TASK ORDER 3-18 PORTS

MALLORY SQUARE MODERNIZATION TO CRUISE SHIP MOORING FACILITIES FEASIBILITY STUDY

This TASK ORDER 3-18 PORTS 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 3, 2017 which is incorporated herein by this reference.

A. SCOPE OF SERVICES

Specific services which the ENGINEER agrees to furnish are summarized on the attached statement entitled TASK ORDER 3-18 PORTS "SCOPE OF SERVICES." The "Scope of Services" defines the work effort anticipated for the Task Order.

This Task Order, when executed, shall be incorporated in and shall become an integral part of the November 3, 2017, Master Agreement.

B. TIME OF COMPLETION

Work under this Task Order will begin immediately following acceptance and completed expeditiously subject to coordination with the City of Key West staff. Work may be performed at any time as requested by the CITY within 12 months after the date of execution of this Task Order, at which time the Task Order will expire.

C. <u>COMPENSATION</u>

Compensation for the labor portions of TASK ORDER 3-18 PORTS, Tasks A and B will be on a lump sum fee basis as stipulated in Article 2, Paragraph 2.1 of the AGREEMENT. Compensation for all expenses will be on a Cost Reimbursable-Per Diem basis as stipulated in Article 2, Paragraph 2.2 of the AGREEMENT. The estimated compensation is shown on the attached statement entitled TASK ORDER 3-18 PORTS COMPENSATION.

D. ACCEPTANCE

By signature, the parties each accept the provisions of this TASK ORDER 3-18 PORTS, and authorize the ENGINEER to proceed at the direction of the CITY's representative in accordance with the "SCOPE OF SERVICES." Start date for this project will be no later than ten (10) days after execution of this authorization.

For CH2M HILL, INC.		For CITY OF KEY WEST	
By:	musibleil	Ву:	
	Sirpa H. Hall, P.E.	Jim Scholl	
	Senior Business Vice President	City Manager	
	Sy Alla	Dated the day of	010
	Sean McCoy, P.E.		
	Key West Project Manager	ATTEST:	

TASK ORDER 3-18 PORTS

MALLORY SQUARE MODERNIZATION TO CRUISE SHIP MOORING FACILITIES FEASIBILITY STUDY

SCOPE OF SERVICES

Project Description

Purpose

The CITY has requested that the ENGINEER provide engineering services for the feasibility study for the Modernization of the Cruise Ship Mooring Facilities at the Mallory Square Cruise Berth. Various mooring and berthing arrangements will be investigated, environmental permitting requirements of these arrangements will be invested as well.

Scope of Services

The scope of services provided below addresses the work to be completed for the project; and includes Task A (Background Investigation), Task B (Conceptual Layout Development), Task C (Permitting Investigation) and Task D (Conceptual Mooring Analysis)

Task A - Background Investigation

A.1 - Data Collection

The CONSULTANT will coordinate with the City to verify and collect data pertinent to the study. This would include land survey, facility as-builts, hydrographic surveys, design plans, submerged lands maps and legal descriptions, and geotechnical information. In addition, a summary should be made of the cruise vessels that call at Mallory Square and other Berths on Key West.

An analysis of this data will be performed to determine the suitability of the data for use on the project. A data gap memorandum will be produced if any additional information is required to complete the task.

A.2 - Kickoff Meeting

A kickoff meeting will be held with the CONSULTANT and the City staff in attendance. There will be one CONSULTANT staff in attendance in person with additional attendees connecting remotely via conference call. During this meeting, the data collection process will be discussed, preliminary vessel arrangements will be discussed. Also discussed will be the specific goals of the study with all stakeholders present. The range of potential vessels that may call at the site should be established as a foundation for the layout development in subsequent phases. It is expected that a maximum of 4 vessels of varying lengths and arrangements will be studied.

Deliverables

All Deliverables shall be in an appropriate electronic format, unless noted otherwise.

The following deliverables will be provided under this Task:

- Data Gap Analysis Memo
- Kick-off meeting minutes

Task B -Conceptual Layout and Analysis

Under this task, the CONSULTANT will develop conceptual layouts at the berth for the range of vessels developed during Task A. Currently, the maximum sized ship to call at Mallory Square is approximately 750′ LOA. This task will contemplate various changes to the berth including addition of new mooring points, extension of the T-Dock, and realignment of the T-Dock with the intention of improving the accommodation of ships that currently call at Mallory Square. Operational considerations will be taken into account when examining the different layouts. For specific scope elements, please see the sub task descriptions below.

B.1 - Conceptual Layouts

The CONSULTANT will perform the work to develop conceptual berthing layouts for the proposed range of vessels. These layouts will consider port-to and starboard-to arrangements, will consider the locations of the vessel doors and the preferred current mooring line arrangement at other berths in Key West. There will be a maximum of 8 layouts produced.

Any additional mooring hardware, fendering, structure modifications and additions, structure realignments and dredging will be clearly marked. The structure changes will be driven by the results of the conceptual level mooring and berthing analysis performed in Task D.

B.2 - Alternatives Analysis

A memorandum describing the layouts, with pros and cons for each configuration listed. A conceptual level cost estimate will be produced for each layout and the options will be ranked for the suitability against the desired outcome.

B.3 - Layouts Review Meeting

A meeting will be held with the CONSULTANT and the City staff in attendance to review and discuss the conceptual layouts. There will be one CONSULTANT staff in attendance in person with additional attendees connecting remotely via conference call. The purpose of the meeting is to verify that the desired layouts have been developed. Feedback from the City may spawn additional layouts to be generated. Up to 4 additional layouts will be developed and studied as a result of this meeting.

Deliverables

All Deliverables shall be in an appropriate electronic format, unless noted otherwise.

The following deliverables will be provided under this Task:

- Layout Drawings
- Alternatives Analysis Memorandum
- Meeting Minutes from Layouts Review Meeting

Assumptions

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

- Existing topographic survey and geotechnical information is assumed to be available. No allowance has been included for Benthic Survey, or geotechnical investigations.
- No land or bottom land costs shall be included in cost estimating for the project.
- Concepts and design will be frozen at the end of each design phase and re-designs after those milestones may be considered 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.
- Facilitate access to any required facilities.
- Attendance of key personnel at meetings as requested.
- CITY to provide existing topographic maps, data or existing subsurface investigation information.

Exclusions - Additional Services (Optional)

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:

- Additional design of mooring improvements that are not part of the T-pier.
- Re-Bidding any, or all, portions of this project or bidding of multiple projects
- Additional environmental studies or analyses required by the permitting agencies.
- Additional permitting involving agencies other than the those listed under Task C

Compensation

The estimated compensation for TASK ORDER NO 3-18 PORTS, is shown on attachment A entitled TASK ORDER NO. 3-18 PORTS, COMPENSATION.

Attachment A TASK ORDER 3-18 PORTS COMPENSATION

Task Order 3-18 Ports MALLO	DRY SQUARE MOD	DERNIZATION TO C	RUISE SHIP MOOI	RING FACILITIES FE	ASIBILITY STUDY		
Title	Engineer 6	Engineer 5	Engineer 4	Engineer 3	Technician 4	Clerical / Office	Task/Line Item Subtotal
Rate	\$ 198.72	\$ 181.88	\$ 157.18	\$ 134.72	\$ 102.17	\$ 71.85	Subtotal
A.1 - Data Collection							
Data Collection	4	4	4	4		2	\$2,833.70
Hours Subtotal	4	4	4	4	0	2	18
Cost Subtotal	\$ 794.88	\$ 727.52	\$ 628.72	\$ 538.88	\$ -	\$ 143.70	\$2,833.70
A.2 - Kickoff Meeting							
Kickoff Meeting	2	2				2	\$904.90
Meeting Minutes	2	2					\$761.20
Hours Subtotal	4	4	0	0	0	2	10
Cost Subtotal	\$ 794.88	\$ 727.52	\$ -	\$ -	\$ -	\$ 143.70	\$1,666.10
B.1 - Coneptual Layout and Analysis							
Conceptual Layouts	16	8	32	24		2	\$13,041.30
Drawings					32		\$3,269.44
Hours Subtotal	16	8	32	24	32	2	114
Cost Subtotal	\$ 3,179.52	\$ 1,455.04	\$ 5,029.76	\$ 3,233.28	\$ 3,269.44	\$ 143.70	\$16,310.74
B.2 - Alternatives Analysis							
Alternatives Analysis	8		24	32			\$9,673.12
Alternatives Memo	8		8	8			\$3,924.96
Hours Subtotal	16	0	32	40	0	0	88
Cost Subtotal	\$ 3,179.52	\$ -	\$ 5,029.76	\$ 5,388.80	\$ -	\$ -	\$13,598.08
B.3 - Alternatives Meeting							
Alternatives Meeting	8	4	24	24		2	\$9,466.58
Meeting Minutes	8		8	8			\$3,924.96
Hours Subtotal	16	4	32	32	0	2	86
Cost Subtotal	\$ 3,179.52	\$ 727.52	\$ 5,029.76	\$ 4,311.04	\$ -	\$ 143.70	\$13,391.54
Total Hours by Per Diem Rate	56	20	100	100	32	8	
Total Fee Estimate by Per Diem Rate	\$ 11,128.32	\$ 3,637.60	\$ 15,718.00	\$ 13,472.00	\$ 3,269.44	\$ 574.80	
						TO Total Labor	\$47,800.16
	TO Total Expenses						\$3,000.00
					TO 3	-18 Contract Total	\$ 50,800.16