CLACKAMAS WATER ENVIRONMENT SERVICES

Gregory L. Geist
Director

January 26, 2021

Board of County Commissioners
Clackamas County

Members of the Board:

Approval of a Contract #3690 with Stantec Consulting Services, Inc. for the
Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Design

Purpose/Outcomes	Execution of Contract #3690 between Stantec Consulting Services Inc. and Water Environment Services for engineering design services for the Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Project.
Dollar Amount and Fiscal Impact	The contract amount is not to exceed $289,975.00.
Funding Source	WES Funds: 639-01-20100-481020-P632305
Duration	August 31, 2022
Previous Board Action/Review	Prior discussions related to budget and Capital Improvements Plan.
Counsel Review	This contract was reviewed and approved by County Counsel on [insert date].
Strategic Plan Alignment	1. This project supports the County's Strategic Plan of building a strong infrastructure that delivers services to customers and honors, utilizes, promotes and invests in our natural resources. 2. This project supports the WES Strategic Plan goal to provide properly functioning infrastructure that supports healthy streams and reduces flooding.
Contact Person	Steven Rice, (971-284-3710)
Contract No.	*#3690*

BACKGROUND:
WES is seeking engineering services for design of the Kellogg Creek Water Resource Recovery Facility (KC WRRF) Influent Pump 2 and 4 Replacement project. The KC WRRF was constructed as a conventional secondary treatment facility in 1976. The facility recently underwent an improvements project that included, in part, replacement of Influent Pumps 1 and 3, which serve as low flow pumps. Influent Pump 2 (originally constructed in 1976) and Influent Pump 4 (added to the pump station in 1996) serve as high flow pumps during periods of wet weather flow. The pumps have exceeded their expected operating life and are due for scheduled replacement.

The engineering services include hydraulic modeling to confirm pump selection and to identify any necessary wetwell or piping modifications to enable pump performance. Recommended structural or mechanical modifications will be included in the development of bid documents along with the replacement of the influent pumps. Anticipated services also include support during the bidding phase. Additional services, such as construction administration, inspection, or start-up support may be added by future amendment.

This project was advertised in accordance with ORS and LCRB Rules on October 1, 2020. Proposals were opened on October 28, 2020. The District received two (2) proposals: Stantec Consulting Services, Inc. and Evergreen Engineering. The Evaluation Committee selected Stantec Consulting Services, Inc. as the highest ranking proposer recommended a contract be awarded. Following award, the Project Manager entered into negotiations with Stantec Consulting Services, Inc. and developed a final statement of work, along with final billing rates and contract value.

RECOMMENDATION:
Staff recommends that the Board of County Commissioners of Clackamas County, acting as the governing body of Water Environment Services, approve and execute the Contract between Water Environment Services and Stantec Consulting Services, Inc. for the KC WRRF Influent Pump 2 and 4 Replacement Project.

Respectfully submitted,

Greg Geist
Director, WES

Placed on the _____ Agenda by the Procurement Division.

WATER ENVIRONMENT SERVICES
PERSONAL SERVICES CONTRACT
Contract #3690

This Personal Services Contract (this "Contract") is entered into between **Stantec Consulting Services Inc.,** ("Contractor"), and Water Environment Services, a political subdivision of the State of Oregon ("District").

ARTICLE I.

1. **Effective Date and Duration.** This Contract shall become effective upon signature of both parties. Unless earlier terminated or extended, this Contract shall expire on **August 31, 2022**.

2. **Scope of Work.** Contractor shall provide the following personal services: **RFP# 2020-84 Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Design** ("Work"), further described in **Exhibit A.**

3. **Consideration.** The District agrees to pay Contractor, from available and authorized funds, a sum not to exceed **Two Hundred Eighty Nine Thousand and Nine Hundred Seventy- Five Dollars ($289,975.00)**, for accomplishing the Work required by this Contract. Consideration rates are on a time and materials basis in accordance with the rates and costs specified in Exhibit A. If any interim payments to Contractor are made, such payments shall be made only in accordance with the schedule and requirements in Exhibit A.

4. **Invoices and Payments.** Unless otherwise specified, Contractor shall submit monthly invoices for Work performed. Invoices shall describe all Work performed with particularity, by whom it was performed, and shall itemize and explain all expenses for which reimbursement is claimed. The invoices shall include the total amount billed to date by Contractor prior to the current invoice. If Contractor fails to present invoices in proper form within sixty (60) calendar days after the end of the month in which the services were rendered, Contractor waives any rights to present such invoice thereafter and to receive payment therefor. Payments shall be made in accordance with ORS 293.462 to Contractor following the District's review and approval of invoices submitted by Contractor. Contractor shall not submit invoices for, and the District will not be obligated to pay, any amount in excess of the maximum compensation amount set forth above. If this maximum compensation amount is increased by amendment of this Contract, the amendment must be fully effective before Contractor performs Work subject to the amendment.

   Invoices shall reference the above Contract Number and be submitted to: Steve Rice at SRice@clackamas.us

5. **Travel and Other Expense.** Authorized: ☐ Yes ☒ No
   If travel expense reimbursement is authorized in this Contract, such expense shall only be reimbursed at the rates in the Clackamas County Contractor Travel Reimbursement Policy, hereby incorporated by reference and found at: https://www.clackamas.us/finance/terms.html. Travel expense reimbursement is not in excess of the not to exceed consideration.

6. **Contract Documents.** This Contract consists of the following documents, which are listed in descending order of precedence and are attached and incorporated by reference, this Contract, Exhibit A, Exhibit B, and Exhibit C.

7. Contractor and District Contacts.

Contractor	District
Administrator: Heather Stephens, PE Phone: 503-220-5437 Email: heather.stephens@stantec.com	Administrator: Steve Rice Phone: 503-742-4605 Email: SRice@clackamas.us

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

ARTICLE II.

1. **ACCESS TO RECORDS.** Contractor shall maintain books, records, documents, and other evidence, in accordance with generally accepted accounting procedures and practices, sufficient to reflect properly all costs of whatever nature claimed to have been incurred and anticipated to be incurred in the performance of this Contract. District and their duly authorized representatives shall have access to the books, documents, papers, and records of Contractor, which are directly pertinent to this Contract for the purpose of making audit, examination, excerpts, and transcripts. Contractor shall maintain such books and records for a minimum of six (6) years, or such longer period as may be required by applicable law, following final payment and termination of this Contract, or until the conclusion of any audit, controversy or litigation arising out of or related to this Contract, whichever date is later.

2. **AVAILABILITY OF FUTURE FUNDS.** Any continuation or extension of this Contract after the end of the fiscal period in which it is written is contingent on a new appropriation for each succeeding fiscal period sufficient to continue to make payments under this Contract, as determined by the District in its sole administrative discretion.

3. **CAPTIONS.** The captions or headings in this Contract are for convenience only and in no way define, limit, or describe the scope or intent of any provisions of this Contract.

4. **COMPLIANCE WITH APPLICABLE LAW.** Contractor shall comply with all applicable federal, state and local laws, regulations, executive orders, and ordinances, as such may be amended from time to time.

5. **COUNTERPARTS.** This Contract may be executed in several counterparts (electronic or otherwise), each of which shall be an original, all of which shall constitute the same instrument.

6. **GOVERNING LAW.** This Contract, and all rights, obligations, and disputes arising out of it, shall be governed and construed in accordance with the laws of the State of Oregon and the ordinances of Clackamas County without regard to principles of conflicts of law. Any claim, action, or suit between District and Contractor that arises out of or relates to the performance of this Contract shall be brought and conducted solely and exclusively within the Circuit Court for Clackamas County, for the State of Oregon. Provided, however, that if any such claim, action, or suit may be brought in a federal forum, it shall be brought and conducted solely and exclusively within the United States District Court for the District of Oregon. In no event shall this section be construed as a waiver by the District of any form of defense or immunity, whether sovereign immunity, governmental immunity, immunity based on the Eleventh Amendment to the Constitution of the United States or otherwise, from any claim or from the jurisdiction of any court. Contractor, by execution of this Contract, hereby consents to the personal jurisdiction of the courts referenced in this section.

7. **RESPONSIBILITY FOR DAMAGES; INDEMNITY.** Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay which may be caused by, or result from, the conduct of Work, or from any act, omission, or neglect of Contractor, its subcontractors, agents, or employees. The Contractor agrees to indemnify, hold harmless and defend Clackamas County and the District, and their officers, elected officials, agents and employees from and against all claims and actions, and all expenses incidental to the investigation and defense thereof, arising out of or based upon damage or injuries to persons or property caused by the errors, omissions, fault or negligence of the Contractor or the Contractor's employees, subcontractors, or agents. However, neither Contractor nor any attorney engaged by Contractor shall defend the claim in the name of District or any department of District, nor purport to act as legal representative of District or any of its departments, without first receiving from the Clackamas County Counsel's Office authority to act as legal counsel for District, nor shall Contractor settle any claim on behalf of District without the approval of the Clackamas County Counsel's Office. District may, at its election and expense, assume its own defense and settlement.

8. **INDEPENDENT CONTRACTOR STATUS.** The service(s) to be rendered under this Contract are those of an independent contractor. Although the District reserves the right to determine (and modify) the delivery schedule for the Work to be performed and to evaluate the quality of the completed performance, District cannot and will not control the means or manner of Contractor's performance. Contractor is responsible for determining the appropriate means and manner of performing the Work. Contractor is not to be considered an agent or employee of District for any purpose, including, but not limited to: (A) The Contractor will be solely responsible for payment of any Federal or State taxes required as a result of this Contract; and (B) This Contract is not intended to entitle the Contractor to any benefits generally granted to District employees, including, but not limited to, vacation, holiday and sick leave, other leaves with pay, tenure, medical and dental coverage, life and disability insurance, overtime, Social Security, Workers' Compensation, unemployment compensation, or retirement benefits.

9. **INSURANCE.** Contractor shall secure at its own expense and keep in effect during the term of the performance under this Contract the insurance required and minimum coverage indicated below. The insurance requirements outlined below do not in any anyway limit the amount of scope of liability of Contractor under this Contract. Contractor shall provide proof of said insurance and name the District and Clackamas County as an additional insureds on all required liability policies. Proof of insurance and notice of any material change should be submitted to the following address: Clackamas County Procurement Division, 2051 Kaen Road, Oregon City, OR 97045 or procurement@clackamas.us.

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

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

10. **LIMITATION OF LIABILITIES.** This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent. Except for liability arising under or related to Article II, Section 13 or Section 20 neither party shall be liable for (i) any indirect, incidental, consequential or special damages under this Contract or (ii) any damages of any sort arising solely from the termination of this Contact in accordance with its terms.

11. **NOTICES.** Except as otherwise provided in this Contract, any required notices between the parties shall be given in writing by personal delivery, email, or mailing the same, to the Contract Administrators identified in Article 1, Section 6. If notice is sent to District, a copy shall also be sent to: Clackamas County Procurement, 2051 Kaen Road, Oregon City, OR 97045, or procurement@clackamas.us. Any communication or notice so addressed and mailed shall be deemed to be given five (5) days after mailing, and immediately upon personal delivery, or within 2 hours after the email is sent during District's normal business hours (Monday – Thursday, 7:00 a.m. to 6:00 p.m.) (as recorded on the device from which the sender sent the email), unless the sender receives an automated message or other indication that the email has not been delivered.

12. **OWNERSHIP OF WORK PRODUCT.** All work product of Contractor that results from this Contract (the "Work Product") is the exclusive property of District. District and Contractor intend that such Work Product be deemed "work made for hire" of which District shall be deemed the author. If for any reason the Work Product is not deemed "work made for hire," Contractor hereby irrevocably assigns to District all of its right, title, and interest in and to any and all of the Work Product, whether arising from copyright, patent, trademark or trade secret, or any other state or federal intellectual property law or doctrine. Contractor shall execute such further documents and instruments as District may reasonably request in order to fully vest such rights in District. Contractor forever waives any and all rights relating to the Work Product, including without limitation, any and all rights arising under 17 USC § 106A or any other rights of identification of authorship or rights of approval, restriction or limitation on use or subsequent modifications. Notwithstanding the above, District shall have no rights in any pre-existing Contractor intellectual property provided to District by Contractor in the performance of this Contract except to copy, use and re-use any such Contractor intellectual property for District use only.

13. **REPRESENTATIONS AND WARRANTIES.** Contractor represents and warrants to District that (A) Contractor has the power and authority to enter into and perform this Contract; (B) this Contract, when executed and delivered, shall be a valid and binding obligation of Contractor enforceable in accordance with its terms; (C) Contractor shall at all times during the term of this Contract, be qualified, professionally competent, and duly licensed to perform the Work; (D) Contractor is an independent contractor as defined in ORS 670.600; and (E) the Work under this Contract shall be performed in the same professional skill, care, diligence and standards as other professionals performing similar services under similar conditions. The warranties set forth in this section are in addition to, and not in lieu of, any other warranties provided. The Contractor shall be responsible for the technical accuracy of its services and documents resulting therefrom, and District shall not be responsible for discovering deficiencies therein. The Contractor shall correct such deficiencies without additional compensation except to the extent such action is directly attributable to deficiencies in information furnished by the District.

14. **SURVIVAL.** All rights and obligations shall cease upon termination or expiration of this Contract, except for the rights and obligations set forth in Article II, Sections 1, 6, 7, 11, 13, 14, 16, 21 and 27, and all other rights and obligations which by their context are intended to survive. However, such expiration shall not extinguish or prejudice the District's right to enforce this Contract with respect to: (a) any breach of a Contractor warranty; or (b) any default or defect in Contractor performance that has not been cured.

15. **SEVERABILITY.** If any term or provision of this Contract is declared by a court of competent jurisdiction to be illegal or in conflict with any law, the validity of the remaining terms and provisions shall not be affected, and the rights and obligations of the parties shall be construed and enforced as if the Contract did not contain the particular term or provision held to be invalid.

16. **SUBCONTRACTS AND ASSIGNMENTS.** Contractor shall not enter into any subcontracts for any of the Work required by this Contract, or assign or transfer any of its interest in this Contract by operation of law or otherwise, without obtaining prior written approval from the District, which shall be granted or denied in the District's sole discretion. In addition to any provisions the District may require, Contractor shall include in any permitted subcontract under this Contract a requirement that the subcontractor be bound by this Article II, Sections 1, 7, 8, 13, 16, and 27 as if the subcontractor were the Contractor. District's consent to any subcontract shall not relieve Contractor of any of its duties or obligations under this Contract.

17. **SUCCESSORS IN INTEREST.** The provisions of this Contract shall be binding upon and shall inure to the benefit of the parties hereto, and their respective authorized successors and assigns.

18. **TAX COMPLIANCE CERTIFICATION.** The Contractor shall comply with all federal, state and local laws, regulation, executive orders and ordinances applicable to this Contract. Contractor represents and warrants that it has complied, and will continue to comply throughout the duration of this Contract and any extensions, with all tax laws of this state or any political subdivision of this state, including but not limited to ORS 305.620 and ORS chapters 316, 317, and 318. Any violation of this section shall constitute a material breach of this Contract and shall entitle District to terminate this Contract, to pursue and recover any and all damages that arise from the breach and the termination of this Contract, and to pursue any or all of the remedies available under this Contract or applicable law.

19. **TERMINATIONS.** This Contract may be terminated for the following reasons: (A) by mutual agreement of the parties or by the District (i) for convenience upon thirty (30) days written notice to Contractor, or (ii) at any time the District fails to receive funding, appropriations, or other expenditure authority as solely determined by the District; or (B) if contractor breaches any Contract provision or is declared insolvent, District may terminate after thirty (30) days written notice with an opportunity to cure.

    Upon receipt of written notice of termination from the District, Contractor shall immediately stop performance of the Work. Upon termination of this Contract, Contractor shall deliver to District all documents, Work Product, information, works-in-progress and other property that are or would be deliverables had the Contract Work been completed. Upon District's request, Contractor shall surrender to anyone District designates, all documents, research, objects or other tangible things needed to complete the Work

20. **REMEDIES.** If terminated by the District due to a breach by the Contractor, then the District shall have any remedy available to it in law or equity. If this Contract is terminated for any other reason, Contractor's sole remedy is payment for the goods and services delivered and accepted by the District, less any setoff to which the District is entitled.

21. **NO THIRD PARTY BENEFICIARIES.** District and Contractor are the only parties to this Contract and are the only parties entitled to enforce its terms. Nothing in this Contract gives, is intended to give, or shall be construed to give or provide any benefit or right, whether directly, indirectly or otherwise, to third persons unless such third persons are individually identified by name herein and expressly described as intended beneficiaries of the terms of this Contract.

22. **TIME IS OF THE ESSENCE.** Contractor agrees that time is of the essence in the performance this Contract.

23. **FOREIGN CONTRACTOR.** If the Contractor is not domiciled in or registered to do business in the State of Oregon, Contractor shall promptly provide to the Oregon Department of Revenue and the Secretary of State, Corporate Division, all information required by those agencies relative to this Contract. The Contractor shall demonstrate its legal capacity to perform these services in the State of Oregon prior to entering into this Contract.

24. **FORCE MAJEURE.** Neither District nor Contractor shall be held responsible for delay or default caused by events outside the District or Contractor's reasonable control including, but not limited to, fire, terrorism, riot, acts of God, or war. However, Contractor shall make all reasonable efforts to remove or eliminate such a cause of delay or default and shall upon the cessation of the cause, diligently pursue performance of its obligations under this Contract.

25. **WAIVER.** The failure of District to enforce any provision of this Contract shall not constitute a waiver by District of that or any other provision.

26. **PUBLIC CONTRACTING REQUIREMENTS.** Pursuant to the public contracting requirements contained in Oregon Revised Statutes ("ORS") Chapter 279B.220 through 279B.235, Contractor shall:
    a. Make payments promptly, as due, to all persons supplying to Contractor labor or materials for the prosecution of the work provided for in the Contract.
    b. Pay all contributions or amounts due the Industrial Accident Fund from such Contractor or subcontractor incurred in the performance of the Contract.
    c. Not permit any lien or claim to be filed or prosecuted against District on account of any labor or material furnished.
    d. Pay the Department of Revenue all sums withheld from employees pursuant to ORS 316.167.
    e. As applicable, the Contractor shall pay employees for work in accordance with ORS 279B.235, which is incorporated herein by this reference. The Contractor shall comply with the prohibitions set forth in ORS 652.220, compliance of which is a material element of this Contract, and failure to comply is a breach entitling District to terminate this Contract for cause.
    f. If the Work involves lawn and landscape maintenance, Contractor shall salvage, recycle, compost, or mulch yard waste material at an approved site, if feasible and cost effective.

27. **NO ATTORNEY FEES**. In the event any arbitration, action or proceeding, including any bankruptcy proceeding, is instituted to enforce any term of this Contract, each party shall be responsible for its own attorneys' fees and expenses.

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

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

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

Stantec Consulting Services Inc.	Clackamas County
_____	_____
Authorized Signature Date	Chair Date
_____	_____
Name / Title (Printed)	Recording Secretary
644410-91	Approved as to Form:
Oregon Business Registry #	
FBC/New York	_____
Entity Type / State of Formation	County Counsel Date

EXHIBIT A
RFP# 2020-84
Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Design
Issued October 1, 2020

REQUEST FOR PROPOSALS #2020-84

FOR

Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Design

BOARD OF COUNTY COMMISSIONERS
JIM BERNARD, Chair
SONYA FISCHER, Commissioner
KEN HUMBERSTON, Commissioner
PAUL SAVAS, Commissioner
MARTHA SCHRADER, Commissioner

Gary Schmidt
County Administrator

George Marlton
County Procurement Officer

George Marlton
Analyst

PROPOSAL CLOSING DATE, TIME AND LOCATION

DATE: **October 28, 2020**

TIME: **2:00 PM, Pacific Time**

PLACE: **Clackamas County Procurement Division**
Clackamas County Public Services Building
2051 Kaen Road, Oregon City, OR 97045

SCHEDULE

Request for Proposals Issued…….....October 1, 2020

Protest of Specifications Deadline.....October 8, 2020, 5:00 PM, Pacific Time

Deadline to Submit Clarifying Questions.....October 21, 2020, 5:00 PM, Pacific Time

Request for Proposals Closing Date and Time…….....October 28, 2020, 2:00 PM, Pacific Time

Deadline to Submit Protest of Award.....Seven (7) days from the Intent to Award

Anticipated Contract Start Date…….....November 2020

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SECTION 1
NOTICE OF REQUEST FOR PROPOSALS

Notice is hereby given that Water Environment Services ("WES") through its Board of County Commissioners will receive sealed Proposals per specifications until **2:00 PM, October 28, 2020** ("Closing"), to provide Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Design**.** No Proposals will be received or considered after that time.

The resulting contract from this RFP require the consultant to begin work in December 2020 with work set to continue through August 2022.

RFP Documents can be downloaded from ORPIN at the following address: http://orpin.oregon.gov/open.dll/welcome, Document No. C01010-2020-84-20. Prospective Proposers will need to sign in to download the information and that information will be accumulated for a Plan Holder's List. Prospective Proposers are responsible for obtaining any Addenda, clarifying questions, and Notices of Award from ORPIN. Sealed Proposals are to be sent to Clackamas County Procurement Services – Attention George Marlton, Chief Procurement Officer at 2051 Kaen Road, Oregon City, Oregon, 97045 or may be emailed to procurement@clackamas.us.

Contact Information
Procurement Process and Technical Questions: George Marlton, gmarlton@clackamas.us

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

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

SECTION 2
INSTRUCTIONS TO PROPOSERS

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

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

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

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

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

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

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

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

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

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

County will consider any protests received and:

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SECTION 3
SCOPE OF WORK

3.1. INTRODUCTION

Clackamas Water Environment Services (WES), referred to as "District", is seeking Proposals from consultants to provide engineering services for design, bidding, and construction for the Kellogg Creek Water Resource Recovery Facility ("KC WRRF") Influent Pump 2 and 4 Replacement project.

Proposers should demonstrate their firm's capabilities to successfully complete this project within the allowed budget and schedule. Selection will be made based on firm qualifications. An agreement will be developed with the selected firm.

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

3.2 BACKGROUND

Clackamas Water Environment Services, an intergovernmental partnership formed pursuant to ORS 190, owns and operates over 340 miles of conveyance infrastructure and five wastewater treatment facilities.

The KC WRRF was constructed as a conventional secondary treatment facility in 1976. The facility is currently undergoing an $18 million upgrade, which includes, in part, replacement of Influent Pumps 1 and 3, reclaiming the facility's hydraulic capacity of 25 MGD. Current ongoing work also includes an emergency replacement of the Pump 4 VFD. Conceptual design work for the selection of the VFD includes developing a preliminary pump specification for Pumps 2 and 4 to ensure compatibility with the replacement VFD. The preliminary pump specification will form the basis of pump selection and design for this project.

3.3. PROJECT SCOPE

3.3.1. Design Services

Elements of the consultant's design services will include:

a. **Project management and quality control** - Proposers should demonstrate ability to manage the project and provide information regarding processes and tools that will be used to ensure project completion on schedule and within budget. Quality control staff and procedures should be identified to ensure technically accurate and complete deliverables.
b. **Review of previous work -** Design will include review of the work to replace the Pump 4 VFD, including the draft Pump 2 and 4 specification. Proposers should demonstrate experience with Flygt N-Impeller pumps by Xylem, on which WES has standardized for raw sewage pumping.
c. **Hydraulic modeling** – Either computational fluid dynamics or physical modeling will be performed, if necessary to confirm pump selection and/or to identify any necessary wetwell or piping modifications to enable pump performance. Firms should describe their experience with hydraulic modeling and examples of its use to form the basis of pump station design.
d. **Preliminary design** – Deliverable should include results of any hydraulic modeling, proposed pump design data, potential wetwell modifications, sub-discipline approaches, approximately 30% drawings, and cost estimate. The preliminary design deliverable should provide adequate information to provide confidence that the proposed approach will efficiently deliver the required capacity, at a level of detail to show the full intent of design. Proposers should describe their approach to developing a preliminary design deliverable.

e. **Final Design** - Draft deliverable that should be comprised of approximately 90% drawings, specifications, and an updated cost estimate. Proposers should describe their approach for developing the draft 90% bid documents, engaging with WES staff to elicit feedback, and addressing Owner review comments.
f. **Bid Documents** - Produce 100% bid documents and final construction cost estimate. Firms should demonstrate a history of bid document development that results in a responsive bids that provided ratepayer value both on bid day and through construction completion.

3.3.2. Services During Bidding and Construction

Services during bidding and construction may be added by future contract amendment. Anticipated tasks in this phase include:

a. **Bid period services** – including responses to technical questions during the bid period.
b. **Construction administration services –** may include responding to Requests for Information, and submittal review and response. Proposers should demonstrate experience with these services and provide evidence of a history of timely response to maintain contract requirements and construction schedules.
c. **Startup support services –** Proposers should describe approach to keep technical design staff engaged during construction and startup and demonstrate experience with successful startup that does not disrupt plant operation.

The following items are included and incorporated within this RFP:

1. Original Plant Record Drawings Kellogg Creek WRRF (CH2M Hill, 1976) – **Attachment #1**
2. Influent Pump Station Expansion Drawings (Brown and Caldwell, 1995) – **Attachment #2**
3. Kellogg Creek Influent Pump Station Rehabilitation Report (Brown and Caldwell, 2014) – **Attachment #3**
4. Kellogg Creek WRRF Improvements Project (Brown and Caldwell, 2018, selected drawings) – **Attachment #4**
    - Drawings are illustrative of pump station layout only. Ongoing modifications will result in alternative pump manufacturer and installation details.

Special Terms:
Max Multiplier: 3.15
Rate Cap: $230.00
Rates for senior technologists in advisory roles will be negotiated.

3.3.3. Term of Contract:

The term of the contract shall be from the effective date through **August 31, 2022.**

3.3.4 Sample Contract: Submission of a Proposal in response to this RFP indicates Proposer's willingness to enter into a contract containing substantially the same terms (including insurance requirements) of the sample contract identified below. No action or response to the sample contract is required under this RFP. Any objections to the sample contract terms should be raised in accordance with Paragraphs 2.2 or 2.3 of this RFP, pertaining to requests for clarification or change or protest of the RFP/specifications, and as otherwise provided for in this RFP. This RFP and all supplemental information in response to this RFP will be a binding part of the final contract.

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

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

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

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

The following insurance requirements will be applicable:
☒ Commercial General Liability: combined single limit, or the equivalent, of not less than $1,000,000 per occurrence, with an annual aggregate limit of $2,000,000 for Bodily Injury and Property Damage.
☒ Professional Liability: combined single limit, or the equivalent, of not less than $1,000,000 per occurrence, with an annual aggregate limit of $2,000,000 for damages caused by error, omission or negligent acts.
☒ Automobile Liability: combined single limit, or the equivalent, of not less than $500,000 per occurrence for Bodily Injury and Property Damage.
☐ Cyber Liability: combined single limit, or the equivalent, of not less than $1,000,000 per occurrence for network security (including data breach), privacy, interruption of business, media liability, and errors and omissions

SECTION 4
EVALUATION PROCEDURE

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

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

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

4.2 Evaluation Criteria

Category	**Points available:**
Firms Qualifications and Experience	0-30
Project Team	0-30
Project Understanding and Approach	0-40
Available points	**0-100**

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

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

SECTION 5
PROPOSAL CONTENTS

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

5.1.1. Complete Proposals may be mailed to the below address or emailed to Procurement@clackamas.us. The subject line of the email must identify the RFP title. Proposers are encouraged to contact Procurement to confirm receipt of the Proposal. If the Proposal is mailed, an original copy and an electronic copy (on compact disk or jump drive) must be included. The Proposal (hardcopy or email) must be received by the Closing Date and time indicated in Section 1 of the RFP.

5.1.2. Mailing address including Hand Delivery, UPS and FEDEX:

Clackamas County Procurement Division – Attention George Marlton, County Procurement Officer
Clackamas County Public Services Building
2051 Kaen Road
Oregon City, OR 97045

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

5.1.4. Proposals will be limited to 12 pages. To maintain the fairness and integrity of the selection process, it is important that SOQs conform to the requirements of these instructions. Use 8 ½ x 11 paper, printed double sided in a minimum of 12 pt. font, with one inch margins. All page counts are for double-sided paper. (Each sheet of paper is two pages; blank pages, cover letter, section separators and resumes do not count). Interviews are not anticipated to be a part of the selection process, but WES reserves the right to require interviews, if needed, to make a final selection.

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

5.2 Cover Letter:
The cover letter should identify the proposing entity, the contact for the procurement and contract negotiation process, and be signed by an authorized representative or official. The cover letter is limited to one page and is not included in the page count.

5.3 Firm Qualifications and Experience (30 Points):
Provide a brief history of the firm's, experience and capabilities. Highlight recent (within the last 10 years), relevant and local project experience. Particular emphasis on projects that demonstrate the qualifications and specialized experience of the staff who will work directly with WES is preferred.

Provide project descriptions including scope, type of facility, year completed, project size and location, and proposed team members who were involved and their roles. For all projects listed, provide name of the owner, owner's contact person with their phone number and email address. Contact information must be current and accurate to be considered.

Provide any other information applicable to the evaluation of the firm's qualifications for accomplishing the project.

5.5 Project Team (30 Points):

- Provide a staffing plan to demonstrate the structure and responsibilities of the proposed project team. Include a project organizational chart showing proposed staff.
- List the qualifications of the project team members, highlighting specific knowledge and experience that will be beneficial to this project. Identify the length of employment for key personnel with their respective firms, intended responsibilities on this project and primary office location.
- Include, as part of a staffing plan, examples of projects that members of the proposed team have successfully delivered together.

5.6 Project Understanding and Approach (40 Points):

Explain the approach your team would use to deliver a successful project. In the discussion for this section specifically address the following:

- Demonstrate familiarity with the KC WRRF and understanding of project drivers and goals.
- Demonstrate familiarity with pump selection and pump station design.
- Explain your approach to include WES staff and their review in the design process.
- Include a schedule that achieves WES goal to complete the design, construction, and startup of this project prior to August 2022.

5.7 Resumes

Provide resumes of key project team members highlighting relevant experience. Resumes will not be included in page count.

5.8 Completed Proposal Certification (see the below form)

PROPOSAL CERTIFICATION

Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Design

Submitted by: Stantec Consulting Services, Inc.

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

The undersigned, through the formal submittal of this Proposal response, declares that he/she has examined all related documents and read the instruction and conditions, and hereby proposes to provide the services as specified in accordance with the RFP, for the price set forth in the Proposal documents.

Proposer, by signature below, hereby represents as follows:

(a) That no County elected official, officer, agent or employee of the County is personally interested directly or indirectly in this contract or the compensation to be paid hereunder, and that no representation, statement or statements, oral or in writing, of the County, its elected officials, officers, agents, or employees had induced it to enter into this contract and the papers made a part hereof by its terms;

(b) The Proposer, and each person signing on behalf of any Proposer certifies, in the case of a joint Proposal, each party thereto, certifies as to its own organization, under penalty of perjury, that to the best of their knowledge and belief:

1. The prices in the Proposal have been arrived at independently, without collusion, consultation, communication, or agreement for the purpose of restraining competition as to any matter relating to such prices with any other Proposer or with any competitor;

2. Unless otherwise required by law, the prices which have been quoted in the Proposal have not been knowingly disclosed by the Proposer prior to the Proposal deadline, either directly or indirectly, to any other Proposer or competitor;

3. No attempt has been made nor will be made by the Proposer to induce any other person, partnership or corporation to submit or not to submit a Proposal for the purpose of restraining trade;

(c) The Proposer fully understands and submits its Proposal with the specific knowledge that:

1. The selected Proposal must be approved by the Board of Commissioners.

2. This offer to provide services will remain in effect at the prices proposed for a period of not less than ninety (90) calendar days from the date that Proposals are due, and that this offer may not be withdrawn or modified during that time.

(d) That this Proposal is made without connection with any person, firm or corporation making a bid for the same material, and is in all respects, fair and without collusion or fraud.

(e) That the Proposer shall use recyclable products to the maximum extent economically feasible in the performance of the contract work set forth in this document.

(f) That the Proposer accepts all terms and conditions contained in this RFP and that the RFP and the Proposal, and any modifications, will be made part of the contract documents. It is understood that all Proposals will become part of the public file on this matter. The County reserves the right to reject any or all Proposals.

(g) That the Proposer holds current licenses that businesses or services professionals operating in this state must hold in order to undertake or perform the work specified in these contract documents.

(h) That the Proposer is covered by liability insurance and other insurance in the amount(s) required by the solicitation and in addition that the Proposer qualifies as a carrier insured employer or a self-insured employer under ORS 656.407 or has elected coverage under ORS 656.128.

(i) That the Proposer is legally qualified to contract with the County.

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

(k) The Proposer agrees to accept as full payment for the services specified herein, the amount as shown in the Proposal.

☑ Resident Bidder, as defined in ORS 279A.120
☐ Non-Resident Proposer, Resident State_____
Oregon Business Registry Number 644410-91

Contractor's Authorized Representative:

Signature:		Date:	10/28/2020
Name:	Richard 'Dick' Talley	Title:	Vice President
Firm:	Stantec Consulting Services, Inc.		
Address:	601 SW 2nd Ave #1400		
City/State/Zip:	Portland, OR 97204	Phone:	503 226-7377
e-mail:	richard.talley@stantec.com	Fax:	

Contract Manager:

Name Heather Stephens, PE Title: Senior Principal

Phone number: 503-220-5437

Email Address: heather.stephens@stantec.com

EXHIBIT B
VENDOR'S RESPONSE/NEGOTIATED STATEMENT OF WORK

Stantec

WE'RE BETTER TOGETHER

CLACKAMAS COUNTY

Proposal for

KELLOGG CREEK WRRF INFLUENT PUMP 2&4 REPLACEMENT DESIGN

RFP#2020-84

OCT 28, 2020

Tab 1

Cover Letter

1. COVER LETTER

Stantec

Stantec Consulting Services, Inc.
601 SW 2nd Ave #1400,
Portland, OR 97204
503-226-7377

Oct 28, 2020

ATTENTION:

George Marlton, Chief Procurement Officer
procurement@clackamas.us

REFERENCE:

RFP for Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Design

Reliable performance of the Influent Pump Station at the Kellogg Creek WRRF is critical to protecting public health and maintaining stable operation of the plant. Recent improvements at the pump station will allow the facility to operate reliably during low flow conditions, and the current improvements will replace the remaining two larger pumps (Pump 2 and 4), and the remaining aging variable frequency drive (VFD) for Pump 2. The new non-clog influent pumping system will provide efficient, consistent operation meeting the District's expected level of service and minimizing unplanned or emergency maintenance needs.

We understand the District's needs and vision for this facility, propose a team with the experience, technical capabilities, continuity, and proven collaborative approach to deliver the project. Our team offers:

A delivery approach to minimize schedule risk and maximize improvement evaluation: We will quickly reach decisions needed to finalize pump selection, giving WES the option of procuring pumps in parallel with detailed computational fluid dynamics (CFD) modeling and, if warranted, physical modeling. If WES does not want to procure pumps early, we can accelerate the design process and still have improvements online by August of 2022.

Understanding of your facilities resulting in efficient design: Our team has been supporting WES in current upgrades to the pump station, providing technical guidance regarding pump selection and design of the Pump 4 VFD. We have a clear understanding of how the new pumps are required to perform, what it will take to install them, and how they will be controlled in conjunction with the new smaller pumps. We know your pump station design and equipment preferences and will design the pump replacement for consistency, operational efficiency, safety, and ease of maintenance.

A local team you know and trust: Our core team, Tino Senon, Josh Papp, and I have provided responsive service and successful project delivery with the District. We have added local mechanical and structural team members with recent, relevant experience providing pump station retrofits in the Portland area and through the Pacific Northwest. Finally, we included Carl Serpa to lead the I&C design and provide seamless integration with your existing control system. We appreciate our working partnership with District staff and will continue that to replace the WRRF Pumps 2 and 4 to meet the District's needs. It has been our pleasure to collaborate with the District on recent improvements at the Kellogg Creek WRRF Influent Pump Station, and we look forward to the opportunity to continue to support the upgrade of this facility. Should you have any questions, please do not hesitate to call me or email me.

Sincerely,

Heather Stephens, PE
Senior Principal
503-220-5437
heather.stephens@stantec.com

Tab 2

Firm Qualifications & Experience

2. FIRM QUALIFICATIONS AND EXPERIENCE

Firm Description

Stantec's founder set out on a mission to provide clean water to small communities with the promise of designing innovative systems to improve quality of life. After six decades, our purpose remains the same and our services have greatly evolved.

Our Pacific Northwest water and wastewater team has been providing engineering solutions for over 45 years. Our local group is more than 300 members strong, including more than 50 engineers, scientists, and support staff in our downtown Portland office and eight offices in Oregon, Washington, and Idaho. From planning and siting, design and construction, to maintenance and repair, we assess each project holistically to propose solutions that are cost-effective, operate as intended, and are efficient to maintain. By combining proven innovations with extensive direct expertise, Stantec delivers economical, durable, and high-quality pump station solutions. Our key staff for this project are all located in the Northwest, or have direct working knowledge and experience with WES.

Types of Work Executed

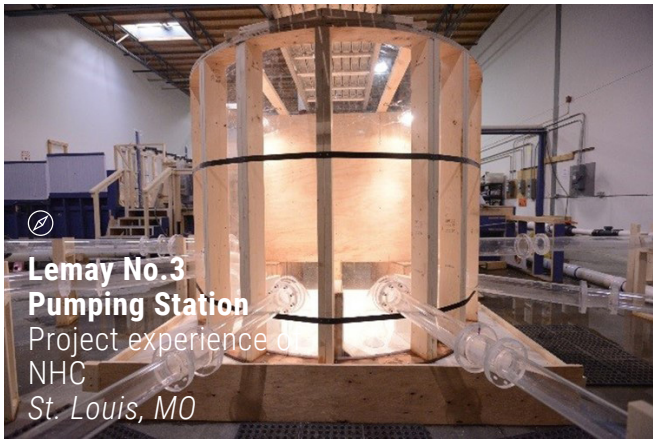
Our experience includes successful pump station projects throughout the Pacific Northwest with special focus on safe operations, maintenance, and seismic resiliency. Our team currently has five pump station projects under design or construction in the greater Portland Metropolitan area. This experience means an efficient design team and practical knowledge that the you can trust.

We provide a full spectrum of services from planning through preliminary design, design services (including 3-dimensional visualization and design), hydraulic and surge modeling, and services during construction and startup. WES can be confident our team will deliver a safe and reliable solution for upgrading the Kellogg Creek Influent Pump Station through:

- Committed partnership
- Improved hydraulic performance with CFD analysis and modeling
- Cost estimating
- Meeting Hydraulic Institute (HI) standards
- Delivering on budget and on schedule

Subconsultants

We've teamed with Northwest Hydraulic Consultants (NHC) in Seattle for physical modeling services. NHC is an internationally recognized engineering and geoscience consulting company with over 40 years of experience specializing in water resources engineering for the development, management, and protection of water resources. NHC's professionals are highly qualified in all areas of hydrotechnical engineering and fluvial geomorphology.



NHC recently conducted a physical model study for the Lemay No.3 pumping station and force main to assess the occurrence of surface and subsurface vortex formation, the pre-swirl flow approaching the pumps, and the distribution of velocities within the pump throat.

Firm Experience

The following pages describe relevant projects completed within the last 10 years, with owner contact information included at the end of the section. These projects demonstrate the experience of the staff who will work on your project.

Sunset and Heathfield Pump Stations

Seattle, WA

Completion: Ongoing
Project Size: 26 MGD firm capacity
Team Members: Tino Senon, QC | Linda Stigler, Civil and Mechanical

Stantec provided engineering, site design, and engineering services during construction for the Sunset and Heathfield pump stations and forcemain renovation project. The two stations are part of the Sunset and Heathfield System that conveys flow from the 48-inch diameter Issaquah Interceptor, a gravity sewer running under Lake Sammamish, to a series of combined sewer interceptors that terminate at the South Treatment Plant located to the north of downtown Bellevue, Washington. The project provided increased capacity (from 18 MGD to 30 MGD) in order utilize the maximum available capacity in the regional gravity sewer systems, meet the area's growing wastewater conveyance needs, improve the reliability and reduce the reliance on the large pumps located within each station, and better protect public health and the environment by reducing the risk of CSO over flows to Lake Sammamish during peak flow conditions.

As part of the project, our team completed physical and CFD modeling of the pump inlets to allow retrofits to be completed within the existing wetwell, and selected and designed pumps to maximize operating time at peak efficiency and minimize vibration. We also provided structural assessment (modeling and analysis for the existing pump station structure and design of structural retrofits to the existing building. Our innovative approach to using solids handling pumps with non-standard 500-hz motors minimized power requirements to both facilities, resulting in millions in capital and life-cycle cost savings.

PROJECT HIGHLIGHTS

- Designed around a pre-selected pump type
- CFD and physical modeling
- Worked with O&M staff on equipment layout and placement
- On-budget and on-schedule

Kellogg Creek WRRF
Clackamas County, OR

Completion: Ongoing
Project Size: 25 MGD firm capacity
Team Members: Tino Senon, Mechanical | Heather Stephens, PM | Josh Papp, Electrical

Stantec has been involved with the Kellogg Creek WRRF providing expert review and electrical engineering support regarding the refurbishment of the influent pump station. We have consulted the District since early 2020 and successfully provided the following:

- Reviewed original pump performance data and replacement pump submittals, and provided technical support to WES regarding installation of Flygt N-Impeller pumps
- Developed draft pump 2 & 4 technical specifications to help identify pump #2 and #4 electrical load requirements
- Provided design documents for a new VFD to replace the outdated drive on the existing Pump #4, and also to drive the new replacement Pump #4

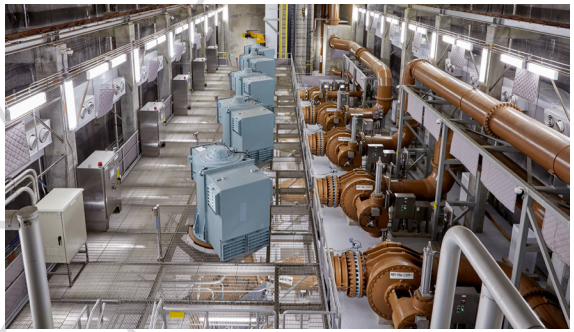
Midlakes Pump Station
Bellevue, WA

Completion: 2020
Project Size: 2 MGD firm capacity
Team Members: Tino Senon, QC | Linda Stigler, Civil and Mechanical

The Midlakes Pump Station project involved final design of a new wastewater pump station to replace the existing 800-gpm capacity pump station, increasing pumping capacity in preparation for the increased flow projections associated with the Bel-Red corridor re-zoning. The new facility will convey 1700 gpm during peak wet weather and 1,200 gpm peak dry weather flow. It involves a 12-ft diameter wet well, three submersible pumps, buried valve and meter vaults, a control building, and a standby generator. The pump station is located on City-owned property and includes a new access road, challenging groundwater conditions, coordination with adjacent industrial users, and architectural design to coordinate with future development of the surrounding city property as a public park. Stantec provided preliminary design, siting, and final design of the facility. Changes have been consistently documented to accommodate varying site constraints and modifications to future proposed facilities in order to ensure comprehensive design-bid-build documents.

Easterly Tunnel Dewatering Pump Station (ETDPS)

Cleveland, OH



Completion: 2018
Project Size: 160 MGD firm capacity
Team Members: Tino Senon, QC | Josh Papp, Electrical

The ETDPS project is one of the largest combined sewer overflow (CSO) pump station projects in the US and is a critical component to NEORSD's methods to address CSOs in Cleveland. This project is the second major component scheduled as part of the Easterly CSO Plan Improvements Program. NEORSD selected Stantec to provide design and construction administration services.

The 160 MGD ETDPS provides the means to entirely dewater the Euclid Creek Tunnel and Dugway Storage Tunnel at the end of each wet weather event, and pump combined sewage to the Easterly Interceptor for transport to the Easterly Wastewater Treatment Plant. The underground pump station served by twin shafts is equipped with nine pumps that enables the Euclid Creek and Dugway storage tunnels to capture flows in a controlled fashion to reduce urban flooding and discharges of sanitary sewage to the surrounding environment.

Previous studies developed a Base Project Alternative for the project, estimated at approximately $150M. The first task we completed was identification of alternatives to the base project and a thorough evaluation. We identified the twin-shaft and cavern alternative that was selected and saved more than $50M.

Willamette Pump Station

West Linn, OR

Completion: 2016
Project Size: 4 MGD firm capacity
Team Members: Adam Odell, Design Manager/Mechanical

The Willamette Pump Station, which is the largest within the Tri-City Service District, was suffering from continuous pump clogging and ragging. After previous evaluations failed to identify a firm solution, Stantec evaluated the pump station and collection system holistically and provided a resolution without leaving the District with a stranded investment.

We evaluated all points of the system that could potentially be critical to the failure of the pump station including:

- Capacity and hydraulics
- Structural, mechanical, and electrical integrity
- Pump control strategy (lead, lag, etc.)
- Wet well flow and level characteristics
- Pump suction hydraulics

Stantec prepared a conclusive evaluation and recommended the optimal pump station alternative, which ultimately was to replace the existing pump which failed HI standards. Our report included a budgetary level of effort summary for design and construction and a technical report to provide the District with the planning direction necessary to invest strategically long term in the pump station asset to reduce staff labor costs and provide reliable service to District customers while meeting DEQ regulatory requirements.

References

Our team has successfully delivered wastewater pump station designs and retrofits, throughout the greater West. We have assisted clients through all project phases—planning, design, permitting, public endorsement, construction, operator training, and startup. WES will benefit from our record of high-quality, reliable engineering coupled with innovative approaches that produce highly-constructible, functional designs that meet owner's goals for their investments.

The previous pages provided descriptions of similar projects completed. We invite you to contact the references to learn more about our ability to successfully deliver your project.

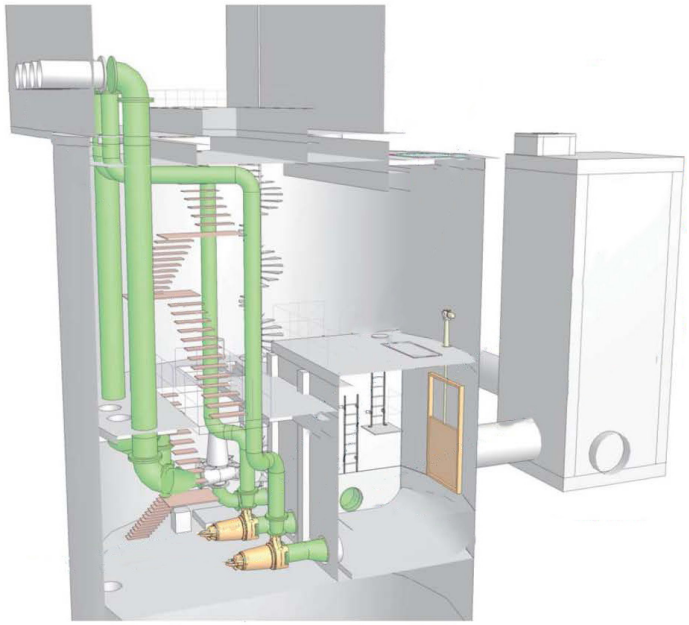


Figure - 3D Model of the Kellogg Creek WRRF IPS

King County Wastewater Treatment Division (WTD)
Ann Grothe, PMP
Workforce Development Program Supervisor
206-477-5587
ann.grothe@kingcounty.gov
Project: Sunset and Heatherfield Pump Stations

Tri-City Service District
Matt House
Project Manager
503-742-4601
matth@co.clackamas.or.us
Project: Willamette Pump Station

Northeast Ohio Regional Sewer District (NEORSD)
Douglas Gabriel, CCM
Deputy Director of Engineering and Construction
216-881-6600
gabrield@neorsd.org
Project: Easterly Tunnel Dewatering Pump Station

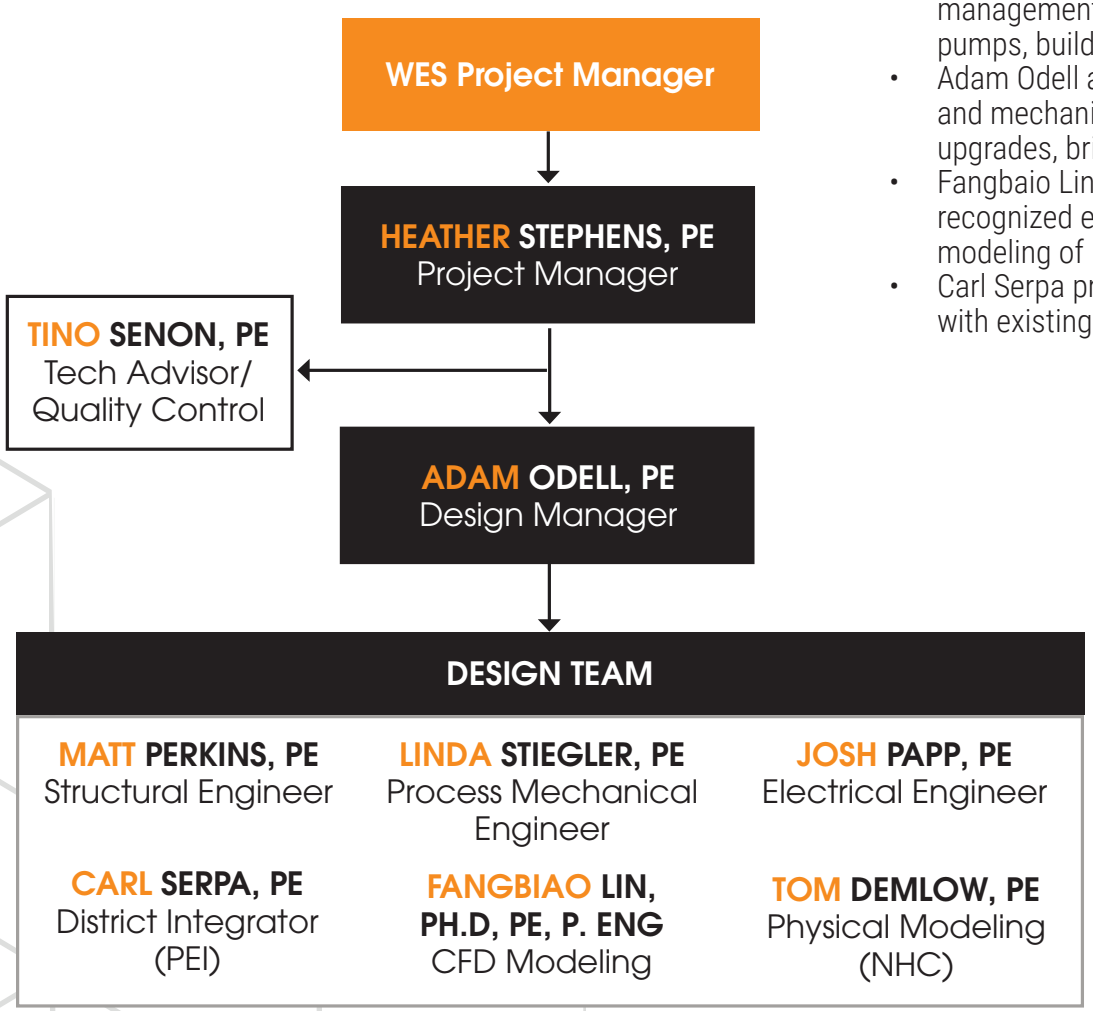
Bellevue Utilities, City of Bellevue, WA
Vanaja Rajah
Senior Utilities Engineer/ Project Manager
425-452-4881
vrajah@bellevuewa.gov
Project: Midlakes Pump Station

Tab 3

Project Team

3. PROJECT TEAM

Our team and organizational structure is shown below, followed by descriptions of relevant experience of key team members. Resumes are included in the Appendix. The Firm Qualifications illustrated projects these team members have successfully delivered together.



Our team includes trusted staff who have been working with the District on the Kellogg Creek WRRF IPS adding the capabilities of additional engineers and technical specialists experienced in wastewater pump station design:

- Heather Stephens, Tino Senon, and Josh Papp providing management, overview, and design of the replacement pumps, building on their current work at the IPS,
- Adam Odell and Linda Stiegler providing technical leadership and mechanical design of pump replacement and related upgrades, bringing years of experience in the Pacific Northwest
- Fangbaio Lin and Tom Demlow providing nationally-recognized expertise in CFD and physical modeling of pump station performance
- Carl Serpa providing I&C design integrating with existing facility operation

Heather Stephens, PE

Project Responsibility: Project Manager
2 years with Stantec, located in Portland

Heather is a senior leader with 25 years of experience in the planning and design of wastewater conveyance and treatment systems serving public utilities throughout the western US. With a focus on municipal clients, Heather has completed dozens of projects involving the design of wastewater facilities, wastewater treatment process engineering, wastewater system master planning, pipeline design, and asset management. Her work includes projects ranging in size from $500K-$8M for public agencies throughout the Western US. Heather is currently managing Stantec's design of the VFD Replacement at the Kellogg Creek WRRF Influent Pump Station.

Adam Odell, PE

Project Responsibility: Design Manager
15 years with Stantec, located in Portland

For the past 15 years, Adam has focused on wastewater, pump station, and process engineering projects with Stantec out of the Portland office. Something he prides himself on is having never left a project once he's started working on it. His recent work includes condition assessments and upgrades for Water Environment Service's Willamette Pump Station, design management duties for Beaverton's Sexton Mt. and Sorrento pump stations, and finalizing construction for Vancouver's West Side pump station. Adam brings two important attributes to this project–an understanding of wastewater and pump station design, and extensive civil and field engineering experience in the local area.

Joshua Papp, PE

Project Responsibility: Electrical Engineer
19 years with Stantec, located in Cleveland

Josh has over 19 years of experience with the design and construction of electrical power distribution. His experience includes the design of electrical power systems from 15kV to 480 volts, motor control centers, schematics for control of process equipment, load studies, and lighting. Josh designed and produced electrical construction documents, narratives, and bid packages primarily for water and wastewater treatment facilities and pumping stations. He followed the majority of his projects through construction for shop drawing review ensuring compliance with the electrical contract documents. Josh has worked almost exclusively on water, wastewater, and related pump station projects through his career. He worked on the Easterly Tunnel Dewatering Tunnel project, and is currently providing the VFD design for the existing and future pump #4 at Kellogg Creek WRRF Influent Pump Station.

Carl Serpa, PE

Project Responsibility: District Integrator
Portland Engineering

Carl Serpa is a professional engineer in control systems engineering, as well as owner and lead engineer for Portland Engineering, Inc. Carl has 25 years of experience in wastewater processing, treatment and pumping design. He specializes design upgrades to SCADA and telemetry, operational readiness testing, incorporation of new controls with an existing HMI, system analysis and design, equipment specification, radio frequency licensing, development of new operator interface system, all elements in the wastewater treatment process, and quality assurance/quality control. Our team has successfully partnered with Carl on multiple projects at the Tri-City facility, such as the Willamette River Pump Station, the current Wilsonville WTP expansion project, as well as the current Kellogg Creek upgrade.

Linda Stiegler, PE

Project Responsibility: Mechanical Engineer
32 years with Stantec, located in Bellevue

Linda has been involved in water/wastewater planning, design, and construction projects for over 32 years, serving in roles such as lead civil engineer or project technical lead. She is well versed in the technical, regulatory, and institutional aspects of the industry. Linda's core experience encompasses design of public facilities and engineering support services during construction. Her relevant and recent pump station design experience includes serving as a design lead for both the Midlakes Pump Station in Bellevue and the Sunset and Heathfield Pump Stations for King County. She has been involved in design of wastewater and water treatment plants, pump stations, water reservoirs, pipelines up to 72-inches in diameter, and trenchless pipeline crossings.

Matthew Perkins, PE

Project Responsibility: Structural Engineer
12 years with Stantec, located in Portland

Matthew is a structural designer with over 12 years of professional experience. His responsibilities include evaluation of existing structures, detailed structural analysis and design, drawing production, engineering services during construction, management of engineering teams, and value engineering reviews. His project experience ranges from seismic evaluation of small pump stations to complete designs of treatment facilities. He has worked as a team member of teams as small as three and has lead design teams as large as twenty. Matthew's relevant project work includes the Willamette Pump Station Rehabilitation, the Tri-City Water Pollution Control Plant, and Lake Oswego-Tigard Water Treatment Plant Expansion among others.

Tino Senon, PE

Project Responsibility: Tech Advisor/QC
42 years with Stantec, located in Bellevue

Tino has over 49 years of experience and has designed pump stations in excess of two million horsepower over the past years. Using his wealth of experience on numerous pump station projects, Tino supervises project teams and performs periodic technical reviews. He's held the following responsibilities: project design criteria review, mechanical process systems configuration and design, construction budget and schedule development, predesign report preparation, supervision of engineers, quality checks in design, pumping station piping and power cogeneration systems, and engineering services during construction. Relevant project work includes the quality review for Lower Tualatin Pump Station, and design advising on San Francisco Public Utility Department's collection and pump station system upgrade. Tom and Tino have known each other for nearly 20 years, and have shared Hydraulic Institute (HI) committee responsibility for authoring current HI standards.

Fangbiao Lin, PE, Ph.D, P.Eng

Project Responsibility: CF Modeler
9 years with Stantec, located in Lynnwood

Dr. Fangbiao Lin is a recognized expert in the field of hydraulics and fluid dynamics, computational fluid dynamics, hydropower, hydraulic machinery, and hydraulic engineering with more than 37 years of experience. His experience includes resource planning, and the execution of project types from pump station and wastewater plant design optimization to thermal discharges from coal and nuclear power generating stations. Dr. Lin's extensive background in hydraulic modeling, fluid dynamics, and turbulence modeling complements his extensive experience of computational fluid dynamics (CFD) modeling for water and air flows. Some relevant project work includes CRD McLoughlin Wastewater Treatment Plant Design Management in Victoria, TVA Hydrothermal Modeling Demonstration in Tennessee, and Effluent Plume Modeling of Cedar Valley Lodge WWTP in Canada.

Tom Demlow, PE

Project Responsibility: Physical Modeler
20 years with NHC, located in Seattle

Tom Demlow of NHC has 47 years of professional experience in hydraulic design, physical and numerical modeling, and troubleshooting hydraulic problems. His project experience includes the hydraulic design of pump intakes, reservoir optimization, water intake structures, river bed and bank stabilization, erosion control, hydraulic transients, conveyance systems, flood protection, spillways, flow release facilities, and drop shaft structures. Tom assisted many owners in developing money-saving design alternatives for complex hydraulic structures. His relevant project work includes the Corvallis WWRP Influent Pumping Station hydraulic performance, and the physical model study of the Lemay No.3 Pumping Station in St. Louis.

Tab 4

Project Understanding & Approach

4. PROJECT UNDERSTANDING AND APPROACH

Understanding

The Kellogg Creek Water Resource Recovery Facility (KCWRRF) has undergone numerous improvements over the last 3+ years. Many of these improvements have been to the Influent Pump Station (IPS) to achieve the Districts stated goal of maintaining 25 mgd of firm and reliable pumping capacity, as well as efficiently meeting low flow pumping conditions. Improvements have included replacing two of the original pumps and Variable Frequency Drives (VFDs) with lower flow equipment, and site electrical improvements (incoming power/transformer). The District is also in the process of replacing the oldest VFD in the pump station, which is operating well beyond its anticipated useful life.

These upgrades have moved forward for reasons more than just aging infrastructure replacement; the pump station has a history of pump clogging and poor performance. Primary causal factors for pump clogging have been:

- Large pumps operating at a speed outside of the Acceptable Operating Range (AOR)
- Oversized pump suction piping resulting in low suction velocities contributing to suction recirculation (suction recirculation can cause large rag balls to form which eventually leads to a pump clog)
- A lack of check valves on pump discharge piping which allows solids backflow through the pump
- An unorthodox wet well design
- A horizontal bar rack which can generate a significant "mat" of debris and can cause unwanted preferential flow splitting

The facility was originally rated as a 40 mgd firm capacity pump station. Given changes to the collection system, and limited options for expanding the KCWRRF, the pump station is only required to have 25 mgd firm capacity.

Therefore the future pump arrangement will be:

- Pumps #1 and #3 – 5.5 mgd
- Pumps #2 and #4 – 14 mgd

Through the recent pump station expansion, the District has standardized on Flygt (Xylem) non-clog submersible N-impeller pumps for the Influent Pump Station. The current project will replace Pumps #2 and #4 with new similarly-sized Flygt pumps, and upgrade related drive and control units. The VFD for pump #4 is more than 30 years old, has become obsolete, and there is concern it could imminently fail. The District is in the process of procuring and installing a new VFD to ensure the continued operation of the existing pump #4, and also to control the future Flygt pump. A similar new VFD for Pump #2 will be included in the pump replacement project.

Finally, the September 2014 influent pump station rehabilitation report made numerous recommendations for wet well improvements. To date, flow baffling and flow diversion curtains have been implemented. Tools such as Computational Fluid Dynamics (CFD) and physical modeling of the wet well could be helpful to confirm whether any other improvements can be made to limit pump clogging.

Moving forward, the District has solicited engineering services to finalize the rehabilitation of the influent pump station. Our team's understanding of the existing and proposed new IPS equipment will allow us to efficiently and quickly advance the pump replacement to provide stable and reliable operation into the future.

Approach

Our approach to the IPS Pump 2 and 4 Replacement Design is to move forward quickly to confirm the basis of design and finalize pump selection, proceeding in parallel with CFD modeling of the pump station wet well to support long-term successful operation of the facility. We will begin by reviewing work to date, providing CFD modeling of the wet well (followed by physical modeling if warranted), and providing 30%, 90%, and 100% Construction Documents. Our approach centers around a focused, early effort to confirm pump hydraulics and finalize the pump specifications prepared to support VFD replacement. This will give the District the option of pre-purchasing pumps to accelerate completion of the IPS improvements, allowing the related design efforts to proceed in parallel with pump procurement. Stantec has been supporting WES in current upgrades to the Influent Pump Station, providing technical guidance regarding pump selection and design of a new VFD to replace the drive on Pump 4 and support operation of the new pump. We have a clear understanding of how the new pumps are required to perform, what it will take to install them in the IPS, and how they will be controlled in conjunction with the new Pumps 1 and 3.

Step 1: Confirm Pump Hydraulics

The design TDH of the new pumps will be determined by the new operating level in the IPS wetwell (two feet lower than the original design low wetwell level) plus any necessary changes in pump suction or discharge piping. We will identify potential modifications (such as reducing suction piping to increse suction velocities) to be considered in CFD modeling, and the related TDH impacts of those changes. Those changes selected for evaluation in the CFD model will be included in the TDH calculation to identify the most conservative set of conditions for pump sizing, and will be reflected in the pump design criteria. This approach allows final wetwell and piping modifications to be evaluated concurrently with pump procurement, accelerating the schedule for pump replacement.

Step 2: Examine Modifications to Enhance Pump Performance

Working with District staff, the our team will document conditions in the pump station that are known or suspected of contributing to settlement of solids or stringy material which can cause pump clogging. Two key issues include the carrying velocity in the existing suction piping, and the lack of a check valve on the pump discharge piping that allows material to re-enter the pump station following pump shutdown. While some wetwell enhancements were constructed in the recent improvements to the IPS, these should be confirmed and additional enhancements considered as appropriate.

As a first step in evaluating wetwell performance, we propose preparing a CFD model to study and provide alternatives by evaluating the approach hydraulics to each pump impeller and work to satisfy the requirements of ANSI/HI 9.8. We will develop the CFD model using the ANSYS FLUENT software which we have successfully used on other projects for predicting complex three-dimensional patterns.

We will use the CFD modeling study to confirm that the pump station will perform with an acceptable level of service with recent improvements, or confirm the recommended modifications to improve wetwell performance. If the CFD model does not provide an adequate level of confidence in pump station performance, additional verification can be provided with a subsequent physical model.

Step 3: Proceed with Pump Replacement Design

Once the pump selection is complete and wetwell modifications identified, we will quickly proceed with 30%, 90%, and 100% design of required improvements with appropriate QC workshops to engage District staff. We have a detailed understanding of the electrical and I&C modifications required through our team members' previous work on the existing pump and VFD replacement. Other design features to be evaluated with District staff will include:

- Electrical design which will maintain the existing (and new) field-mounted vibration switch, and is wired directly to the VFD and SCADA
- Remove the seal water system
- Incorporate the new pumps into Flygts MAS-801 system
- Evaluate, based on District standards for condition and performance, discharge piping realignment with possible check valve, and a new discharge flow meter
- Consider removal of the horizontal bar rack, or options for replacing its functionality

Stantec prepared raw sewage pump specifications customized for Flygt pumps for Willamette Pump Station, which was plagued by clogging and ragging. Design manager Adam Odell presented his findings from this at the 2015 Pacific Northwest Clean Water Association and the 2015 Southern Oregon Operators Conference. His presentation was entitled "Flushables, the New 'F' Word".

Accelerated Schedule for Construction Completion

Our proposed project schedule, shown on the next page, allows you to complete start-up and testing of the new pumps by August 2022 so they are in service prior to the 2022/23 wet weather season. The schedule also focuses construction during the dry season to minimize the potential need for bypass pumping. Key critical path elements of the design and construction schedule are determining what improvements need to be made to the wet well and pump procurement. This schedule includes two parallel design tracks:

- Finalizing pump and VFD design
- Assembling construction documents for pump and VFD installation, as well as finalizing other wet well and piping improvements

Alternatively, the District could opt for a more traditional approach and allow the contractor to procure and install the Flygt pumps during summer 2022. CFD or physical modeling and wet well improvement design documents could either lag the pump and VFD design documents or be deferred if the pumps work as desired.

Focused Design with Rigorous QC

The 30% stage gate is the most critical to meeting overall project schedule. The 30% review gives you as the owner the best opportunity to review and confirm the design intent. To give us the opportunity to gather as much client review as possible, we propose the following:

- Prior to the 30% deliverable, conduct at least one Design Decision workshop to review alternatives for wet well improvement and options for preventing back-flow through the pump
- Deliver documents at least one week prior to the deliverable review workshop, and allow one additional week for client feedback. Consider using software such as Bluebeam Studio to capture all client comments on one document

The process identified above augments our already internal rigorous QC process. Key components to deliver an on-time and accurate bid ready documents include the following:

- Include a seasoned construction manager in our quality reviews to spot potential issues before they become problems in the field. Having construction employees providing design input is a big benefit to a project's bidding and buildability
- Utilize an independent technical reviewer (ITR) to cross check and provide interdisciplinary review
- Use internal tracking logs which can be made available to the Owner at any time to ensure internal QC has been done

The 30% Design Review Workshop will be used to discuss questions, feedback, and proposed changes, with all decisions documented in the Review Workshop minutes. This milestone will result in a clear understanding of the 90% Design documents,

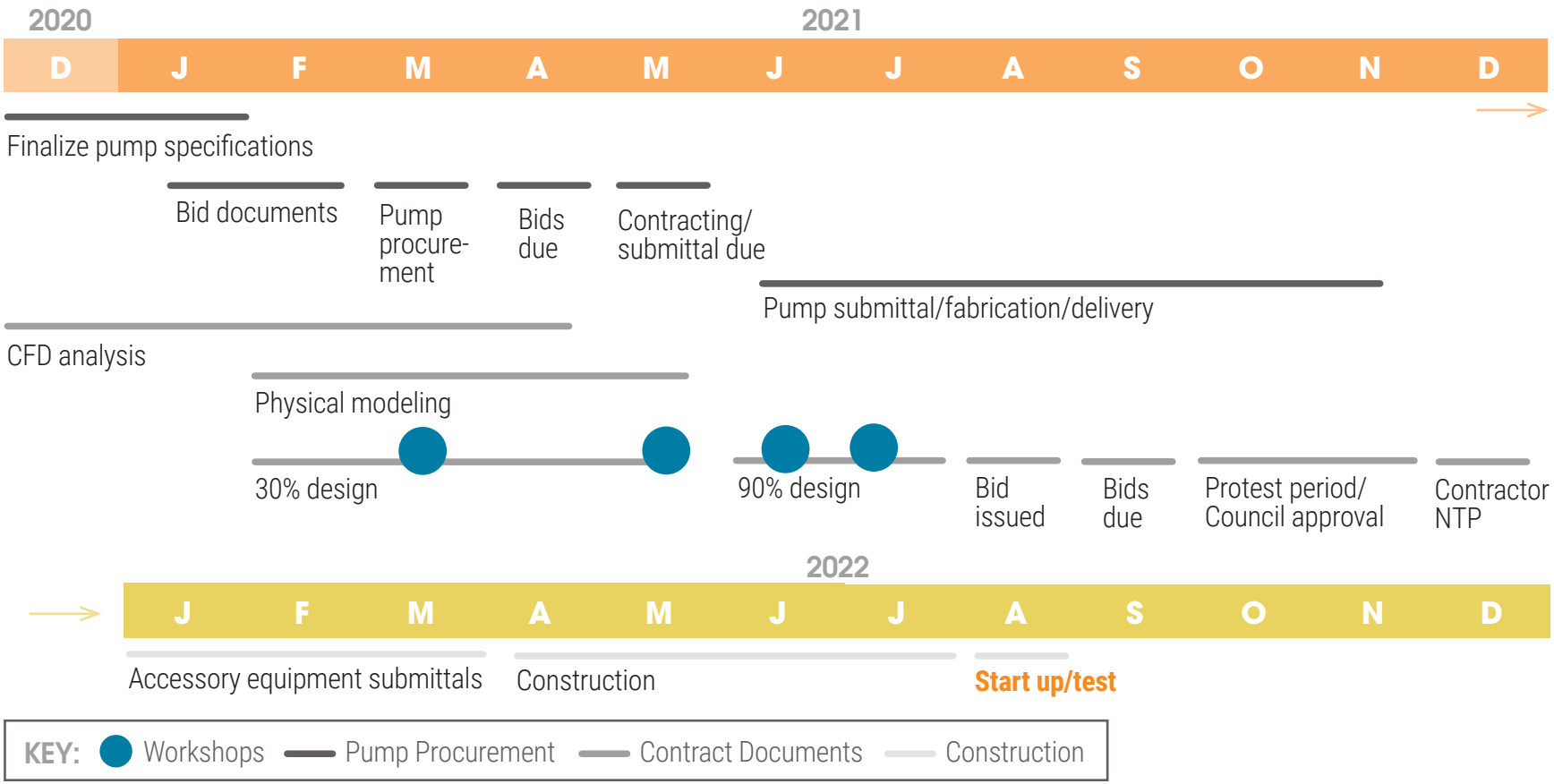
and bi-weekly design team meetings will further support efficient coordination and decision-making. As a result, the 90% design will clearly reflect a shared understanding of the project, allowing the project to move quickly to final Construction Documents.

Coordination with District Staff

Our approach is founded in clear and regular communication between the Stantec and District teams. Heather and key team members will meet with your PM and stakeholders on a bi-weekly basis at a minimum, and more frequently during key phases of the project.

In addition to the bi-weekly team meetings, Heather will provide phone updates to your project manager on a weekly basis, and summarize competed and upcoming activities in a Monthly Status Report.

Schedule



Tab 5

Resumes

HEATHER STEPHENS PE

PROJECT MANAGER

EDUCATION
MS Civil Engineering, University of Washington
BS Civil Engineering, Harvey Mudd College

REGISTRATIONS
Professional Engineer, OR, WA

25
years of relevant experience

**projects completed prior to joining Stantec*

Heather is a senior leader in Stantec's Portland office. She has 25 years of experience in the planning and design of wastewater conveyance and treatment systems serving public utilities throughout the western US. With a focus on municipal clients, Heather has completed dozens of projects involving the design of wastewater facilities, wastewater treatment process engineering, wastewater system master planning, pipeline design, and asset management. Her work includes projects ranging in size from $500K-$8M for the City of Portland, Clean Water Services, City of Tacoma Department of Public Works, King County, Eastern Municipal Water District, County of Kauai, City of Santa Rosa, and City and County of Honolulu.

RELEVANT EXPERIENCE

KELLOGG CREEK WRRF TECHNICAL ASSISTANCE AND VFD REPLACEMENT, WATER ENVIRONMENT SERVICES | Clackamas County, OR
Heather is managing Stantec's support of improvements to the influent pump station at the WRRF. Efforts include technical assistance evaluating replacement pumps, developing draft pump specifications, and preparing construction documents for VFD replacement.

BROAD OAK PUMP STATION UPGRADES * | Hillsboro, OR
Heather led the pre- and final design of improvements to upgrade Clean Water Services' Broad Oak Pump Station. The existing station did not meet the District's design criteria, used outdated telemetry, was difficult to access for maintenance, and did not have standby power. The upgrade included a duplex submersible pump station with improved access and a new standby generator.

SECONDARY TREATMENT EXPANSION PROGRAM MANAGEMENT SUPPORT | Portland, OR
Heather is leading engineering services for the Program Support Team providing assistance to BES associated with the Secondary Treatment Expansion Program (STEP) at CBWPT. STEP is a $400M capital centered around investments in the secondary and solids handling process units, with related upgrades to the plant electrical system and support facilities. Stantec's services include developing engineering discipline and CAD/BIM design guidelines, documenting design review practices and responsibilities for efficient staff input, providing subject matter experts for technical input and review of design deliverables, and preparing uniform Division 0 and 1 specifications for use under alternatives project delivery methods.

KING COUNTY WEST POINT TREATMENT PLANT IMPROVEMENTS | Seattle, WA
Heather is serving as the Process Lead and supporting Program Development for improvements at the King County West Point Treatment Plant (WPTP). The project includes helping the County develop a program delivery plan for small- to medium-side projects, as well as designing high priority improvements using the County's design guidelines.

ADAM O'DELL PE

DESIGN MANAGER

EDUCATION
BS Environmental Engineering, Oregon State University
BS Mathematics, Linfield College

REGISTRATIONS
Professional Engineer, OR

14
years of relevant experience

$500M+
of wastewater treatment facility design and construction

Adam brings 14 years of experience centered on wastewater treatment, pump/lift station projects, and heavy civil engineering projects. He has focused on civil engineering, mechanical engineering, hydraulics, hydraulic modeling, and process engineering. He has broad engineering experience and has started and completed many successful and long-term projects. His recent work includes condition assessments and upgrades for Water Environment Service's Willamette Pump Station, as well as current pump station projects for the City of Beaverton and Vancouver. Adam has also been the design manager for several wastewater projects including process blower upgrades, chemical feed, pump stations, head works screening, and utility water pumping.

RELEVANT EXPERIENCE

WILLAMETTE PUMP STATION, WATER ENVIRONMENT SERVICES | West Linn, OR
Adam was Design Manager providing current conditions evaluation of the pump station, the largest in the District. After previous evaluations of problematic pump clogging left the District without a firm solution, Adam helped evaluate the pump station holistically and provide a firm solution without leaving the district with a stranded investment.

SEXTON MOUNTAIN PUMP STATION | City of Beaverton, OR
The City of Beaverton was up against a firm deadline for removing one of there most important reservoirs from service, requiring a fast-tracked performance upgrade to the Sexton Mt. pump station. Adam led the effort to pre-purchase two new 250 hp pumps, VFDs, a 600 kw standby generator, and a switchboard. He led the design effort for detailed installation drawings, and the next phase of the project will include an additional booster pump station, power generation microturbine, separate electrical building, conference rooms, and coordination with Energy Trust of Oregon.

AQUIFER STORAGE AND RECOVERY (ASR) AND SORRENTO PUMP STATION | City of Beaverton, OR
Adam was Design Manager providing mechanical design for the demolition of an existing reservoir, pump station, and ASR well and replacement with a new submersible ASR well pump, new booster pump station, onsite sodium hypochlorite generation, caustic soda, and fluoride saturation pumps. This facility will be considered essential (category 4) and will have meeting rooms and a SCADA "command center".

RESERVOIR AND PUMP STATION | North Plains, OR
Adam was Lead Mechanical Engineer focused on pump design, reservoir inlet/outlet configuration, and sodium hypochlorite feed system.

TINO SENON PE

TECHNICAL ADVISOR, QUALITY CONTROL

EDUCATION
BS/BSc, Mechanical Engineering, Central Philippines University

REGISTRATIONS
Professional Engineer TX, OR, CA

49+
years of relevant experience

2M+
horsepower pump stations designed

100+
pump stations worked on

Tino has over 49 years of experience and has designed pump stations in excess of 2M horsepower over the past years working for the firm. Using his wealth of experience on numerous pump station projects, Tino supervises project teams and performs periodic technical reviews in the US and across the globe. He has worked on projects from concept to startup and held the following responsibilities: project design criteria review, mechanical process systems configuration and design, construction budget and schedule development, predesign report preparation, supervision of engineers, quality checks in design involving mechanical processes, pumping stations piping and power cogeneration systems, and engineering services during construction.

RELEVANT EXPERIENCE

LOWER TUALATIN PUMP STATION | Clean Water Services, OR
Tino was Mechanical Quality Reviewer for design and construction on a new 22-MGD raw sewage pump station to replace the existing river crossing siphon, lifting flow from the gravity sewer and discharging it to the gravity sewer interceptor near the wastewater treatment plant. Stantec prepared a dynamic flow simulation study to optimize the pump station capacity of 22 MGD and establish the exceedence flow where the pumps should operate 90% of the time during the near-term planning period.

COLLECTION AND PUMP STATION SYSTEM UPGRADE | City of San Francisco Public Utility Department, CA
Tino was Pump Station Design Senior Adviser providing technical guidance and performed periodic review of pump station expansion and the new raw sewer storage tunnel dewatering pump station.

DURHAM ADVANCED WASTEWATER TREATMENT FACILITY PUMP STATIONS | Tigard, OR
Tino designed a raw sewer influent pump station with a firm capacity to 200-mgd that consisted of four 25-mgd and two 40-mgd pumps for Phase 1, and a total of six, 40-mgd, 1,000-hp pumps for Phase 2. Each pump is driven by a VFD. A dual self-cleaning wet well was used so that one wet well can be utilized for dry weather flows and both wet wells for wet weather flows. The pumps were selected to operate with their best efficiency points optimized at the 90% exceedence flow of the collection system.

KELLOGG CREEK INFLUENT PUMP STATION-WES | Clackamas County, OR
Tino has helped the District troubleshoot and provide 3rd party review of influent pumps which have continued to have clog and ragging problems. He has made recommendations for pump replacement, and has advised the District on how to move forward. Tino recently provided pre-design services, including draft specifications, for pumps #2 and #4 with the intent to define the motor electrical load required for the new pump #4 VFD design.

JOSHUA PAPP

PE

ELECTRICAL ENGINEER

EDUCATION
BS, Electrical Engineering,
Cleveland State University

REGISTRATIONS
Professional Engineer, OH, CO

19
years of relevant experience

Josh has over 19 years of experience with the design and construction of electrical power distribution. His experience includes the design of electrical power systems from 15kV to 480 volts, motor control centers, schematics for control of process equipment, load studies, and lighting. Josh has designed and produced electrical construction documents, narratives, and bid packages primarily for water and wastewater treatment facilities and pumping stations. He also has followed the majority of projects through construction for shop drawing review ensuring compliance with the electrical contract documents. Josh has worked almost exclusively on water, wastewater, and related pump station projects through his career.

RELEVANT EXPERIENCE

LOWER TUALATIN PUMP STATION | Portland, OR
Josh was Electrical Design Lead for a new 30 MGD wastewater pump station located in a park setting for conveyance to the Durham WWTP. Design includes six (6) 480V 135HP VFD's for submersible pumps, 13.2KV service, double-ended secondary unit substation with low voltage switchgear, and related low voltage distribution equipment. The pump station was in a 100 year flood plain and forced the equipment to be on the second floor, which also required special electrical service entrance coordination with the utility. The pump station received an award for contractor/owner/city/consultant collaborations for a successful project.

EASTERLY WTTP TUNNEL DEWATERING PUMP STATION | Cleveland, OH
Josh was part of the electrical team responsible for the design of the tunnel dewatering pump station. The pump station takes stormwater event flows from the City's deep tunnel storage systems up to the Easterly WWTP during dry weather so that the flows may be treated. Josh led the motor specifications and incorporation of controls for seven pumps, and various other tasks.

KELLOGG CREEK INFLUENT PUMP STATION-WES | Clackamas County, OR
Josh is currently providing the VFD design for the existing pump #4. This new VFD will have the dual ability to power the future Flyght pump, which is expected to have a lower horsepower motor, and Josh has been working directly with Flygt to ensure the VFD will match. Josh also designed the VFDs for pumps #1 and #2 about 15 years ago.

DURHAM ADVANCED WASTEWATER TREATMENT FACILITY PUMP STATIONS | Tigard, OR
Josh finalized the design and provided engineering services during construction for the Durham IPS. The pump station has a firm capacity of 200-mgd that consists of four 25-mgd and two 40-mgd pumps for Phase 1, and a total of six, 40-mgd, 1,000-hp pumps for Phase 2. Each pump is driven by a VFD.

MATT PERKINS

PE

STRUCTURAL ENGINEER

EDUCATION
MS, Civil Engineering, Portland State University
BS, Civil Engineering, Oregon State University

REGISTRATIONS
Professional Engineer, OR, WA, CA

12
years of relevant experience

8
pump stations designed and constructed

$800M
of water infrastructure supported

Matthew is a structural designer with over 12 years of professional experience. His responsibilities include evaluation of existing structures, detailed structural analysis and design, drawing production, engineering services during construction, management of engineering teams, and value engineering reviews. Matthew's project experience ranges from seismic evaluation of small pump stations to complete designs of treatment facilities. He is registered with the State of Oregon as a General Post-Earthquake Inspector and has been trained in Rapid Visual Screening of Buildings for Potential Seismic Hazards (FEMA P-154).

RELEVANT EXPERIENCE

WILLAMETTE PUMP STATION REHABILITATION | West Linn, OR
Matthew served as Lead Structural Engineer for Water Environment Services Willamette Pump Station Rehabilitation Project. He evaluated the existing pump station using ASCE 41 Tier 1 evaluation requirements. The process included meeting with operators to discuss current pump station performance, review of the as-built drawings, and site observations.

LAKE OSWEGO-TIGARD WATER TREATMENT PLANT EXPANSION | West Linn, OR
Matt was the Lead Structural Designer for the $65M expansion of the LOT Water Treatment Plant. The project involved the expansion/replacement of an existing 16 MGD direct filtration WTP with a new 38 MGD conventional treatment plant, all within the footprint of the existing WTP, and while keeping it on-line throughout construction. During the design phase, Matthew led the structural design of the buried 2MG clearwell, high service pump station, and residuals handling facilities. He served as lead project/resident engineer during construction.

SEXTON MT. PUMP STATION | Beaverton, OR
Matt is currently providing Tier 1 and Tier 2 structural analysis for retrofitting Beaverton's most critical pump station, built in 1992. He determined that retrofitting the pump station, rather than constructing new, will save the City significant rate payer funds. Matt recommended adding additional anchors to the wall-to-ceiling connections, and reinforcing the walls using either FRP or external steel bracing. This project is on-going and upgrades are expected in 2021.

SORRENTO PUMP STATION | Beaverton, OR
Matt is serving as the structural design lead for the pump station. The pump station includes chemical containments, masonry walls, and vaulted ceilings with wood joists, and designed to meet client-driven seismic design criteria so the facility can function as a "command center" post seismic event.

FANGBIAO LIN

Ph.D, PE, P. Eng

CF MODELER

EDUCATION

Ph.D., Civil and Environmental Engineering (Water Resources and Hydraulics), University of Iowa
M. Eng., Hydroelectric Engineering, Hohai University
B. Eng., Hydroelectric Power Engineering, Hohai University

REGISTRATIONS

Professional Engineer AZ, Ontario

37+
years of relevant experience

50+
pump stations modeled and designed

Dr. Fangbiao Lin is a recognized expert in the field of hydraulics and fluid dynamics, computational fluid dynamics, hydropower, hydraulic machinery, and hydraulic engineering with more than 37 years of experience. His experience includes resource planning, marketing, and the execution of a wide scope of project types from pump station and wastewater plant design optimization to thermal discharges from coal and nuclear power generating stations. Dr. Lin's extensive background in hydraulic modeling, fluid dynamics, and turbulence modeling complements his extensive experience of computational fluid dynamics (CFD) modeling for water and air flows with free surface and in closed conduits, in stationary or rotating frames of references, with fixed boundaries or moving boundaries, and with or without buoyancy. He is a regularly sourced subject-matter industry expert and has authored numerous peer-reviewed journal articles.

RELEVANT EXPERIENCE

CRD MCLOUGHLIN WASTEWATER TREATMENT PLANT DESIGN MANAGEMENT | City of Victoria, BC

Fangbiao was Independent Technical Reviewer on a comprehensive CFD study, including three Flow-3D models: influent force main to primary influent, primary effluent to biological aerated filters, and biological aerated filters to disk filters. These models were developed by a third party and the review resulted in four rounds of versions and a more reliable CFD results for better designs with even flow split and acceptable hydraulics.

TVA HYDROTHERMAL MODELING DEMONSTRATION | TVA, TN

Fangbiao was Principal CFD Engineer on a TVA assembled expert panel to develop a framework for numerical models to predict hydrothermal conditions in rivers and reservoirs. Stantec's previous CFD studies for TVA on hydrothermal modeling of Browns Ferry Nuclear Power Plant, Small Modular Reactor Project, and Cumberland Fossil Plant were reviewed and expert opinion were provided to help develop appropriate framework for the hydrothermal forecast system.

EFFLUENT PLUME MODELING OF CEDAR VALLEY LODGE WWTP | LNG Canada, BC

As Independent Technical Reviewer, Fangbiao conducted a hydrodynamic effluent dispersion modeling study to support an Environmental Impact Study for constructing a temporary wastewater treatment plant for housing workforce. The model was developed using Mike-3D and Cormix for a large ocean arm.

REVIEW OF CFD MODELING OF THE ROTAMIX DIGESTER MIXING SYSTEM | Red Deer WWTP, Alberta

Fangbiao was Modeling Reviewer for the CFD modeling study performed by Vaughan Company for the Rotamix Digestr Mixing System for the Red Deer WWTP to confirm the quality and completeness of the analysis.

LINDA STIEGLER PE

MECHANICAL ENGINEER

EDUCATION
MS, Civil Engineering, University of California Davis
BS, Environmental Sciences, University of Virginia

REGISTRATIONS
Professional Engineer, WA, CA

32
years of relevant experience

Linda has been involved in water/wastewater planning, design, and construction projects for over 32 years, serving in roles such as lead civil engineer or project technical lead. She is well versed in the technical, regulatory, and institutional aspects of the industry. Design of public facilities and engineering support services during construction form the core of her experience but she also has experience in project management, facility planning, and permit negotiation. She has been involved in design of wastewater and water treatment plants, pump stations, water reservoirs, pipelines up to 72-inches in diameter, and trenchless pipeline crossings.

RELEVANT EXPERIENCE

MIDLAKES PUMPING STATION | Bellevue, WA
Linda acted as project technical lead for the design of the replacement facilities for the existing 800 GPM Midlakes pump station. The wastewater pump station provides a capacity of 1700 GPM using two submersible non-clog pumps with a third as standby. A valve vault, meter vault, electrical building, standby generator, and future odor control are also provided. This replacement will provide additional capacity in preparation for the increased flow projection associated with the Bel-Red corridor re-zoning.

CSO PUMP STATION DESIGN | Bremerton, WA
As the project engineer, Linda designed the 7500-gpm pump station that diverts excess flows from the Callow Avenue Basin collection system near Puget Sound Naval Shipyard and routes the flows directly to the City's wastewater treatment plant via a 30 inch forcemain. The pump station incorporates three 200 hp VFD driven submersible wastewater pumps, a "self-cleaning" wet well, and surge control. It was designed for intermittent operation to reduce raw sewage overflows from the collection system to the Puget Sound.

WASTEWATER PUMP STATION | King County, WA
Linda provided construction engineering services during construction of the new Pacific Pump Station that replaced an aging, inadequate local lift station. The project was originally conceived as a 7.0 mgd pump station; however, a revisit of flow projections and hydrographs collected as part of the Regional I/I Control Program enabled the pump station to be downsized to 2.9 mgd. The pump station is designed as wet well/dry well pump station with extended shaft, screw centrifugal pumps and a self-cleaning wetwell. Linda reviewed submittals, answered requests for information and worked to resolve potential change orders.

TOM DEMLOW

PE

PHYSICAL MODELER

EDUCATION
BS, Civil Engineering, Colorado State University
MS, Civil Engineering, Colorado State University

REGISTRATIONS
Professional Engineer, WA, B.C.

47
years of relevant experience

250+
pump station hydraulic design analyses

Tom Demlow of NHC has 47 years of professional experience in hydraulic design, physical and numerical modeling, and troubleshooting hydraulic problems. His project experience includes: the hydraulic design of pump intakes for wastewater, water supply, industry, and flood control pump stations, and power plant cooling; reservoir optimization; water intake structures; river bed and bank stabilization; erosion control; hydraulic transients; conveyance systems; flood protection; spillways; flow release facilities; and drop shaft structures. Tom assisted many owners in developing money-saving design alternatives for complex hydraulic structures. He is a member of the Hydraulic Institute Intake Design and Pump Piping Committees that developed the 1998, 2009, 2012, 2016, and 2018 Standards.

RELEVANT EXPERIENCE

CORVALLIS WWRP INFLUENT PUMPING STATION | Corvallis, OR
Principal Investigator of a 1:3 scale model that was used to evaluate the hydraulic performance of the existing 28 mgd pump station. The existing pump station had performance problems and could not maintain flow rates. The model determined the cause of the performance problems and was used to develop solutions. In addition the project evaluated the ultimate hydraulic capacity of the pump station.

LEMAY NO. 3 PUMPING STATION PHYSICAL MODEL STUDY | Metropolitan St. Louis Sewer District, MO
Project Manager for a physical model study of the pump station to assess the design hydraulically to ensure the design meets the Hydraulic Institute design standards. The circular wet well contains six pumps with a design capacity of 33.5 mgd.

LOWER INTERCEPTOR PROJECT NEW NATOMAS AND SOUTH RIVER PUMP STATIONS | Sacramento Regional County Sanitation District, CA
Principal Investigator of a 1:3 scale model that was used to evaluate the hydraulic performance of the existing 28 mgd pump station. The existing pump station had performance problems and could not maintain flow rates. The model determined the cause of the performance problems and was used to develop solutions. In addition the project evaluated the ultimate hydraulic capacity of the pump station.

MICHELSON WATER RECLAMATION PLANT-PHASE 2 EXPANSION | Irvine Range Water District, CA
Technical Review of a CFD model study used to optimize the pump station. CFD model FLUENT provided detailed hydraulics information to assess the design of the pump station to meet the flow requirement of the project expansion and was used to develop solutions. In addition the project evaluated the ultimate hydraulic capacity of the pump station.

CARL SERPA PE

DISTRICT INTEGRATOR

EDUCATION
BS, Chemical Engineering,
University of Washington

REGISTRATIONS
Professional Engineer, OR

25
years of relevant experience

Carl Serpa is a Professional Engineer in Control Systems Engineering who is an owner of, and lead engineer for, Portland Engineering, Inc. Carl has 25 years of experience in wastewater processing, treatment and pumping design. Carl specializes design upgrades to SCADA and telemetry; operational readiness testing; incorporation of new controls with an existing HMI; system analysis and design; equipment specification; radio frequency licensing; development of new operator interface systems; all elements in the wastewater treatment process; and quality assurance/ quality control. Our team has successfully partnered with Carl on multiple projects at the Tri-City facility, the Willamette River Pump Station, and currently at the Wilsonville WTP expansion project.

RELEVANT EXPERIENCE

KELLOGG CREEK UPGRADE | Clackamas County, OR
Carl is providing system integration for the current improvements at the Kellogg Creek WRRF including the replacement of Pumps 1 and 3 in the Influent Pump Station.

TRI-CITY PHASE 1 AND PHASE 2 | Tri-City, OR
Carl was Project Manager and Lead Engineer for the control system development and programming for the $55 Million solids expansion project at Water Environment Services Tri-City Plant. PEI provided engineering services for control system PLC and HMI programming, control strategy development, startup, testing and commissioning.

WILLAMETTE RIVER PUMP STATION UPGRADE | West Linn, OR
Carl provided a full I&C evaluation of the Willamette Pump Station which included the PLC control system, telemetry system, and review of the Control Programing. He assisted the team and helped determine if modifications to control logic, such as changing the wet well level or the sequence of pump operation, might help the pumps pass rags and/or stringy material. Carl provided recommendations for replacing the PLC's IO modules, replacement of instruments, and upgrades to the remote telemetry system.

TIGARD BONITA PUMP STATION DESIGN | Trigard, OR
Carl was the Lead Designer and Engineer for the City of Tigard Bonita pump station project which was an integral portion of the larger Lake Oswego Tigard water partnership project. Carl provided control system design, instrument specifications, control narratives, programming and integration services for six 200 HP pumps and associated instrumentation. The project also included telemetry data links for remote monitoring and control for both the City of Tigard and Lake Oswego.

PROPOSAL CERTIFICATION

Kellogg Creek Water Resource Recovery Facility Influent Pump 2 and 4 Replacement Design

Submitted by: Stantec Consulting Services, Inc.

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

The undersigned, through the formal submittal of this Proposal response, declares that he/she has examined all related documents and read the instruction and conditions, and hereby proposes to provide the services as specified in accordance with the RFP, for the price set forth in the Proposal documents.

Proposer, by signature below, hereby represents as follows:

(a) That no County elected official, officer, agent or employee of the County is personally interested directly or indirectly in this contract or the compensation to be paid hereunder, and that no representation, statement or statements, oral or in writing, of the County, its elected officials, officers, agents, or employees had induced it to enter into this contract and the papers made a part hereof by its terms;

(b) The Proposer, and each person signing on behalf of any Proposer certifies, in the case of a joint Proposal, each party thereto, certifies as to its own organization, under penalty of perjury, that to the best of their knowledge and belief:

1. The prices in the Proposal have been arrived at independently, without collusion, consultation, communication, or agreement for the purpose of restraining competition as to any matter relating to such prices with any other Proposer or with any competitor;

2. Unless otherwise required by law, the prices which have been quoted in the Proposal have not been knowingly disclosed by the Proposer prior to the Proposal deadline, either directly or indirectly, to any other Proposer or competitor;

3. No attempt has been made nor will be made by the Proposer to induce any other person, partnership or corporation to submit or not to submit a Proposal for the purpose of restraining trade;

(c) The Proposer fully understands and submits its Proposal with the specific knowledge that:

1. The selected Proposal must be approved by the Board of Commissioners.

2. This offer to provide services will remain in effect at the prices proposed for a period of not less than ninety (90) calendar days from the date that Proposals are due, and that this offer may not be withdrawn or modified during that time.

(d) That this Proposal is made without connection with any person, firm or corporation making a bid for the same material, and is in all respects, fair and without collusion or fraud.

(e) That the Proposer shall use recyclable products to the maximum extent economically feasible in the performance of the contract work set forth in this document.

(f) That the Proposer accepts all terms and conditions contained in this RFP and that the RFP and the Proposal, and any modifications, will be made part of the contract documents. It is understood that all Proposals will become part of the public file on this matter. The County reserves the right to reject any or all Proposals.

(g) That the Proposer holds current licenses that businesses or services professionals operating in this state must hold in order to undertake or perform the work specified in these contract documents.

(h) That the Proposer is covered by liability insurance and other insurance in the amount(s) required by the solicitation and in addition that the Proposer qualifies as a carrier insured employer or a self-insured employer under ORS 656.407 or has elected coverage under ORS 656.128.

(i) That the Proposer is legally qualified to contract with the County.

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

(k) The Proposer agrees to accept as full payment for the services specified herein, the amount as shown in the Proposal.

☑ Resident Bidder, as defined in ORS 279A.120
☐ Non-Resident Proposer, Resident State_____
Oregon Business Registry Number 644410-91

Contractor's Authorized Representative:

Signature:	Dick Talley	Date:	10/28/2020
Name:	Richard 'Dick' Talley	Title:	Vice President
Firm:	Stantec Consulting Services, Inc.		
Address:	601 SW 2nd Ave #1400		
City/State/Zip:	Portland, OR 97204	Phone:	503 226-7377
e-mail:	richard.talley@stantec.com	Fax:	

Contract Manager:

Name Heather Stephens, PE Title: Senior Principal

Phone number: 503-220-5437

Email Address: heather.stephens@stantec.com

EXHIBIT 1

PROFESSIONAL SERVICES CONTRACT

SCOPE OF WORK

The following is a scope of services for professional engineering services for the design, bid, and award for the Kellogg Creek Water Resource Recovery Facility (KC WRRF) Influent Pump 2 and 4 Replacement Project.

Table of Contents

Background

Clackamas Water Environment Services (herein referred to as District), an intergovernmental partnership formed pursuant to ORS 190, owns and operates over 340 miles of conveyance infrastructure and five water resource recovery facilities. The KC WRRF was constructed as a conventional secondary treatment facility in 1976 to serve the North Clackamas Urban area, and the cities of Happy Valley, Johnson City and Milwaukie. The facility recently completed an upgrade that included, in part, replacement of Influent Pumps 1 and 3. This project will replace Influent Pumps 2 and 4 and their associated Variable Frequency Drives. These pumps serve as high flow pumps to meet peak wet weather demand.

General Assumptions

The following key assumptions were used when determining the scope, schedule, and level of effort for compensation to the Consultant. These assumptions are in addition to those included in the Scope of Services.

1. The design shall be based on standards and codes in effect on the effective date of the authorization to proceed.
2. Consultant shall submit minutes from each workshop no later than 5 working days following each respective workshop. The District's review comments will be received by the Consultant within 10 working days from any corresponding design review workshop. Written responses to the comments will be provided by the Consultant. District shall furnish required information, examine deliverables submitted by Consultant, and render decisions and approvals in a timely manner.
3. The Consultant shall use the 49-Division Construction Specifications Institute (CSI) MasterFormat® specifications. District will provide Division 0 specifications and Consultant will provide Division 1 and technical specifications for project use with District review and comment. District will compile Division 0, Division 1, the Technical Specifications, and the Construction Drawings for delivery to the Clackamas County Purchasing Department.
4. Deliverable documents shall be provided electronically using .PDF and original .DOC format, unless otherwise specified herein. Drawings (11-inch by 17-inch) in .PDF format will be provided for each District internal review.
5. The Consultant's standard CAD software shall be used to produce the drawings, in conformance with Consultant's CAD drafting standards.
6. Meetings and workshops will be held remotely via video conferencing.
7. No permit applications will be prepared by Consultant. Consultant shall provide supporting documentation through an allowance as defined in this scope. The District shall develop the actual permit application and required reports and pay all permit application fees.
8. At a minimum (unless otherwise approved by County), two vendors shall be named for each manufactured component or piece of equipment with provisions for an "equal" to be proposed by the contractor and subject to approval by the Engineer. An exception to this assumption applies to the pumps, with which the District has standardized around Flygt N-Pumps, by Xylem.
9. No equipment pre-purchase or pre-negotiation shall be required.

10. No additive or deductive alternates shall be included on the bid form and contract documents.
11. At the Districts direction, physical modeling shall be performed by our subconsultant, Northwest Hydraulic Consultants (NHC) as a lump sum service.
12. Attachment A provided the anticipated project schedules.

District-Provided Services:

1. District shall provide to Consultant available data in District's possession relating to Consultant's services on the Project. Consultant will reasonably rely upon the accuracy, timeliness, and completeness of the information provided by District.
2. District shall make its facilities accessible to Consultant as required for Consultant's performance of its services.
3. District shall give prompt notice to Consultant when District observes, or becomes aware of, developments that affect the scope or timing of Consultant's services, or of defects in the work of Consultant.
4. District shall provide the final Protective Device and Arc Flash Study for the existing plant upgrade project. The Study will need to be updated for Pump 2 & Pump 4 by the Contractor during construction. This will also need to be made available to the Contractor selected for this Contract.
5. District shall provide available documentation regarding wet well modifications studied/considered during previous Influent Pump Station improvements and shall provide available as-built information for modifications made to the wet well, junction box, or pump suction/discharge piping.

Scope of Services

The Consultant shall provide the District with the engineering design, bid, and award services described herein.

Task 1 - Project Management

Task Specific Objectives:

The purpose of this task is to provide the administrative, project team management, and financial/schedule management activities associated with performing and completing this task of the project. This task also includes maintaining clear communication with the District to deliver the project through conclusion of Construction.

Task 1.1 - Develop Brief Project Management Plan

Consultant will set up the project and prepare a brief project management plan (PMP). The PMP will provide for a staffing plan identified in the scope of work to communicate staff roles and responsibilities. The PMP will describe how Consultant will manage cost, scope, schedule and quality; establish lines of communication and team member roles; and help to define how the project will be managed so that the budget and schedule goals are met. Components of the PIP consist of the following:

Project Schedule

A project schedule will be developed and maintained to monitor overall progress of the project.

QA/QC Plan

Prepare a project QA/QC plan, which defines reviews to be conducted for all Consultant's deliverables and the roles and responsibilities of QA/QC team members. This subtask will also include project close out activities.

Decision and Risk Register

Develop and maintain Decision and Risk registers for review during Project Management meetings.

Bi-Weekly Project Manager Meeting

Participate and attend bi-weekly project management meetings between District's PM and two Consultant team members. Meetings will review schedule and progress, and updates to the Decision and Risk register will be made at this time.

Task 1.2 - Invoicing and Scope Management

Invoices will be submitted on a monthly basis. A project report will accompany each monthly invoice and will detail task and subtask breakdown of cost and hours worked per staff person and percent spent/complete for each task and subtask. This monthly project status report will be included with each submitted invoice.

Task 1 Deliverables:

- One invoice will be submitted for monthly payment in PDF format.
- Project Status Report submitted monthly with invoice in PDF format.

Task 1 Meetings

- Biweekly project updates

Task 2 - Internal Quality Management

Task Specific Objectives:

Discipline reviews at the 30%, 90%, and 100% milestones will be documented under this Task. Each design discipline will be reviewed by an approved quality control reviewer. The discipline reviewer will generate a log of comments, and each design lead will adjudicate each comment.

Task 2 Deliverables:

- Documentation of QC reviews available upon request

Task 3 - CFD Modeling

Task Specific Objectives:

Consultant will develop a computational fluid dynamics (CFD) model for the influent pump station to evaluate whether the existing wet well can be modified during replacement of pumps 2 and 4, and develop design modifications to the suction piping if necessary. The CFD model will be developed using the ANSYS FLUENT software which has been successful for predicting complex three-dimensional

patterns. The CFD results will be used to assess if the approaching hydraulics to the pumps is appropriate to meet with the requirements of Hydraulic Institute Standards – Rotodynamic Pumps for Pump Intake Design (ANSI/HI 9.8-2018), and Rotodynamic Pumps for Pump Piping (ANSI/HI 9.6.6-2016). At the end of the study, a recommended design will be prepared.

Development of the CFD model of the Existing Wet Well. A CFD model will be developed for the existing wet well based on as-built drawings provided by the District supplemented with site photos or other available documents. This model will include influent pipe, wet well, suction piping to the four pumps, and reaches of discharge pipes.

Existing Wet Well Modeling. Up to three simulations of the existing wet well will be performed with different pumps in operation. The results of these simulations will identify poor hydraulics and provide information to develop design modifications.

Design Modification Modeling. Up to three design modifications will be modeled at the most conservative condition selected during review of the existing wet well. This will develop a design that has acceptable hydraulics in terms of pre-swirl angles and velocity distribution at pump throats. Once an accepted design is developed, two additional CFD simulations will be performed for other operating conditions to confirm that design will also work for these conditions.

Following development of the existing pump station model and a development of an initial approach for alleviating hydraulic concerns, a CFD modeling workshop will be held to discuss and review results. The goal of the workshop will be to reach consensus on what type of modifications can or should be made, and to discuss potential scheduling for construction of the recommended improvements.

Report and Meeting. At the end of this study, a draft technical report will be submitted for review. After a consolidated set of the comments are received, the final report will be prepared and submitted.

Task 3 Assumptions:

- District will provide available drawings reflecting current configuration of influent pump station.
- If physical modeling is done as part of this project, findings from the CFD model will be coordinated with Northwest Hydraulics Consultants (NHC) to test desired CFD outputs.

Task 3 Deliverables:

- Technical memorandum describing the model results and recommendations in PDF format.

Task 3 Meetings

- CFD modeling workshop: This workshop will be a key decision workshop which will determine the design path for upgrading the hydraulic characteristics within the wet well. This meeting will also be used to discuss and determine if physical modeling is warranted and should proceed. The meeting is expected to last at least 2 hours and will include Consultant's CFD modeling lead, PM, and Design Management Staff.

Task 4 - Physical Modeling

Task Specific Objectives:

The goal of the physical model study is to optimize and confirm the design of the wet well by determining if the proposed pump station design can provide acceptable flow to the pumps. The District and Consultant team will determine whether to proceed with physical modeling based on the outcome

of the CFD modeling workshop in Task 2. The physical modeling study will be provided by subconsultant NHC, working closely with Stantec and District staff. Specific objectives include:

- Determine the existence and magnitude of adverse flow phenomena in terms of free and subsurface vortex activity, swirl of flow entering the pump and velocity distribution at the pump impeller location;
- Investigate geometric modifications to the pump station to improve flow approaching the pumps;
- Document the performance of the selected pump station design for the anticipated range of operating conditions.

Model Design and Construction

Based on the provided information on the proposed geometry, the flow rate, and the study objectives, construct and test the physical model at a scale of approximately 1:3 (The model scale will be confirmed upon receipt of dimensional drawings that include the pump suction bell and throat diameters. The model scale may require slight adjustments to accommodate commercially available cast acrylic tubing). The physical model will be operated in adherence to the Froude criterion for dynamic similarity.

The proposed model scale has been estimated based on existing drawings which show that the pump suction inlet is 30 inches in diameter and the reduced throat at the pump impeller is 16 inches in diameter.

The physical model will include an approximately 40-foot length (prototype) of the two 48-inch influent pipes, the Influent Junction Box, and the 8-foot length of the influent pipe connecting to the wet well. The wet well, all four pumps, and suction plumbing to the impeller location will all be included in the model. NHC will prepare physical model design drawings and submit them for review and approval prior to the onset of model construction.

Prior to the start of model design and construction, the team will hold a meeting with the District PM, NHC PM, Stantec PM and Design Manager, and CFD Modeling lead to discuss the findings of CFD modeling and considerations related to physical modeling.

Model Testing

The testing approach will include assessing the performance of the existing design under proposed flow capacities, evaluating design modifications to the initial configuration if unsatisfactory pump performance is identified, and fully documenting the final design. All decisions regarding the test program, test results, design modifications, or test procedures will be made with concurrence from Stantec. Each model test will be operated in steady state, where the inflow equals the outflow, and the water level remains constant. Model measurements and instrumentation will be in accordance with ANSI/HI 9.8-2018.

Testing will be conducted in the following phases:

1. Existing Design Testing: The performance of the existing wet well and pump suction piping will be assessed with 4 pump operating combinations. With each test, general flow patterns will be documented, debris mats on the horizontal trash rack will be assessed, solids deposition evaluated, surface and subsurface vortex formation, flow velocity distribution at the pump impeller location, and flow pre-swirl at the pump impeller location.

2. At the end of Existing Design Testing a conference call will held to summarize the results and discuss potential modifications to the wet well and pump suction piping. We have assumed a Microsoft Teams call will conducted so any photos and tabulated results can be presented.
3. Design Modification Testing: In consultation with the design team, modifications will be performed to resolve any deficiencies. We have assumed that Design Modification testing will be limited to 3 weeks (15 working days) to resolve any deficiencies in the design.
4. Final Documentation Testing: After the Witness Test (discussed below) the selected modified design will be tested to confirm the design. We have assumed 8 pump operating and inflow distribution scenarios will be conducted.

Witness Test

Model testing will include a witness test for Stantec and District personnel and will be conducted at the end of the design modification testing. Given the current global pandemic, it has been assumed that the witness test will need to be held by video conference and will include a presentation of study results including pre-recorded video footage and/or a live feed of the physical model for various operating conditions. The laboratory can be made available for a limited (1-2) number of personnel from Stantec/WES if an in-person witness test would be valuable. If this occurs, they will need to follow all State and NHC guidelines for in-person meetings. This includes, masks, social distancing requirements, etc.

Reporting

NHC will prepare a draft technical report summarizing the results of the physical model study for review by the design team and the District. The report will contain an introduction, descriptions of the model, scaling criteria, instrumentation, test procedures, relevant color photographs, complete descriptions of the test results including observations, tabular and graphical data, and conclusions and recommendations. The report will also provide details (description and drawings) of all modifications and/or additions that were required to correct any hydraulic anomalies or other unsatisfactory flow conditions.

Task 4 Deliverables:

- A draft report will be submitted in electronic (PDF) format within two weeks of completing the model testing. An electronic copy (PDF format) of the final report will be submitted within approximately one week of receiving a consolidated set of review comments.

Task 4 Meetings

- CFD/Physical Modeling coordination meeting
- Witness testing

Task 5 - Preliminary (30%) Design

The purpose of this task is to develop the design in sufficient detail to convey the design intent to District staff. Design development will include incorporation of hydraulic modeling and recommendations for wet well and pump suction improvements.

Task 5.1 - Pump Station Model Update

A baseline 3D CAD model of the junction boxes, wet well, and pump suction/discharge piping will be developed which incorporates all modifications made the infrastructure to date. The 3D model will be provided to the CFD and Physical Modeling teams so that they can proceed with the most accurate information.

Task 5.2 - Preliminary Design Documents

The anticipated drawing list is provided in the **Figure 1**. The 30% Preliminary Design submittal will include preliminary drawings as noted in Figure 1, a Table of Contents for the complete specifications, and 90% specifications for the pumps and variable frequency drives.

Sheet List

Number	Sheet	Description	30% Deliverable	90%/100% Deliverable
	GENERAL			
1	G-001	COVER SHEET & LIST OF DRAWINGS	X	X
2	G-002	STANDARD SYMBOLS	X	X
3	G-003	ABBREVIATIONS	X	X
4	G-004	PIPE SCHEDULE & DESIGN CRITERIA	X	X
5	G-005	3D MODEL	X	X
	DEMOLITION			
6	CX-101	MECHANICAL DEMOLITION - PLAN		X
7	CX-102	MECHANICAL DEMOLITION - SECTION I		X
8	CX-103	ELECTRICAL DEMOLITION - PLAN		X
9	CX-104	ELECTRICAL DEMOLITION - SECTION I		X
	INSTRUMENTATION			
10	GI-001	SYMBOLS AND NOMENCLATURE - 1		X
11	GI-002	INSTALLATION DETAILS - I		X
12	GI-003	INSTALLATION DETAILS - II		X
13	I-001	PROCESS AND INSTRUMENTATION DIAGRAM	X	X
14	I-002	CONTROL WIRING SCHEMATICS - I		X
15	I-003	CONTROL WIRING SCHEMATICS - I		X
16	I-004	BLOCK DIAGRAMS		X
	STRUCTURAL			
17	S-001	GENERAL NOTES - I		X
18	S-002	SPECIAL INSPECTION REQUIREMENTS - I		X
19	S-003	STANDARD DETAILS - I		X
20	S-101	PUMP BASE PLAN AND SECTION		X
21	S-102	WET WELL PLAN	X	X
22	S-103	WET WELL SECTION	X	X
	PROCESS MECHANICAL			
23	D-001	GENERAL NOTES AND SYMBOLS		X
24	D-002	STANDARD DETAILS - I		X
25	D-101	PUMP STATION - PLAN	X	X
26	D-102	SECTION - I	X	X
	ELECTRICAL			
27	GE-001	SYMBOLS – I		X
28	GE-002	SYMBOLS – II		X
29	GE-003	ABBREVIATIONS AND GENERAL NOTES		X
30	GE-004	STANDARD DETAILS – I		X
31	GE-005	STANDARD DETAILS – II		X
32	GE-006	PHOTOGRAPHS – I*		X
33	GE-007	PHOTOGRAPHS – II*		X
34	GE-008	SCHEMATIC DIAGRAMS – I*		X
35	GE-009	SCHEMATIC DIAGRAMS – II*		X
36	GE-010	SINGLE LINE DIAGRAM		X
37	E-001	INFLUENT PUMP STATION PUMP FLOOR PLAN		X
38	E-002	INFLUENT PUMP STATION TOP PLAN*		X

Figure 1 – Anticipated Design Drawing List

Task 5 Assumptions

- Pumps will be dry pit submersible by Flygt and will be provided with the MAS 801 pump protection system with a new HMI. Pumps #1 & #3 have been provided with the Mini-CAS monitoring system from the previous design/construction project and will remain as-is and will not be modified, programmed, or otherwise integrated into the new pumps monitoring system or SCADA.
- Design includes relocating the Ventilation Alarm Panel which conflicts with the new/larger Pump 4 VFD.
- Design includes demolition of the RTD Relay panel related to abandoned Pump 1 RTD's and Pump 2 RTD's. This will provide space for the Pump 2 VFD.
- Seal Water & its Low Flow instrument will be removed from Pump 2 & 4, as well as seal water I/O point/s to SCADA. Existing wiring will remain in place as spare where it is combined in conduit with other wiring.
- Hardwired I/O to SCADA will remain the same except for removal of seal water.
- Existing flow meters do not need to be replaced
- Updates required to the Protective Device and Arc Flash Study for Pump 2 & Pump 4 VFD's will be included as a performance specification
- Consultant will provide pump anchorage calculations during design
- Consultant will provide calculations for the VFD cabinets once the VFD submittal has been approved.
- Seismic or a structural evaluation of the existing wet well and influent junction box will not be required
- Structural modifications to the floor, hatches, openings or the monorail system are not required.
- Replacement of pumps #2 and #4 will not require any changes to the pump station electrical distribution system and standby power system.
- New influent screening options will not be evaluated
- HVAC, plumbing, or fire protection design will not be required
- Consultant will not provide full size (22x34) mylar or paper drawings. It is assumed that drawings required for permitting can be stamped and delivered electronically.

Task 5 Deliverables:

- A PDF of the 30% design drawings in 11x17 format. Deliverable will be electronic only.
- Draft specification table of contents, 90% specification sections for pumps and variable frequency drives.

Task 5 Workshops:

Consultant will conduct one (1) four-hour workshop to conduct a review of the work products with the District staff, at the end of the 30% design phase. Consultant's project manager, technical advisor, design manager, and electrical and I&C design leads will attend the workshop.

Task 6 - Draft (90%) Contract Documents

The purpose of this task is to develop the complete draft contract drawings specifications, and estimate. The following activities will be completed under this subtask:

- Finalize specification Division 1 documents
- Prepare construction drawings
- Prepare technical specifications
- Prepare final calculations
- Complete final QA/QC checking and coordination review
- Coordinate with District on advertising and bidding process
- Prepare construction cost estimate
- Incorporate District comments from the 30% deliverable

Task 6 Assumptions:

- Coordination with outside agencies (DEQ) will not be required, assumes District will coordinate all permitting requirements.

Task 6 Deliverables:

- 90% Construction Documents (PDF format)
- 90% Construction Cost Estimate and Schedule (PDF format)

Task 6 Workshops:

Consultant will conduct one (1) four-hour workshop to conduct a review of the work products with the District staff upon delivery of the 90% deliverable. Consultant's project manager, technical advisor, design manager, and design leads (as necessary) will attend the workshop.

Task 7 - (100%) Bid Ready Contract Documents

Consultant will modify the contract documents to reflect agreed-upon final review comments from the District after the 90% review workshop, applicable permitting agencies and Consultant's quality control review team. Reproducible final documents will then be submitted to the District.

Task 7 Deliverables:

- Record of review and responses (PDF format)
- 100% contract documents (PDF format)

Task 8 - Bid Phase Services

Consultant will provide the District various services during the bidding phase. Consultant will provide the drawings and plans and, at the District's request, will attend the pre-bid meeting with the contractors to help answer any questions that may arise. Stantec will put together addendums in the case that contractors ask formal questions.

Consultant will provide technical assistance as needed to interpret the contract documents during the construction contract bid phase. Correspondence with prospective bidders shall be documented in writing. Consultant team members will attend the pre-bid conference and will assist in preparing technical addenda to the contract documents (if needed).

Task 8 Assumptions:

- District shall plan and lead pre-bid conference
- Two addenda will be prepared

Task 8 Deliverables:

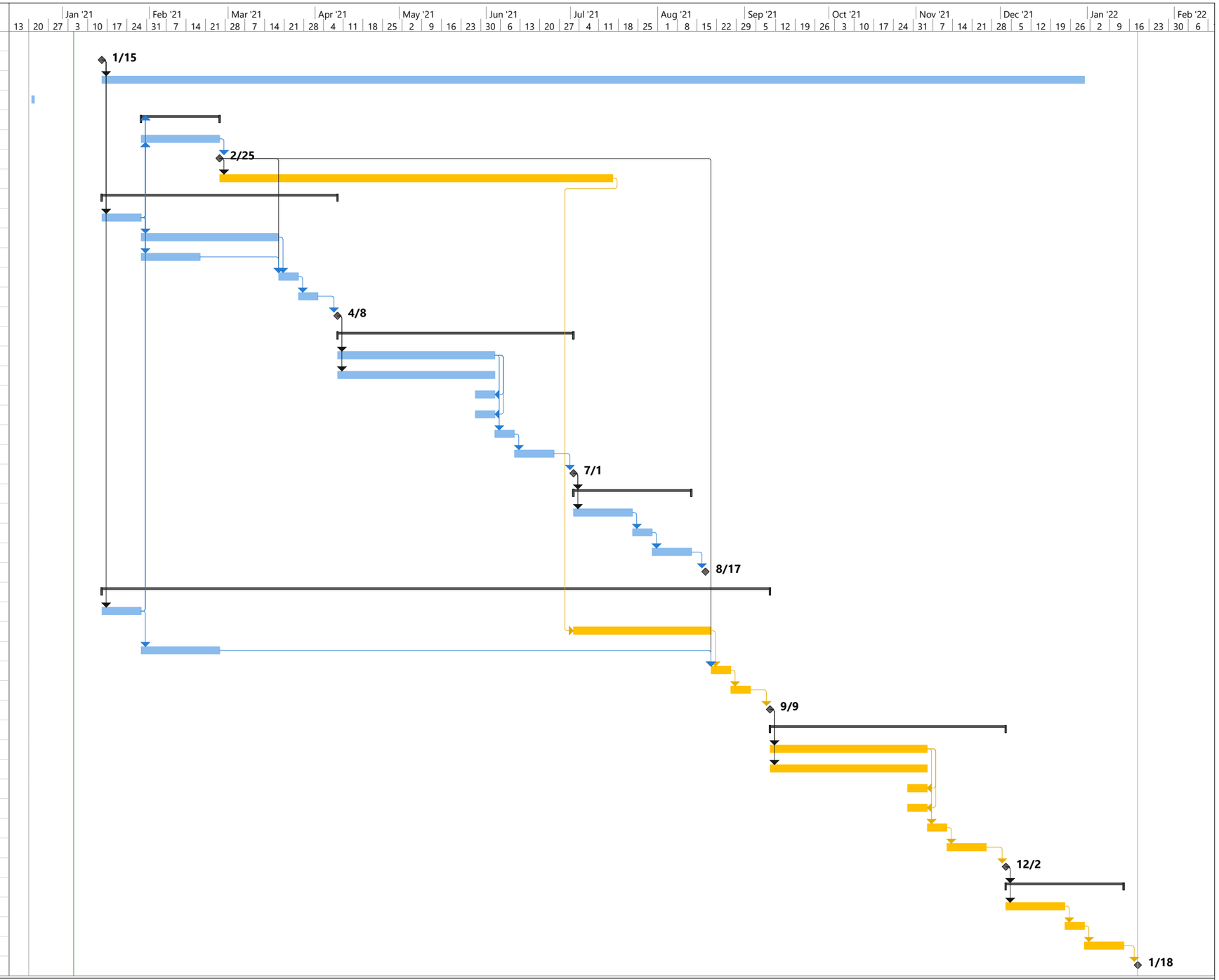
- Written documentation of correspondence with bidders (Word.doc format)
- Technical addenda to the contract documents (PDF and/or Word.doc format)

Task 9 - Construction Phase Services (FUTURE)

Construction-phase services will be authorized through a separate amendment based on the District's needs. Construction-phase services could include Construction Management, Inspection, Engineering Services During Construction, Record Drawing preparation, and associated efforts.

ATTACHMENT A – PROJECT SCHEDULE

ID	Task Mode	Task Name	Duration
1			
2		Notice to Proceed	0 days
3		Task 1. Project Management	250 days
4		Task 2. Quality Management	1 day?
5		**Task 3. CFD Modeling**	**20 days**
6		Prepare Model	20 days
7		Model Workshop	0 days
8		Task 4. Physical Modeling	100 days
9		**Task 5. 30% Design (No Physical Modeling)**	**60 days**
10		Update 3D Model	10 days
11		Preliminary Design Drawings	35 days
12		Specifications	15 days
13		Internal Review	5 days
14		Draft to WES	5 days
15		30% Review Workshop	0 days
16		**Task 6. 90% Design (No Physical Modeling)**	**60 days**
17		Final Design Drawings	40 days
18		Final Specifications	40 days
19		Construction Cost Estimate	5 days
20		Construction Schedule	5 days
21		Internal Review	5 days
22		Draft to WES	10 days
23		90% Review Workshop	0 days
24		**Task 7. 100% Contract Documents (No Physical Modeling)**	**30 days**
25		Prepare Contract Documents	15 days
26		Internal Review	5 days
27		Issue for Construction	10 days
28		Advertise	0 days
29		**Task 5b. 30% Design (Physical Modeling)**	**170 days**
30		Update 3D Model	10 days
31		Preliminary Design Drawings	35 days
32		Specifications	20 days
33		Internal Review	5 days
34		Draft to WES	5 days
35		30% Review Workshop	0 days
36		**Task 6b. 90% Design (Physical Modeling)**	**60 days**
37		Final Design Drawings	40 days
38		Final Specifications	40 days
39		Construction Cost Estimate	5 days
40		Construction Schedule	5 days
41		Internal Review	5 days
42		Draft to WES	10 days
43		90% Review Workshop	0 days
44		**Task 7b. 100% Contract Documents (Physical Modeling)**	**30 days**
45		Prepare Contract Documents	15 days
46		Internal Review	5 days
47		Issue for Construction	10 days
48		Advertise	0 days



Project: Draft Schedule.mpp
Date: Tue 1/5/21

Task
Split
Milestone
Summary
Project Summary
Inactive Task
Inactive Milestone
Inactive Summary
Manual Task
Duration-only
Manual Summary Rollup
Manual Summary
Start-only
Finish-only
External Tasks
External Milestone
Deadline
Progress
Manual Progress

EXHIBIT C
FEE SCHEDULE

FEE ESTIMATE - Kellogg WRRF_IPS Pump 2 and 4

Name	Stephens, Heather	Odell, Adam	Randive, Prashant	Kulkarni, Prasad	Senon, Constantino	Johnson, Andrew	Lin, Fangbiao	Christie, Kieran	Thompson, Meghan	Perkins, Matthew	Papp, Joshua	Reed, Douglas	Tehaney, John	Black, Bryan	McGinn, Rachel	Morrison, Maxwell	ODCs - Travel	NHC	PEI
Project Billing Rate	$230.00	$185.00	$135.00	$135.00	$400.00	$165.00	$230.00	$185.00	$155.00	$217.00	$185.00	$230.00	$230.00	$230.00	$115.00	$75.00	$1.00	$1.05	$1.05
Total Units (T&M)	77	148	140	80	8	233	33	16	16	82	84	16	16	16	22	20	1100	93300	12420
Fee (T&M)	$18,630	$30,340	$18,900	$10,800	$3,200	$39,765	$7,590	$2,960	$2,480	$17,794	$15,540	$3,680	$3,680	$3,680	$2,530	$1,500	$1,100	$97,965	$13,041
Escalation (T&M)	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00
Total Fee (T&M)	$17,710	$27,380	$18,900	$10,800	$3,200	$38,445	$7,590	$2,960	$2,480	$17,794	$15,540	$3,680	$3,680	$3,680	$2,530	$1,500	$1,100	$97,965	$13,041

Project Summary	Labor	Expense	Subs	Total
Fixed Fee	$0.00	$0.00	$0.00	**$0.00**
Time & Material	$177,869.00	$1,100.00	$111,006.00	**$289,975.00**
Total	$177,869.00	$1,100.00	$111,006.00	**$289,975.00**

WBS Code	Task Code	Task Name	Units																		Task Type	Hours	Labour	Expense	Subs	Total
1		**Project Management**																			**Time & Material**	**101**	**$16,068.00**	**$0.00**	**$0.00**	**$16,068.00**
1.1		PMP and Bi-Weekly Meetings	12	16				2	1			4	4				2				Time & Material	41	$8,118.00	$0.00	$0.00	$8,118.00
1.2		Invoicing and Scope Management	10	10													20	20			Time & Material	60	$7,950.00	$0.00	$0.00	$7,950.00
2		**Internal Quality Management**												**16**	**16**	**16**					**Time & Material**	**48**	**$11,040.00**	**$0.00**	**$0.00**	**$11,040.00**
3		**CFD Modeling**	**6**	**12**				**132**	**20**												**Time & Material**	**170**	**$29,980.00**	**$0.00**	**$0.00**	**$29,980.00**
4		**Physical Modeling (NHC)**	**12**	**16**					**12**										**1100**	**93300**	**Time & Material**	**40**	**$8,480.00**	**$1,100.00**	**$97,965.00**	**$107,545.00**
5		**Preliminary (30%) Design**																			**Time & Material**	**183**	**$33,054.00**	**$0.00**	**$1,701.00**	**$34,755.00**
5.1		Pump Station Model Update	5	4	40			8													Time & Material	57	$8,610.00	$0.00	$0.00	$8,610.00
5.2		Preliminary Design Drawings	8	28			6	38			8	12	8							1080	Time & Material	108	$21,014.00	$0.00	$1,134.00	$22,148.00
5.3		30% Design Review Workshop	4	6				4					4							540	Time & Material	18	$3,430.00	$0.00	$567.00	$3,997.00
6		**Draft (90%) Contract Documents**																			**Time & Material**	**312**	**$52,434.00**	**$0.00**	**$11,340.00**	**$63,774.00**
6.1		Drawings & Specifiations	6	20	80	60	2	20			4	38	40							8100	Time & Material	270	$44,346.00	$0.00	$8,505.00	$52,851.00
6.2		Cost Estimate	2							16										2700	Time & Material	18	$3,420.00	$0.00	$2,835.00	$6,255.00
6.3		90% Design Review Workshop	4	8				4				4	4								Time & Material	24	$4,668.00	$0.00	$0.00	$4,668.00
7		**(100%) Bid Ready Contract Documents**	**6**	**20**	**20**	**20**		**10**			**4**	**20**	**20**								**Time & Material**	**120**	**$20,790.00**	**$0.00**	**$0.00**	**$20,790.00**
8		**Bid Phase Services**	**2**	**8**				**15**				**4**	**4**								**Time & Material**	**33**	**$6,023.00**	**$0.00**	**$0.00**	**$6,023.00**

CLACKAMAS WATER ENVIRONMENT SERVICES

Gregory L. Geist
Director

Board of County Commissioners
Clackamas County

Members of the Board:

Approval of Contract between Water Environment Services and Apsco, LLC for the Grit and Septage Pump Replacement Project

Purpose/Outcome	Replacement of aging infrastructure at the Tri City WRRF and Kellogg Creek WRRF. These replacements will renew the capacity of thee systems.
Dollar Amount and Fiscal Impact	Total Contract Value of $239,651.00 until June 30, 2022. This project is part of a budget line from the WES Capital Plan.
Funding Source	639-01-20100-481010-P632299
Duration	Contract until June 30, 2022
Previous Board Action/Review	
Strategic Plan Alignment	1. This project supports the WES Strategic Plan goal to provide properly functioning infrastructure that supports healthy streams and reduces flooding. 2. This project supports the County's Strategic Plan of building a strong infrastructure that delivers services to customers and honors, utilizes, promotes and invests in our natural resources.
Counsel Review	AK 12/7/2020
Procurement Review	Was this project processed through Procurement? Yes.
Contact Person	Jeff Stallard, Civil Engineering Supervisor, 503-742-4964
Contract No.	3435

BACKGROUND:

Clackamas Water Environment Services ("WES"), needs to purchase a total of 10 pumps between the two facilities. The existing pumps no longer produce the minimum pressure required for operating conditions resulting in a decreased efficiency and capacity. The new pumps will be replacing existing pumps at the Tri-City and Kellogg Creek Water Recovery Resource Facility. WES will replace 5 pumps during FY 20/21 and 5 pumps during FY 21/22. The pumps selected are a direct replacement to the existing pumps that have been installed for nearly 30-years.

PROCUREMENT PROCESS:

This project was advertised in accordance with ORS and LCRB Rules on August 20, 2020. Proposals were opened on September 15, 2020. The County received three (3) proposals from Apsco LLC, Owens Pump and Equipment, and Wastewater Solutions. After review of the base bids Aspco LLC was determined to be lowest responsive bidder.

RECOMMENDATION:
Staff recommends the Board approve the Contract with Apsco, LLC for the Grit and Septage Pump Replacement Project.

Respectfully submitted,

Greg Geist
Director, WES

Placed on the _____ Agenda by the Procurement Division.

CLACKAMAS
WATER
ENVIRONMENT
SERVICES

Gregory L. Geist
Director

February 4, 2021

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

Members of the Board:

Approval of a Resolution Allowing the Reduction of Interest
Collected on Certain Existing Assessments for
Water Environment Services

Purpose/Outcomes	Approval of a Resolution Allowing the Reduction of Interest Collected on Certain Existing Assessments.
Dollar Amount and Fiscal Impact	Allow write-down of ~$51,708.96 in uncollectable interest, subject to exact timing of repayment.
Funding Source	WES monthly service charge revenues. No County General Fund revenues are involved.
Duration	One-time adjustment.
Previous Board Action/Review	None.
Counsel Review	This Resolution was drafted and finalized by County Counsel on January 27, 2021.
Strategic Plan Alignment	1. Grow a Vibrant Economy. Writing off interest charges that prevent cost recovery and allowing development to occur.
Contact Person	Chris Storey, WES Assistant Director (503-742-4543)
Contract No.	*Resolution No. not assigned yet.*

BACKGROUND:

Water Environment Services ("WES") constructed wastewater improvements (collection lines) in 1981-82 in support for and anticipation of development in the Hoodland area, and levied assessments to recover costs from benefited properties. The anticipated development did not occur. For the relevant three parcels, known as Whispering Woods parcels #63833, #78295, and #78301 (the "Properties"), the owners did not make payments and interest has accrued on the assessments since originally levied in July 1982.

A developer has approached the current owner of the Properties (it is unclear if the current owner is the same as the original owner in 1982) about acquiring the properties, but the assessment costs are a material barrier to the transaction. The original assessment across the three Properties was for $24,181.28. Interest accrued to date based on the then-policy of twelve percent (12%) per annum adds an additional $68,790.61 to the assessment, for a total payoff amount of $92,971.89 as of the end of January 2021. This total cost is considered prohibitive by the parties and therefore a barrier to WES collecting anything on the assessment and for productive economic activity to occur on the Properties.

WES is proposing that the interest rate on the assessment be reduced from 12% to three percent (3%), which would set the accrued interest at $17,081.65 in addition to the original principal as of the end of January 2021. WES' current cost of capital, or interest rate it is paying for borrowed funds, is below 3% and the rate of recovery on the assessment would still be a net benefit to the ratepayers of WES. This reduction in the assessment interest rate would reduce accrued interest by approximately $51,708.96, subject to exact timing of repayment.

Best practice is for the Board to approve such a write down of this kind of uncollectable debt. Given the shifting dates of when the closing of the sale of the Properties, and therefore the repayment of the relevant assessments, is in flux, the request is for approval to reduce the rate of interest on the outstanding assessments to 3% and the actual amount of interest reduced be as of the date of payoff.

The attached resolution has been reviewed and approved by County Counsel.

RECOMMENDATION:
Staff respectfully recommends that the Board, as the governing body of Water Environment Services, adopt the resolution allowing the reduction of interest collected on certain existing assessments.

Respectfully submitted,

Chris Storey, Assistant Director
WES

Attachments: Authorizing Resolution

A RESOLUTION ALLOWING THE REDUCTION OF INTEREST COLLECTED ON CERTAIN EXISTING ASSESSMENTS

RESOLUTION NO.

WHEREAS, Water Environment Services ("WES") imposed an assessment on properties in the Hoodland area related to the construction of wastewater infrastructure by WES in July 1982;

WHEREAS, the assessments on three properties known as Whispering Woods #63833, #78295, and #78301 ("Properties") remain unpaid and have accrued interest at a default rate for uncollected debt of 12%; and

WHEREAS, the amount of interest owed on assessments for each of the Properties is almost three times the principal owed, and has become a perceived barrier to the development and further beneficial use of these properties; and

WHEREAS, WES desires to reduce the interest rate owed on the assessments of the Properties to 3%, which would reduce the total amount of collected interest from approximately $68,790.61 to $17,081.65, subject to the exact timing of full repayment, in order to facilitate the sale and development of the Properties;

NOW THEREFORE, BE IT RESOLVED BY BOARD OF WATER ENVIRONMENT SERVICES THAT:

1. The Board authorizes the reduction of the interest rate on the Properties from 12% to 3%.
2. The Board delegates authority to the Director or Assistant Director of Water Environment Services to take all necessary steps and execute all documentation necessary to accomplish the reduction in the interest rate and collection of the assessments owed by the Properties.

ADOPTED this 4th day of February, 2021.

WATER ENVIRONMENT SERVICES:

_____
Chair

_____
Recording Secretary