

## TASK ORDER 2-17 SWR

### ENGINEERING SERVICES FOR THE DESIGN, BID PHASE, and SERVICES DURING CONSTRUCTION FOR THE EFFLUENT PUMP FP-3-1 CONTROL AND VFD REPLACEMENT AT THE RICHARD A. HEYMAN ENVIRONMENTAL PROTECTION FACILITY (WWTP)

This TASK ORDER 2-17 SWR is issued under the terms and conditions of the AGREEMENT TO FURNISH GENERAL ENGINEERING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and CH2M HILL, Engineers, Inc. ("CONSULTANT") dated November 19, 2012 which is incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services that the CONSULTANT agrees to furnish are summarized on the attached statement entitled TASK ORDER 2-17 SWR SCOPE OF SERVICES. The Scope of Services defines the work effort anticipated for the Task Order.

B. TIME OF COMPLETION

Work under this Task Order will begin immediately following acceptance and be completed expeditiously subject to coordination with the City of Key West staff.

C. COMPENSATION

Compensation for the labor portions of TASK ORDER 2-17 SWR, Task A and B will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for the labor portions of Tasks C and all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 5, Paragraph 5.1.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled "TASK ORDER 2-17 SWR COMPENSATION".

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER 2-17 SWR, and authorize the CONSULTANT to proceed at the direction of the City's representative in accordance with Article 3, SCOPE OF SERVICES. Start date for this Project will be no later than ten (10) days after execution of this authorization.

For CH2M HILL, Engineers Inc.

For CITY OF KEY WEST

By: \_\_\_\_\_  
Didier Menard, P.E.  
Vice President

By: \_\_\_\_\_  
Jim Scholl  
City Manager

\_\_\_\_\_  
Sean McCoy, P.E.  
Key West Project Manager

Dated the \_\_\_\_ day of \_\_\_\_\_, 20\_\_

ATTEST: \_\_\_\_\_

# **TASK ORDER 2-17 SWR**

## **ENGINEERING SERVICES FOR THE DESIGN, PERMITTING, AND BID PHASE SERVICES FOR THE EFFLUENT PUMP FP-3-1 CONTROL AND VFD REPLACEMENT**

### **SCOPE OF SERVICES**

#### **Project Description**

In 2015, the CONSULTANT, developed preliminary design documents for the replacement of Effluent Pump FP-3-1 VFD drive, and PLC controls. Before this project could be completed and bid, one of two VFD drives failed, and needed to be replaced under an emergency purchase. Having resolved the immediate need, the project was placed on hold. The Project has been resurrected and proposes the replacement of the Effluent Pump FP-3-1 Control and VFD located at the City of Key West, Florida WWTP. The Project consists of a new control system for Effluent Pump FP-3-1, programming of the system, associated electrical and instrumentation, installation of an Allen Bradley Variable Frequency Drive with one Power Flex 755 AC Drive, and an ADD ALTERNATE to provide but not install one Allen Bradley Variable Frequency Drive with one Power Flex 755 AC Drive.

#### **Purpose**

The CITY has requested that the CONSULTANT provide engineering services for the preparation of bid ready documents, bid phase services, and limited services during construction for the VFD and PLC replacement for effluent pump FP-3-1. This Task Order describes the CONSULTANT's Scope of Services. Specific activities to be performed under this Task Order include:

- Provide 90% design documents (Specifications and Drawings) with submission of 90% documents for review
- Provide bid documents (Specifications and Drawings) for bidding
- Bid Phase Services
- Services During Construction

#### **Scope of Services**

The following tasks describe the activities to be performed and the work products to be prepared by the CONSULTANT.

##### **Task A -Design**

###### **Subtask A.1 - 90% Design Documents**

The CONSULTANT will perform the work necessary to review the 2015 Preliminary Design Documents, complete the design to 90% for review by the City. The CONSULTANT will

submit 90% design review documents to the CITY and conduct a design review meeting with the CITY prior to the conclusion of this task.

Specific work activities in this task are identified below:

- Conduct Kickoff Meeting with City and OMI.
- Prepare 90% design documents, which include legal and technical specifications and drawings.
- Based on the 90% documents, prepare a probable construction cost estimate.
- Submit Cost Estimate, and 90% design documents to the CITY.
- Conduct 90% review meeting and incorporate review comments from CITY into the Bid Documents. Up to TWO CONSULTANT staff will attend the meeting, all others will be available by telephone. ,

### **Deliverables**

The following deliverables will be provided under this Task:

- Kickoff Meeting Minutes (digital)
- Four (4) copies of detailed design (90%), which include legal and technical specifications, and drawings (two (2) of these copies are for review by OMI).
- Review Meeting Minutes (digital)

### **Subtask A.2 – Bid Ready Documents**

During this subtask, the CONSULTANT will complete the technical design based on the outcome of the 90% Design Review. This will involve incorporating the CITY's comments from the 90% review meeting. At the end of this subtask the design documents will be considered complete and ready for bidding.

Specific work activities in this task are identified below:

- Prepare Bid Documents

### **Deliverables**

- Four (4) copies of Bid Documents, electronic copy of Bid Documents (PDFs) for upload to DemandStar, and one (1) copy of the Invitation to Bid in Word.

### **Task B–Bid Phase Services**

Bidding services are based on a Bid Period of 30 days. The CONSULTANT will provide the following services to the CITY to assist in the bidding process:

- Coordinate with CITY to provide contract documents, in PDF format, to DemandStar for bidding.
- All direct communications with bidders on matters related to the technical aspects of the design will be handled directly by the CONSULTANT.
- Coordinate and conduct one pre-bid meeting to familiarize each bidder with the scope of work and to answer any questions that may arise.

- Issue up to two (2) ADDENDA, if required.
- Bids will be received, opened, and read aloud by the CITY at the designated time and location.
- Review and evaluate bids for compliance and completeness. The CONSULTANT will prepare a recommendation of award letter for the CITY identifying the successful bidder.
- After award, the CONSULTANT will distribute to the successful contractor three (3) sets of contract documents for execution. The contractor will be directed to return these sets of documents to the CONSULTANT for compliance review of the bidding requirements. After the CONSULTANT reviews the contract documents, these three sets of documents will be sent to the CITY for final review and signatures.
- Prepare conformed contract documents for use by CITY, CONSULTANT, and Contractor during construction.

Bid services will be considered complete upon the CONSULTANT's review and forwarding of the Contractors executed documents to the CITY, and submittal of conformed documents to the CITY.

### **Deliverables**

- Pre-bid meeting minutes (digital)
- Recommendation of award letter (digital)
- Three (3) copies of Contract Documents for execution
- Six (6) copies of 11 x 17 Conformed Contract Documents (two (2) of these copies are for OMI), one (1) full size set of drawings and two (2) CD's containing specifications and drawings in PDF format.
- Three (3) copies of Signed and Sealed documents for submission by contractor to City of Key West building department for building permit application if required.
- One (1) full size set of drawings, and one (1) CD containing specifications and drawings in PDF format to awarded contractor

### **Task C-Services During Construction**

The CONSULTANT will perform limited construction phase services listed in this Task Order for a construction period that is estimated to be Nine (9) months. The CITY will be responsible for full-time resident observation.

The CONSULTANT will perform the following activities during this portion of the project.

- The CONSULTANT will coordinate and conduct one pre-construction meeting and distribute meeting minutes.
- At the request of the CITY, coordinate and conduct monthly progress meetings and prepare and distribute meeting minutes; attendance at up to four (4) meetings is assumed.

- At the request of the CITY, coordinate and conduct up to three (3) additional meetings as required.
- At the request of the CITY, review up to sixty (60) shop drawings and other construction related submittals.
- At the request of the CITY, the CONSULTANT will provide up to 146 hours to assist in the technical interpretations of the drawings, specifications, and contract documents, and evaluate requested deviations from the approved design or specifications.
- Conduct up to four (4) specialty inspections at the construction site, by a Sr. Construction Inspector/Design Engineer.
- Provide final punchlist inspection while performing on-site start-up and programming assistance, one (3) three-day site visit by two CONSULTANT personnel assumed. *PM & electrical*
- Prepare record drawings based on mark-ups from the CONTRACTOR.

### **Deliverables**

- Pre-construction meeting minutes (digital)
- Progress meeting minutes (digital)
- Additional meeting minutes (digital)
- Reviewed shop drawings (digital)
- Request for Information (digital)
- punch list(s) (digital)
- One (1) full size copy, two (2) 11" x 17" copies, and one (1) electronic copy of record drawings

## **Assumptions**

The following assumptions were used in the development of this Task Order:

- The design work on this project will be completed by the end of the first quarter of calendar year 2017.
- The design will be based on the federal, state, and local codes and standards in effect at the start of the project. Any changes in these codes may necessitate a change in scope.
- The design documents will be prepared for a single construction contract.
- The CONSULTANT's master specifications will be used as the basis for all technical sections in Divisions 1 through 49. The CONSULTANT's master specifications incorporating CITY requirements will be used for General Conditions, Supplemental Conditions, and other front end documents.
- Legal, easement, or plat surveys are not included in the scope of work. If additional property is required it shall be the responsibility of the City to obtain.
- This Task Order assumes that no FDEP permit is required.

- This Task Order does not include any City of Key West Building Department permit applications.
- The contract will be awarded after the first bidding process. Re-bidding will be considered as an “Additional Services”.

## **Obligations of the CITY**

To assist meeting schedule and budget estimates contained in this proposal, the CITY will provide the following:

- Prompt review and comment on all deliverables (within 10 working days of receipt).
- Facilitate access to any required facilities.
- Prompt response to data requests
- Attendance of key personnel at meeting as requested.

## **Additional Services**

The CONSULTANT will, as directed, provide additional services that are related to the project but not included within this Scope of Services. These and other services can be provided, if desired by the CITY, as an amendment to the Task Order. Work will begin for the Additional Services after receipt of a written notice to proceed from the CITY. Additional services may include, but are not limited to, the following:

- Re-bidding any, or all, portions of this project.
- Permitting through Florida Department of Environmental Protection if required

## **Compensation**

The estimated compensation for TASK ORDER NO 2-17 SWR, is shown on Attachment A entitled TASK ORDER NO. 2-17 SWR, COMPENSATION.

## **Completion Dates**

- 90% Design: 8 weeks after Kick-off meeting
- Bid Documents: 2 weeks after 90% review meeting and receipt of CITY’s comments
- Bid Phase: Start at publication of Invitation to Bid and ends two weeks after receipt of contract documents from Contractor for execution.
- Services During Construction: 9 months after Notice to Proceed

## **Attachment A**

### Compensation

**TASK ORDER NO. 2-17 SWR, COMPENSATION**

Staff	ST/SPM	PM/ES	PE	T5	Spec Pr	SPA
Hourly Rate	\$170.00	\$157.00	\$135.00	\$113.00	\$89.00	\$67.00

							Total Hours	Shipping	Travel
<b>Task A Design</b>									
<b>A.1.90% Design</b>									
Kick off meeting	5					2	5		
90% Design	6	14	6	4	6		30	\$ 50.00	
90% review meeting/responses	2	2					4		
	<b>13</b>	<b>16</b>	<b>6</b>	<b>4</b>	<b>6</b>	<b>2</b>	<b>39</b>		
	<b>\$ 2,210.00</b>	<b>\$ 2,512.00</b>	<b>\$ 810.00</b>	<b>\$ 452.00</b>	<b>\$ 534.00</b>	<b>\$ 134.00</b>	<b>\$ 6,652.00</b>	<b>\$ 50.00</b>	
<b>A.2.Final Design</b>									
Bid Document Prep	20	16		10	10	2	58		
Bid Doc review meeting/responses	6	4				2	12		
Bid Documents Final	4	8		10	4	2	28	\$ 50.00	
	<b>30</b>	<b>28</b>	<b>0</b>	<b>20</b>	<b>14</b>	<b>6</b>	<b>98</b>		
	<b>\$ 5,100.00</b>	<b>\$ 4,396.00</b>	<b>\$ -</b>	<b>\$ 2,260.00</b>	<b>\$ 1,246.00</b>	<b>\$ 402.00</b>	<b>\$ 13,404.00</b>	<b>\$ 50.00</b>	
<b>Task C Bid Phase Services</b>									
Pre-bid meeting	4						4		
RFI/Response to bidders/addenda	6	8		1	4	2	21		
Bid opening/Evaluation/award ltr	4					2	6		
Execute contract documents	6	4		6	4	4	24		
	<b>20</b>	<b>12</b>	<b>0</b>	<b>7</b>	<b>8</b>	<b>8</b>	<b>55</b>		
	<b>\$3,400.00</b>	<b>\$1,884.00</b>	<b>\$0.00</b>	<b>\$791.00</b>	<b>\$712.00</b>	<b>\$536.00</b>	<b>\$7,323.00</b>	<b>\$0.00</b>	
<b>Task D Construction Phase Services</b>									
Pre-Con Meeting	6	2				1	9		
Progress meetings	22					4	26		
Submittals	4	18				4	26	\$ 100.00	
RFI/Change Orders	2	8				2	12		
Site Visits	8	24					32		
Record Drawings	4	4		8			16	\$ 50.00	\$ 500.00
Closeout/Startup	8	40				2	50		\$ 2,200.00
	<b>54</b>	<b>96</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>13</b>	<b>171</b>		
	<b>\$9,180.00</b>	<b>\$15,072.00</b>	<b>\$0.00</b>	<b>\$904.00</b>	<b>\$0.00</b>	<b>\$871.00</b>	<b>\$26,027.00</b>	<b>\$150.00</b>	<b>\$2,700.00</b>
							<b>Total Hours</b>	<b>363</b>	
							<b>Subtotal Cost</b>	<b>\$ 53,406.00</b>	<b>\$ 250.00 \$ 2,700.00</b>
							<b>TO 2-17 Total</b>	<b>\$ 56,356.00</b>	