Exhibit A

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:	CITY:
CAROLLO ENGINEERS, INC.	CITY OF WILSONVILLE
By:	By:
Print Name:	Print Name:
As Its:	As Its:
EIN/Tax I.D. No	
	APPROVED AS TO FORM:
	Amanda Guile-Hinman, City Attorney
	City of Wilsonville, Oregon

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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.
- 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:

- 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:

- 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.
- 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.
- 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:

- 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:

- 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 buildout 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.
- 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 AACEI 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.
- 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 buildout 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 Manag	er Tech Advisor/ QC	Process Modeling Lead / UV Process Lead	Solids Treatmen Lead	t Cost Estimating HeadworksLead	Process QC Lead	Structural Lead	Sr. Discipline Engineer	Staff Elect. Engineer	Staff Engineer	Staff Engineer	CAD/ Graphics Tech.	WP/ Admin. Support	WP/ Admin. QC	Carollo Hours Ca	rollo DL Cost	Direct Costs	PECE (\$14/hr)	Subtotal Carollo Cost	bconsultant Cost	Total Cost	t
	Senior PM	Senior Engineer	Principal Engineer	Senior Engineer	Senior Engineer	r Senior Engineer	Senior Engineer	r Lead Engineer	Prof Eng.	Staff ENG/EIT	Staff ENG/EIT	Senior CAD	Admin	Senior Admin						Tota	Subs	
	Price	Matson/ Giesbrecht/ Laffitte	Conklin / Sotirakos	Clark	Rozgony / Karan	n Graham	Doering	Troup/ Rogers / Sokolowski	Munoz / Richard / Gourley	d Mansour / Reilly Horio	/ LaPorte/ Flynn	Christensen	Staff	Staff								
Direct Labor (DL) Ra	tes \$2	90 \$290	\$275	\$215	5 \$29	0 \$275	\$290	0 \$165	\$17	0 \$14	7 \$137	\$147	\$11	\$126								
TASK 200 - PLANNING AREA CHARACTERISTICS (CHAPTER 1)		1 0	0	0	0	0 0	0	0	0	6	2	2	C	0	11	\$1,740	\$0	\$154	\$1,894	\$0	\$0 \$1,89	
Investigate population projections, update graphics, text as needed						_				2	1				3	\$431 \$1,015	\$0	\$42	\$473		\$0 \$4 \$0 \$1,0	
Update Chapter 1 draft document Incorporate input from City on updated Chapter 1 document		1								2	1	2			2	\$1,015	\$U \$0	\$84			\$0 \$1,0	
Task 200 Subto	otal	1 0	0	0	0) 0	0) 0	0	6	2	2	C	0	11	\$1,740	\$0	\$154		\$0	\$0 \$1,89	
TASK 300 - CONDITION ASSESSMENT AND TIER 1 SEISMIC ANALYSIS (CHAPTER 2)		1 0	0	0	0	0 0	0	0	0	2	0	0	1	0	4	\$694	\$0	\$56	\$750	\$0	\$0 \$75	
Update Chapter 2 draft document, incorporate geotech report into Appendix Incorporate input from City on updated Chapter 2 document		1				_				1			1		2	\$257 \$437	\$U \$0	\$28	\$285 \$465		\$0 \$28 \$0 \$46	285
Task 300 Subto	otal	1 0	0	0	0) 0	0) 0	0	2	0	0	1	0	4	\$694	\$0			\$0	\$0 \$7	
																		1				
TASK 400 - WASTEWATER FLOW AND LOAD PROJECTIONS (CHAPTER 3)		1 0	7	0	0	0	0	0	0	7	1	0	2	0	18	\$3,601	\$0	\$252	\$3,853	\$0	\$0 \$3,8	
Update flows & loads incorporating permitted industrial "commitments" Update chapter 3 draft document			4							4	1		1		8	\$1,688 \$1,091	\$0	\$112	\$1,800 \$1,175		\$0 \$1,80 \$0 \$1,1	
Incorporate input from City on updated Chapter 3 document		1	1							1			1		4	\$1,091 \$822	\$0	\$84	\$1,175		\$0 \$1,1	
Task 400 Subto	otal	1 0	7	0	0) 0	0) 0	0) 7	1	0	2	0	18	\$3,601	\$0	\$252		\$0	\$0 \$3,8	853
TASK 500 - CAPACITY ANALYSIS (CHAPTER 4)		3 0	11	2	0	0 0	0	6	0	10	6	0	2	0	40	\$7,827 \$712	\$0	\$560	\$8,387 \$754	\$0	\$0 \$8,38 \$0 \$75	
Teams meeting to discuss updated flows, loads and capacity analyses Update process capacity analyses, identify process capacity constraints, update prior figures		1	2	2						2	2				8	\$1,548	\$0	\$42			\$0 \$1,66	
Review findings of hydraulic analysis (by others) identify hydraulic capacity constraints, prepare new figures			1					2			2				5	\$879	\$0	\$70	\$949		\$0 \$94	949
Identify process and hydraulic capacity constraint solution timing, update prior timing estimates as appropriate		1	1							2					4	\$859	\$0	\$56	\$915		\$0 \$9 [.]	
Update current draft Master Plan Chapter 4, provide updated text for hydraulic analysis			1					4		2	1		1		7	\$1,229 \$1,641	\$0	\$98	\$1,327 \$1,753		\$0 \$1,32 \$0 \$1,75	327
Update Chapter 4 draft document consistent with flow/load projections Incorporate input from City on updated Chapter 4 document		1	4			-				1	1		1		5	\$1,641	\$0	\$112			\$0 \$1,73	
Task 500 Subto	otal	3 0	11	2	. 0) 0	0) 6	0	10	6	0	2	0	40	\$7,827	\$0	\$560		\$0	\$0 \$8,38	
		1														64 007		\$70	64.407			407
TASK 600 - REGULATORY CONSIDERATIONS AND STRATEGY (CHAPTER 5) Update Chapter 5 draft document consistent with revised flow/load projections		1 0	2	0	u u	0	0	0	U	1	U	0	'	0	5	\$1,097 \$275	\$0	\$14	\$1,167 \$289	\$0	\$0 \$1,16 \$0 \$28	
Incorporate input from City and update Chapter 5 document		1	1							1			1		4	\$822	\$0	\$56	\$878		\$0 \$8	878
Task 600 Subto	otal	1 0	2	0	0) 0	0) 0	0	1	0	0	1	0	5	\$1,097	\$0	\$70	\$1,167	\$0	\$0 \$1,10	167
TASK 700 ALTERNATIVES DEVELORMENT & EVALUATION (CHARTER 6)		7 0	10	1	-		0	12		12	2	0		0	51	\$10.415	¢n	\$714	\$11,129	\$0	\$0 \$11,12	120
TASK 700 - ALTERNATIVES DEVELOPMENT & EVALUATION (CHAPTER 6) Confirm prior alternatives analyses conclusions relative to updated flow & load projections		7 0	1	1		, 0	0	13		1	2	0	2	0	3	\$10,413	\$0	\$42	\$679	40	\$0 \$67	
Identify and evaluate alternatives to address hydraulic capacity deficiencies		1	1		1	1		2		1					6	\$1,332	\$0	\$84	\$1,416		\$0 \$1,4	
Develop hydraulic capacity alternatives implementation timing, update prior timing estimates as appropriate		1	1		-					1					3	\$712	\$0	\$42	\$754		\$0 \$75	
Develop hydraulic capacity alternative Class 5 AACEI opinions of probable cost, update prior alternative probable cost opinions Prepare new hydraulic capacity alternatives fources		1	2		2	2		4		2	1				11	\$2,374 \$944	\$U \$0	\$154	\$2,528		\$0 \$2,52 \$0 \$1,02	
Prepare new hydraulic capacity alternatives figures Teams meeting to discuss alternatives evaluation		1	1					1		1	1				5	\$1,014	\$0	\$70	\$1,084		\$0 \$1,08	
Update draft Chapter 6 consistent with revised capacity analyses		2	2					2		4			1		11	\$2,158	\$0	\$154			\$0 \$2,3	
Incoporate input from City on updated Chapter 6 document Task 700 Subto) tal	1	2	1	-		1	12		2	2		1		6	\$1,244 \$10,415	\$0	\$84 \$714	\$1,328	¢0	\$0 \$1,32 \$0 \$11,12	
Task 700 Subto		, 0	10	1	3	, <u> </u>	1	13	1	13	2	0	2	0	51	φ10,415	\$0	\$714	¢11,129		<u>φυ φ11,1</u>	23
TASK 800 - RECOMMENDED ALTERNATIVE (CHAPTER 7)		3 0	5	0	0	0	0	0	0	3	1	0	2	0	14	\$3,043	\$0	\$196		\$0	\$0 \$3,2	
Update CIP tool schedule and cash flow consistent with revised and new alternatives evaluations		1	4							2					6	\$1,394	\$0	\$84			\$0 \$1,4	
Teams meeting to discuss Recommended Alternative and updated CIP Update Chapter 7 draft document, CIP schedule and cash flow discussion, graphics		1	1							1	1		1		3	\$712 \$537	\$0	\$42	\$754 \$579		\$0 \$75 \$0 \$5	
Incoporate input from City on updated Chapter 7 document		1											1		2	\$400	\$0	\$28	\$428		\$0 \$42	428
Task 800 Subto	otal	3 0	5	0	0	0	0) 0	0	3	1	0	2		14	\$3,043	\$0	\$196	\$3,239	\$0	\$0 \$3,2	239
		2	-	-		, <u> </u>	-			+		^		_	40	\$2,212	**	\$168	\$2,380	¢0	\$0 \$2,38	290
TASK 900 - PREPARE MASTER PLAN Update Executive Summary and compile final documents		2 0	2	0		, 0	0			4	2	0	2	0	12	\$2,212 \$2,212	\$U \$0	\$168		φU	\$0 \$2,38	
Task 900 Subto	otal	2 0	2	0	0) 0	0) 0	0) 4	2	0	2	0	12	\$2,212	\$0			\$0	\$0 \$2,38	
TASK 1000 - Quality Management		0 4	0	0	0 0	0 0	0	0	0	0 0	0	0	C	0	4	\$1,160 \$1,160	\$0	\$56	\$1,216 \$1,216	\$0	\$0 \$1,2 \$0 \$1,2	
Senior review and technical editing Task 1000 Subto	otal	0 4	0	0	0) 0	0) 0	0) 0	0	0	C	0	4	\$1,160	\$0	\$50		\$0	\$0 \$1,2	216
TASK 1100 - PROJECT MANAGEMENT	2	2 0	0	0	0	0 0	0	0 0	0	0	0	0	C	8	30	\$7,388	\$0	\$420	\$7,808	\$0	\$0 \$7,80	
PM Coordination, Bi-Weekly PM Meetings Monthly Progress Reporting	1	2												0	12	\$3,480 \$3,908	\$0	\$168	\$3,648		\$0 \$3,64 \$0 \$4,16	
Task 1100 Subto	otal 2	2 0	0	0	0) 0	0) 0	0	0	0	0	C	8	30	\$7,388	\$0	\$420		\$0	\$0 \$7,80	
TOTAL AMENDMENT AMOUNT	4	1 4	37	3	3	3 0	0	19	0	46	14	2	12	8	189 \$	39,177	\$ -	\$ 2,646	\$ 41,823 \$	- \$	- \$ 41,82	23

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	Lood	t Cost Estimating/ HeadworksLead	Process QC Lead	Structural Lead	Sr. Discipline Engineer	Staff Elect. Engineer	Staff Engineer	Staff Engineer	CAD/ Graphics Tech.	WP/ Admin. Support	WP/ Admin. QC	Carollo Hours	Carollo DL Cost	Direct Costs	PECE (\$14/hr)	Subtotal Carollo Cost	Subconsultant C	cost	Total Cost
	Senior PM	Senior Engineer	Principal Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Senior Engineer	Lead Engineer	Prof Eng.	Staff ENG/EIT	Staff ENG/EIT	Senior CAD	Admin	Senior Admin							Total Subs	
	Price	Matson/ Giesbrecht/ Laffitte	Conklin / Sotirakos	Clark	Rozgony / Karam	Graham	Doering	Troup/ Rogers / Sokolowski	Munoz / Richard / Gourley	Mansour / Reilly / Horio	LaPorte/ Flynn	Christensen	Staff	Staff								
Direct Labor (DL) Rates	\$290	\$290	\$275	\$215	\$290	\$275	\$290	\$165	\$170	\$147	\$137	\$147	\$11	0 \$126								
Optional Effort																						
TASK 500 - CAPACITY ANALYSIS (CHAPTER 4)	4	0	30	0	36	0	0	2	0	17	4	0	2	2 0	95	\$23,447	\$1,000	\$1,330	\$25,777	\$0	\$0	\$25,7
Conduct site visit to confirm assumptions related to Headworks capacity evaluation					6										6	\$1,740	\$1,000	\$84	\$2,824		\$0	\$2,82
Develop hydraulic calculations from unsubmerged weirs in AB Influent Splitter Structure (downstream control point) terminating upstream of existing Headwor	ks				6			2							8	\$2,070	\$0	\$112	\$2,182		\$0	0 \$2,18
Perform capacity assessment - Headworks screening and screenings handling facility			1		6					2					9	\$2,309	\$0	\$126	\$2,435		\$0	0 \$2,4
Perform capacity assessment - Grit basin, grit pumping and grit handling system					8					2					10	\$2,614	\$0	\$140			\$0	0 \$2,43 0 \$2,75
Prepare effluent sampling plan, and perform collimated beam analysis - UV system	1		6							1					8	\$2,087	\$0	\$112	\$2,199		\$0	\$2,19
Collimated beam analysis report - UV system			8							2			-	1	11	\$2,604	\$0	\$154			\$0	0 \$2,75
Perform capacity assessment - UV system			4												4	\$1,100	\$0	\$56			\$0	0 \$1,1
Teams meeting to discuss capacity analysis findings (assumes part of same Task 500 Teams call to discuss flows, loads and capacity findings)										1	1				2	\$284	\$0	\$28	\$312		\$0	i0 \$3
Identify process capacity constraints and prepare new Headworks and UV figures	1		4		4					2	2				13	\$3,118	\$0	\$182			\$0	\$3,30
Identify process capacity constraint solution timing	1		2		2					2				_	7	\$1,714	\$0	\$98	\$1,812		\$0	0 \$1,8
Update draft Master Plan Chapter 4, provide text for headworks and UV analyses			4												12	\$2,848	\$0	\$168	\$3,016		\$0	0 \$3,0 ⁻
Incorporate input from City on updated Chapter 4 document	1		1							1	1			1	5	\$959	\$0	\$70	\$1,029		\$0	0 \$1.02
Task 500 Subtotal	4		20		26				0	17			·		95		\$1,000	φi 0				0 \$25,77
	4	1	30	0	30	0	0	2	0	1/	4	1	1		35	923,447	\$1,000	φ1,330	923,111			J \$23,1
TASK 700 - ALTERNATIVES DEVELOPMENT & EVALUATION (CHAPTER 6)	6	0	35	0	23	0	0	0	0	18	5	0		3 0	90	\$21.696	02	\$1,260	\$22,956	\$0	\$0	0 \$22,9
	0	0		0	2.5	0	0	0	0	10		, in the second		, ,	14	\$3,714	φ0 ©0	\$196	\$3,910	φυ	φ0 ¢0	0 \$3.9
Identify and evaluate alternatives for Headworks upgrades			10		0					2					14	\$3,044	90 \$0	\$168			\$0 \$0	0 \$3,3 0 \$3,2
Identify and evaluate alternatives for UV process upgrades Tome mediate alternatives automatives conclusions and of some Task 200 Tomms call to discuss bydraulis alternatives)			1		1					2	1				12	\$702	90 \$0	\$100	\$744		\$0	0 \$74
Teams meeting to discuss alternatives evaluation (assumes part of same Task 700 Teams call to discuss hydraulic alternatives)					1					0	1				3	\$2.264	\$U \$0	\$126			30	0 \$2,39
Develop headworks and UV alternative implementation timing, update prior timing estimates as appropriate	1		4		2					2					9		\$0				\$0	
Develop headworks and UV alternative Class 5 AACEI opinions of probable cost, update prior alternative probable cost opinions	1		4		6					4					15	\$3,718	\$0	\$210	\$3,928		\$0	0 \$3,92
Prepare new Headworks and UV alternatives figures			6		4					2	4				16	\$3,652	\$0	\$224	\$3,876		\$0	0 \$3,8
Update draft Chapter 6 consistent with revised capacity analyses	2		4		2					4			2	2	14	\$3,068	\$0	\$196	\$3,264		\$0	0 \$3,26
Incoporate input from City on updated Chapter 6 document	2		2							2				1	7	\$1,534	\$0	\$98	\$1,632		\$0	0 \$1,63
Task 700 Subtotal	6	0	35	0	23	0	0	0	0	18	5	0		3 0	90	\$21,696	\$0	\$1,260	\$22,956	\$0	\$0	0 \$22,9
	-	-	-	-		-	-			l	l	-						a ·				
TASK 800 - RECOMMENDED ALTERNATIVE (CHAPTER 7)	2	0	2	0	1	0	0	0	0	1	4	0	2	<u> 0</u>	12	\$2,335	\$0	\$168	\$2,503	\$0	\$0	\$2,50
Update CIP tool schedule and cash flow consistent with revised and new alternatives evaluations			1							1	1				3	\$559	\$0	\$42 \$42			\$0	60 \$60
Teams meeting to discuss Recommended Alternative and updated CIP (assumes part of same Task 800 Teams call to discuss hydraulic alternatives)			1		1						1				3	\$702	\$0	\$42			\$0	i0 \$74
Update Chapter 7 draft document, CIP schedule and cash flow discussion, graphics	1										1		1		3	\$537	\$0	\$42	\$579		\$0	0 \$5
Incoporate input from City on updated Chapter 7 document	1										1			1	3	\$537	\$0	\$42	\$579		\$0	60 \$51
Task 800 Subtotal	2	0	2	0	1	0	0	0	0	1	4	0	2	2	12	\$2,335	\$0	\$168	\$2,503	\$0	\$0	\$2,50
	· .	-	-	-	-		-				-	-			-	60.000		***	eo : co	-	-	-
TASK 1000 - Quality Management	1	6	0	0	0	0	0	0	0	0	0	0		0	7	\$2,030	\$0	\$98	\$2,128	\$0	\$0	\$0 \$2,12
Senior review and technical editing	1	6													7	\$2,030		\$98	φ2,120		\$0	50 \$2,12
Task 1000 Subtotal	1	6	0	0	0	0	0	0	0	0	0	0	(0	7	\$2,030	\$0	\$98	\$2,128	\$0	\$0	\$0 \$2,12
		-	-	-			-		-		-	-		-	l							
TASK 1100 - PROJECT MANAGEMENT	4	0	0	0	0	0	0	0	0	0	0	0	(0	4	\$1,160	\$0	\$56	\$1,216	\$0	\$0	50 \$1,2 ⁻
PM Coordination, Bi-Weekly PM Meetings	4													_	4	\$1,160	\$0	\$56	\$1,216		\$0	0 \$1,2
Monthly Progress Reporting	0														0	\$0	\$0	\$0	\$0		\$0	<u>)</u>
Task 1100 Subtotal	4	0	0	0	0	0	0	0	0	0	0	0	(0 0	4	\$1,160	\$0	\$56	\$1,216	\$0	\$0	\$1,2
1															208	\$ 50.668	\$ 1,000	\$ 2,912	\$ 54,580			\$ 54.58
TOTAL OPTIONAL AMOUNT	17		67								13										S -	\$ 54.58