#### **WORK ORDER 4-17 PORTS**

# ENGINEERING SERVICES FOR THE IMPROVMENTS TO MALLORY SQUARE T-PIER AND BREASTING DOLPHINS

This WORK ORDER is issued under the terms and conditions of the AGREEMENT TO FURNISH GENERAL CONSULTING SERVICES TO THE CITY OF KEY WEST ("AGREEMENT") between the City of Key West ("CITY") and CH2M HILL Consultants, 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 WORK ORDER 4-17 PORTS SCOPE OF SERVICES. The Scope of Services defines the work effort anticipated for the WORK ORDER.

#### B. TIME OF COMPLETION

Work under this WORK 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 WORK ORDER 4-17 PORTS, Task A, will be on a lump sum fee basis as stipulated in Article 5, Paragraph 5.1.1 of the AGREEMENT. Compensation for all expenses of WORK ORDER 4-17 PORTS, Tasks B, and C 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 WORK ORDER 4-17 PORTS COMPENSATION.

#### D. ACCEPTANCE

By signature, the parties each accept the provisions of this WORK ORDER 4-17 PORTS, and authorize the CONSULTANT to proceed at the direction of the City's representative in accordance with Article 1, SCOPE OF SERVICES. Start date for this Project will be no later than ten (10) days after execution of this authorization.

For CH2M HILL, Consultants Inc.	For CITY OF KEY WEST
By: Sirpa H. Hall, P.E. Senior Business Vice President	By: Jim Scholl City Manager
Sean McCoy, P.E. Key West Program Manager	Dated the 4 day of Arthus 7 20 UT  ATTEST: Augela Bestate 1

#### **WORK ORDER 4-17 PORTS**

# CONSULTANTING SERVICES FOR THE IMPROVMENTS TO MALLORY SQUARE T-PIER AND BREASTING DOLPHINS

## **SCOPE OF SERVICES**

## **Project Description**

As the City continues to address their needs to securely dock cruise ships and other vessels at the Mallory Wharf and to use the existing infrastructure as part of the berthing plan for passenger and crew access, the City has identified improvements that must be made. Recent improvements to the eastern most section of the T-Pier have been completed, and the City has decided to replace the mooring hardware on the western section, as well as the three (3) breasting dolphins surrounding it.

This WORK ORDER 4-17 Ports includes Inspection, design improvements, and production of Bid Ready Documents of the older section of the T-Pier, and 3 surrounding breasting dolphins.

## **Purpose**

The purpose of this WORK ORDER is to address deteriorating conditions of the T-Pier, and three breasting dolphins, by performing a pre-design inspection, designing improvements, and producing bid documents. Once the City selects a contractor, CH2M will provide limited services during construction, as described below.

## **Scope of Service**

The scope of services provided below addresses the work to be completed for the project; and includes Task A-Background Investigation and Design.

## Task A - Initial Inspection and Design

Under this task, CONSULTANT will prepare Construction Documents including Drawings, Technical Specifications and an Estimate of Probable Construction Cost for the improvements to three (3) Breasting dolphins, and the western section of the T-Pier as described above (Project Description).

Prior to commencing design of improvements, CONSULTANT will conduct an on-site visual, above waterline evaluation of the structures to determine the extent of the repairs required. The On-Site evaluation will follow the kick-off meeting and will consist of a four (4) hour on-site review of the general condition of the Breasting Dolphins and T-Pier.

 CONSULTANT will hold a brief waterside project kickoff, and begin the onsite evaluation. This evaluation will be visual only, and does not include materials sampling or testing.

- Based upon observations conducted during the evaluation, CONSULTANT will prepare Contract/Construction Documents and applicable Technical Specifications for the improvements to three (3) Breasting dolphins, and the western section of the T-Pier as described above (Project Description). Anticipated improvements are limited to Bollards, Fenders, Ladders, Platforms, railings, and may include superficial (aesthetic) concrete rehabilitation.
- CONSULTANT will identify any areas that, in CONSULTANTS opinion, require
  additional testing to determine extent of reinforcement corrosion, and/or, load rating of
  existing mooring facility.
- CONSULTANT will prepare an Estimate of Probable Construction Cost for the project.

### Deliverables and Schedule (Task A)

CONSULTANT will provide the following Task A Deliverables as listed below. CONSULTANT will provide CITY with the Deliverable at the milestone level of detail as follows:

- Photographs and Video taken during visual evaluation will be submitted digitally on CD.
- 90% Construction Documents Submittal; Two 11 x 17 drawing sets (4 design drawings are assumed for drawing package, and two (2) 8 ½ x 11 Specifications manuals, estimate of probable cost and the Kick Off Meeting Minutes plus one (1) CD with PDFs of each. Milestone will be delivered within 6 (six) calendar weeks of Kick off Meeting.
- Based on the 90% document review, address CITY comments and prepare bid documents.
- Submit Digital bid documents to the CITY, for upload to DemandStar.

## **WORK ORDER Assumptions**

The following assumptions were used in the development of this WORK ORDER

- No Destructive material sampling or testing will be conducted.
- Any permits required will be obtained by the CITY including, but not limited to Building and Environmental Permits. It is assumed project is maintenance work and will not require state or federal permits.
- During pre-design evaluation, CITY will provide boat or barge access to the mono-piles and fenders that are not readily reachable by land.
- CONSULTANT will include Proof Load Testing requirements in the technical specifications, to be performed by awarded contractor, for all new Bollards.
- Work is based on all existing T-Pier and Breasting Dolphin equipment hardware information being provided to the CONSULTANT by CITY in electronic format including CAD files, surveys and geotechnical reports.
- The design work on this project will be completed in calendar year 2017.
- The CONSULTANT'S master specifications will be used as the basis for all technical sections in Division 1 through 49.

- General Conditions, Supplemental Conditions, and other front end documents will be provided by the CITY.
- The CITY will pay for all permit application fees.
- The construction contract will be awarded after the first bidding process. Re-bidding is not considered part of this WORK ORDER.

## **Obligations of the CITY**

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

- City will provide boat and pilot for initial inspection for above waterline portions of the evaluation. 4 hours assumed.
- CITY will provide all legal, easement, or plat survey and/or acquisitions required for additional property necessary to complete the project.
- Prompt review and comment on all deliverables (within 10 working days of receipt).
- The City will coordinate and implement all Public involvement activities.
- Facilitate access to any required facilities
- Attendance of key personnel at meetings as requested
- The CITY will provide available drawings and manufacturer's information for the existing bollards, fenders and structures being improved.
- Payments of all permit application fees.

#### **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 WORK 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:

- Additional design services if requested by the City
- Mobilization of Commercial Dive team for underwater pile evaluation.
- Environmental Permitting services; Application, Coral community relocation, and/or Environmental studies or analyses.
- Bid Phase Services
- Construction Phase Services
- Any labor and expenses required to address construction claims, unforeseen subsurface considerations or additional construction time requested by the CONTRACTOR or OWNER

## Compensation

The estimated compensation for WORK ORDER 4-17 PORTS is shown on Attachment A entitled WORK ORDER 4-17 PORTS, COMPENSATION.

# Attachment A WORK ORDER 4-17 PORTS COMPENSATION

Tasks								
Title	Senior Project Manager	Sr. Technologist	Estimator (Principal Technologist)	Technician VI	Technician VI Spec Processor	Senior Project Assistant	Expenses (Travel/Repro/ Ship)	Task/Line Item Subtotal
Rate	\$ 157.00	\$ 170.00	\$ 186.00	\$ 118.00	\$ 89.00	\$ 67.00		
TASK A - Initial Inspection and Design								
A.1 - Initial Inspection -								
Project Kickoff / Pre-Design Site Visit (One Trip)	4	4					\$50.00	œ
Travel Time		8					\$250.00	œ
Record collecting / organizing info	1	2				4		7
Hours Subtotal	5	14	0	0	0	4		23
Cost Subtotal	\$ 785.00	\$ 2,380.00	\$	\$ -	- \$	\$ 268.00	\$300.00	\$ 3,733.00
A.2 - Design Phase								
Design Documents / Sketches and Coordination	8	32	4	32	10	9	\$100.00	92
Design Meeting and Coordination (Assumes 1 additional site visit)	4	12						16
Hours Subtotal	12	44	4	32	10	9		108
Cost Subtotal	\$ 1,884.00	\$ 7,480.00	\$ 744.00	\$ 3,776.00	\$ 890.00	\$ 402.00	\$100.00	\$ 15,276.00
Total Hours by Per Diem Rate	17	28	4	32	10	10		
Total Fee Estimate by Per Diem Rate	\$ 2,669.00	\$ 9,860.00	\$ 744.00	\$ 3,776.00	\$ 890.00	\$ 670.00		
,							WO Total Labor	\$ 18,609.00
						WO	WO Total Expenses	\$400.00
						W04-1	WO 4-17 Contract Total \$ 19,009.00	\$ 19,009.00