

RESOLUTION NO. 2636

A RESOLUTION OF THE CITY OF WILSONVILLE AUTHORIZING THE CITY MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT WITH CAROLLO ENGINEERS, INC. FOR MASTER PLANNING AND DESIGN SERVICES

WHEREAS, the City has planned and budgeted for the completion of Capital Improvement Projects for the Willamette River Water Treatment Plant 2017 Master Plan Update and two related Capital Improvement Projects known as Water Treatment Plant Surge Tank and WTP Life Safety and Seismic Upgrades (collectively the “Project”); and

WHEREAS, the City solicited Requests for Proposals from qualified consultants for the Project that duly followed the State of Oregon Public Contracting Rules and the City of Wilsonville Municipal Code; and

WHEREAS, Carollo Engineers, Inc. was selected as the most qualified consultant, and subsequently provided an acceptable scope and fee proposal for the Project; and

WHEREAS, the City desires to award a Professional Services Agreement contract with Carollo Engineers, Inc. to perform Master Planning and Design Services for the Project.

NOW, THEREFORE, THE CITY OF WILSONVILLE RESOLVES AS FOLLOWS:

1. The City of Wilsonville, acting as the Local Contract Review Board, authorizes the City Manager to enter into and execute, on behalf of the City of Wilsonville, a Professional Services Agreement contract with Carollo Engineers, Inc. for a not-to-exceed amount of \$431,356.
2. This Resolution becomes effective upon the date of adoption.

ADOPTED by the Wilsonville City Council at a regular meeting thereof this 19th day of June 2017, and filed with the Wilsonville City Recorder this date.

Tim Knapp, Mayor

ATTEST:

Sandra C. King, MMC, City Recorder

SUMMARY OF VOTES:

Mayor Knapp	Yes
Council President Starr	Excused
Councilor Akervall	Yes
Councilor Stevens	Yes
Councilor Lehan	Yes

Attachments:

Professional Services Agreement with Exhibit A – Scope, and Exhibit B – Fee Proposal

**CITY OF WILSONVILLE
PROFESSIONAL SERVICES AGREEMENT**

This Professional Services Agreement (“Agreement”) is made and entered into on this ____ day of _____, 2017 (“Effective Date”) by and between the **City of Wilsonville**, a municipal corporation of the State of Oregon (hereinafter referred to as the “City”), and **Carollo Engineers, Inc.**, a Delaware 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. Term

The term of this Agreement shall be from the Effective Date until all services required to be performed hereunder (“Services”) are completed and accepted, unless earlier terminated in accordance herewith. Except in the event of an extension of time, agreed to in writing by the City, all Services must be completed by no later than March 31, 2018.

Section 2. Consultant’s Services

2.1. Consultant shall diligently perform the professional engineering and consulting Services according to the requirements identified in the Scope of Services, attached hereto as **Exhibit A** and incorporated by reference herein, for the Willamette River Water Treatment Plant 2017 Master Plan Update Project (“Project”).

2.2. 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 which 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 Services 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.

2.3. Consultant will not be deemed to be in default by reason of delays in performance due to reasons 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.

2.4. 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 Services described herein.

2.5. 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 work on 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 3. Compensation

3.1. Except as otherwise set forth in this **Section 3**, the City agrees to pay Consultant on a time and materials basis for Tasks 100 through 600, inclusive, as described in **Exhibits A and B**, a not to exceed amount of THREE HUNDRED NINE THOUSAND FOUR HUNDRED NINETY-NINE DOLLARS (\$309,499) ("Compensation Amount"). In addition, the City may later order, in writing, the additional Optional Task 700, as also shown in **Exhibits A and B**, at a not to exceed amount of ONE HUNDRED TWENTY-ONE THOUSAND EIGHT HUNDRED FIFTY-SEVEN DOLLARS (\$121,857). The Compensation Amounts for Tasks 100 through 600 together, and Optional Task 700 by itself, are considered individual not-to-exceed amounts for the specified Services. No Services shall be performed and no compensation shall be provided for Optional Task 700 until authorized, in writing, by the City Project Manager. Any compensation in excess of the Compensation Amounts listed above will require an express written Addendum to be executed between the City and Consultant.

3.2. 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 Services 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 B**. Compensation above the amount shown in **Subsection 3.1** above requires a written Addendum, executed in compliance with the provisions of **Section 155**.

3.3. Unless expressly set forth on Consultant's Rate Schedule as a reimbursable expense item that is not included in the Compensation Amount of **Subsection 3.1**, or as an additional charge for which a written Addendum has been approved, in accordance with **Subsection 3.2** and

the requirements of **Section 155**, Consultant shall only be entitled to the Compensation Amount specified in **Subsection 3.1**.

3.4. 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.

3.5. 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, and all other similar fees resulting from this Project, that are not specifically covered by **Exhibit A**.

3.6. 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, office expenses, and all other indirect and overhead charges.

Section 4. City's Responsibilities

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.

Section 5. City's Project Manager

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

Section 6. Consultant's Project Manager

Consultant's Project Manager is Christina Suto. 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 7. 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 8. 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 Services, 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 9. Subcontractors and Assignments

9.1. 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.

9.2. 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.

Section 10. Consultant Is Independent Contractor

10.1. Consultant is an independent contractor for all purposes and shall be entitled to no compensation other than the Compensation Amount provided for under **Section 3** 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.

10.2. Consultant has requested 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 an approved Rate Schedule. 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 155** of this Agreement. In all cases, processing and payment of billings from subcontractors is solely the responsibility of Consultant.

10.3. 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 100** and meet the same insurance requirements of Consultant under this Agreement.

Section 11. Consultant Responsibilities

11.1. Consultant shall 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 subcontractor 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.

11.2. Consultant must comply with all applicable Oregon and federal wage and hour laws, including Bureau of Labor and Industries (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. Unless otherwise expressly set forth on **Exhibit B** as a reimbursable expense item not included in the Compensation Amount, specific costs associated

with items set forth in this subsection shall be deemed as fully and conclusively included in the rate upon which Consultant's Compensation Amount is based.

11.3. 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.

11.4. References to "subcontractor" mean a subcontractor at any tier.

Section 12. Indemnity and Insurance

12.1. 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 12.2**. 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.

12.2. Standard of Care: In the performance of professional 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.

12.3. Insurance Requirements: 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. The amount of insurance carried is in no way a limitation on Consultant's liability hereunder. The policy or policies of insurance maintained by Consultant shall provide at least the following minimum limits and coverages at all times during performance under this Agreement:

12.3.1. Commercial General Liability Insurance. Consultant shall obtain, at Consultant's 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 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.

12.3.2. Professional Errors and Omissions Coverage. 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 thereafter.

12.3.3. Business Automobile Liability Insurance. If Consultant will be using a motor vehicle in the performance of the Services herein, Consultant shall provide the City a certificate indicating that Consultant has 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**.

12.3.4. Workers Compensation Insurance. Consultant 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.

12.3.5. Insurance Carrier Rating. Coverages provided by Consultant 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.

12.3.6. Additional Insured and Termination Endorsements. Additional Insured coverage under Consultant's Commercial General Liability, Automobile Liability, and Excess Liability Policy(ies), as applicable, will be provided by endorsement. Additional insured coverage shall be for both on-going 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.

12.3.7. Certificates of Insurance. 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.

12.3.8. Primary Coverage. 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 13. Early Termination; Default

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

13.1.1. By mutual written consent of the parties;

13.1.2. 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

13.1.3. 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.

13.2. 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.

13.3. 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.

13.4. 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 17**, for which Consultant has received payment or the City has made payment.

Section 14. 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 15. 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 3** of this Agreement, or changes or modifies the Scope of Services 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 in the form of an Addendum shall be the basis for refusal by the City to treat said communication 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 16. 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 for a period of four (4) years, unless within that time the City specifically requests an extension. This clause shall survive the expiration, completion, or termination of this Agreement.

Section 17. Property of the City

17.1. Originals or certified copies of the original work forms, including but not limited to documents, drawings, tracings, surveying records, mylars, 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 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.

17.2. 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 18. 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: Eric Mende
 29799 SW Town Center Loop East
 Wilsonville, OR 97070

To Consultant: Carollo Engineers, Inc.
 Attn: Christina Suto
 720 SW Washington Street, Suite 550
 Portland, OR 97205

Section 19. Miscellaneous Provisions

19.1. Integration. 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 documents, the provisions of this Agreement shall control.

19.2. Legal Effect and Assignment. 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.

19.3. No Assignment. Consultant may not assign this Agreement, nor the performance of any obligations hereunder, unless agreed to in advance and in writing by the City.

19.4. Adherence to Law. 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.

19.5. Governing Law. This Agreement shall be construed in accordance with and governed by the laws of the State of Oregon. All contractual provisions required by ORS Chapters 279A and 279C 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.

19.6. Jurisdiction. Venue for any dispute will be in Clackamas County Circuit Court.

19.7. 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.

19.8. Nonwaiver. 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.

19.9. Severability. 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.

19.10. Modification. This Agreement may not be modified except by written instrument executed by Consultant and the City.

19.11. Time of the Essence. Time is expressly made of the essence in the performance of this Agreement.

19.12. Calculation of Time. 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.

19.13. Headings. 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.

19.14. Number, Gender and Captions. 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.

19.15. Good Faith and Reasonableness. 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.”

19.16. Other Necessary Acts. 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.

19.17. Interpretation. 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.

19.18. Entire Agreement. This Agreement and all documents attached to this Agreement represent the entire agreement between the parties.

19.19. Counterparts. 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.

19.20. Authority. 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:

CAROLLO ENGINEERS, INC.

CITY OF WILSONVILLE

By: Jude Grounds
As Its: Vice President
Employer I.D. No. 86-0899222

By: _____
Bryan Cosgrove
As Its: City Manager

CAROLLO ENGINEERS, INC.

APPROVED AS TO FORM:

By: Jeffrey F. McCallum
Print Name: Jeffrey F. McCallum
As Its: Assoc. Vice President

Barbara A. Jacobson, City Attorney
City of Wilsonville, Oregon

CITY OF WILSONVILLE

**WILLAMETTE RIVER WATER TREATMENT PLANT
2017 MASTER PLAN UPDATE**

SCOPE OF SERVICES

May 4, 2017

BACKGROUND

In the late 1990s, the City of Wilsonville (Wilsonville) began construction of the Willamette River Water Treatment Plant (WRWTP) via a design/build project delivery model – one of the earliest/largest examples of alternative delivery in the region. The existing WRWTP, on the lower site, was placed into service in April 2002. The WRWTP is located along the Willamette River on the southern edge of the City of Wilsonville and is irregularly shaped, with two distinct areas commonly referred to as the Lower and Upper site.

As part of the original project, Wilsonville partnered with the Tualatin Valley Water District (District) to provide funding to oversize key infrastructure (including the intake, raw water pump station, finished water pump station, and select pipelines) to better accommodate plant expansion to help meet the needs of the combined communities. The existing treatment plant has a current regulatory capacity of 15 mgd and was built to accommodate a future expansion of up to 70 mgd of total capacity, assuming the existing plant could be 'high rated' to accommodate this elevated flow. This assumption was confirmed as part of the District-led *WRWTP Master Plan* (MWH, 2006), which also demonstrated sufficient space was available at the Upper site to accommodate a second plant with at least 100+ mgd in additional capacity, depending on the assumptions made for design/operational criteria.

In 2015, Wilsonville, along with other stakeholders, updated the *WRWTP Master Plan* (MWH, 2006) to determine how the existing plant could be expanded to meet the future demands of the emerging Willamette Water Supply Program (WWSP), primarily comprised of the District and the City of Hillsboro. Though the *WRWTP Master Plan 2015 Update* (Carollo, 2017) succeeded in evaluating these possibilities, following the completion of the 2015 Update, it was determined the WWSP treatment facilities would be optimized at an alternate site, located several miles north of the existing WRWTP. Moving forward, the existing WRWTP is expected to exclusively serve Wilsonville and Sherwood, with any additional future partners currently unknown. However, the oversized river intake and raw water pumping station will be further expanded to provide raw water to both the existing plant and the proposed new, off-site WWSP treatment facilities (WWSP WTP).

The 2015 Master Plan Update documented future water needs, level of service (LOS) goals, regulatory requirements, reliability and resiliency of the distribution system, and

EXHIBIT A

seismic evaluation. The purpose of this Project is to supplement and expand upon the information presented in the 2015 Master Plan Update that applies to the existing facilities at the WRWTP and create a stand-alone Master Plan for upgrade and expansion that best accommodates the growing needs of Wilsonville and Sherwood, while carefully coordinating with the upcoming requirement to pump raw water to the WWSP WTP.

GENERAL PROJECT ASSUMPTIONS

- Carollo Engineers, Inc. and partner subconsultants are referred to as “CONSULTANT” in this document.
- The City of Wilsonville and its staff is referred to as “Wilsonville” in this document.
- The agencies participating in the WRWTP 2015 Master Plan Update are referred to as “Participants” in this document.
- All meetings will be held at Wilsonville offices unless otherwise stated in specific scope task descriptions.
- Draft and Final Chapters will be provided in electronic copy (.pdf and/or .docx) and transmitted via email or secure file transfer.
- Draft drawings will be provided in electronic copy (.pdf) and transmitted via email or secure file transfer.
- Calculation tables will be provided in .xlsx format.
- Meeting notes and related materials will be transmitted electronically (.pdf and/or .docx) via email.
- Wilsonville will print and produce additional copies of all documents as necessary for its use.
- CONSULTANT will develop the chapters for the Plan as described herein. An anticipated list of appendices for the document is summarized below, these will be incorporated, and/or others may be added as deemed necessary during Master Plan development.
- Stakeholders for meeting invitation and distribution of draft and final documents for review include the Cities of Wilsonville and Sherwood, Veolia NW (WRWTP Operator), and Tualatin Valley Water District.
- All draft and final drawings destined for inclusion in a construction plan will be delivered to Wilsonville in AutoCAD 2017.
- All final deliverable drawings will be provided to Wilsonville in both pdf and AutoCAD format, along with all electronic reference files necessary to allow Wilsonville personnel to access and modify files without restriction.

SCOPE OF SERVICES

Task 100 - PROJECT MANAGEMENT

The purpose of this task is to manage all activities within the Project as assigned by Wilsonville and maintain the Project within the contracted scope, schedule, and budget. This includes project administration, monthly invoicing, client and team coordination, and quality assurance/quality control review necessary to successfully complete the Project to Wilsonville's expectations. Additionally, CONSULTANT will develop a Project Management Plan (PMP) and lead the initial team kick-off meeting.

Task 100 Activities

101. *Kick-Off Meeting:* Review scope and objectives with project team. Review first data request issued immediately following NTP.
102. *Monthly Progress Reports and Invoices:* Prepare and submit monthly activity reports showing current Project scope, budget, and schedule status and identifying key issues or elements of the Project that will need to be addressed in the proceeding weeks. An electronic version of the monthly progress reports and invoices will be sent to Wilsonville for review and approval.
103. *Project Management Plan:* Prepare a brief PMP that describes Project roles and responsibilities, lists contact information for the project team, and describes communication protocols and quality management, including the scope of services, schedule, and budget. Quality Management includes, but is not limited to, the following elements:
 - a. Project Manager overview of all primary documents to verify technical consistency and compliance with contract requirements.
 - b. Designate and assign qualified CONSULTANT staff to develop assigned Project deliverables, and manage CONSULTANT staff for schedule, quality, and budget relative to assigned deliverables.
 - c. Develop a proposed timeline for Project deliverables with a target Draft Master Plan submittal five (5) months post-Notice to Proceed issued by Wilsonville.
 - d. Maintain a decision log, tracking all decisions as they occur.
 - e. Maintain a risk register identifying all potential Project risks, with input from Wilsonville and other Participant staff.
 - f. Resolution of all review comments with a memorandum summarizing key comments and the manner in which each was addressed in the work.The PMP will be introduced and discussed with the CONSULTANT and Wilsonville project team at the Project Kick-Off Meeting. A revised final PMP will be delivered following incorporation of Wilsonville's comments.
104. *CONSULTANT Team Coordination:*
 - a. Manage the CONSULTANT project team to track time and budget, work elements accomplished, work items planned for the next period, labor hours, scope changes, time, and budget needed to complete the Project.

EXHIBIT A

- b. Create and maintain a working monthly Project schedule based on the schedule in the PMP.
105. *Meetings:* Bi-Weekly Project Status conference calls shall be held to review Project status, including scope, budget, and schedule. Prepare an agenda and document discussions, including action items and decisions, in meeting minutes which will serve as the following meeting's agenda.

Assumptions:

- a. Kick-off meeting shall be attended by CONSULTANT's Project Manager and the Project Engineer, as well as one professional level staff. Meeting duration shall be two (2) hours with four (4) hours preparation for each attendee.
- b. The PMP will be updated with full incorporation of review comments once Wilsonville's review of the draft PMP is complete. Review comments shall be provided electronically, in 'track changes' mode where possible.
- c. Total length of the Project is six (6) months from NTP to Draft Final Document (ready for Planning Commission and City Council hearings).
- d. Bi-Weekly Project Status meetings shall either be held via conference call or shall be scheduled to coincide with a Workshop; participation limited to CONSULTANT and Wilsonville Project Managers. Total duration for each meeting is one (1) hour, with one (1) hour of preparation time. A total of ten (10) meetings are anticipated.

Deliverables:

- a. Data request list
- b. Draft and Final PMP
- c. Six (6) monthly progress reports and invoices
- d. Meeting agendas and minutes

Task 200 - EQUIPMENT CONDITION ASSESSMENT

An assessment of the existing condition, performance (as related to condition), vulnerability, and criticality of all the major aboveground assets will be conducted by a multi-disciplined team consisting of registered professional civil, structural, mechanical, electrical, and instrumentation engineers. Documentation of the existing facilities, including digital photos, field notes, and comments from the field condition assessment team will be developed.

Task 200 Activities

201. *Conduct Field Assessment of Aboveground Assets:* An experienced multi-discipline field condition assessment team consisting of licensed engineers in civil, structural, mechanical, and electrical/instrumentation disciplines will complete existing equipment/structures conditions assessment. Interviews will be conducted with operations and maintenance personnel to obtain information concerning the operation and maintenance history of each asset.

EXHIBIT A

Remaining useful service, age and economic life, condition, risk, vulnerability, criticality, and other parameters will be updated for each asset.

202. *Develop Technical Memorandum:*

- a. *Populate Asset Database:* Develop an asset database (Microsoft Excel), with information including complete equipment list, existing condition, performance history, capacity, criticality, vulnerability, risk, remaining useful life, and level of service.
- b. *Determine Rehabilitation and/or Replacement Schedule:* Develop recommended rehabilitation and replacement schedule and an itemized capital improvements plan (CIP) for the next 20 year planning horizon.
- c. *Prepare Draft Technical Memorandum:* The condition assessment team will draft a technical memorandum (TM) summarizing the general conditions of the facilities reviewed and include the Asset Database and Rehab/Replacement Schedule indicated above.

203. *Workshop:* Present finding of the field assessment and recommendations for rehabilitation and replacement at a workshop with Wilsonville.

Assumptions:

- a. Field assessments will be completed over 1-3 days at the plant facility.
- b. Workshop will coincide with an associated workshop held for Tasks 3 and 4.

Deliverables:

- a. Draft and Final Renewal and Replacement TM
- b. Workshop agenda and minutes

TASK 300 - LIFE SAFETY AND SEISMIC ASSESSMENT

Perform an assessment to identify life safety deficiencies which may exist in structural connections, equipment anchors, mechanical and electrical systems, and other ancillary components. Evaluate the structural performance of the existing WTP facilities not evaluated as part of the 2015 Master Plan Update during the anticipated 500-year and 2,500-year seismic events.

Task 300 Activities

301. *Life Safety:*

- a. *Site Visit:* Review the existing facilities to identify deficiencies which may exist with the structural connections of mechanical and electrical systems, equipment and tank anchors, lighting and ventilation, roof/wall connections, and similar components.
- b. Perform seismic calculations, as required, to confirm the seismic restraint requirements of the above identified components and to identify deficiencies in the existing facilities.

EXHIBIT A

- c. Document any deficiencies identified and provide recommendations and priorities based on risk, probability, and criticality for improvements to the facilities to provide the proper seismic restraints.
302. *Seismic Evaluation and Mitigation:*
- a. Review record drawings of construction and other available reports and materials relevant to the design and construction of the existing facilities for the purpose of evaluating the seismic performance of the WRWTP structures. The structures included in this evaluation include those not previously evaluated in the 2015 Master Plan Update which includes: ballasted flocculation, ozone contactor, filters, sludge thickening and pump station, washwater equalization, and sludge dewatering.
 - b. Prepare a professional judgment of the expected existing facilities performance for the 500-year and 2,500-year recurrence interval ground motions. Identify expected modes of failure for each of the structures and prepare a table listing the deficiencies.
303. *Technical Memorandum:* Prepare draft TM summarizing the findings of the life safety assessment and seismic evaluation.
- a. Identify deficiencies in terms of whether they address life safety or are relevant to meeting the LOS Goals established during the 2015 Master Plan Update.
 - b. Identify mitigation measures for each deficiency in order to meet life safety requirements or to meet the LOS Goals.
 - c. Estimate the costs of the mitigation measures identified. Group the projects and costs as follows: Life Safety, 500-year event, 2,500-year event.
304. *Workshop:* Conduct a half-day workshop to present and review the findings of the assessment and recommended improvements.

Assumptions:

- a. Analysis will build upon the efforts developed as part of the *WRWTP 2015 Master Plan Update* (Carollo, 2017), which considered the facilities that were considered common to the 'Lower and Upper Sites' (i.e., RW Intake, RWPS, FWPS, chemical storage, clearwell and Administration Facility). These earlier efforts will not be revisited; rather the efforts for this update will focus on previously un-analyzed facilities, including: the primary treatment facilities (ballasted flocculation, ozonation, filters, sludge thickening and pump station, washwater equalization, and sludge dewatering), as well as site electrical, and electrical infrastructure. Analysis will be based off criteria developed during the WRWTP 2015 Update.
- b. Site visit will coincide with the site visit for the equipment condition assessment. Total site visit for both tasks will be completed in 1-3 days.
- c. Equipment submittals/shop drawings or other required equipment information will be provided to CONSULTANT by Wilsonville, which is required for structural calculations.

EXHIBIT A

- d. Seismic evaluation does not include testing of materials.
- e. Workshop will coincide with Workshop held for Tasks 2 and 4.

Deliverables:

- a. Draft and Final TM documenting seismic analysis and recommendations, including costs and prioritization for improvements
- b. Workshop agenda and minutes

TASK 400 - SURGE TANK SIZING AND SITING

CONSULTANT will update the results of the August 2011 Hydraulic Transient analysis performed by MWH/Stantec using the City's current Inflowmeter™ hydraulic model. CONSULTANT's general scope includes data input, model manipulation, and data output activities needed to complete this Task. Using model results, recommended surge tank sizing and siting will be developed and carefully coordinated with the WWSP Raw Water Facility (RWF) preliminary design efforts. Using the recommendations developed, CONSULTANT will prepare design drawings and major equipment specifications to a 30% design level.

Task 400 Activities

401. *Surge Modeling:*

- a. *Confirm Base Scenario – Existing Conditions:* Using Wilsonville's current InfoWater™ model, CONSULTANT shall format and print out a large format plan view map (minimum 22" x 34") of the existing model of Wilsonville and Sherwood water transmission system from the WRWTP to the Snyder Park Reservoir, showing the following information:
 - Pipeline links, with identification number and diameters noted.
 - Turnouts, Valves, and PRVs, including elevation, operating status (NO/NC), or pressure set point, as applicable.
 - Nodes/junction points including identification number for the five turnouts (Wilsonville Road, Barber, Brockway, Kinsman, Tooze [Sherwood]). On a separate spreadsheet (8.5" x 11"), print out the current database values showing base (Average Daily) water demand and peak day factor for each node, by number.

CONSULTANT shall deliver this map and spreadsheet to Wilsonville's Project Manager, who will edit the map for current line sizes and system configuration, and demand assumptions, and return the edited documents to CONSULTANT. CONSULTANT shall revise the electronic database for the existing conditions scenario, return an electronic copy of the model to Wilsonville, and reprint final copies of the map and spreadsheets for delivery to Wilsonville.

- b. *Run Surge Analyses:* Using the updated existing conditions model, developed in Task 401a and the surge tank location identified in Task 402b, CONSULTANT shall re-run the 15 MGD WRWTP (10 Wilsonville, 5 Sherwood) scenario from the 2011 Hydraulic Transient analysis to verify

EXHIBIT A

that current configuration of the Wilsonville and Sherwood distribution turnouts will not impact operations of the WRWTP at a 15 MGD capacity. Additional analyses will be run at the future demands, determined by Task 500. Currently, this is anticipated to include the following:

- 20 MGD WRWTP flow rate; 15 MGD Wilsonville and 5 MGD Sherwood
 - 25 MGD WRWTP flow rate; 17.5 MGD Wilsonville and 7.5 MGD Sherwood
 - 30 MGD WRWTP flow rate; 22.5 MGD Wilsonville and 7.5 MGD Sherwood
- c. *Model Results and Pre-Design Technical Memorandum:* Prepare TM summarizing the analysis and recommendations of the surge analysis and preliminary investigations conducted in Task 402a, including surge tank siting, piping connections, and Class 5 OPCC. As part of the TM, CONSULTANT shall evaluate the feasibility of alternate methods (alternate surge tank) for the 20 MGD scenario. After submittal of the Draft TM, a workshop will be held with Wilsonville and WRWTP staff to confirm approach and preferred alternative selected. Decisions made at the workshop, and comments received on the Draft TM, will be incorporated into a Final TM.
402. *Surge Tank Design Development:* CONSULTANT shall prepare 30% design documents based on the decisions and recommendations documented in the TM.
- a. *Preliminary Investigations:* CONSULTANT shall perform preliminary investigations:
- i. *Surge Tank Siting:* CONSULTANT shall identify an appropriate site for the surge tank, point of connection to the HSPS discharge header, and route for the connecting pipeline. This analysis will consider constructability, proximity of the surge tank to the pump discharge header, and construction impacts to operations and maintenance.
 - ii. *Preliminary OPCC:* CONSULTANT shall prepare a Class 5 (-30%/+50%) OPCC for the surge tank for inclusion in the Model Results and Pre-Design TM.
- b. *30% Design:* CONSULTANT shall prepare preliminary design drawings incorporating the recommendations from Task 401, showing the locations of all facilities and documenting the major design criteria and concepts.

Assumptions:

- a. Future water demand information developed as part of Task 500 will be used for scenario inputs.
- b. Latest surge model provided by Wilsonville, with minor efforts to import the data into the transient analysis software and correct any minor issues required to reflect the current pipe network and proposed changes.

EXHIBIT A

- c. For the 20, 25, and 30 MGD analysis, Wilsonville will provide revised assumed demands for each of the turnouts.
- d. Previous survey information will be provided by Wilsonville in AutoCAD format.
- e. No geotechnical evaluation will be completed as part of the 30% Design task. Preliminary sizing and siting of the surge tank will be based on previously developed geotechnical information. Additional geotechnical evaluation, if deemed necessary, will be included in the Final Design effort (Task 700).
- f. Surge tank will be located in the open area to the east of the HSPS and will be connected to the blind flange on the south end of the HSPS or the potable water pipe exiting the north end of the clearwell. No modifications to structures or publicly accessible spaces will be required to make surge tank connection.
- g. Surge tank design will include seven (7) drawings at the 30% deliverable. No specifications will be prepared for the 30% deliverable.
- h. Surge tank design will include modifications to yard piping and connection to existing plant air system. Electrical and control connections will be made to existing panels and PLCs.
- i. It is assumed the existing plant air system is sufficient to provide air to the surge tanks. NOTE: An additional compressor will be needed for the large screen project.

Deliverables:

- a. Draft and Final versions of an existing conditions map and spreadsheet for the transmission pipeline and network
- b. Draft and Final versions of a TM documenting the results of the surge analyses, including recommended surge tank sizing and siting recommendations
- c. Model scenarios and data set results (1 DVD disk)
- d. Workshop presentation of surge tank siting and sizing alternatives, interim alternatives to surge tank, if any, with a final recommendation
- e. 30% Design Drawings of surge tank

TASK 500 - DRAFT MASTER PLAN UPDATE

The 2017 Draft Master Plan Update will utilize the previous work completed in the *Willamette River WTP 2015 Master Plan Update* (Carollo, 2017) as a foundation and will build upon it for this Project. The goal of this task is to review key information from the previous Master Plan, confirm its continued validity, incorporate it into this Master Plan Update, supplement this information with site specific information from Tasks 200 and 300, and create a stand-alone Master Plan document specific to the existing WRWTP. Alternatives for expanding the plant production capacity will be developed and compared to determine the best path forward for the WRWTP. Class 4 OPCC estimates will be prepared for the recommended alternative for WRWTP capacity expansion, and also for near-term (within 10 years) improvements that are identified as part of Task 200.

EXHIBIT A

Task 500 Activities

501. *Validate Pre-Established Information:*

- a. ***Confirm Population/Demand Projections with Wilsonville and Sherwood:*** Review existing data from the *Willamette River WTP 2015 Master Plan Update* (Carollo, 2017) related to population and demand projections and confirm the projections remain appropriate.
- b. ***Confirm Raw Water Quality and Treated Water Quality Goals:*** Review raw water quality data included in the *Willamette River WTP 2015 Master Plan Update* (Carollo, 2017) and confirm it is accurate and applicable to the current and anticipated raw water quality treated at the plant. Review treated water quality goals and confirm they remain applicable for Wilsonville and Sherwood.
- c. ***Confirm Level of Service (LOS) Goals:*** Review LOS goals for plant operations following identified emergency scenarios and ensure they remain applicable to plant facilities dedicated to providing water to Wilsonville and Sherwood. LOS goals identified and confirmed under this task will be applicable to the work being performed under Task 300.

502. *Existing Facilities:* Utilize the description of the existing facilities contained in the *Willamette River WTP 2015 Master Plan Update* (Carollo, 2017) and confirm it is complete and accurate.

503. *Treatment Process Alternatives:* Develop two viable treatment process expansion alternatives for adding the required future capacity to the plant for serving Wilsonville and Sherwood. Each alternative shall meet all water quality and level of service goals.

- a. Each alternative analysis shall include process flow diagram, design criteria, site plan, and comparative capital and O&M cost estimates.
- b. ***Ancillary Systems:*** Review needs of the Cities with respect to requirements such as treated water storage and pumping, and develop a plan for meeting these needs. This subtask shall include reviewing the plan for raw water pumping, chemical storage, electrical service, and finished water pumping developed in the *Willamette River WTP 2015 Master Plan Update* (Carollo, 2017) and ensures the developed plan meets the future needs of the Cities of Wilsonville and Sherwood. Summarize the impacts these improvements will have on the Cities of Wilsonville and Sherwood, specifically related to cost.
- c. ***Capital Improvements Plan:*** Develop a Capital Improvement Plan for expanded capacity on the WRWTP site. CONSULTANT shall prepare a near-term Capital Improvement Plan (CIP) that includes two parts; the scope and timing of improvements for the next logical expansion of the WRWTP, and repair, replacement and life safety improvements from Tasks 200 and 300 over the next ten (10) years, supported by a Class 4 OPCC. Long-term capital improvements (20 years) will be supported by a Class 5 OPCC.

EXHIBIT A

504. *Draft Master Plan Update*: Develop a draft report to document the information collected, confirmed, or otherwise used in Tasks 200, 300, and 500, including applicable conclusions and recommendations. The document will be formatted to include a separate chapter documenting the various alternatives considered and the final recommendations for expansion of the existing facility. Information and documentation of the work performed under Task 400 will be a self-contained appendix. Wilsonville will then review the draft document and provide feedback prior to finalization of the Master Plan 2017 Update.
505. *Workshops*: Meet with Wilsonville and other stakeholders for up to three (3) workshops (separate from the Tasks 200, 300 and 400 workshops).
- a. *Workshop 1*: The first workshop will include review of existing data and outline Wilsonville's vision for the development of expansion alternatives and plant facilities.
 - b. *Workshop 2*: The second workshop will allow the Engineer to present the progress made on the alternatives development, including viable options, criteria considered, requirements of each option, and timing required for implementation of each option. Wilsonville will review the data and information presented and provide feedback as to the preferences of Wilsonville.

Assumptions:

- a. Two primary plant expansion alternatives will be considered, including: (1) a conventional expansion by constructing new facilities similar to the existing facilities, and (2) uprating the existing facilities to operate at higher loading rates. Variations of these two options will be considered as well as sub-alternatives such as constructing some new facilities and uprating other facilities.
- b. The majority of background information, such as population/demand projections, raw water quality, and treated water quality goals, will be obtained from the *Willamette River WTP 2015 Master Plan Update* (Carollo, 2017) and verified for validity and continued applicability. It is assumed that the information currently contained in the *Willamette River WTP 2015 Master Plan Update* (Carollo, 2017) remains valid and will not require modification.
- c. Class 4/5 OPCCs will be prepared based on Class 4/5 American Association of Cost Engineering (AACE) International Recommended Practice cost estimate classification system. Class 4/5 cost estimates will also contain up to a +40% contingency depending upon the degree of design definition available.
- d. New source water assessment is not included in this Scope of Services.
- e. Sediment transport analysis of the river bed is not included in this Scope of Services.
- f. No CFD modeling will be performed for the existing or proposed facilities.
- g. Pilot or bench-scale testing is not included in this Scope of Services.
- h. Comparative cost estimates will be Class 4 OPCC in accordance with the AACE International Recommended Practice cost estimate classification system.

EXHIBIT A

Deliverables:

- a. Class 4 OPCC for near-term capital improvements for resiliency and capacity expansion
- b. Class 5 OPCC for long-term capital improvements for capacity expansion
- c. Draft Master Plan Update
- d. Workshop agendas and minutes

TASK 600 - FINAL MASTER PLAN UPDATE

Task 600 Activities

601. *Finalize Master Plan Document:* Produce a final Master Plan Update document which includes the information from Tasks 200, 300, and 500 after incorporating and addressing all Wilsonville comments. The final document will include an executive summary and appendices. Information generated as part of Task 400 will be included in an appendix.
602. *Community Outreach:* CONSULTANT will support Wilsonville in preparing a presentation for adoption hearings before the Planning Commission and City Council and community outreach efforts, and will attend and participate in the presentations at the direction of Wilsonville.

Assumptions:

- a. The presentation prepared for Planning Commission, City Council, and community outreach will be significantly based on the same presentation, slightly modified for each audience, as appropriate.
- b. Attendance at the Planning Commission, City Council, and community outreach meeting will include the Project Manager and Project Engineer. Attendance at each meeting will last four (4) hours and will include no more than one (1) community outreach meeting.

Deliverables:

- a. CONSULTANT will provide five (5) hard copies of the final Master Plan Update document in three ring binders. CONSULTANT will also provide a PDF file of the final document with all appendices included. CONSULTANT will provide any AutoCAD files, including references generated as part of Task 600.
- b. Presentation material for Planning Commission, City Council, and community outreach meeting.

TASK 700 (OPTIONAL) - SURGE TANK FINAL DESIGN

Wilsonville can exercise this task to proceed with final design for the surge tank alternative developed in Task 400. This task would carry the 30% design through 100% design.

EXHIBIT A

Task 700 Activities

701. *60% Design Submittal:* Prepare 60% submittal including drawings and specifications consistent with a 60% design level.
 - a. *Geotechnical Investigation:* CONSULTANT shall conduct site reconnaissance, drill one (1) bore hole, perform laboratory testing of selected soil samples, and provide geotechnical recommendations for facility design in a TM. The geotechnical analysis will include performing shallow foundation or deep foundation analysis for the new surge tank and will be performed for static conditions only. L-pile parameters will be developed for the site soils.
702. *90% Design Submittal:* Prepare 90% submittal including drawings and project specifications for final review by Wilsonville. Provide an updated Class 2 OPCC.
703. *Finalize Surge Tank Design:* Complete the necessary drawings and specifications to a 100% design level so Wilsonville can use for bidding.

Assumptions:

- a. Geotechnical investigation will include one (1) bore hole up to 50 feet deep using a mud rotary drill rig. Laboratory testing is anticipated to include up to three (3) natural moisture content determinations (ASTM D2216), up to one (1) sieve and hydrometer analysis (ASTM D422), and up to one Atterberg limit test (ASTM D4318).
- b. Geotechnical analysis will not include assessment of seismic liquefaction potential.
- c. The size and siting of the surge tank will not materially change from the 30% documents.
- d. Surge tank design will include twenty (20) drawings at the 60% deliverable. The 60% deliverable will include guide specifications for major components and equipment, customized with basic sizing and configuration information added. The surge tank design will include twenty-one (21) drawings at the 90% and 100% deliverables. A total of twenty-seven (27) specification sections will be prepared. Wilsonville will provide Divisions 00 and 01.

Deliverables:

- a. Draft and Final versions of the geotechnical analysis and recommendations
- b. 60% Design Drawings and Specifications of Surge Tank (one (1) electronic copy and one (1) hard copy of each)
- c. 90% Design Drawings and Specifications of Surge Tank (one (1) electronic copy and one (1) hard copy of each)
- d. 100% Design Drawings and Specifications of Surge Tank (one (1) electronic copy and one (1) hard copy of each)
- e. Opinion of Probable Construction Cost (OPCC) estimate for 60% and 90% design submittal

EXHIBIT B



City of Wilsonville
Willamette River Water Treatment Plant 2017 Master Plan Update

TASK / DESCRIPTION	CAROLLO LABOR HOURS AND COSTS										STANTEC LABOR HOURS AND COSTS										DIRECT EXPENSE				TOTAL COST		
	PM	TAC	Project Engineer	Senior Prof	Prof	CAD / Graphics	Document Proc.	Total Hours	Labor Cost	TAC	Process Lead	Sr. Estimator	Project Prof.	Prof.	Ast. Prof.	CAD / Graphics	Document Proc.	Total Hours	Stimtec Labor Cost	Shannon and Wilson (Geotech)	Total Sub Markup (5%)	Total Sub	Other Direct Charges	PECE @ \$/hr		Total Direct Charges	
	\$240	\$240	\$208	\$208	\$185	\$146	\$95			\$240	\$240	\$208	\$185	\$140	\$146	\$95							\$1,100	\$11.70			
Task 100. Project Management	48	0	6	0	0	0	34	94	\$ 18,998	0	4	4	0	0	0	0	0	0	\$ 1,920	\$ -	\$ -	98	\$ 2,016	\$ 4,000	\$ 1,100	\$ 6,106	\$ 24,114
101 Kick-Off Meeting	4	0	4	0	4	0	0	12	\$ 2,532	0	4	4	0	0	0	0	0	0	\$ 1,920	\$ -	\$ -	96	\$ 2,016	\$ 2,000	\$ 140	\$ 2,140	\$ 6,688
102 Monthly Progress Reports and Invoices	18	0	0	0	0	0	30	48	\$ 7,170	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 562	\$ 562	\$ 7,132
103 Monthly Progress Reports and Invoices	18	0	0	0	0	0	30	48	\$ 7,170	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 562	\$ 562	\$ 7,132
104 Project Management Plan	4	0	2	0	4	0	4	14	\$ 2,496	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 164	\$ 164	\$ 2,660
105 CONSULTANT Team Coordination	0	0	0	0	0	0	0	0	\$ -	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -
106 CONSULTANT Team Coordination	0	0	0	0	0	0	0	0	\$ -	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ -	\$ -
107 Meeting	20	0	0	0	0	0	0	20	\$ 4,800	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 234	\$ 234	\$ 7,034
108 Bi-weekly Project Status Meeting	20	0	0	0	0	0	0	20	\$ 4,800	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 234	\$ 234	\$ 7,034
Task 200. Equipment Condition Assessment	16	72	34	64	8	0	12	208	\$ 44,124	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 7,000	\$ 2,410	\$ 53,534
201 Site Visits	4	28	4	0	0	0	0	36	\$ 6,512	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 4,000	\$ 4,421	\$ 12,933
202 Develop Technical Memorandum	8	28	4	0	0	0	12	166	\$ 30,420	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 4,000	\$ 4,421	\$ 12,933
203 Develop Equipment Spreadsheet	2	6	2	24	0	0	0	36	\$ 7,668	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 421	\$ 6,229
204 Prioritize Repairs	2	12	6	16	0	0	12	36	\$ 7,668	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 421	\$ 6,229
205 Draft Tech Memo	4	4	4	24	0	0	12	74	\$ 14,678	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 866	\$ 866	\$ 15,542
206 Client Workshop	4	8	4	0	0	0	0	24	\$ 5,192	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 3,000	\$ 281	\$ 8,473
207 Client Workshop	4	8	4	0	0	0	0	24	\$ 5,192	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 3,000	\$ 281	\$ 8,473
Task 300. Life Safety / Seismic Assessment	12	44	24	0	16	0	8	110	\$ 43,176	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 2,000	\$ 2,434	\$ 47,610
301 Life Safety	4	4	4	0	0	0	0	12	\$ 2,752	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 1,000	\$ 1,400	\$ 3,892
302 Site Visits	4	4	4	0	0	0	0	12	\$ 2,752	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 1,000	\$ 1,400	\$ 3,892
303 Seismic Evaluation and Mitigation	0	8	72	0	16	2	0	96	\$ 20,148	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 1,147	\$ 21,295
304 Seismic Evaluation and Mitigation	0	8	72	0	16	2	0	96	\$ 20,148	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 1,147	\$ 21,295
305 Develop Technical Memorandum	4	32	16	0	8	0	8	74	\$ 15,084	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 866	\$ 15,950
306 Develop Technical Memorandum	4	32	16	0	8	0	8	74	\$ 15,084	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 866	\$ 15,950
307 Client Workshop	4	8	4	0	0	0	0	24	\$ 5,192	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 1,000	\$ 281	\$ 6,473
308 Client Workshop	4	8	4	0	0	0	0	24	\$ 5,192	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ 1,000	\$ 281	\$ 6,473
Task 400. Surge Tank Sizing and Siting	8	0	12	0	0	0	0	20	\$ 4,416	18	0	66	72	40	22	4	4	238	\$ 44,400	\$ 4,000	\$ -	2,420	\$ 50,820	\$ -	\$ 234	\$ 55,470	
401 Surge Model	4	0	8	0	0	0	0	12	\$ 2,624	6	0	40	24	0	0	0	4	74	\$ 14,560	\$ 4,000	\$ -	929	\$ 19,569	\$ -	\$ 140	\$ 22,273	
402 Update Model	4	0	4	0	0	0	0	8	\$ -	0	0	12	0	0	0	0	0	12	\$ 2,496	\$ -	\$ -	125	\$ 2,621	\$ -	\$ -	\$ 2,621	
403 Run Model	4	0	4	0	0	0	0	8	\$ -	4	0	16	12	0	0	0	0	32	\$ 6,508	\$ -	\$ -	325	\$ 6,833	\$ -	\$ -	\$ 6,833	
404 Draft and Final TMs	4	4	8	0	16	2	0	28	\$ 2,624	2	0	12	12	0	0	4	4	30	\$ 5,576	\$ 4,000	\$ -	479	\$ 10,055	\$ -	\$ 140	\$ 12,819	
405 Surge Tank Design	4	0	4	0	0	0	0	8	\$ 1,792	12	0	26	48	40	22	0	164	184	\$ 29,820	\$ -	\$ -	1,491	\$ 31,311	\$ -	\$ 94	\$ 33,197	
406 30% Design	4	0	4	0	0	0	0	8	\$ 1,792	12	0	26	48	40	22	0	164	184	\$ 29,820	\$ -	\$ -	1,491	\$ 31,311	\$ -	\$ 94	\$ 33,197	
Task 500. Draft Master Plan Update Document	38	58	122	0	118	0	0	334	\$ 69,876	10	0	60	0	0	0	0	0	60	\$ 14,400	\$ -	\$ -	720	\$ 16,120	\$ 2,000	\$ 3,900	\$ 6,900	\$ 90,804
501 Validate Pre-Established Information	2	4	14	0	8	0	0	28	\$ 5,632	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 328	\$ 6,160
502 Confirm Population/Census Projections	2	4	14	0	8	0	0	28	\$ 5,632	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 12	\$ 5,752
503 Confirm Existing Raw Water Quality Parameters	2	4	14	0	8	0	0	28	\$ 5,632	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 12	\$ 5,752
504 Confirm Finished Water Quality Goals	2	4	14	0	8	0	0	28	\$ 5,632	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 12	\$ 5,752
505 Confirm Level of Service Goals	2	4	14	0	8	0	0	28	\$ 5,632	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 12	\$ 5,752
506 Draft Summary of Existing Information	2	4	8	0	8	0	0	22	\$ 4,584	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 257	\$ 4,841
507 Existing Facilities	2	4	8	0	8	0	0	22	\$ 4,584	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 257	\$ 4,841
508 Summarize Existing Facilities and Capacities	2	4	8	0	8	0	0	22	\$ 4,584	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 257	\$ 4,841
509 Draft Summary of Existing Facilities	2	4	8	0	8	0	0	22	\$ 4,584	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 257	\$ 4,841
510 Expansion Alternative Analysis	14	26	64	0	64	0	0	170	\$ 35,232	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 94	\$ 36,176
511 Develop 2 Alternatives for Expansion	6	12	24	0	24	0	0	66	\$ 14,232	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 198	\$ 15,028
512 Compare Alternatives Including Cost/Benefits	2	8	16	0	16	0	0	42	\$ 8,688	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 786	\$ 9,474
513 Draft Summary of Expansion Alternatives	4	8	24	0	24	0	0	80	\$ 12,312	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 702	\$ 13,014
514 Finalize Recommendations	4	8	16	0	16	0	0	44	\$ 9,168	10	0	0	0	0	0	0	0	60	\$ 14,400	\$ -	\$ -	720	\$ 15,120	\$ -	\$ 515	\$ 24,803	
515 Workshops	16	16	16	0	16	0	0	64	\$ 13,968	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 749	\$ 14,717
516 Workshop No. 1 - Review Existing Data/Costs	8	8	8	0	8	0	0	32	\$ 6,984	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 374	\$ 7,358
517 Workshop No. 2 - Present/Review Recommendations	8	8	8	0	8	0	0	32	\$ 6,984	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	-	\$ -	\$ -	\$ -	\$ 374	\$ 7,358
Task 600. Final Master Plan Update																											