CITY OF SANTA ROSA TRANSPORTATION AND PUBLIC WORKS PROJECT WORK ORDER NO. A010014-2011-09E

PROJECT NAME: LAGUNA TREATMENT PLANT DISINFECTION IMPROVEMENTS

CITY PROJECT MANAGER: MIKE PRINZ

CONSULTANT PROJECT MANAGER: DOUG WING

SCOPE OF SERVICE: See Consultant's Scope of Services/Proposal for Services and Fee Schedule dated

July 16, 2024, attached as Exhibit B-1.

START DATE: AUGUST 2024 COMPLETION DATE: MAY 2026

CHARGE NUMBER FOR PAYMENT: 86638

\$1,170,989.00 NOT-TO-EXCEED AMOUNT FOR THIS PROJECT:



TERMS AND CONDITIONS: This Project Work Order is issued and entered into as of the last date written below in accordance with the terms and conditions set forth in the "Master Professional Services Agreement with Carollo Engineers, Inc., Agreement No. A010014," dated November 1, 2011, and "Project Work Order No. A010014-2011-09", dated January 21, 2016, and "Project Work Order No. A010014-2011-9A", dated September 30, 2019, and "Project Work Order No. A010014-2011-09B", dated November 19, 2020, "Project Work Order No. A10014-2011-09C", dated September 27, 2021, and "Project Work Order No. A010014-2011-09D", dated March 8, 2022, which are hereby incorporated and made part of this Project Work Order. In the event of a discrepancy or conflict between the terms and conditions of the Project Work Order and the Master Agreement, the Master Agreement shall govern.

PROJECT WORK ORDER HISTORY

TROSECT WORK ORDER HISTORY		
Original Project Work Order No. A010014-2011-09	Amount:	\$2,803,599.00
Amendment No. A010014-2011-09A	Amount:	\$1,584,655.00
Amendment No. A010014-2011-09B	Amount:	\$2,131,132.00
Amendment No. A010014-2011-09C	Amount:	\$ 750,000.00
Amendment No. A010014-2011-09D	Amount:	\$ 15,000.00
Amendment No. A010014-2011-09E	Amount:	\$1,170,989.00
	Total:	\$8,455,375.00
CITY OF SANTA ROSA,		
A Municipal Corporation		
By:	Date:	
Daniel J. Galvin III		
Board of Public Utilities Chair		
CAROLLO ENGINEERS, INC.,		
A Delaware Corporation		
B. Ken Wilkins	Date: Aug	6 2024
By:	Date: 7198	
Name: Ken Wilkins		
C., VD		
Title: Sr. VP		
M	Aug	g 5, 2024
By:	Date:	
_{Name:} Michael Barnes		
Coordon		
Title: Secretary		

APPROVED AS TO FORM:

By: (Aug 6, 2024 11:52 PDT)

Santa Rosa City Attorney's Office

Attachments: Exhibit B-1 - Consultant's proposal and fee for services for this Project Work Order



Exhibit B-1

2795 Mitchell Drive Walnut Creek, California 94598 P. 925-932-1710 / F. 925-891-9107

carollo.com

July 16, 2024

Mike Prinz
Deputy Director – Regional Water Reuse Operations
Santa Rosa Water
4300 Llano Road
Santa Rosa, CA 95407

Subject: Laguna Treatment Plant Disinfection Improvements Project PWO No. A010014-2011-09

ESDC and Closeout Amendment Proposal

Dear Mr. Prinz:

Carollo Engineers has been working with the City for over 10 years on the ultraviolet light disinfection system improvements project and looks forward to completing the project in 2025. As we have discussed, the project has evolved, and the scope of work has increased especially for the Design project management, regulatory compliance/permitting and Engineering Services During Construction (ESDC) tasks. In addition, the schedule for completion of the project has increased from what was originally envisioned in the original 2016 project work order and the 2020 ESDC amendment. Based on the most recent construction progress schedule the construction should be completed in July 2025 and our support should be completed by the end of 2025.

The following tasks scope and budget need to be amended based on the overall project work to be completed and the longer duration for the construction completion. The projected scope and budget increases are outlined below.

ESDC Tasks

Task 1 ESDC Project Management. The original project construction duration was envisioned as 30 months. This was updated to 36 months in the final bid documents to reflect the delays that have been experienced on other construction projects. In addition, we anticipate the project will take 4 months for closeout once the project construction is completed. This will increase the overall project duration and required budget by approximately 33 percent more than originally anticipated.

Task 2 ESDC Progress Meetings and Site Visits. The duration for progress meetings and site visits has also increased based on the duration noted above and requires a 33 percent budget increase.

Task 3 Submittal Review. The original Shop Drawing submittals review budget was based on a total of 350 submittals. Total submittals to date through June 2024 a total of 511 submittals or approximately 46 percent more than budgeted. Projected total submittals may total as many as 560 submittals. This increased the required effort and will require a 60 budget percent increase.

Task 4 RFI/RFC Review. The original RFI/RFC review budget was based on 250 RFIs. Total RFIs to date through June 2024 are 437, with a projected total of 500. This increased the required effort and will require a 100 budget percent increase.



Mike Prinz Santa Rosa Water July 16, 2024

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Task 5 Design Clarifications / Review of Requested Change Orders. The original Design Clarification (DC) budget was based on 20 DCs plus change order reviews. To date a total of 39 DCs have been issued, with a projected total of 50 DCs. Although the projected number of DCs is higher than anticipated, the time spent on each DC has been less and change order review time has been minimal. Therefore, the projected budget increase is based on both the increased number and the budget expended to date and requires a 25 percent budget increase.

Task 10 Discipline Engineer Observations and Factory Testing. Additional site visits and discipline engineer consultations have increased the time allocated to this task. This increased the required effort and will require a 40 budget percent increase.

Design, Regulatory Compliance and Commissioning Tasks

Task 001 Project Management. The original project design, regulatory compliance and commissioning task duration was exceeded due to the extended time for the project to be completed. This increased the effort and will require a 15 percent budget increase.

Task 009 Regulatory Compliance. The scope for this task has increased based on the requirements of the permitting agencies. An Engineers Report for the Use of Recycled Water was originally envisioned as an update to the original report. DDW required a new updated report specific to the new UV system and including new system controls and diversion system operation. In addition, a BAAQMD application for Authority to Construct was required and added to the permitting scope. This increased the required effort and will require a 50 percent budget increase.

Amendment Budget Projection

The amendment budget projection is outlined on the attached table. In general, the budget projections are based on the increased scope noted above. A budget amendment is requested for the total amount noted. Overall, the requested amendment is about a 16 % increase over the current authorized PWO budget.

If you have any questions or comments concerning this budget amendment request, please feel free to contact me.

Sincerely, Carollo Engineers

In WW

Principal Engineer / Associate Vice President Douglas Wing, P.E.

Mike Prinz Santa Rosa Water July 16, 2024

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Water Reuse Fellow and Chief Technologist / Vice President Andrew Salveson, P.E.

DW:dww

CC:

Marc Solomon – Hazen & Sawyer Anne Prudhel – Carollo Engineers

City of Santa Rosa Laguna Treatment Plant Disinfection Improvements Project PWO A010014-2011-09

Task	Prior A	Prior Approved Budget	Scope increase (%)	Budge	Budget Amendment	Proposed	Proposed Total Budget
Engineering Services During Construction (ESDC) Tasks							
100 ESDC Project Management	\$	149,703.00	33	\$	49,402.00	\$	199,105.00
200 Progress Meetings and Site Visits	↔	287,744.00	33	↔	94,956.00	\$	382,700.00
300 Submittal Review	\$	709,448.00	09	\$	425,669.00	\$	1,135,117.00
400 RFI/RFC	↔	397,921.00	100	↔	397,921.00	↔	795,842.00
500 Design Clarifications	↔	216,045.00	25	↔	54,011.00	\$	270,056.00
600 As-built Record Drawings	↔	118,786.00	0	↔	ı	\$	118,786.00
700 Startup Assistance	↔	40,990.00	0	↔	ı	\$	40,990.00
800 O&M Manual Development	↔	112,263.00	0	↔	1	\$	112,263.00
900 Project Closeout	↔	30,014.00	0	\$	ı	↔	30,014.00
1000 Discipline Engineer Observations and Factory Testing	\$	68,218.00	40	\$	27,287.00	\$	95,505.00
Subtotal	\$	2,131,132.00		\$	1,049,246.00	\$	3,180,378.00
Design and Permitting Tasks							
001 Task 001 Project Management	↔	451,951.00	15	↔	67,793.00	\$	519,744.00
002 Background Infoirmation Review	↔	189,015.00	0	↔	1	\$	189,015.00
003 Prelimnary Design	↔	254,113.00	0	\$	ı	\$	254,113.00
004 UV Procurement	↔	172,313.00	0	↔	1	\$	172,313.00
005 Diversion Final Design	↔	1,463,794.00	0	↔	ı	\$	1,463,794.00
006 UV Design	↔	1,567,102.00	0	↔	ı	\$	1,567,102.00
007 Final Design Meetings	↔	93,741.00	0	↔	ı	↔	93,741.00
008 Bid Period Services	↔	124,368.00	0	↔	1	↔	124,368.00
009 Regulatory Compliance	↔	107,900.00	20	↔	53,950.00	↔	161,850.00
010 Commissioning	↔	173,918.00	0	↔	Ī	↔	173,918.00
011 O&M Training	↔	98,548.00	0	↔	Ī	↔	98,548.00
013 Contingency	↔	250,000.00	0	↔	Ī	\$	250,000.00
014 VE Review	↔	117,075.00	0	↔	ı	\$	117,075.00
015 Hypo Testing Assistance	\$	89,416.00	0	\$	•	\$	89,416.00
Subtotal	\$	5,153,254.00		\$	121,743.00	\$	5,274,997.00
Total	\$	7,284,386.00	-	\$	1,170,989.00	\$	8,455,375.00

