



5363-Stuart-17

May 19, 2017

James W. Bouquet P.E.  
Director of Engineering  
City of Key West  
3140 Flagler Ave  
Key West, FL 33040

*Transmitted via electronic mail to James Bouquet at [jbouquet@cityofkeywest-fl.gov](mailto:jbouquet@cityofkeywest-fl.gov) on May 19, 2017.*

Reference: Project: TR1503 – Shoreline Armoring at Rest Beach, Florida

Subject: Cost Proposal

Dear Mr. Bouquet:

Tetra Tech has been contracted under the executed General Environmental Engineering Services agreement between the City of Key West and Tetra Tech, Inc. dated January 13, 2015. Per your request, the City of Key West (known as the City) has requested Tetra Tech Inc. (Tetra Tech) prepare a cost estimate to provide the City with additional engineering services to complete the construction drawings and Bid Documents for the Rest Beach Seawall due to unforeseen request made from FDEP on the permit application for the construction of the seawall.

Upon permit submittal, FDEP requested changes in the location and design of the proposed seawall. A second set of drawings were designed by Tetra Tech and sequentially, the permit application and construction drawings were resubmitted to the Department in compliance with the Department's request. This action was not anticipated and additional funds are requested to complete the tasks of the additional design and to review the contractor submittals to the intended RFP for the construction of the seawall.

We have also included a cost estimate, at your request, for Construction Engineering Inspection Services for the construction of a seawall and cap at Rest Beach. This letter outlines our technical approach and cost estimate based on the information provided. The technical approach is located in Attachment A.

**Costs/Schedule** – All work performed by Tetra Tech will be completed under our current Environmental Engineering Services Contract with the City, with all previously agreed upon terms and conditions, with a total estimated cost of \$86,035.00. This price is a best cost estimation and will be a **not-to-exceed cost** for this task order. The additional engineering is ongoing, the procurement services and services during construction will

**Tetra Tech, Inc.**

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begin once the revised engineering plans and specification have been approved. The detailed cost breakdown is located in Attachment B.

Items	Task Title/Task Function	Amount
1.0	Additional Design	\$20,433.00
2.0	Contractor Submittals	\$15,165.00
3.0	Services During Construction/Site Visits	\$34,615.00
4.0	Reporting and Certification	\$15,822.00
	<b>Total Labor and Cost Estimate</b>	<b>\$86,035.00</b>

We look forward to work with the City of Key West. If you have any questions or require any additional information, please contact me at 803.641.4944.

Sincerely,

*Shauna Stotler*

Shauna Stotler  
Project Manager

cc: Brian Proctor, Tetra Tech, Inc.

Recipient  
Date  
Page 3 of 3

If this cost estimate is acceptable please confirm with signatures below.

For TetraTech, Inc.:

*Shauna Stotler* 5/19/17  
\_\_\_\_\_  
Authorized Signature      Date  
Shauna Stotler – Project Manager

For City of Key West:

\_\_\_\_\_  
Authorized Signature      Date  
Jim Scholl - City Manager

**ATTACHMENT A**  
**SCOPE OF SERVICES**  
**Rest Beach, Florida Seawall Project –**  
**Construction Engineering Inspection Services**

**Project Understanding**

The City of Key West will soon be issued a permit from the Florida Department of Environmental Protection for the construction of an approximately 695 ft long (inclusive of return segments) vertical steel sheet pile wall with concrete cap, to protect Rest Beach park infrastructure and Atlantic Boulevard from storm erosion impacts. File Number MO-45AR has been assigned to the application for activities seaward of the fifty-foot setback from Mean High Water.

Tetra Tech is currently working under contract with the City for services through and inclusive of construction contract document preparation and bid phase services. City staff desires Tetra Tech, as the Engineer of Record, to provide Construction Engineering Inspection (CEI) services for the Rest Beach Seawall Project (Project) to ensure that the seawall is properly installed and that all other provisions of the contract documents are met.

**Scope of Services**

**Task 1 – Review and Approval of Contractor Submittals and Payment Requests**

The selected Contractor will be required to provide several pre-construction submittals pertaining to the Project – including, but not limited to, a schedule, a Health & Safety Plan, Work Plan, Environmental Protection Plan, Quality Control Plan, and Hurricane/Severe Storm Preparation Plan. We will review and either provide comments for revision/resubmittal or approval. Likewise, we expect shop drawing and possibly product submittals (sheet pile interlock, concrete admixture, vegetation to be replaced). These will likewise be subjected to review and, once submitted to our satisfaction, approval. Finally, we will review and recommend City approval/processing of contractor payment (draw) requests.

For the purposes of budgeting, we assume the construction will require seven (7) weeks to complete, once the Contractor is mobilized and has established site security and preparation. We expect a total of three (3) payment requests.

**Task 2 – Construction Inspection and Coordination/Certification**

Tetra Tech will prepare for and lead weekly construction progress meetings (typically on Monday or Tuesday of each work week), to establish an understanding as to the Contractor's schedule and milestone items for the coming week. A brief meeting agenda with a call-in number and passcode will be circulated to the City and the Contractor (and any key subcontractors the Prime Contractor wishes to include) in advance of each meeting. Tetra Tech will participate via telecom except in those instances where the weekly site visit coincides with the progress meeting.

A Tetra Tech engineer will conduct once weekly site visits to the project site over the seven week duration. Equipment on site, personnel and activities/progress will be noted, as well as establishing an

understanding of work to be conducted over the days following the site inspection. Tetra Tech will prepare and transmit a Construction Inspection Report to the City, complete with photographs, to document construction progress, within 72 hours of each site visit.

Once the Contractor deems their activities to be substantially complete, Tetra Tech will arrange and staff an on-site Substantial Completion Walk-through/Inspection with the City and the Contractor. Any items requiring completion, correction or replacement/modification will be identified during the walk-through. Tetra Tech will prepare, for City review and approval, and transmit to the Contractor a Punch List for Project elements requiring corrective action.

Following Contractor completion of the Punch List items, the City, Tetra Tech and the Contractor shall conduct a final completion walk-through of the site. Tetra Tech will certify the project as complete and shall provide such certification to the City as well as to the Florida Department of Environmental Protection. Included in this certification will be Contractor-generated As-Built Drawings of the Project, which shall document all field and site adjustments that may have become necessary through the course of the construction.

### **Project Deliverables**

The following work products will be provided to the City:

Task 1 – City notification (along with Contractor) of approved submittals and recommendation to process payment requests

Task 2 –Once Weekly Site Inspection Reports; Punch List; Completion Certification Statement and Review Construction As-Built Drawings Prepared by the Contractor

City of Key West			Task 4.07- Addl Design		Task 4.07- Contractor Submittals		Task 4.08-Services During Construction/Site Visits		Task 4.09-Reporting and Certification		TOTAL	
Rest Beach - CEI Services												
BILLING CLASS	NAME	UNIT RATE	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST	UNITS	COST
<i>Tetra Tech Staff</i>												
Tech Prof II	S. Stotler-Hardy	\$ 115.00	4	\$460							4	\$460
Tech Prof I	R. Garland	\$ 95.00	2	\$190							2	\$190
Tech Prof II	C. Warren - Procurement	\$ 115.00	2	\$230							2	\$230
Sr. Project Manager	S. McGahee	\$ 192.00	8	\$1,536	4	\$768	-		4	\$768	16	\$3,072
Sr. Tech Prof III	A. McDonald	\$ 179.00	4	\$716							4	\$716
Tech Prof I	F. Martinez	\$ 95.00					32	\$3,040			32	\$3,040
Principal Tech Prof	Michael Barnett	\$ 192.00	22	\$4,224	8	\$1,536	70	\$13,440	32	\$6,144	132	\$25,344
Sr. Tech Prof III	Richard Czlapinski	\$ 179.00	20	\$3,580	16	\$2,864	10	\$1,790	24	\$4,296	70	\$12,530
Engineer II	Jesse Davis	\$ 158.00	56	\$8,848	32	\$5,056	52	\$8,216	28	\$4,424	168	\$26,544
Tech Prof I	Frank Keller	\$ 95.00	1	\$95	2	\$190	4	\$380	2	\$190	9	\$855
											-	
Total				\$19,879		\$10,414		\$26,866		\$15,822		\$72,981
TRAVEL												
R/T Airfare	\$ 450.00				2	\$900					2	\$900
R/T Airfare	\$ 600.00						5	\$3,000			5	\$3,000
Mileage/Gas	\$ 0.54				2,200	\$1,188	2,135	\$1,153			4,335	\$2,341
Rental Car w/Fuel	\$ 80.00	2	\$160	2	\$160	10	\$800				14	\$1,120
Misc Travel Costs	\$ 50.00	2	\$100	6	\$300	6	\$300				14	\$700
Lodging	\$ 210.00			6	\$1,260	8	\$1,680				14	\$2,940
Meals & IE	\$ 69.00	2	\$138	12	\$828	10	\$690				24	\$1,656
TOTAL TRAVEL COSTS				\$398		\$4,636		\$7,623				\$12,657
OTHER DIRECT COSTS												
Shipping/Postage	\$ 5.00	3	\$15	10	\$50						13	\$65
Reproduction - B&W	\$ 0.08	200	\$16	500	\$40						700	\$56
Misc. Equip & Supplies	\$ 25.00	5	\$125	1	\$25	5	\$126				11	\$276
TOTAL OTHER DIRECT COSTS				\$156		\$115		\$126				\$397
GRAND TOTAL				\$20,433		\$15,165		\$34,615		\$15,822		\$86,035