

TASK ORDER APPROVAL FORM

CONTRACT #: C18-2679-WS

TASK ORDER #: 13

TASK ORDER AMOUNT: \$ 65,400

CONTRACT: C18-2679-WS
CH2M HILL ENGINEERS, INC.
MASTER SERVICE ENG AGREEMENT
EXPIRES: 09/30/2022

OFFERED BY CONSULTANT:

CH2M HILL Engineers, Inc

FIRM'S NAME

David Stejskal

REPRESENTATIVE'S PRINTED NAME

David Stejskal

Digitally signed by David Stejskal
DN: c=US, E=david.stejskal@jacobs.com, O=Jacobs Engineering Group, Inc., CN=David Stejskal
Date: 2022.07.15 11:02:20-05'00'

SIGNATURE

Vice-President

TITLE

7/15/2022

DATE

**RECOMMENDED FOR APPROVAL
(Department Director)**

**APPROVED BY OKALOOSA COUNTY
(Per Purchasing Manual) Table 1**

Jeff Littrell

SIGNATURE

Digitally signed by Jeff Littrell
DN: cn=Jeff Littrell, ou=Okaloosa County Water & Sewer System,
ou=Okaloosa County, c=US, email=j.littrell@okaloosacounty.com,
o=OKS
Date: 2022.07.20 14:37:18 -05'00'

TITLE

07/20/2022

DATE

Jeffrey A Hyde

PURCHASING MANAGER

Digitally signed by Jeffrey A Hyde
Date: 2022.07.20 15:20:24 -05'00'

DATE

Faye Douglas

OMB Director/DATE

Digitally signed by Faye Douglas
Date: 2022.07.29 10:37:27 -05'00'

DATE

John Hofstad

COUNTY ADMINISTRATOR (if applicable)

Digitally signed by John Hofstad
Date: 2022.07.29 11:01:06 -05'00'

CHAIRMAN (if applicable)

DATE

DATE

Task Order 13

THIS TASK ORDER IS ISSUED PURSUANT TO THE AGREEMENT FOR CONSULTING SERVICES DATED FEBRUARY 6, 2018, FOR THE BOARD OF COUNTY COMMISSIONERS OF OKALOOSA COUNTY, FLORIDA, WHICH IS INCORPORATED HEREIN BY THIS REFERENCE, WITH RESPECT TO:

Design for Lift Station and Well Electrical Design Standards

Article A.Purpose

Introduction

Okaloosa County (the "COUNTY") provides water and sewer services to residences and businesses within Okaloosa County, Florida. This Task Order (TO) was requested by the COUNTY for CH2M HILL Engineers, Inc, a wholly owned subsidiary of Jacobs Engineering Group Inc. (Jacobs) to develop Electrical Design Standards for the COUNTY's lift stations and distribution wells. Jacobs' role will be to facilitate the COUNTY's selection of design standards, and details. The Electrical Design Standards will provide guidance for designing and constructing new process facilities and rehabilitating existing facilities. This will help ensure that future projects incorporate the COUNTY's standards into the projects and will improve the standardization of design and provide guidance for designers working on COUNTY projects.

Article B.Scope of Services

Task 1 – Kickoff Meeting

Jacobs will review information provided by the COUNTY ahead of the Kickoff Meeting, such as information on the system, past standards/drawings, and other raw data provided by the COUNTY.

Jacobs will conduct a Kickoff Meeting with the COUNTY attended by Jacobs PM and Electrical Lead. As a part of the meeting, the overall project objectives, schedule, success factors, communication plan, and other pertinent items will be discussed. Jacobs will also visit several existing facilities with the COUNTY to familiarize themselves with the COUNTY's existing facilities and infrastructure. Jacobs will prepare a meeting agenda with discussion topics and data needs. Key personnel from the COUNTY are expected to attend to provide detailed assessments of the facilities and to provide direction in the selection of design criteria.

A visit to representative sites will be conducted following the meeting. Jacobs will prepare meeting minutes to document key information and decisions made. The minutes will be distributed to the COUNTY for acceptance.

Deliverables

- Meeting Minutes

Task 2 – Lift Station Electrical Design Standards

The purpose of this task is to develop Electrical Design Standards for the COUNTY's lift stations. Four standard control panel design drawing packages will be prepared under this task. The first two drawing packages will consist of duplex lift stations with low and medium sized pumps. The next two drawing packages will consist of triplex lift stations with low and medium sized pumps. The

horsepower separation between the low and medium sized pump design drawings will be discussed and selected at the Kickoff Meeting. The drawing packages will be designed with provisions for both 480V and 240V 3phase systems. Lift stations packages will consist of the following sheets:

- Standard Riser Diagram and Power Plan
- Pump Control Panel Diagram (up to 3 sheets)
- Control Panel Layout Detail
- Control Panel Deadfront Layout Detail
- Control Panel Enclosure Mounting and Standard Details

The Riser Diagram and Power Plan drawing sheet will consist of a standard one-line diagram with a reference table for minimum conductor sizes required based on pump HP and typical conductor lengths.

The lift station control panel drawings will be prepared around across-the-line and/or soft start motors. The design will also include accommodations for either a permanent generator feed with transfer switch or portable generator receptacle as directed by the COUNTY. A detail will be included with standard generator size recommendations based on pump HP.

Additionally, a standard package control systems specification will be prepared. The specification will document the requirements for the electrical equipment components associated with the control panels.

Jacobs will submit to the COUNTY a draft set of the Standard Control Panel Design Drawings and Specifications for review. A design review meeting will be conducted to review the COUNTY's review comments. Up to two (2) Jacobs staff will attend the meeting with the Jacobs lead electrical engineer joining the meeting virtually. Following the meeting Jacobs will incorporate the accepted comments provided by the COUNTY into the final Lift Station Electrical Design Standards.

Deliverables

- Draft Standard Control Panel Design Drawing Package for Duplex Lift Stations with Small Pumps
- Draft Standard Control Panel Design Drawing Package for Duplex Lift Stations with Medium Pumps.
- Draft Standard Control Panel Design Drawing Package for Triplex Lift Stations with Small Pumps
- Draft Standard Control Panel Design Drawing Package for Triplex Lift Stations with Medium Pumps.
- Draft Package Control Systems Standard Specification for Lift Stations
- Final Standard Control Panel Design Drawing Package for Duplex Lift Stations with Small Pumps
- Final Standard Control Panel Design Drawing Package for Duplex Lift Stations with Medium Pumps.
- Final Standard Control Panel Design Drawing Package for Triplex Lift Stations with Small Pumps
- Final Standard Control Panel Design Drawing Package for Triplex Lift Stations with Medium Pumps.
- Final Package Control Systems Standard Specification for Lift Stations

Task 3 – Well Electrical Design Standards

The purpose of this task is to develop Electrical Design Standards for the COUNTY's distribution wells. Two standard control panel design drawing packages will be prepared under this task for wells with medium-sized and higher-sized horsepower pumps. The horsepower separation between the medium-sized and higher-sized pump design drawings will be discussed and selected at the Kickoff Meeting. Both drawing packages will be designed around 480V 3-phase well pump motors and will consist of the following sheets:

- Standard Riser Diagram and Power Plan
- Pump Control Panel Diagram (up to 3 sheets)
- Control Panel Layout Detail
- Control Panel Deadfront Layout Detail
- Control Panel Enclosure Mounting and Standard Details

The Riser Diagram and Power Plan drawing sheet will consist of a standard one-line diagram with a reference table for minimum conductor sizes required based on pump HP and typical conductor lengths.

The control panel drawings will be prepared around soft starts or variable frequency drives, to be discussed more during the Kickoff Meeting. The design will also include accommodations for a permanent generator feed with transfer switch. A detail will be included with standard generator size recommendations based on pump HP.

Additionally, a standard package control systems specification will be prepared. The specification will document the requirements for the electrical equipment components associated with the control panels.

Jacobs will submit to the COUNTY a draft set of the Standard Control Panel Design Drawings and Specifications for review. A design review meeting will be conducted with the COUNTY to review the comments for the well standard design documents in conjunction with the lift station standard design documents. Following the meeting Jacobs will incorporate the accepted comments provided by the COUNTY into the final Well Electrical Design Standards.

Following submission of the final Well Electrical Design Standards the COUNTY has indicated their intention to use these standards to upgrade one public water supply well as a pilot rehabilitation project. Following construction, Jacobs will update the design standards based on lessons learned as directed by the COUNTY.

Deliverables

- Draft Standard Control Panel Design Drawing Package for Wells with Medium-Sized Motors
- Draft Standard Control Panel Design Drawing Package for Wells with Higher-Sized Motors
- Draft Package Control Systems Standard Specification for Wells
- Final Standard Control Panel Design Drawing Package for Wells with Medium-Sized Motors
- Final Standard Control Panel Design Drawing Package for Wells with Higher-Sized Motors
- Final Package Control Systems Standard Specification for Wells

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- Revised Final Standard Control Panel Design Drawing Package for Wells with Medium-Sized Motors
 - Revised Final Standard Control Panel Design Drawing Package for Wells with Higher-Sized Motors
 - Revised Final Package Control Systems Standard Specification for Wells

Assumptions and Specific Conditions

The following assumptions have been taken into consideration in the preparation of this Scope of Services and compensation. Should deviations from these assumptions be required to deliver the services described in this Scope of Services, the scope of work and compensation shall be modified accordingly and approved by COUNTY in writing prior to executing the changes to the Scope of Services.

- The Scope of Services assumes Jacobs will not be responsible for any Instrumentation and Controls (I&C) design including SCADA telemetry system design and details. The COUNTY will be responsible for providing the I&C design and details for Jacobs to incorporate the necessary electrical components into the control panel design for integration with the telemetry system.
- The Electrical Design Standard documents provided as described above for lift stations will only be prepared for soft start motors. Additional Electrical Design Standards for variable frequency drives are not included in this project.
- The Electrical Design Standard documents prepared for the Wells will only be designed around single, vertical turbine well pump facilities. Design Standards for booster pumping stations is not included in this project.
- Electrical Site Plans and Grounding Plans are not included in this project.
- The concepts that will be established in the Kickoff Meeting will not be modified after accepted by the COUNTY. Modification to these concepts may result in an adjustment in the scope of services and compensation.
- This Task Order fee includes a budget of \$5,000 to prepare the Revised Final Well Design document. This assumes the required revisions are minor in nature and do not require extensive redesign.

Article C. Compensation Provisions

As compensation for providing the services described in this Task Order 13, the COUNTY shall pay Jacobs in accordance with Section 7 – Amount and Method of Payment of the Agreement. Compensation will be on time and materials basis, according to Exhibit A of the Agreement. Jacobs will keep the COUNTY informed of progress so that the budget and/or work effort can be adjusted if found necessary.

A breakdown by task is summarized below:

TABLE 2
Compensation per Task

Task	Fee (\$)
Task 1 – Kickoff Meeting	\$5,500
Task 2 – Lift Station Electrical Design Standards	\$32,800
Task 3 – Well Electrical Design Standards	\$27,100
Total	\$65,400

The fee by task shown in Table 2 is based on immediate authorization to proceed.

Article D. Period of Service:

The schedule for the Project within this Task Order is as follows:

Authorization to Proceed: Upon Execution of the Task Order
Termination of Task Order: September 30, 2022 or until completed

Article E. Authorized Representatives

The Authorized Representatives designated below are authorized to act with respect to this Task Order. Communications between the parties and between Jacobs’ subcontractors shall be through the following Authorized Representatives:

For Okaloosa County Water & Sewer:	For CH2M HILL Engineers, Inc, a wholly owned subsidiary of Jacobs Engineering Group Inc.:
Name: Jeff Littrell, Water and Sewer Director	Name: David Stejskal, Vice-President
Address: 1804 Lewis Turner Blvd., Suite 300, Fort Walton Beach, Florida 32547	Address: 25 West Cedar Street, Suite 350 Pensacola, FL 32502
Telephone: (850) 651-7172	Telephone: (251) 591-9248

Jeff Littrell

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***** END *****