



April 6, 2023

BCC Agenda Date/Item: \_\_\_\_\_

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

**Approval of a Personal Services Contract with Jacobs Engineering Group, Inc. to provide Engineering Services for the Tri-City Clarifier Rehabilitation Project. Total value is \$1,174,243. Funding through Water Environment Services Sanitary Sewer Construction Funds. No County General Funds are involved.**

<b>Previous Board Action/Review</b>	Related construction contract (#7262) presented at Issues on January 17, 2023 and approved on January 19, 2023. Presented at Issues on April 4, 2023.		
<b>Performance Clackamas</b>	<ol style="list-style-type: none"> <li>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.</li> <li>2. This project supports the WES Strategic Plan goal to provide properly functioning infrastructure that supports healthy streams and reduces flooding.</li> </ol>		
<b>Counsel Review</b>	Yes	<b>Procurement Review</b>	Yes
<b>Contact Person</b>	Steven Rice	<b>Contact Phone</b>	503-742-4605

**EXECUTIVE SUMMARY:**

Water Environment Services (WES) has completed engineering design, bidding, and award of the Tri-City Water Resource Recovery Facility (WRRF) Primary Clarifier Rehabilitation Project. Primary treatment at the Tri-City WRRF is provided by six rectangular primary clarifiers that remove surface scum and suspended solids prior to secondary treatment. The construction scope of work includes rehabilitation of corroded concrete, full mechanism replacement, and miscellaneous mechanical and electrical improvements to the Primary Building situated on top of a portion of the basins. This work will occur in two basins per year during the dry weather season, beginning in 2023 and concluding in 2025. The construction contract was award to McClure & Sons in January 2023.

Jacobs Engineering Group, Inc. was selected to provide engineering services during the construction phase following evaluation of proposals solicited by RFP2022-98. The services include assistance in administration of the contract for construction, monitoring the performance of the construction contractor, verifying that the contractor’s work is in substantial compliance with the contract documents, and assistance in responding to

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events that occur during the construction. The scope of work also includes providing a Residential Project Representative to provide full-time on-site construction observation during each dry weather working window.

**RECOMMENDATION:** Staff recommends that the Board of County Commissioners of Clackamas County, acting as the governing body of Water Environment Services, approve Contract #7588 between Water Environment Services and Jacobs Engineering Group, Inc. for the Tri-City Water Resource Recovery Facility (WRRF) Primary Clarifier Rehabilitation Project.

Respectfully submitted,



Greg Geist  
Director, WES

Attachment: Contract #7588



**WATER ENVIRONMENT SERVICES  
PERSONAL SERVICES CONTRACT  
Contract #7588**

This Personal Services Contract (this “Contract”) is entered into between **Jacobs Engineering Group 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 **May 31, 2026**.
- 2. Scope of Work.** Contractor shall provide personal engineering services and resident project representative services during construction of the Tri-City Primary Clarifier Rehabilitation Project (“Work”), further described in **Exhibit A**.
- 3. Consideration.** The District agrees to pay Contractor, from available and authorized funds, a sum not to exceed **One Million One Hundred Seventy-Four Thousand Two Hundred Forty-Three Dollars (\$1,174,243.00)**, 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 B**. If any interim payments to Contractor are made, such payments shall be made only in accordance with the schedule and requirements in Exhibit B.
- 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. Contractor shall submit present invoices in proper form within sixty (60) calendar days after the end of the month in which the services were rendered, Payments to Contractor shall be made within thirty (30) days of invoice receipt. 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: [SRice@Clackamas.us](mailto: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, and Exhibit B.

**7. Contractor and District Contacts.**

Contractor	District
Administrator: Todd Dye Phone: 541-908-6036 Email: Todd.Dye@jacobs.com	Administrator: Steven Rice Phone: 503-742-4605 Email: <a href="mailto:SRice@clackamas.us">SRice@clackamas.us</a>

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 three (3) 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. INDEMNITY, RESPONSIBILITY FOR DAMAGES.** Contractor shall be responsible for all damage to property, injury to persons, and loss, expense, inconvenience, and delay which may be caused by, or result from, the conduct of Work, to the extent caused by, any negligent act or omission of Contractor, its subcontractors, agents, or employees. The Contractor agrees to indemnify the District and Clackamas County, and their officers, elected officials, and employees from and against all claims, actions, losses, liabilities, including reasonable attorney and accounting fees, and all expenses, 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 Clackamas County (“County”), purport to act as legal representative of District or County, or settle any claim on behalf of District or County, without the approval of the Clackamas County Counsel’s Office. District or County may assume their own defense and settlement at their election and expense.

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

- 9. INSURANCE.** Contractor shall secure at its own expense and keep in effect during the term of the performance under this Contract the insurance required and minimum coverage indicated below. The insurance requirements outlined below do not in any way 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 included as an additional on all required liability policies, except for Workers Compensation and Professional Liability. 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](mailto: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.
<input checked="" type="checkbox"/> Required – Commercial General Liability: with limits of \$1,000,000 per occurrence, with an annual aggregate limit of \$2,000,000 for Bodily Injury and Property Damage.
<input checked="" type="checkbox"/> Required – Professional Liability: with limits of \$1,000,000 per claim, with an annual aggregate limit of \$2,000,000 for damages caused by error, omission or negligent acts.
<input checked="" type="checkbox"/> Required – Automobile Liability: combined single limit, or the equivalent, \$1,000,000 per accident for Bodily Injury and Property Damage.

The policy(s) shall be primary insurance as respects to the District except for Workers Compensation and Professional Liability. Any insurance or self-insurance maintained by the District shall be excess and shall not contribute to it, except for Workers Compensation and

Professional Liability. Any obligation that District agree to a waiver of subrogation is hereby stricken. Jacobs can offer a waiver of subrogation on all insurance policies except for Professional Liability.

- 10. LIMITATION OF LIABILITIES.** This Contract is expressly subject to the debt limitation of Oregon counties set forth in Article XI, Section 10, of the Oregon Constitution, and is contingent upon funds being appropriated therefore. Any provisions herein which would conflict with law are deemed inoperative to that extent. Except for liability arising under or related to Article II, Section 13 or Section 20 neither party shall be liable for (i) any indirect, incidental, consequential or special damages under this Contract or (ii) any damages of any sort arising solely from the termination of this Contract in accordance with its terms.
- 11. NOTICES.** Except as otherwise provided in this Contract, any required notices between the parties shall be given in writing by personal delivery, email, or mailing the same, to the Contract Administrators identified in Article 1, Section 6. If notice is sent to District, a copy shall also be sent to: Clackamas County Procurement, 2051 Kaen Road, Oregon City, OR 97045, or [procurement@clackamas.us](mailto: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 accordance with the standard of professional skill and care required for a project of similar size, location, scope, and complexity, during the time in which the Work is being performed. 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, 10, 12, 13, 14, 15, 17, 20,



21, 25, 27, 28, and 30, 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. 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.

Jacobs Engineering Group Inc.

Water Environment Services



Digitally signed by  
Robert Brady Fuller  
Date: 2023.03.08  
13:09:11-08'00'

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chair

\_\_\_\_\_  
Date

\_\_\_\_\_  
Name / Title (Printed)

\_\_\_\_\_  
Recording Secretary

064469-83  
Oregon Business Registry #

FBC/Delaware  
Entity Type / State of Formation

APPROVED AS TO FORM

  
County Counsel

3/13/23  
Date

**EXHIBIT A  
PERSONAL SERVICES CONTRACT  
SCOPE OF WORK**

**EXHIBIT A – SCOPE OF WORK**  
 Water Environment Services of Clackamas County  
 Tri-City WRRF Primary Clarifier Rehabilitation Project –  
 Contract #7588; WES Project P632324  
 Services During Construction and  
 Resident Project Representative Services for  
 TCWRRF Primary Clarifier Rehabilitation

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## Background

Consultant shall provide Services During Construction (SDC) as defined below. These SDC are intended to assist the District to administer the contract for construction, monitor the performance of the construction contractor, verify that the contractor’s work is in substantial compliance with the Contract Documents, and assist the District in responding to events that occur during the construction. These SDC are based upon the understanding that the District will contract directly with the General Contractor and will be actively involved in the construction process to make decisions, provide approvals, and perform other actions necessary for the completion of the construction.

Water Environment Services of Clackamas County (District) and Jacobs (Consultant) recently completed design of the TCWRRF Primary Clarifier Rehabilitation project at the Tri-City Water Resource Recovery Facility (TCWRRF). Consultant was selected through competitive procurement to provide Engineering Services described herein. The design includes replacement of six primary clarifier mechanisms, in-basin piping, demolition of select existing HVAC facilities, new ventilation equipment, primary clarifier influent channel gate replacement, and rehabilitation of primary clarifier interior concrete surfaces and related improvements.

## Assumptions – General

1. Procore software will be used as the means of all project documentation including submittals, RFI’s, pay requests, and change orders.
2. Where deliverable documents are identified, unless noted otherwise, five (5) hard copies of the deliverable will be provided in addition to electronic version in .PDF and original .DOC format.
3. Submittals will be provided via an electronic document management system (e.g. Procore). Materials samples and O&M submittals are the only physical submittals anticipated.

4. Consultant's services during construction are based upon the schedule or duration of construction of three construction seasons (2023, 2024, 2025), with advertisement in summer 2022, Notice to Proceed not later than January 2023, and Final Completion by October 2025.
5. The District expects to bid the project with Primary Clarifier 1 and 2 subject to installation in 2023, and that Primary Clarifier 3&4, and 5&6 subject to additive alternate authorization.
6. Consultant will not be responsible for the means, methods, techniques, sequences or procedures of the Contractor, nor will Consultant be responsible for the Contractor's failure to perform in accordance with the Contract Documents.

## District-provided Services

1. District will make its facilities accessible to Consultant as required for Consultant's performance of its services.
2. District will 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.
3. The District will participate in regularly scheduled project status meetings.
4. District will procure and provide access for Consultant to Procore software.
5. Access to office space for Consultant staff use of Consultant laptop computer, photocopy equipment, potable water, restroom and internet access for Consultant staff.
6. Monthly utility, internet and cleaning charges will be paid by the District.
7. Independent Testing, Inspection and Survey Services will be arranged by District.
8. The District will examine information submitted by Consultant and render in writing or otherwise provide decisions in a timely manner.
9. The District will furnish required information and approvals in a timely manner.
10. The District will cause agreements with the contractor to be consistent with Consultant's Agreement.
11. The District will participate in partnering workshops and meetings and provide a meeting space.

## New scope for Services During Construction

### Task 1 Project Management

#### 1.1 Progress Meetings and Updates

Consultant's project manager shall meet with District's project manager periodically throughout the construction phases of the project to review project progress and discuss upcoming work activities.

#### 1.2 Project Work Plan

Consultant shall prepare a general work plan that defines Consultant's delivery approach, staffing, responsibilities and project deliverables.



The following subtasks are provided under this task:

- Update and maintain a work plan to include organization, roles, responsibilities, schedule, budget, and staff plan for execution of services during construction or the Project. The work plan and project instructions will include an update to the quality assurance/quality control (QA/QC) plan.
- Work with Consultant's Project Representative to develop a Construction Management Manual and Construction Quality Assurance Plan.
- Consultant project manager may also participate in weekly Contractor coordination meetings.

### 1.3 Prepare and Submit Monthly Narrative Report and Invoice

Consultant shall submit a monthly invoice with a report regarding progress of construction.

**Task 1 Deliverables:** Monthly progress reports, invoices and project work plan.

## Task 2 Partnering Workshops – not used

## Task 3 Engineering Services During Construction

Consultant shall provide services to assist in coordinating the site activities, administering the contract for construction, monitoring the contractor's performance, responding to design and technical submittals and closing out the contract for construction.

### 3.1 Conformed Documents – already authorized in Design Phase contract

### 3.2 Document Management System and Procedures

Consultant shall work with District to establish a system and set of procedures for managing, logging, tracking and storing all relevant correspondence between the contractor, Consultant and District and documents produced during the project. The Consultant shall, in coordination with the District, maintain hard copy records, suitably organized, of relevant documentation.

Consultant shall assist the District in monitoring all outstanding decisions, approvals or responses required from the District.

### 3.3 Site Coordination

#### 3.3.1 Preconstruction Meeting

Consultant's project manager and lead engineer will attend a preconstruction meeting with the Contractor and District at the Project site prior to the commencement of construction.

#### 3.3.2 Mobilize On-Site Team

Consultant shall mobilize a team on-site during periods of on-site construction (Assume June 1 through October 31 in 2023, 2024, and 2025) to provide site coordination, contract administration and monitor the performance of the contractor. Consultant on-site team shall mobilize in the field offices to be provided by the District.

#### 3.3.3 Project Site Meetings

Consultant shall conduct weekly construction coordination meeting with the contractor and prepare and distribute minutes of these meetings. Project engineer shall participate in meetings up to the limit of the budget shown.

### 3.3.4 Site Communications

Consultant shall issue other communications during construction as provided in the Contract Documents.

**Deliverables:** Preconstruction meeting agenda and notes; weekly construction meeting agenda and notes developed and maintained within the Procore Meetings tool.

## 3.4 Construction Contract Administration

### 3.4.1 Correspondence and Communication

Consultant shall coordinate all written communication among the contractor, Consultant and District during the construction phase. Consultant shall prepare written communication to the contractor and provide recommendations to the District for written communication between the District and contractor.

### 3.4.2 Payments to Contractor

Consultant shall receive and review the contractor's monthly requests for payment. Consultant shall determine whether the amount requested reflects the progress of the contractor's work and is in accordance with the contract for construction.

Consultant shall provide recommendations to the District as to the acceptability of the requests. Consultant shall advise the District as to the status of the total amounts requested, paid and remaining to be paid under the terms of the contract for construction. Consultant's knowledge, information and belief from its observations of the work on site and selected sampling that the work has progressed to the point indicated. Such recommendations do not represent that continuous or detailed examinations have been made by Consultant to ascertain that the contractor has completed the work in exact accordance with the contract for construction; that Consultant has made an examination to ascertain how or for what purpose the contractor has used the moneys paid; that title to any of the work, materials or equipment has passed to the District free and clear of liens, claims, security interests or encumbrances.

**Deliverables:** Payment recommendation, written communication to contractor. Review of contractor applications for payment maintained within the Procore Commitments tool.

## 3.5 Contract Changes

Consultant will assist the District with the issuance of changes to the contract for construction.

### 3.5.1 Defective Work

Consultant shall disapprove or reject work which Consultant believes to be defective, or that Consultant believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

### 3.5.2 Minor Variations in Work

Consultant may authorize minor variations in the work from the requirements of the Contract Documents which do not involve an adjustment in the contract price or the contract times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.

### 3.5.3 Coordinate Issuances of Changes

Consultant shall assist the District with the issuance of changes to the contract for construction. Consultant shall receive and review the contractor's response to the request for change including cost, construction schedule, duration and completion date and will obtain such further information as is necessary to evaluate the basis for the contractor's proposal. Consultant shall assist the District with negotiations of the proposal and, upon approval by the District, prepare final change order documents for execution by the District and contractor.

Consultant shall review all contractor-related changes to the contract for construction including impact on cost, construction schedule, duration and completion date. Consultant shall make recommendations to the District regarding the acceptability of the contractor's request and, upon agreement and approval, Consultant shall prepare change order documents.

**Deliverables:** Defective work notices; field orders; work change directives; and change order documents.

## 3.6 Project Controls

### 3.6.1 Contractor's Schedule Submittal

Consultant shall review the contractor's initial construction schedule and verify that it is consistent with the requirements of the contract for construction. Consultant shall advise contractor of any areas where the schedule is not in compliance with the contract for construction. Consultant shall provide comments to the District to assist with District in approving, accepting or taking other action on the contractor's schedule, in accordance with the contract for construction.

### 3.6.2 Contractor's Schedule Updates

Consultant shall review the contractor's periodic schedule updates or other schedule submissions. Consultant shall advise the contractor if the updates or other submissions are not in accordance with the contract for construction. Consultant shall provide comments to the District regarding the updates or other submissions.

## 3.7 Claims and Disputes

Consultant shall receive, log, and notify the District about all letters and notices from the contractor concerning claims or disputes between the contractor and District pertaining to the acceptability of the work or the interpretation of the requirements of the contract for construction. Consultant shall review all such letters and notices and will discuss them with the contractor as necessary to understand each such claim or dispute.

Consultant shall advise the District regarding the contractor's compliance with the contract requirements for such claims and disputes. Consultant will assist the District in discussions with the contractor to resolve claims and disputes.

Consultant shall issue recommendations on contractor claims or disputes. Consultant will not, except as part of Additional Services, participate in judicial or alternative dispute resolution procedures for the claims or disputes.

The level of effort includes an allowance of 16 hours for this subtask.

**Deliverables:** Written documentation related to claims and disputes.

### 3.8 Interpretation of Contract Documents (RFIs)

Consultant shall issue written clarifications or interpretations of the requirements of the Contract Documents as necessary. Per common construction language, these are called “Requests for Information (RFIs)”. Consultant will coordinate such review with District.

**Assumptions:** Assume 50 RFIs will be reviewed at 4 hours per RFI.

### 3.9 Submittals/Shop Drawing Reviews

Consultant shall obtain from the contractor a proposed shop drawing and submittal schedule, which will identify all shop drawings, samples and submittals required by the contract for construction with the anticipated dates for submission.

Consultant shall serve as Submittal Manager within the Procore system, ensuring that submittals are received and routed according to Document Management Procedures. Consultant shall review and approve shop drawings and samples required by the Contract Documents. Consultant shall log and track all shop drawings, samples and submittals in Procore. Consultant’s review of all shop drawings, samples and submittals shall be for general conformance with the design concept and general compliance with the requirements of the contract for construction. Such review shall not relieve the contractor from its responsibility for performance in accordance with the contract for construction, nor is such review a guarantee that the work covered by the shop drawings, samples and submittals is free of errors, inconsistencies or omissions.

Consultant’s scope shall be based upon the scope of work in the contract for construction and shall include a maximum of three submissions by the contractor for each shop drawing, sample or submission.

**Assumptions:** Assume 62 submittals plus 50% resubmittals will be reviewed under this task at 4 hours per submittal.

**Deliverables:** Submittal log, submittal review comments.

### 3.10 Proposed Substitutions

Consultant shall assist the District in reviewing and responding to the contractor’s request for substitution of materials and equipment. Consultant shall review such requests and advise the District as to the acceptability of such substitutions.

**Deliverables:** Documentation of reviews and recommendations for substitution.

### 3.11 Design Team Visits

Consultant shall coordinate visits to the site by the design team members to review progress and quality of the work. The visits shall observe the general quality of the work at the time of the visit and review any specific items of work that are brought to the attention of the design team members by the Contractor or the District. Consultant shall provide District 48-hour notice of design team member visit.

**Assumptions:** Assume approximately 10 design team visits per dry season, for three years of active construction project.

### 3.12 Testing, Inspection and Survey Services - NOT USED

#### Task 4 Public Outreach Support – Not used.

#### Task 5 Control System Software Services

Consultant shall provide control system software services. The services include planning, programming, testing, and startup for the plant control system PLC and HMI system components to provide the functions described in the Control Loop Descriptions developed during the design phase.

##### **Assumptions:**

- Submittals reviews, RFI responses and change order preparation is covered in Task 3, not this task.
  - Submittal reviews
  - Preparation of design clarifications and change orders
- Up to 3 days of effort will be included for finalizing software loop descriptions.
- PLC programs in the primary clarifier processor (S7-400) and the air handling processor (S7-1500) will be developed early in the project and implemented in phases in alignment with the project construction sequence.
- HMI and PLC software will be configured to District software standards.
- Consultant will modify the existing PLC and HMI programs in new files so all work can be done offsite at their office and brought online in phases at the project site as systems and components are commissioned.
- Consultant will provide required programming licenses for all software used in offsite development, including Wonderware Intouch HMI, Wonderware Intouch development, Siemens TIA, Siemens Step 7, and WIN-911 alarm dialer.
- Software Versions are as follows:
  - 1) Wonderware Software
    - a) InTouch HMI – Version: 11.1
    - b) InTouch Development – Version: 11.1
  - 2) Siemens S7-400 Software
    - a) Step 7 Professional Edition 2010 Version: 5.5
    - b) PCS 7 PDM Version: 6.0
  - 3) Siemens S7-1500 Software
    - a) TIA Version: V14 SP1 Update 7
  - 4) TeleDAC Auto Dialer
    - a) WIN -911 /Pro VX MExx Version: 7.15
- Consultant will provide spare S7-400 and S7-1500 processor (or Siemens emulator) for PLC software development and testing.
- Consultant will configure new Wonderware Intouch tags and graphics for processes monitored and controlled by existing PLC's. The scope and fee are based on software quantities as listed below:



- Where possible, existing Intouch graphics and tags will be re-used for processes that are monitored and controlled by existing PLCs.
- The scope assumes up to two system integration workshops (draft and final).
- Up to a maximum of 20 new WIN-911 tags will be added. The programming will be executed using the existing onsite system.
- Additional historian tags will be added as needed, up to 40 new historian tags.
- Operations training will include up to two 2 hour sessions onsite training for District operations staff.
- District staff will participate in software factory testing and final site software testing.
- No factory testing of equipment (drives or package systems) will be provided.
- Software O&M documentation is limited to electronic copies of final control loop description documents and electronic copies of the final HMI and PLC programs.

## 5.1 Project Meetings

Consultant shall plan and participate in project meetings related to Task 5 activities including attending construction meetings and coordinating with vendors.

**Deliverables:** Meeting notes relating to Task 5 items

## 5.2 Software Planning – Software Loop Descriptions

Consultant shall review project design control loop descriptions, assign IO points, create alarm list, and identify HMI displays elements.

Consultant shall develop final control loop descriptions based on the control loop descriptions contained in the Contract Documents, 1. Control loop descriptions shall define the automated monitoring and control functions to be provided by the PLC and HMI software.

**Deliverables:** Revised control loop descriptions in District’s standard format

## 5.3 Software Programming

Consultant shall perform the following activities:

- PLC programming for each new process systems according to control loop descriptions.
- PLC programming for modifying existing systems.
- HMI programming for new process systems according to the control loop descriptions.
- HMI programming for modifying existing systems.

Consultant shall provide control system software programming services based on the final software loop descriptions defined in Task 5.2. The purpose of this task is to configure the PLC and HMI software to perform the functions identified in the process control narratives. The major task items of software configuration shall include:

- PLC programming for new automated monitoring and control functions at the following PLCs:
  - Primary Clarifiers S7-400 (Existing)
    - A new control strategy and associated logic will be implemented for the primary clarifier mechanism.
    - A simplified control strategy will be implemented for the existing primary sludge pumps.
  - Chlorine Building S7-1500 (Existing)

- A new control strategy and associated logic will be implemented for the new air handlers.
- Wonderware Intouch HMI graphics for the facility improvements. Includes the following:
  - Updated primary sludge collector graphics
  - Simplified primary sludge pump control pop ups
  - New air handler graphics
- Add new critical alarms to the existing WIN-911 alarm dialer software
- 16 hours is included to review and remove existing PLC code and graphics associated with the modified equipment.

**Deliverables:**

- Draft Graphics Review Submittal
- Final Graphics Review Submittal
- Win-911 alarm list

## 5.4 Factory software acceptance testing:

Consultant shall perform offline software testing in Jacobs’ Portland, Oregon, office. One day will be coordinated with District staff to demonstrate, via Teams, the proper function of the PLC-HMI links with simulated I/O before the software is taken to the field for implementation and final site acceptance testing with actual I/O. The testing will be executed with the final PLC and HMI software configurations developed in Jacobs’s office.

Perform the following activities:

- Bench testing and coordination for all new PLC and HMI code.

**Deliverables:** Factory software acceptance test documentation.

## 5.5 Site Acceptance Testing

Consultant shall perform the following activities:

- Create and maintain startup testing documentation.
- Performance testing of each subsystem.
- Coordination with plant staff for final commissioning.

Consultant shall provide control system software site acceptance testing services to confirm that the configured control system software provides the automated monitoring and control functions identified in the final control loop descriptions. Major tasks include:

- Functional Test Part 1 (FT1): This effort is entirely the responsibility of the contractor. The tests and documentation are requirements of the contractor as specified in the Contract Documents.
- Functional Test Part (FT2): Repeat the Contractor’s unwitnessed Functional Test Part 1 (FT1) to confirm that the wiring systems and field equipment are ready for software functional testing. This testing requires support by the contractor for simulating field I/O and troubleshooting wiring.

- Software Functional Acceptance Testing: Test the software functions identified in the final control loop descriptions on a loop-by-loop basis using actual I/O from field devices. This testing will require multiple testing phases, dictated by the Contractor’s schedule.
- Software Training:
  - Train District operations staff how to use the new control system software
- Site Software Acceptance Test Completion Documentation
  - Site software acceptance testing: Software testing at project site with District staff to demonstrate the proper function of the PLC-HMI links with actual I/O after functional testing with the contractor has been completed. The testing will be executed with the final PLC and HMI software configurations started up at the project site. Site final software acceptance testing will include 1 day of formal testing, signoff, and documentation of software functionality with District per clarifier.
  -

**Deliverables:** Final site software acceptance test documentation consisting of formal signoff of software functions.

## 5.6 HMI/SCADA Staff Training

Consultant shall perform the following activities:

- Onsite training with plant staff on how new system operate and how to use the HMI.
- Review all HMI graphics and the functions of each screen element.
- Provide on the job assistance to operators as they begin using the new systems.
- Review alarm list and appropriate responses to alarms.
- Review basic troubleshooting for control system equipment.

## 5.7 HMI O&M Manual and Final Control System Software Documentation

Consultant shall perform the following activities:

- Provide written user manual for HMI system that includes process graphic screen captures and detailed description of associated functions.
- Incorporate as build control functionality description into HMI user manual to provide user with practical description of how the system operates.
- Include alarm list with descriptions and appropriate responses

Jacobs will provide deliverables to document the final PLC and HMI software configurations.

- Final Software O&M Files

### **Deliverables:**

- Written HMI user manual (draft and final)
- DVDs containing the following (three copies):
  - Final HMI Graphics application
  - Final PLC files
- Electronic files for each of the following software O&M documents:
  - Three 3-ring binders containing the final software O&M document
  - Final software loop descriptions

- Final software tag list
- Color copies of the HMI main process graphics

## Task 6 Construction Management/Field Services

Consultant shall provide one on-site full time Resident Project Representative/Field Inspector for duration of the following project.

- TCWRF Primary Clarifier Rehabilitation

The Resident Project Representative will provide construction management of the General Contractor's work. These construction contract management services are based upon the responsibilities, authority and limitations of authority set forth in the Contract Documents for the Resident Project Representative and are further described and limited as follows:

### 6.1 Responsibilities and Authority of Resident Project Representative

The Resident Project Representative is expected to follow the responsibilities and exercise authority as designated by the Contract Documents.

- 6.1.1 Schedules: Review and monitor Progress Schedule, Schedule of Submittals, and Schedule of Values prepared by contractor and consult with Engineer concerning acceptability.
- 6.1.2 Conferences and Meetings: Conduct or attend meetings with contractor, such as preconstruction conferences, progress meetings, Work conferences and other Project related meetings.
- 6.1.3 Liaison: (i) Serve as Engineer's liaison with contractor, working principally through Contractor's authorized representative, and assist in understanding the intent of the Contract Documents; (ii) assist Engineer in serving as Owner's liaison with Contractor when Contractor's operations affect Owner's onsite operations; (iii) assist in obtaining from Owner additional details or information when required for proper execution of the Work.
- 6.1.4 Interpretation of Contract Documents: Inform Engineer and Owner when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor technical clarifications and interpretations as issued by Engineer, or non-technical clarifications and interpretations of the Contract Documents issued by Owner.
- 6.1.5 Submittals: Receive submittals that are furnished at the Site by Contractor, and notify Engineer of availability for examination. Advise Engineer and Contractor of the commencement of any Work or arrival of materials and equipment at Site, when recognized, requiring a Shop Drawing or Sample if the submittal has not been approved by Engineer.
- 6.1.6 Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and provide recommendations to Engineer; transmit to Contractor, in writing decisions as issued by Engineer.
- 6.1.7 Review of Work and Rejection of Defective Work: (i) Conduct onsite observations of the Work in progress to assist Engineer in determining if the Work is, in general, proceeding in accordance with the Contract Documents; (ii) inform Engineer and Contractor whenever RPR believes that any Work is defective; (iii) advise Engineer whenever RPR believes that any Work will not produce a completed Project that conforms generally to the Contract Documents or will prejudice the integrity of the design concept of the completed Project as

- a functioning whole as indicated in the Contract Documents, whenever RPR believes Work should be uncovered for observation, or requires special testing, inspection, or approval; (iv) monitor to ensure that tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; (v) observe, record and report to Engineer appropriate details relative to the test procedures and startups; and (vi) accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections and report to the Engineer.
- 6.1.8 Inspections, Tests, and System Startups: (i) Verify tests, equipment and systems startups and operating and maintenance training are conducted in the presence of appropriate personnel, and that Contractor maintains adequate records thereof; (ii) observe, record, and report to Engineer appropriate details relative to the test procedures and system startups; and (iii) accompany visiting inspectors representing public or other agencies having jurisdiction over the Project, record the results of these inspections, and report to Engineer.
- 6.1.9 Records: (i) Maintain at the Site files for correspondence, conference records, Submittals including Shop Drawings and Samples, reproductions of original Contract Documents including all Addenda, the signed Agreement, Written Amendments, Work Change Directives, Change Orders, Field Orders, additional Drawings issued after the Effective Date of the Agreement, Engineer's written clarifications and interpretations, progress reports, and other Project related documents; (ii) keep a record of pertinent Site conditions, activities, decisions and events.
- 6.1.10 Reports: (i) Furnish Engineer periodic reports of progress of the Work and of Contractor's compliance with the Progress Schedule and Schedule of Submittals; (ii) consult with Engineer in advance of scheduled major tests, inspections or start of important phases of the Work; and (iii) assist in drafting proposed Change Orders, Work Change Directives, and Field Orders, and obtain backup material from Contractor as appropriate.
- 6.1.11 Payment Requests: Review Applications for Payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the Schedule of Values, Work completed, and materials and equipment delivered at the Site but not incorporated in the Work.
- 6.1.12 Certificates, Operation and Maintenance Manuals: During the course of the Work, verify materials and equipment certificates and operation and maintenance manuals and other data required by Specifications to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and ensure these documents have been delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.
- 6.1.13 Substantial Completion: (i) Conduct an inspection in the company of Engineer, Owner, and contractor and prepare a list of items to be completed or corrected; (ii) submit to Engineer a list of observed items requiring completion or correction.
- 6.1.14 Final Completion: (i) Conduct final inspection in the company of Engineer, Owner, and contractor; and (ii) notify Contractor and Engineer in writing of all particulars in which this inspection reveals that the Work is incomplete or defective; and (iii) observe that all items on final list have been completed, corrected, or accepted by Owner and make recommendations to Engineer concerning acceptance. Consultant shall support Owner for submission of letters from structural engineer of record that work is complete.



## 6.2 Limitations of Authority

Resident Project Representative will not:

- 6.2.1 Have authority to authorize a deviation from Contract Documents or substitution of materials or equipment, unless authorized by Owner; or
- 6.2.2 Exceed the limitations of Engineer's authority as set forth in Contract Documents; or
- 6.2.3 Undertake any of the responsibilities of contractor, subcontractors, suppliers, or contractor's authorized representative; or
- 6.2.4 Advise on, issue directions relative to, or assume control over an aspect of the means, methods, techniques, sequences, or procedures of contractor's work unless such advice or directions are specifically required by the Contract Documents; or
- 6.2.5 Advise on, issue directions regarding, or assume control over safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor; or
- 6.2.6 Participate in specialized field or laboratory tests or inspections conducted offsite by others, except as specifically authorized by District; or
- 6.2.7 Accept Shop Drawings or Samples from anyone other than contractor; or
- 6.2.8 Authorize Owner to occupy the Project in whole or in part; or
- 6.2.9 Take an action that would affect Owner's obligations related to scope or schedule of the Work.

### **Assumptions:**

- Assume the RPR will review approximately 20% submittals. Assume the RPR will process approximately 20 % of RFIs. It is assumed these submittals and RFIs are in addition to those described in the assumptions of Task 3.
- Assume that the RPR will work 9 hours per day for the duration of the active construction contract, (June 2023 to September 2023, June 2024 through September 2024, and June 2025 to September 2025, which is 12 months, 23 work days per month) with 16 hours per month for 8 months over winter and 40 hour allowance for contract closeout.
- During active construction, RPR will maintain a Daily Log within the Procore tool.
- The off-site Construction Manager is budgeted to support the on-site RPR for an allowance of 120 hours.

## Task 7 O&M Manual and Startup Support

### 7.1 Operations and Maintenance Manual

This task performed by District.

### 7.2 Startup Process Support and Training

Consultant will provide engineering and operations and maintenance support during startup.

Within this task, Consultant will support District to confirm that the new process systems are operating as they were designed. This assistance includes:

- Review Contractor's startup plan

- Observation of startup activities and contractor testing.

## Task 8 Post Construction, Construction Closeout and Documentation

### 8.1 Construction Document Closeout

Consultant shall finalize all documentation and project notebooks associated with Consultant support during the design and construction phase, providing any critical information and documentation to the District, and archiving critical backup files and documents.

Consultant shall provide to the District an organized set of hard copy project documents and records only for those items that were submitted in hard copy format. Procore electronic project records are expected to be the primary source of project documents.

Consultant shall coordinate with the Contractor for the submission of required warranties, guarantees, lien releases and other similar documents as required by the contract for construction. Consultant will advise the District as to the acceptability and compliance of these documents with the contract for construction.

### 8.2 Substantial and Final Completion

Consultant shall assist the District in issuing documents for substantial and final completion and acceptance of the work. Consultant will advise the District on payment, final payment, and release of insurance and bonds.

### 8.3 Occupancy and Start-Up Permits

Consultant shall assist the District with securing occupancy and start-up permits. As the contract for construction will require the contractor to secure such permits, Consultant will monitor the contractor's efforts and will advise the District of the contractor's progress. Should the District be required to secure such permits, Consultant will assist the District by coordinating final inspections, submitting documents to the governmental agencies and coordinating inspections by the agencies.

### 8.4 Warranty Period Services

Consultant shall coordinate with the contractor for the submission of required warranties, guarantees, lien releases and other similar documents as required by the Contract Documents. Consultant shall advise the District as to the acceptability and compliance of these documents with the Contract Documents.

### 8.5 Record Drawings

During the course of construction, drawings will be updated as part of record drawings to reflect changes to structural and mechanical features.

On a monthly basis, as part of the ongoing construction effort, Consultant will update 2-dimensional record drawings on the basis of information furnished by the contractor and field staff related to formal project changes only (Work Change Directives). Following substantial completion, these updates will be checked by Consultant field staff against all RFI's and any changes to design. Field staff shall inspect the contractor redlines monthly, prior to approving contractor pay request.

- No formal updates to specifications will be prepared or performed as part of this work. The field team is anticipated to keep an updated set of specifications in the field office noting changes authorized by the Contract.

**Deliverables:** 1 electronic copy of half and full-size drawings in PDF and AutoCAD formats; 3 hard copies of half-size drawings on bond paper; Updated set of specifications noting authorized changes.

## Task 9 Safety

Consultant shall manage the health, safety and environmental activities of its staff and the staff of its subcontractors to achieve compliance with applicable State and Federal health and safety laws and regulations. Consultant will prepare a Health Safety and Environment (HS&E) Plan covering its staff activities.

Confined space entry is required by Consultant employees and is expected to be performed in all primary clarifiers, and primary influent channel. Consultant will follow Consultant's procedures and cooperate with Owner and Contractor subject to Oregon OSHA standards.

Consultant shall coordinate its health, safety and environmental program with the responsibilities for health, safety and environmental compliance specified in the contract for construction. Consultant shall coordinate with responsible parties to correct conditions that do not meet applicable federal, state and local occupational safety and health laws and regulations, when such conditions expose Consultant staff, or staff of Consultant subcontractors, to unsafe conditions.

Consultant shall notify affected personnel of any site conditions posing an imminent danger to them which Consultant observes.

Consultant is not responsible for health or safety precautions of construction workers. Consultant is not responsible for the contractor's compliance with the health and safety requirements in the contract for construction, or with federal, state, and local occupational safety and health laws and regulations.

## Additional Services

The following services shall be considered as Additional Services. No budget has been included for Consultant to support the following:

- Services necessary due to the default of the Contractor.
- Services for the investigation and analysis of contractor claims or preparation of reports on contractor claims except as specifically described in above scope of work. Provision of professional claims analysis services; participation in litigation or alternative dispute resolution of claims.
- Preparation for and serving as a witness in connection with any public or private hearing or other forum related to the project.
- Services to support, prepare, document, bring, defend, or assist in litigation undertaken or defended by the District.

## Project Schedule

The services during construction services described and required herein shall be completed in a timely manner based on Contractor Notice to Proceed in January 2023, Consultant's Notice to Proceed in January 2023 and the completion of construction over the course of 3 construction seasons, with active construction June 2023 through September 2023, and June 2024 through September 2024, and June 2025 through September 2025. Actual active construction activities may occur outside of these windows and will be accommodated by the Consultant as needed.

## Budget

Staff will bill at per diem rates shown.

Labor billing rates are current at the time of the execution of the agreement and will be adjusted annually (January 1) per the Bureau of Labor and Statistics Consumer Price Index – Seattle Area CPI-All Urban Consumers.

The current authorized compensation limit for services performed under this scope of work shall not exceed the amount shown in Exhibit B. Exhibit B also shows the basis for labor and expenses used to develop the fee.

**Exhibit B**  
**HOURLY RATES**

Clackamas Water Environment Services  
Tri-City WRRF Primary Clarifier Rehabilitation  
Engineering Services During Construction  
Jacobs Engineering Group Inc.

**PERSONNEL**

Labor will be invoiced by staff classification at the following hourly rates, which are valid through this contract expiration, and will be adjusted annually (January 1) per the Bureau of Labor and Statistics Consumer Price Index – Seattle Area CPI-All Urban Consumers.

Escalation will not cause rates to exceed rate cap of \$260 per hour.

Staff Category Billing Rate Hourly (hourly)	2023
Senior Project Manager	\$260
Project Manager/Sr. Engineer	\$260
Senior Project Engineer	\$251
Mid-Level Engineer/Sr. Technical Staff	\$228
Project Engineer	\$218
Technical Staff	\$208
Senior Technician	\$194
Resident Project Representative Level 2	\$192
Resident Project Representative Level 1	\$170
Engineer/Editor	\$182
Staff Engineer 2	\$168
Technician 2	\$155
Staff Engineer 1/Scientist/Project Controls	\$142
Technician 1	\$127
Project Assistant/Project Accountant	\$115
Office	\$103
Intern	\$87

**PROJECT EXPENSES**

Expenses incurred in-house that are directly attributable to the project will be invoiced at actual cost. These expenses include the following:

Mileage	Current IRS Rate
Postage and Delivery Services	At Cost
Printing and Reproduction	At Cost
Travel, Lodging and Subsistence	At Cost

**OUTSIDE SERVICES**

Outside technical, professional and other services will be invoiced at actual cost plus 5%.



Attachment B

Tri-City WRRP Primary Clarifier Rehabilitation Engineering Services During Construction		JACOBS												TOTAL LABOR HOURS & EXPENSES							
R 646		Project Manager Todd Dye	Office Sr. Manager Ryan Zemmer	Construction Manager/ Inspector Curtis Bar	Resident Project Representative Dan Wilson	Mechanical Engineer Saverio Span	HVAC Engineer Jim Schneider	Structural Engineer Alex Fife	Electrical Engineer Jacob Heien	Lead IJC Engineer Daryl Barnsack	Staff IJC Engineer Stephane McGeary	Schedule Consultant Ryan Maltry	Lead CAD Technician Bernward	Self CAD Technicians TDP	Project Assistant Shamir Dalton	Repro Teresa Rothlis	Project Controls Connet Blaine	Labor Dollars	Coating Inspector	Expense	TOTAL LABOR HOURS & EXPENSES
1.0	Services During Construction	\$229.00	\$80.00	\$192.00	\$176.00	\$142.00	\$210.00	\$160.00	\$182.00	\$261.00	\$215.00	\$228.00	\$122.00	\$127.00	\$193.00	\$103.00	\$142.00	\$0	\$0	\$0	\$0
1.1	Progress Meetings and Updates	190													190			\$65,800	\$0	\$65,800	360
1.2	Project Work Plan	0													0			1,388	\$0	\$1,388	6
1.3	Project Narrative Report and Invoice	0													0			25,927	\$0	\$25,927	163
2.0	2.0 Prefabrication	0													0			\$0	\$0	\$0	0
3.0	3.0 Engineering Services During Construction	16				8												\$0	\$0	\$0	16
3.1	3.1 Document Management System and Procedures																	\$0	\$0	\$0	
3.2	3.2 Site Coordination																	\$0	\$0	\$0	
3.3	3.3 Construction Contract Administration																	\$0	\$0	\$0	
3.4	3.4 Construction Cost Control	12						16				24						\$1,746	\$0	\$1,746	60
3.5	3.5 Project Controls																	\$0	\$0	\$0	
3.6	3.6 Claims and Disputes																	\$0	\$0	\$0	
3.7	3.7 Bid Management	2																\$0	\$0	\$0	2
3.8	3.8 Submittals/Shop Drawing Reviews	2																\$0	\$0	\$0	2
3.9	3.9 Proposed Substitutions	24																\$0	\$0	\$0	24
3.10	3.10 Testing, Inspection and Survey Services																	\$0	\$0	\$0	
3.11	3.11 Public Outreach Support																	\$0	\$0	\$0	
3.12	3.12 Field Support Services																	\$0	\$0	\$0	
4.0	4.0 Public Outreach Support																	\$0	\$0	\$0	
4.1	4.1 Field Support Services																	\$0	\$0	\$0	
4.2	4.2 Software Planning - Software Loop Descriptions																	\$0	\$0	\$0	
4.3	4.3 Software Programming																	\$0	\$0	\$0	
4.4	4.4 Software Testing																	\$0	\$0	\$0	
4.5	4.5 SRA/Response Testing																	\$0	\$0	\$0	
4.6	4.6 HMIS/CAD/Shop Drawing Reviews																	\$0	\$0	\$0	
4.7	4.7 Contract Management/Field Services																	\$0	\$0	\$0	
4.8	4.8 O&M Manual and Startup Report																	\$0	\$0	\$0	
4.9	4.9 Pre-Start-up Support Services																	\$0	\$0	\$0	
4.10	4.10 Start-up Support Services																	\$0	\$0	\$0	
4.11	4.11 Post-Construction, Construction Closeout and Documentation																	\$0	\$0	\$0	
4.12	4.12 Construction Document Checklist																	\$0	\$0	\$0	
4.13	4.13 Occupancy and Start-Up Permits																	\$0	\$0	\$0	
4.14	4.14 Warranty Period Services (not authorized)																	\$0	\$0	\$0	
4.15	4.15 Safety																	\$0	\$0	\$0	
<b>Total Hours</b>		88,692	37,200	452,736	176,670	68,720	5,222	66,560	15,862	108,881	37,496	5,472	1,016	7,250	33,851	2,884	127,861	1,116,484		19,673	1,136,157
<b>Total Labor Dollars</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,116,484
<b>Total Expense</b>		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
<b>2024 &amp; 2025 Labor Escalation</b>																					\$50,000
<b>5% reduction Subcontractorials</b>																					\$17,979
<b>Total, not to exceed</b>																					\$117,420

All staff billed at the per diem rates shown. Per diem rates are subject to annual escalation on January 1.