

**WORK ASSIGNMENT NO. 7
CHANGE ORDER NO. 2**

PROJECT NO# 6088670-6042370

PROJECT TITLE: LAKE MANATEE WTP SCADA SYSTEM REPLACEMENT

DATE: January 12, 2021

Pursuant to the Manatee County, Florida, Agreement No. 16-2334CD for Professional Services for Utility Engineering entered into by and between the COUNTY OF MANATEE, FLORIDA, hereinafter referred to as the "COUNTY" and Carollo Engineers Inc, hereinafter referred to as the "Consultant", a determination has been made by the COUNTY that there is a need for the performance of or rendering of services by the Consultant of a certain "Work Assignment" under the purview of said Contract, and the Consultant is hereby authorized to perform or render the particular services of work described as follows:

TITLE OF THE PROJECT: LAKE MANATEE WTP SCADA SYSTEM REPLACEMENT

TASKS OF PROFESSIONAL SERVICES AUTHORIZED:

Consultant shall perform tasks as more specifically detailed in attached SCOPE OF SERVICES. This work assignment shall remain in effect until completion of the project.

<u>TITLE:</u>	<u>COMPENSATION</u>
Original Work Assignment No. 7	\$245,139
Change Order No. 1	\$155,528
Change Order No. 2	\$430,746.23

Compensation to the Consultant for rendering all of the above identified services and products shall not exceed: \$831,413.23. Compensation for the tasks shall not exceed the amounts shown.

Any modification to the project resulting in increases to prior cost estimate or potential overruns shall be communicated to the County in writing, prior to initiation of work, for approval.

COUNTY may authorize, in writing, in advance, adjustments in the compensation for particular tasks established above, provided such adjustments do not exceed the maximum compensation authorized for this Work Assignment.

Partial compensation may be requested on a monthly basis for unit prices and actual hours incurred but not to exceed the percentage of the tasks completed.

Work Assignment Number 7

**LAKE MANATEE WTP SCADA SYSTEM REPLACEMENT
Project # 6088670**

Carollo Engineers, Inc.
401 N. Cattlemen Rod, Suite 306
Sarasota, FL 34232

By: 

January 12, 2021
Robert Cushing, Senior Vice President

COUNTY OF MANATEE, FLORIDA

By: 
_____ Jacob Erickson Manatee County
Purchasing Official

Date: 3/19/2021

ATTACHMENT 1

**MANATEE COUNTY GOVERNMENT
WORK ASSIGNMENT NO: 7**

CHANGE ORDER NO. 2

**CONSTRUCTION PHASE SERVICES FOR THE
LAKE MANATEE WTP SCADA SYSTEM REPLACEMENT**

**SCOPE OF SERVICES
CAROLLO ENGINEERS
January 12, 2021**

CHANGE ORDER DESCRIPTION

PROJECT DESCRIPTION

The purpose of the Lake Manatee WTP SCADA Upgrade project is to design, install, and commission a new SCADA system with CiTect software. The new SCADA system will provide a reliable, economical, and expandable system that meets the requirements of the COUNTY. The new SCADA system will center on an open network protocol standard to all control systems. A robust and thorough design and integration will provide continued plant operation at the Lake Manatee WTP. A separate entity, hired by the COUNTY shall provide programming services under a separate work assignment.

SCOPE OF WORK

TASK 10 – CONSTRUCTION SERVICES

The Consultant will provide services for each phase of construction to establish that the work being performed by the General Contractor is in conformance to the requirements of the Contract.

The Consultant will not be responsible for the means, methods, techniques, sequences, or procedures or construction selected by General Contractor, or the safety precautions and programs incident to the work of General Contractor.

The current ongoing projects that could affect this project include:

- SCADA system upgrade project at the WTP (from HSQ SCADA software to Citect SCADA software).
- UF Project.

10.1 Monthly Status Meetings

The Consultant's PM will participate in monthly status meetings with the General Contractor, Subcontractors and other COUNTY representatives throughout the construction phase to keep the COUNTY informed of the project progress, and obtain input and direction as required for outstanding project issues. Prior to each meeting, Consultant will prepare relevant information to be addressed. Meeting objectives will be to reach decisions on pertinent issues relative to the specific topic being addressed. The Consultant will capture COUNTY-approved decisions through meeting minutes, to be distributed to meeting attendees for review and approval. Following receipt of comments, the Consultant will prepare final minutes for distribution.

Consultant will attend construction project meetings to discuss issues and monitor activities. Consultant's Project Manager and/or Design Manager shall attend monthly project meetings as required to maintain overview and design intent throughout the construction phase. It is assumed that the construction phase will last up to twenty-four (24) months.

Additional Consultant experts will participate in progress meetings on an as-requested basis by conference call.

10.2 Specified Project Meetings

The consultant will attend the specified project meetings with the General Contractor, Subcontractors and other COUNTY representatives. Consultant will review submitted agendas for each meeting in accordance with project specifications. The Consultant will capture COUNTY-approved decisions through meeting minutes, to be distributed to meeting attendees for review and approval. Following receipt of comments, the Consultant will prepare final minutes for distribution.

The meetings include:

- A. Pre-installation meetings (8)
- B. Schedule Update meetings (5)
- C. QA/QC Meetings (3)
- D. Wireless System meetings (3)
- E. Graphics, Reports, Control Philosophy, Alarms meetings (2 each, 8 total)
- F. Pre-Shutdown Meetings (7)
- G. Pre-Process Startup Meetings (3)
- H. Closeout Meeting (1)

10.3 Review of Construction Schedule

The Consultant will review the General Contractor's Construction Schedule. The Consultant will collaborate with General Contractor on modifications to the schedule until both the Consultant and General Contractor are satisfied that the schedule accurately reflect the appropriate schedule of activities for the Project.

10.4 Submittals Review

Consultant will review key submittals provided by the construction contractor related to the membranes and supporting equipment. The Consultant's review shall be for conformance with

the overall design concept and contract documents. Such review or other action shall not extend to compliance with the information given in the contract documents, to means, methods, sequences, techniques, procedures of construction selected by the construction contractor, or to safety precautions and programs associated thereto. The Consultant will receive and review maintenance and operating schedules and instructions, operation and maintenance manuals, and guarantees, which are to be assembled by the General Contractor in accordance with the contract documents.

The submittal process will be managed through the COUNTY's E-Builder system. The Consultant will review submittals from the General Contractor (i.e., samples, schedules, and shop drawings) for conformance to the design concept of the project and for compliance with the Contract Documents; and will assemble written guarantees and operating manuals required of the General Contractor. The submittal reviews will be managed to provide timely review and response to the General Contractor's submittals. The Consultant will review and return submittals within the calendar days set forth in the Contract Documents for the project.

10.5 RFIs and RFAs

Requests for Information (RFIs) and Requests for Alternates (RFAs) from the General Contractor will be managed through the COUNTY's E-Builder system. The Consultant will prepare responses to the RFIs and RFAs to provide the field personnel the appropriate level of information relative to the request. The Consultant will respond to general requests for information and/or alternates from the General Contractor to provide supplemental information. The Consultant will issue clarifications to the General Contractor as required to clarify discrepancies in the Contract Documents. Should an RFA require additional design effort by the Consultant, General Contractor shall compensate Consultant for this work. The Consultant shall keep a log showing the receipt and response date of each RFI or RFA.

10.6 Change Order Requests and Work Directives

The Consultant will review and analyze Change Order Requests, whether initiated by the COUNTY or the General Contractor. The Consultant will initiate Change Order Requests only after review and acceptance by the COUNTY.

Consultant review and analysis of Change Order Requests will include scope and pricing information submitted by the General Contractor as part of the request, and will include field review and discussions with the General Contractor and COUNTY regarding the request.

The Consultant will process Change Orders for the project. These services will include, but not be limited to:

- Development of the Change Order documents to include the background, justification, and cost analysis of the Change Orders.
- Negotiation of the Change Orders with the General Contractor
- Preparation of the Change Orders for the COUNTY'S execution
- Assist with Executive Summary preparation
- Other support services as required

10.7 Review Pay Requests

The Consultant, on a monthly basis, will estimate the compensation due the General Contractor by the COUNTY. This estimate will constitute a representation based on such observations and the data comprising the application for payment, that the work has progressed to the level indicated. The Consultant review will include a numerical and mathematical check of quantities, values, percentages of the completed work, schedule, and if applicable, schedule recovery plan.

10.8 Final Inspections

One formal inspection will be conducted jointly with the Discipline Engineers, COUNTY representatives, the General Contractor, and Subcontractors for Substantial Completion and one formal inspection for Final Completion. Additional informal inspections will be conducted by the Consultant during the final stages of construction before Substantial and before Final Completion. A formal punch list of incomplete work will be developed jointly with the Consultant and the COUNTY field representatives after Substantial Completion and will be issued to the General Contractor in accordance with the Contract Documents. Multiple, informal punch lists may be prepared jointly by the Consultant to aid the General Contractor with the closeout of the Project construction.

10.9 Start-Up Services

Consultant will provide services for assistance and monitoring of start-up activities associated with the membrane system.

10.9.1 Factory Acceptance Tests

Contract documents require factory acceptance testing (FAT) of major project components prior to delivery to the construction site. These tests are intended to confirm proper operation and compliance with contract documents. The Consultant will review and provide comments on the protocol submitted by Contractor outlining FAT activities. Consultant will plan for and attend a four-week factory acceptance test for each of the following systems:

- Plant RTU Control Panels: The factory acceptance test will be attended by two electrical/I&C engineers.
- SCADA Servers: The factory acceptance test will be attended by two electrical/I&C engineers.
- Field RTU Control Panels: The factory acceptance test will be attended by two electrical/I&C engineers.

10.9.2 Review of RTU Cut-Over Plans

Consultant shall review the contractor's cut over plans for each significant RTU and new server cabinet. The consultant will provide County and Contractor detailed comments to the contractor's cut over plans including items descriptions, impacts to plant operations, schedule, and foreseeable interruptions of plant process equipment.

10.9.3 Wireless System Testing

Consultant will provide services of an engineer/programmer to check radio signal levels, configuration of main and remote radios, remote radio polling routines, data rates, physical hardware installation including connections, and overall system performance.

10.10 Record Drawings

The Consultant will review the progress of development of the General Contractor's record drawings monthly throughout the course of construction. Upon completion of construction, the Consultant shall produce an end-of-project set of Record Drawings for the COUNTY.

The Consultant will revise the contract drawings to show as-constructed conditions and will furnish one electronic copy, one (1) reproducible Mylar copy, and three (3) original sets to the COUNTY. Record drawings will be provided prior to final completion.

Deliverables for Task 10:

- Monthly Progress and Inspection Reports Status Meeting Notes - one (1) electronic PDF file to be delivered to the COUNTY'S Project Manager.
- Construction Status Meeting Notes - one (1) electronic PDF file to be delivered to each meeting attendee.
- One (1) electronic (PDF) copies of draft and final comments on the construction schedule
- Submittal Review Response – one (1) electronic response (PDF) per submittal and resubmittal
- RFI response – one (1) electronic response (PDF) per RFI
- RFA response – one (1) electronic response (PDF) per RFA
- Change Order – one (1) electronic response (PDF or Work) per change order request
- Pay Request Review comments – one (1) electronic response (PDF) per pay request
- Five (5) electronic (PDF) copies of the Substantial Completion punch list
- Five (5) electronic (PDF) copies of the Final Completion punch list
- Five (5) electronic (PDF) copies of draft and final comments on the membrane system performance test plans
- Five (5) electronic (PDF) copies of draft and final comments on results of the Short-Term Testing reports
- Five (5) electronic (PDF) copies of draft and final comments on results of the Long-Term Testing reports
- Record Drawings
 - Three (3) hard copies of stapled edge bound 24" x 36" drawings, signed/sealed
 - One (1) hard copy of 24" x 36" drawings (Mylar)
 - One (1) compact disc including drawings in DWG and PDF format

WORK ASSIGNMENT ASSUMPTIONS:

Because of the nature of this project, certain assumptions apply to this Scope of Services. To the extent possible, these assumptions are stated within this document and are reflected in the budget.

- COUNTY shall attend all meetings to maintain the progress of the project according to the schedule.

PROJECT SCHEDULE

The contract start date will be the day of the approval of the Work Assignment. In lieu of an attachment detailing the construction phase services schedule, it is noted that the project milestones and deliverables will follow the construction schedule submitted by General Contractor, and reviewed and accepted by Consultant and COUNTY.

COMPENSATION

The table below summarizes the original authorized compensation and requested revision for the individual tasks.

Task No.	Task Description	Previous Contract Amount	Revised Contract Amount	Net Change this CO
1-9	Balance of original WA7	354,851.00	354,851.00	0
10.1	Monthly Status Meetings	0	20,227.76	20,227.76
10.2	Specified Project Meetings	0	56,329.44	56,329.44
10.3	Review of Construction Schedule	0	2,640.00	2,640.00
10.4	Submittal Review	12,480.00	98,560.00	86,080.00
10.5	RFI's and RFA's	3,120.00	44,856.00	41,736.00
10.6	Change Orders and work directives	0	41,196.00	41,196.00
10.7	Review Pay Requests	0	15,216.00	15,216.00
10.8	Final Inspections	15,240.00	28,842.30	13,602.30
10.9.1	Attend Factory Acceptance Tests	10,524.00	90,399.20	79,875.20
10.9.2	Review RTU Cut-Over Plans	0	10,760.00	10,760.00

10.9.3	Wireless System Testing	0	23,731.53	23,731.53
10.10	Final Completion/Record Drawings	4,452.00	43,804.00	39,352.00
	Totals	400,667	831,413.23	430,746.23

WORK ASSIGNMENT ASSUMPTIONS:

Because of the nature of this project, certain assumptions apply to this Scope of Services. To the extent possible, these assumptions are stated within this document and are reflected in the budget.

- COUNTY shall attend all meetings to maintain the progress of the project according to the schedule.

PROJECT SCHEDULE

The contract start date will be the day of the approval of the Work Assignment. In lieu of an attachment detailing the construction phase services schedule, it is noted that the project milestones and deliverables will follow the construction schedule submitted by General Contractor, and reviewed and accepted by Consultant and COUNTY.

January 12, 2021
 WORK ASSIGNMENT NO. 7
 Lake Manatee WTP SCADA System Upgrade
 Change Order No. 2
 Engineering Services During Construction, 2017 Rates - Draft FEE

		Senior Technical Advisor I	Senior Engineer/Scientist II	Project Engineer II	CADD Supervisor	Administrative Assistant	TOTAL LABOR HOURS CAROLLO	CAROLLO TOTAL LABOR	COMPUTER MODELING SERVICES @ \$12/hr	OTHER DIRECT COSTS	Subconsultant, WSW Engineering	Subconsultant Markup, 6%	TOTAL FEE
		\$ 220.00	\$ 181.00	\$ 135.00	\$ 110.00	\$ 81.00							
Lake Manatee WTP SCADA Upgrade													
Construction Phase Services		672	1160	374	112	24	2332	\$ 420,744.00	\$ 1,344.00	\$ 6,474.23	\$ 2,080.00	\$ 104.00	\$ 430,746.23
10.1	Monthly Status Meetings	48	48	0	0	0	96	\$ 19,248.00	\$ -	\$ 979.76	\$ -	\$ -	\$ 20,227.76
10.2	Specified Project Meetings	108	170	0	0	0	278	\$ 54,530.00	\$ -	\$ 1,799.44	\$ -	\$ -	\$ 56,329.44
10.3	Review of Construction Schedule	12	0	0	0	0	12	\$ 2,640.00	\$ -		\$ -	\$ -	\$ 2,640.00
10.4	Submittal Review	184	240	16	0	0	440	\$ 88,080.00	\$ -	\$ -	\$ -	\$ -	\$ 88,080.00
10.5	RFIs	96	96	24	0	0	216	\$ 41,736.00	\$ -	\$ -	\$ -	\$ -	\$ 41,736.00
10.6	Change order requests	96	96	20	0	0	212	\$ 41,188.00	\$ -	\$ -	\$ -	\$ -	\$ 41,188.00
10.7	Review Pay Requests	56	16	0	0	0	72	\$ 15,216.00	\$ -	\$ -	\$ -	\$ -	\$ 15,216.00
10.8	Final Inspections	24	40	0	0	0	64	\$ 12,520.00	\$ -	\$ 1,082.30	\$ -	\$ -	\$ 13,602.30
10.9	Startup Services	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
10.9.1	Factory Acceptance Testing	16	236	234	0	0	486	\$ 77,826.00	\$ -	\$ 2,049.20	\$ -	\$ -	\$ 79,875.20
10.9.2	Review of RTU Cut Over Plans	16	40	0	0	0	56	\$ 10,760.00	\$ -	\$ -	\$ -	\$ -	\$ 10,760.00
10.9.3	Wireless System Testing		128				128	\$ 23,168.00	\$ -	\$ 563.53	\$ -	\$ -	\$ 23,731.53
10.10	Final Completion/Record Drawings	16	40	80	112	24	272	\$ 35,824.00	\$ 1,344.00	\$ -	\$ 2,080.00	\$ 104.00	\$ 39,352.00
Totals - All Tasks		672	1160	374	112	24	2332	\$ 420,744.00	\$ 1,344.00	\$ 6,474.23	\$ 2,080.00	\$ 104.00	\$ 430,746.23

RESOLUTION B-21-055
AMENDING THE ANNUAL BUDGET
FOR MANATEE COUNTY, FLORIDA
FOR FISCAL YEAR 2021

WHEREAS, Florida Statutes 129.06, authorizes the Board of County Commissioners to amend its budget for the current fiscal year as follows:

- a) Appropriations for expenditures in any fund may be decreased and other appropriations in the same fund correspondingly increased, provided the total appropriations of the fund are not changed.
- b) Appropriations from reserves may be made to increase the appropriation for any particular expense in the same fund, or to create an appropriation in the fund for any lawful purpose.
- c) Unanticipated revenues, including increased receipts for enterprise or proprietary funds, may be appropriated for their intended purpose, and may be transferred between funds to properly account for the unanticipated revenue.

NOW, THEREFORE, BE IT RESOLVED by the Board of County Commissioners of Manatee County, Florida that the 2020-2021 budget is hereby amended in accordance with FS 129.06 as described in the description and specified in the budget adjustment batch file listed below:

Department: UTILITY OPERATIONS
Fund: WATER/SEWER CAP. IMPROV.
Description: Transfers \$921,753 from reserves in the Water and Sewer Capital Improvement fund to the Water: Supervisory Control and Data Acquisition (SCADA) Replacement project for change order number two for design and associated overhead cost. This budget amendment is being presented to the Board of County Commissioners along with the change order.

This budget amendment adjusts the FY21-25 CIP.

Batch ID: MH21021A

Reference: BU21000211

ADOPTED IN OPEN SESSION WITH A QUORUM PRESENT AND VOTING THIS 9th DAY OF March 2021.



BOARD OF COUNTY COMMISSIONERS
MANATEE COUNTY, FLORIDA

By: _____
Chairman

ATTEST: Angelina Coloneso
Clerk of Circuit Court

By: Uella Jensen
Deputy Clerk

APPROVED in Open Session

3/9/2021

Manatee County Board of County
Commissioners



Board of County Commissioners March 9, 2021 - Regular Meeting

SUBJECT

EXECUTION OF CHANGE ORDER NO. 2 TO WORK ASSIGNMENT NO. 7 FOR AGREEMENT NO. 16-2334CD WITH CAROLLO ENGINEERS, INC., FOR THE LAKE MANATEE WATER TREATMENT PLANT (WTP) SUPERVISORY CONTROL AND DATA ACQUISITION (SCADA) SYSTEM REPLACEMENT PROJECT AND ADOPTION OF BUDGET RESOLUTION B-21-055

Category

CONSENT AGENDA

Briefings

None

Contact and/or Presenter Information

Contact: Chris Daley, Procurement Project Manager, Financial Management Department, Procurement Division, Ext. 3048

Presenters: Robert Halbach, Project Engineer II, Ext. 7329, and Jeff Streitmatter, Public Works Department, Project Management Division, Ext. 7335

Action Requested

Authorize the Procurement Official, or designee, to execute Change Order No. 2 to Work Assignment No. 7 for Agreement No. 16-2334CD with Carollo Engineers, Inc., for the Lake Manatee Water Treatment Plant (WTP) SCADA System Replacement project in the amount of \$430,746.23, for a revised not-to-exceed amount of \$831,413.23.

Adoption of Budget Resolution B-21-055 amending the annual budget for Manatee County, FL, for fiscal year 2021. This budget amendment adjusts the FY21-25 CIP.

Enabling/Regulating Authority

Manatee County Code of Laws

Background Discussion

Change Order No. 2 to Work Assignment No. 7 for Agreement No. 16-2334CD with Carollo Engineers, Inc. provides an additional \$430,746.23 for additional construction phase services for the Lake Manatee WTP SCADA System Replacement project.

Procurement History

On April 4, 2017, the Board of County Commissioners authorized execution of Agreement No. 16-2334CD with Carollo Engineers, Inc. of Sarasota, FL to provide Utility Engineer of Record services.

On August 31, 2017, Work Assignment No. 7 was executed for a total not-to-exceed amount of \$245,139.00 to provide professional engineering services for the design, commissioning, and construction phase services of a replacement SCADA system using Citect system software.

On July 8, 2019, Change Order No. 1 to Work Assignment No. 7 was executed providing an additional \$155,528.00 to provide additional design services that made a change to the network and server equipment to allow the system to be expandable using an open network protocol standard to all control systems, for a revised not-to-exceed amount of \$400,667.00.

Change Order No. 2 to Work Assignment No. 7 provides an additional \$430,746.23 for additional construction phase services for the Lake Manatee WTP SCADA System Replacement project that addresses the redesign changes made in Change Order No. 1, for a revised not-to-exceed amount of \$831,413.23.

Budget Resolution B-21-055 transfers \$921,753.00 from reserves in the Water and Sewer Capital Improvement fund to the Water: Supervisory Control and Data Acquisition (SCADA) Replacement project for change order number two for design and associated overhead cost.

Attorney Review

Not Reviewed (Utilizes exact document or procedure approved within the last 18 months)

Other (if applicable)

Reviewing Attorney

Instructions to Board Records

Original to Board Records.

Signed copies of Change Order to:

- Carollo Engineers, Inc.: Robert Cushing (rcushing@carollo.com)
- Public Works Department: Robert Halbach (robert.halbach@mymanatee.org) and Tia Saputo (tia.saputo@mymanatee.org)

- Procurement Division: Chris Daley (chris.daley@mymanatee.org) / (approvedeagendas@mymanatee.org)

Signed copies of resolution to: budget@mymanatee.org

Cost and Funds Source Account Number and Name

\$430,746.23 - Utility Rates in project 6042370

Distributed also to: L. Stephens, S. Flowers, V. Ayles, R. Hamilton, D. Heaton, J. Shepard, by RT for VT, 3/11/21

Amount and Frequency of Recurring Costs

N/A

