includes: hydrogeologic mapping; aquifer analysis; water quality monitoring and sampling; groundwater management planning; integrated groundwater modeling; production well construction, testing, and monitoring; and evaluating existing supply facilities. She is currently pursuing an M.S. in hydrologic sciences at UC Davis. Her thesis project involves updating the Yolo County Integrated Water Flow Model (IWFMM) and inspecting impacts to the shallow, intermediate, and deep aquifers due to changes in agriculture irrigation and municipal pumping practices, and the completion of the regional treated surface water supply project.



DEBORAH GALARDI

Role: Rates and SDCs

Firm: Galardi Rothstein Group

Percent Available for Project: 30%

Deborah Galardi has 30 years of experience in developing rates and system development charges (SDCs) for various infrastructure systems. Ms. Galardi has successfully conducted utility rate and financial studies for dozens of clients across North America, including cities and utility districts in Oregon, Alaska, California, Texas, Utah, Arizona, Louisiana, Georgia and Hawaii, as well as utilities in Canada. Ms. Galardi is working with the City of Sweet Home to update its water and wastewater system development charge (SDC) methodologies and project lists. She is also assisting the City in the developing new methodologies for transportation, parks and stormwater systems.



MARK WALTER

Role: Operations Support

Firm: Waterdude Solutions

Percent Available for Project: 30%

Mark Walter has an extensive and varied work history ranging from operations to management positions over advanced wastewater treatment facilities. He is well versed on modern operations and maintenance methods and is an effective communicator. Mr. Walter's combination of experience gives him a unique ability to orient quickly and facilitate action.

Project Team Assisting the City Engineer (Continued)



GARY JENKS, PE

Role: SCADA/Programming

Firm: The Automation Group

Percent Available for Project: 20%

Gary is responsible for PLC/HMI Programming, factory authorized AF Drive start up, and project start up and commissioning. Gary's previous experience ranges from project manager and foreman to controls division manager. Gary completed his Inside Wireman Apprenticeship from BOLI in 1993, is accredited through the Rockwell Automation System Integrator and holds his General Journeyman license.



KYLE LATIMER, PE, PLS

Role: Survey

Firm: Udell Eng. and Land Surveying

Percent Available for Project: 25%

Kyle is a Professional Land Surveyor as well as Civil Engineer. Kyle manages the scheduling of survey crews, oversees the completion of all surveys and delegates survey drafting and research as necessary. Kyle has served as a Field Crew Chief for nearly 6 years and has a vast knowledge in the use of the survey instruments.



ALAN ARMSTRONG, LA

Role: Architecture

Firm: Strongwork Architecture

Percent Available for Project: 25%

Alan Armstrong has worked for a variety of firms on a wide range of products from custom shoe displays to fancy restaurants to multi-million dollar water filtration facilities, custom homes, and residential remodels and ADUs. Alan is founder, owner, and architect of Strongwork Architecture, launched in 2009. Besides a constant mission to provide beautiful, coherent, and cost-effective solutions to any architectural challenge, Alan prides himself on being easy to work with, punctual, communicative, and generally a good guy.

Extension-of-Staff Feedback

"If the board ain't happy, ain't nobody happy"... Your research over the past few months, written findings, preparation for tonight's meeting, and delivery of the presentation rocked! The board's engaging questions showed they read and understood the material, and your assistance in tonight's discussion was very helpful. I'm confident that the information will be utilized to reach an informed, positive decision for CRW. Thank you a bunch!"

Adam Bjornstedt, Chief Engineer, Clackamas River Water (In response to West Yost's presentation on the Grasley/Henrici Alternatives Analysis as an extension-of-staff)

Corporate Profile & Legal Qualifications

Experience and Qualifications



This section addresses, in part, the following Scoring Criteria from the City's RFP:

Record of past performance, including but not limited to price and cost data from previous projects, quality of work, ability to meet schedules, cost control and contract administration. (15%)

Additional information related to the Experience criteria can be found in the Approach, Methodology and Capabilities Section of this proposal as follows:

- Price and cost information on past projects is addressed in many sections.
- Approach to Cost Estimating summarizes our history and accuracy with cost estimating.
- Approach to Project Management addresses ability to meet schedules, cost control and contract administration.

The following sections provide more detailed information related to specific projects completed by West Yost and our partners that are applicable to the services anticipated to be required by the City as part of the City Engineer-of-Record contract. Project sections are broken into the following disciplines:

- Long-term Continuing Services Clients with Reference Contact Information;
- Water/Wastewater infrastructure and pump stations;
- Water/Wastewater treatment facilities;
- Transportation and stormwater;
- SCADA Programming and AWIA Compliance; and
- Construction Management.

Long Term Continuing Services Clients with Reference Contact Information

The following summaries for three of West Yost's long-term local clients were completed under continuing services and on-call contracts. Reference contact information is provided.

City of Corvallis, OR



REFERENCE: Mr. John Kelker, Water Operations Supervisor, (541) 754-1758, John.Kelker@corvallisoregon.gov;

YEARS OF SERVICE: 1997 – Current (23 years);

NUMBER OF PROJECTS: 44

West Yost has worked with the City of Corvallis through and on-call services contract for over 20 years, completing over 40 separate task orders on a wide range of projects at the City's water and wastewater treatment plants and pump stations. The City has two water treatment plants, the Taylor WTP along the Willamette River and the Rock Creek WTP in the southwesterly area of town along the Marys River. The City's Wastewater Reclamation Plant (WRP) treats and discharges an average daily flow of 7 MGD to the Willamette River. An abbreviated list of projects completed for the City include:

WRF Projects

- Headworks Bar Screen Replacement
- Effluent Pump Installation
- NPDES Permit Assistance including Outfall Diffuser Improvements

Taylor WTP Projects

- Filter Bays 1-4 rehabilitation and upgrades;
- High Head Pump Station Upgrades and Clearwell 2 surge tank;

- Chemical storage, and feed system upgrades (multiple projects);
- Intake Upgrades to add Johnson screens with air burst cleaning;
- Sedimentation basin tube settler replacement;
- Structural concrete repairs and seismic upgrades;
- Seismic improvements to various structures at the plant
- A new sludge basin and pumping modifications to the existing basins,

Pump Stations and Pipelines

- Brooklane Wastewater Lift Station
- 36th/Grant Water Pump Station
- Baldy 2nd Level Booster Station Pressure Evaluation
- North Hills Water Transmission Upgrade
- Water System Planning and Hydraulic Modeling
- Design Standards for Pumping Stations
- North Hills 3 Surge Analysis
- Taylor WTP High Service Pump and Metering
- Taylor WTP Backwash Pump Design
- Avery and Crescent Valley Lift Station Replacement
- Ridgecrest Pump Station

“The team-work approach between the City and West Yost was critical to the successful completion and implementation of this project. West Yost was responsive to staff concerns and input, and a long-term partnership was established that Corvallis anticipates will benefit both our staff and customers.”

– Mr. Tom Penpraze, Utilities Division Manager (retired),
City of Corvallis

City of Albany, OR



REFERENCE: Ms. Staci Belcastro, PE, City Engineer, (541) 917-7645, staci.belcastro@cityofalbany.net;
YEARS OF SERVICE: 2000 – Current (20 years);
NUMBER OF CONTRACTS: 18

West Yost has worked with the City of Albany through and on-call services contract since 2012, supporting a wide array of projects. The Albany WRF is a decommissioned Cannibal process with a vertical loop reactor aeration basin and large aerated solids storage system. The Albany WRF currently treats an average daily flow of 12 MGD with peak flows up to 68 MGD. West Yost has an on-call engineering services agreement with the City of Albany which has been used for a wide range of projects. This includes projects to assist the City with the selection of a new backwash pump, repair and retrofit of the flocculation and sedimentation tanks and the development of a pumping station layout for the Riverfront Interceptor and Lift Station project. Recent projects include:

- Capital Planning Support
- Riverfront Lift Station and Interceptor Project
- WRF Aeration System Evaluation and Upgrades
- WRF Solids Handling Improvements
- Vine Street Water Treatment Plan Projects (multiple)

City of Medford, OR



REFERENCE: Mr. Dustin Hagemann, Water Reclamation Division Manager, (541) 774-2750
dustin.hagemann@cityofmedford.org;
YEARS OF SERVICE: 1998–Current (22 years);
NUMBER OF CONTRACTS: 28

West Yost has worked with the City of Medford through and on-call services contract since 2014, supporting a wide array of projects. The Medford WRF is a conventional activated sludge facility with average daily and peak wet weather flows of 20 MGD and 80 MGD, respectively. In addition, Walt Meyer has worked with the City continuously since 1980 and has led the majority of all major upgrade projects at the facility over the past 40 years. Our continuing support for the City and at the Medford WRF is a collaborative process where West Yost team serves as an extension of staff to support upgrades to address operational challenges, planning for the next phase of expansion and re-negotiation of the City's NPDES Permit. Recent projects include:

- Medford WRF Facility Plan and Capital Plan Updates
- Temperature Management Plan
- Aeration Basin Control Gates, Diffuser Replacement and Turblex Blower Upgrades
- RAS Pump Station and Piping Upgrades
- New Dechlorination (Sodium Bisulfite) Chemical Storage Facility
- Digester gas boiler replacement, gas piping upgrades
- New Vactor Waste Receiving Station
- Recycled Water Pipeline Design

Water/Wastewater Infrastructure and Pump Station Projects

Biosolids Management Plan, City of Yuba City



In conjunction with completing the Master Plan, West Yost was retained by the City to complete an analysis of alternatives for complying with California Senate Bill 1383 (SB1383) organics management requirements. The effort has involved developing a high-level, feasibility evaluation of reuse/disposal options for the City's WWTP biosolids. The City currently disposes of their biosolids at a nearby, private landfill and the costs for this disposal option will triple in the next three years. As part of this effort, West Yost has engaged with other local wastewater agencies to discuss the potential for developing a regional organic waste/biosolids processing facility. West Yost also engaged in discussions with private companies that have biosolids processing technologies potentially applicable to the City. Costs for the viable management and disposal options were developed, along with other comparative factors. A presentation was developed for City staff that summarizes the biosolids alternatives analysis and includes recommended next steps. Findings from this study are being incorporated into the Master Plan, and a project report prepared for this effort will be included as an attachment to the Master Plan report.

West Basin Facilities Plan, Clean Water Services (CWS), OR

Clean Water Services provides wastewater services and water resources management for the entire western metropolitan area of Portland, Oregon, with more than 500,000 customers. CWS operates four wastewater treatment plants and treats more than 58 million gallons of wastewater a day to among the highest standards in the nation before returning the water to the Tualatin River. It works in partnership with 12 member cities—Beaverton, Tigard, Tualatin, Hillsboro, King City, Forest Grove, Sherwood, Cornelius, Banks, Gaston, Durham, and North Plains.

West Yost led the facilities planning effort for CWS that set the direction for wastewater treatment in western Washington County. The West Basin Facilities Plan (WBFP) included detailed facilities plans for the Hillsboro and Forest Grove wastewater treatment plants in the larger context of water resources management in western Washington County. West Yost led detailed facility condition assessments, and evaluated alternatives for treatment in the West Basin including treatment at the District's Forest Grove, Hillsboro and Rock Creek treatment plants. In conjunction with the WBFP, a District-wide Reclaimed Water Master Plan (RWMP) was developed concurrently; West Yost led extensive river modeling to identify water quality impacts for the various water management alternatives. The RWMP identified opportunities for effluent reuse and evaluated them according to their improvement of water quality and community values and benefits.

Discharge requirements for the Tualatin River are very stringent including a prohibition for dry season discharge by the West Hillsboro and Forest Grove Plants. Based on the water quality modeling conducted for the river, the team demonstrated that dry season discharge will not cause degradation of the river and that the overall water management conducted by the District enhances the river water quality. Based on this work the District is currently negotiating the NPDES permit to allow for summer discharge which will enhance the overall management of wastewater in the region.

Riverfront Interceptor Sewer Lift Station and Forcemain, City of Albany, OR



The Riverfront Interceptor (RFI) is the primary pipeline that conveys wastewater from the core of the City of Albany to the Wastewater Reclamation Facility (WRF). West Yost completed the design of the RFI Sewer Lift Station to divert peak flows from the RFI and convey them via a 30-inch forcemain to the WRF. The lift station has a capacity of 12,500 gpm and is sized to divert flow from the RFI and

prevent Sanitary Sewer Overflows to the Willamette River during one-in-five-year storm events. Due to constraints of the existing sewer system, the lift station required a deep excavation and had to be sited in a small footprint within the Riverfront Park, between a walking path and functional railroad tracks. West Yost and the City worked with residents and the railroad to develop a constructible design with minimal above-grade components to preserve park aesthetics.

Expansion of Recycled Water System, City of Cottage Grove, OR



The City is expanding the Wastewater Treatment Plant's recycled water system to reduce or eliminate treated effluent discharge to the Coast Fork of the Willamette River during the dry weather season. The City's National Pollutant Discharge Elimination System (NPDES) discharge permit limits the effluent thermal load (April 1 – October 31) and phosphorous load (June 15 – September 15) that is discharged to the Coast Fork of the Willamette River and the City has set a goal of eliminating all direct discharges to the River during the dry season.

The existing system includes irrigation of the City golf course and the expansion is planned for a distribution system for irrigating parks, school grounds and agricultural areas. As part of the predesign, water balances were completed for a wide range of operating conditions and weather extremes. Both the irrigation demand and reclaimed water storage needs were defined.

Design includes improvements to the plant pumping system to increase system redundancy, additional monitoring, controls and alarms for ease of operation and pipeline design. Also included is the addition of storage so discharge during the early and late part of the dry season can be controlled within the limits established by the discharge permit.

Taylor Water Treatment Plant High Head Pump Station, City of Corvallis, OR

A new high service pump was needed at the Taylor Water Treatment Plant (WTP) to convey water from Clearwell No. 1 to the water distribution system. To provide additional operational capacity when Clearwell No. 2 is out of service for maintenance or cleaning, a new pump in Clearwell No. 1 was needed. In addition, by providing a variable speed drive on this new pump, operators can deliver water into the system at the appropriate rate when Clearwell No. 2 is not in service.

The primary goal of this project was to provide a minimum of 10-mgd capacity from Clearwell No. 1 during times when Clearwell No. 2 is out of service. In addition, the new pump had to be selected to operate with the pumps in Clearwell No. 2 in operation. A hydraulic model for the water distribution system was used to model the various operational conditions to verify that the new pump could provide the required capacity when operating in numerous system conditions. System curves were created for a full range of operating conditions in the system and these curves provided the operating conditions for the new high-head pump.

The existing flow metering was not reliable at the Taylor WTP so that the second goal of this project was to replace the two existing meters with magnetic flow meters to provide reliable service. A 20-inch and a 36-inch diameter magnetic flow meter were installed. Discharge piping modifications were made to add valving so the City can now operate the two major distribution pipelines independently, which greatly enhances maintenance access.

Wastewater Pumping as Needed Engineering Services, City of Portland Bureau of Environmental Services

West Yost Associates has provided as-needed engineering services for improvements to existing wastewater pump stations and evaluations for the development of new pump stations. The following projects have been completed or are currently in design:

- Ankeny Pump Station Odor Treatment System Rehabilitation: Predesign evaluation and alternatives analysis, preparation of permitting documents, and detailed design of replacement odor treatment equipment to mitigate odors at this pump station located in the Tom McCall Waterfront Park and adjacent to the Portland Saturday Market.

- SW Terwilliger at Northgate Pipe Repair and Pump Station Evaluation, Alternatives analysis and preliminary design of four pump station configurations to bypass a portion of sagging gravity sewer pipe located in unstable soils. Alternative selection included detailed cost analysis and was carried out in close collaboration with Bureau engineering and operations staff.

Transmission Main Hydraulic Transient Analysis, Portland Water Bureau, OR



The Portland Water Bureau (PWB), based on recommendations from an transmission system asset review, embarked on a program to assess the resiliency of their major transmission facilities by evaluating their ability to provide adequate surge protection in the event of a major outage (e.g., earthquake, power outage).

West Yost evaluated 14 miles of transmission mains from Powell Butte Reservoir, located in southeast Portland, to terminal reservoirs in the Portland downtown area, west of the Willamette River. The evaluation assessed the adequacy (quantity and location) of existing surge protection devices (e.g., air vacuum valves, surge tanks, etc.) along the transmission network. Several main break and power outage scenarios were evaluated using the existing potable water hydraulic model to determine the existing system's adequacy to mitigate hydraulic transients. Additional surge protection devices are recommended in strategic locations to improve the transmission system's resiliency during a major outage event. Conceptual site drawings and engineer's opinion of probable construction cost estimates will be provided to enable the PWB to implement a capital improvement program.

Water/Wastewater Treatment Projects Row River Water Treatment Plant, City of Cottage Grove, OR

West Yost performed design services, is currently providing bid support services, and will be providing construction support services to the City of Cottage Grove for the Row River Water Treatment Plant Expansion project. The project's objective is to expand the water treatment plant's capacity from 4 mgd to 6 mgd. The design included hydraulic evaluation of the feed and finished water pump stations, evaluation of the existing membrane filtration system, addition of a membrane filtration treatment train, and upgrades to the electrical and control systems to support the expanded facilities. The team worked closely with the City staff and the membrane system supplier to identify operational and maintenance issues experienced with the existing membrane filtration system and to incorporate improvements to address these issues in the design.

Finished Water Pump Replacement, Joint Water Commission, OR

West Yost is working with JWC to upgrade the FWPS #1 to improve reliability and to replace aging infrastructure. FWPS #1 was built in 1974 and houses six vertical turbine pumps with a total pumping capacity of 46 million gallons per day. The pump station sends treated water from the JWC WTP to the elevated Fernhill Reservoirs and to the City of Hillsboro's North Transmission Line.

Various operation and maintenance improvements have been made to the pump station since its original construction. The current project involves replacement of three of the six vertical turbine pumps and motors (Pumps 1, 2, and 6) and the motor on Pump 4. Pumps 1 and 4 are 4,000 gpm pumps with 400 hp motors and Pumps 2 and 6 are 7,000 gpm pumps with 800 hp motors. West Yost developed a hydraulic model of the JWC system to develop system curves and define efficient operating points for the replacement pumps.

Wastewater Treatment as Needed Engineering Services, City of Portland Bureau of Environmental Services, OR

West Yost Associates has provided as-needed engineering services for improvements to various wastewater treatment processes at the Columbia Boulevard Wastewater Treatment Plant (CBWTP) and Tryon Creek Wastewater Treatment Plant (TCWTP). The following

projects have been completed, or are currently in design or construction:

- TCWTP Disinfection Improvements Phase 1: Preliminary evaluation of the chlorine contact tanks and chlorine injection system to identify improvements to the contact tank configuration and metering system. After alternatives were evaluated, detailed design documents were developed to improve the chlorine metering system, this involved new neat chlorine injection locations, and pump reconfiguration replacement.
- CBWTP Wet Weather Primary Sedimentation Tank Rehabilitation: Condition assessment repair alternative analysis, on-site repair material testing, and development of contract drawings and specifications to repair interior concrete surfaces.
- CBWTP Digester 9 & 10 Transfer Pump Replacement: Hydraulic analysis and pump alternative analysis was performed followed by development of design documents to replace the existing progressive cavity pumps and portions of piping with new centrifugal pumps and bypass piping.
- CBWTP Loop Tank Replacement: Design of the replacement of sodium hypochlorite bulk storage tank and valves and piping associated with the tank and truck loading area.

Wastewater Treatment Biosolids Facilities Master Plan, Dublin San Ramon Services District, Dublin, CA

West Yost completed a comprehensive Wastewater Treatment and Biosolids Facilities Master Plan for the Dublin San Ramon Services District in 2017 that evaluated and identified the major improvements needed through the

2035 planning horizon. This project involved an evaluation of every aspect of the District's wastewater treatment system and included a detailed capital improvement program to address key capacity and condition-related issues identified during the master planning process.

The Master Plan also included long-term strategic plan that identified strategies for incorporating opportunities and mitigating potential future constraints. Issues addressed in the strategic plan included anticipated nutrient removal requirements for San Francisco Bay discharges, increasing demands for the District's recycled water (including interest in direct and/or indirect potable reuse options), increasing concerns with the current biosolids management practices, and the expansion of the District's existing on-site energy generation potential (including assessing opportunities for co-digestion of food waste).

A key investigation analyzed long-term biosolids disposal/reuse opportunities. The District currently relies on anaerobic digestion and lagoon stabilization/storage for their biosolids, followed by land disposal via subsurface injection on District properties. The District is concerned that the existing disposal strategy will not be viable in the long-term, where the primary driver for change would be the odor generating potential associated with the existing practices. West Yost evaluated the capacity of the biosolids facilities and demonstrated that the existing system is at or near its available capacity due to limitations on the land disposal system. The Master Plan recommended that the City implement a new biosolids strategy in a step-wise function, thus allowing them to continue to rely on existing infrastructure while starting the process of diversification. The analysis considered a wide-range of biosolids processing.



As part of the Dublin San Ramon Services District master planning effort, West Yost helped the District better understand the capacity limitations of their existing land disposal facilities and developed a strategy to begin diversifying their biosolids operations to provide added flexibility in the event that continued land disposal becomes prohibitive in the future due to changing regulations or to increased pressure from neighboring development.

Easterly Wastewater Treatment Plant Expansion, City of Vacaville, CA



West Yost performed planning and design services for two major projects at the City's Easterly Wastewater Treatment Plant (EWWTP), a \$100 million Expansion/Upgrade Project and a \$130 million Advanced Treatment Project. Major facilities planned, designed and constructed included a secondary process expansion, with the addition of nitrification and denitrification, construction of tertiary filters, a chlorine contact basin expansion, flow equalization facilities to eliminate blending, administrative/laboratory/O&M facilities, and the demolition and phase out of existing facilities.

The planning work was developed in two phases and culminated in the 2010 Master Plan, which is referred to as the Tertiary Treatment Project Facilities Plan. This planning document built off of West Yost's 1996 Master Plan that provided a forward thinking, flexible approach that stood the test of time from a regulatory and facility planning perspective. Specifically, the City was faced with a decision regarding if and how the old existing plant (North Plant) should be incorporated into an expanded plant. West Yost conducted an extensive assessment of the existing structures, which included rigorous cost estimating, to determine the capital expenditures required to bring the old facilities up to comparable performance and reliability expectations of new facilities. This thorough analysis identified a strategy for maximizing the use of existing facilities without investing significant dollars to minimize investments as the older facilities were phased out/abandoned over a 10- to 15-year period. A new, readily-expandable South Treatment Plant was constructed to operate in parallel with the old (North) plant, with the expectation that the old plant would eventually be abandoned with capacity replaced in the South Plant.

The 2010 Master Plan identified a comprehensive program of improvements that phased out the North Plant facilities and upgraded the South Plant facilities to meet new regulatory requirements that mandated stringent ammonia and nitrate limits, eliminated blending, and enabled compliance with dry weather filtration/Title 22 reclamation standards. The evaluation of nutrient removal facilities included developing a calibrated BioWIN model of the treatment facilities to define the capacity requirements. The blending analysis identified and compared alternatives for eliminating blending, such as providing additional hydraulic treatment capacity to accommodate peak wet weather flow conditions, equalizing flows upstream of the hydraulically-limited systems to ensure capacity is not exceeded, or to provide some combination of equalization and treatment process expansion. The recommended combined strategy resulted in the lowest-cost approach for meeting the blending elimination goals.

Transportation and Stormwater Projects Storm Drain Report and Follow-On Services, City of Dixon, CA

West Yost prepared the City of Dixon's Storm Drain Report (Master Plan) in 1999 and the Dixon Regional Watershed Management Plan in 2001. Since then, West Yost has been providing on-going stormwater services to the City. As follow-on work, we developed an XPSWMM model of the City's storm drains and the downstream agricultural drainage channels. West Yost helped the City negotiate an increase in the Basin C permitted discharge rate from 77 to 125 cfs, which in turn reduced the size Pond C design volume and saved the City about \$600,000 in excavation costs.

The Pond C conceptual design prevented the need for obtaining a California Division of Dam Safety permit. The pond was designed to use native California vegetation to develop aquatic, riparian, and upland habitats. West Yost's construction cost estimate for the pond was \$2.9 million. The bids ranged from \$2.3 million to \$4.6 million. West Yost also prepared the Conceptual Design Report for the Pond A and Lateral 1 Project, the Core Area Drainage Study, the Valley Glen Pump Station Conceptual Design and the South Almond Street Drainage Study, and recently prepared the 2-Dimensional model study of a failure of the Pond A levee. West Yost is currently providing development review services for the City of Dixon.

Lake Dalwigk Detention Basin Improvements, Vallejo Flood and Wastewater District

West Yost prepared the Vallejo Flood and Wastewater District's (District's) Storm Drain Master Plan in 2002 and has performed many follow-on assignments. These include four multi-year on-call contracts, additional modeling projects, and storm water improvement design, and construction inspection/management projects. West Yost was also selected to provide on-call design and construction inspection and management services.

In addition, West Yost prepared the detailed design and specifications for the Lake Dalwigk Detention Basin Improvements project. The major components included enlarging the lake and designing 2,600 feet of 96-inch bypass pipeline through a congested industrial area (in soft bay mud). Other components of the project included design of a diversion structure, modification of an existing pump station/weir, removal of nuisance vegetation, restoration with suitable native California grasses and trees, replacement of undersized culverts with a 14-foot by 7-foot box culvert, and completion of other culvert and ditch improvements at two sites.

West Yost divided the project into three bid packages to allow phasing of the construction and coordination of some of the project elements with future redevelopment along Sonoma Boulevard. Phase 1 improvements included excavation and disposal of approximately 47,000 cubic yards of soil and the addition of two wildlife habitat islands, open water and wetland habitat, a new low level outlet, and a new trash rack. The low level outlet allowed for optimized habitat during the winter and facilitated maintenance activities during the summer. Staging areas

were designated on the plans to allow public access around Lake Dalwigk. West Yost provided engineering services during construction, construction inspection, and construction management services for this project.

Coastal Highlands Phase 2 – Storm Water Improvements, City of Florence, OR

CIVIL WEST

Coastal Highlands Phase 2 – Storm Water Improvements addresses the unique nature of stormwater design in Coastal Oregon. The subdivision was designed with the intent that stormwater runoff would infiltrate through filter strips into the groundwater table; however, due to the sandy soils and high precipitation in the area, the groundwater table periodically surges above ground level, flooding the community. Civil West Engineering Services provided planning, design, bidding, permitting assistance, and construction oversight support for the implementation of a new stormwater drainage system. In addition to the redesigned infiltration ditches, this project included approximately 2,200 lineal feet of new stormwater piping, 10 new manholes, 14 catch basins, and a stormwater outfall into Munsel Creek.

Storm Drain Master Plan and Stormwater Improvements, City of Newport, OR

CIVIL WEST

Civil West provided the City of Newport with two separate Drainage Master Plans, one focusing solely on the old waterfront at the bay, and another to complete the rest of the City basins. Prior to the development of these plans, the City had no stormwater planning to



West Yost prepared the detailed design and specifications for the Vallejo Flood and Wastewater District's Lake Dalwigk Detention Basin Improvements project, which included enlarging the lake and designing 2,600 feet of 96-inch bypass pipeline through a congested industrial area.

guide the City in developing projects and budgets. As a result, little consideration was given to the effects of future development in areas upstream of isolated improvements. The Master Plans together identified approximately \$17 million worth of improvements, some critical, and some purely based on future development. Among the first projects identified in the plans, the Bay-Moore drainage collections system was overhauled and included the replacement of two outfalls which discharge stormwater into the Yaquina Bay. Because of the sensitive environmental nature of this work, and the necessity to do the construction in a tidal bay, unique designs and construction methods were necessary to meet State and Federal permit requirements.

Main Street and Lakeview Street Pavement and Utility Improvements, City of Lowell, OR

CIVIL WEST

Civil West as the Engineer of Record for the City of Lowell prepared plans, specifications and bid documents for the improvement of two streets adjacent to the high school. The pavement was in poor shape, and based on a Pavement Preservation Plan prepared in 2018, the streets were both in need of a grind and overlay. Due to areas of subbase failure, sections of the road also needed to be excavated and a new base course installed. The City decided that while the roads were under construction, it would be a good time to replace old AC watermains. The total project included approximately 1300 lf of roadway, utility, and sidewalk replacement. Construction is scheduled for this summer.

SCADA and AWIA Projects

SCADA Program Definition, City of Sacramento, CA

West Yost provided services to the City of Sacramento to define the scope of work and level of effort for a SCADA improvements program. West Yost conducted a baseline assessment and developed alternatives and recommendations for network design and staffing roles and responsibilities. The evaluation considered the existing SCADA communications network, control system hardware/software, and on-going projects intended to modernize and improve the staff's roles and responsibilities to support and maintain the system. The deliverable included a technical baseline assessment, key alternatives, and assumptions used to drive recommendations for system improvement. West Yost

sought significant input from the City's IT department through all stages of the document development.

The recommendations have been compiled into the department SCADA program, which includes a communications network and control systems detailed design and a multi-phased implementation approach for improvements and network migration. The program is intended to upgrade the SCADA system in a reasonable time frame, expanding on the IT department's on-going network and control system improvements with further considerations for maintainability, consistency, standardization, and cybersecurity.

The program, including implementation, has an overall planned duration of approximately six years and has been organized into 10 bid packages for implementation. The OPIC recommends a planning budget of \$62M.

**“Dan, Joel, and Jeff,
Thanks for the presentation today and for your combined resources to put together our SCADA Master Plan. You guys did a great job, and I appreciate your time and effort working with our team.”**

—Mr. David Hansen
Supervising Engineer
City of Sacramento

SCADA Master Plans, Joint Water Commission and City of Hillsboro, OR



West Yost is currently developing a SCADA Master Plan with JWC in conjunction with the City of Hillsboro SCADA Master Plan, evaluating the current system against the latest operational technology and cybersecurity standards and best practices. The project is assessing SCADA hardware, software, communications network architecture and protocols, programming and configuration approach,

organizational roles and responsibilities for supporting SCADA, current and ongoing projects, and data sharing methodology both internally and with JWC's partners.

The final Master Plan will be a comprehensive document with a horizon of 5 years focused on providing an implementable project portfolio of both CIP projects and JWC-led internal initiatives to improve system support and accommodate future growth, including planned treatment facilities in the region. West Yost is leveraging information gathered in the JWC RRA project and will address recommended mitigations that come out of the ongoing RRA project.

AWIA 2018 RRA and ERP Compliance, Joint Water Commission, OR

West Yost is assisting the Joint Water Commission with their AWIA RRA and ERP compliance certification. Staff interviews, site visits and workshops are being conducted to gather data for assessment and planning efforts. West Yost will complete an all-hazards RRA and full ERP for the JWC using AWWA tools and guidance including J100. This project includes a RRA and ERP for the Barny Reservoir Joint Ownership Commission. The project is on schedule and will be completed within the approved budget.

AWIA 2018 RRA and ERP Compliance, Lake Oswego-Tigard Water Partnership, OR



West Yost is assisting the Lake Oswego-Tigard Water Partnership with their AWIA RRA and ERP compliance certification. West Yost will complete an all-hazards RRA and full ERP for the combined water systems and facilities that serve more than 100,000 people in the cities of Lake Oswego and Tigard, including a Clackamas River Watershed evaluation and asset inventory. The LO-T project is on schedule and will be completed within the approved budget. The City of Lake Oswego recently amended the contract to have West Yost complete their AWIA Compliance work.

New Pump Stations, City of Cottage Grove

THE AUTOMATION GROUP

The Automation Group has worked for the city for 18 years and provides SCADA/HMI Services, instrumentation and telemetry services including 1 intake, 5 Pump Stations and 3 reservoirs. Over the last 18 years, TAG has been involved with upgrading the SCADA system, and are currently involved in the new filter train and remote connections for the operators. TAG provides on call support and is the city's "System Integrator of Record."

7th Street Pump Station, City of Newport

THE AUTOMATION GROUP

The Automation Group has worked for the city for 16 years and provides SCADA/HMI services, instrumentation and telemetry services, including intake, for seven pump stations and five reservoirs. Over the last 16 years, TAG has been involved with upgrading the SCADA system, new pump stations and are currently involved in the reservoir/booster station rehab and remote connections for the operators. TAG is currently the city's "System Integrator of Record."

Construction Management Projects

Washington Park Reservoir Improvements, Portland Water Bureau, OR

West Yost is leading the engineering services during construction for the Portland Water Bureau's (PWB's) Washington Park Reservoir Replacement Construction Manager/General Contractor (CM/GC) Project. West Yost and our subconsultants are providing all construction phase engineering services, which includes addressing submittals, RFI's, construction change directives and change order request support. West Yost is providing cost estimating, evaluation of schedule and management of subconsultants.

With over 30 subconsultants contributing to the design phase of the project, PWB was concerned with the coordination of the completed contract documents. West Yost completed a document review for inconsistencies and coordination issues to stay ahead of the CM/GC contractor on RFIs in the field. Following that review, West Yost has designed project elements that were not originally designed as the PWB had requested, were not going to serve the project as intended, or were not constructible. This included redesigning the intake and outlet piping to accommodate severe site constraints. Outlet piping was realigned to travel through the reservoir, then under the existing dam using bore-and jack installation. West Yost

worked closely with the contractor to develop detailed drawings quickly to facilitate construction. The design accommodated the contractor's jacking pit constraints, facilitating a change from four trenchless installations to three, saving PWB over \$1M.

Design tasks on this project included designing pressure and gravity mains ranging in size from 4 to 30 inches and materials including: ductile iron, welded steel, HDPE and PVC. Additional design tasks have included providing chlorine injection facilities, valves and appurtenances, flexible connections, access vaults, and corrosion protection.

Services included:

- Utility coordination, and relocation
- Waterline routing and design for open-cut waterline installation, and trenchless installation
- Chlorine injection facility design
- Coordination with stakeholders, including local jurisdictions, and Trimet
- Cathodic protection
- Seismic design
- Phasing projects and scheduling including public involvement and other key aspects fit into the overall project schedule
- Technical specification preparation
- Project cost estimating
- Construction related engineering services, which include submittal review, and response to requests for information
- Preparation of as-built drawings



Headworks, Dryden Box and Influent Flume Improvements, City of Modesto, CA



The \$17 million Headworks and Dryden Box Project at the City of Modesto's Primary Sutter Avenue Treatment Plant is currently under construction by general contractor, C. Overaa & Co. The project involves constructing numerous buried junction structures tying into existing pipelines, installation of several hundred feet of large diameter pipe, new process equipment, odor control improvements, and major electrical improvements that include replacing motor control centers and upgrading control systems with PLCs to improve remote automated control via the existing SCADA system. The work includes pumped bypasses, shutdowns, temporary systems, tie-ins, and startups requiring manipulation of existing system valves and gates to test the new system in a loop prior to incorporation into the process with small windows of opportunity for testing and confirming reliability. The junction structures require control of groundwater and complicated shoring systems to construct the structures, and temporary bypasses to demolish existing piping within the new tie-in structures, while minimizing impacts to the operation of the existing treatment plant processes. The project started in November 2018 and is scheduled to be completed on or before November 2020.

The City's goals included minimizing disruption to the daily domestic sewer treatment process while making the upgrades to the sewer treatment facility during the allotted seasonal construction windows. The City also wants to complete upgrades to the Can Seg pump station (Pumping Plant No. 3) including startup and commissioning prior to start of canning season.

West Yost provides Construction Management and Inspection services including correspondence/document

control, Submittal & RFI review and coordination, and as-built updates. West Yost conducts weekly progress meetings, coordinates Methods of Procedure (MOP) review meetings prior to shutdown/tie-in milestones and bypass events, and daily coordination with plant Operations and Maintenance staff to minimize disruption to the daily treatment process. West Yost also provides daily construction inspection (quality assurance) including coordinating materials testing and special inspection services on an as-needed basis, startup coordination & oversight, monthly schedule review, monthly payment application review and payment recommendation, review and negotiation of Potential Change Orders (PCOs), monthly reports summarizing construction activities and issues, claim and dispute resolution, and weekly review of permit/environmental compliance.

West Yost meets the City's goals through rigorous review of the CPM Baseline Schedule and frequent coordination (Methods of Procedure review) meetings with the client and contractor to schedule shutdowns, bypasses, tie-ins, etc. to minimize disruption to daily treatment processes. West Yost is in daily communication with City Operations & Maintenance staff to discuss concerns.

An abandoned structure was encountered that encroaches on the proposed Junction Box that spans the entire depth of the 40-foot-deep excavation. In order to construct the new Junction Box, the structure would require demo to the full extent of the excavation, which would result in a change order with an order of magnitude of approximately \$300,000. Working with the Contractor and the Design Engineer, we were able to avoid demolishing the abandoned structure and minimize additional costs created by the unforeseen condition by deleting construction of the new Junction Box and tie-in the new 84-in. line to the north wall of the existing Junction Box. In addition, the abandoned structure was utilized as shoring in lieu of the proposed driven sheet piles resulting in additional cost savings.

Preston Van Meter, PE City Engineer (Engineer-of-Record)

Preston is a civil engineer with 26 years of experience on a diverse array of projects of all types and sizes. Over his career he has served as a trusted advisor providing services as City Engineer for nine Oregon communities, including: Keizer; Sheridan; Donald; Hubbard; Dundee; Vernonia; Rainier; Madras; and Sweet Home. Most recently, Preston served as the City Engineer-of-Record for City of Sweet Home and Project Manager for the City of Sweet Home's \$28 Million Wastewater Treatment Plant Improvements Project.

In addition to leading the design of all types and sizes of municipal projects, Preston has a deep understanding of the diverse array of services required of the City Engineer-of-Record, ranging from providing engineering support for the City's Planning Department on private development applications and submittals, to quickly responding to inquiries from Public Works field staff related to utility operations and maintenance. He has a strong reputation for superior client service and responsiveness that is an asset for on-call and as-needed contracts.

Preston is also a recognized wastewater treatment expert who has delivered major WWTP upgrades and expansion on projects throughout the Western United States with services including initial planning and conceptual design, permitting, final design, bidding and construction administration. He has also participated in and led value engineering studies for several wastewater treatment and infrastructure projects.

EXPERIENCE

City Engineer-of-Record, City of Sweet Home, OR: Project Manager serving as contract City Engineer providing a broad range of services. In addition to leading the City's \$28M WWTP expansion Project, Preston led the developing of System Development Charges (SDCs) for five City utilities, development of a water system model, development of utility base maps in GIS, support of development reviews and consultations, attendance at City Council meetings and other miscellaneous projects and duties.

City Engineer, City of Rainier, OR: Project Manager serving as contract City Engineer providing a broad range of services including construction support for the A Street Improvements Project through downtown, WTP evaluation and condition assessment, NPDES Permitting support, WWTP filter evaluation and upgrades, development of a wastewater collection system rehabilitation program to reduce inflow and infiltration (I/I), evaluation of the 84" Fox Creek culvert for meeting fish passage requirements for endangered salmonid species, attendance at City Council meetings and other miscellaneous projects and duties.

Wastewater Engineer-of-Record, City of Madras, OR: Project Manager serving as the Engineer-of-Record on larger water and wastewater projects in the City of Madras. These included the \$10M J-Street Bridge Replacement Project



STAFF TITLE: Principal Engineer II

YEARS OF EXPERIENCE: 26

PROFESSIONAL REGISTRATIONS

- Professional Civil Engineer, Oregon No. 51615
- Professional Engineer, Washington No. 43828

EDUCATION

- MS, Civil Engineering, University of Michigan
- BS, Civil Engineering, Oregon State University
- BS, Business Administration, Oregon State University

PROFESSIONAL AFFILIATIONS

- Oregon Association of Clean Water Agencies
- Pacific Northwest Clean Water Association
- Water Environment Federation

to address a floodplain encroachment issue as well as a series of projects at the City's two wastewater treatment plants and wastewater pump stations. Other services included permitting support with Oregon DEQ, evaluation of a potential wastewater infiltration basin for effluent discharge and review of development projects related to expansion of City utilities.

Wastewater Treatment Plant Progressive Design-Build; City of The Dalles, OR: Project Manager for Oregon's first progressive design build (PDB) WWTP project partnering with Mortenson Construction. The project included: IPS upgrades to increase capacity to 18 MGD utilizing Wemco Hidrostral pumps; new headworks with grit removal; new primary filtration system; new primary anaerobic digester with digester mixing system; new microturbine cogeneration system with gas conditioning; new mechanical building; new electrical and SCADA room; and associated site and yard piping improvements.

Pendleton WWTP Liquids Stream, Solids Stream and Outfall Upgrades Project; City of Pendleton, OR: Project Manager for a \$20 Million expansion of the Pendleton Wastewater Treatment Plant. The project included; new 12 MGD headworks; primary clarifier rehabilitation; new in-plant pump station; new aeration basin designed for Ammonia removal and conversion to a membrane bioreactor in a future phase; chlorine contact chamber expansion; new dechlorination facility; primary digester rehabilitation and pump mixing system; FOG and food waste receiving station; new solids dewatering facility; and new Umatilla River outfall. The project included significant funding and environmental permitting support.

Dundee WWTP Expansion; City of Dundee, OR: Project Manager and Design Lead for the design and construction of a new membrane bioreactor (MBR) facility including: new WWTP headworks; new 8 MGD influent pump station with dual force mains; MBR facility with MLE treatment process; new closed-vessel UV disinfection system; new utility water pump station; new 2 cell facultative sludge storage basin; and associated civil and site improvements. The project was designed for cost-effective expansion from 1 MGD to 2 MGD based on the membrane basin design. The project included extensive environmental permitting and re-negotiation of the City's NPDES Permit.

WWTP Improvements Project; City of Hubbard, OR: Project Manager leading WWTP improvements including: new headworks; new aeration blower complex; conversion of an existing Schreiber Counter-Current Aeration Basin to a conventional activated sludge treatment process with

anoxic selector; and new centrifuge dewatering facility and covered cake storage and loadout area.

Property Floodplain Certification Program; City of Keizer, OR: Project Manager leading an evaluation of finished floor elevations for homes along the Willamette River in support of an update the FEMA Flood Insurance Study (FIS) and updates to the 100 year floodplain maps for the City following the 1996 Willamette River Flood that exceeded a 100-year event in the Salem/Keizer Area. As part of the project, home inspections were conducted and finished floor elevations were surveyed, involving significant coordination with the City and the local homeowners association.

Volcano Baseball Stadium Public Improvements; City of Keizer, OR: Project Engineer leading the wintertime development of a 13-acre parcel in the City's Urban Renewal Annexation area along Interstate-5 designated for construction of a new baseball stadium for the Salem-Keizer Volcanoes minor league baseball team. Design included extension of public water, wastewater services to the site, storm water treatment facilities and a 10-acre parking complex to serve the stadium. All projects were completed using a design-build delivery approach with five different General Contractors that allowed construction of the \$2 Million Project to begin less than 3 months after City Notice to Proceed.

Lockhaven Drive Improvements Project; City of Keizer, OR: Project Engineer for a 2-phase project to widen and upgrade approximately 2-miles of Lockhaven Driver connecting the City's main arterial street, North River Road, with the City's primary interchange with Interstate 5. Utility upgrades included replacement and upsizing of the existing water and sewer mains along construction of a new storm drain and storm water quality facilities. Street improvements included site distance improvements, driveway closure/relocation, storm drainage, curbs, sidewalks, lighted signage, handicap ramps meeting current ADA requirements, and landscape improvements. Right-of-way and easements were negotiated with over 30 property owners prior to the completion of the improvements.

Cherry Avenue Widening and Iris Lane Improvements Project; City of Keizer, OR: Project Engineer for a major urban renewal project involving the design and construction of 1.5 miles on Cherry Avenue and construction of a three lane connection through private property to connect to the City's main arterial street, North River Road. Utility upgrades included replacement and upsizing of the existing water and sewer mains along construction of a new storm drain and storm water

quality facilities. Street improvements included driveway closure/relocation, storm drainage, curbs, sidewalks, lighted signage, handicap ramps meeting current ADA requirements, and landscape improvements. Right-of-way and easements were negotiated with over 50 property owners prior to the completion of the improvements.

North River Road Water Main Replacement Project; City of Keizer, OR: Project Engineer for the design and construction of the replacement of 8,000 lineal feet of City's primary 14" diameter water transmission main on the City's primary arterial street. Construction involved project sequencing to facilitate pressure testing, chlorination, and reconnection of distribution mains at 6 major intersections, over 50 service reconnections varying size from 1" to 6" diameter, and flexible construction scheduling to minimize impacts during peak traffic hours.

Storm Water Master Plan; City of Sheridan, OR: Project Engineer leading the hydraulic modeling and preparation of a phased Storm Drain Master Plan for the City based on ongoing development projects. The plan included recommended CIP projects were funding using a combination of SDCs and cost-share agreements with local developers.

Viola Street Storm Drain Replacement Project; City of Sheridan, OR: Project Engineer for the design and construction of a 30" storm drain. Design involved the addition of water quality controls in catch basins and manholes and obtaining permits for a highway crossing and outfall from regulatory agencies.

Bridge Street Storm Drain Project; City of Sheridan, OR: Project Engineer for the planning, design, and construction of a 36" storm drain. Design involved the relocation of existing utilities to provide minimum grade for the storm drain and re-connecting existing tributary laterals at intersections.

Ballston Road Reservoir and Booster Pump Station Project; City of Sheridan, OR: Project Engineer for the design and construction of a new 1.5-million-gallon water reservoir and booster pump station to serve a low pressure area of the City on the opposite side of town from the City's water treatment plant and primary storage reservoir.

Annual Watermain Replacement Program; City of Keizer, OR: Project Engineer for six years supporting design water main replacement projects for smaller local water mains as part of the City's annual water main rehabilitation and replacement program.

Wastewater Treatment Plant Improvements Project, Influent Pump Station Upgrades, City of Sweet Home, OR: Project Manager leading the 20% Schematic Design and Final Design of the Sweet Home Wastewater Treatment Plant (WWTP) expansion project, which focused on rehabilitation, reuse, and re-purposing of existing WWTP unit processes and upgrades to increase capacity from 7 MGD to 12 MGD. The project includes rehabilitation and capacity expansion of the existing WWTP influent pump station (IPS) to provide pumping capacity ranging from low flows less than 0.50 MGD to winter peak flows of nearly 13 MGD. IPS Upgrades included reusing and rehabilitating the existing 18' diameter wet well and installing new submersible pumps: one Hidrostal pump in the pre-rotation basin for low flows and cleaning operations and four Flygt submersible pumps. This approach saved the City approximately \$2.5 million compared to construction of a new influent pump station. The project is currently in final design.

Wastewater Reclamation Plant Influent Pump Station Evaluation Project and Implementation, City of Corvallis, OR: Project Manager for development and testing of a physical model of the existing Corvallis WWRP Influent Pump Station (IPS) wet well. Implementing IPS recommendations to severe air-entraining vortices will save the City approximately \$2 million in planned upgrades and allow a larger \$10 million wet well expansion to be delayed for several years. IPS upgrades recommended in the physical model study were designed and constructed the following year. The project was completed on time and budget and has performed as predicted in the model study. The project was completed in 2010.

Wapato Pump Station Improvements Project, Clean Water Services Clean Water Institute, Hillsboro, OR: Project Manager for the design and construction of upgrades to a flood control pump station associated with a low-head concrete dam design to drain agricultural fields in the Tualatine River Basin during spring months to facilitate cultivation. The project involved installation of three large axial flow surface water pumps in a new fiberglass building on top of the dam structure. New trash racks; corrosion control equipment; and associated electrical, structural, and mechanical improvements are included in the project. A preliminary coffer dam for use during construction was also designed. The project was a collaboration between the US Fish and Wildlife Service, Clean Water Institute (CWS), and the Joint Water Commission. The project is currently under construction.

Bob Ward, PE

Bob is a West Yost Vice President who provides design, project management, and construction supervision on water facilities projects in the Portland region. Bob is experienced in water treatment, operations, management and has been working on water quality and regulatory compliance issues throughout his career. Bob has served as project manager or principal-in-charge for work on the five largest water treatment facilities in Oregon as well as seven Construction Management/General Contractor (GC/CM) and Design-Build projects. One of his water treatment projects was completed and on budget in 27 months using progressive design build. Bob is also managing several AWIA RRA and ERP projects.

EXPERIENCE

Grabhorn Reservoir Replacement Owner's Representative and Project Management, Tualatin Valley Water District (TVWD), Beaverton,

OR: Principal-in-Charge, responsible for oversight of West Yost's Owner's Representative and Project Management services to assist TVWD with the Grabhorn Reservoir Replacement Project. Replacement of the existing reservoir with a new 5 MG, partially buried, AWWA D-110 concrete tank by March 2019 using Progressive Design Build is moving forward as scheduled. Prepared materials for a workshop with TVWD staff on project delivery options and a structured approach to assess and select the preferred project delivery method for the Grabhorn Reservoir. Developed the findings and Board resolution that meet Oregon Revised Statute 279C.335 supporting an exemption from the competitive bidding process. Worked closely with District staff to develop the presentation for the required Public Hearing and subsequent TVWD Board approval of Progressive Design Build (PDB). Preparing RFP for the selection of a PDB team.

Washington Park Improvements Project, Portland Water Bureau,

Portland, OR: Principal-in-Charge. Project includes the replacement of the existing historical Washington Park Reservoirs No. 3 and No. 4 with a 14 MG concrete reservoir, support structures, facilities and up to 30-inch welded steel piping; and modifications required to disconnect Reservoir No. 4. Key elements include permitting facilities in an Olmsted-designed park and developing new water features to replace the existing open reservoirs. Developed documents for and assisted in the CM/GC procurement and selection of Hoffman Construction. Construction cost is \$152 million.

Bull Run Water Treatment Decision, Portland Water Bureau, OR: Project Manager for this public decision-making process, which recommended filtration, preferably membranes, to treat the 200+ mgd Bull Run supply to meet upcoming regulations. A 20+ person citizen panel of community leaders was used to ensure community support of a key decision that is based upon both technical and non-technical issues. Technologies evaluated were UV, ozone, direct filtration, and membrane filtration. Other aspects included permitting, siting, financing, and alternative project delivery methods. The project was completed in 2002; however, was not implemented.



STAFF TITLE: Vice President

YEARS OF EXPERIENCE: 36

PROFESSIONAL REGISTRATIONS

- Professional Civil Engineer, Oregon No. 58810
- Professional Civil Engineer, Washington No. 43096

EDUCATION

- MS, Environmental Studies, University of Montana
- BS, Civil Engineering, Montana State University

PROFESSIONAL AFFILIATIONS

- American Water Works Association
- Water Environment Federation
- AWWA Microbial/Disinfection By-Product Technical Action Workgroup Member
- Chi Epsilon Civil Engineering Honorary Society

Aquifer Storage and Recovery, Portland Water Bureau, OR: As Project Director, provided program management oversight and direction for a five-year, \$21 million expansion of the Columbia South Shore wellfield to produce 100 mgd of drinking water. First major phase included three new wells designed for production and aquifer storage and recovery. Other work included groundwater master plan, well siting for additional capacity, pipeline routing, and evaluation of water quality data.

Dam #2 Intake Improvements Project, Portland Water Bureau, OR: Principal-in-Charge. Project included the evaluation of options to replace or upgrade the raw water intake and power house in take for the Bull Run Dam #2. Evaluations of various intakes and upgrades to the existing facilities were done. Supported the development of the CM/GC documents. Project was completed by Advanced American Diving and cost less than the Guaranteed Maximum Price, which resulted in shared savings with Portland Water Bureau and the Contractor.

Mt. Tabor and Washington Park Deferred Maintenance and Security Improvements Project, Portland Water Bureau, Portland OR: Principal-in-Charge. Project involved design of valving, water and sewer piping, control, and security systems at Portland Water Bureau's five open finished water storage reservoir in a public park. Other major elements included permitting, neighborhood outreach, and working in a public park and congested streets. Project delivery method was CM/GC. A Guaranteed Maximum Price was negotiated at the 90% design phase.

Ridgewood View Reservoir and Pump Station Project, Tualatin Valley Water District, Beaverton, OR: Principal-in-Charge for the replacement of two 5 MG concrete reservoirs, a 12 mgd pump station, and up to 30-inch steel piping located in existing neighborhood parks. The project included development of reservoir replacement alternatives, alternative evaluation, parks master planning and design. Alternatives included replacing both reservoirs in their existing footprint, combining the storage in a single reservoir on the site of one of the existing tanks, and a single tank at a new location within one of the parks. Given the impact on the parks, an extensive public outreach and involvement effort was required. The project also included extensive land use permitting and evaluation of the ISI Envision sustainability rating system. A new, seismically resilient, 5-sided reservoir and 11 mgd pump station are currently under construction. The project was completed in September 2016.

Chlorination Improvements, Medford Water Commission, OR: Project Manager and Principal-in-Charge. Evaluated options for chlorination of 45-mgd and 33-mgd water supplies. A groundwater and surface water supply were chlorinated using gaseous chlorine. Options evaluated were gas chlorine with improved containment, on-site generation, and liquid sodium hypochlorite. Criterion DecisionPlus was used to evaluate financial and non-financial parameters. Key drivers in the decision process were water quality, public and operator safety and cost; pH changes and impact on coagulation chemicals (polyaluminum chloride (PACl) in the Rogue River supply were a significant issue. Pilot work was done to evaluate diurnal pH changes, hypochlorite, PACl, and potential carbon dioxide addition. Managed the design and construction phase services for two liquid sodium hypochlorite systems and one carbon dioxide system for pH adjustments.

World Class Safety Program, California Department of Water Resources: Principal-in-Charge for development and implementation of a world-class Safety Program for 3,000+ DWR staff throughout California. Work included site assessments of all major DWR storage, generation, and pumping facilities, as well as roles and responsibilities and evaluation of existing programs. Developed an organizational structure for safety, provided training plans, and developed hazard assessment forms. Also implemented and upgraded DWR safety programs statewide.

Umpqua Basin Water Association, Membrane Water Treatment Plant, Roseburg, OR: Project Manager for a new 6-mgd (expandable to 8 mgd) water treatment plant. Improvements included river intake upgrades to meet NOAA criteria, chemical system upgrades, replacement of gaseous chlorine system with on-site generation, and improvements to existing high head pump station. Membranes were procured through a competitive process based on lifecycle cost. Improvements were completed to meet new regulations and to replace an aging pressure filter system. Alternative project delivery methods, including design-build, CM/GC, and engineer/procure/construct were evaluated. The \$9.4 million plant was constructed using an engineer-led design-build process and was completed four months ahead of schedule and on budget.

Membrane Water Treatment Plant, City of Cottage Grove, OR: Project Director for a \$9.4 million new 4 mgd (expandable to 8 mgd) water treatment plant with an 8 mgd river intake. Improvements include river intake upgrades to meet NOAA criteria, chemical system upgrades, replacement of gaseous chlorine system with hypochlorite and membrane filtration system. Pall membranes were procured through a competitive process based upon lifecycle cost.

2018 AMERICA'S WATER INFRASTRUCTURE ACT RESPONSE

2018 America's Water Infrastructure Act Risk and Resilience Assessment/Emergency Response Plan Compliance Gap Assessment, Santa Clara Valley Water District, San Jose, CA: Principal-in-Charge.

West Yost assisted Santa Clara Valley Water District (Valley Water) with their America's Water Infrastructure Act 2018 risk and resilience assessment (RRA) and emergency response plan (ERP) compliance certification. Valley Water serves approximately 1.8 million people and includes Silicon Valley in their service area. We reviewed previously completed RRAs and ERPs to provide a thorough gap analysis. We completed staff interviews, made project recommendations, and wrote summary reports and certification letters. We evaluated Valley Water's critical chemical suppliers in a detailed chemical supply chain resilience evaluation using an abbreviated set of questionnaires based on the Supply Chain Resilience Assessment & Management program at the Ohio State University.

Mountainview Reservoirs Evaluation and Upgrades, City of Oregon City, OR: Principal-in-Charge.

Provided overall leadership to evaluate and upgrade an existing 10.5-million-gallon storage reservoir to meet seismic codes as well as to design and construct a new 2-million-gallon storage reservoir on an adjacent site. The existing reservoir was oblong and had significant structural deficiencies at the corners, a wood beam supported roof and circulation issues that impacted water quality. The evaluation developed various alternatives and selected the best value for the utility to meet these multiple objectives. Subsequently, provided design and construction phase support to the reservoir upgrade, new reservoir and ancillary improvements.

2018 America's Water Infrastructure Act Risk and Resilience Assessment and Emergency Response Plan Compliance Projects: Principal-in-Charge.

West Yost has assisted approximately 15 clients with their all-hazards America's Water Infrastructure Act (AWIA) 2018-compliant Risk and Resilience Assessments (RRAs) and Emergency Response Plans (ERPs). For each project, West Yost completes a thorough gap analysis after reviewing and organizing previously completed RRA- and ERP-related resources. We conduct both RRAs and ERPs according to the American Water Works Association (AWWA) standards, which represent cross-sector best practices. Each RRA considers natural, built, cyber, and personnel assets and any relevant threats and hazards. Risk and resilience management strategies are developed to address the highest risks and reduce vulnerabilities.

Next, an ERP is developed. This is built on existing emergency preparedness plans and refined to align with AWIA and state requirements and industry best practices. Finally, we prepare self-certification documentation for submittal to the Environmental Protection Agency. We performed or are performing these services for the following clients:

Large Utilities (serving more than 100,000 people)

- City of Fairfield, CA
- Joint Water Commission and Barney Reservoir Joint Operating Commission, OR
- Lake Oswego-Tigard Water Partnership, OR

Corie Moolenkamp, PE

Corie is a professional engineering manager who has progressive experience in the management, design and construction management of water storage, water and wastewater pumping and conveyance facilities, as well as water and wastewater treatment. She has been involved in several planning projects including work on wastewater facilities plans, water supply and distribution plans and water rights. She brings a significant amount of local knowledge to the team, as all of her professional work has been municipal in nature and focused in Oregon, primarily in the Portland metropolitan area. In addition to technical work, Corie has successfully managed projects from \$5,000 to \$15 million in fees. She is well-versed in the financial, organizational, and resource allocation aspects of public works projects.

EXPERIENCE

Grabhorn Reservoir Replacement Owner's Representative and Project Management, Tualatin Valley Water District (TVWD), Beaverton, OR:

Project Manager responsible for providing Owner's Representative and Project Management services to assist TVWD with the Grabhorn Reservoir Replacement Project. Evaluated the potential options of new reservoir size and locations, resulting in replacement of the existing reservoir with a new 5 MG, partially buried, AWWA D-110 concrete tank. Lead an evaluation of project delivery methods including Design Bid Build (DBB); Construction Manager/General Contractor (CM/GC); Lump Sum Design Build (DB); and Progressive Design Build (PDB). Conducted collaborative workshops with TVWD to rank and select the preferred project delivery method – Progressive Design Build. Managed the process to meet Oregon Revised Statute 279C.335 including development of findings and obtaining TVWD Board approval. Prepared the RFP for the selection of the PDB Team, followed by management of the selection process, project management, design review and worked with the PDB contractor on the developing bid packages and a guaranteed maximum price (GMP). The reservoir replacement was completed in 2019.

Washington Park Reservoir Improvements Project, Portland Water

Bureau, Portland, OR: As Project Manager, Corie is leading the engineering services during construction for the Portland Water Bureau's construction manager/general contractor project. The project includes addressing submittals, RFIs, construction change directives, and change order support. Corie provides cost estimates, evaluates the schedule, and manages subconsultants. At the start of the project, Corie managed a review team to evaluate the design documents for constructability and completeness. Her team completed the review of more than 800 multidisciplinary design sheets in less than four weeks. Since then, Corie has managed the West Yost team to update and redesign ductile iron, welded steel, HDPE, and PVC gravity and pressure mains ranging in size from 4 to 30 inches; coordinate utilities; phase projects and schedule public involvement; design chlorine injection systems; design cathodic protection of piping systems; and prepare live as-builts as the project proceeds.



STAFF TITLE: Engineering Manager I

YEARS OF EXPERIENCE: 21

PROFESSIONAL REGISTRATIONS

- Professional Civil Engineer, Oregon No. 73588

EDUCATION

- BS, Civil Engineering, University of Idaho

PROFESSIONAL AFFILIATIONS

- American Water Works Association
 - Pacific Northwest Section
 - Northwest Oregon Subsection

AWARDS

- Pioneer Award, Pacific Northwest Section, American Water Works Association, May 2007

Kelly Butte Reservoir Project, Portland Water Bureau (PWB), OR: Project Engineer/Project Manager during design of this project. The project involved the replacement of an existing 10 MG above-grade steel reservoir with a new, 25 MG buried reinforced concrete reservoir to ensure compliance with requirements in the Long-term 2 Surface Water Treatment Rule. The project was fast-tracked via construction management/general construction (CM/GC) alternative delivery to ensure the project met compliance deadlines. Corie managed the land use process and was responsible for obtaining those permits for the project. At 60% design completion, Corie transitioned to Project Manager at the client's request and saw the project into construction.

Ridgewood View Reservoir and Pump Station Improvements, Tualatin Valley Water District (TVWD), Beaverton, OR: Design Manager/Project Manager for the replacement of an existing 5 MG partially buried circular D110 Type tank with a new, 8 MG 5-sided reinforced concrete tank. The reservoir was designed to match the shape of the site in order to maximize the total storage volume. The project also included an 11 mgd pump station on site and many park improvements. Corie managed the land use process and was responsible for obtaining those permits for the project. She finalized design coordination, and performed quality control reviews and coordination checks on the technical specifications and drawings. Corie managed the construction phase support for TVWD with a difficult contractor requiring her to provide technical defense for TVWD through construction claims and change orders.

Powell Butte Reservoir Project, Portland Water Bureau (PWB), OR: Project Engineer for the designer during the construction of a 50 MG Reservoir for the City of Portland. Reviewed submittals, answered RFIs and made site visits to verify adequate work and installation. Assisted in the close-out of the project.

Kruger Road Reservoir, Tualatin Valley Water District, City of Sherwood, OR: Corie served as Project Engineer during site layout, design and construction management of this 3.0 MG D110 prestressed, partially buried, concrete reservoir. She worked on design documents for tank, piping, and civil elements of the project. During the construction phase, Corie reviewed submittals and RFIs while making regular visits to the construction site for engineering observation.

City of Grants Pass Water Treatment Plant, Seismic Analysis, Grants Pass, OR: Project Manager for a seismic analysis of the existing water treatment plant buildings, tanks, and other features of the Grants Pass

Water Treatment Plant which was constructed in 1931. As one of the oldest operating water treatment plants in Oregon, and with only a few upgrades over the years this facility had many structural/seismic deficiencies that were identified. A report containing deficiencies and proposed fixes was created. Corie worked on cost estimations and proposed schedules and sequencing for the potential structural fixes.

Medford Reuse Pipeline, City of Medford, OR: Project Engineer assisting in the alignment selection, pre-design, and design of a reuse water pipeline to deliver Level IV reclaimed water to agricultural users in the vicinity of the wastewater treatment plant. The pipeline consists of approximately 20,000 lineal feet of 18-inch diameter pipe and 2,300 feet of 12-inch diameter pipe.

Roseander Pump Station Replacement Predesign, Tualatin Valley Water District, Beaverton, OR: Project Manager/Project Engineer. Managed predesign for a pump station replacement to a new site. Design included pump selection, station layout, and architectural and landscape schemes. Issued subcontracts for consultants and continuously manage schedules and budgets while also designing facilities.

Wyndham Ridge Booster Pump Station, Sherwood, OR: Project Engineer. Analyzed current and future demands for the pressure zone served by the existing pump station to determine the necessity of retrofitting the station for seismic restraint and surge control. This work was performed due to a changed in function as the station converted from a constant pumping station to a booster pump station. Designed rehabilitation items for the pump station retrofit.

Snyder Park Waterline, Tualatin Valley Water District, Sherwood, OR: Project Engineer. Assisted in predesign and design of a waterline replacement near the City's existing 2 MG reservoir and booster pump station. It was critical to complete work before the summer sports season began; adherence to the project schedule was critical. The project was completed on schedule.

Gresham Main Street Pump Station, City of Gresham, OR: Served as Project Manager for the design and construction of retrofits to the Main Street Pump Station, which supplies water from Conduit No 3 to Gresham's Intermediate Pressure Zone.

City of Albany, Zone 4 Pump Station, City of Albany, OR: Assisted in the preliminary design of a constant pumping station to serve the newly created Zone 4 Pressure Zone in Albany. Additional work included pump selection and site layout for final design.



Matt Wadlington, PE, MBA

Principle and Willamette Valley Regional Manager

Years of Experience

23

Education

Bachelor of Science, Civil Engineering, University of Arizona

Master of Business, Administration, University of Arizona

Registrations

Civil Engineer

Oregon (#83524)
Arizona (#32047)
California (#57713)
Washington (#56840)

Affiliations

Professional Engineers of Oregon

National Society of Professional Engineers

American Society of Civil Engineers

American Water Work Association

Certifications

LEED AP

▶ SUMMARY

During his 23 years as a professional engineer, Matt has managed the planning and design for municipal transportation, water, wastewater, stormwater, and site development projects. He has coordinated with clients, local government agencies and sub-consultant staff for successful completion of over 300 different projects in Oregon, Washington, California and Arizona.

In addition, Matt also spent many years early in his career preparing development plans for land developers. These included subdivision and commercial developments as well as all the infrastructure necessary to support those projects. These residential projects ranged from 5 lot subdivisions to 2000 lot master planned communities. Commercial developments included single lot development for stand-alone stores to 200 acre commercial/retail developments.

▶ ENGINEER OF RECORD

- Adair Village, Oregon
- Dundee, Oregon
- Hubbard, Oregon
- Lowell, Oregon
- Toledo, Oregon
- Veneta, Oregon

▶ SUPPORTING ROLE FOR THE ENGINEER OF RECORD

- Gold Hill, Oregon
- Florence, Oregon
- Newport, Oregon
- Rogue River, Oregon

▶ TRANSPORTATION KEY EXPERTISE

- Roadway and Intersection Design
- Traffic Calming (road diet) Design
- Pedestrian and Bicycle Route Design
- Regional Traffic Studies
- Funding Support
- Preliminary Engineering Reports
- Master Planning

Matt Wadlington, PE, MBA (continued)

▶ RELEVANT TRANSPORTATION EXPERIENCE

- Coos Bay, OR
 - Downtown Traffic Study
 - Ocean Boulevard “Road Diet”
 - Ocean Boulevard Sidewalk Improvements
 - Newmark Avenue Traffic Study
 - Empire Boulevard Improvements
- Toledo, OR
 - ‘A’ Street Subgrade Replacement
 - 10th Street Drainage Improvements
- Adair Village, OR
 - Development of Downtown Drainage and Traffic Plan
 - Review of Commercial Development on Major Intersection
- Monmouth, OR
 - Traffic Calming Design
- Marana, AZ
 - Design and Construction Management of 4-Lane Access Road to Major Golf Resort and Upscale Residential Development
 - Design of 2 “Round-a-Bout” Intersections
 - Design of Over 15 miles of Local and Collector Roadways
- Pima County, AZ
 - Design and Construction Management of Numerous County Roadways Serving New Developments
 - Traffic Studies of Major Collector Roadways and Intersections

▶ DEVELOPMENT REVIEW KEY EXPERTISE

- Subdivision review (including streets, water, sewer, stormwater, and grading plans)
- Commercial Development review (apartments, commercial centers, office, and industrial developments)
- SDC Allocation review and analysis.
- Inspections and construction observation of public infrastructure.

▶ RELEVANT DEVELOPMENT REVIEW EXPERIENCE

- Adair Village, OR
 - Calloway Creek Subdivision (200 residential units)
 - William R Carr Subdivision (24 residential units)
 - ServePro (3 acre commercial development)
- Lowell, OR
 - Crestview Estates Subdivision (26 residential units)
 - Sunset Hills Subdivision (17 residential units)
 - Lowell High School (New gymnasium & modular classrooms)
- Veneta, OR
 - Sarto Village PUD (retirement and nursing home development)
- Florence, OR
 - Cannery Station (mixed-use development)
 - Golf Links PUD (Traffic Impact Analysis Review)
 - 35th St. (Burger King TIA Review)
- Hubbard, OR
 - Sewer Reimbursement District review
 - Multiple commercial and industrial site improvement reviews
 - Lot split application reviews

Daphne Marcyan, PE

Daphne is project manager and water system design engineer who focuses on analyzing hydraulic systems for efficient and complete water pump station and system designs. Her broad background also includes strategic land use permitting land development, road design, grading of challenging sites, water and sewer line design, and implementation of innovative storm water management techniques such as Low Impact Development Approaches (LIDA) to detention and water quality facility design. Her experience has her ready to efficiently tackle projects and deliver successful solutions for a variety of clients.

EXPERIENCE

Edgewood Waterline Replacement, Clackamas River Water (CRW), OR: As part of our on-call contract with CRW, Daphne Marcyan is managing the design, bidding and construction of approximately 4,000 linear feet of 8-inch ductile iron (D.I.) water main. The project is currently being designed for the 90% submittal with project bidding scheduled for May 2019.

Ridgecrest Pump Station, City of Corvallis, OR: Project Engineer who led all phases of design and coordinated with subconsultants for an efficient plan set for the new Ridgecrest Pump Station. The pump station was needed to provide domestic water service and a constant flow of 1,500 gpm for fire in this closed system for the Ridgecrest housing development and future development in the area. West Yost converted the City's hydraulic model from H2OMap to InfoWater and modeled the domestic and fire demands to develop system head curves for the current and future development. A surge analysis was performed by West Yost staff to check for potential issues and to protect the City's pumps and water system in the event of a power outage. The pump station is nearing the end of the design phase with bidding scheduled for spring 2020.

Wet Weather Lift Station and Force Main Project, City of Albany, OR:

Daphne led the lift station design for the Riverfront Sewer Interceptor Lift Station and Force Main Project. The Project includes design of a new 12,500 gpm lift station and 1 1/3 miles of 30-inch force main. The Project will provide the City with the necessary peak flow capacity during high-flow conditions and will be integrated into the City's wastewater utility to eliminate sewage overflows into the Willamette River.

Dayton Avenue Wastewater Lift Station Replacement, City of Newberg,

OR: Team Engineer. The lift station is located along NE Dayton Avenue, near Chehalem Creek. The site has a number of challenging features such as a narrow and steep access driveway, wetland impacts, impacts to the Dayton Avenue embankment slope, and stormwater impacts due to wetland and City of Newberg water quality requirements. Provided technical advice to the team on how to construct the station replacement within the limited site area. The final site design included six retaining walls, a water quality pond, and stormwater improvements designed to meet City of Newberg and USACE requirements for wetland impacts near Chehalem Creek.



STAFF TITLE: Principal Engineer I

YEARS OF EXPERIENCE: 17

PROFESSIONAL REGISTRATIONS

- Professional Civil Engineer, Oregon No. 79697, Washington No. 44980

EDUCATION

- BS, Civil Engineering, Purdue University

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- American Water Works Association

RECOGNITION

- 2017 President of ASCE Environmental and Water Resources Group
- AWWA Involvement and Presenter at 2017 PNWS Conference in Kennewick, WA

Pump Station 15 Replacement, Sunrise Water Authority, Happy Valley, OR: Assistant Project Manager. Assisted with the management of a project to replace Pump Station 15. Designed on a fast-track schedule, this project included obtaining land use approvals, completing the pump station design, and advertising for construction in less than six months. The expedited schedule was required so the station could be constructed before the peak summer demands to supply drinking water to a new residential community.

Fulton Pump Station Replacement, City of Portland Water Bureau (PWB), OR: Design Engineer. This project involves the replacement of the existing 12 mgd Fulton Pump Station with a new 18-mgd station to meet projected 2025 water demands for the Burlingame Service Area (BSA) system. The new pump station is sited within the City's Willamette Park and included the latest in Green Building Policy and eco-roof design to effectively integrate the new station into the existing park surroundings. Project challenges included design for new large-diameter piping and alignments in an extremely crowded NW Nevada Street corridor, and corrosion concerns related to future potential Portland Streetcar extensions. Daphne was responsible for leading the design of the site improvements to comply with the City of Portland's Stormwater Management Manual. The site features include water quality facilities including stormwater planters, vegetated basins, an eco-roof, and permeable pavers.

10 MG Reservoir Improvements and Transfer Pump Station, City of Tigard, OR: Design Lead. Daphne led the engineering design work for the City of Tigard's 10 MG Reservoir and Pump Station Upgrades project involving the replacement of an existing pump station with a new 7,200 gpm pump station that consists of six vertical turbine pumps delivering water to two separate pressure zones. The new pump station was designed and constructed with a 22-foot by 50-foot footprint and a basement approximately 40 feet deep. The design allows the full 10 MG of the supply reservoir to be used while providing full access for the equipment operators without the risk of entering a confined space. The project also involved the design and construction of a new 40-foot deep control vault next to the pump station to allow the City to more effectively control the water coming into the reservoir from the City of Portland, the aquifer storage and recovery well house on site, and the City of Tigard's 550-foot service zone reservoir.

Portland Water Bureau Intertie Project, City of Sandy, OR: Design Engineer. This complex interagency project allows the City of Sandy to meet demands at least 50 years into the future. The project includes the design and

construction management of an intertie with Portland Water Bureau's 66-inch diameter conduit, five miles of 24-inch diameter transmission main, a 1 mg reservoir, a new 4 mgd booster pump station, and a new transfer pump station at the reservoir site. Daphne led the design of the new transfer pump station and was team engineer for the design of the 4 mgd booster pump station.

1.3 MG Forest Park Low Tank Reservoir Improvements, City of Portland Water Bureau (PWB), OR: Design Engineer and Construction Phase Services. The project included design and construction of a 1.3 MG buried water reservoir in a residential neighborhood in Forest Park. The topography of the site consists of a steep terrain with an approximate 20 percent slope. Daphne designed the site plan and access road profile on the steep, confined site to accommodate the water tank and proposed building. The project also includes the design of a 25-foot by 64-foot building to house four vertical turbine pumps with a capacity of approximately 3,500 gpm, electrical equipment, and mechanical piping. Daphne also designed the architectural and ventilation plans for the building, and prepared the stormwater management plan conforming to the City of Portland's Stormwater Management Manual. This highly visible project along SW Skyline Boulevard will incorporate LIDA concepts and other sustainable approaches for stormwater management. Daphne also led all permitting activities including the completion of the City's Type II and Type III land use reviews.

River Terrace East Hydraulic Modeling, City of Tigard, OR: Project Manager. Oversaw the hydraulic modeling exercise for the existing and proposed River Terrace East residential developments. This project involved using the City's hydraulic model to analyze the developer's proposed utility system design for compliance with City design standards. The project involved sizing of a pump station to be constructed by the developer to serve higher elevation lots that could not be effectively served from the surrounding pressure zone.

Brooke Barry, PE

Brooke Barry has engineering experience, including preparing final design documents for water transmission, distribution, and sewer pipeline design projects. Brooke worked on several large diameter water transmission projects including the preliminary design for the Willamette Water Supply Program. On this project, Brooke completed routing analysis to select the final 33-mile route for the proposed 30- to 66-inch welded steel pipe water transmission main, including working with geotechnical engineers to analyze over 40 trenchless crossings. She performed the hydraulic analysis to confirm pipeline sizing for the gravity side of the system. She was one of two main staff engineers who completed final design drawings for the 66-inch 124th Avenue Water Transmission Pipeline.

EXPERIENCE

Washington Park Reservoir Improvements Project, City of Portland,

OR: Brooke is Project Engineer performing services during construction for the rebuilding of the existing reservoirs into a new 12.5-million gallon, seismically reinforced below ground reservoir. Brooke's responsibilities include coordinating with Portland Water Bureau, Engineers of Record, contractor and subcontractors to resolve questions and issues, interacting with multidisciplinary teams (electrical, geotechnical, structural) to review submittals, answer RFIs, and develop redesigns during construction. Brooke assisted with redesigning the future reservoir outlet and overflow piping and stormwater conveyance system. She performed design calculations including thrust restraint per AWWA M41 and HDPE ring deflection per AWWA M55. She served as submittal review lead (reviewing, managing, corresponding with PWB and subconsultants) for approximately one year.

Design and Expansion of the Recycled Water System, City of Cottage

Grove, OR: As Project Engineer, Brooke was responsible for modeling water balances to determine required storage facility volume to reduce effluent discharge, analyzing potential sites to irrigate using recycled water, designing two pump stations and over a mile of AWWA C900 distribution piping. She coordinated with a cross connection specialist to verify the irrigations systems complied with State regulations.

Riverfront Interceptor Wet Weather Lift Station and Force Main, City of

Albany, OR: Brooke served as Project Engineer for the design of approximately 7,000 linear feet of 30-inch nominal diameter force main. The force main was designed as partially restrained AWWA C900 PVC pipe but provided the contractor the option to bid HDPE. The design included cased pipeline sections under a railroad and single body sewage combination air valve assemblies. Brooke completed pipeline calculations per AWWA M55 and AWWA M23 to check internal and external pressure and coordinated with the surge analysis team to verify placement, size, and type of valve to mitigate for surge and vacuum pressures.



STAFF TITLE: Associate Engineer II

YEARS OF EXPERIENCE: 6

PROFESSIONAL REGISTRATIONS

- Professional Engineer, Oregon No. 85993

EDUCATION

- BS, Civil Engineering, Oregon Institute of Technology, Klamath Falls

PROFESSIONAL AFFILIATIONS

- American Water Works Association

SW 124th Avenue Pipeline, Tualatin Valley Water District/City of Hillsboro, OR: Brooke served as Pipeline Engineer to complete final design plans for a 66-inch diameter welded steel pipe water transmission line and 12-inch, restrained joint, ductile iron water fill line. The design included design calculations per AWWA (steel cylinder thickness, buoyancy, thrust block/coupling restraint, outlet, collar plate, fittings), alignment, profile, appurtenances, one trenchless railroad crossing, and drafting. Brooke provided services during construction including submittal review.

Willamette Water Supply Preliminary Design, Tualatin Valley Water District/City of Hillsboro, OR: As Pipeline Engineer, Brooke performed the steady-state hydraulic analysis to confirm pipeline sizing, design pressures, steel cylinder thickness, minimum and maximum hydraulic grade lines, and reservoir elevations. She developed preliminary design documents for 33 miles of welded steel pipe water transmission line including route evaluation and documentation, preliminary plans (alignment/profile/hydraulic profile/ details). She prepared trenchless crossing designs to meet railroad & Bonneville Power Administration requirements and adhere to limitations for tunneling techniques and geotechnical design criteria.

Cedar & Golden BCIP Project, City of Hillsboro, OR: As Pipeline Engineer, Brooke completed PS&E for 3,400 linear feet of replacement ductile iron water distribution line, including hydrant relocations, abandonment of existing line, connection details, and service line replacements.

Water Improvements on NE 99th/SR-503, City of Vancouver, OR: As Pipeline Engineer, Brooke completed PS&E for 1,500 linear feet of new 20-inch ductile iron water transmission line, including 120 linear feet of trenchless crossing of SR-503 using bore and jack.

Columbia River Crossing, David Evans & Columbia River Crossing, David Evans & Associates, OR/WA: Project Engineer/Modeler. Performed HEC-RAS 1-D model analysis to estimate changes in base flood elevations resulting from the construction of the Columbia River Crossing. Conducted complex pier scour analysis per HEC-18. Prepared the Hydraulics Report detailing 1-D model development, calibration, results, mitigation investigation, and impact.

DeJong Bridge Rehabilitation, Oregon Department of Transportation, Sheridan, OR: As Project Engineer/Modeler, Brooke developed a HEC-RAS 1-D model using project topographic and bathymetric survey to evaluate changes in base flood elevations. She conducted scour analysis and mitigation proposal for all design alternatives per HEC-18 and HEC-23 and prepared the Hydraulics

Report detailing the analysis per the ODOT Hydraulics Manual.

Stormwater Master Plan, Gresham Smith and Partners, Portland, OR: As Project Engineer, Brooke developed port-wide design standards and best management practices. She performed the hydraulic analysis to evaluate existing stormwater conveyance infrastructure and completed the asset management analysis to determine the expended useful life (based on age and material) for at the four Port of Portland marine terminals and Portland International Airport (PDX).

Alpine Avenue, City of McMinnville, OR: Brooke was Project Engineer on this Project that won the 2019 ACEC Engineering Excellence Award. She prepared final PS&E for the replacement storm drain and waterline, including building a pipe network in Civil 3-D. She also completed the design of stormwater planters and authored the water quality summary report.

I-5 Corridor Reinforcement 500 kV Transmission Line, Bonneville Power Administration, WA: As Project Engineer, Brooke conducted existing culvert condition assessments and future culvert location determinations on existing and proposed Bonneville Power Administration access roads. She performed the work via site visits.

U.S. 26 Glencoe Road Interchange Project, Oregon Department of Transportation, North Plains, OR: As a Construction Inspection Intern, Brooke provided plan, specification, and special provision interpretation, inspection of work to ensure proper installation techniques and the use of approved materials, test summaries, FIR, material quantification and quality control verification per the Field-Tested Materials Acceptance Guide. She coordinated with ODOT, inspection teams, Engineers of Record, the Contractor and subcontractors to resolve questions and issues.

O'Hare Modernization Project, City of Chicago, IL: As a Construction Management Intern, Brooke prepared production reports, RFI's, employee timesheets, takeoffs, new bulletin-issued drawings updates, material delivery review to verify compliance and quantities, and interpretation of plans and specifications with the project team to solve questions and issues. She provided crew supervision within the airfield to ensure work met FAA regulations, and work supervision to ensure proper quantities, installation techniques, and low yield.

Maryna Asuncion, EIT

Maryna Asuncion is a civil engineer whose work has focused primarily on wastewater infrastructure and stormwater treatment and conveyance. Maryna has a broad background including civil site design (grading and layout), wastewater pump station design, wastewater treatment plant condition assessment and facility plan development, storm and sanitary sewer design, stormwater management techniques and water quality facility (LIDA) design. Maryna's skills include project delivery, technical writing, construction administration and management, AutoCAD Civil 3D, and AutoCAD Storm and Sanitary Analysis.

EXPERIENCE

NE 10th Avenue Pump Station and Trunk Sewer, Clark Regional

Wastewater District, WA: Staff engineer for the design and construction of a new wastewater pump station and gravity trunk sewer to convey projected flows from new development in Ridgefield, Washington. Worked with sub-consultants and the client to design the submersible pump station and approximately 2,000 LF of trunk sewer. The work included preliminary design and a predesign report, grading the pump station site, site layout, mechanical design, developing special provisions and preparing construction plans, construction observation, construction inspection, coordinating between the client and contractor during construction, reviewing submittals, reviewing requests for information, processing change orders, observing startup testing, producing field reports, and delivering asbuilt drawings. This project required coordination with an adjacent Clark County project, and approximately 200 LF of the trunk was constructed with a shallow jack and auger bore underneath the I-5 freeway.

Molalla Avenue Roadway Improvements, City of Oregon City, OR: Staff engineer for the redesign of underground utilities in Molalla Avenue. Primarily worked on the storm sewer design and sanitary sewer repairs. Designed storm sewer to capture post-development flows from approximately 4,000 LF of reconstructed crown roadway corridor. Proposed roadway improvements to improve pedestrian access and safety and improve the layout of underground and above ground utilities triggered stormwater management for water quality treatment. Developed preliminary design of multiple LIDA facilities to capture runoff from the north segment of the roadway and the south segment, which discharged to different outfalls. Although the City exempted the project from stormwater treatment, Maryna helped design a gravity stormwater conveyance system to capture flows along new curb and send runoff to existing outfall locations along the roadway corridor. Developed construction plans (storm sewer plan and profile sheets, composite utility sheets, sanitary sewer repair plan and profile sheets), performed site visits to gather information, managed comment logs, modeled the existing and proposed storm sewer system using AutoCAD Storm and Sanitary Analysis program to confirm capacity.



STAFF TITLE: Engineer II

YEARS OF EXPERIENCE: 3

PROFESSIONAL REGISTRATIONS

- Engineer-in-Training, Oregon No. 91498EI

EDUCATION

- BS, Civil Engineering, University of Portland, Oregon

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- Environmental Water Resources Group
- Pacific Northwest Clean Water Association

Boone Road Water Pump Station, City of Salem,

OR: Staff engineer who helped finalize construction documents and bid documents and performed intermittent construction administration for a Water Pump Station for the City of Salem. Worked on site grading, stormwater management, storm sewer design, LIDA facility design, proprietary treatment structure design, submittal review, and RFI review. Worked with manufacturers through submittal review and attended occasional construction progress meetings. Used AutoCAD Civil 3D to model the site grading and the adjacent roadway grade.

Kane Drive Culvert Replacement, City of Gresham,

OR: Staff engineer for the permanent design of a Culvert beneath NE Kane Drive in the City of Gresham, which failed and was replaced with a temporary solution in 2015. The new culvert is 140' long and 40' wide. This project required coordination with environmental engineers for fish passage and intensive traffic control design following ODOT standards to accommodate a full street closure. Coordinated with precast manufacturers to design the concrete culvert. Challenges associated with this project included a sanitary sewer flyover pipe at the outlet of the culvert suspended above the stream with a concrete block support, the adjacent Mount Hood Community College Pump Station, steep grades at the inlet and outlet of the proposed culvert, and aerial utilities that had to be temporarily relocated to accommodate the large crane required to place the precast concrete sections. Proprietary treatment was designed to manage and treat stormwater runoff from the newly constructed section of roadway.

Pendleton Water Resources Recovery Facility Condition Assessment, City of Pendleton, OR:

Staff engineer assisting with condition assessment of the Pendleton WRRF in City of Pendleton. Spent two days at the facility taking inventory of the equipment and processes, assessing the condition of the equipment, discussing facility shortcomings with operations staff, writing field reports, and brainstorming potential improvements. Processed the information collected in the field, compiled the information into summary documents and wrote reports to incorporate in the Facility Plan.

Lake Oswego 10th Street Pump Station Upgrades, City of Lake Oswego, OR:

Staff engineer who primarily worked on site grading and stormwater management design for the Lake Oswego 10th Street Pump Station Upgrades. Helped prepare land use documents, preliminary design plans, and final construction documents. Used the City of Portland online PAC program to size a LIDA storm facility to treat on-site runoff. Designed the LIDA facility and stormwater conveyance to tie into existing storm sewer system. Performed a downstream

analysis and wrote a drainage report per Lake Oswego standards to meet Land Use requirements.

City of Portland BES Marx & 105th Pump Station Upgrades, City of Portland, OR:

Lead staff engineer for the preliminary design of the BES' Marx and 105th Pump Station upgrades in the City of Portland. Developed a Project Management Plan, wrote multiple technical memorandums to summarize different design components' preliminary design, worked with structural and geotechnical sub-consultants to develop preliminary design, coordinated with the client, reviewed preliminary plans, helped with the predesign report, wrote the agenda for and attended the City of Portland early assistance meeting, performed basic downstream analysis and preliminary design of the stormwater management system on site, assisted with private utility coordination, and led internal weekly check-in meetings.

PRESENTATIONS

- Asuncion, M. Women in Leadership in Engineering, 2019 PNCWA Regional Conference, Portland, OR
- Asuncion, M. Integrating Stormwater and Stream Resilience with Sanitary Sewer Conveyance, 2019 ASCE/EWRG Sustainable Stormwater Symposium, Portland, OR

Riley Murnane, EIT

Riley Murnane is an environmental engineer with experience in infrastructure services during construction, project planning and permitting, developing cost estimates, and microbial metabolism. Infrastructure projects include lift stations, storage reservoirs, and treatment tanks. Project planning and permitting includes work on multiple Facilities Plans as well as the drafting of Recycled Water Use Plans and site authorizations. Riley is also familiar with state and federal requirements regarding Recycled Water, Dam Safety, and certified organic farming.

EXPERIENCE

Miners Ravine Off-Channel Detention Basin and Earthen Dam, Placer County Flood Control & Water Conservation District, Auburn, CA: Project director for a regional, multi-objective flood control and creek restoration project. Brian developed conceptual plans; obtained state grant funding; performed oversight of plans, specifications, and cost estimate development; administered the construction management contract; and developed long-term operations, mitigation, and maintenance plans. Work included the application and filing of both a CLOMR and LOMR with FEMA.

Washington Park Reservoir Improvements Project, Portland Water Bureau, OR: Staff Engineer managing Requests for Information (RFIs) and Submittals between the client and various subconsultants during construction. RFIs and Submittals included electrical, structural, civil, water resources, and other disciplines of engineering and needed to be correctly screened before sending to subconsultants. The project included the demolition of an open reservoir and replacement with a buried reinforced concrete reservoir. Riley was also involved with the management and coordination of Construction Change Directives (CCDs) between West Yost and multiple subconsultants. CCD coordination required a steady understand of both the historical and aesthetic requirements of the design as well as the interfaces of responsibility between subconsultants.

Facilities Plan Update, South Suburban Sanitary District, OR: Staff Engineer for the investigation and planning of an update to the existing lagoon treatment system to meet future NPDES permits. Investigated alternatives included advanced treatment, membrane bioreactors, and regionalization with another sanitary district. Ultimately, finer details were defined for an approximately \$55 million recycled water system. Significant site evaluation and comprehension of DEQ recycled water policies was required to suggest this alternative. The facilities plan included an Environmental Assessment as well as a Recycled Water Use Plan.

Graham Hill Water Treatment Plant Tank Improvements, Santa Cruz, CA: Riley was involved as a Staff Engineer involved with the final production check of the drawing documents and the drafting of specifications for various site appurtenances.



STAFF TITLE: Engineer I

YEARS OF EXPERIENCE: 1

PROFESSIONAL REGISTRATIONS

- Engineering Intern, Oregon No. 93958EI

EDUCATION

- BS, Environmental Engineering, University of Nevada, Reno
- MS, Environmental Engineering, Oregon State University

PROFESSIONAL AFFILIATIONS

- Pacific Northwest Clean Water Association (PNCWA)
- PNCWA – Young Professional subcommittee
- PNCWA – Governmental Affairs subcommittee

Row River Water Treatment Plant Expansion, City of Cottage Grove, OR:

Riley was involved as a Staff Engineer for the design of a \$1.2 million water treatment plant expansion project. Design included the fitting of an extra membrane filtration skid and all associated process piping. Riley was also involved in the engineering services during construction including managing RFIs and submittals as well as the issuing of field orders.

Facilities Plan Update, Water Environment Services, OR:

Staff Engineer involved with flow and loads analysis to project sizing requirements of the treatment plant. Two different service areas and treatment facilities (25 mgd and 70 mgd) are under the jurisdiction of Water Environment Services (WES) with only the larger being designated for future expansion. Flow and loads analysis had to consider the rapidly growing population of both service areas as well as the diversion to the buildout facility.

Facilities Plan Update, City of Wilsonville, OR:

Staff Engineer involved with flow and loads analysis to project sizing requirements of the treatment plant which is currently sized for approximately 4 mgd flow.

Avery Park and Crescent Valley Lift Stations, City of Corvallis, OR:

Riley worked as a Staff Engineer involved in the design of two lift stations serving recreational facilities and a high school. The existing lift stations were old and past their useful life. The new lift stations had to accommodate the small available footprint and existing infrastructure.



Role

Collection System and Rehabilitation Lead

Experience

22 years

Education

MEng, Environmental Engineering, Cornell University, 1999

BS, Environmental Engineering, Cornell University, 1997

Licenses

Professional Engineer – OR #82099

Professional Engineer – WA #44969

Project Management Professional - #2308673

Certification

Certified NASSCO Pipeline Assessment Certification Program (PACP) U-203-551

Certified Construction Documents Technologist (CSI)

Confined-Space Entry 29 CFR 1910.146(g) OSHA

Construction Safety Awareness 29 CFR 1926.21 (b) OSHA

Professional Affiliations

Pacific Northwest Clean Water Association, Board of Directors, Vice-President (2019-present)

Rob Lee, PE, PMP

Rob Lee Rob has 22 years of experience providing engineering services for projects involving wastewater collection, conveyance, and treatment. Rob's experience includes trenchless rehabilitation and condition assessment, inflow/infiltration studies and infrastructure evaluations, design, preparation of contract drawings and specifications, preparation of as-built plans, shop drawing, and submittal reviews, and construction oversight and management. Rob's experience gained from leading large municipal pipeline condition assessment, planning, design, and rehabilitation projects and programs will be leveraged to quickly and effectively develop solutions for the City of Sweet Home.

Relevant Experience

Project Manager, I/I Abatement Program, City of Sweet Home, OR. This decade-long program focused on reducing excessive flows to the City's wastewater treatment plant. Flow monitoring and modeling were key to identifying the leakiest basins in the City and Rob helped develop a long-term program to address the I/I. Four phases of rehabilitation were implemented focusing on sewer mains, laterals, and manholes. Rob served as engineer of record, as well as construction manager, for the largest and most recent phase that involved over 45,000 feet of sewer mains. The City invested \$17M with a resulting 50% reduction in wet-weather peak flows. Rob served as the consultant point of contact for coordination with the Oregon Department of Environmental Quality (DEQ), as the rehabilitation work was being conducted under a Mutual Agreement and Order between DEQ and the City.

Project Manager, Wastewater Program, City of Sandy, OR. Rob is current serving as Owner's Representative and Collection System Lead Designer for the City of Sandy's \$60M wastewater program driven by regulatory requirements. Rob is leading a design effort to reduce I/I in their collection system, including evaluating alternative delivery methods that can reduce City staff effort and increase cost certainty.

Project Manager, I/I Reduction Program, City of Oregon City, OR. Rob led the development of the framework for an ongoing I/I program for Oregon City. Program elements included prioritization of the most cost-effective areas to address I/I, developing a private I/I source and lateral policy, and making recommendations of a 5-year CIP with planned expenditures.

Project Manager, Upper Salmon Creek Interceptor Restoration, Clark Regional Wastewater District (CRWWD), Vancouver, Washington. Rob managed the design and construction services for the restoration of the deteriorating 21" and 24" Upper Salmon Creek Interceptor. Rob evaluated technologies with CRWWD staff and selected the use of pipe-penetrating radar to determine presence and adequacy of reinforcement for the larger trunks. The work was managed by the District but was under tight schedule constraints due to funding by Clark County. The design utilized trenchless technologies to minimize disruption to County roads and impacted homeowners. Design and construction was successfully completed and met all project goals.

Interim Program Manager and Technical Lead, Large Scale Sewer Rehabilitation Program, City of Portland Bureau of Environmental Services. Rob served as interim program manager to help reinvigorate this critical \$250M+ ongoing program to address sewer risk in the City of Portland's collection system. Having been involved with the program since 2009, Rob also served as technical lead for two different consulting teams on this program. Rob coordinated and delivered the designs for over a dozen project areas as part of the program. He has also served as technical lead and project manager on a multi-year Large Diameter Sewer Condition Assessment program in support of the LSSRP. Rob introduced an approach that demonstrated that holistic replacement (i.e., laterals, manholes, inlets in addition to failing pipes) was not ideal for extending the life of the City's assets, and that using the same condition-based City approach for all assets could save significant budget while managing the City's risk.

Awards

Lyman Ketcham Award,
2018

Client Endorsement

"Rob provided valuable leadership to the BES LSSRP Program. His mixture of solid technical abilities combined with his collaborative and communicative approach was a tremendous asset in reenergizing this vital \$250M+ program. He is an asset on any public works project and we look forward to working with him again."

James Allison, Large Scale Sewer Rehabilitation Program Manager, Bureau of Environmental Services, City of Portland, Oregon

Technical Lead, Sewer Relining Program, Seattle Public Utilities. Rob served as the technical lead for a sewer lining work assignment-driven contract with Seattle Public Utilities. Five work assignments were completed under this multi-year contract, including providing engineering services during construction for previously designed lining contracts, development of a large diameter and ultraviolet light-cured only project, a project that included 179 "sites", and a providing technical assistance to develop standard operating procedures and training guidance for in-house spot repair and lateral lining crews. Rob provided technical guidance to the work assignment teams, contacted potential lining contractors, conducted QA/QC reviews, and provided detailed comments and suggested revisions to the City's lining specifications and bid forms.

Project Manager, Trunk Line Rehabilitation Program, Clean Water Services, OR. Rob assisted the District with its large diameter inspection and rehabilitation program for trunk sewers 24 up to 84 inches in diameter. Rob led the inspection and assignment of condition grades of the District's Trunkline Inspection Program, and he helped develop the currently used seven-year program for systematically inspecting the District's large diameter sewers on a recurring basis. The Inspection Program yielded inspection data on over 400,000 linear feet of large-diameter trunk sewers. Project involved selecting appropriate rehabilitation methodologies based on sewer condition and field inspections to identify constructability and permitting issues. Rob led the design of three separate rehabilitation projects, including a deteriorating sanitary trunk line in the Rock Creek stream corridor that perpendicularly crosses underneath Tualatin Valley Highway and an elevated railroad crossing. The designs used trenchless technologies for difficult-to-access trunk lines.

Project Engineer, Lake Oswego Interceptor Sewer, City of Lake Oswego, OR. Rob led and supported the design of over 18,000 feet of replacement 42-inch buoyant and pile-supported HDPE interceptor to replace a failing and undersized concrete interceptor through the middle of Lake Oswego serving over two thirds of the City's

residents. Rob served as design lead on the condition assessment and subsequent rehabilitation design of 12,000 feet of 8- and 10-inch in-water sewers, 6,000 feet of 16-, 18-, 24-, and 36-inches of in-water interceptor, and rehabilitation of over 40 manholes. Seven manholes were coated with polyurethane to provide corrosion protection, and 11 manholes were lined with HDPE inserts.

Project Manager, Large Diameter Sewer Inspection (2009, 2012–2015), City of Portland Bureau of Environmental Services. Rob oversaw the assessment of the physical and hydraulic condition of over 100,000 linear feet of large-diameter combined sewers in the City. Sewers ranged from 33 inches to 144 inches in diameter and included monolithic concrete sewers, egg-shaped brick sewers, and fat-bottom concrete horseshoe sewers. Project activities included selection of appropriate inspection tools such as laser scanning, digital scanning, coordination of CCTV and specialty inspection subcontractors, coordinating inspection database formats for importing into the City's CMMS system, and making rehabilitation and reinspection recommendations.

Project Lead, Rehabilitation Standard Specification Development, City of Portland Bureau of Environmental Services, OR. Rob assisted the City in developing their standard specifications for rehabilitation, including thermal cured-in-place pipe (CIPP), ultraviolet light-cured-in-place pipe (UV-CIPP), and manhole rehabilitation. He collaborated with the City's Material Testing Laboratory, the City's Standards and Practice Committee, Design Services, and Construction Engineering to develop a standard appropriate for all City projects.

Project Manager, Norway Storm Sewer Rehabilitation, City of Salem, OR. Rob provided design calculations for an unusual storm sewer crossing underneath a Union Pacific Railroad. The storm sewer began as a 24-inch concrete sewer, transitioned to a 30-inch corrugated metal sewer located directly underneath the railroad, and then transitioned back to 24-inch concrete. The project involved coordinating with the City's on-call CIPP contractor, meeting railroad design requirements, and developing PE-stamped design calculations.

Walt Meyer, PE

Walt Meyer is an engineer with experience in water and wastewater planning, design, and construction. He has managed multi-disciplined project teams for various water, wastewater, storm water, and environmental services projects. Walt has directed facilities planning for wastewater programs for many communities and also has extensive design experience including wastewater treatment plants, pumping stations, large diameter pipelines, and water facilities. He has managed infiltration/inflow assessments, sludge management evaluations, financial plans, environmental assessments, and rate studies for many communities. Walt is very familiar with Oregon's water quality standards and has a history of successful negotiation with regulatory agencies on behalf of clients.

EXPERIENCE

Design and Construction Management of Various Wastewater Treatment Plants in the Pacific Northwest: As Principal-in-Charge, Project Manager and Project Engineer, projects include improvements such as pretreatment, influent pumping, headworks, screening, grit removal, primary sedimentation, secondary treatment process, odor control, sludge dewatering, sludge digestion, solids handling, ultraviolet disinfection, outfall and pipeline systems, energy conservation measures, and cogeneration facilities. Clients include:

- City of Corvallis
- City of Cave Junction
- City of Grants Pass
- City of Brookings
- City of Boise, ID
- City of Albany
- City of Medford
- City of Portland
- City of Salem
- Clackamas County
- City of Bandon
- City of Creswell
- Clean Water Services of Washington County
- City of McMinnville
- South Suburban Sanitary District

Headworks Rehabilitation, City of Salem, OR: Project manager to address ongoing problems with the City's influent pumps and headworks. Pump clogging and excessive operator intervention for de-ragging required innovative solutions for improvements that met the City's limited budget. Walt Meyer designed a new headworks with a capacity of 100 mgd including a climber screen and screening handling. All of the screenings were pulled to the top floor by the screen for handling and storage which avoided conveyors and their associated maintenance. This project eliminated the need for the operators to enter the wet well on a weekly basis which had been a dangerous duty.

Rock Creek Treatment Plant Expansion, Clean Water Services of Washington County, OR: As Project Manager, completed the design of the primary treatment expansion including influent pumping station and force mains, new headworks with screening and odor control, grit removal, new 25 mgd primary treatment, and upgrading of the existing primaries, flow control, and other miscellaneous plant improvements. This headworks provided a peak flow capacity of 100 mgd.



STAFF TITLE: Engineering Manager II

YEARS OF EXPERIENCE: 50

PROFESSIONAL REGISTRATIONS

- Professional Civil Engineer, California No. 22399

EDUCATION

- BS, Civil Engineering, Oregon State University

PROFESSIONAL AFFILIATIONS

- Oregon Association of Clean Water Agencies
- Pacific Northwest Clean Water Association
- Water Environment Federation

AWARDS

- Pacific Northwest Clean Water Association – 2009 President's Award
- 2012 ACWA Outstanding Member Agency Award for Advancing Water Quality Trading

Facility Planning for Medford Regional Water

Reclamation Facility, City of Medford, OR: Recently completed the 2012 Facilities Plan for the Medford Regional Water Reclamation Facility. This plan defines the treatment plant improvements needed for the next 20 years. An innovative trading program is included whereby the City will purchase certified thermal credits obtained from riverbank restoration to improve river shading. He also assisted the City with the negotiation of their NPDES permit with the Oregon Department of Environmental Quality.

West Basin Facilities Plan, Clean Water Services,

OR: Project Manager for a comprehensive plan to evaluate the best long-term option to serve western Washington County. The project included facilities plans for both the Forest Grove and Hillsboro Facilities and integration of the planning with the Reclaimed Water Master Plan.

CSO Management Plan, City of Portland Bureau of

Environmental Services, OR: Project Manager, Principal-in-Charge and Advisor for the plan that included extensive system modeling to define conveyance needs for Portland's combined sewer system. Initiated the planning effort as project manager. Provided technical review and guidance on regulatory issues in negotiations for the Stipulation and Final Order, which was negotiated between the city and the Oregon Department of Environmental Quality.

Wastewater Facilities Plan, Clean Water Services of Washington County, OR:

Project Manager for the preparation of a plan that provides a long-term solution to improve water quality in the Tualatin River through improved treatment, effluent reuse, source control, and flow management. Study included the major interceptors and an infiltration and inflow analysis. During plan preparation, organized meetings with regulators to define water quality requirements and obtain plan support. Assisted as an agency technical advisor in its negotiated settlement of the NRDC suit related to NPDES permit violations.

Water System Master Plan, Eugene Water and Electric Board (EWEB), Eugene, OR:

Managed the preparation of EWEB's 2015 Water System Master Plan, which addresses resiliency and optimization of the water distribution system for cost effective operation. The plan included an assessment of existing demands and projects demands until buildout of the urban growth boundary. The plan also addresses specific projects to optimize operation and improve redundancy and resiliency and includes a 20 year capital improvements plan to implement the projects. Background information on the existing system, water demand, regulatory compliance and planning criteria are addressed. An evaluation of alternatives to enhance service

both in the Base Level and the Upper Levels is presented and the recommended improvements and Capital Improvement Plan are included.

Water System Master Plan, City of Milwaukie, OR:

Project Manager for the development of the City's 2011 Water System Master Plan, which included the City's supply wells, treatment system, pump stations and water distribution system. The project included development and calibration of a hydraulic model to evaluate improvements required to meet both existing and future water demand and fire flow requirements within the City's system. A capital improvement plan was developed to guide system improvements for full buildout of the City and future areas for expansion. Also prepared a rate study for the system based on the capital improvements identified in the master plan. The final recommendation included rate increases to allow the City to reach a sustainable level of pipeline replacements using pay-as-you-go financing.

Taylor Water Treatment Plant and Rock Creek Water Treatment Plant, City of Corvallis, OR:

Designed modifications to the raw water piping including a new chemical mixing system. Originally operators had difficulty balancing chemicals to the sedimentation system and the improvements resolved this issue. Also provided design services for upgrading the filters by replacing the launders, media, filter underdrains, surface washing and backwash pumps. Also designed improvements to the solids handling including a new holding tank with high pressure cleaning capability.

Water Treatment Plant, City of Grants Pass, OR:

Managed several plant improvement projects including the chlorination retrofit pre-design and new system telemetry installation. Also provided new speed control for the system backwash. Designed filter improvements including new surface wash system, controls and backwash improvements. Completed an assessment of solids handling improvements and prepared contract documents for cleaning of the solids storage lagoon.

Water Master Plan, City of Oregon City, OR:

Managed the update of the Oregon City Water Master Plan including updating of water demand projections, review of service criteria, development of a hydraulic model, and preparation of the capital improvement plan.

Water Supply, Treatment, and Distribution System Facilities Plan, City of Albany, OR:

Directed a comprehensive water system master plan that evaluated alternative water supplies, treatment requirements, and distribution system improvements. Developed the water distribution system master plan and updated the plan when the City extended service to the West Albany region.

Craig Thompson, PE, BCEE

Craig Thompson is a civil engineer who primarily focuses on water supply, including major involvement in 26 water treatment facilities with a total capacity of over 1,000 mgd and with capacities between 1 and 220 mgd. His experience includes regulatory compliance evaluations and training; condition assessments; award-winning designs; construction inspection; start-up training and assistance; process optimization studies; and design, construction, and operation of pilot plants.

Craig has been an invited speaker at workshops organized by the US Environmental Protection Agency (USEPA), California Division of Drinking Water (DDW), and California/Nevada Section AWWA. He has worked with both USEPA and DDW on behalf of water agencies. He has served as California-Nevada Section AWWA Treasurer, Water Quality Division Chair, Safe Drinking Water Act Committee chair, on Section Governing Board as Trustee for both Water Quality and Operations and Maintenance Divisions, and also past chair of the International Ozone Association-Pan American Group.

EXPERIENCE

Foothill Water Treatment Plant Improvements, City of Redding, CA: Project Engineer. Craig developed an innovative approach to improving existing filter inlet weirs that provides both filter flow monitoring and control using a passive system that is more reliable and a significantly lower cost than a previously recommended approach. West Yost also worked with the City's water treatment supervisor to develop an innovative filter-to-waste system that cost one-half of the previously recommended approach and that can operate at higher flow rates. The filter improvements project's cost savings permitted additional filter improvements including increasing the filter media depth. Under our on-call engineering services project Craig managed the temporary Cypress Pump Station design-support project.

Humboldt Bay Municipal Water District, Eureka, CA: Project Engineer. Evaluation of eight filter processes for a Department of Drinking Water (DDW)-required surface water treatment plant. Craig worked with District staff to implement a particle count study that demonstrated District's Collector Wells' water is not a GWUDI source enabled HBMWD to save \$20 million (in 1994). Designed in-line filters for Lloyd L. Heckathorn Turbidity Reduction Facility and baffled disinfection contactor.

Water Treatment Plant and Water Distribution System Master Plan, City of Yuba City, CA: Project Engineer. Master plan identified benefits of collector wells versus direct diversion of Feather River water to improve City's water supply reliability. Collector well benefits include significant improvement in source water quality (lower turbidity and natural organic matter), reduced risk of surface water contaminants, as well as eliminating State Fish and Wildlife Department concerns



STAFF TITLE: Principal Engineer II

YEARS OF EXPERIENCE: 33

PROFESSIONAL REGISTRATIONS AND CERTIFICATIONS

- Professional Civil Engineer, California No. 44224
- Board Certified Environmental Engineer, American Academy of Environmental Engineers, No. 10-20029

EDUCATION

- BA, History, University of California, San Diego
- BS, Civil Engineering, University of California, Berkeley
- ME, Civil Engineering, University of California, Berkeley

PROFESSIONAL AFFILIATIONS

- American Society of Civil Engineers
- American Water Works Association
- American Academy of Environmental Engineers
- Chi Epsilon
- International Ozone Association

with existing river diversion's impact on endangered aquatic species and anadromous fish.

Jamieson Canyon Water Treatment Plant Upgrade and Expansion, City of Napa, CA:

Lead Process Engineer. Modifications to expand and upgrade conventional filtration treatment process for regulatory compliance. Improvements include new pre-ozone contactor, flocculation sedimentation pre-treatment, intermediate ozone pipeline contactor, modify four existing and add two filters, and spent backwash water handling system.

Hennessey Water Treatment Plant, City of Napa, CA:

Project Engineer for the design of a new surface wash and filter-to-waste system for self-backwashing filters to improve filter performance and regulatory compliance.

Harry Tracy Water Treatment Plant, San Francisco Public Utilities Commission, San Francisco, CA:

Project Engineer. Condition assessment to improve performance and regulatory compliance. Technical Advisor for design of 3 MG disinfection contactor that has T10 to HDT ratio 90-percent and 8 MG clearwell. Project Trainer for operator and engineering staff training program.

Denniston Creek Water Treatment Plant, Coastside County Water District, Half Moon Bay, CA:

Project Manager. Feasibility study, preliminary design, final design, engineering services during construction, and start-up support for pre-treatment process and washwater recovery system improvements that optimize cost-savings and water production.

Graham Hill Water Treatment Plant, City of Santa Cruz, CA:

Technical Advisor. Improvements to address regulations, reliability and aging infrastructure at the Graham Hill WTP. Filter Improvements and Tank Replacement projects will permit treating higher turbidity water and reducing disinfection byproducts.

Rio Vista Water Treatment Plant Expansion, Preliminary Design Report, Castaic Lake Water Agency, Santa Clarita, CA:

Project Engineer. Provided design that increase capacity from 30- to 66-mgd. Craig also served as Lead Process Engineer for original ozone system, contact clarifiers, and clarifier-filter building for the first 30-mgd phase of planned 140-mgd capacity treatment plant.

North Bay Regional Water Treatment Plant, Cities of Fairfield and Vacaville, CA:

Project Engineer for Condition Assessment project. Technical Advisor for ozone system improvements project.

Jenny Lind Distribution System Disinfection Byproducts Compliance Support, Calaveras County Water District, CA:

Project Engineer. Assessment of cause of high disinfection byproduct concentrations in water distribution system and identified strategies that enabled District to comply with Stage 1 Disinfectants and Disinfection Byproducts Rule.

Lake Bard Water Filtration Plant Expansion, Calleguas Municipal Water District, Thousand Oaks, CA:

Lead Designer for 2005 American Academy of Environmental Engineers (AAEE) Grand Prize Award-winning hypolimnion oxygenation system that uses ozone contactor's off-gas to improve source water in Lake Bard. Designed ozone system and hydraulic flocculation system for original 50-mgd facilities, and modifications that increased treatment capacity to 65-mgd.

Peterson Water Treatment Plant Capacity Expansion, San Juan Water District, Granite Bay, CA:

Project Engineer for Master Plan to increase capacity from 120- to 240-mgd. Technical Advisor for filter backwash handling and solids dewatering improvements, filter media replacement, and plant-scale filter study to increase capacity.

2018 AMERICA'S WATER INFRASTRUCTURE ACT RESPONSE

2018 America's Water Infrastructure Act Risk and Resilience Assessment/Emergency Response Plan Compliance Gap Assessment, Santa Clara Valley Water District, San Jose, CA:

Civil Engineer. West Yost assisted Santa Clara Valley Water District (Valley Water) with their America's Water Infrastructure Act 2018 risk and resilience assessment (RRA) and emergency response plan (ERP) compliance certification. Valley Water serves approximately 1.8 million people and includes Silicon Valley in their service area. We reviewed previously completed RRAs and ERPs to provide a thorough gap analysis. We completed staff interviews, made project recommendations, and wrote summary reports and certification letters. We evaluated Valley Water's critical chemical suppliers in a detailed chemical supply chain resilience evaluation using an abbreviated set of questionnaires based on the Supply Chain Resilience Assessment & Management program at the Ohio State University.

Timothy Banyai, PE, PMP

Principal Engineer II

Timothy Banyai is a registered civil engineer and project management professional with experience managing and designing water and wastewater treatment plants and pumping stations. Tim has served as project manager, lead project engineer, technical advisor and quality control reviewer. As a manager, Tim maintains direct client contact, provides project team leadership, and coordinates among disciplines to ensure successful project completion. His direct project experience includes design and preparation of drawings and specifications, assisting clients in bidding-phase services, and performing construction-phase duties. Tim has a strong record of developing cost-effective and innovative designs for water and wastewater treatment plant projects, and is known for managing multi-disciplinary teams for water and sewer infrastructure improvement projects. He also has direct experience as an operator and laboratory technician for a wastewater treatment plant where he conducted laboratory analysis, helped develop and implement a facilities plan study for nitrogen control, performed pilot studies, and developed bench-scale models. Tim's experience as a treatment plant operator provides insights he incorporates into the design for successful construction-phase sequencing, testing and start-up, and operations and maintenance. Tim also has experiencing preparing State Revolving Fund (SRF) applications and managing SRF-funded projects.

EXPERIENCE

Digester Final Design and OEDC, City of San Jose, CA: Project Engineer, DAFT Area Lead for a \$140 million project that included modifications to the dissolved air flotation thickeners (DAFTs), four existing anaerobic digesters, and replacement of the digester gas pipeline at the San Jose-Santa Clara Regional Wastewater Facility. Six DAFTs were upgraded to co-thicken primary and secondary sludge. Co-thicken of the primary and secondary sludges allowed the DAFTs to be loaded at a higher loading rate reducing the number of DAFTs needed for rehabilitation. The rehabilitation also included upgrading the pressurization system along with implementing recycle of the DAFT supernatant, new thickened sludge pumps, and a new polymer system.

Digester and Thickener Final Design, Silicon Valley Clean Water (SVCW), Redwood City, CA: Project Manager for final design of a \$12.84 million multi-system automation and upgrade project involving improvements to the primary clarification, gravity thickening and digestion processes. Worked with SVCW's designated system integrator to implement plant wide automation standards. In addition to producing final biddable plans and specifications, worked directly with O&M during performance of their duties to gather feedback, assist with asset management, and provide this feedback to the system integrators for implementation and improvement of the initial control strategies. Also assisted SVCW with pre-selection of the fan press dewatering technology.



STAFF TITLE: Principal Engineer II

YEARS OF EXPERIENCE: 28

PROFESSIONAL REGISTRATIONS

- Professional Civil Engineer, California No. 60715, Kansas No. 14119
- Project Management Professional, Registration No. 1459040

EDUCATION

- MS, Environmental Engineering, North Dakota State University
- BS, Civil Engineering, North Dakota State University

PROFESSIONAL AFFILIATIONS

- Tau Beta Pi Engineering Honor Society
- Water Environment Federation

Wastewater Treatment Plant Improvement Project, City of Ukiah, CA: Project Manager Tim helped manage the planning phase and managed the design and office engineering during construction phases. He developed technical memorandum for the preliminary design report, which included evaluating solids thickening treatment technologies and digestion process alternatives. The evaluation identified dissolved air flotation thickening (DAFT) as the preferred solution for co-thickening primary sludge, waste secondary solids, and primary scum. The design of the DAFTS included two rectangular DAFTs, pressurization and air saturation system, polymer system, and thickened sludge pumps. The DAFTs are able to obtain 4 to 7 percent thickened solids concentration. The evaluation also identified converting the existing floating covers on the anaerobic digesters to submerged concrete covers as the most feasible alternative to gain capacity. The design also included new internal draft tube mixers and structural modifications to meet current seismic codes. Other elements of the project included a new influent pumping station, bar screen facilities, grit removal facilities, conversion of the existing secondary clarifiers to primary clarifiers, new trickling filter pumping station, trickling filter modifications, conversion of the primary clarifiers to solids contact tanks, new secondary clarifiers, modifications to the chlorination facilities, modifications to the existing anaerobic digesters, and new operations building. A detailed construction sequencing plan was developed to assure the wastewater treatment plant remained in operation and met NPDES permit limits throughout construction. Also assisted the City during bidding and construction.

Dewatering Final Design, Silicon Valley Clean Water (SVCW), Redwood City, CA: Project Manager for final design of drying bed improvements that consisted of lining the existing drying beds, segmenting the drying beds into five beds, and providing new decant structures. A decant pumping station was also included to pump the decant back to the plant. The drying bed improvements required lime and lime/cement stabilization of the soft Bay Mud soil to allow truck traffic on the drying beds. The facilities were designed to accommodate dewater solids from 8 to 25 percent.

Collection System Master Plan, South Tahoe Public Utility District, CA: Tim served as the project engineer in charge of evaluating 22 of the District's 42 lift stations located throughout the South Lake Tahoe area. These facilities are important elements of the collection system, as any overflows could cause significant environmental damage to sensitive Lake Tahoe. A generator facility and two valve stations were also evaluated. Because of the large number and wide variety of lift stations at the District, the lift stations were placed into one of five categories to help manage the implementation of

recommendations. A six-step process was used for the lift station assessment, which included: 1) developing a lift station inventory, 2) reviewing maintenance histories, 3) selecting lift stations for inspection, 4) developing condition assessment procedures, 5) conducting a field condition assessment that included interviewing operations and maintenance staff, and 6) rating each lift station's condition. The assessment included a mechanical, structural and electrical condition evaluation. Following the field evaluation and rating of the lift stations, recommendations for improvements were developed and prioritized to meet the District's level of service and capital improvements budget requirements.

Dechlorination Facility Modifications, Livermore-Amador Valley Water Management Agency, CA: Project Engineer for the design of modifications to the dechlorination facility, and provided construction inspection and change management services during construction. Tim designed several new facilities, including a new chemical feed system a storage tank and a chemical feed control system.

Dewatering and Solids Handling Preliminary Design Report, South Bayside System Authority, Redwood City, CA: Project Engineer. Tim helped develop a predesign report that recommended improvements to SBSA's dewatering and solids handling systems. This involved evaluating dewatering system layouts in existing centrifuge room, solar air drying bed area requirements (including geotechnical requirements), and high-solids pumping options. Also contributed to a technical memorandum on demolition requirements in the solids handling building.

San Jose/Santa Clara Water Pollution Control Plant Master Plan, San Jose, CA: Project Engineer. Tim served as the lead project engineer on the biosolids portion of the Plant Master Plan. The biosolids portion included evaluating the existing DAFTs, mesophilic anaerobic digesters, sludge lagoons, and air drying beds. The team evaluated treatment process technologies for solids thickening, pre-processing before digestion, digestion, dewatering, drying, thermal processing, and disposal. A phased approach was recommended that included upgrading the existing DAFTs; structural and mechanical improvements to the existing mesophilic digesters; relocating digested sludge storage and air drying beds; new mechanical dewatering; and provisions for future pre-processing, drying and thermal processing. The phased approach, along with the ability to modify the plan as new technologies developed, provided the plant with the most flexibility for solids treatment and ultimate disposal of biosolids.



Will Dawson, QSP

General Engineering Support / South Coast Regional Manager

Years of Experience

18

Education

Associate of Science, Civil Engineering, Santa Rosa Junior College

Bachelor of Science, Civil Engineering Administration, Chico State, California

Registrations

Construction General Permit

Qualified SWPPP Practitioner (QSP)

Affiliations

American Society of Civil Engineers

American Water Works Association

SUMMARY

Will brings over 18 years of experience in engineering design, project management, contract administration, and facilities plan preparation to the City of Sweet Home. His experience is rooted in transportation engineering and drainage design methods.

Will has coordinated with clients, local government agencies and sub-consultant staff for successful completion of over 400 different projects in Northern California and Southwest Oregon.

KEY EXPERTISE

- Transportation Design
- ADA Design
- Roadway Design
- Storm Drainage Design
- Storm Drainage Water Quality
- Storm Drainage Calculations
- Tide Gate Design

RELEVANT EXPERIENCE

- ▶ City of Coos Bay, OR
 - Golden Avenue Roadway Construction
 - 4th Street Roadway Safety Improvements
 - Vine Street Storm Drain Replacement
 - Eastside Safe Routes to School
- ▶ Florence, OR
 - Rhododendron Drive Phase II
 - 2020 Safe Routes to School
- Santa Rosa, CA*
 - Santa Rosa Avenue Widening
 - Over 100 Neighborhood Transportation Projects
- Sebastopol, CA*
 - Safe Routes to School
 - Downtown ADA Improvements
- Windsor, CA*
 - Conde Lane Major Intersection Design
- Petaluma, CA*
 - East Washington Avenue Roundabout
- Ukiah, CA*
 - Downtown Revitalization
 - Gobbi Street highway 101 Interchange
- Fort Bragg, CA*
 - Downtown Streetscape
 - North Franklin Street Rehabilitation
 - Glass Beach Trail System

*Project completed prior to joining Civil West

Doug Moore, PE

Doug Moore is an engineer with experience in storm drainage facility master planning, stormwater computer modeling, facilities planning, preliminary design, design and specifications, construction and capital cost estimating, project permitting, and project management. He has hydrologic and hydraulic modeling expertise with XPSWMM (1 and 2 dimensional modeling), Sacramento SWMM, HEC-1, HEC-2, HEC-HMS, HEC-RAS, MOUSE, MIKE URBAN, and RiverFLO-2D. He has provided initial planning, detailed design, and construction period engineering services for four large detention basin projects, each of which created significant wildlife habitat areas. Doug has performed wastewater treatment plant planning and facility evaluations. He has prepared potable water demand estimates and facility evaluations. He is skilled at preparing potable water, wastewater, and stormwater evaluations for development specific plans, city and county wide general plans, and environmental impact reports. Doug is particularly skilled at quickly developing infrastructure concepts and plans that minimize construction costs without compromising system performance.

EXPERIENCE

Storm Drain Master Plan 2014 Update, University of California, Davis:

Project Manager for the preparation of the original UC Davis Storm Drainage Master Plan (SDMP) in 2000, and prepared updates of the SDMP in 2006 and 2014. The 2014 update was undertaken to include use of a linked 1- and 2-dimensional (1D and 2D) modeling. The 2014 update included modeling the storm drain system using the 1-dimensional layer of the XPSWMM model, and using the 2-dimensional model layer to simulate flood water ponding and flow over the ground surface. The model included about 1,300 1-dimensional model links and about 200,000 ground surface grid cells (15 ft by 15 ft). Stormwater system monitoring was performed the morning of December 2, 2012, and included measuring freeboard depths at manholes, flooding depths at several low areas around campus, and photographing flooded streets and pedestrian paths around campus. The storm was simulated with the XPSWMM model. The model was calibrated using this storm event, gaged water levels in the Arboretum Waterway and in the main stormwater lift station, gaged discharge from the lift station, and the observed/photographed flooding. The update also included revising the XPSWMM model of the Central Campus to the current land uses and drainage facility conditions.

Yuba City Basin Master Drainage Study, Sutter County and City of Yuba City, CA:

Project Manager for a study to provide drainage service support for economic development in the City and County, and to develop solutions to existing drainage and storm water flooding problems, and to model and evaluate summertime/agricultural irrigation runoff flooding problems. This study includes: outreach meetings with each agricultural irrigation district in the Yuba City Basin; GPS surveys of drainage channels, culverts, pump stations, and miscellaneous other drainage structures; development of a hydrologic/hydraulic computer model using XPSWMM of the Gilsizer Slough, the Live Oak Canal, Snake River, Little Blue Creek, the Lower Snake River, the



STAFF TITLE: Engineering Manager II

YEARS OF EXPERIENCE: 27

PROFESSIONAL REGISTRATION

- Professional Civil Engineer, California No. 58122, Nevada No. 19924

EDUCATION

- MS, Civil Engineering, University of California, Davis
- BS, Geology, University of Oregon
- BS, Mathematics, University of Oregon

PROFESSIONAL AFFILIATIONS

- North Bay Engineers Club
- California Stormwater Quality Association
- Floodplain Management Association

AWARDS

- California Water Environment Association, Sacramento Area Section 2011 Engineering Achievement Award – Dry Creek Levee Relocation at the Wastewater Treatment Plant, City of Roseville
- American Society of Civil Engineers, Sacramento Section 2011 Small Flood Control Project of the Year – Dry Creek Levee Relocation at the Wastewater Treatment Plant, City of Roseville

State owned drainage channels, the major road side ditches, the major agricultural drains, the O'Banion Pump Station (720 cfs capacity), and the Chandler Pump Station (280 cfs capacity); the North Gilsizer Slough watershed, detention basin, and pump station; identification of future grant funding opportunities for storm water projects that are recommended in this study; an XPSWMM model of 10-year/24-hour, and 100-year/24-hour, and 100-year/10-day storm events; recommended design standards for the Gilsizer Slough; and improvements will be identified to achieve the recommended design criteria, subject to the budget limitations of the County, City, and Gilsizer Drainage District.

On-Call Services, Vallejo Flood & Wastewater District, Vallejo, CA:

As follow on work from the VFWD SDMP, Doug is serving as the Project Manager for providing on-call stormwater services to VFWD. This work has included preparing the design of a headwall, trash rack, and access road for a VFWD open channel within Setterquist Park. He has also reviewed a Caltrans plan to enlarging three culverts under I-80 in the Skibereen/Monteith neighborhood and developed the lowest-cost storm drainage improvement plan to address the increased flows through the Caltrans culverts. He evaluated the causes and developed a solution to reduce the flooding of a single house on Humboldt Street. These tasks have been completed within the schedule needed for the VFWD to satisfy its obligations to the City of Vallejo and Caltrans. For a related project, Doug evaluated the causes of the flooding for several houses in the Hampshire and Mississippi Street Area from the December 30-31, 2005 storm (within the Austin Creek watershed). This evaluation included modeling the actual rainfall hyetograph with the MOUSE model of the Austin Creek Watershed. The model was found to closely reproduce the actual observed/reported flooding. From this work, it was determined that the storm exceeded the VFWD design criteria. This work was summarized in a PowerPoint presentation to the VFWD Board of Trustees on February 13, 2006. Through the on-call call contract, the MOUSE models have been updated to Mike Urban software.

Dixon Watershed Management Plan, Solano County Water Agency, CA: The Dixon area watersheds have experienced significant flooding for many years. Flood control in the region is managed by several (often adversarial) organizations, including the City of Dixon, and several irrigation and water conservation districts. For this WMP, slow, steady consensus building was a critical element. This consensus building was facilitated through several stakeholder meetings at which the concerns, ideas, and financial limitations of the stakeholders were identified. Flood improvement plans were developed that incorporated the concerns of the stakeholders but did not exceed their financial limitations. This planning effort has led to design and construction/expansion of two detention basins (Dixon

Ponds A and C) and their outfall channels. This work also led to the formation of the Dixon Joint Powers Authority, which will address watershed flooding problems.

On-Call Engineering Services, City of Dixon, CA:

Doug was the Project Manager (and performed about 80 percent of the actual development review work) for the on-call stormwater engineering services for the City of Dixon. These services were initiated in 2004, and were on-going through 2008 when development in the City ceased. Under this contract, Doug has reviewed 12 development projects, including the Southwest Dixon Development (over 450 acres), Valley Glen (over 200 acres), the Parkland Development (about 60 acres), and several others. Doug has reviewed development drainage reports, hydrologic and hydraulic models, improvement plans, and other documents. He has verified that the drainage reports are consistent with the City's stormwater design criteria and with current industry standards. Improvement plans were also reviewed for consistency with City's design criteria/industry standards and for consistency with the facility sizing presented in the approved drainage reports. Doug has summarized the review comments in written letters, and for some development projects, he has attended/participated in meetings between the City Public Works and the developers engineers. Doug's involvement in these meetings has streamlined the submittal and review of revised drainage reports and plans. Doug also recommended revision to the City's drainage design criteria and developed a spreadsheet template that is currently used by the development community for sizing stormwater retention basins within the City. West Yost has performed five City sponsored studies to determine how to best (and most cost effectively) address existing flooding problems within the City. Examples of these studies include the South Almond Street Study and the Core Area Study.

Storm Drain Master Plan and Subsequent On-Call Services, City of Manteca, CA:

Doug provided both field work support and QA/QC services for the Manteca's original Storm Drain Master Plan and the associated SP-SWMM hydrologic and hydraulic modeling. The field work included site visits to many of the FCOC facilities to photograph and document the channel and culvert conditions. The QA work included reviewing the hydrology model layer and the hydraulic model layer. His hydrology review focused on ensuring the peak runoff rates were conservative, but reasonable. He also ensured the hydraulic model layer had appropriate input data such as pipe and channel lengths, diameters, Manning's n values, entrance and exit loss coefficients, and invert elevations. The model results review included verifying the channel flows and velocities were reasonable, that the real-time control modeling was duplicating the actual system operation, and that there were no model instabilities.



Anna Reimer, GIT

Anna certified geologist-in-training who has worked on most of West Yost's groundwater resources projects over the past decade. Her experience includes: hydrogeologic mapping; aquifer analysis; water quality monitoring and sampling; groundwater management planning; integrated groundwater modeling; production well construction, testing, and monitoring; and evaluating existing supply facilities. She is currently pursuing an M.S. in hydrologic sciences at UC Davis. Her thesis project involves updating the Yolo County Integrated Water Flow Model (IWFMM) and inspecting impacts to the shallow, intermediate, and deep aquifers due to changes in agriculture irrigation and municipal pumping practices, and the completion of the regional treated surface water supply project.

In addition to her hydrogeological work, Anna is co-lead of West Yost's GIS User Group and is responsible for writing training documentation, standardizing layouts and workflows, and researching advancements in the industry.

EXPERIENCE

Soscol Gateway Interior Drainage Project, City of Napa, CA: Took 2-dimensional flood modeling results and presented them in easily understandable maps of floodwater depths (colored shading) and flow vectors (arrows depicting the direction and velocity) for existing conditions. From these existing conditions maps, improvements were developed that reduce the 100-year flooding to a level that will include only minor ponding in the public streets. Prepared flooding depth and vector maps for the improvement alternatives.

Central Campus Storm Water LEED Evaluation, University of California at Davis, CA: Conducted field work verifying the presence or lack thereof of buildings, roads, bike paths, sidewalks, or other non-permeable surfaces within the databases provided by UC Davis for a flooding and runoff model.

Civic Center Storm Drain Sizing Model, City of Rocklin, CA: West Yost created a flood model for the planned City of Rocklin Civic Center. The City provided old as-built and record drawings, AutoCAD files, and a set of GIS shapefiles containing all of the relevant information. All of these data sources were used to develop hydrologic and hydraulic modeling using HECHMS and XPSWMM. Recommendations for detention basin and storm drain enlargement or construction were made based on the model results. Anna's responsibilities included compiling different data sources into a single database, layout of XPSWMM storm drain facilities and drainage basins, calculating flow hydrographs for a range of storm events, and post processing of model results.

Storm Drain Master Plan, University of California, Davis: West Yost developed a 2D flood model for UC Davis' Central Campus using XPSWMM and HEC-HMS. Both existing and planned campus and arboretum waterway construction projects were incorporated into the model scenarios. 2-year, 10-

STAFF TITLE: Associate Geologist I

YEARS OF EXPERIENCE: 10

REGISTRATION

- Professional Geologist-in-Training, California No. 750

EDUCATION

- BS, Geology, University of California, Davis

CERTIFICATION

- OSHA 10 Hour Construction Safety Training, No. 15222971
- 40 Hour HAZWOPER, No. 81570

PROFESSIONAL AFFILIATIONS

- Groundwater Resources Association
- Geological Society of America

year, 100-year, and 200-year flood maps and flow velocity maps were prepared for the Central Campus. Anna's responsibilities included topographic data processing and updating with planned project grading, mapping of existing storm drain facilities, and post-processing of model results.

200-Year Storm Floodplain Delineation, City of Elk Grove, CA: For this ongoing project, West Yost delineated the 200-year floodplains along Laguna Creek and Deer Creek within the City limits. For both creeks, Anna used the HEC-GeoRAS program in conjunction with HEC-RAS hydraulic models to delineate the 200-year floodplain. Anna also processed LIDAR topographic data prepared by the State of California Department of Water Resources and post-processed the model results. Anna created a Mapbook of the floodplain extents along each creek for the City.

Upper Laguna Creek, City of Elk Grove, CA: Prior to this study, floodplain mapping had not been prepared by FEMA for a large portion of Laguna Creek within Elk Grove. Sacramento County desired to have the floodplain mapped to provide information for future development along the creek and to allow the potential benefits of converting an existing mining pit in the upper watershed into a flood control detention basin. West Yost prepared a dynamic hydraulic model using HEC-GeoRAS to calculate the flood flows and water surface elevations in the creek. Anna used the HEC Geo-RAS software in conjunction with ArcGIS to map the 100-year floodplain along 9 miles of the creek. This information was used to support a LOMR application that was quickly approved by FEMA.

Sacramento Valley Groundwater Assessment Report, Northern California Water Association / Macaulay Water Resources, CA: Tasks included researching historical data for the region and generating maps. The report provides an overview of the Sacramento Valley's groundwater resources and the efforts to better understand and actively manage the resources to provide sustainable benefits for the Sacramento Valley, and includes sections on the historical development of land and water resources; the ongoing efforts for sustainable groundwater management; the effects of increasing use of groundwater; and recommendations for the future.

Groundwater Management Plan Preparation, City of Woodland, CA: Assisted in the preparation of the plan for the City of Woodland. Specific tasks included compiling historical data, creating figures and generating tables for the plan, and assisting with the writing of certain sections. The City of Woodland relies entirely on groundwater obtained from 24 wells for its municipal supply. Groundwater is used for domestic drinking water

and agricultural supply in the surrounding areas of Yolo County. The Yolo Subbasin, which includes the City, has documented groundwater issues including inelastic land subsidence due to groundwater withdrawal and water quality problems. Among the more significant of these water quality problems are elevated nitrate and boron concentrations and salinity levels.

Groundwater Management Plan, City of Lompoc, CA: Assisted in the preparation of the City of Lompoc's Groundwater Management Plan. Specific tasks included compilation and assessment of historical data, writing the plan, generating basin management objectives, and generating indicative maps and figures for the plan.

Neighborhoods 6 & 7 Drainage Master Plan Study, City of Citrus Heights, CA: Created figures to be used both in-house and within reports of the modeled results, problem areas, and proposed fixes for the existing storm drainage facilities with the city of Citrus Heights.

Storm Drainage and Wastewater Master Plans, City of Stockton, CA: In coordination with Project Engineers, compiled ESRI shapefile and coverage files provided by the City into detailed planning study maps and map documents. Created and added new subshed and proposed facility layers to the map document. Used GIS techniques to perform area calculations and related analysis in support of the master planning process.

Monitoring Network Assessment, Colusa County, CA: In order to support the implementation of a Groundwater Sustainability Plan, existing monitoring networks within the Colusa Subbasin were assessed using criteria outlined by SGMA emergency regulations and Department of Water Resources documentation regarding Best Management Practices (BMPs) for the Sustainable Management of Groundwater. Federal, state, and locally managed networks for the monitoring of groundwater levels, groundwater quality, land subsidence, and surface water were evaluated based on spatial distribution, monitoring frequency, and station-specific requirements. Data gaps were identified within each of the monitoring networks and recommendations were made for additional study or the installation of new monitoring stations. Specific tasks included compiling available information on existing networks and monitoring locations, summarizing requirements listed in the Emergency Regulations and BMPs, evaluating each of the networks for SGMA compliance, identifying data gaps, making recommendations to fill the data gaps, and writing and issuing the Groundwater Monitoring Network Assessment Report.

Deborah Galardi

Principal



Key Expertise

- ◆ 30 years experience developing defensible and fiscally-sound funding strategies for infrastructure systems in Oregon and around the country.
- ◆ Knowledge of Sweet Home infrastructure systems and capital improvement needs from initial work on system development charge methodologies.

Education

BS, Economics (University of Oregon)

Certifications

Woman Business Enterprise

Summary of Project Experience

Ms. Galardi has successfully conducted utility rate and financial studies for dozens of clients across North America, including cities and utility districts in Oregon, Alaska, California, Texas, Utah, Arizona, Louisiana, Georgia and Hawaii, as well as utilities in Canada. .

Key Project Experience

Ms. Galardi is working with the **City of Sweet Home** to update its water and wastewater system development charge (SDC) methodologies and project lists. She is also assisting the City in the developing new methodologies for transportation, parks and stormwater systems.

Since 1998, Ms. Galardi has served as Financial Consultant of Record for the **City of Salem's** water, wastewater and drainage utility. During that time, Ms. Galardi has conducted numerous financial analyses, including development of long-term financial plans, evaluation of alternative rates and charges for the regional water and wastewater systems, and completion of bond feasibility studies. Ms. Galardi also completed a parks system development charge study for the city.

GRG has conducted comprehensive water, wastewater, and stormwater financial planning, rate and SDC studies for the **City of Albany**. Most recently, Ms. Galardi assisted the city in developing a funding strategy for a new stormwater utility. She also developed a transportation SDC methodology for the city.

Ms. Galardi has completed biennially updates to water, sewer, stormwater, and transportation rates for the **City of Newberg** since 2002. In addition, Ms. Galardi has developed water and wastewater SDC methodologies for the city.

Ms. Galardi recently completed a water, wastewater, transportation and stormwater SDC study for the **City of Millersburg**. She also developed financial plans and new rate structures for the city's water and wastewater systems.

As part of a comprehensive master planning effort, Ms. Galardi developed funding strategies for the wastewater, stormwater, and water systems of the **City of Pendleton**. The project included development of system revenue requirements, evaluation of funding sources, and calculation of SDCs for each infrastructure system.

Ms. Galardi recently completed a water SDC methodology and fee update for the **Eugene Water & Electric Board (EWEB)**. The revised methodology includes separate SDCs for upper area pressure zones, based on a distribution of pumping and storage costs.

Ms. Galardi served as rate consultant to the **City of Bend** for more than a decade. During that time she conducted numerous rate and SDC studies for the city. She worked with stakeholder advisory committees to develop water, wastewater and transportation SDC methodologies and charges to recover master plan recommended infrastructure costs.

Ms. Galardi conducted a wastewater, storm water, and transportation SDC study for the **City of Springfield**. The project included analysis of alternative technical methods for system valuation, system capacity definition, and fee unit assignment for each system; and research of SDC-related policies of other Oregon communities. Ms. Galardi facilitated work with a council-appointed citizen advisory committee to develop the technical and policy recommendations, including downtown development incentives.

Ms. Galardi is currently updating the transportation SDC methodology for the **City of Stayton**.

Membership in Professional Organizations

International Water Association

- Economics & Statistics Specialist Group Management Committee

American Water Works Association

Water Environment Federation

- Utility Management Committee
 - Author and Editorial Review Board, Financing and Charges Manual Task Force

Selected Presentations / Publications

- “Current Status & Financial Strategies of North American Water Utilities”, presented at the IWA Regional Economic Workshop, Tokyo, Japan (March 2015)
- “North American Trends and Practices”, presented at the Regional Economic Workshop: Financing Water Utilities and Infrastructure, Brasov, Romania (September 24, 2013)
- “Tucson Water Rate Restructuring: Pricing Water Service Availability in a Desert City”, to be presented at the 2013 Utility Management Conference, Phoenix, Arizona.
- With Eric Rothstein, “Ensuring Financial Sustainability in an Uncertain World” (December 2011, Water Utility Management International)
- “Financial Management during Times of Uncertainty” presented at the Oregon Municipal Finance Officers Association, March 2009.
- “Managing Impact Fees during Recession” presented at the 2009 National Impact Fee Roundtable; Phoenix, Arizona.
- “System Development Charges” presented at the 2009 Pacific Northwest section of the American Water Works Association; Salem, Oregon.

Mark D. Walter
13290 Squire Drive, Oregon City, Oregon 97045
971-413-4126
markw@waterdudesolutions.com

June 2020

PROFILE

Mr. Walter has an extensive and varied work history ranging from operations to management positions over advanced wastewater treatment facilities. He is well versed on modern operations and maintenance methods and is an effective communicator. Mr. Walter's combination of experience gives him a unique ability to orient quickly and facilitate action.

PROFESSIONAL EXPERIENCE

Operations Maintenance and Management Specialist, Owner Waterdude Solutions, LLC www.waterdudesolutions.com

- Interim system supervision and management services.
- Assessment of operations, maintenance and management programs.
- Development of process for contract operations request for proposal.
- O&M program development and training.
- Implementation of Antero CMMS and Operator 10 software.
- Asset condition and operational status assessment.
- Identify and facilitate capital repair project completion.
- O&M feasibility review during design.

Operations Manager

Oak Lodge Sanitary District, Oak Grove Oregon

- Operations coordinator for \$60M CM/GC wastewater improvement project.
- Developed and implemented plans for operations and maintenance during construction.
- Implemented HACH WIMS software for process control and laboratory data.
- Developed work flows and performance monitoring for new systems.
- Created and updated standard operating procedures for new and existing systems.

Maintenance Division Manager

Clean Water Services (CWS), Hillsboro, Oregon

- Responsible for reimplementation of CMMS and developing connection to 5-year CIP.
- Facilitated Department safety culture change initiative and developed training.
- Defined and updated predictive maintenance and condition assessment protocols.
- Created measurement systems for maintenance and reliability performance.

Manufacturer's Equipment Representative

Beaver Equipment Specialty Company, Inc., Vice President

Goble Sampson Associates, Sales Engineer

- Identified and developed sales opportunities for water/wastewater equipment.
- Evaluated feasibility of various equipment applications.
- Facilitated equipment procurement options with owners and consultants.
- Developed comparative equipment lifecycle cost reports for evaluation.
- Performed equipment commissioning and performance testing services.

Project Manager

CH2MHill, Operations Management International, Inc
City of Lebanon, City of Philomath and Freeway Properties

- Supervision and management of two water and three wastewater treatment systems.
- Identified and coordinated improvement projects between CH2MHill and clients.
- Performed offsite O&M evaluations and support of other CH2MHill facilities.

Operations Supervisor

CH2MHill, Operations Management International, Inc
Gresham Wastewater Treatment Plant

- Coordinated operations and maintenance activities.
- Developed O&M programs and provided training to support effective operations.

Wastewater Treatment Plant Operator

- Clackamas County Department of Utilities, Oregon City, Oregon
- Orange County Sanitation District, Fountain Valley, California
- Michelson Water Reclamation Plant, Irvine, California

CERTIFICATION

- Wastewater Treatment System Operation, Oregon Grade IV #7091
- Wastewater Collection System Operation, Oregon Grade IV #12219
- Oregon Emerging Small Business Certification # 10792 Waterdude Solutions, LLC.

EDUCATION

Clackamas Community College and Chemeketa College, Oregon

- Water Quality, Management, Human Relations, and Business Law

Professional Development

- EPA Advanced Asset Management Training; Managing Multiple Projects; Conflict Resolution; Effective Negotiating; Project Management; Coaching and Teambuilding; Building Better Training Programs; Emergency Response Planning; Leading with Emotional Intelligence; Performance Management; Technology of Participation (ToP) Facilitation; Taylor Protocols Core Value Index (CVI) facilitation.

REGIONAL LEADERSHIP EXPERIANCE

- Past President of the Pacific Northwest Clean Water Association (PNCWA).
- Past Director, Chair of Oregon Water Education Foundation Water Environment School.
- Past Operations Challenge Chair and competitor PNCWA; WEF committee/competitor.
- Past Oregon Region PNCWA Director; Lower Columbia Section PNCWA President.
- Past Chair, Awards Committee PNCWA, current Co-Chair.
- Current Co-Chair (Chair 2019) Plant Operations and Maintenance Committee PNCWA.
- Presenter and trainer at regional and national technical and management conferences.

VETERAN

United States Army

- 82nd Airborne Division, Paratrooper/Infantryman
- 104th Training Brigade, Infantry Instructor

Gary Jenks

President of The Automation Group

Experience

2006 - PRESENT The Automation Group, Inc. Eugene, OR

President

- PLC/HMI Programming
- Factory Authorized AF Drive Start-up
- Project Start-up and commissioning

2001 - 2006 LH Morris Electric, Inc. Springfield, OR

Controls Division Manager

- PLC/HMI Programming
- Factory Authorized AF Drive Start-up
- Project Start-up and commissioning
- Responsible for the Daily operations of the Controls Division

1995 - 2001 NW Industrial Electric Springfield, OR

Project Manager/Foreman

- PLC/HMI Programming
- AF Drive Start-up
- Project Start-up and commissioning
- Electrical Installations

1990 - 1995 Emerald Industrial Electric Springfield, OR

Foreman

- PLC/HMI Programming
- Electrical Installations

Education

1990 - 1993 BOLI Salem, Oregon

Inside Wireman Apprenticeship

Summary of qualifications

1993

General Journeyman License

Accreditations

Rockwell Automation System Integrator

Certified Drive Start-up Technician: Allen Bradley, ABB, Cutler Hammer

Advisory Board for Electronic Technology at Lane Community College



KYLE LATIMER PE, PLS

Survey Department Manager

Kyle Latimer is performing the duties as our Survey Department Manager. Kyle is a Professional Land Surveyor as well as Civil Engineer. Kyle manages the scheduling of our survey crews, oversees the completion of all surveys and delegates survey drafting and research as necessary. Kyle served as the Field Crew Chief for nearly 6 years prior to becoming manager, thus has a vast knowledge in the use of the survey instruments.



YEARS OF EXPERIENCE

12

EDUCATION

- Oregon State University
Bachelor of Forest Science
Civil Engineering 2008

REGISTRATION

Professional Civil Engineer, 2014

OR #804421- PE

Professional Land Surveyor, 2013

OR #80442- PLS

PROFESSIONAL ACTIVITIES

- Active member of the Professional Land Surveyors of Oregon

UNIQUE QUALIFICATIONS

- Exceptional working relationship with the City of Sweet Home
- Extensive experience working with local public entities.



STRONGWORK ARCHITECTURE

ALAN ARMSTRONG

Licenses + Certifications

- Oregon ESB Certification
- Licensed Architect: OR,WA
- Living Future Accreditation
- Certified Sustainable Building Advisor

Education

- Bachelor of Architecture
University of Oklahoma,
2001

Professional Experience

- Strongwork Architecture, LLC; Owner, Architect; 2009 - Present
- MWA Architects; PM, Associate; 2010 - 2014
- PCC Instructor; 2010
- Litmus Design + Architecture; Designer; 2005 - 2008
- Vizwerks, Inc; Designer, 2001 - 2004

PROJECT EXPERIENCE

Public Work

Portland Water Bureau Filtration Facility – Portland, OR
Beaverton Cooper Mt ASR Pump Station – Beaverton, OR
Redmond Booster 1A Pump Station – Redmond, OR
Parkdale WWTP – Parkdale, OR
Sweet Home WWTP – Sweet Home, OR
Portland Water Bureau CCIP – Portland, OR
Hannah Mason Pump Station – Portland, OR*
Green River Filtration Facility – Tacoma, WA*
Oak Harbor Clean Water Facility – Oak Harbor, WA*
Hillsboro Waste Water Facility – Hillsboro, OR*
JWC Backup Power Facility – Forest Grove, OR*
BPA North Ampere Building – Vancouver, WA*
BPA Celilo Desgassing Room – The Dalles, OR*
BPA Telecom Buildings – Oregon*
TVA Shelby Substation Rehab – Tennessee*
Tri-Cities WWTP Admin Bldg Remodel – Clackamas, OR*

Residential

Jones Duplex	Sellwood Addition and Remodel
Duke St Triplex	South Tabor Remodel
Sherrett St ADU**	SW Taylors Ferry Remodel
Arbor Lodge ADU	Bluecrest Apartments
North Tabor ADU	
Bogdan ADU	

*work performed while employed with previous firm

**Accessory Dwelling Unit



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

6/22/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER KPD Insurance, Inc. PO Box 784 Springfield OR 97477	CONTACT NAME: PHONE (A/C, No, Ext): 541-741-0550	FAX (A/C, No): 541-741-1674
	E-MAIL ADDRESS:	
INSURED The Automation Group, Inc. 4678 Isabelle St Eugene OR 97402	INSURER(S) AFFORDING COVERAGE	
	INSURER A : Ohio Security	NAIC # 24082
	INSURER B : Ohio Casualty	24074
	INSURER C : Maxum Indemnity Co.	26743
	INSURER D : Mutual of Enumclaw	14761
	INSURER E :	
INSURER F :		

COVERAGES

CERTIFICATE NUMBER: 500183977

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input checked="" type="checkbox"/> LOC <input type="checkbox"/> OTHER:	Y	Y	BKS54916816	10/29/2019	10/29/2020	EACH OCCURRENCE	\$ 1,000,000
							DAMAGE TO RENTED PREMISES (Ea occurrence)	\$ 1,000,000
							MED EXP (Any one person)	\$ 15,000
							PERSONAL & ADV INJURY	\$ 1,000,000
							GENERAL AGGREGATE	\$ 2,000,000
							PRODUCTS - COMP/OP AGG	\$ 2,000,000
								\$
D	<input checked="" type="checkbox"/> AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			BAP0005120	10/29/2019	10/29/2020	COMBINED SINGLE LIMIT (Ea accident)	\$ 1,000,000
							BODILY INJURY (Per person)	\$
							BODILY INJURY (Per accident)	\$
							PROPERTY DAMAGE (Per accident)	\$
								\$
B	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input checked="" type="checkbox"/> RETENTION \$ 10,000			USO54916816	10/29/2019	10/29/2020	EACH OCCURRENCE	\$ 5,000,000
							AGGREGATE	\$ 5,000,000
							Prod/Compl Ops Agg	\$ 5,000,000
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? <input type="checkbox"/> Y/N <input checked="" type="checkbox"/> N/A (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						PER STATUTE	OTH-ER
							E.L. EACH ACCIDENT	\$
							E.L. DISEASE - EA EMPLOYEE	\$
							E.L. DISEASE - POLICY LIMIT	\$
A C	Installation Floater Professional Liability			BKS54916816 PFP602231407	10/29/2019 10/29/2019	10/29/2020 10/29/2020	\$100,000 Limit \$2,000,000 Per Claim \$10,000 Deductible	\$500 Deductible \$2,000,000 Agg Claims Made Cov

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

** Pollution Liability - Effective 10/29/2019 to 10/29/20 - Westchester Surplus Lines Insurance Co. Policy #G70917373002

\$1,000,000 Limit Each Pollution Condition/ \$1,000,000 Pollution General Aggregate - \$5,000. Retention.

Re: City Engineer of Record Services RFP 2020.

City of Sweet Home, its council, officers, representatives, employees are included as Additional Insured's, when required by written contract per form CG8810 0413, including Waiver of Subrogation and Primary and Non-Contributory coverage.

CERTIFICATE HOLDER**CANCELLATION**
 City of Sweet Home
 1400 24th Avenue
 Sweet Home OR 97386

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

COMMERCIAL GENERAL LIABILITY EXTENSION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

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- With respect to coverage afforded by this endorsement, the provisions of the policy apply unless modified by the endorsement.

A. NON-OWNED AIRCRAFT

Under Paragraph 2. Exclusions of Section I - Coverage A - Bodily Injury And Property Damage Liability, exclusion g. Aircraft, Auto Or Watercraft does not apply to an aircraft provided:

1. It is not owned by any insured;
2. It is hired, chartered or loaned with a trained paid crew;
3. The pilot in command holds a currently effective certificate, issued by the duly constituted authority of the United States of America or Canada, designating her or him a commercial or airline pilot; and
4. It is not being used to carry persons or property for a charge.

However, the insurance afforded by this provision does not apply if there is available to the insured other valid and collectible insurance, whether primary, excess (other than insurance written to apply specifically in excess of this policy), contingent or on any other basis, that would also apply to the loss covered under this provision.

B. NON-OWNED WATERCRAFT

Under Paragraph 2. Exclusions of Section I - Coverage A - Bodily Injury And Property Damage Liability, Subparagraph (2) of exclusion g. Aircraft, Auto Or Watercraft is replaced by the following:

This exclusion does not apply to:

- (2) A watercraft you do not own that is:
 - (a) Less than 52 feet long; and
 - (b) Not being used to carry persons or property for a charge.

C. PROPERTY DAMAGE LIABILITY - ELEVATORS

1. Under Paragraph 2. Exclusions of Section I - Coverage A - Bodily Injury And Property Damage Liability, Subparagraphs (3), (4) and (6) of exclusion j. Damage To Property do not apply if such "property damage" results from the use of elevators. For the purpose of this provision, elevators do not include vehicle lifts. Vehicle lifts are lifts or hoists used in automobile service or repair operations.
2. The following is added to Section IV - Commercial General Liability Conditions, Condition 4. Other Insurance, Paragraph b. Excess Insurance:

The insurance afforded by this provision of this endorsement is excess over any property insurance, whether primary, excess, contingent or on any other basis.

D. EXTENDED DAMAGE TO PROPERTY RENTED TO YOU (Tenant's Property Damage)

If Damage To Premises Rented To You is not otherwise excluded from this Coverage Part:

1. Under Paragraph 2. Exclusions of Section I - Coverage A - Bodily Injury and Property Damage Liability:
 - a. The fourth from the last paragraph of exclusion j. Damage To Property is replaced by the following:

Paragraphs (1), (3) and (4) of this exclusion do not apply to "property damage" (other than damage by fire, lightning, explosion, smoke, or leakage from an automatic fire protection system) to:

 - (i) Premises rented to you for a period of 7 or fewer consecutive days; or
 - (ii) Contents that you rent or lease as part of a premises rental or lease agreement for a period of more than 7 days.

Paragraphs (1), (3) and (4) of this exclusion do not apply to "property damage" to contents of premises rented to you for a period of 7 or fewer consecutive days.

A separate limit of insurance applies to this coverage as described in Section III - Limits of Insurance.

- b. The last paragraph of subsection **2. Exclusions** is replaced by the following:

Exclusions c. through n. do not apply to damage by fire, lightning, explosion, smoke or leakage from automatic fire protection systems to premises while rented to you or temporarily occupied by you with permission of the owner. A separate limit of insurance applies to Damage To Premises Rented To You as described in **Section III - Limits Of Insurance**.

2. Paragraph **6.** under **Section III - Limits Of Insurance** is replaced by the following:

6. Subject to Paragraph **5.** above, the Damage To Premises Rented To You Limit is the most we will pay under Coverage **A** for damages because of "property damage" to:

- a. Any one premise:

(1) While rented to you; or

(2) While rented to you or temporarily occupied by you with permission of the owner for damage by fire, lightning, explosion, smoke or leakage from automatic protection systems; or

- b. Contents that you rent or lease as part of a premises rental or lease agreement.

3. As regards coverage provided by this provision **D. EXTENDED DAMAGE TO PROPERTY RENTED TO YOU (Tenant's Property Damage)** - Paragraph **9.a.** of **Definitions** is replaced with the following:

9.a. A contract for a lease of premises. However, that portion of the contract for a lease of premises that indemnifies any person or organization for damage by fire, lightning, explosion, smoke, or leakage from automatic fire protection systems to premises while rented to you or temporarily occupied by you with the permission of the owner, or for damage to contents of such premises that are included in your premises rental or lease agreement, is not an "insured contract".

E. MEDICAL PAYMENTS EXTENSION

If **Coverage C Medical Payments** is not otherwise excluded, the Medical Payments provided by this policy are amended as follows:

Under Paragraph **1. Insuring Agreement of Section I - Coverage C - Medical Payments**, Subparagraph **(b)** of Paragraph **a.** is replaced by the following:

- (b)** The expenses are incurred and reported within three years of the date of the accident; and

F. EXTENSION OF SUPPLEMENTARY PAYMENTS - COVERAGES A AND B

1. Under **Supplementary Payments - Coverages A and B**, Paragraph **1.b.** is replaced by the following:

- b. Up to **\$3,000** for cost of bail bonds required because of accidents or traffic law violations arising out of the use of any vehicle to which the Bodily Injury Liability Coverage applies. We do not have to furnish these bonds.

2. Paragraph **1.d.** is replaced by the following:

- d. All reasonable expenses incurred by the insured at our request to assist us in the investigation or defense of the claim or "suit", including actual loss of earnings up to **\$500** a day because of time off from work.

G. ADDITIONAL INSUREDS - BY CONTRACT, AGREEMENT OR PERMIT

1. Paragraph **2.** under **Section II - Who Is An Insured** is amended to include as an insured any person or organization whom you have agreed to add as an additional insured in a written contract, written agreement or permit. Such person or organization is an additional insured but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused in whole or in part by:

- a. Your acts or omissions, or the acts or omissions of those acting on your behalf, in the performance of your on going operations for the additional insured that are the subject of the written contract or written agreement provided that the "bodily injury" or "property damage" occurs, or the "personal and advertising injury" is committed, subsequent to the signing of such written contract or written agreement; or

- b. Premises or facilities rented by you or used by you; or
- c. The maintenance, operation or use by you of equipment rented or leased to you by such person or organization; or
- d. Operations performed by you or on your behalf for which the state or political subdivision has issued a permit subject to the following additional provisions:
 - (1) This insurance does not apply to "bodily injury", "property damage", or "personal and advertising injury" arising out of the operations performed for the state or political subdivision;
 - (2) This insurance does not apply to "bodily injury" or "property damage" included within the "completed operations hazard".
 - (3) Insurance applies to premises you own, rent, or control but only with respect to the following hazards:
 - (a) The existence, maintenance, repair, construction, erection, or removal of advertising signs, awnings, canopies, cellar entrances, coal holes, driveways, manholes, marquees, hoist away openings, sidewalk vaults, street banners, or decorations and similar exposures; or
 - (b) The construction, erection, or removal of elevators; or
 - (c) The ownership, maintenance, or use of any elevators covered by this insurance.

However:

- 1. The insurance afforded to such additional insured only applies to the extent permitted by law; and
- 2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

With respect to Paragraph 1.a. above, a person's or organization's status as an additional insured under this endorsement ends when:

- (1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
- (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

With respect to Paragraph 1.b. above, a person's or organization's status as an additional insured under this endorsement ends when their written contract or written agreement with you for such premises or facilities ends.

With respects to Paragraph 1.c. above, this insurance does not apply to any "occurrence" which takes place after the equipment rental or lease agreement has expired or you have returned such equipment to the lessor.

The insurance provided by this endorsement applies only if the written contract or written agreement is signed prior to the "bodily injury" or "property damage".

We have no duty to defend an additional insured under this endorsement until we receive written notice of a "suit" by the additional insured as required in Paragraph b. of Condition 2. **Duties In the Event Of Occurrence, Offense, Claim Or Suit under Section IV - Commercial General Liability Conditions.**

2. With respect to the insurance provided by this endorsement, the following are added to Paragraph 2. Exclusions under Section I - Coverage A - Bodily Injury And Property Damage Liability:

This insurance does not apply to:

- a. "Bodily injury" or "property damage" arising from the sole negligence of the additional insured.
- b. "Bodily injury" or "property damage" that occurs prior to you commencing operations at the location where such "bodily injury" or "property damage" occurs.
- c. "Bodily injury", "property damage" or "personal and advertising injury" arising out of the rendering of, or the failure to render, any professional architectural, engineering or surveying services, including:
 - (1) The preparing, approving, or failing to prepare or approve, maps, shop drawings, opinions, reports, surveys, field orders, change orders or drawings and specifications; or
 - (2) Supervisory, inspection, architectural or engineering activities.

This exclusion applies even if the claims against any insured allege negligence or other wrongdoing in the supervision, hiring, employment, training or monitoring of others by that insured, if the "occurrence" which caused the "bodily injury" or "property damage", or the offense which caused the "personal and advertising injury", involved the rendering of, or the failure to render, any professional architectural, engineering or surveying services.

- d. "Bodily injury" or "property damage" occurring after:
 - (1) All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or
 - (2) That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.
- e. Any person or organization specifically designated as an additional insured for ongoing operations by a separate **ADDITIONAL INSURED -OWNERS, LESSEES OR CONTRACTORS** endorsement issued by us and made a part of this policy.

3. With respect to the insurance afforded to these additional insureds, the following is added to Section III - Limits Of Insurance:

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

- a. Required by the contract or agreement; or
 - b. Available under the applicable Limits of Insurance shown in the Declarations;
- whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

H. PRIMARY AND NON-CONTRIBUTORY ADDITIONAL INSURED EXTENSION

This provision applies to any person or organization who qualifies as an additional insured under any form or endorsement under this policy.

Condition 4. Other Insurance of SECTION IV - COMMERCIAL GENERAL LIABILITY CONDITIONS is amended as follows:

- a. The following is added to Paragraph a. Primary Insurance:

If an additional insured's policy has an Other Insurance provision making its policy excess, and you have agreed in a written contract or written agreement to provide the additional insured coverage on a primary and noncontributory basis, this policy shall be primary and we will not seek contribution from the additional insured's policy for damages we cover.

b. The following is added to Paragraph b. Excess Insurance:

When a written contract or written agreement, other than a premises lease, facilities rental contract or agreement, an equipment rental or lease contract or agreement, or permit issued by a state or political subdivision between you and an additional insured does not require this insurance to be primary or primary and non-contributory, this insurance is excess over any other insurance for which the additional insured is designated as a Named Insured.

Regardless of the written agreement between you and an additional insured, this insurance is excess over any other insurance whether primary, excess, contingent or on any other basis for which the additional insured has been added as an additional insured on other policies.

I. ADDITIONAL INSURED - EXTENDED PROTECTION OF YOUR "LIMITS OF INSURANCE"

This provision applies to any person or organization who qualifies as an additional insured under any form or endorsement under this policy.

1. The following is added to Condition 2. Duties In The Event Of Occurrence, Offense, Claim or Suit:

An additional insured under this endorsement will as soon as practicable:

- a. Give written notice of an "occurrence" or an offense that may result in a claim or "suit" under this insurance to us;
- b. Tender the defense and indemnity of any claim or "suit" to all insurers whom also have insurance available to the additional insured; and
- c. Agree to make available any other insurance which the additional insured has for a loss we cover under this Coverage Part.
- d. We have no duty to defend or indemnify an additional insured under this endorsement until we receive written notice of a "suit" by the additional insured.

2. The limits of insurance applicable to the additional insured are those specified in a written contract or written agreement or the limits of insurance as stated in the Declarations of this policy and defined in Section III - Limits of Insurance of this policy, whichever are less. These limits are inclusive of and not in addition to the limits of insurance available under this policy.

**J. WHO IS AN INSURED - INCIDENTAL MEDICAL ERRORS / MALPRACTICE
WHO IS AN INSURED - FELLOW EMPLOYEE EXTENSION - MANAGEMENT EMPLOYEES**

Paragraph 2.a.(1) of Section II - Who Is An Insured is replaced with the following:

(1) "Bodily injury" or "personal and advertising injury":

- (a) To you, to your partners or members (if you are a partnership or joint venture), to your members (if you are a limited liability company), to a co-"employee" while in the course of his or her employment or performing duties related to the conduct of your business, or to your other "volunteer workers" while performing duties related to the conduct of your business;
- (b) To the spouse, child, parent, brother or sister of that co-"employee" or "volunteer worker" as a consequence of Paragraph (1) (a) above;
- (c) For which there is any obligation to share damages with or repay someone else who must pay damages because of the injury described in Paragraphs (1) (a) or (b) above; or
- (d) Arising out of his or her providing or failing to provide professional health care services. However, if you are not in the business of providing professional health care services or providing professional health care personnel to others, or if coverage for providing professional health care services is not otherwise excluded by separate endorsement, this provision (Paragraph (d)) does not apply.

Paragraphs (a) and (b) above do not apply to "bodily injury" or "personal and advertising injury" caused by an "employee" who is acting in a supervisory capacity for you. Supervisory capacity as used herein means the "employee's" job responsibilities assigned by you, includes the direct supervision of other "employees" of yours. However, none of these "employees" are insureds for "bodily injury" or "personal and

advertising injury" arising out of their willful conduct, which is defined as the purposeful or willful intent to cause "bodily injury" or "personal and advertising injury", or caused in whole or in part by their intoxication by liquor or controlled substances.

The coverage provided by provision J. is excess over any other valid and collectable insurance available to your "employee".

K. NEWLY FORMED OR ADDITIONALLY ACQUIRED ENTITIES

Paragraph 3. of **Section II - Who Is An Insured** is replaced by the following:

3. Any organization you newly acquire or form and over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no other similar insurance available to that organization. However:
 - a. Coverage under this provision is afforded only until the expiration of the policy period in which the entity was acquired or formed by you;
 - b. Coverage A does not apply to "bodily injury" or "property damage" that occurred before you acquired or formed the organization; and
 - c. Coverage B does not apply to "personal and advertising injury" arising out of an offense committed before you acquired or formed the organization.
 - d. Records and descriptions of operations must be maintained by the first Named Insured.

No person or organization is an insured with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations or qualifies as an insured under this provision.

L. FAILURE TO DISCLOSE HAZARDS AND PRIOR OCCURRENCES

Under **Section IV - Commercial General Liability Conditions**, the following is added to **Condition 6. Representations**:

Your failure to disclose all hazards or prior "occurrences" existing as of the inception date of the policy shall not prejudice the coverage afforded by this policy provided such failure to disclose all hazards or prior "occurrences" is not intentional.

M. KNOWLEDGE OF OCCURRENCE, OFFENSE, CLAIM OR SUIT

Under **Section IV - Commercial General Liability Conditions**, the following is added to **Condition 2. Duties In The Event of Occurrence, Offense, Claim Or Suit**:

Knowledge of an "occurrence", offense, claim or "suit" by an agent, servant or "employee" of any insured shall not in itself constitute knowledge of the insured unless an insured listed under Paragraph 1. of **Section II - Who Is An Insured** or a person who has been designated by them to receive reports of "occurrences", offenses, claims or "suits" shall have received such notice from the agent, servant or "employee".

N. LIBERALIZATION CLAUSE

If we revise this Commercial General Liability Extension Endorsement to provide more coverage without additional premium charge, your policy will automatically provide the coverage as of the day the revision is effective in your state.

O. BODILY INJURY REDEFINED

Under **Section V - Definitions**, **Definition 3.** is replaced by the following:

3. "Bodily Injury" means physical injury, sickness or disease sustained by a person. This includes mental anguish, mental injury, shock, fright or death that results from such physical injury, sickness or disease.

P. EXTENDED PROPERTY DAMAGE

Exclusion a. of **COVERAGE A. BODILY INJURY AND PROPERTY DAMAGE LIABILITY** is replaced by the following:

a. Expected Or Intended Injury

"Bodily injury" or "property damage" expected or intended from the standpoint of the insured. This exclusion does not apply to "bodily injury" or "property damage" resulting from the use of reasonable force to protect persons or property.

Q. WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US - WHEN REQUIRED IN A CONTRACT OR AGREEMENT WITH YOU

Under **Section IV - Commercial General Liability Conditions**, the following is added to **Condition 8. Transfer Of Rights Of Recovery Against Others To Us**:

We waive any right of recovery we may have against a person or organization because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard" provided:

1. You and that person or organization have agreed in writing in a contract or agreement that you waive such rights against that person or organization; and
2. The injury or damage occurs subsequent to the execution of the written contract or written agreement.



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

03/03/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Evergreen Insurance Managers Inc 5293 NE Elam Young Pkwy Ste 160 Hillsboro OR 97124	CONTACT NAME: Andy Clifton PHONE (A/C, No, Ext): (503) 259-3060 E-MAIL ADDRESS: aclifton@gmail.com	FAX (A/C, No): (503) 259-3065	
	INSURER(S) AFFORDING COVERAGE		NAIC #
INSURED Galardi Consulting LLC DBA: Galardi Rothstein Group 7327 SW Barnes Rd #224 Portland OR 97225	INSURER A: Allied World Surplus Lines Insurance Company		24319
	INSURER B:		
	INSURER C:		
	INSURER D:		
	INSURER E:		
	INSURER F:		

COVERAGES**CERTIFICATE NUMBER:****REVISION NUMBER:**

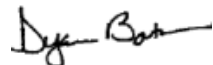
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A				<input type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability			03053647	03/01/2020	03/01/2021	\$2,000,000 Aggregate Limt \$2,000,000 Each Claim

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

re: City of Sweet Home, 1400 24th Ave, Sweet Home, OR 97386

CERTIFICATE HOLDER**CANCELLATION**

Murraysmith 888 SW 5th Ave Ste 1170 Portland OR 97204	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE 
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CONFIRMATION OF COVERAGE # 886980

PRODUCER: Leonard Adams Company
5201 Southwest Westgate Drive
Suite 300
Portland, OR 97221

ATTENTION: Brian P Dooney

INSURED: Leeway Engineering Solutions, LLC
12597 NW Majestic Sequoia Way
Portland, OR 97229

TERM: 01/24/2020 - 01/24/2021

COMPANY: Underwriters at Lloyds of London

POLICY #: PSI0011061377

Confirmation of Coverage expires on 01/23/2021 unless cancelled or replaced by the policy.

COVERAGE(S): Professional Liability Claims Made & Reported
General Liability Occurrence

LIMIT(S): Limits/Deductibles:

INSURING CLAUSE 1: PROFESSIONAL LIABILITY

ALL SECTIONS COMBINED

Aggregate limit of liability: USD1,000,000 including costs and expenses

SECTION A: ERRORS AND OMISSIONS

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD5,000 each and every claim, including costs and expenses

SECTION B: BREACH OF CONTRACT

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD5,000 each and every claim, including costs and expenses

SECTION C: SUB-CONTRACTOR VICARIOUS LIABILITY

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD5,000 each and every claim, including costs and expenses

SECTION D: CONTINGENT BODILY INJURY AND PROPERTY DAMAGE LIABILITY

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD5,000 each and every claim, including costs and expenses

SECTION E: INTELLECTUAL PROPERTY RIGHTS INFRINGEMENT

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD5,000 each and every claim, including costs and expenses

SECTION F: POLLUTION LIABILITY

Limit of liability: USD1,000,000 each and every claim, including costs and expenses



Deductible: USD5,000 each and every claim, including costs and expenses

SECTION G: REGULATORY COSTS AND FINES

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD5,000 each and every claim, including costs and expenses

SECTION H: DISHONESTY OF EMPLOYEES

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD5,000 each and every claim, including costs and expenses

SECTION I: PAYMENT OF WITHHELD FEES

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD5,000 each and every claim, including costs and expenses

INSURING CLAUSE 2: CYBER EVENT COSTS

NO COVER GIVEN

INSURING CLAUSE 3: COMMERCIAL GENERAL LIABILITY

ALL SECTIONS COMBINED

Aggregate limit of liability: USD2,000,000 including costs and expenses

SECTION A: BODILY INJURY AND PROPERTY DAMAGE LIABILITY

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD1,000 each and every claim, including costs and expenses

SECTION B: PERSONAL AND ADVERTISING INJURY

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD1,000 each and every claim, including costs and expenses

SECTION C: PRODUCTS AND COMPLETED OPERATIONS LIABILITY

Aggregate limit of liability: USD1,000,000 including costs and expenses

Deductible: USD1,000 each and every claim, including costs and expenses

SECTION D: TENANTS' LEGAL LIABILITY

Aggregate limit of liability: USD250,000 including costs and expenses

Deductible: USD1,000 each and every claim, including costs and expenses

SECTION E: MEDICAL EXPENSES

Limit of liability: USD5,000 each and every claim

Deductible: USD0 each and every claim

SECTION F: EMPLOYEE BENEFITS LIABILITY

Aggregate limit of liability: USD1,000,000 including costs and expenses

Deductible: USD1,000 each and every claim, including costs and expenses

SECTION G: NON-OWNED AND HIRED AUTOMOBILE LIABILITY

Limit of liability: USD1,000,000 each and every claim, including costs and expenses

Deductible: USD2,500 each and every claim, including costs and expenses

SECTION H: LIABILITY FOR DAMAGE TO HIRED OR LEASED AUTOMOBILES

Limit of liability: USD50,000 each and every claim, including costs and expenses

Deductible: USD2,500 each and every claim, including costs and expenses

INSURING CLAUSE 4: COMMERCIAL PROPERTY

NO COVER GIVEN

INSURING CLAUSE 5: BUSINESS INTERRUPTION



NO COVER GIVEN

INSURING CLAUSE 6: LOSS MITIGATION

Limit of liability: USD1,000,000 each and every claim

Deductible: USD0 each and every claim

INSURING CLAUSE 7: COURT ATTENDANCE COSTS

Aggregate limit of liability: USD100,000 sub-limited to USD2,000 per day

Deductible: USD0 each and every claim

INSURING CLAUSE 8: REPUTATION AND BRAND PROTECTION

Aggregate limit of liability: USD100,000

Deductible: USD0 each and every claim

The maximum amount payable by us in respect of each Section and each Insuring Clause will not exceed the limit of liability.

In respect of INSURING CLAUSES 1, 2 and 3, where cover is provided under multiple Sections, only one limit of liability will apply to that claim and this will be the highest limit of liability of the Sections under which cover is provided.

PLEASE READ THE HOW MUCH WE WILL PAY SECTION IN ITS ENTIRETY

TERMS:

WORDING: A&E US v3.0 Professions Architects and Engineers

BUSINESS ACTIVITIES: Environmental engineering planning, design and related consulting services

LEGAL ACTION: Worldwide

TERRITORIAL SCOPE: Worldwide

RETROACTIVE DATE FOR UNKNOWN WRONGFUL ACTS: 24-Jan-2020

ENDORSEMENTS:

U.S. TERRORISM RISK INSURANCE ACT OF 2002 AS AMENDED NOT PURCHASED
CLAUSE

OPTIONAL EXTENDED REPORTING PERIOD: 12 months for USD3,065.00 subject to 5%
broker fee and e&s taxes/fees
(only payable if you choose to exercise this option)

Program Comments in general unless otherwise applicable:

- Pay on Behalf Of
- Duty to take control of and conduct
- Strict Settlement Provision



- Limit of Liability is Inclusive of Costs and Expenses
- Punitive, exemplary or multiple damages where insurable under applicable law
- Review Cancellation Provision 5. Policy premium becomes fully earned if the policy is noticed.
- 60 Day Automatic ERP

REFER TO FORM WORDING OR APPLICABLE ENDORSEMENTS FOR CANCELLATION PROVISIONS.

THE ABOVE IS SIMPLY A SUMMARY OF NOTABLE ITEMS AS RESPECTS THE POLICY FORM WORDING. PLEASE REVIEW THE POLICY FORM WORDING, EXCLUSIONS AND ENDORSEMENTS AS THEY WILL ULTIMATELY DETERMINE COVERAGE.

CONDITION(S):

Subject to:

- 1) ~~Completed TRIA form either accepting or rejecting terrorism coverage under GL coverage section. Cover under the Terrorism Risk Insurance Act is available for an additional premium of USD 65.00 + e&s taxes/fees. Failure to submit a TRIA form with your bind order will be forfeiture of this option.~~
- 2) ~~Completed diligent search letter~~
- 3) ~~Please review the definition of Business Activities and advise if any changes should be made~~
- 4) ~~Confirmation the insured does not undertake any land surveying, structural or geotechnical engineering. (prior to binding)~~

Insured has declined Terrorism Coverage

Premium breakdown:

Professional Liability - USD3,000.00

General Liability - USD650.00

CLAIMS MANAGER: CFC Underwriting Limited
newclaims@cfcunderwriting.com

M&D Premium	\$	3,650.00	
Company fee	\$	315.00	Fully retained at inception
Broker fee	\$	300.00	Fully retained at inception
OR Surplus lines tax	\$	85.30	
OR Fire marshal tax	\$	12.80	
OR Surplus line service charge	\$	10.00	
Total Gross Amount	\$	4,373.10	

This insurance was procured and developed under the Oregon Surplus Lines laws. It is NOT covered by the provisions of ORS 734.510 to 734.710 relating to the Oregon Insurance Guaranty



Association. If the insurer issuing this insurance becomes insolvent, the Oregon Insurance Guaranty Association has no obligation to pay claims under this evidence of insurance. - Brown and Riding Insurance Services, Inc SL License #100169869

Payment due in 20 days.

0.0% MINIMUM RETAINED PREMIUM IN THE EVENT OF CANCELLATION. NO FLAT CANCELLATIONS.

Please review carefully. Coverages provided may differ from those requested.

This Confirmation is intended for use as evidence that insurance as described has been effected, against which a Policy or Policies will be issued. This Confirmation and the insurance effected by it are subject to all terms, conditions and provisions of the Policy or Policies to be issued and in the event of any inconsistency therewith, the terms, conditions and provisions of the Policy or Policies shall prevail.

Brown & Riding has the right to cancel any binder or policy in accordance with the cancellation provisions of such binder or policy. When coverage is bound by Brown & Riding, a charge will be made in accordance with the policy terms and upon binding, all fees for the full policy term will be fully earned. Producer guarantees payment of premium for risks placed through Brown & Riding. If Producer does not make timely payment of any sums due Brown & Riding, then Brown & Riding may, without limitation of other remedies, cancel the policy for non-payment of premium.

Brown & Riding assumes no legal obligation as to the insurance applicant, insured, or known or unknown third parties regarding the suitability, adequacy, or appropriateness of limits, terms, conditions, exclusions, and other policy features. Producer shall be responsible for disclosing to Producer's customer all Brown & Riding broker fees, other fees, and charges disclosed by Brown & Riding to Producer.

Producer shall hold harmless Brown & Riding, and Brown & Riding shall hold harmless Producer, from any and all of the respective negligent or wrongful acts, omissions, or conduct that result in a financial or other obligation to the other.

In the event of a dispute between Brown & Riding and Producer, the prevailing party shall be entitled to recover its attorneys' fees, costs, and related litigation expenses in addition to any other recovery.

While we do encourage policyholders to submit all claim notices directly, Brown & Riding remains happy to assist throughout the reporting and adjustment process. Please feel free to contact us at claimdesk@brcins.com with any claim-related questions, requests, or concerns.

The responsibility for the accuracy of the information set forth in any certificate of insurance is the sole responsibility of the person or entity which issues the certificate. Although Brown & Riding may retain copies of certificates of insurance forwarded to us, Brown & Riding does so strictly without prejudice as to their accuracy. Neither the insurers, their representatives, nor Brown & Riding will be responsible for any liability resulting from your issuance any certificate of



insurance. We also draw your attention to the fact that unless the policy is physically endorsed, the issuance of a certificate does not amend, extend, or alter the coverage afforded by the policy or change the person(s) or entities to whom such coverage is afforded under the policy.

Moreover, neither the underwriters, their representatives, nor Brown & Riding will be responsible for any liability resulting from the issuance of any unauthorized endorsement or the issuance of an endorsement which has been authorized by the insurers but where the authorized wording has been amended or revised in any way, without the prior written approval of the insurers.

By binding this coverage, the Retailer confirms that the prospective insured has (1) been advised of the right to receive policy documents in paper format; and (2) has consented to receive all such documents electronically.

Regards,

Jeff Langfeldt

LIMIT CHANGE ENDORSEMENT

ATTACHING TO POLICY
NUMBER: PSI0011061377

THE INSURED: Leeway Engineering Solutions LLC

WITH EFFECT FROM: 04 Feb 2020

It is understood and agreed that the following amendments are made to this Policy:

The Limits of Liability stated in the Declarations are deleted in their entirety and replaced by the following:

INSURING CLAUSE 1: PROFESSIONAL LIABILITY

ALL SECTIONS COMBINED

Aggregate limit of liability: USD2,000,000 including **costs and expenses**

SECTION A: ERRORS AND OMISSIONS

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

SECTION B: BREACH OF CONTRACT

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

SECTION C: SUB-CONTRACTOR VICARIOUS LIABILITY

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

SECTION D: CONTINGENT BODILY INJURY AND PROPERTY DAMAGE LIABILITY

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

SECTION E: INTELLECTUAL PROPERTY RIGHTS INFRINGEMENT

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

SECTION F: POLLUTION LIABILITY

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

SECTION G: REGULATORY COSTS AND FINES

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

SECTION H: DISHONESTY OF EMPLOYEES

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

SECTION I: PAYMENT OF WITHHELD FEES

Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**

Deductible: USD5,000 each and every claim, including **costs and expenses**

INSURING CLAUSE 2: CYBER EVENT COSTS

NO COVER GIVEN

INSURING CLAUSE 3: COMMERCIAL GENERAL LIABILITY**ALL SECTIONS COMBINED**Aggregate limit of liability: USD2,000,000 including **costs and expenses****SECTION A: BODILY INJURY AND PROPERTY DAMAGE LIABILITY**Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**Deductible: USD1,000 each and every claim, including **costs and expenses****SECTION B: PERSONAL AND ADVERTISING INJURY**Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**Deductible: USD1,000 each and every claim, including **costs and expenses****SECTION C: PRODUCTS AND COMPLETED OPERATIONS LIABILITY**Aggregate limit of liability: USD1,000,000 including **costs and expenses**Deductible: USD1,000 each and every claim, including **costs and expenses****SECTION D: TENANTS' LEGAL LIABILITY**Aggregate limit of liability: USD250,000 including **costs and expenses**Deductible: USD1,000 each and every claim, including **costs and expenses****SECTION E: MEDICAL EXPENSES**

Limit of liability: USD5,000 each and every claim

Deductible: USD0 each and every claim

SECTION F: EMPLOYEE BENEFITS LIABILITYAggregate limit of liability: USD1,000,000 including **costs and expenses**Deductible: USD1,000 each and every claim, including **costs and expenses****SECTION G: NON-OWNED AND HIRED AUTOMOBILE LIABILITY**Limit of liability: USD1,000,000 each and every claim, including **costs and expenses**Deductible: USD2,500 each and every claim, including **costs and expenses****SECTION H: LIABILITY FOR DAMAGE TO HIRED OR LEASED AUTOMOBILES**Limit of liability: USD50,000 each and every claim, including **costs and expenses**Deductible: USD2,500 each and every claim, including **costs and expenses****INSURING CLAUSE 4: COMMERCIAL PROPERTY**

NO COVER GIVEN

INSURING CLAUSE 5: BUSINESS INTERRUPTION

NO COVER GIVEN

INSURING CLAUSE 6: LOSS MITIGATION

Limit of liability: USD1,000,000 each and every claim

Deductible: USD0 each and every claim

INSURING CLAUSE 7: COURT ATTENDANCE COSTS

Aggregate limit of liability: USD100,000 sub-limited to USD2,000 per day

Deductible: USD0 each and every claim

INSURING CLAUSE 8: REPUTATION AND BRAND PROTECTION

Aggregate limit of liability: USD100,000

Deductible: USD0 each and every claim

In consideration of this Endorsement an additional premium of USD292.00 is due from **you**.**SUBJECT OTHERWISE TO THE TERMS AND CONDITIONS OF THE POLICY**

Authorised Signatory



CFC Underwriting Ltd

Authorised Signatory



CFC Underwriting Ltd

Premium	\$292.00
Company Fee	
Broker Fee	
Inspection Fee	
State Tax	\$5.84
Fire Marshal Tax	\$0.88
Total	\$298.72



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

11/18/2019

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Hall & Company 19660 10th Ave NE Poulsbo WA 98370	CONTACT NAME: Melissa Canestro PHONE (A/C, No, Ext): 360-626-2008 FAX (A/C, No): 360-626-2008	
	E-MAIL ADDRESS: mcanestro@hallandcompany.com	
INSURED Strongwork Architecture LLC 8301 SE 13th Avenue, Office E Portland OR 97202	INSURER(S) AFFORDING COVERAGE	
	INSURER A: The Charter Oak Fire Insurance Company	NAIC # 25615
	INSURER B: LIBERTY INSURANCE UNDERWRITERS	19917
	INSURER C: Travelers Property Casualty Company of America	25674
	INSURER D: KINSALE INSURANCE COMPANY	38920
	INSURER E: INSURER F:	

COVERAGES

CERTIFICATE NUMBER: 2070236004

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input checked="" type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:			6808K114861	11/16/2019	11/16/2020	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$1,000,000 MED EXP (Any one person) \$5,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000 \$
A	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			6808K114861	11/16/2019	11/16/2020	COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB <input type="checkbox"/> OCCUR EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE DED RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	UB3N872866	3/20/2019	3/20/2020	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE - EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000
B D	Professional Liab: Claims Made Excess Professional Liability			AEXNYABP03Y001 01001010200	11/16/2018 11/11/2019	11/16/2020 11/16/2020	\$2,000,000 Per Claim \$2,000,000 Aggrega \$1,000,000 Per Claim \$1,000,000 Aggrega

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

The certificate holder is an additional insured per the attached.

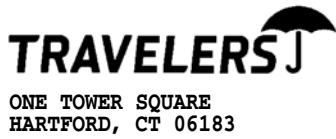
CERTIFICATE HOLDER**CANCELLATION**
 Portland Water Bureau
 Portland, OR

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Cari Cobb

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**WORKERS COMPENSATION
AND
EMPLOYERS LIABILITY POLICY
ENDORSEMENT WC 00 03 13 (00)-01**

POLICY NUMBER: UB3N872866

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit any one not named in the Schedule.

SCHEDULE

DESIGNATED PERSON:

DESIGNATED ORGANIZATION:

**ANY PERSON OR ORGANIZATION FOR WHICH THE INSURED HAS AGREED
BY WRITTEN CONTRACT EXECUTED PRIOR TO LOSS TO FURNISH THIS
WAIVER.**

DATE OF ISSUE: 03/20/2019

ST ASSIGN:

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

BLANKET ADDITIONAL INSURED (ARCHITECTS, ENGINEERS AND SURVEYORS)

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

1. The following is added to SECTION II – WHO IS AN INSURED:

Any person or organization that you agree in a "written contract requiring insurance" to include as an additional insured on this Coverage Part, but:

- a. Only with respect to liability for "bodily injury", "property damage" or "personal injury"; and
- b. If, and only to the extent that, the injury or damage is caused by acts or omissions of you or your subcontractor in the performance of "your work" to which the "written contract requiring insurance" applies, or in connection with premises owned by or rented to you.

The person or organization does not qualify as an additional insured:

- c. With respect to the independent acts or omissions of such person or organization; or
- d. For "bodily injury", "property damage" or "personal injury" for which such person or organization has assumed liability in a contract or agreement.

The insurance provided to such additional insured is limited as follows:

- e. This insurance does not apply on any basis to any person or organization for which coverage as an additional insured specifically is added by another endorsement to this Coverage Part.
- f. This insurance does not apply to the rendering of or failure to render any "professional services".
- g. In the event that the Limits of Insurance of the Coverage Part shown in the Declarations exceed the limits of liability required by the "written contract requiring insurance", the insurance provided to the additional insured shall be limited to the limits of liability required by that "written contract requiring insurance". This endorsement does not increase the limits of insurance described in Section III – Limits Of Insurance.

- h. This insurance does not apply to "bodily injury" or "property damage" caused by "your work" and included in the "products-completed operations hazard" unless the "written contract requiring insurance" specifically requires you to provide such coverage for that additional insured, and then the insurance provided to the additional insured applies only to such "bodily injury" or "property damage" that occurs before the end of the period of time for which the "written contract requiring insurance" requires you to provide such coverage or the end of the policy period, whichever is earlier.

2. The following is added to Paragraph 4.a. of SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS:

The insurance provided to the additional insured is excess over any valid and collectible other insurance, whether primary, excess, contingent or on any other basis, that is available to the additional insured for a loss we cover. However, if you specifically agree in the "written contract requiring insurance" that this insurance provided to the additional insured under this Coverage Part must apply on a primary basis or a primary and non-contributory basis, this insurance is primary to other insurance available to the additional insured which covers that person or organizations as a named insured for such loss, and we will not share with the other insurance, provided that:

- (1) The "bodily injury" or "property damage" for which coverage is sought occurs; and
- (2) The "personal injury" for which coverage is sought arises out of an offense committed;

after you have signed that "written contract requiring insurance". But this insurance provided to the additional insured still is excess over valid and collectible other insurance, whether primary, excess, contingent or on any other basis, that is available to the additional insured when that person or organization is an additional insured under any other insurance.

COMMERCIAL GENERAL LIABILITY

3. The following is added to Paragraph 8., Transfer Of Rights Of Recovery Against Others To Us, of SECTION IV – COMMERCIAL GENERAL LIABILITY CONDITIONS:

We waive any right of recovery we may have against any person or organization because of payments we make for "bodily injury", "property damage" or "personal injury" arising out of "your work" performed by you, or on your behalf, done under a "written contract requiring insurance" with that person or organization. We waive this right only where you have agreed to do so as part of the "written contract requiring insurance" with such person or organization signed by you before, and in effect when, the "bodily injury" or "property damage" occurs, or the "personal injury" offense is committed.

4. The following definition is added to the DEFINITIONS Section:

"Written contract requiring insurance" means that part of any written contract under which you are required to include a person or organization as an additional insured on this Coverage Part, provided that the "bodily injury" and "property damage" occurs and the "personal injury" is caused by an offense committed:

- a. After you have signed that written contract;
- b. While that part of the written contract is in effect; and
- c. Before the end of the policy period.



WEST YOST



ASSOCIATES

Exhibit E

Engineer's Schedule of Rates and Charges



August 7, 2020

SENT VIA: EMAIL

Mr. Greg Springman
Public Works Director
City of Sweet Home
1400 24th Avenue
Sweet Home, OR 97386

**SUBJECT: Team Rates Submittal and Contract Comments for the
City Engineer of Record Contract**

Dear Mr. Springman:

It is an honor for our team to be selected to serve as the City of Sweet Home's City Engineer of Record. We look forward to supporting you, your team and your community in the years to come on the many exciting and challenging projects you are tackling.

West Yost's current 2020 standard rates are included in Attachment A. We are committed to working with the City to deliver the highest quality engineering services with an eye on keeping our services cost efficient. In support of this goal, we propose the following reduced rates for key West Yost staff who will be most actively involved in leading individual task orders:

Preston Van Meter (City Engineer and Treatment Lead): \$227/hour

Corie Moolenkamp (Infrastructure Lead): \$227/hour

In addition, our standard rate schedule has been modified to reduce the Subconsultant markup from 10% to 5%, reduce the mark-up on other direct costs from 15% to 5% and to reconcile the finance charge for past due invoices.

Also included in Attachment A are current rate schedules for our sub-consultants from Civil West, Leeway Engineering Solutions, Udell Engineering, TAG, and Strongwork Architecture.

Greg Springman

August 7, 2020

Page 2

Proposed hourly rates for Galardi-Rothstein (Deb Galardi) and Waterdude Solutions (Mark Walter) are summarized below:

Galardi-Rothstein

Deb Galardi current hourly billing rate:	\$185/hour
Mileage:	current federal rate

Waterdude Solutions

Mark Walter current hourly billing rate:	\$154/hour
Mileage:	included in billing rate

Lastly, West Yost has reviewed the City's standard contract and included requested changes for the City's consideration in Microsoft Word format with changes tracked as Attachment B. This file will also be forwarded electronically.

On behalf of West Yost and our team, we look forward to completing the contract negotiations and getting started on delivering the important projects you have coming up in your community.

Sincerely,

WEST YOST ASSOCIATES



Preston Van Meter, PE
Principal Engineer
RCE #51615

cc: Bob Ward, West Yost Principal-in-Charge

Attachment A: West Yost and Team Current Billing Rate Schedules

Attachment B: Proposed changes to City Contract Form in MS Word format

Attachment A

West Yost and Team Current Billing Rate Schedules

2020 Billing Rate Schedule (Sweet Home)

(Effective January 1, 2020 through December 31, 2020)*



POSITIONS	LABOR CHARGES (DOLLARS PER HOUR)
ENGINEERING	
Principal/Vice President	\$281
Engineering/Scientist/Geologist Manager I / II	\$267 / \$279
Principal Engineer/Scientist/Geologist I / II	\$242 / \$257
Senior Engineer/Scientist/Geologist I / II	\$217 / \$227
Associate Engineer/Scientist/Geologist I / II	\$187 / \$200
Engineer/Scientist/Geologist I / II	\$151 / \$175
Engineering Aide	\$86
Administrative I / II / III / IV	\$76 / \$96 / \$116 / \$128
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	\$275 / \$277
Principal Tech Specialist I / II	\$252 / \$263
Senior Tech Specialist I / II	\$231 / \$242
Senior GIS Analyst	\$211
GIS Analyst	\$199
Technical Specialist I / II / III / IV	\$147 / \$168 / \$189 / \$210
Technical Analyst I / II	\$106 / \$126
Technical Analyst Intern	\$85
Cross-Connection Control Specialist I / II / III / IV	\$110 / \$120 / \$135 / \$150
CAD Manager	\$168
CAD Designer I / II	\$130 / \$146
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	\$272
Construction Manager I / II / III / IV	\$164 / \$176 / \$187 / \$237
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$144 / \$160 / \$178 / \$185
Apprentice Inspector	\$130
CM Administrative I / II	\$70 / \$94
Field Services	\$185

- Technology and Communication charges including general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses will be billed at 6% of West Yost labor.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 5%.
- Mileage will be billed at the current Federal Rate and Travel will be billed at cost.
- Subconsultants will be billed at actual cost plus 5%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.0% per month (an Annual Rate of 12%) on the unpaid balance may be added to invoice amounts if not paid within 30 days from the date of the invoice.

2020 Billing Rate Schedule

(Effective January 1, 2020 through December 31, 2020)*

Equipment Charges



EQUIPMENT	BILLING RATES
Gas Detector	\$80 / day
Hydrant Pressure Gauge	\$10 / day
Hydrant Pressure Recorder, Standard	\$40 / day
Hydrant Pressure Recorder, Impulse (Transient)	\$55 / day
Trimble GPS – Geo 7x	\$220 / day
Vehicle	\$10 / day
Water Flow Probe Meter	\$20 / day
Water Quality Multimeter	\$185 / day
Well Sounder	\$30 / day



Civil West Engineering Services, Inc. - 2020 Rate Schedule	
STAFF/ITEM	BILLING RATE
ENGINEERING	
Principal Engineer	\$165
Project Manager	\$150
Senior Project Engineer	\$145
Project Engineer	\$134
Engineering Technician	\$114
Staff Engineer	\$84
Inspector 1	TBD
Inspector 2	\$134
Inspector 3	\$114
Engineering Intern	\$50
Clerical	\$52
Surveying	
Senior Surveyor (PLS)	\$150
Senior Survey Technician	\$120
Survey Technician	\$103
1-person Survey Crew	\$160
2-person Survey Crew	\$188
3-person Survey Crew	\$225
REIMBURSABLES	
Mileage - or current IRS Rate	\$0.575
Lodging, meals as required for travel	Cost
Reproduction, Printing, Etc.	Cost plus 10%
Subconsultants	Cost plus 10%
* Scoped Support Services Approved Travel Budgets Will be Developed and Approved by City Using Standard Billing Rates.	



Leeway Engineering Solutions, LLC 2020 Schedule of Charges*	
Labor Classification	Hourly Billing Rate
Principal	\$210.00
Project Manager / Senior Engineer	\$170.00
Project Engineer	\$147.00
Staff Engineer	\$115.00
Drafter	\$102.00
Administrative	\$78.00

**Rates effective 1/1/20 to 12/31/20*



Udell Engineering & Land Surveying, LLC



63 East Ash Street, Lebanon, OR 97355
Ph: 541-451-5125 • Fax: 541-451-1366

EXHIBIT A

2020 Fee Schedule

Any services performed outside the listed scope within the service agreement will be charged in addition based on the following hourly and unit rates as listed below:

Hourly Rates:

Principal Engineer:	\$ 124.00
Project Engineer:	\$ 98.00
Survey Manager:	\$ 93.00
CADD Technician:	\$ 67.00
Engineering Design Technician	\$ 77.00
Survey Technician:	\$ 69.00
1 Man Survey Crew:	\$ 82.00
2 Man Survey Crew:	\$ 132.00
2 Man Survey Crew (prevailing wage rates):	\$ 198.00
Office Staff	\$ 52.00

Reimbursable Unit Rates:

Mileage (per mile):	\$ 0.58
Copies (per sheet):	
22 x 34	\$ 1.75
11 x 17	\$ 0.60
8.5 x 11	\$ 0.15
Mylars	\$ 18.00

2020 TAG Rates

• <u>Programming – HMI/OIT:</u>	<u>\$137.50</u>
• <u>Instrument Calibration:</u>	<u>\$137.50</u>
• <u>Engineering-Design:</u>	<u>\$150.00</u>
• <u>Panel Shop Labor:</u>	<u>\$ 71.50</u>
• <u>Electrical:</u>	<u>\$ 95.00</u>
• <u>Mechanical:</u>	<u>\$110.00</u>
• <u>Fab Shop Labor:</u>	<u>\$ 93.50</u>
• <u>Admin/Purchasing:</u>	<u>\$ 71.50</u>

- **Straight Time:** 8:00am to 4:30 pm, Monday thru Friday. Swing or Graveyard work can be prearranged at straight time rates if required for customer.
- **Over Time:** After 4:30pm (or after 8 hours) Weekdays and all day Saturdays & Sundays. (Time & ½ x straight time rates.)
- **Double Time:** Holidays (2 x straight time rate.)

TAG Charges hourly service rate from Portal to Portal

Services are rendered in half-hour increments only with a 2 hour minimum billing charge, unless otherwise noted or arranged.

- **Expenses:** *Expenses of transportation (ie...airline tickets, rental cars, taxis) will be billed at cost plus 10% processing fees.*
- **Standard Per Diem Rates:** **\$150/per night lodging and \$50/per day for meals.**

Standard Fuel/Mileage Rates:

- Round Trip from TAG office up to 50 Miles = \$30.00
- Round Trip from TAG office up to 100 miles = \$60.00
- Round Trip from Tag Office *Over 100 miles at \$0.59 per Mile