EXHIBIT A

CITY OF WILSONVILLE PROFESSIONAL SERVICES AGREEMENT

This Professional Services Agreement ("Agreement") for the West Side Level B Water Reservoir/Transmission Main Project ("Project") is made and entered into on this _____ day of February 2023 ("Effective Date") by and between the **City of Wilsonville**, a municipal corporation of the State of Oregon (hereinafter referred to as the "City"), and **Consor North America, Inc.**, an Oregon corporation (hereinafter referred to as "Consultant").

RECITALS

WHEREAS, the City requires services which Consultant is capable of providing, under terms and conditions hereinafter described; and

WHEREAS, Consultant represents that Consultant is qualified to perform the services described herein on the basis of specialized experience and technical expertise; and

WHEREAS, Consultant is prepared to provide such services as the City does hereinafter require.

NOW, THEREFORE, in consideration of these mutual promises and the terms and conditions set forth herein, the parties agree as follows:

AGREEMENT

Section 1. Scope of Work

Consultant shall diligently perform the design and construction support services according to the requirements identified in the Scope of Work for the Project, attached hereto as **Exhibit A** and incorporated by reference herein (the "Services").

Section 2. Term

The term of this Agreement shall be from the Effective Date until all Services required to be performed hereunder are completed and accepted, or no later than October 10, 2025, whichever occurs first, unless earlier terminated in accordance herewith or an extension of time is agreed to, in writing, by the City.

Section 3. Consultant's Services

3.1. All written documents, drawings, and plans submitted by Consultant in conjunction with the Services shall bear the signature, stamp, or initials of Consultant's authorized Project Manager. Any documents submitted by Consultant that do not bear the signature, stamp, or initials of Consultant's authorized Project Manager, will not be relied upon by the City. Interpretation of plans and answers to questions regarding the Services or Scope of Work given by Consultant's Project Manager may be verbal or in writing, and may be relied upon by the City, whether given verbally or

in writing. If requested by the City to be in writing, Consultant's Project Manager will provide such written documentation.

3.2. Consultant will not be deemed to be in default by reason of delays in performance due to circumstances beyond Consultant's reasonable control, including but not limited to strikes, lockouts, severe acts of nature, or other unavoidable delays or acts of third parties not under Consultant's direction and control ("Force Majeure"). In the case of the happening of any Force Majeure event, the time for completion of the Services will be extended accordingly and proportionately by the City, in writing. Lack of labor, supplies, materials, or the cost of any of the foregoing shall not be deemed a Force Majeure event.

3.3. The existence of this Agreement between the City and Consultant shall not be construed as the City's promise or assurance that Consultant will be retained for future services beyond the Scope of Work described herein.

3.4. Consultant shall maintain the confidentiality of any confidential information that is exempt from disclosure under state or federal law to which Consultant may have access by reason of this Agreement. Consultant warrants that Consultant's employees assigned to the Services provided in this Agreement shall be clearly instructed to maintain this confidentiality. All agreements with respect to confidentiality shall survive the termination or expiration of this Agreement.

Section 4. Compensation

4.1. Except as otherwise set forth in this **Section 4**, the City agrees to pay Consultant on a time and materials basis, guaranteed not to exceed ONE MILLION FOUR HUNDRED SEVENTY-TWO THOUSAND SIX HUNDRED FORTY-FOUR DOLLARS (\$1,472,644), for performance of the Services ("Compensation Amount"). Any compensation in excess of the Compensation Amount will require an express written Addendum to be executed between the City and Consultant. Consultant's Rate Schedule is set forth in Attachment B to **Exhibit A**.

4.2. During the course of Consultant's performance, if the City, through its Project Manager, specifically requests Consultant to provide additional services that are beyond the Scope of Work described on **Exhibit A**, Consultant shall provide such additional services and bill the City at the hourly rates outlined on Consultant's Rate Schedule, as set forth in **Exhibit A**, Attachment B. Any Additional work beyond the Scope of Work, or any compensation above the amount shown in **Subsection 4.1**, requires a written Addendum executed in compliance with the provisions of **Section 17**.

4.3. Except for amounts withheld by the City pursuant to this Agreement, Consultant will be paid for Services for which an itemized invoice is received by the City within thirty (30) days of receipt, unless the City disputes such invoice. In that instance, the undisputed portion of the invoice will be paid by the City within the above timeframe. The City will set forth its reasons for the disputed claim amount and make good faith efforts to resolve the invoice dispute with Consultant as promptly as is reasonably possible.

4.4. The City will be responsible for the direct payment of required fees payable to governmental agencies, including but not limited to plan checking, land use, zoning, permitting, and all other similar fees resulting from this Project, that are not specifically covered by **Exhibit A**.

4.5. Consultant's Compensation Amount and Rate Schedule are all inclusive and include, but are not limited to, all work-related costs, expenses, salaries or wages, plus fringe benefits and contributions, including payroll taxes, workers compensation insurance, liability insurance, profit, pension benefits and similar contributions and benefits, technology and/or software charges, licensing, trademark, and/or copyright costs, office expenses, travel expenses, mileage, and all other indirect and overhead charges, including, but not limited to, the recently enacted Oregon Corporate Activity Tax (CAT).

Section 5. City's Rights and Responsibilities

5.1. The City will designate a Project Manager to facilitate day-to-day communication between Consultant and the City, including timely receipt and processing of invoices, requests for information, and general coordination of City staff to support the Project.

5.2. Award of this contract is subject to budget appropriation. Funds are approved for Fiscal Year 2022-23. If not completed within this fiscal year, funds may not be appropriated for the next fiscal year. The City also reserves the right to terminate this contract early, as described in **Section 15**.

Section 6. City's Project Manager

The City's Project Manager is Mike Nacrelli. The City shall give Consultant prompt written notice of any re-designation of its Project Manager.

Section 7. Consultant's Project Manager

Consultant's Project Manager is Adam Blair. In the event that Consultant's designated Project Manager is changed, Consultant shall give the City prompt written notification of such re-designation. Recognizing the need for consistency and knowledge in the administration of the Project, Consultant's Project Manager will not be changed without the written consent of the City, which consent shall not be unreasonably withheld. In the event the City receives any communication from Consultant that is not from Consultant's designated Project Manager, the City may request verification by Consultant's Project Manager, which verification must be promptly furnished.

Section 8. Project Information

Except for confidential information designated by the City as information not to be shared, Consultant agrees to share Project information with, and to fully cooperate with, those corporations, firms, contractors, public utilities, governmental entities, and persons involved in or associated with the Project. No information, news, or press releases related to the Project, whether made to representatives of newspapers, magazines, or television and radio stations, shall be made without the written authorization of the City's Project Manager.

Section 9. Duty to Inform

If at any time during the performance of this Agreement or any future phase of this Agreement for which Consultant has been retained, Consultant becomes aware of actual or potential problems, faults, or defects in the Project or Scope of Work, or any portion thereof; or of any nonconformance with federal, state, or local laws, rules, or regulations; or if Consultant has any objection to any decision or order made by the City with respect to such laws, rules, or regulations, Consultant shall give prompt written notice thereof to the City's Project Manager. Any delay or failure on the part of the City to provide a written response to Consultant shall neither constitute agreement with nor acquiescence to Consultant's statement or claim, nor constitute a waiver of any of the City's rights.

Section 10. Subcontractors and Assignments

10.1. Unless expressly authorized in **Exhibit A** or **Section 11** of this Agreement, Consultant shall not subcontract with others for any of the Services prescribed herein. Consultant shall not assign any of Consultant's rights acquired hereunder without obtaining prior written approval from the City, which approval may be granted or denied in the City's sole discretion. Some Services may be performed by persons other than Consultant, provided Consultant advises the City of the names of such subcontractors and the work which they intend to perform, and the City specifically agrees in writing to such subcontracting. Consultant acknowledges such work will be provided to the City pursuant to a subcontract(s) between Consultant and subcontractor(s) and no privity of contract exists between the City and the subcontractor(s). Unless otherwise specifically provided by this Agreement, the City incurs no liability to third persons for payment of any compensation provided herein to Consultant. Any attempted assignment of this Agreement without the written consent of the City shall be void. Except as otherwise specifically agreed, all costs for work performed by others on behalf of Consultant shall not be subject to additional reimbursement by the City.

10.2. The City shall have the right to enter into other agreements for the Project, to be coordinated with this Agreement. Consultant shall cooperate with the City and other firms, engineers or subcontractors on the Project so that all portions of the Project may be completed in the least possible time and within normal working hours. Consultant shall furnish other engineers, subcontractors and affected public utilities, whose designs are fitted into Consultant's design, detail drawings giving full information so that conflicts can be avoided.

10.3. Consultant shall include this Agreement by reference in any subcontract and require subcontractors to perform in strict compliance with this Agreement.

Section 11. Consultant Is Independent Contractor

11.1. Consultant is an independent contractor for all purposes and shall be entitled to no compensation other than the Compensation Amount provided for under **Section 4** of this Agreement. Consultant will be solely responsible for determining the manner and means of accomplishing the end result of Consultant's Services. The City does not have the right to control or interfere with the manner or method of accomplishing said Services. The City, however, will have the right to specify and control the results of Consultant's Services so such Services meet the requirements of the Project.

11.2. Consultant may request that some consulting services be performed on the Project by persons or firms other than Consultant, through a subcontract with Consultant. Consultant acknowledges that if such services are provided to the City pursuant to a subcontract(s) between Consultant and those who provide such services, Consultant may not utilize any subcontractor(s), or in any way assign its responsibility under this Agreement, without first obtaining the express written consent of the City, which consent may be given or denied in the City's sole discretion. For all Services performed under subcontract to Consultant, as approved by the City, Consultant shall only charge the compensation rates shown on the approved Rate Schedule (**Exhibit A**, Attachment B). Rate schedules for named or unnamed subcontractors, and Consultant markups of subcontractor billings, will only be recognized by the City as set forth in Consultant's Rate Schedule, unless documented and approved, in writing, by the City pursuant to a modification to Consultant's Rate Schedule, per **Section 17** of this Agreement. In all cases, processing and payment of billings from subcontractors is solely the responsibility of Consultant.

11.3. Consultant shall be responsible for, and defend, indemnify, and hold the City harmless against, any liability, cost, or damage arising out of Consultant's use of such subcontractor(s) and subcontractor's negligent acts, errors, or omissions. Unless otherwise agreed to, in writing, by the City, Consultant shall require that all of Consultant's subcontractors also comply with, and be subject to, the provisions of this **Section 11** and meet the same insurance requirements of Consultant under this Agreement.

Section 12. Consultant Responsibilities

12.1. Consultant must make prompt payment for any claims for labor, materials, or services furnished to Consultant by any person in connection with this Agreement as such claims become due. Consultant shall not permit any liens or claims to be filed or prosecuted against the City on account of any labor or material furnished to or on behalf of Consultant. If Consultant fails, neglects, or refuses to make prompt payment of any such claim, the City may, but shall not be obligated to, pay such claim to the person furnishing the labor, materials, or services and offset the amount of the payment against funds due or to become due to Consultant under this Agreement. The City may also recover any such amounts directly from Consultant.

12.2. Consultant must comply with all applicable Oregon and federal wage and hour laws, including BOLI wage requirements, if applicable. Consultant shall make all required workers compensation and medical care payments on time. Consultant shall be fully responsible for payment of all employee withholdings required by law, including but not limited to taxes, including payroll, income, Social Security (FICA), and Medicaid. Consultant shall also be fully responsible for payment of salaries, benefits, taxes, Industrial Accident Fund contributions, and all other charges on account of any employees. Consultant shall pay to the Department of Revenue all sums withheld from employees pursuant to ORS 316.167. All costs incident to the hiring of assistants or employees shall be Consultant's responsibility. Consultant shall defend, indemnify, and hold the City harmless from claims for payment of all such expenses.

12.3. No person shall be discriminated against by Consultant or any subcontractor in the performance of this Agreement on the basis of sex, gender, race, color, creed, religion, marital status,

age, disability, sexual orientation, gender identity, or national origin. Any violation of this provision shall be grounds for cancellation, termination, or suspension of the Agreement, in whole or in part, by the City. References to "subcontractor" mean a subcontractor at any tier.

Section 13. Indemnity

13.1. Indemnification. Consultant acknowledges responsibility for liability arising out of the performance of this Agreement, and shall defend, indemnify, and hold the City harmless from any and all liability, settlements, loss, costs, and expenses in connection with any action, suit, or claim resulting or allegedly resulting from Consultant's negligent acts, omissions, errors, or willful or reckless misconduct pursuant to this Agreement, or from Consultant's failure to perform its responsibilities as set forth in this Agreement. The review, approval, or acceptance by the City, its Project Manager, or any City employee of documents or other work performed, prepared, or submitted by Consultant shall not be considered a negligent act, error, omission, or willful misconduct on the part of the City, and none of the foregoing shall relieve Consultant of its responsibility to perform in full conformity with the City's requirements, as set forth in this Agreement, and to indemnify the City as provided above and to reimburse the City for any and all costs and damages suffered by the City as a result of Consultant's negligent performance of this Agreement, failure of performance hereunder, violation of state or federal laws, or failure to adhere to the standards of performance and care described in Subsection 13.2. Consultant shall defend the City (using legal counsel reasonably acceptable to the City) against any claim that alleges negligent acts, omissions, errors, or willful or reckless misconduct by Consultant. As used herein, the term "Consultant" applies to Consultant and its own agents, employees, and suppliers, and to all of Consultant's subcontractors, including their agents, employees, and suppliers.

13.2. <u>Standard of Care</u>. In the performance of the Services, Consultant agrees to use at least that degree of care and skill exercised under similar circumstances by reputable members of Consultant's profession practicing in the Portland metropolitan area. Consultant will re-perform any Services not meeting this standard without additional compensation. Consultant's re-performance of any Services, even if done at the City's request, shall not be considered as a limitation or waiver by the City of any other remedies or claims it may have arising out of Consultant's failure to perform in accordance with the applicable standard of care of this Agreement and within the prescribed timeframe.

Section 14. Insurance

14.1. <u>Insurance Requirements</u>. Consultant shall maintain insurance coverage acceptable to the City in full force and effect throughout the term of this Agreement. Such insurance shall cover all risks arising directly or indirectly out of Consultant's activities or work hereunder. Any and all agents, contractors, or subcontractors with which Consultant contracts to work on the Services must have insurance that conforms to the insurance requirements in this Agreement. Additionally, if a subcontractor is an engineer, architect, or other professional, Consultant must require the subcontractor to carry Professional Errors and Omissions insurance and must provide to the City proof of such coverage. The amount of insurance carried is in no way a limitation on Consultant's liability hereunder. The policy or policies maintained by Consultant shall provide at least the following minimum limits and coverages at all times during performance under this Agreement:

14.1.1. <u>Commercial General Liability Insurance</u>. Consultant and all subcontractors shall obtain, at each of their own expense, and keep in effect during the term of this Agreement, comprehensive Commercial General Liability Insurance covering Bodily Injury and Property Damage, written on an "occurrence" form policy. This coverage shall include broad form Contractual Liability insurance for the indemnities provided under this Agreement and shall be for the following minimum insurance coverage amounts: The coverage shall be in the amount of **\$2,000,000** for each occurrence and **\$3,000,000** general aggregate and shall include Products-Completed Operations Aggregate in the minimum amount of **\$2,000,000** per occurrence, Fire Damage (any one fire) in the minimum amount of **\$50,000**, and Medical Expense (any one person) in the minimum amount of **\$10,000**. All of the foregoing coverages must be carried and maintained at all times during this Agreement.

14.1.2. <u>Professional Errors and Omissions Coverage</u>. Consultant agrees to carry Professional Errors and Omissions Liability insurance on a policy form appropriate to the professionals providing the Services hereunder with a limit of no less than **\$2,000,000** per claim. Consultant shall maintain this insurance for damages alleged to be as a result of errors, omissions, or negligent acts of Consultant. Such policy shall have a retroactive date effective before the commencement of any work by Consultant on the Services covered by this Agreement, and coverage will remain in force for a period of at least three (3) years after termination of this Agreement.

14.1.3. <u>Business Automobile Liability Insurance</u>. If Consultant or any subcontractors will be using a motor vehicle in the performance of the Services herein, Consultant shall provide the City a certificate indicating that Consultant and its subcontractors have business automobile liability coverage for all owned, hired, and non-owned vehicles. The Combined Single Limit per occurrence shall not be less than **\$2,000,000**.

14.1.4. <u>Workers Compensation Insurance</u>. Consultant, its subcontractors, and all employers providing work, labor, or materials under this Agreement that are subject employers under the Oregon Workers Compensation Law shall comply with ORS 656.017, which requires them to provide workers compensation coverage that satisfies Oregon law for all their subject workers under ORS 656.126. Out-of-state employers must provide Oregon workers compensation coverage for their workers who work at a single location within Oregon for more than thirty (30) days in a calendar year. Consultants who perform work without the assistance or labor of any employee need not obtain such coverage. This shall include Employer's Liability Insurance with coverage limits of not less than **\$500,000** each accident.

14.1.5. <u>Insurance Carrier Rating</u>. Coverages provided by Consultant and its subcontractors must be underwritten by an insurance company deemed acceptable by the City, with an AM Best Rating of A or better. The City reserves the right to reject all or any insurance carrier(s) with a financial rating that is unacceptable to the City.

14.1.6. <u>Additional Insured and Termination Endorsements</u>. The City will be named as an additional insured with respect to Consultant's liabilities hereunder in insurance coverages. Additional Insured coverage under Consultant's Commercial General Liability, Automobile Liability, and Excess Liability Policies, as applicable, will be provided by endorsement. Additional insured coverage shall be for both ongoing operations via ISO Form CG 2010 or its equivalent, and products and completed operations via ISO Form CG 2037 or its equivalent. Coverage shall be Primary and Non-Contributory. Waiver of Subrogation endorsement via ISO Form CG 2404 or its equivalent shall be provided. The following is included as additional insured: "The City of Wilsonville, its elected and appointed officials, officers, agents, employees, and volunteers." An endorsement shall also be provided requiring the insurance carrier to give the City at least thirty (30) days' written notification of any termination or major modification of the insurance policies required hereunder. Consultant must be an additional insured on the insurance policies obtained by its subcontractors performing work on the Services contemplated under this Agreement.

14.1.7. <u>Certificates of Insurance</u>. As evidence of the insurance coverage required by this Agreement, Consultant shall furnish a Certificate of Insurance to the City. This Agreement shall not be effective until the required certificates and the Additional Insured Endorsements have been received and approved by the City. Consultant agrees that it will not terminate or change its coverage during the term of this Agreement without giving the City at least thirty (30) days' prior advance notice and Consultant will obtain an endorsement from its insurance carrier, in favor of the City, requiring the carrier to notify the City of any termination or change in insurance coverage, as provided above.

14.2. <u>Primary Coverage</u>. The coverage provided by these policies shall be primary, and any other insurance carried by the City is excess. Consultant shall be responsible for any deductible amounts payable under all policies of insurance. If insurance policies are "Claims Made" policies, Consultant will be required to maintain such policies in full force and effect throughout any warranty period.

Section 15. Early Termination; Default

15.1. This Agreement may be terminated prior to the expiration of the agreed upon terms:

15.1.1. By mutual written consent of the parties;

15.1.2. By the City, for any reason, and within its sole discretion, effective upon delivery of written notice to Consultant by mail or in person; or

15.1.3. By Consultant, effective upon seven (7) days' prior written notice in the event of substantial failure by the City to perform in accordance with the terms through no fault of Consultant, where such default is not cured within the seven (7) day period by the City. Withholding of disputed payment is not a default by the City.

15.2. If the City terminates this Agreement, in whole or in part, due to default or failure of Consultant to perform Services in accordance with the Agreement, the City may procure, upon reasonable terms and in a reasonable manner, services similar to those so terminated. In addition to any other remedies the City may have, both at law and in equity, for breach of contract, Consultant shall be liable for all costs and damages incurred by the City as a result of the default by Consultant,

including, but not limited to all costs incurred by the City in procuring services from others as needed to complete this Agreement. This Agreement shall be in full force to the extent not terminated by written notice from the City to Consultant. In the event of a default, the City will provide Consultant with written notice of the default and a period of ten (10) days to cure the default. If Consultant notifies the City that it wishes to cure the default but cannot, in good faith, do so within the ten (10) day cure period provided, then the City may elect, in its sole discretion, to extend the cure period to an agreed upon time period, or the City may elect to terminate this Agreement and seek remedies for the default, as provided above.

15.3. If the City terminates this Agreement for its own convenience not due to any default by Consultant, payment of Consultant shall be prorated to, and include the day of, termination and shall be in full satisfaction of all claims by Consultant against the City under this Agreement.

15.4. Termination under any provision of this Section shall not affect any right, obligation, or liability of Consultant or the City that accrued prior to such termination. Consultant shall surrender to the City items of work or portions thereof, referred to in **Section 19**, for which Consultant has received payment or the City has made payment.

Section 16. Suspension of Services

The City may suspend, delay, or interrupt all or any part of the Services for such time as the City deems appropriate for its own convenience by giving written notice thereof to Consultant. An adjustment in the time of performance or method of compensation shall be allowed as a result of such delay or suspension unless the reason for the delay is within Consultant's control. The City shall not be responsible for Services performed by any subcontractors after notice of suspension is given by the City to Consultant. Should the City suspend, delay, or interrupt the Services and the suspension is not within Consultant's control, then the City shall extend the time of completion by the length of the delay.

Section 17. Modification/Addendum

Any modification of the provisions of this Agreement shall not be enforceable unless reduced to writing and signed by both the City and Consultant. A modification is a written document, contemporaneously executed by the City and Consultant, which increases or decreases the cost to the City over the agreed Compensation Amount in **Section 4** of this Agreement, or changes or modifies the Scope of Work or the time for performance. No modification shall be binding or effective until executed, in writing, by both Consultant and the City. In the event Consultant receives any communication of whatsoever nature from the City, which communication Consultant contends gives rise to any modification of this Agreement, Consultant shall, within five (5) days after receipt, make a written request for modification to the City's Project Manager in the form of an Addendum. Consultant's failure to submit such written request for modification as a basis for modification or to allow such modification. In connection with any modification to this Agreement affecting any change in price, Consultant shall submit a complete breakdown of labor, material, equipment, and other costs. If Consultant incurs additional costs or devotes additional time on Project tasks, the City shall be responsible for payment of only those additional costs for which it has agreed to pay under a signed

Addendum. To be enforceable, the Addendum must describe with particularity the nature of the change, any delay in time the Addendum will cause, or any increase or decrease in the Compensation Amount. The Addendum must be signed and dated by both Consultant and the City before the Addendum may be implemented.

Section 18. Access to Records

The City shall have access, upon request, to such books, documents, receipts, papers, and records of Consultant as are directly pertinent to this Agreement for the purpose of making audit, examination, excerpts, and transcripts during the term of this Agreement and for a period of four (4) years after termination of the Agreement, unless the City specifically requests an extension. This clause shall survive the expiration, completion, or termination of this Agreement.

Section 19. Property of the City

19.1. Originals or certified copies of the original work forms, including but not limited to documents, drawings, tracings, surveying records, mylars, spreadsheets, charts, graphs, modeling, data generation, papers, diaries, inspection reports, and photographs, performed or produced by Consultant under this Agreement shall be the exclusive property of the City and shall be delivered to the City prior to final payment. Any statutory or common law rights to such property held by Consultant as creator of such work shall be conveyed to the City upon request without additional compensation. Upon the City's written approval, and provided the City is identified in connection therewith, Consultant may include Consultant's work in its promotional materials. Drawings may bear a disclaimer releasing Consultant from any liability for changes made on the original drawings and for reuse of the drawings subsequent to the date they are turned over to the City.

19.2. Consultant shall not be held liable for any damage, loss, increased expenses, or otherwise, caused by or attributed to the reuse by the City or its designees of all work performed by Consultant pursuant to this Agreement without the express written permission of Consultant.

Section 20. Notices

Any notice required or permitted under this Agreement shall be in writing and shall be given when actually delivered in person or forty-eight (48) hours after having been deposited in the United States mail as certified or registered mail, addressed to the addresses set forth below, or to such other address as one party may indicate by written notice to the other party.

To City:	City of Wilsonville
-	Attn: Mike Nacrelli, Civil Engineer
	29799 SW Town Center Loop East
	Wilsonville, OR 97070

To Consultant:	Consor North America, Inc.		
	Attn: Adam Blair		
	888 SW 5 th Avenue, Suite 1170		
	Portland, OR 97204		

Section 21. Miscellaneous Provisions

21.1. <u>Integration</u>. This Agreement, including all exhibits attached hereto, contains the entire and integrated agreement between the parties and supersedes all prior written or oral discussions, representations, or agreements. In case of conflict among these or any other documents, the provisions of this Agreement shall control, and the terms most favorable to the City, within the City's sole discretion, will apply.

21.2. <u>Legal Effect and Assignment</u>. This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective heirs, personal representatives, successors, and assigns. This Agreement may be enforced by an action at law or in equity.

21.3. <u>No Assignment</u>. Consultant may not assign this Agreement, nor delegate the performance of any obligations hereunder, unless agreed to in advance and in writing by the City.

21.4. <u>Adherence to Law</u>. In the performance of this Agreement, Consultant shall adhere to all applicable federal, state, and local laws (including the Wilsonville Code and Public Works Standards), including but not limited to laws, rules, regulations, and policies concerning employer and employee relationships, workers compensation, and minimum and prevailing wage requirements. Any certificates, licenses, or permits that Consultant is required by law to obtain or maintain in order to perform the Services described on **Exhibit A**, shall be obtained and maintained throughout the term of this Agreement.

21.5. <u>Governing Law</u>. This Agreement shall be construed in accordance with and governed by the laws of the State of Oregon, regardless of any conflicts of laws. All contractual provisions required by ORS Chapters 279A, 279B, 279C, and related Oregon Administrative Rules to be included in public agreements are hereby incorporated by reference and shall become a part of this Agreement as if fully set forth herein.

21.6. <u>Jurisdiction</u>. Jurisdiction and venue for any dispute will be in Clackamas County Circuit Court.

21.7. Legal Action/Attorney Fees. If a suit, action, or other proceeding of any nature whatsoever (including any proceeding under the U.S. Bankruptcy Code) is instituted in connection with any controversy arising out of this Agreement or to interpret or enforce any rights or obligations hereunder, the prevailing party shall be entitled to recover attorney, paralegal, accountant, and other expert fees and all other fees, costs, and expenses actually incurred and reasonably necessary in connection therewith, as determined by the court or body at trial or on any appeal or review, in addition to all other amounts provided by law. If the City is required to seek legal assistance to enforce any term of this Agreement, such fees shall include all of the above fees, whether or not a

proceeding is initiated. Payment of all such fees shall also apply to any administrative proceeding, trial, and/or any appeal or petition for review.

21.8. <u>Nonwaiver</u>. Failure by either party at any time to require performance by the other party of any of the provisions of this Agreement shall in no way affect the party's rights hereunder to enforce the same, nor shall any waiver by the party of the breach hereof be held to be a waiver of any succeeding breach or a waiver of this nonwaiver clause.

21.9. <u>Severability</u>. If any provision of this Agreement is found to be void or unenforceable to any extent, it is the intent of the parties that the rest of the Agreement shall remain in full force and effect, to the greatest extent allowed by law.

21.10. <u>Modification</u>. This Agreement may not be modified except by written instrument executed by Consultant and the City.

21.11. <u>Time of the Essence</u>. Time is expressly made of the essence in the performance of this Agreement.

21.12. <u>Calculation of Time</u>. Except where the reference is to business days, all periods of time referred to herein shall include Saturdays, Sundays, and legal holidays in the State of Oregon, except that if the last day of any period falls on any Saturday, Sunday, or legal holiday observed by the City, the period shall be extended to include the next day which is not a Saturday, Sunday, or legal holiday. Where the reference is to business days, periods of time referred to herein shall exclude Saturdays, Sundays, and legal holidays observed by the City. Whenever a time period is set forth in days in this Agreement, the first day from which the designated period of time begins to run shall not be included.

21.13. <u>Headings</u>. Any titles of the sections of this Agreement are inserted for convenience of reference only and shall be disregarded in construing or interpreting any of its provisions.

21.14. <u>Number, Gender and Captions</u>. In construing this Agreement, it is understood that, if the context so requires, the singular pronoun shall be taken to mean and include the plural, the masculine, the feminine and the neuter, and that, generally, all grammatical changes shall be made, assumed, and implied to individuals and/or corporations and partnerships. All captions and paragraph headings used herein are intended solely for convenience of reference and shall in no way limit any of the provisions of this Agreement.

21.15. <u>Good Faith and Reasonableness</u>. The parties intend that the obligations of good faith and fair dealing apply to this Agreement generally and that no negative inferences be drawn by the absence of an explicit obligation to be reasonable in any portion of this Agreement. The obligation to be reasonable shall only be negated if arbitrariness is clearly and explicitly permitted as to the specific item in question, such as in the case of where this Agreement gives the City "sole discretion" or the City is allowed to make a decision in its "sole judgment."

21.16. <u>Other Necessary Acts</u>. Each party shall execute and deliver to the other all such further instruments and documents as may be reasonably necessary to carry out this Agreement in order to

provide and secure to the other parties the full and complete enjoyment of rights and privileges hereunder.

21.17. <u>Interpretation</u>. As a further condition of this Agreement, the City and Consultant acknowledge that this Agreement shall be deemed and construed to have been prepared mutually by each party and it shall be expressly agreed that any uncertainty or ambiguity existing therein shall not be construed against any party. In the event that any party shall take an action, whether judicial or otherwise, to enforce or interpret any of the terms of the Agreement, the prevailing party shall be entitled to recover from the other party all expenses which it may reasonably incur in taking such action, including attorney fees and costs, whether incurred in a court of law or otherwise.

21.18. <u>Entire Agreement</u>. This Agreement and all documents attached to this Agreement represent the entire agreement between the parties.

21.19. <u>Counterparts</u>. This Agreement may be executed in one or more counterparts, each of which shall constitute an original Agreement but all of which together shall constitute one and the same instrument.

21.20. <u>Authority</u>. Each party signing on behalf of Consultant and the City hereby warrants actual authority to bind their respective party.

The Consultant and the City hereby agree to all provisions of this Agreement.

CONSULTANT:

CITY:

CONSOR NORTH AMERICA, INC.

CITY OF WILSONVILLE

By:_____

Print Name:

As Its:

By:_____

Print Name:

As Its:			
AS IIS.			

EIN/Tax I.D. No.:_____

APPROVED AS TO FORM:

Ryan Adams, Assistant City Attorney City of Wilsonville, Oregon

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EXHIBIT A

SCOPE OF WORK PROPOSED ENGINEERING SERVICES FOR WEST SIDE RESERVOIR AND SW TOOZE ROAD TRANSMISSION MAIN CITY OF WILSONVILLE

Introduction/General/Background

The City of Wilsonville (City) is seeking engineering consulting services for the design and construction of a new 3.0 million gallon (MG) prestressed concrete reservoir and approximately 4,000 linear feet (LF) of 24-inch diameter finished water transmission main through unincorporated Clackamas County. The proposed facilities will address the absence of Pressure Zone (PZ) B finished water storage on the City's west side. The new reservoir will also increase overall storage capacity for the City's largest service area, supporting continued growth in the Frog Pond Area, located on the City's east side. The City's master planning work for this area indicates Frog Pond East and South may ultimately see approximately 1,800 new homes, with occupancy starting as soon as 2024.

Project Understanding

The proposed West Side Reservoir will be constructed on City-owned property located at 12771 SW Tooze Road. The City has selected the construction of an AWWA D110, Type 1, circular prestressed concrete tank to address seismic resiliency concerns. Designs will provide for a partially buried tank with an overflow elevation matching other tanks in PZ B. The tank's final size will be determined during preliminary design. Associated reservoir site improvements include a new site access driveway along the easterly property line, a stormwater management facility, and providing adequate spacing for a potential future well and possible second tank. The City received land use approval for the reservoir in 2012, with an extension being approved in 2022 allowing for construction permitting activities to begin by July 2024.

Approximately 4,000 LF of new 24-inch diameter restrained ductile iron piping finished water transmission main (TM) is needed to supply the proposed West Side Reservoir from the City's existing PZ B piping at the Tooze Road Metering Vault. The City of Sherwood's existing 48-inch diameter welded steel transmission main is located on the east side of SW Tooze Road. Pipeline designs, installation activities, and roadway restoration will need to be coordinated around this existing main and the County's DOTD standards.

Project design assumptions and major work elements detailed in this scope of services are based upon the previously developed conceptual project design concepts and conditions of Clackamas County land use approval.

Anticipated City Responsibilities

It is anticipated the City of Wilsonville will be responsible for the following activities:

- 1. Provide a project manager responsible for overall project management and coordination between Consor, Inc. ("Consor" or "Consultant") and the City.
- 2. Establish the work scope and design parameters, including related standards.
- 3. Provide Consultant access to the site, including necessary confined space safety equipment, if needed.
- 4. Provide the Consultant copies of all available and relevant City of Wilsonville utility record drawings, topographical maps, surveys, reports, studies, GIS mapping, etc. pertinent to the project. Consultant to provide data request for City at project kick-off meeting.
- 5. Provide Consultant with digital copies of City of Wilsonville's standard construction specifications and details.
- 6. Provide timely review and consolidated comment on all reports, drawings, and specifications submitted by Consultant to City for review and approval. Project schedule assumes a two-week review and comment period following receipt of Consultant's major design submittal packages.
- 7. Submit applications to the State, County and/or other jurisdictions for required permits. (Note: Consultant will prepare and may be requested to contribute project information for any such applications).
- 8. Pay for all permit application fees.
- 9. Maintain project records and process consultant invoices.
- 10. Provide legal review of all contracts, bid forms, and real property.
- 11. Public Involvement and Outreach (PI&O) activities: The City will lead all project PI&O activities, including the preparation and distribution of all public notifications. The Consultant is to provide assistance in developing project graphics materials.

Project Design Assumptions

Basic project design assumptions presented by major project elements are detailed below.

- 1. West Side Reservoir
 - a. Volume: 3.0 MG
 - b. Type: Prestressed concrete reservoir construction, AWWA D110, Type I. Founded on a membrane slab.
 - c. Dimensions: Approximate 135-foot diameter, 28-foot water height, 30-foot wall height.
 - d. Overflow elevation: Approximately 398 feet.

- e. Floor elevation: Approximately 370 feet.
- f. Passive/active mixing system (based on results of hydraulic modeling)
- g. Site: 12771 SW Tooze Road, Clackamas County, owned by City. Reservoir planned for construction on southern portion of site. Existing grade at approximately 380-ft elevation.
- h. Site grading and development: Site retaining walls requiring professional structural engineering services are not required at this site.
- i. City will complete the following as required and will provide the Consultant with reporting as obtained:
 - 1. Phase 1 Environmental Site Assessment
 - 2. Wetland Delineation
 - 3. Archaeological Investigations
- j. Current site uses:
 - 1. City Operations Storage Building: To be demolished and removed for project site.
 - 2. Existing residential structure: Single-family house occupies the southwest portion of the site. City to maintain current access for residents. Project to provide new site driveway construction and permanent access to the reservoir site. Tenants to occupy home during and after construction.
- k. Permanent site access: To be provided from SW Tooze Road at the southeast corner of the site, modifying the existing entrance at the middle of the south property line of the site. Existing access to be maintained as dedicated access to residential structure.
- I. Onsite piping:
 - 1. New site piping to be provided including all inlet and outlet, overflow, and drain piping for new reservoir. Stub outs for future well and reservoir to be provided onsite. Design criteria of onsite inlet/ outlet piping configuration to be determined by hydraulic modeling task.
 - 2. Seismic Control Valve Vault: Designs to include the installation of a Seismic Control Valve Vault on the reservoirs' inlet/outlet line. The Seismic Control Valve shall consist of a seismically activated, electronically and remotely operated motorized operator on a standard butterfly isolation valve. Instrumentation and control designs associated with the valve will be integrated into the City's preferred Earthquake Early Warning system.
 - 3. Reservoir monitoring manholes: Designs will include dedicated reservoir monitoring manholes for each reservoir to consolidate piping from the reservoir overflow, potable drain, ring underdrain, and foundation drain. A 30-mil PVC liner and drainage layer under the tank structure will provide hydraulic separation of groundwater or surface water flows from the ring underdrain to allow monitoring of potential tank leakage.
- m. Stormwater management: Site stormwater drainage and emergency reservoir overflows will be routed via gravity systems to an onsite detention facility, and then via gravity systems off-

site to the public storm drainage system located along SW Tooze Road. Alternatively, should onsite infiltration testing show shallow infiltration capacity sufficient for project needs, an onsite detention facility will be constructed with no outlet to the SW Tooze Road.

- n. Electrical features are included in project designs. Telemetry designs will be provided by the City's systems integrator, Portland Engineering, Inc. (PEI). Reservoir level, flow monitoring, Seismic Valve control/status, and hatch intrusion alarm instrumentation will be provided.
- o. Site landscaping:
 - 1. Reservoir site landscaping will include site restoration and screening consistent with the surrounding site and development, meeting the requirements of the project's approved Clackamas County land use permit.
 - 2. Landscaping to consist of low-maintenance native plantings and trees.
 - 3. Onsite vegetative stormwater treatment design.
 - 4. Specifications for a Contractor-designed temporary irrigation system.
- p. Survey:
 - 1. Vertical datum: NGVD 88
 - 2. Required for entire project site, including property boundaries and property corners.
 - 3. City to provide any existing survey files adjacent to the project site for use in connecting proposed site piping to existing City distribution and/or transmission piping.
- q. Easement requirements: None anticipated.
- 2. SW Tooze Road Transmission Main
 - a. Size: 24-inch diameter.
 - b. Material: Class 52 restrained ductile iron pipe.
 - c. Survey:
 - 1. To be provided by Consultant in areas of proposed improvements
 - 2. City to provide any existing survey files for use in connecting proposed site piping to existing City distribution and/or transmission piping.
 - d. Improvements to Tooze Road Metering Vault: To be determined in project scoping.
- 3. General
 - 1. Project designs and specifications to be based on a construction by a private contractor selected through a competitive bidding process.

- 2. Project designs and drawings to be divided into at least two (2) schedules (West Side Reservoir, SW Tooze Road TM to allow for possible separation of major project elements to various contractors.
- 3. A single set of CSI technical specifications will be developed for the project.
- 4. Drawings: For all tasks and subtasks where drawings (either conceptual, draft, or final) are deliverables, Consultant shall comply with the following Consor drafting standards:
 - 1. Drawings shall be on Consor title block/frame.
 - 2. Half-size drawings shall be 11"x17"; full-size drawings shall be 22"x34".
 - a. Half-size drawings will be provided for 30%, 60%, 90%, and Final design submittal packages.
 - b. Full-size drawings will be provided for Final Design submittal package.
 - 3. For plotted drawings, allowed line types shall be variations of black/grayscale; no color printing shall be used.
 - 4. All line type/shading/hatch styles used shall be able to remain legible after photocopying/scanning.
 - 5. Drawing CAD files will be made available to City upon request.
- 5. Traffic Control: It is assumed the Consultant will prepare typical traffic control plans as needed in accordance with County requirements showing minimum Contractor traffic control requirements. Construction contractor will provide traffic control plans and details as required to obtain County permitting.
- 6. Erosion Sedimentation and Control (ESC): Designs to be coordinated with requirements for the submittal of WES Site Development and DEQ's 1200-CN permitting.
- 7. Construction cost estimates:
 - 1. Quantities, construction installation costs, and construction material costs to be developed by Consultant using information from recent, similarly bid projects.
- 8. Land Use Approval: The City received Clackamas County land use approval for the proposed project in 2011 based on conceptual design concepts. This scope of services assumes no changes will be made to the site layout, facilities configurations, and facilities sizing to the extent resubmittal or requests for amendments to the previous land use approval will be required. Resubmittal for land use approval is considered an optional task and included under Task 3 Extra Work as Authorized.
- 9. Construction Phase Services: Construction phase services are divided between the Consultant and City to cover construction phase services.

Proposed Subconsultants

1. Peterson Structural Engineering, Inc. (PSE): Structural Engineering

- 2. Shannon & Wilson (S&W): Geotechnical & Foundation Engineering
- 3. AKS Engineering & Forestry, LLC (AKS): Topographic Surveying + Land Use Permitting
- 4. Industrial Systems, Inc. (ISI): Electrical Engineering
- 5. Portland Engineering, Inc. (PEI): Instrumentation & Controls

Proposed Scope of Services

Presented below is a detailed description of the proposed scope of services by work task to be completed by the Consultant for the West Side Reservoir and Transmission Main project.

Task 1 – Preliminary Analysis and Investigations

Objective

Preliminary engineering design work completed under this task will include development of project design criteria and recommendations for final facilities design. Additional preliminary engineering activities include hydraulic analysis to confirm pump station capacity and storage capacity needs, as well as the sizing of onsite and off-site piping improvements. Topographic survey, geotechnical investigations and a site-specific seismic hazard study, a site-specific corrosion control study and an environmental site assessment are also included in this task.

Preliminary designs will include adequate work to support characterization and sizing of the reservoirs, pump station, equipment storage building, and proposed off-site piping improvements to support the final design process described in Task 2. Anticipated preliminary design subtasks are outlined as follows:

1.1 Project Management

Objective

This task includes the administration and coordination of the Consultant's staff, subconsultants, and the interface with the City's Project Manager and other City staff. Consultant will actively manage all project work to meet the project budget and schedule.

Activities

1.1.1 Project Invoices/Status Reporting

- A. Prepare monthly invoices, including expenditures by task, hours worked by project personnel, and other direct expenses with the associated backup documentation.
- B. Monthly status reports to accompany each invoice and include comparisons of monthly expenditures and cumulative charges to budget by task, including cost-to-complete, earned value, cash flow, and certified firm participation.

1.1.2 Bi-Weekly Project Design Meetings

- A. Work under this subtask includes coordinating schedules, developing agendas, preparing presentation materials, and being responsible for running Bi-Weekly Project Design Meetings during the Design phase.
- B. Purpose of Bi-Weekly Project Design Meetings includes the coordination and advancement of the City's project objectives with input and discussion from the Consultant on key issues. Meeting subjects will vary but will focus on project constructability, maintaining schedule, construction cost controls, operational flexibility in facility designs, and receiving timely and relevant City Operations staff input.

1.1.3 Key Project Meetings

- A. Work under this subtask includes coordinating schedules, developing agendas, preparing presentation materials, and being responsible for running Key Project Design Meetings during the Design phase.
- B. Key Project Design Meetings include the following meetings:
 - 1. Project Kick-off
 - 2. Design Review following City review of 30 Percent Design package
- C. Purpose of Key Project Design Meetings will be the review of City comments and key issues resulting from the review of major project deliverables, as well as the timely incorporation of City Operations staff project input.

1.1.4 Maintain Project Tracking Logs

- A. Key Deliverables Log: Develop a list of key deliverables required for the project under various categories, such as Documents, Specifications, Drawings, etc. Assign completion dates to key deliverables by project stages (30%, 60%, 90%, Final Designs).
- B. Design Review Comment Log: Develop and maintain a list of City comments on drawings, specifications, and construction cost estimates at the 30%, 60%, and 90% project stages. Consultant will provide response to design review comments, with the City to determine resolution on items.
- C. Decision Log: Document issues requiring resolution and project team decisions as they occur during the progression of the work. Maintain a decision log throughout the project.
- D. Risk Register: Document risks to project schedule, construction, and future facilities operations as they are presented by the project team throughout the Design tasks.
- E. Permit Tracking Log: Document submittal materials and status of materials development needed for permit applications. Tracking various permit pre-application meeting dates, anticipated and actual application submittal dates, and anticipated and actual permit approval dates.

1.1.5 Quality Assurance/Quality Control (QA/QC)

Perform in-house QA/QC reviews of all deliverables.

Task 1.1 Deliverables

- 1. Project Invoices/Status Reporting: Consultant shall deliver to the City a monthly invoice and status report covering:
 - a. Work on the project performed during the previous month.
 - b. Work anticipated on the project for the upcoming month.
 - c. Issues encountered and actions taken for their resolution.
 - d. Potential impacts to submittal dates, budget shortfalls, or optional services.
 - e. Budget Analysis.
 - f. Issues requiring project team action.

- 2. Project Design Schedule and updated project schedules at major design deliverable milestones, in MS Project or Excel.
- 3. Bi-Weekly and Key Project Design Meetings:
 - a. Meeting agendas and minutes.
 - b. Graphics and/or PowerPoint presentation materials as needed to illustrate project discussion points for Project Bi-Weekly and Key Meetings.
- 4. Project Tracking Logs
 - a. Key Deliverables Log: Provide updated status on the list of key deliverables at each Bi-Weekly Project Design Meeting. Submittal of log to City at each key design deliverable milestone (30 Percent Design Submittal).
 - b. Design Review Comment Log: Submittal to City at the end of subsequent design phase (i.e., responses to City comments from 60 Percent Designs will be provided with submittal of 90 Percent Designs).
 - c. Decision Log: Submittal to City the first week of every month during project Design phases. Key items and project team decisions to be presented as part of Bi-Weekly Project Meeting agendas.
 - d. Risk Register: Submittal to City the first week of every month during project Design phases.
 - e. Permit Tracking Log: Submittal to City the first week of every month during project Design phases.

Task 1.1 Assumptions

- 1. Preliminary analysis and investigations Phase duration will be 6 months (January 2023 June 2023); therefore, it is assumed that there will be up to 7 progress payments/status reports.
- 2. Bi-Weekly Project Design Meetings:
 - a. Meeting attendance will include the Consor PM, appropriate design leads, and one additional staff engineer (up to four total Consultant staff).
 - b. Meetings will have an approximate duration of 60 minutes each and are assumed to be conducted via Microsoft Teams Video.
 - c. With Phase 1 duration assumed at 6 months, up to 14 Bi-Weekly Project Design Meetings have been provided for in Proposed Project Fee Estimate.
 - d. Additional time has been provided in the Proposed Project Fee Estimate to cover preparation of meeting agendas, presentation materials, and meeting notes.
- 3. Key Project Design Meetings:
 - a. Meeting attendance will include the Consor PM, design leads, and one additional staff engineer (up to four Consultant staff).

- b. Meetings will have an approximate duration of 3 hours each and are assumed to be conducted at City offices or via Microsoft Teams Video, unless otherwise determined.
- c. Up to four Key Project Design Meetings have been provided for in Proposed Project Fee Estimate.
- d. Additional time has been provided in the Proposed Project Fee Estimate to cover preparation of meeting agendas, presentation materials, and meeting notes.
- 4. Meeting agendas and supporting information to be provided by Consultant to the City's Project Manager one business day in advance of any meeting. Materials to be distributed to meeting attendees by City's Project Manager.
- 5. Meeting notes to be distributed to meeting attendees and other interested parties within three business days of the subject meeting date.
- 6. Project Tracking Logs to be developed and maintained in Microsoft Excel format.

1.2 Geotechnical Investigations:

The scope of services below includes the geotechnical investigation and design phase of the project. The geotechnical services during the construction phase are included in Section 2.7.

- A. Geotechnical investigations:
 - 1. Site borings:
 - a. Health and Safety Plan and field exploration. Consultant will perform a site reconnaissance to look for surficial geologic features including surficial soil types and presence of shallow water (if ponded water or groundwater seepage is observed). Exploration locations will also be marked during the reconnaissance for utility locates.
 - b. Complete two borings within/near the footprints of the new 3.0 MG reservoir. Borings will be advanced to depths of up to 60 and 30 feet and will include up to 10 feet of rock coring into basalt bedrock.
 - c. Complete minimum one test-test pit within the footprint (or as close as possible) of the optional zero discharge onsite stormwater facility will be advances to a depth of 10 and an open pit infiltration test will be performed. This boring will be advanced for the purpose of conducting an infiltration test to support design of the new stormwater facility.
 - d. Borings will be advanced using hollow-stem auger or mud-rotary drilling methods and HQ wire-line rock coring methods. The investigations will be advanced by an Oregon-state licensed drilling company and will be observed by the Consultant. Consultant will develop field logs in conjunction with these investigations. Selected soils samples in the borings will be collected for laboratory testing.
 - e. A vibrating wire piezometer will be installed in a single boring to monitor the depth to groundwater. We assume the piezometer monument will be removed by the contractor during construction. The borehole, where no piezometer will be installed, will be abandoned and backfilled according to Oregon Water Resources Department regulations.

- f. Prior to the borings, Consultant will contact the utility notification center (One-Call) for underground utilities clearance. A private utility locator will also be contacted to verify the presence underground utilities near the explorations.
- g. In conjunction with borings, Consultant will collect standard penetration test (SPT) split spoon samples and thin wall Shelby tube soil samples for laboratory testing and assessing soil parameters for our geotechnical evaluations.
- 2. Tooze Road investigations:
 - a. Consultant will perform up to 3 test pits, hand augers, or shallow borings, provided a suitable excavation location can be established outside of the paved right-of-way where no utility conflicts are present. Prior to performing the explorations, Consultant will visit the field to mark the locations and a private utility locator will be hired as a secondary check against the public utility locate. The exploration will be observed by a member of Consultant's staff who will log the excavations and collect soil samples for laboratory testing.
- B. Laboratory Testing:
 - 1. Based on the field exploration logs and laboratory testing, Consultant will develop boring logs for all field explorations. Geotechnical engineering design and construction recommendations will include the following:
 - 3. Laboratory analysis: Laboratory testing will be conducted on selected samples collected from borings. Analysis will include determination of soil moisture contents, sieve analyses, Atterberg limits, unconfined compression strength tests, corrosivity suite, and consolidation tests.
- C. Geotechnical engineering evaluation:

Based on the field exploration logs and laboratory testing, Consultant will perform geotechnical engineering analyses to support the design and construction of the new reservoir in accordance with the ASCE 7-16 and the Oregon Structural Specialty Code. Analyses will include the following items:

- a. Interpretation of the subsurface conditions and estimated depth to low compressibility bedrock;
- b. Seismic ground motion development using the general procedure following ASCE 7-16 and Oregon Structural Specialty Code;
- c. Review of foundation types, which may be used for the new reservoir and their design parameters, including bearing capacity, anticipated settlement, and subgrade preparation for shallow footings including the need to over-excavate shallow soils down to competent residual soils (if necessary);
- d. Retaining wall selection and geotechnical design parameters (if required on the east property line or elsewhere);
- e. Slope stability analysis and global stability analysis for retaining walls and access road that require site grading; and
- f. Pavement design for new paved areas (as applicable).

D. Geotechnical Report:

Upon completion of the geotechnical analyses, we will prepare a draft geotechnical engineering report to support the design and construction of the new reservoir. This report will summarize our analyses and provide discussions and recommendations. Items addressed in the report will include the following:

- a. Regional and local geologic setting;
- b. Site seismicity and ground motion parameters developed using local building code;
- c. Seismic and geologic hazards;
- d. Subsurface conditions and infiltration rate;
- e. Depth to low compressibility hard rock;
- f. Measured infiltration rate and depth to groundwater;
- g. Organic soils, expansive soils, and compressible soils; their potential impacts; and recommended mitigation including the minimum depth of over-excavation to support the tank at the ground surface (if required);
- h. Earthwork recommendations such as compaction composition of engineered fill;
- i. Anticipated foundation types and soil bearing capacity;
- j. Design parameters for below-grade structural walls;
- k. Protection of adjacent structures during excavation;
- I. Recommendations for instrumentation program during construction;
- m. Discussion on excavation and shoring wall types;
- n. Typical cross-section for each retaining wall system and type;
- o. Recommendations for flexible pavement design; and
- p. Discussion of on-site materials which can be reused for engineered fill.

Task 1.2 Assumptions

- A. No permits will be required to perform borings
- B. Subsurface soils are not contaminated and the soil cuttings can be left on site.
- C. Test pits will be backfilled with spoils with minimal compactive effort.
- D. Explorations do not include environmental sampling or testing.
- E. Shallow borings, if required for Tooze Road Explorations, can be performed in same 2-day window that the reservoir site borings are performed.

Task 1.2 Deliverables

- 1. Draft and final GDR (PDF format, included in Appendix of Preliminary Design Report).
- 2. Draft and final GER (PDF format, included in Appendix of Preliminary Design Report).

1.3 Topographic Survey

Complete topographic surveys for the West Side Reservoir site and project's proposed off-site piping improvements.

1.3.1 West Side Reservoir Site

- A. The following work items will be completed:
 - 1. Survey, title, road, and as-built research
 - 2. Locating existing property corner monuments of record
 - 3. Establishing property lines, right-of-way lines, and easements
 - 4. Elevating locations to NGVD 88 vertical datum
 - 5. Establishing NAD 83 2011 State Plane Coordinates
 - 6. Coordinating public utility locates
 - 7. Providing notice to adjoining property owners
 - 8. Field tying:
 - a. Above ground located utilities (e.g., sanitary, storm, water, gas, power, communications)
 - b. Hard surfaces (e.g., curb, sidewalk, concrete, asphalt, driveway drops, ramps)
 - c. Utility poles, light poles, and signs
 - d. Trees 6-inch diameter at breast height and greater
 - e. Natural ground and break lines for 1-foot contours
 - f. Buildings, fences
 - 9. Preparing an Existing Conditions Plans showing the above items that can be used for design purposes.

Task 1.3.1 Deliverables

1. Existing Conditions Plans (PDF).

Task 1.3.1 Assumptions

- 1. Survey limits:
 - a. West Side Reservoir site:
 - i. Approximately 20 feet outside boundaries of City's property, plus right-of-way to right-ofway on SW Tooze Road along frontage of City's property
- 2. Surveying does not require professional traffic control services.
- 3. Site access for surveying will be coordinated by the City.
- 4. Property boundary dispute resolution is outside of this scope.

5. City to provide applicable record drawings, if available.

1.3.2 SW Tooze Road Transmission Main

- A. Complete topographic surveys for the SW Tooze Road TM Alignment. The following work items will be completed:
 - 1. Survey, title, road, and as-built research
 - 2. Establishing property lines, right-of-way lines, and easements
 - 3. Elevating locations to NGVD 88 vertical datum
 - 4. Establishing NAD 83 2011 State Plane Coordinates
 - 5. Coordinating public utility locates
 - 6. Providing notice to adjoining property owners as required
 - 7. Field tying:
 - a. Above ground located utilities (e.g., sanitary, storm, water, gas, power, communications)
 - b. Hard surfaces (e.g., curb, sidewalk, concrete, asphalt, driveway drops, ramps)
 - c. Utility poles, light poles, and signs
 - d. Trees 6-inch diameter at breast height and greater
 - e. Natural ground and break lines for 1-foot contours
 - f. Buildings, fences
 - 8. Preparing an Existing Conditions Plans showing the above items that can be used for design purposes.

Task 1.3.2 Deliverables

1. Existing Conditions Plans (PDF).

Task 1.3.2 Assumptions

- 1. Survey limits:
 - a. Right-of-way (ROW) to ROW on SW Tooze Road from Reservoir Site to the SW Tooze Road Vault at the intersection of SW Westfall Road, including entire intersection and ROW and City easements areas near SW Tooze Road Vault.
- 2. It is assumed the City will coordinate access from property owners as may be required to complete work.
- 3. Surveying does not require professional traffic control services.
- 4. City to provide applicable record drawings, if available.

1.4 Hydraulic Modeling

Consultant to provide defined planning and modeling work for to verify existing and future demands in support of optimized project designs.

1.4.1 Review Existing Data

- A. Data collection and review:
 - 1. It is anticipated this task will include review of City's current hydraulic model and recent relevant analysis, master planning documents, system demand data, storage sizing criteria, and the evaluation of future supply system infrastructure improvements and operations.
 - 2. Consultant shall review City's operations of the distribution system including pumping and turnout vault operations.

1.4.2 Hydraulic Modeling

A. Evaluate water distribution system hydraulics with respect to new West Side Reservoir, SW Tooze Road TM, and City's PZ B Turn-out Vaults. Elements of model to be confirmed with City staff prior to modeling.

1.4.3 Technical Memorandum

- A. Consultant shall provide a technical memorandum outlining the findings of Tasks 1.4.1 and 1.4.2 and providing recommendations.
 - 1. Reservoir sizing analysis: Evaluate storage requirements, hydraulic constraints, and the sizing of the new finished water storage facility to optimize reservoir dimensions and value of the site.
 - 2. SW Tooze Main TM sizing and WQ analysis: Evaluate the sizing and water quality, and to optimize design.
 - 3. Additional System recommendations: Provide findings and recommendations for improvements outlined under task 1.4.2 for other system facilities including City's existing turndown vaults.

1.5 Preliminary Design

Preliminary engineering design work completed under this task will include development of project design criteria and recommendations for final facilities design. Additional preliminary engineering activities include hydraulic analysis to inform reservoir and TM criteria, as well optimizations of the City's water system with respect to the new facilities. Topographic survey and geotechnical investigations are also included in this task.

Preliminary designs will include adequate work to support characterization and sizing of the reservoir and transmission main to support the final design process described in Task 2. Anticipated preliminary design subtasks are outlined as follows:

1.5.1 West Side Reservoir

- A. Confirmation of storage requirements and reservoirs sizing are addressed in Task 1.4, Hydraulic Analysis.
- B. Site reconnaissance:

- 1. Gather and review existing mapping, as-builts, design drawings, engineering reports, easements, and other data related to the project.
- 2. Perform site reconnaissance with City staff and design team to confirm existing reservoir site conditions.
- C. Reservoir configuration and site layout: Develop preliminary design criteria and complete a siting analysis to confirm an economical orientation and configuration for the proposed reservoir and related facilities at the existing site. Determination of the City's preferred reservoir configuration and site layout.
 - 1. Confirmation of previous conceptual project site layouts, incorporating the City's desire for the siting of resilient storage facilities. Siting of reservoirs will take into consideration siting of future facilities including a second water storage reservoir and well.
 - 2. Conceptual site plans will orient alternative reservoir configurations on the site to accommodate varied structure location, backfill depths, and finished grade conditions. Conceptual site plans will include cross-sectional views of the reservoir and the existing ground surface to analyze and illustrate site grading and layout.
 - 3. Site plan and general facility configurations will be prepared, identifying key project features including reservoir structure; valve vaults; access roads; maintenance vehicle parking, tank drainage and overflow facilities; site drainage facilities; and major site piping layouts.
- D. Structural designs and analysis: Perform preliminary structural assessment for reservoir including cost comparison of enhanced seismic design standards including the Willamette Water Supply and Oregon Resiliency Plan Standards.
- E. Electrical:
 - 1. Determine site lighting and power needs at reservoir site.
- F. Control System:
 - 1. Determine reservoir level monitoring and security monitoring needs.
 - 2. Develop preliminary concepts for operation and monitoring of reservoir isolation valving, including the Seismic Control Valve.
 - 3. Develop communications plan for site connection to City SCADA.
- G. Preliminary construction cost estimate

Task 1.5.1 Deliverables

- A. Section in Preliminary Design Report (Subtask 1.5.3) documenting reservoir's design criteria and recommendations for reservoir's storage sizing and dimensioning to maximize constructible space available onsite. Section will include discussions on future storage volume redundancy and the potential risks and uncertainties associated with the presented design recommendations.
- B. Preliminary Structural Design reporting, covering structural design criteria and recommendations for reservoirs (PDF format, in Appendix to Preliminary Design Report).

- C. Preliminary Drawings (PDF format):
 - a. Existing Conditions Plan
 - b. Site Layout Plan, including proposed siting for the Reservoir and the site stormwater management facility.
 - c. Site Grading Plan
 - d. Reservoir Section Views
 - e. Site Piping Plan
 - 1. Additional conceptual schematics detailing site piping, piping connections, and positioning for isolation valving.
- D. Preliminary Construction Cost Estimates (PDF format).

Task 1.5.1 Assumptions

- A. Basic design assumptions for the West Side Reservoir are provided in Project Design Assumptions.
- B. Site reconnaissance: City will provide all available information on project site and current operating conditions, piping, etc. City staff will attend site visits, as needed.
- C. Reservoir configuration and site layout:
 - 1. Final site layout will provide efficient layout for proposed reservoir and future facilities. Any changes to approved site layout may require resubmittal and land use approval from Clackamas County.
 - 2. Reservoir will be partially buried.
- D. Controls:
 - 1. Relays to the City's existing SCADA system for reservoir monitoring and controls systems will be housed in onsite enclosures.
 - 2. Project controls will connect to City's existing SCADA via a new fiber optic cable and conduit routed along the transmission main line to the existing fiber connection in the SW Tooze Road Vault.
- E. Preliminary construction cost estimate:
 - 1. To be completed in accordance with the Association for the Advancement of Cost Engineering International (AACE) Class 4 standards, with an expected accuracy range of +30 to -20 percent, as recommended for a preliminary design level of project definition.
 - 2. Construction installation costs and construction material costs to be developed by Consultant using information from recent, similarly bid projects and in-house cost estimating specialist.

1.5.2 SW Tooze Road Transmission Main

- A. Confirmation of transmission pipeline sizing is performed as part of Task 1.4 Hydraulic Modeling.
- B. Complete design surveys, right-of-way research, utility locates and associated coordination with One Call & area utilities, collection of available utility as-built drawings, and horizontal & vertical control.
- C. Development of transmission piping alignments based on available roadways, right-of-way, utility corridors, and existing or needed easements for the 24-inch diameter transmission main for the West Side Reservoir to the SW Tooze Road Vault.
- D. Identify potential requirements for property/easement/right-of-way acquisition.
- E. Hydraulic analysis: Completed as part of Task 1.4 Hydraulic Modeling

Task 1.5.2 Deliverables

- A. Section in Preliminary Design Report (Subtask 1.5.3) documenting Transmission Main's design criteria and recommendations
- B. Corrosion Control Design reporting, covering findings from site soils testing and corrosion control design recommendations (PDF format, in Appendix to Preliminary Design Report).
- C. Preliminary Drawings (PDF format):
 - 1. Existing Conditions Plan
 - 2. Transmission Main Plan Views
- D. Preliminary Construction Cost Estimate (PDF format):

Task 1.5.2 Assumptions

- A. Basic design assumptions for the SW Tooze Road TM are provided in Project Design Assumptions.
- B. Site reconnaissance: City will provide all available information on SW Tooze Road Vault site and current operating conditions, piping, etc. City staff will attend site visits, as needed.
- C. Existing geotechnical borings and analysis along SW Tooze Road from Consultant's previous project work on Sherwood Transmission Main are sufficient for geotechnical recommendations for new 24-inch diameter TM.
- D. Preliminary construction cost estimate:
 - 1. To be completed in accordance with the Association for the Advancement of Cost Engineering International (AACE) Class 4 standards, with an expected accuracy range of +30 to -20 percent, as recommended for a preliminary design level of project definition.
 - 2. Construction installation costs and construction material costs to be developed by Consultant using information from recent, similarly bid projects and in-house cost estimating specialist.

1.5.3 Preliminary Design Report

- A. Prepare a preliminary engineering report presenting findings and recommendations for all work elements detailed above.
 - 1. Reporting to document the City's design criteria and preferred configurations for final design of the West Side Reservoir and SW Tooze Road TM Improvements.
 - 2. Reporting to include preliminary project construction cost estimates.

Task 1.5.3 Deliverables

- A. Interim draft report summarizing design criteria for all major project elements based on discussions with City staff (PDF format).
 - 1. Concurrence on design criteria from City staff will be used as the basis for project design recommendations provided in the Preliminary Design Report.
- B. Preliminary Design Report presenting findings and recommendations (PDF format).
 - 1. Including preliminary design drawings and figures detailed in Tasks 1.5.1 and 1.5.2 to the level necessary to confirm feasibility and to adequately present proposed concepts to City staff, City officials, the public, and prospective regulatory interests.
- C. Preliminary project construction cost estimates (PDF and Excel format).
- D. Preliminary project schedule (PDF format).

Task 1.5.3 Assumptions

A. QA/QC activities associated with development and submittal of Preliminary Design Report, associated drawings, and construction cost estimating included in Proposed Project Fee Estimate under subtask 1.5.3, Preliminary Design Report.

Task 2 – Final Analysis, Design, and Construction

Objective

Work under this task includes the preparation of final plans, technical specifications, and construction cost estimates. These efforts will be completed in an incremental approach to the 60 and 90 percent level, allowing for City input and comment as the designs are developed

2.1 Project Management

Objective

This task includes the administration and coordination of the Consultant's staff, subconsultants, and the interface with the City's Project Manager and other City staff. Consultant will actively manage all project work to meet the project budget and schedule.

Activities

2.1.1 Project Invoices/Status Reporting

- A. Prepare monthly invoices, including expenditures by task, hours worked by project personnel, and other direct expenses with the associated backup documentation.
- B. Monthly status reports to accompany each invoice and include comparisons of monthly expenditures and cumulative charges to budget by task, including cost-to-complete, earned value, cash flow, and certified firm participation.

2.1.2 Bi-Weekly Project Design Meetings

- A. Work under this subtask includes coordinating schedules, developing agendas, preparing presentation materials, and being responsible for running Bi-Weekly Project Design Meetings during the Design phase.
- B. Purpose of Bi-Weekly Project Design Meetings includes the coordination and advancement of the City's project objectives with input and discussion from the Consultant on key issues. Meeting subjects will vary but will focus on project constructability, maintaining schedule, construction cost controls, operational flexibility in facility designs, and receiving timely and relevant City Operations staff input.

2.1.3 Key Project Meetings

- A. Work under this subtask includes coordinating schedules, developing agendas, preparing presentation materials, and being responsible for running Key Project Design Meetings during the Design phase.
- B. Key Project Design Meetings include the following meetings:
 - 1. Design Review following City review of 60 Percent Design package
 - 2. Design Review following City review of 90 Percent Design package

C. Purpose of Key Project Design Meetings will be the review of City comments and key issues resulting from the review of major project deliverables, as well as the timely incorporation of City Operations staff project input.

2.1.4 Maintain Project Tracking Logs

- A. Key Deliverables Log: Develop a list of key deliverables required for the project under various categories, such as Documents, Specifications, Drawings, etc. Assign completion dates to key deliverables by project stages (60%, 90%, Final Designs).
- B. Design Review Comment Log: Develop and maintain a list of City comments on drawings, specifications, and construction cost estimates at the 60%, and 90% project stages. Consultant will provide response to design review comments, with the City to determine resolution on items.
- C. Decision Log: Document issues requiring resolution and project team decisions as they occur during the progression of the work. Maintain a decision log throughout the project.
- D. Risk Register: Document risks to project schedule, construction, and future facilities operations as they are presented by the project team throughout the Design tasks.
- E. Permit Tracking Log: Document submittal materials and status of materials development needed for permit applications. Tracking various permit pre-application meeting dates, anticipated and actual application submittal dates, and anticipated and actual permit approval dates.

2.1.5 Quality Control/Quality Assurance (QA/QC)

Perform in-house QA/QC reviews of all deliverables.

Task 2.1 Deliverables

- 1. Project Invoices/Status Reporting: Consultant shall deliver to the City a monthly invoice and status report covering:
 - a. Work on the project performed during the previous month.
 - b. Work anticipated on the project for the upcoming month.
 - c. Issues encountered and actions taken for their resolution.
 - d. Potential impacts to submittal dates, budget shortfalls, or optional services.
 - e. Budget Analysis.
 - f. Issues requiring project team action.
- 2. Project Design Schedule and updated project schedules at major design deliverable milestones, in MS Project or Excel.
- 3. Bi-Weekly and Key Project Design Meetings:
 - a. Meeting agendas and minutes.
 - b. Graphics and/or PowerPoint presentation materials as needed to illustrate project discussion points for Project Bi-Weekly and Key Meetings.

- 4. Project Tracking Logs
 - a. Key Deliverables Log: Provide updated status on the list of key deliverables at each Bi-Weekly Project Design Meeting. Submittal of log to City at each key design deliverable milestone (60 Percent, 90 Percent, and Final Designs Submittal).
 - b. Design Review Comment Log: Submittal to City at the end of subsequent design phase (i.e., responses to City and from 60 Percent Designs will be provided with submittal of 90 Percent Designs).
 - c. Decision Log: Submittal to City the first week of every month during project Design phases. Key items and project team decisions to be presented as part of Bi-Weekly Project Meeting agendas.
 - d. Risk Register: Submittal to City the first week of every month during project Design phases.
 - e. Permit Tracking Log: Submittal to City the first week of every month during project Design phases.

Task 2.1 Assumptions

- 1. Final Design duration will be 9 months (July 2023 March 2024); therefore, it is assumed that there will be up to 10 progress payments/status reports.
- 2. Bi-Weekly Project Design Meetings:
 - a. Meeting attendance will include the Consor PM, appropriate design leads, and one additional staff engineer (up to four total Consultant staff).
 - b. Meetings will have an approximate duration of 60 minutes each and are assumed to be conducted via Microsoft Teams Video.
 - c. With project Final Design duration assumed at 9 months, up to 20 Bi-Weekly Project Design Meetings have been provided for in Proposed Project Fee Estimate. Bi-Weekly meetings will not occur during project construction.
 - d. Additional time has been provided in the Proposed Project Fee Estimate to cover preparation of meeting agendas, presentation materials, and meeting notes.
- 3. Key Project Design Meetings:
 - a. Meeting attendance will include the Consor PM, design leads, and one additional staff engineer (up to four Consultant staff).
 - b. Meetings will have an approximate duration of 3 hours each and are assumed to be conducted at City offices or via Microsoft Teams Video, unless otherwise determined.
 - c. Up to four Key Project Design Meetings have been provided for in Proposed Project Fee Estimate.

- 4. Meeting agendas and supporting information to be provided by Consultant to the City's Project Manager one business day in advance of any meeting. Materials to be distributed to meting attendees by City's Project Manager.
- 5. Meeting notes to be distributed to meeting attendees and other interested parties within three business days of the subject meeting date.
- 6. Project Tracking Logs to be developed and maintained in Microsoft Excel format.

Additional time has been provided in the Proposed Project Fee Estimate to cover preparation of meeting agendas, presentation materials, and meeting notes.

2.2 Final Design

Objective

Work under this task includes the preparation of final plans, technical specifications, and construction cost estimates for the proposed West Side Reservoir and the SW Tooze Road Transmission Main. These efforts will be completed in an incremental approach to the 60 and 90 percent level, allowing for City input and comment as the designs are developed and completed, prior to submittal of final designs. Design subtasks are detailed as follows.

2.2.1 West Side Reservoir

2.2.1.A 60% Design - Plans, Specifications, and Estimates

Consultant will develop engineering plans depicting recommended improvements, including general, civil, structural, mechanical, landscaping, instrumentation, and electrical information necessary for the construction of the new facilities and demolition of existing facilities. Specific work under this task include:

- A. Prepare 60% construction drawings and details to clearly describe the work to be constructed.
- B. Prepare 60% technical specifications and bid schedule to cover conditions specific to the work.
- C. Prepare a 60% level cost estimate.

2.2.1.B 90% Design - Plans, Specifications, and Estimates

Under this task, the 90% design submittal will be advanced from the 60% design submittal, incorporating City comments. Specific work under this task include:

- A. Prepare 90% construction drawings and details to clearly describe the work to
- B. Prepare 90% technical specifications in Construction Specifications Institute (CSI) format. Special specifications will cover conditions specific to the work, including pre-qualification of specialty contractors.
- C. Prepare an updated 90% level cost estimate.
2.2.1.C Final Design - Plans, Specifications, and Estimates

The final design submittal will be advanced from the 90% submittal, incorporating City review comments. Work under this subtask includes preparing final technical specifications and drawings required for bidding the project.

2.2.2 SW Tooze Road Transmission Main

2.2.2.A 60% Design - Plans, Specifications, and Estimates

Consultant will develop engineering plans depicting recommended improvements, including general, civil, mechanical, landscaping, instrumentation, and electrical information necessary for the construction of the new facilities and improvements to existing facilities. Specific work under this task include:

- A. Prepare 60% construction drawings and details to clearly describe the work to be constructed.
- B. Prepare 60% technical specifications and bid schedule to cover conditions specific to the work.
- C. Prepare a 60% level cost estimate.

2.2.2.B 90% Design - Plans, Specifications, and Estimates

Under this task, the 90% design submittal will be advanced from the 60% design submittal, incorporating City comments. Specific work under this task include:

- A. Prepare 90% construction drawings and details to clearly describe the work to
- B. Prepare 90% technical specifications in Construction Specifications Institute (CSI) format. Special specifications will cover conditions specific to the work, including pre-qualification of specialty contractors.
- C. Prepare an updated 90% level cost estimate.

2.2.2.C Final Design - Plans, Specifications, and Estimates

The final design submittal will be advanced from the 90% submittal, incorporating City review comments. Work under this subtask includes preparing final technical specifications and drawings required for bidding the project.

2.3 Public Involvement and Outreach

Objective

Assist City in public involvement and outreach activities. Consultant's role is to support the City in the ways City Communications Staff deems most effective and beneficial.

Activities

A. Communications Outreach Plan: Consultant will work with City staff to create a communications outreach plan identifying the outreach methods, roles and responsibilities, and schedule. The communications plan will also include outreach tasks required by the project's technical specifications and permit approvals.

- B. City-wide outreach tasks: Consultant will work with City staff to identify the tasks where City could use additional support. Possible tasks could include:
 - 1. City project website updates
 - 2. Eblast updates to the Project's interested parties list
 - 3. Postcard "construction is coming" mailer advertising the meet the contractor event
 - 4. Meet the contractor event
 - 5. Articles for partner agency newsletters (Clackamas County)
 - 6. Service provider communications (Washington County, school districts, etc)
 - 7. CPO and neighborhood association meetings (City led)
 - 8. Groundbreaking/ribbon cutting event.
- C. Neighborhood outreach tasks: Consultant will work with City staff to identify the tasks where City could use additional support. Possible tasks could include:
 - 1. Creation of maps/graphics
 - 2. Fact sheets and door hangers
 - 3. Door knocking to residents

Task 2.3 Deliverables

1. Community Outreach Plan

Task 2.3 Assumptions

- 1. City will be the point of contact for neighborhood residents, community planning organizations and neighborhood associations, and complaints during construction. City will lead CPO, neighborhood association, and nearby resident communications.
- 2. Consultant would take the lead on most city-wide outreach and assist City with neighbor/resident outreach as needed.
- 3. Consultant will work directly with City communications staff and will not attend construction or project team meetings.
- 4. Specific tasks will be determined after the communications plan is developed.

2.4 Permitting and Approvals

Objective

Work under this task includes aiding the City in obtaining certain permits and approvals for the project, including building permits and approval by the State of Oregon Health Authority (OHA). Work under this

task includes providing design documentation needed to meet various jurisdictional permitting standards and responding to technical inquiries through the course of design efforts.

Activities

2.4.1 Clackamas County, West Side Reservoir Site, Grading Permit

A. Prepare and submit drawings and technical specifications to support County review and approval of grading permit.

2.4.2 Clackamas County Building Permit

- A. Schedule and facilitate pre-submittal meeting with County Building Services.
- B. Submit final structural designs & calculations for County Building Permit for the following facilities:
 - 1. West Side Reservoir
- C. Address County Building Services comments and requested drawing and/or calculations to provide for building permit approvals.

2.4.2 Clackamas County Development Permit

- A. Sewer, Storm, and Water Utility permitting.
- B. Traffic access, street improvement, and circulation approval.
- C. Surface Drainage review.

2.4.3 Water Environment Services (WES), 1200-CN

A. Prepare and submit drawings and technical specifications to support WES review and approval of project under National Pollution Discharge Elimination System (NPDES)n requirements.

2.4.4 Clackamas County, Right-of-Way Permits

- A. Permit Type, Access: Submit final site layout designs for County ROW, Access Permit
- B. Permit Type, Utility: Submit final off-site piping improvement designs for County ROW, Utility Permit.
- C. Maybe included with County Development Permit.

2.4.5 OHA Plan Review

Submit project plans to the OHA Drinking Water Authority for review.

2.4.6 Conformed Project Documents

A. Comments received from the various permitting jurisdictions will be addressed by development of complete conformed set of project drawings and specifications.

Task 2.4 Deliverables

1. Complete application submittal packages for all project permitting noted in Task 2.2, including any supplement material such as renderings, maps, and other documents.

Task 2.4 Assumptions

- 1. Grading Permit:
 - a. Final site layout and grading plans will be used for permit submittal package.
- 2. WES 1200-CN Permit:
 - a. Site area and any off-site improvement required for this development exceed one-acre of disturbance.
 - b. Permit application submittal requires final stamped project drawings. Erosion and Sediment Control (ESC) drawings developed for and included in the final contract documents will be used for permit application.
 - c. Any WES comments will be incorporated into the contract documents with Conformed Documents.
 - d. Permit will be obtained on behalf of the City, to be transferred to the Contractor following award of project.
- 3. Clackamas County Development Permit:
 - a. Permit application materials will be prepared in accordance with County requirements
- 4. Clackamas County Building Permits:
 - a. Application is to be based upon project's Structural Engineer's designs and supporting calculations.
 - b. Permit review and approval fees will be paid by the City.
 - c. Receipt by the City of approved County Grading Permit, WES 1200-C, and County Development Permit, and Fire District access written approval is required prior to County's issuance of Building Permits.
- 5. OHA Plan Review:
 - a. A single plan review application is required for the entire project.
 - b. Permit review and approval fees will be paid by the City.
 - c. Incorporate OHA plan review comments into the project plans and specifications by construction contract modification.
- 6. All other construction-related permits and approvals will be obtained by the construction contractor, including permits for building, electrical, and any other construction permits.

2.5 Bidding Support

Objective

Under this task, Consor will assist the City with advertisement and bidding services for the project as the City may request. Services to be provide are detailed below.

Activities

2.5.1 Advertisement and Bidding Services

- A. Prepare an advertisement and arrange for its publication in the appropriate media. Advertisement costs will be paid by the City.
- B. Pre-qualify specialty contractors in accordance with City ordinances.
 - 1. For prestressed concrete reservoir construction, the Reservoir Contractor and Pre-stressing Contractors will be pre-qualified.
 - 2. For SW Tooze Road Transmission Main construction, the Transmission Main Contractor will be pre-qualified.
- C. Respond to questions from bidders, subcontractors, equipment suppliers and other vendors regarding the project and plans and specifications. Maintain a written record of communications during bidding process.
- D. Prepare and issue any addenda as necessary to clarify the contract documents.
- E. Facilitate a mandatory pre-bid conference to review the project with prospective bidders.
- F. Attend the bid opening and assist the City with the bid opening process. Assist the City with the evaluation of the bids and prepare a written bid summary document. Provide a written recommendation of award for the construction contract.

Task 2.5.1 Assumptions

A. Distribute the contract documents to the appropriate plan centers and to prospective bidders, subcontractors, equipment suppliers and other vendors upon request.

2.6 Construction Support

Objective

Under this task Consor will assist the City with construction administration and construction observation services associated with the various project elements. These services will be provided from notice of award of a construction contract to the final acceptance of the project.

2.6.1 Construction Administration

A. Perform general administration and project management throughout Construction phase and associated tasks to provide successful completion of all tasks and elements of the project within the established scope, schedule, and budget. Anticipated Construction duration is 15 months (April 2024 - July 2025).

- B. Proactively track progress of project work completed against schedule & budget.
- C. Inform the District of any anticipated challenges during the Construction phases as they arise and develop solutions together.

2.6.2 Pre-Construction Conference

Attend project's preconstruction conference and coordinate with the City regarding the conference details.

Subtask 2.6.2 Deliverables

1. Notes from preconstruction meeting (in PDF format).

Subtask 2.6.2 Assumptions

- 1. The City will prepare meeting agenda and a written conference summary. City will distribute meeting summary to all conference attendees.
- 2. Consultant attendance at preconstruction conference will be at project site or City offices.

2.6.3 Shop Drawings and Submittals

- A. Receive and review shop drawings and other technical submittals such as equipment, materials of construction, performance data and certifications, laboratory test results, and technical manuals submitted by the Contractor which are required by the contract documents.
- B. Consider and evaluate any alternatives or substitutions proposed by the Contractor.
- C. Receive and review other submittals of the Contractor including construction schedules, shop drawing/submittal schedules, lump sum price breakdowns, and other submittals required by the contract documents.
- D. Maintain a submittal log and file.
- E. Submit complete electronic submittal files to the City upon completion of the project, as requested.

Subtask 2.6.3 Deliverables

- 1. Submittal reviews with flysheet summarizing Engineer comments (in PDF format).
- 2. Submittal log and complete electronic submittal files, upon request (in PDF format).

Subtask 2.6.3 Assumptions

- 1. Submittal reviews will be completed within 14 calendar days of receipt of submittals.
- 2. For budgeting purposes, it is assumed the contractor will provide up to 125 individual submittals/shop drawings for review, requiring an average of 2 4 hours for review time. It is further assumed approximately half of the original submittals will require a re-submittal and an additional 1 to 2 hours of review time.

2.6.4 Respond to RFI's

- A. Provide clarification of the contract documents to the Contractor based upon the Contractor's written requests for information (RFI).
- B. Prepare written responses and drawings or sketches to the Contractor to clarify the contract documents.

Subtask 2.6.4 Assumptions

- 1. Written responses to RFI will be completed within 2-3 calendar days of receipt of the Contractor's RFI, though more time may be necessary depending on the complexity of the required clarification.
- 2. For budgeting purposes, it is assumed the Contractor will submit up to 35 RFI's for review and comment, with each RFI requiring up to 6 hours.

2.6.5 Weekly Construction Meetings

- A. Attend weekly construction meetings in person.
 - 1. The purpose of these meetings is to identify any potential field problems and other issues regarding the project, as well as to review the project progress versus the project schedule.

Subtask 5.5 Deliverables

1. Notes from weekly construction meetings (in PDF format).

Subtask 2.6.5 Assumptions

- 1. For budgeting purposes, individual weekly construction meetings are assumed to be four hours in duration, which includes time before and after meetings for review site conditions, anticipated work, and ongoing discussions with City and Contractor. Project construction is assumed to take approximately 15 months to complete, with up to 68 weekly meetings budgeted. Task hours include travel, field visit and documentation.
- 2. Consultant attendance at weekly construction meetings includes Consultant's project engineer and construction management observation staff.

2.6.6 Additional Onsite Construction Observations

- A. Perform up to general construction site visits to coincide with important project construction milestones.
 - 1. The onsite representative will notify the City when arriving at and leaving the project site; prepare written reports on the construction activities at the site; maintain a diary of their activities, decisions, discussions with the Contractor and other observations; attend a coordinated on-site meeting with the City and Contractor; and document construction work by photographs. Additional visits to include 1 visit per month by Project Engineer and 1 visit per week by project Construction Management (CM) staff.
 - 2. Construction observation reports shall be submitted to the City following site visits.

Subtask 2.6.6 Deliverables

1. Construction observation reports and associated photographs of ongoing activities (in PDF format).

Subtask 2.6.6 Assumptions

- 1. The onsite representative to be assigned by Consor shall be approved by the City prior to the beginning of construction.
- 2. For budgeting purposes, construction site visits are assumed to take approximately 4 hours to complete.
- 3. Two visits are reserved for observation and testing of reservoir's interior coating systems.

2.6.7 Engineer of Record Special Inspections

- A. Coordinate Engineer of Record (EOR) Special Inspections as required by the Oregon Structural Specialty Code (OSSC).
 - 1. Consor will alert the City to the need for upcoming Special Inspections for various elements of project construction.
 - 2. As required by the current OSSC, the following EOR Special Inspections will be provided for with this scope of services:
 - a. Structural:
 - i. Foundation reinforcing and formwork.
 - ii. Wall reinforcing and formwork.
 - iii. Roof reinforcing and formwork.
 - iv. Substantial completion of all structural elements.
 - b. Geotechnical:
 - i. Subgrade and foundation grade for the planned reservoir.
 - ii. Reservoir Backfill
 - 3. Generation and submittal of EOR Special Inspection observation reports for each observation.

Subtask 2.6.7 Deliverables

- 1. EOR Special Inspection observation reports (in PDF format).
- 2. Final summary letter documenting the results of observations, conclusions, and opinions from EOR Special Inspection site visits, Structural and Geotechnical (in PDF format).

Subtask 2.6.7 Assumptions

- 1. For budgeting purposes, individual EOR Special Inspection site visits are budgeted for eight hours. Site visits also include expenses related to travel to and from the project site and EOR offices. No expenses have been provided for lodging.
- 2. Additional site visits by Structural and Geotechnical EORs may be provided at the City's request at an additional cost.

- 3. A quality control program will be required of the Contractor to provide soils testing for earth compaction, aggregate testing, asphaltic concrete (AC) pavement testing, and other testing procedures as required in the contract documents and in accordance with all construction permits.
- 4. City will be responsible for coordinating special inspection needs related to the Contractor's quality control program.

2.6.8 Review Contract Modifications

Provide services related to issuing contract modifications. These include preparation of contract modification proposal description and justification documentation, and making recommendations to the City regarding any contract modifications.

Subtask 2.6.8 Deliverables

1. Formal contract modification documents with supporting materials (in PDF format).

Subtask 2.6.8 Assumptions

1. For budgeting purposes, it is assumed the contractor will request up to 10 contract modifications, with each contract modification requiring up to 5 hours to review and process.

2.6.9 Facilities Startup and Testing

- A. Coordinate with the Contractor and the City for final testing and start-up of the facilities.
- B. Identify substantial completion of the project and submit a certificate of substantial completion with City concurrence.

Subtask 2.6.9 Deliverables

- 1. Final testing and facilities start-up notes (in PDF format).
- 2. Certificate of Substantial Completion (in PDF format).

Subtask 2.6.9 Assumptions

1. For budgeting purposes, testing and start-up activities are assumed to take up to two eight-hour days to complete.

2.6.10 Final Inspections

- A. Attend final inspection of the project with representatives of the City.
- B. Prepare a "punch list" of items of work remaining to achieve final completion of the project and to prepare for the City's acceptance of the project.
- C. Recommend procedures and timing of acceptance of the project. Advise the City and the Contractor of the dates for any warranty periods as established in the contract documents.

Subtask 2.6.10 Deliverables

1. Notes from final inspection to include in punch list (in PDF format).

Subtask 2.6.10 Assumptions

- 1. For budgeting purposes, final inspection is assumed to take approximately eight hours to complete.
- 2. City will coordinate scheduling and attendance for final inspection.

2.7 Project Closeout

Objective

Under this task Consor will assist the City with closeout associated with the various project elements. These services will be provided starting with Substantial Completion and end with the anniversary inspection.

2.7.1 Record Drawings

Prepare record drawings of the project.

Subtask 2.7.1 Deliverables

- 1. One set of full-sized (22" x 34") set of record drawings
- 2. Electronic AutoCAD files
- 3. Two sets of half-sized (11"x17") drawings (in PDF format).

Subtask 2.7.1 Assumptions

1. Record drawings of the project will be based upon the construction records of the Contractor and City's onsite representative.

2.7.2 O&M Manual

Consultant will prepare Operations and maintenance manual for Reservoir site facilities based on Contractor submitted

Subtask 2.7.2 Deliverables

- 1. Provide three (3) bound hardcopies to the City.
- 2. Provide electronic version (PDF).

Subtask 2.7.2 Assumptions

1. Contractor to supply facility manuals for Consultant compilation.

2.7.3 Anniversary Inspection

- A. Assist the City with the facilitation of a one-year anniversary inspection and the administration of potential corrective actions by the Contractor.
- B. Report to the City and the Contractor on findings and corrections.

Subtask 2.7.3 Deliverables

1. Notes from the one-year anniversary inspection (in PDF format).

Subtask 2.7.3 Assumptions

- 1. The City will provide a final Release from Warranty letter once all corrections are made to the satisfaction of the City.
- 2. For budgeting purposes, the warranty inspection is assumed to take approximately eight hours to complete.

Task 3 – Extra Work as Authorized

Objective

Assist the City with additional project engineering services (Extra Work) which are not included in this Proposed Scope of Services.

Activities

Consultant will provide additional engineering services support for the project, as authorized by the City.

Task 3 Deliverables

1. To be determined with authorization of Extra Work.

Task 3 Assumptions

- 1. A budget of \$50,000 is allocated in the Proposed Project Fee Estimate for this task.
- 2. Request for additional engineering services (Extra Work) will be provided to the Consultant by the City in writing. Consultant will provide a proposed scope of services and fee estimate for Extra Work in writing. Consultant will not begin Extra Work until authorized by the City in writing.
- 3. Items which may be anticipated for Extra Work as Authorized include the following:
 - a. Additional Off-Site Piping Improvements
 - b. Additional efforts to Task 1.4, Hydraulic Modeling
 - c. Additional off-site improvements to turn down vaults or other facilities based on recommendations and finding s of Task 1.4 Hydraulic Modeling
 - d. Additional work associated with Task 2.4, Permits and Approvals associated with Land Use Modifications.

Preliminary Drawing List

See "Attachment A" for the preliminary drawing list compiled for this project. The project has been divided into two schedules for organization purposes as follows:

- A. Schedule A, West Side Reservoir
- B. Schedule B, SW Tooze Road Transmission Main

Proposed Project Fee Estimate

Consor proposes to perform this work on a time and expenses basis with a total not to exceed amount of \$1,472,644, which includes design, permitting, and assistance with bidding and construction management and observation services. The proposed fee estimate is provided as "Attachment B." Fee estimates are based upon Consultant's standard 2023 labor rates.

Proposed Project Schedule

Consor anticipates Notice to Proceed for January 16, 2023. Based upon this starting date, we have included a Preliminary Project Schedule as "Attachment C."

CITY OF WILSONVILE, WEST SIDE RESERVOIR AND SW TOOZE RD TX MAIN PRELIMINARY PLAN SET SHEET COUNT

Sheet No.		Sheet Name
GENERAL		
1	G-1	Cover Sheet and Vicinity and Location Maps
2	G-2	Index of Drawings
3	G-3	Symbols and Legend
4	G-4	Abbreviations
5	G-4 G-5	General Notes
6	G-6	
0	G-0	Key Map and General Project Overview
CIV/II		
	GEN-C-1	Miscellaneous Civil Details 1
7		
8	GEN-C-2	City of Wilsonville Standard Details 1
9	GEN-C-3	City of Wilsonville Standard Details 2
10	GEN-C-4	WES Standard Details 1
11	GEN-C-5	WES Standard Details 2
	SEDIMENTATI	
12	ESC-1	ESC Cover Sheet and Notes
13	ESC-2	ESC West Side Reservoir Site Plan
14	ESC-3	ESC SW Tooze Road Tx Main, Typical, Plan
15	ESC-4	ESC Details 1
16	ESC-5	ESC Details 2
TRAFFIC CONT	FROL PLAN	
17	GEN-TCP-1	Traffic Control Plan 1
18	GEN-TCP-2	Traffic Control Plan 2
19	GEN-TCP-3	Traffic Control Plan 3
20	GEN-TCP-4	Traffic Control Details
-		
SCHEDULE A -	WEST SIDE RES	SERVOIR
CIVIL		
21	RES-C-1	Reservior Site Layout Plan
22	RES-C-2	Reservoir Site Grading Plan
23	RES-C-3	Reservoir Site Access Road Profile and Details
23	RES-C-4	Reservoir Section and Underdrain Details
25	RES-C-5	Reservoir Floor Plan
26	RES-C-6	Reservoir Site Piping Plan
27	RES-C-7	Reservoir Site Piping Profiles 1
28	RES-C-8	Reservoir Site Piping Profiles 2
29	RES-C-9	Reservoir & Site Drainage Piping Plan
30	RES-C-10	Reservoir & Site Drainage Piping Details 2
31	RES-C-11	Reservoir & Site Drainage Piping Details 2
32	RES-C-12	Miscellaneous Reservoir Details 1
33	RES-C-12	Miscellaneous Reservoir Details 2
34	RES-C-13	Miscellaneous Reservoir Site Civil Details 1
35	RES-C-14	Miscellaneous Reservoir Site Civil Details 2
	•	
STRUCTURAL		
36	RES-S-1	Reservoir General Structural Notes
37	RES-S-2	Reservoir Quality Assurance Plan Notes
38	RES-S-3	Reservoir Foundation Plan
39	RES-S-4	Reservoir Roof Plan
40	RES-S-5	Reservoir Section and Column Details
40 41	RES-S-5 RES-S-6	
		Reservoir Roof Slab Reinforcing Details and Waterstop Schedule
42	RES-S-7	Miscellaneous Reinforcing and Joint Details
43	RES-S-8	Prestressed Wall Section and Details
44	RES-S-9	Miscellaneous Details and Prestressing Notes
45	RES-S-10	Foundation and Pipe Block Details
46	RES-S-11	Interior Ladder and Roof Hatch Details
47	RES-S-12	Additional Reservoir Details
MECHANICAL	=	
48	RES-M-1	Reservoir Piping Entrance/Exit Plan and Sections 1
49	RES-M-2	Reservoir Piping Entrance/Exit Plan and Sections 2
50	RES-M-3	Reservoir Roof Vent Details
ELECTRICAL		
51	RES-E-1	Electrical General Notes and Abbreviations
52		
	RES-E-2	Electrical Symbols, Legend, and Standard Details
53	RES-E-3	Reservoir One-Line Diagram
54	RES-E-4	Reservoir Electrical Site Layout Plan
55	RES-E-5	Reservoir Roof Plan
56	RES-E-6	Reservoir Site Grounding Plan
57	RES-E-7	Reservoir Site Grounding Details

INSTRUMENTATION AND CONTROLS

60	RES-I-1	Reservoir Site Process & Instrumentation Diagram
61	RES-I-2	Reservoir Instrumentation Details 1
62	RES-I-3	Reservoir Instrumentation Details 2
63	RES-I-4	Reservoir Instrumentation Details 3
ANDSCAPIN	3	
64	RES-L-1	Reservoir Site Restoration Details
65	RES-L-2	Reservoir Site Restoration Plan
	•	
CHEDULE B -	TRANSMISSIO	N MAIN
IVIL		
66	TM-C-1	Plan & Profile 1
	TM-C-1 TM-C-2	Plan & Profile 1 Plan & Profile 2
66	-	
66 67	TM-C-2	Plan & Profile 2
66 67 68	TM-C-2 TM-C-3	Plan & Profile 2 Plan & Profile 3
66 67 68 69	TM-C-2 TM-C-3 TM-C-4	Plan & Profile 2 Plan & Profile 3 Plan & Profile 4
66 67 68 69 70	TM-C-2 TM-C-3 TM-C-4 TM-C-5	Plan & Profile 2 Plan & Profile 3 Plan & Profile 4 Plan & Profile 5
66 67 68 69 70 71	TM-C-2 TM-C-3 TM-C-4 TM-C-5 TM-C-6	Plan & Profile 2 Plan & Profile 3 Plan & Profile 4 Plan & Profile 5 Plan & Profile 6
66 67 68 69 70 71 71 72	TM-C-2 TM-C-3 TM-C-4 TM-C-5 TM-C-6 TM-C-7	Plan & Profile 2 Plan & Profile 3 Plan & Profile 4 Plan & Profile 5 Plan & Profile 6 Plan & Profile 7

MECHANICAL

ECHANICAL				
75	TM-M-1	SW Tooze Road Vault Improvements, Plan	`	
76	TM-M-2	SW Tooze Road Vault Improvements, Sections & Details 1		

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WEST SIDE RESERVOIR AND SW TOOZE ROAD TRANSMISSION MAIN CITY OF WILSONVILLE PROPOSED FEE ESTIMATE

											L	ABOR CLASSIFICAT	ION (HOURS)																							
																											Sub	consultants								
		Principal Engineer	r Principal Engineer IV	Principal Engineer III		Professional Engineer VI	Professional Engineer V	Professional Engineer IV	Professional Engineer VI	Professional Engineer III	Engineering Designer III	Engineering Designer II C		Construction Manager VI	Construction Manager V												I I&C	Geote		Permits	Subconsultant Multiplie	r Subconsultant To		CADD Unit	ts	1
		v											Cost Estimator III			Technician III			Fechnician III	Administrative II	Administrative II	Administrative I	Hours	Labor	Structura	Electrical	I I&C	Geote	ch Survey	Permits	% Markup	with Markup	Expenses	\$18/hr	GIS Units \$10/hr	Total
Staff Name		\$295 Ginter	\$284 Boland	\$271 Alderman	\$257 Menkerud	\$206 Blair	\$194 Flock	\$183 Husk	\$206 FosterB	\$177 Connors	\$177	\$163	\$276 Griesinger	\$225 Hedberg	\$207 Maxwell	\$158 Ramos	\$176	\$158 McFaddin	\$158 Fisherabli	\$112 Gillis	\$112 Steinberg	\$99 Folmer														4
		Ginter	Bolanu	Aluciman	menneruu	Diali	FIUCK	nusk	rosterb	connors			Griesingen	neuseig	maxwell	Kalilos	cstep	Mcrauum	Cigneraun	Onits	Steinberg	Joines														
Task 1.1 - Project Managament 1.1, Project Invoicing / Statu Updates 1.1, BriWeekly Project Design Meetings 1.1, BriWeekly Project Meetings 1.1, Maintain Project Tracking Logs 1.1, GAVGC				2		6				6										12		8	24 \$	4.0	76 5 1.6	0.9 5 1.0	128 C 1.6	650 5	2 120 5 6	:75		11 \$ 78	8 \$	0 0		\$ 12.994
1.1.2 Bi-Weekly Project Design Meetings				6						21										12		°	41 \$	*,3	27	136 2 1,0	140 \$ 1,0	030 Ş .	2,120 3 0	1/3		1.1 \$ 7,8		10 S		\$ 8,257
1.1.3 Key Project Meetings		_		4		14				8													20 \$	4,1	48							1.1 \$	- \$	0 \$	· \$ ·	\$ 4,178
1.1.4 Maintain Project Tracking Logs 1.1.5 QA/QC			16	4	-	4				12													20 \$	2,9 5,6	28							1.1 \$	- 5	10 \$ 15 \$		\$ 5,653
	Task 1.1 Subtotal	0	16	16	0	32	0	0	0	47	0	0	0	0	0	0	0	0	0	12	0	8	20 \$ 131 \$	25,9	27 \$ 1,6	98 \$ 1,0	28 \$ 1,6	650 \$ 2	,120 \$ 6	75 \$	•	\$ 7,8	8 5 1	5\$	· \$ ·	\$ 33,960
Task 1.2 - Geotechnical Investigations					-																											-				-
Geotechnical Investigations						4				8		8											20 \$	3,5	44			\$ 54	1,919			1.1 \$ 60,4	1 \$	3 \$	- \$	\$ 63,987
	Task 1.2 Subtotal	0	0	0	0	4	0	0	0	8	0	8	0	0	0	0	0	0	0	0	0	0	20 \$	3,5	44 \$	- \$	- \$	- \$ 54	,919 \$	- \$	•	\$ 60,4	1 \$ 3	3\$	<u> </u>	\$ 63,987
Task 1.3 - Topographic Survey																																				
1.3.1 West Side Reservoir Site 1.3.2 SW Tooze Road Transmission Main						2				8		8					2	8					28 \$	4,7	48				\$ 18,8	165		1.1 \$ 20,7 1.1 \$ 35.5	2 \$ -	S C	180 \$ -	\$ 25,680 \$ 40.106
1.3.2 34 1042 1043 1141414201 1141	Task 1.3 Subtotal	0	0	0	0	4	0	0	0	16	0	16	0	0	0	0	4	14	0	0	0	0	26 \$ 54 \$	9,1	80 \$	- \$. \$. ş	- \$ 51,1	.65 \$		\$ 56,2	2 \$.	\$	324 \$ -	\$ 65,786
Task 1.4 Mudaville Madallas																																				-
Task 1.4 - Hydraulic Modeling 1.4.1 Review Existing Data 1.4.2 Hydraulic Modeling 1.4.3 Technical Memorandum		4				4	16 48																24 \$	5,1	.08							1.1 \$	- ş -	ş	- \$ 200	3 \$ 5,308
1.4.2 Hydraulic Modeling		8				4																	60 \$	12,4	96							1.1 \$	- \$ -	\$	- \$ 560	\$ 13,056
1.4.3 Technical Memorandum	Task 1.4 Subtotal	8	0	0	0	8	24 88	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40 \$ 124 \$	8,6 26,2	64							1.1 \$. <u>s</u>	\$	- \$ 320 - \$ 1,080	0 \$ 8,984 0 \$ 27,348
		-				1			-													-									-					
Task 1.5 - Preliminary Design				2		16		16		96	80						8	48					266 5	46.9	10 S 9.0	50 \$ 2.6	SR5 \$ 10.5	560				11 5 245	5 5	5 5 1	008 5	\$ 72.508
Task 1.5 - Preliminary Design 1.5.1 West Side Reservoir 1.5.2 SW Tooze Road Transmission Main 1.5.3 Preliminary Design Report				2		20			24			80					- 8	40					174 \$	30,3		φ 2,0	÷ 10,-					1.1 \$	- \$ -	ŝ	864 \$.	\$ 31,238
1.5.3 Preliminary Design Report	Task 1.5 Subtotal		•	4	•	24	0	8	24	40	80	80	16	0	•	0	16	88	•	0	10	•	102 \$ 542 \$	20,1	08	50 \$ 2,6	9E C 10 E				-	1.1 \$. s . s \$.	5 5 5 1	. S .	\$ 20,108 \$ 123,854
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Task 2.1 - Project Management																																				
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2.1.2 Bi-Weekly Project Design Meetings [Desig 2.1.3 Key Project Meetings [Design Phase Only	ign Phase Only] v]			6		20				30 12													59 \$ 30 \$	11,8	22							1.1 \$	- \$ 1	15 \$ 15 \$		\$ 6,327
2.1.2 Bit Weekly Project Design Meetings [Design 2.1.3 Key Project Meetings [Design Phase Only 2.1.4 Maintain Project Tracking Logs [Design Phase 2.1.5 QA/QC.	Phase Only]					6				16													22 \$	4,0	168							1.1 \$	- \$ 1	IS \$	- \$ -	\$ 4,173
2.1.5 QA/QC	Task 2.1 Subtotal	0	20	12	0	62	0	0	0	82	0	0	0	0	8	8	0	0	0	24	0	8	32 \$ 244 \$	8,9	32 38 \$ 5,0	94 S	- \$ 3,9	960 5 2	.120 \$	- 5	-	1.1 S S 12.2	. S 3	0 S	- 5 -	\$ 9,232
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Task 2.2 - Final Design 2.2.1 West Side Reservoir																							0 5									115		c		
2.2.1.A 60% Design 2.2.1.B 90% Design				4		24		20		120	180		12				12	80	20		8		480 \$ 454 \$	84,9		\$ 3,2	288	\$ 6	5,800			1.1 \$ 11,0	7 \$ 1	18 \$ 2	1,016 \$ -	\$ 98,128 \$ 88,788
2.2.1.8 90% Design 2.2.1.C Final Design				4		24		16		100	180 140		12				12	80 60	20		6		454 \$ 350 \$	80,4		\$ 5,6	584 202 S 10 1	140				1.1 \$ 6,2 1.1 \$ 89,8	2 \$ 1	18 \$ 2 18 \$ 1	,016 \$ -	\$ 88,788
2.2.1.C Final Design 2.2.2 SW Tooze Road Transmission Main				-		10		10		00	140		0				5	00	10				0 \$	01,7			NI 9 13,1	140				1.1 \$	- \$ -	\$		\$ -
2 2 2 A 60% Design				4		20			60			100	8				8	68			8		276 \$	49,1 44,2	20							1.1 \$	- \$ 10	18 \$ 1	.,368 \$ -	\$ 50,596
2.2.2.8 90% Design 2.2.2.C Final Design				2		16			40			60	6				4	48			6		248 \$ 182 \$ 1990 \$	32,4	74							1.1 \$	- \$ 1	18 \$	936 \$ -	\$ 33,518
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Task 2.3 - Public Involvement and Outreach																																				-
Public Involvement and Outreach				2	68	16				14							8						108 \$ 108 \$	25,2	00							1.1 \$	- \$ 1	i0 \$	360 \$	\$ 25,710 \$ 25,710
	Task 2.3 Subtotal	•	0	2	68	16	0	0	0	14	0	0	0	0	0	0	8	0	0	0	0	0	108 \$	25,2	00 \$	- \$	- \$	- \$	- \$	- \$	•	\$	- \$ 1	0 \$	360 \$ -	\$ 25,710
Task 2.4 - Permitting and Approvals																																			_	
Permitting and Approvals	Task 2.4 Subtotal		•		•	8	0	20	0	24	32	0	•	•	•	0		20	•	0	0	•	104 \$ 104 \$	18,3	80 \$ 5,0 80 \$ 5,0	00 6					-	1.1 \$ 5,5	0 \$ 10	0 S	· \$ ·	\$ 23,980 \$ 23,980
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Task 2.5 - Bidding Support				2		20				60							-	6			4		02 C	16.6	79 0 55	22						11 5 60		. e		C 22.917
munity address	Task 2.5 Subtotal	0	0	2	0	20	0	0	0	60	0	0	0	0	0	0	0	6	0	0	4	0	92 \$	16,6	78 \$ 5,5	22 \$	- \$	- \$	- \$	- \$	-	\$ 6,0	4 5 0	5 \$	· \$ ·	\$ 22,817
Task 2.6 - Construction Support	-	1		1		+										-				-													-			+
2.6.1 Construction Administration			1	10	1	75										40	1	. I.				1	125 \$	24,4	80			-			1	1.1 \$	- s	18 S	· \$ ·	\$ 24,578
2.6.2 Pre-Construction Conference						4			6	8		50		4	4	4							30 \$	5,8	36 \$ 25,0	00		200				1.1 \$ 27,5	0 \$ -	\$	- \$ -	\$ 33,336
2.6.4 Respond to RFI's		1	1	1	1	8 24				60 64	12 58	22			30		4	8	4			1	130 \$ 214 \$	22,5 38,9	4z 34	\$ 1,3	388 \$ 3,3 716 \$ 1,9	300 980		-	1	1.1 \$ 5,1 1.1 \$ 2,9	7 \$ - 6 \$ 4,3	5 18 \$	- \$ -	\$ 27,699
101.10 Construction Support 2.6.1 Construction Administration 2.6.2 Pre-Construction Conference 2.6.3 Shop Drawings and Submittals 2.6.4 Respond to RP's 2.6.5 Weekly Construction Meetings 2.6.6 Additional Oracle Construction Internation						30				270				<i>ca</i>	270	68							638 \$	38,9 120,5	25	_						1.1 \$	- \$ 2,6		- \$ -	\$ 123,206
2.6.6 Additional Onsite Construction Observati 2.6.7 Engineer of Record Special Inspections 2.6.8 Review Contract Modifications 2.6.9 Facilities Testing & Start-Up 2.6.10 Final Inspection	tions	+	I		+	+				60	├ ──┤			60	270			├ ───┤				+	390 \$ 20 \$	80,0	40 \$ 54,3	10 \$ 1.4	178 \$ 2.6	640 \$ 16	5,130	-	+	1.1 5 1.1 \$ 82.0	4 5 -	S S	- \$ -	\$ 80,010
2.6.8 Review Contract Modifications						12				40					30	10							92 \$	17,3	42							1.1 \$	- \$ 1	i0 \$	- \$ -	\$ 17,472
2.6.9 Facilities Testing & Start-Up 2.6.10 Final Inspection		1	+		+	8				16					24		+						48 \$	9,4	48		-			-		1.1 S	- \$ -	is ș S	- \$ -	\$ 9,513 \$ 7,792
	Task 2.6 Subtotal	0	0	10	0	169	0	0	6	534	70	72	0	64	664	122	4	8	4	0	0	0	40 \$ 1727 \$	331,0	49 \$ 79,3	10 \$ 3,5	82 \$ 7,9	920 \$ 16	i,130 \$	- \$	-	\$ 117,6	6 \$ 7,3	1 \$	- 5 -	\$ 456,046
Task 2.7 - Project Closeout					+	+											-										-			-			-	+		-
Task 2.7 - Project Closeout 2.7.1 Record Drawings 2.7.2 O&M Manual 2.7.3 Anniversary Inspection						4				40					24		4	36	4				112 \$	19,8	96 \$ 2,5	00 \$ 7	761 \$ 1,5	500				1.1 \$ 5,2	7 \$ 2	10 Ş	792 \$.	\$ 26,125
2.7.2 O&M Manual		1			+	8				32 16					20	16	+					+	76 \$	13,9	80	\$ 7	783			+		1.1 \$ 8	1 \$ 1	i0 \$ ic c	- \$ -	\$ 14,991
2.7.3 Anniversary inspection	Task 2.7 Subtotal	0	0	0	0	14	0	0	0	88	0	0	0	0	60	16	4	36	4	0	0	0	34 \$ 222 \$	40,4	32 \$ 2,5	00 \$ 1,5	44 \$ 1,5	500 \$	- \$	- \$	-	\$ 6,0	8 \$ 4	5 \$	792 \$ -	\$ 6,621 \$ 47,737
Table Barris March As Analysis a																																				-
Task 3 - Extra Work As Authorized Extra Work As Authorized		1	+	1	+	242											+					1	242 \$	49,8	52		-	-		-	+	1.1 \$	- \$ -	s	- \$ -	\$ 49,852 \$ 49,852
	Task 3 Subtotal	0	0	0	0	242	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	242 \$	49,8	52 \$	- \$	- \$	- \$	- \$	- \$	-	\$	- \$ -	\$	- \$ -	\$ 49,852
TOTAL - ALL TASKS		20	36	88	68	767	88	90	190	1309	682	416	70	64	732	146	88	576	64	36	54	16	5600 \$	1,044,8	52 \$ 168,8	32 \$ 19,7	13 \$ 44,7	730 \$ 82	,089 \$ 51,8	40 \$	-	\$ 403,9	4 \$ 10,2	4 \$ 12	2,564 \$ 1,080	\$ 1,472,644

ATTACHMENT "B"

