

**RESOLUTION NO. 3074**

**A RESOLUTION OF THE CITY OF WILSONVILLE AUTHORIZING THE CITY MANAGER TO EXECUTE A PROFESSIONAL SERVICES AGREEMENT CONTRACT AMENDMENT WITH CAROLLO ENGINEERS FOR THE WASTEWATER TREATMENT PLANT MASTER PLAN PROJECT (CAPITAL IMPROVEMENT PROJECT #2104).**

WHEREAS, the City has planned and budgeted for engineering consulting services for Capital Improvement Project #2104, known as the Wastewater Treatment Plant Master Plan project (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 was selected as the most qualified consultant, was awarded a contract for professional engineering services (Resolution No. 2798); and

WHEREAS, the City desires to amend the Professional Services Agreement contract with Carollo Engineers to perform additional analyses.

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

Section 1. The procurement process for the Project duly followed Oregon Public Contracting Rules, and Carollo Engineers has provided a responsive and responsible proposal for engineering consulting services.

Section 2. The City Council, 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 amendment with Carollo Engineers for a not-to-exceed amount of \$41,823, which is substantially similar to Exhibit A attached hereto.

Section 3. In order to allow future minor contract amendments, if needed, to occur without having to come back to City Council, the authorized Construction Contract total is hereby adjusted to up to \$546,635.00, allowing for continued Contracting Agency approval of contract amendments that exceed this adjusted amount by fifteen percent (15%) in accordance with City Code requirements.

Section 3. Effective Date. This Resolution is effective upon adoption.

ADOPTED by the Wilsonville City Council at a regular meeting thereof this 19th day of June, 2023, and filed with the Wilsonville City Recorder this date.

DocuSigned by:  
*Julie Fitzgerald*  
8A974AF3ADE042E...

JULIE FITZGERALD, MAYOR

ATTEST:

DocuSigned by:  
*Kimberly Veliz*  
E781DE10276B498...

Kimberly Veliz, City Recorder

SUMMARY OF VOTES:

Mayor Fitzgerald	Yes
Council President Akervall	Yes
Councilor Linville	Yes
Councilor Berry	Yes
Councilor Dunwell	Yes

EXHIBIT:

- A. Seventh Amendment to Wastewater Treatment Plant Master Plan Professional Services Agreement

**CITY OF WILSONVILLE  
SEVENTH AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT**

**Wastewater Treatment Plant Master Plan**

This Seventh Amendment to Professional Services Agreement (“Seventh Amendment”) is effective the \_\_\_\_ day of June 2023 (“Effective Date”), by and between the **City of Wilsonville**, a municipal corporation of the State of Oregon (“City”), and **Carollo Engineers, Inc.**, a Delaware corporation (“Consultant”), upon the terms and conditions set forth below.

**RECITALS**

WHEREAS, the City entered into a Professional Services Agreement (“Agreement”) with Consultant on May 20, 2020, relating to the Wastewater Treatment Plant Master Plan Project (“Project”); and

WHEREAS, the City entered into a First Amendment to Professional Services Agreement (“First Amendment”) with Consultant on May 19, 2021; and

WHEREAS, the City entered into a Second Amendment to Professional Services Agreement (“Second Amendment”) with Consultant on November 1, 2021; and

WHEREAS, the City entered into a Third Amendment to Professional Services Agreement (“Third Amendment”) with Consultant on April 6, 2022; and

WHEREAS, the City entered into a Fourth Amendment to Professional Services Agreement (“Fourth Amendment”) with Consultant on August 31, 2022; and

WHEREAS, the City entered into a Fifth Amendment to Professional Services Agreement (“Fifth Amendment”) with Consultant on December 7, 2022; and

WHEREAS, the City entered into a Sixth Amendment to Professional Services Agreement (“Sixth Amendment”) with Consultant on April 24, 2023; and

WHEREAS, the City requires additional services which Consultant is capable of providing, under terms and conditions hereinafter described (“Additional Services”); and

WHEREAS, the City and Consultant anticipate that additional time is needed to complete the Services stated in the Agreement and the Additional Services described in this Seventh Amendment; and

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

WHEREAS, Consultant is prepared to provide such Additional 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**

The Agreement is amended as follows:

**Section 1. Term**

The term of the Agreement is hereby extended to December 31, 2023.

**Section 2. Additional Services to be Provided**

Consultant will perform the Additional Services more particularly described in **Exhibit A**, attached hereto and incorporated by reference herein, for the Project pursuant to all original terms of the Agreement, except as modified herein.

**Section 3. Time for Completion of Additional Services**

The Additional Services provided by Consultant pursuant to this Seventh Amendment shall be completed by no later than December 31, 2023.

**Section 4. Compensation**

The City agrees to pay Consultant on a time and materials basis, guaranteed not to exceed FORTY-ONE THOUSAND EIGHT HUNDRED TWENTY-THREE DOLLARS (\$41,823), for performance of the Additional Services (“Seventh Amendment Compensation Amount”) which, when totaled with the Total Compensation Amount from the Fifth Amendment, equals a total not-to-exceed amount of FIVE HUNDRED FORTY-SIX THOUSAND SIX HUNDRED THIRTY-FIVE DOLLARS (\$546,635) for the performance of the Services and Additional Services (“Total Compensation Amount”). The term “Total Compensation Amount,” as defined in the Fifth Amendment, is hereby deleted and replaced with the term “Total Compensation Amount” as defined above. Consultant’s estimate of time and materials is attached hereto as **Exhibit B**, and incorporated herein by reference.

**Section 5. All Other Terms**

All of the other terms and conditions of the Agreement shall remain in full force and effect, as therein written. Unless otherwise defined herein, the defined terms of the Agreement shall apply to this Seventh Amendment.

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

**CONSULTANT:**

CAROLLO ENGINEERS, INC.

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

As Its: \_\_\_\_\_

EIN/Tax I.D. No. \_\_\_\_\_

**CITY:**

CITY OF WILSONVILLE

By: \_\_\_\_\_

Print Name: \_\_\_\_\_

As Its: \_\_\_\_\_

**APPROVED AS TO FORM:**

\_\_\_\_\_  
Amanda Guile-Hinman, City Attorney  
City of Wilsonville, Oregon

**EXHIBIT A – SCOPE OF WORK  
CONTRACT AMENDMENT NO. 7  
ENGINEERING SERVICES FOR CITY OF WILSONVILLE  
WASTEWATER TREATMENT PLANT MASTER PLAN**

## BACKGROUND

This Amendment No. 7 Scope of Work provides for analysis of plant capacity and alternatives to accommodate a service area build-out growth scenario consistent with prior water and sewer collection system planning. The City of Wilsonville (City) desires to modify this build-out growth scenario by incorporating permitted flow and loading “commitments” made to permitted industrial users within the service area of the wastewater treatment plant (WWTP). This Amendment No. 7 adds scope and budget to update the build-out growth scenario, flow and load projections, capacity analyses (including incorporating analysis of WWTP hydraulics by others), plant process alternative analyses and the recommended capital plan for the WWTP. Also added is incorporation of the results of geotechnical assessments of existing structures at the WWTP completed by others. The current draft Master Plan (dated February 2023) will be updated to reflect this additional Amendment No. 7 work.

The current contract expiration date is June 30, 2023. This Amendment No. 7 extends the contract date to **December 31, 2023** to allow completion of the additional scope described herein. The contract schedule must account for the need to deliver an updated draft Master Plan and provide support in presenting the plan to the Planning Commission and the City Council.

## TASK 200 – Planning Area Characteristics

This Amendment No. 7 includes the following additional activities associated with this task:

### Additional Task 200 Scope and Assumptions:

1. Carollo will address City comments on the current draft Master Plan document and update Chapter 1 content as appropriate.
2. Carollo will remove references to Metro (Low) growth projections. This will require revising population plots. Text will be revised to highlight consistency of service area growth (rates) applied in the current draft Master Plan document with historical growth and Metro Transportation Analysis Zone projections.
3. Carollo will update figures in draft Chapter 1, as appropriate.

### Revised Task 200 Deliverables:

1. The current draft Chapter 1 of the Master Plan will be updated. Carollo will generate one new draft version of Chapter 1.
2. Carollo will update the draft version of Chapter 1 based on comments provided by City staff and deliver a final Chapter 1 as part of a complete WWTP Master Plan (Task 900).

## TASK 300 – Condition Assessment and Tier 1 Seismic Analysis (Chapter 2)

This Amendment No. 7 includes the following additional activities associated with this task:

Additional Task 300 Scope and Assumptions:

1. NW GeoTech will evaluate existing structures, look for signs of foundation cracking, map and assess need for mitigation as appropriate in accordance with the attached “Supplemental Geotechnical Scope of Work”. This work will be done by NW GeoTech under separate contract with the City.
2. Carollo will incorporate findings of this additional geotechnical assessment into a revised draft Master Plan Chapter 2.
3. Carollo will update Chapter 2 incorporating additional analyses conducted as part of Amendment 7 and addressing City comments on current draft Master Plan.

Revised Task 300 Deliverables:

1. The City will provide NW GeoTech Supplemental Geotechnical Technical Memorandum (TM). Carollo will include the Supplemental Geotechnical TM as an Appendix to the revised draft Master Plan.
2. The current draft Chapter 2 of the Master Plan will be updated to include discussion of the supplemental geotechnical assessment performed by NW GeoTech. Carollo will generate one new draft version of Chapter 2.
3. Carollo will update the revised draft version of Chapter 2 based on comments provided by City staff and deliver a final Chapter 2 as part of a complete WWTP Master Plan.

## TASK 400 – Wastewater Flow and Load Projections

This Amendment No. 7 includes the following additional activities associated with this task:

Additional Task 400 Scope and Assumptions:

1. The City will identify permitted industrial users with flow and/or load commitments from the City for their wastewater service. This includes details of the magnitude and duration of those flow and load commitments.
2. Carollo will apply assumptions used as the basis for estimating population and wastewater generation in the recent Amendment 5 effort to estimate resulting flows and loads for the WWTP service area in the build-out scenario currently presented in the draft WWTP Master Plan. Permitted industrial users referenced in Task 400 Assumption 1, above, will be addressed separately based on actual flow and load commitments for those users.
3. A brief virtual meeting will be conducted to review projections with the City and reach consensus prior to updating the remainder of the Master Plan analyses and Chapters for consistency with the updated flows and loads.
4. Carollo will update Chapter 3 text and figures incorporating additional analyses conducted as part of Amendment 7 and addressing City comments on current draft Master Plan.

Revised Task 400 Deliverables:

1. The current draft Chapter 3 of the Master Plan will be updated to include discussion of the revised build-out capacity flow and load assessment. Carollo will generate one new draft version of Chapter 3.
2. Carollo will update the revised draft version of Chapter 3 based on comments provided by City staff and deliver a final Chapter 3 as part of a complete WWTP Master Plan.

## TASK 500 – Capacity Analysis

This Amendment No. 7 includes the following additional activities associated with this task:

Additional Task 500 Scope and Assumptions:

1. Carollo will recommend hydraulic profile flow scenarios for assessment (to be performed by the City - Jacobs) for existing and projected 2045 conditions defined in task 400 revised as part of Amendment 7.
2. Carollo will coordinate with Jacobs to facilitate hydraulic modeling for hydraulic capacity analysis.
3. Carollo will update/confirm capacity findings for various unit processes. Significant changes in the conclusions reached during execution of work authorized under Amendment No. 5 are not anticipated. Trigger dates for initiation of plant improvements will need to be adjusted based on revised flow and loading projections developed in Task 400 as part of Amendment 7.
4. Carollo will identify hydraulic capacity constraints indicated by hydraulic analysis performed by Jacobs.
5. Carollo will identify process capacity constraints indicated by unit process analyses.
6. Carollo will update Chapter 4 text and figures incorporating additional analyses conducted as part of Amendment 7 and addressing City comments on current draft Master Plan.
7. Carollo will identify likely trigger dates for addressing capacity constraints (hydraulic and unit process upgrades) under revised build-out conditions.
8. One additional Teams meeting will be held to review the results of the updated analysis of build-out alternatives.

Revised Task 500 Deliverables:

1. Teams meeting with City staff to review revised flow and loading projections as well as updated capacity analysis findings.
2. The current draft Chapter 4 of the Master Plan will be updated to include discussion of the revised build-out capacity assessment in the context of revised flows and load projections developed in Task 400. Carollo will generate one new draft version of Chapter 4.
3. Carollo will update the revised draft version of Chapter 4 based on comments provided by City staff and deliver a final Chapter 4 as part of a complete WWTP Master Plan.

## Optional Task 500 Scope and Assumptions:

1. Additional effort may be provided to assess headworks and disinfection (UV) facilities/processes as these WWTP components were previously assumed to have sufficient capacity under 2045 build-out conditions based on review of plant record documents (as built drawings and design documents).
2. Carollo may perform an analysis of headworks capacity.
  - a. Conduct a site visit at an appropriate time in the analysis to confirm site conditions/feasibility of proposed solutions and speed up the delivery.
  - b. Develop hydraulic calculations starting at unsubmerged weirs in the Aeration Basins Influent Splitter Structure (as the downstream control point) and ending at the upstream end of the Headworks facility. Consider also hydraulic evaluation performed by Jacobs of entire plant hydraulics.
  - c. Evaluate the capacity/suitability of the existing screening and screenings handling system relative to the updated design flows (Task 400) and City's goals.
  - d. Evaluate the capacity/suitability of the existing grit basin, grit pumping, and grit handling system relative to the updated design flows and City's goals.
3. Carollo may perform a UV capacity analysis.
  - a. Review WWTP construction documents (as built plans and design documents).
  - b. Provide a sampling plan for collection of effluent for collimated beam analysis including instructions on packing and shipping samples.

- c. Perform a collimated beam analysis on the UV system influent to characterize the fecal coliform dose response.
  - d. Provide a letter report summarizing the collected data from collimated beam analysis.
  - e. It is assumed the WWTP operations staff will be available to execute the sampling and deliver in accordance with sampling plan described above.
4. Effort under these optional activities will only be undertaken after authorization is first received from the City.

Optional Task 500 Deliverables:

1. Sampling plan for collection of effluent for collimated beam testing (UV dosing).
2. UV dosing (collimated beam testing) evaluation report.
3. Teams meeting with City staff to review capacity analysis findings. Obtain City's concurrence on the alternatives to be developed (up to two alternatives each for screening, grit and UV).
4. Effort under these optional activities will only be undertaken after authorization is first received from the City.

## TASK 600 – Regulatory Considerations and Strategy

This Amendment No. 7 includes the following additional activities associated with this task:

Additional Task 600 Scope and Assumptions:

1. Carollo will update assessment of mass loading limits in City NPDES permit based on projected 2045 flows and loads defined in Task 400 revised as part of Amendment 7.
2. Carollo will update Chapter 5 text and figures incorporating additional analyses conducted as part of Amendment 7 and addressing City comments on current draft Master Plan.

Revised Task 600 Deliverables:

1. The current draft Chapter 5 of the Master Plan will be updated. Carollo will generate one new draft version of Chapter 5.
2. Carollo will update the revised draft version of Chapter 5 based on comments provided by City staff and deliver a final Chapter 5 as part of a complete WWTP Master Plan.

## TASK 700 – Alternatives Development and Evaluation

This Amendment No. 7 includes the following additional activities associated with this task:

Additional Task 700 Scope and Assumptions:

1. Carollo will confirm the alternatives analysis conclusions reached during execution of work authorized under Amendment No. 5 meet treatment plant service demands under the revised build-out flow and loads scenario updated in Task 400 of Amendment 7.
2. It is assumed that no significant changes in the alternatives analysis conclusions reached during execution of work authorized under Amendment No. 5 will be identified, however, trigger dates likely will need to be adjusted.
3. Applying revised capacity findings (Task 500) Carollo will confirm extent and likely timing of alternatives evaluated previously (Amendment No. 5).
4. Carollo will update costs and associated phasing for previously recommended alternatives. This is assumed to be limited to adjustments in estimate basis (ENR CCI indices).
5. Carollo will update Chapter 6 text and figures addressing City comments on current draft Master Plan.

6. One additional Teams meeting will be held to review the results of the updated analysis of build-out alternatives.

Revised Task 700 Deliverables:

1. Teams meeting with City staff to review alternatives evaluation conclusions.
2. The current draft Chapter 6 of the Master Plan will be updated to include discussion of the updated build-out alternatives analysis. Carollo will generate one new draft version of Chapter 6.
3. Carollo will update the revised draft version of Chapter 6 based on comments provided by City staff and deliver a final Chapter 6 as part of a complete WWTP Master Plan.

Optional Task 700 Scope and Assumptions:

1. Carollo may conduct an evaluation of alternatives to address headworks capacity deficiencies identified in Task 500.
2. Develop the selected alternatives (Task 500) to confirm feasibility including hydraulics, size, location on site, and constructability. Include schematics and figures as needed (No CAD models). Carollo may conduct an evaluation of alternatives to address UV system capacity deficiencies identified in Task 500. Recommendations may include revisions to prior recommendation to upgrade existing backup Trojan UV4000 system.
3. Carollo may prepare opinions of probable project costs for recommended headworks and UV system upgrades. Opinions will be Class 5 ACEI level consistent with prior project costs generated for the current draft Master Plan.
4. Trigger dates will be identified for plant headworks and disinfection (UV) facilities/processes.
5. Carollo will update Chapter 6 text and figures incorporating additional analyses conducted as part of these optional Amendment 7 activities.
6. One additional Teams meeting will be held to review the results of the updated analysis of build-out alternatives.
7. Effort under for these optional activities will only be undertaken after authorization is first received from the City.

Revised Task 700 Deliverables:

1. Teams meeting with City staff to review alternatives evaluation conclusions, focused on headworks and UV recommendations.
2. The current draft Chapter 6 of the Master Plan will be updated to include discussion of the headworks and UV build-out alternatives analyses. Carollo will generate one new draft version of Chapter 6.
3. Carollo will update the revised draft version of Chapter 6 based on comments provided by City staff and deliver a final Chapter 6 as part of a complete WWTP Master Plan.
4. Effort under for these optional activities will only be undertaken after authorization is first received from the City.

## TASK 800 – Recommended Plan

This Amendment No. 7 includes the following additional activities associated with this task:

Revised Task 800 Assumptions:

1. Using the revised/updated timing of recommended improvements from Task 700, the CIP tool will be updated to reflect likely changes to trigger dates and associated cost estimates for same.

2. Carollo will develop a graphic identifying the relationship between project flows and loadings to recommended facility upgrades by process area.
3. Carollo will update Chapter 7 text and figures incorporating additional analyses conducted as part of Amendment 7 and addressing City comments on current draft Master Plan.
4. One additional Teams meeting will be held to review the updated recommended plan.

Revised Task 800 Deliverables:

1. The current draft Chapter 7 of the Master Plan will be updated to include discussion of the updated recommended alternatives and associated CIP. Carollo will generate one new draft version of Chapter 7.
2. Carollo will update the revised draft version of Chapter based on comments provided by City staff and deliver a final Chapter 7 as part of a complete WWTP Master Plan.

### TASK 900 – Prepare Master Plan

This Amendment No. 7 includes the following additional activities associated with this task:

Once chapters 1 through 7 of the Master Plan have been updated, Carollo will prepare an updated executive summary and assemble a revised draft Master Plan document for City review. The Master Plan document will be updated to address City comments and provided to the City for delivery to Oregon Department of Environmental Quality for review and approval.

Revised Task 900 Deliverables:

1. The draft Master Plan executive summary will be updated to include discussion of the updated build-out alternatives analysis and information presented in revised Chapters 1 through 7. Carollo will generate one additional draft version of the executive summary.
2. Carollo will assemble a revised draft Master Plan and provide to the City for review.
3. Carollo will update the revised draft version of the Master Plan based on comments provided by City staff and deliver a final WWTP Master Plan document.

### TASK 1000 – Quality Management

This Amendment No. 7 includes the following additional activities associated with this task:

Once revised Master Plan chapters have been updated, Carollo will review in accordance with the project Quality Management plan. In addition, confirmation and review of alternative analyses and cost estimates will be completed.

Revised Task 1000 Deliverables:

1. Additional effort to review revised draft Chapters 1 through 7 and executive summary prior to delivery to City staff for review.

### TASK 1100 – Project Management

This Amendment No. 7 includes the following additional activities associated with this task:

#### Subtask 1102 – Project Monitoring and Reporting

Manage the Project team to track time and budget, work elements accomplished, work items planned for the next period, manpower, scope changes, time and budget needed to complete this Scope of Work. Prepare monthly project status reports that compare work accomplished with schedule activities and compare expenditures with task budgets and submit reports to the City's Project Manager with monthly invoices.

Document expenditures on a task basis and show hours by project personnel and other direct expenses related to work. With each monthly progress report, provide corrective action plans to address schedule/budget deviations from baseline projections, if required.

This Amendment No. 7 includes effort associated with this Subtask sufficient to complete Project Monitoring and Reporting for the period May 1, 2023, through December 31, 2023.

#### **Subtask 1103 – Project Management Meetings**

Schedule and conduct 30-minute, bi-weekly Project Management calls throughout the duration of the Project. Calls will be used to track action items and information needed as documented in Project Management Meeting minutes.

This Amendment No. 7 includes effort associated with this Subtask sufficient to cover the period the period May 1, 2023, through December 31, 2023.

#### **Subtask 1103 – Project Management Meetings**

##### Revised Task 1100 Assumptions:

2. Project duration is extended **six** additional months relative to Amendment 6.
3. Bi-weekly Project Management calls will be held via teleconference.
4. Consultant's Project Manager will lead all meetings and calls.
5. City's Project Manager will lead Planning Commission and City Council meeting presentations.
6. Agendas, meeting minutes, and Action Items will be distributed electronically by the Consultant to City's Project Manager.

##### Revised Task 1100 Deliverables:

1. Six additional monthly Invoices and Progress Reports.
2. Time and materials for ten additional bi-weekly Project Management Meetings.
3. Allowance for up to two additional Teams meetings with City staff as directed by City Project Manager.

City of Wilsonville  
Wastewater Facility Plan  
Amendment No. 7  
DRAFT Level of Effort  
May 24, 2023

EXHIBIT B

WORK TASKS	Project Manager	Tech Advisor / QC	Process Modeling Lead / UV Process Lead	Solids Treatment Lead	Cost Estimating / Headworks/Lead	Process QC Lead	Structural Lead	Sr. Discipline Engineer	Staff Elect. Engineer	Staff Engineer	Staff Engineer	CAD/ Graphics Tech.	WP Admin. Support	WP Admin. QC	Carroll Hours	Carroll DL Cost	Direct Costs	PECE (\$/line)	Subtotal Carroll Cost	Subconsultant Cost	Total Cost	
	Senior PM	Senior Engineer	Process Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Lead Engineer	Prof. Eng.	Staff ENG/ET	Staff ENG/ET	Senior CAD	Admin	Senior Admin							Total/Sub	
	Price	Mason/ Giesbrecht/ Liffite	Conklin/ Sotkovic	Clark	Rogers/ Karam	Graham	Overing	Troup/ Rogers/ Sokolowski	Mama/ Richard/ Gourley	Mansour/ Relfly/ Horio	LaPorter/ Flynn	Christensen	Staff	Staff								
<b>Direct Labor (DL) Rates</b>	\$200	\$200	\$275	\$275	\$200	\$275	\$200	\$165	\$170	\$147	\$137	\$147	\$170	\$120								
<b>TASK 260 - PLANNING AREA CHARACTERISTICS (CHAPTER 1)</b>																						
Integrate population projections, update graphics, text as needed	1	0	0	0	0	0	0	0	0	0	2	2	2	0	0	11	\$1,740	\$0	\$154	\$1,894	\$0	\$0
Update Chapter 1 draft document	1									2	1					3	\$431	\$0	\$42	\$473	\$0	\$0
Incorporate input from City on updated Chapter 1 document	1									2	1	2				2	\$1,070	\$0	\$64	\$1,134	\$0	\$0
<b>Task 260 Subtotal</b>	1	0	0	0	0	0	0	0	0	2	2	2	0	0	0	16	\$3,241	\$0	\$220	\$3,461	\$0	\$0
<b>TASK 380 - CONDITION ASSESSMENT AND TIER 1 DESIGN ANALYSIS (CHAPTER 2)</b>																						
Update Chapter 2 draft document, incorporate geotech report into Appendix	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	2	\$207	\$0	\$28	\$235	\$0	\$0
Incorporate input from City on updated Chapter 2 document	1									1						1	\$64	\$0	\$6	\$70	\$0	\$0
<b>Task 380 Subtotal</b>	1	0	0	0	0	0	0	0	0	1	0	0	1	0	0	3	\$271	\$0	\$34	\$305	\$0	\$0
<b>TASK 400 - WASTEWATER FLOW AND LOAD PROJECTIONS (CHAPTER 3)</b>																						
Update flows & loads incorporating permitted industrial "commitments"	1	0	7	0	0	0	0	0	0	7	1	0	0	2	0	16	\$3,601	\$0	\$352	\$3,953	\$0	\$0
Update Chapter 3 draft document	1		4							4						8	\$1,088	\$0	\$112	\$1,200	\$0	\$0
Incorporate input from City on updated Chapter 3 document	1		1							2						6	\$1,091	\$0	\$84	\$1,175	\$0	\$0
<b>Task 400 Subtotal</b>	1	0	12	0	0	0	0	0	0	13	1	0	2	0	0	28	\$5,780	\$0	\$548	\$6,328	\$0	\$0
<b>TASK 600 - CAPACITY ANALYSIS (CHAPTER 4)</b>																						
Teams meeting to discuss updated flows, loads and capacity analysis	3	0	11	2	0	0	0	0	0	10	4	0	2	0	0	40	\$7,827	\$0	\$660	\$8,387	\$0	\$0
Update process capacity analysis, identify process capacity constraints, update prior figures	1		1							1						2	\$712	\$0	\$42	\$754	\$0	\$0
Review findings of hydraulic analysis (by others) identify hydraulic capacity constraints, prepare new figures	1		2							2						4	\$1,548	\$0	\$112	\$1,660	\$0	\$0
Identify process and hydraulic capacity constraint reduction timing, update prior timing estimates as appropriate	1		1							2						3	\$879	\$0	\$70	\$949	\$0	\$0
Update current draft Master Plan Chapter 4, provide updated text for hydraulic analysis	1		1							4						4	\$900	\$0	\$56	\$956	\$0	\$0
Update Chapter 4 draft document consistent with finalised projections	1		4							2						7	\$1,229	\$0	\$88	\$1,317	\$0	\$0
Incorporate input from City on updated Chapter 4 document	1		1							1						8	\$1,441	\$0	\$112	\$1,753	\$0	\$0
<b>Task 600 Subtotal</b>	1	0	11	2	0	0	0	0	0	11	1	0	2	0	0	55	\$9,999	\$0	\$770	\$10,769	\$0	\$0
<b>TASK 600 - REGULATORY CONSIDERATIONS AND STRATEGY (CHAPTER 5)</b>																						
Update Chapter 5 draft document consistent with revised finalised projections	1	0	1	0	0	0	0	0	0	1	0	0	1	0	0	1	\$1,091	\$0	\$70	\$1,161	\$0	\$0
Incorporate input from City on updated Chapter 5 document	1		1							1						4	\$422	\$0	\$56	\$478	\$0	\$0
<b>Task 600 Subtotal</b>	1	0	2	0	0	0	0	0	0	2	0	0	1	0	0	5	\$1,513	\$0	\$126	\$1,639	\$0	\$0
<b>TASK 700 - ALTERNATIVES DEVELOPMENT &amp; EVALUATION (CHAPTER 6)</b>																						
Identify prior alternatives analysis conclusions relative to updated flow & load projections	7	0	10	1	3	0	0	13	0	13	2	0	2	0	0	51	\$10,415	\$0	\$714	\$11,129	\$0	\$0
Identify and evaluate alternatives to address hydraulic capacity deficiencies	1		1							1						3	\$637	\$0	\$42	\$679	\$0	\$0
Develop hydraulic capacity alternatives implementation timing, update prior timing estimates as appropriate	1		1							2						6	\$1,332	\$0	\$84	\$1,416	\$0	\$0
Develop hydraulic capacity alternative Class 5 A&C2 options of probable cost, update prior alternative probable cost options	1		2							4						11	\$2,374	\$0	\$84	\$2,458	\$0	\$0
Prepare new hydraulic capacity alternative figures	1		1							1						6	\$644	\$0	\$84	\$1,028	\$0	\$0
Teams meeting to discuss alternative evaluation	1		4							1						5	\$1,074	\$0	\$70	\$1,144	\$0	\$0
Update draft Chapter 6 consistent with revised capacity analysis	2		2							4						11	\$2,198	\$0	\$154	\$2,352	\$0	\$0
Incorporate input from City on updated Chapter 6 document	1		2							1						6	\$1,244	\$0	\$84	\$1,328	\$0	\$0
<b>Task 700 Subtotal</b>	7	0	10	1	3	0	0	13	0	13	2	0	2	0	0	51	\$10,415	\$0	\$714	\$11,129	\$0	\$0
<b>TASK 800 - RECOMMENDED ALTERNATIVE (CHAPTER 7)</b>																						
Update CIP risk schedule and cash flow schedule with revised and new alternatives evaluations	3	0	5	0	0	0	0	0	0	3	1	0	2	0	0	14	\$3,043	\$0	\$198	\$3,241	\$0	\$0
Teams meeting to discuss Recommended Alternative and updated CIP	1		1							2						6	\$1,386	\$0	\$84	\$1,470	\$0	\$0
Update Chapter 7 draft document, CIP schedule and cash flow discussion, graphics	1		4							1						3	\$712	\$0	\$42	\$754	\$0	\$0
Incorporate input from City on updated Chapter 7 document	1		1							1						3	\$637	\$0	\$42	\$679	\$0	\$0
<b>Task 800 Subtotal</b>	3	0	5	0	0	0	0	0	0	3	1	0	2	0	0	14	\$4,400	\$0	\$228	\$4,628	\$0	\$0
<b>TASK 900 - PREPARE MASTER PLAN</b>																						
Update Executive Summary and complete final documents	2	0	2	0	0	0	0	0	0	4	2	0	2	0	0	12	\$2,212	\$0	\$168	\$2,380	\$0	\$0
<b>Task 900 Subtotal</b>	2	0	2	0	0	0	0	0	0	4	2	0	2	0	0	12	\$2,212	\$0	\$168	\$2,380	\$0	\$0
<b>TASK 1000 - Quality Management</b>																						
Senior review and historical editing	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	\$1,160	\$0	\$88	\$1,248	\$0	\$0
<b>Task 1000 Subtotal</b>	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	\$1,160	\$0	\$88	\$1,248	\$0	\$0
<b>TASK 1100 - PROJECT MANAGEMENT</b>																						
PM Coordination, Bi-Weekly PM Meetings	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	\$7,166	\$0	\$420	\$7,586	\$0	\$0
Monthly Progress Reporting	12									1						12	\$3,480	\$0	\$168	\$3,648	\$0	\$0
<b>Task 1100 Subtotal</b>	22	0	0	0	0	0	0	0	0	1	0	0	0	0	0	34	\$10,646	\$0	\$588	\$11,234	\$0	\$0
<b>TOTAL AMENDMENT AMOUNT</b>	41	4	37	3	3	0	0	19	0	46	14	2	12	3	0	199	\$38,777	\$0	\$2,646	\$41,423	\$0	\$0

City of Wilsonville  
Wastewater Facility Plan  
Amendment No. 7  
DRAFT Level of Effort  
May 24, 2023

WORK TASKS	Project Manager	Tech Advisor / QC	Process Modeling Lead / UV Process Lead	Solids Treatment Lead	Cost Estimator / Headworks Lead	Process QC Lead	Structural Lead	Sr. Discipline Engineer	Staff Elect. Engineer	Staff Engineer	Staff Engineer	CAD/ Graphics Tech.	WPI Admin. Support	WPI Admin. QC	Carroll Hours	Carroll DL Cost	Direct Costs	PCEC (\$/day)	Subtotal Carroll Cost	Subconsultant Cost	Total Cost
Price	Mason/ Giesbrecht/ Luffite	Conkle / Sotirakos	Clark	Rogarty / Karam	Graham	Owring	Troup/ Rogers / Sokolowski	Mama / Richard / Gourley	Mansour / Rilly/ Horio	LaPorter Flynn	Christensen	Staff	Staff								Total Sub
<b>Optional Effort</b>																					
Direct Labor (DL) Rates																					
TASK 600 - CAPACITY ANALYSIS (CHAPTER 6)	4	0	30	0	30	0	0	2	0	13	4	0	2	0	0	\$25,441	\$1,000	\$1,330	\$25,771	\$0	\$25,771
Conduct site visit to confirm assumptions related to Headworks capacity evaluation																\$1,740	\$1,000	\$84	\$2,824	\$0	\$2,824
Develop hydraulic calculations from unmitigated source to 48 Inlet Splitter Structure (downstream control point) terminating upstream of existing Headworks																\$2,070	\$0	\$112	\$2,182	\$0	\$2,182
Perform capacity assessment - Headworks screening and screenings handling facility																\$2,309	\$0	\$128	\$2,437	\$0	\$2,437
Perform capacity assessment - Cold train, grit pressing and grit handling system																\$2,414	\$0	\$145	\$2,559	\$0	\$2,559
Prepare effluent sampling plan, and perform coliform beam analysis - UV system																\$2,087	\$0	\$112	\$2,199	\$0	\$2,199
Coliform beam analysis report - UV system																\$2,664	\$0	\$164	\$2,768	\$0	\$2,768
Perform capacity assessment - UV system																\$1,100	\$0	\$66	\$1,166	\$0	\$1,166
Teams meeting to discuss capacity analysis findings (assumes part of same Task 700 Teams call to discuss flows, loads and capacity findings)																\$294	\$0	\$28	\$322	\$0	\$322
Identify process capacity constraints and prepare new Headworks and UV figures																\$3,118	\$0	\$182	\$3,300	\$0	\$3,300
Identify process capacity constrained solution timing																\$1,744	\$0	\$98	\$1,842	\$0	\$1,842
Update draft Master Plan Chapter 4, provide text for headworks and UV analysis																\$2,848	\$0	\$168	\$3,016	\$0	\$3,016
Incorporate input from City on updated Chapter 4 document																\$650	\$0	\$10	\$1,020	\$0	\$1,020
<b>Task 600 Subtotal</b>	<b>4</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>30</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>13</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>\$25,441</b>	<b>\$1,000</b>	<b>\$1,330</b>	<b>\$25,771</b>	<b>\$0</b>	<b>\$25,771</b>
TASK 700 - ALTERNATIVES DEVELOPMENT & EVALUATION (CHAPTER 6)	6	0	35	0	23	0	0	0	0	16	5	0	3	0	0	\$21,696	\$0	\$1,260	\$22,956	\$0	\$22,956
Identify and evaluate alternatives for Headworks upgrades																\$3,745	\$0	\$168	\$3,913	\$0	\$3,913
Identify and evaluate alternatives for UV process upgrades																\$3,044	\$0	\$168	\$3,212	\$0	\$3,212
Teams meeting to discuss alternative evaluation (assumes part of same Task 700 Teams call to discuss hydraulic alternatives)																\$1,212	\$0	\$42	\$1,254	\$0	\$1,254
Develop headworks and UV alternative representation timing, update prior timing estimates as appropriate																\$2,064	\$0	\$126	\$2,190	\$0	\$2,190
Develop headworks and UV alternative Class 5 AACE) options of probable cost, update prior alternative probable cost options																\$3,718	\$0	\$214	\$3,932	\$0	\$3,932
Prepare new Headworks and UV alternative figures																\$3,652	\$0	\$224	\$3,876	\$0	\$3,876
Update draft Chapter 6 consistent with revised capacity analysis																\$3,098	\$0	\$196	\$3,294	\$0	\$3,294
Incorporate input from City on updated Chapter 6 document																\$1,354	\$0	\$89	\$1,653	\$0	\$1,653
<b>Task 700 Subtotal</b>	<b>6</b>	<b>0</b>	<b>35</b>	<b>0</b>	<b>23</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>5</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>\$21,696</b>	<b>\$0</b>	<b>\$1,260</b>	<b>\$22,956</b>	<b>\$0</b>	<b>\$22,956</b>
TASK 800 - RECOMMENDED ALTERNATIVE (CHAPTER 7)	2	0	2	0	1	0	0	0	0	1	4	0	2	0	0	\$2,330	\$0	\$168	\$2,498	\$0	\$2,498
Update CIP job schedule and cash flow consistent with revised and new alternative evaluations																\$650	\$0	\$42	\$692	\$0	\$692
Teams meeting to discuss Recommended Alternative and updated CIP (assumes part of same Task 800 Teams call to discuss hydraulic alternatives)																\$1,702	\$0	\$42	\$1,744	\$0	\$1,744
Update Chapter 7 draft document, CIP schedule and cash flow discussion graphics																\$837	\$0	\$42	\$879	\$0	\$879
Incorporate input from City on updated Chapter 7 document																\$837	\$0	\$42	\$879	\$0	\$879
<b>Task 800 Subtotal</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>4</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>0</b>	<b>\$2,330</b>	<b>\$0</b>	<b>\$168</b>	<b>\$2,498</b>	<b>\$0</b>	<b>\$2,498</b>
TASK 1000 - Quality Management	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	\$2,030	\$0	\$98	\$2,128	\$0	\$2,128
Senior review and technical editing																\$2,030	\$0	\$98	\$2,128	\$0	\$2,128
<b>Task 1000 Subtotal</b>	<b>1</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$2,030</b>	<b>\$0</b>	<b>\$98</b>	<b>\$2,128</b>	<b>\$0</b>	<b>\$2,128</b>
TASK 1100 - PROJECT MANAGEMENT	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$1,160	\$0	\$66	\$1,216	\$0	\$1,216
PM Coordination, Bi-Weekly PM Meetings																\$1,160	\$0	\$66	\$1,216	\$0	\$1,216
Monthly Progress Reporting																\$0	\$0	\$0	\$0	\$0	\$0
<b>Task 1100 Subtotal</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$1,160</b>	<b>\$0</b>	<b>\$66</b>	<b>\$1,216</b>	<b>\$0</b>	<b>\$1,216</b>
<b>TOTAL OPTIONAL AMOUNT</b>	<b>17</b>	<b>6</b>	<b>67</b>	<b>0</b>	<b>54</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>36</b>	<b>13</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>\$291,627</b>	<b>\$1,000</b>	<b>\$2,812</b>	<b>\$295,439</b>	<b>\$0</b>	<b>\$295,439</b>

Assumes PM through end of December 2023. Sheet 5