



## **CITY OF POMPANO BEACH CONTINUING CONTRACT FOR ENGINEERING SERVICES FOR WATER AND REUSE TREATMENT PLANT PROJECTS**

### **Work Authorization No. 2 Water Treatment Plant Filter & High Service Pumps 1-4 Building Hurricane Hardening Design Services**

#### **I. PROJECT DESCRIPTION**

Tetra Tech, Inc. (Tetra Tech) is pleased to present this proposal for engineering services to prepare design documents for the identified hurricane hardening elements at the Filter Building of the Pompano Beach Water Treatment Plant. Based on our recent WTP Hurricane Hardening Study completed in June 2015, our understanding of the project is to provide design documents and other engineering services for the identified improvements for the Filter Building which encompasses the High Service Pumps 1-4, Office, and Filter Operation Gallery.

The services rendered pursuant to this Work Authorization No. 2 are in accordance with the terms and conditions of the Agreement for Consulting/ Professional Services between the City of Pompano Beach and Tetra Tech Inc., dated January 19, 2016 and approved by City Ordinance No. 2016-26.

#### **II. SCOPE OF WORK**

##### Task 1.1 – Data Collection, Review, and Preparation

Tetra Tech will collect and review available drawing data for the Filter & HSP 1-4 Building. Existing backgrounds for the new construction documents will be developed based on historical construction drawings and site visits. Tetra Tech assumes that they will be provided copies of all existing drawing documents if not already obtained from the recently completed study.

##### Task 1.2 – Design

Once base site and building drawings are established or created in Task 1.1, Tetra Tech will proceed with preparation of design drawings and specifications, which will provide the general scope, extent, and character of the proposed work to be furnished and performed by the Contractor. Drawings and specifications will be prepared and submitted at the 75 percent complete stage. Comments received from the City will be addressed and a final submittal of the drawings and specifications will be provided. It is our understanding that the City will be responsible for the bidding and contract documents. The following drawings and specifications are anticipated to be prepared:

- Cover sheet, index and key map.
- Site plan sheets for plant improvements.
- Structural and Architectural sheets with associated details.

- Technical Specifications associated with the structural improvements

Deliverables for this task include the following:

- 75 percent drawings and specifications
- Final drawings and specifications.

The specific scope of work required for this work authorization will include the following items for the Filter Building which are outlined in Tetra Tech's Hurricane Hardening Study dated June 30, 2016:

- HSP 1-4
  - Reinforce the CMU walls
  - Replace five (5) of the six (6) operable windows
  - Add one passage door to improve life safety egress. Location of this door may require the construction of new retaining walls from the basement level of the building. This location needs to be reviewed with the owner prior to initiation of the design.
  - Replace one (1) overhead door
  - Replace one (1) exterior exhaust fan louver
  - Replace one (1) double passage door
- Office Building
  - Reinforce the CMU walls
  - Replace two (2) single passage doors and two (2) double doors
  - Analyze the small air louver in the ammonium room
  - Replace ten (10) windows
- Filter Operation Gallery
  - Remove and replace metal stud wall.
  - Retrofit metal deck attachment
  - Reinforce the CMU walls
  - Replace 13 passage doors

#### Task 1.3 – Prepare Opinion of Probable Construction Costs

An opinion of probable construction cost estimate will be prepared for the 75 percent and final submittals. Recent bids for similar building hardening projects will be utilized as a basis for costs. Estimated costs will include engineering and other costs, as well as contingencies.

Deliverables for this task include the following:

- 75 percent cost estimate and
- Final cost estimate.

#### Task 1.4 – Permitting

Tetra Tech will prepare a drawing set, prior to the final drawings, to be provided to the City for submittal to the Building Department having jurisdiction over the project. Comments received from the Building Department, will be addressed by Tetra Tech and an updated drawing set will be provided to the City for resubmittal to the Building Department to obtain a dry run permit, if applicable.

#### Task 1.5 – Bidding Assistance

The proposed improvements will be bid as one (1) project. Bidding and award activities will be led by the City. Tetra Tech will conduct the following services during the bidding process.

1. Tetra Tech will work with the City staff to provide a master copy of the Bid Set construction drawings and specifications in electronic format (PDF). It is our understanding that the City will be responsible for the bidding and contract documents and project advertisement and distribution of bid packages to potential bidders.
2. Support with addenda. Tetra Tech will respond to technical questions forwarded by the City for addenda as part of this scope of services. Tetra Tech will respond to questions using the Addendum Form for expedited response time and will generate necessary supporting documents, as applicable, and submit them to the City for distribution to registered plan holders.
3. Tetra Tech will attend and conduct the pre-bid meeting at the City. A meeting agenda will be prepared and distributed by Tetra Tech. Responses to questions provided in writing at the meeting will be provided through an addendum.
4. Tetra Tech will tabulate and evaluate the bids' unit and total prices and provide support by checking references for the three lowest bidders and evaluation of the apparent low bidder's contractor's qualifications for undertaking the utility work on the project. Tetra Tech will provide a recommendation of award, once completed.

#### Task 1.6 – Construction Phase Services

Construction administration services will be provided. This will include review of all submittals within our Scope of Design services, provide clarifications to issues during construction, response to contractor RFI's, and periodic site visits concerning our scope of design services. Progress meeting attendance will be by special request only and it is anticipated that this will occur no more than once per month throughout the duration of construction, which is estimated to be twelve months.

Record drawings will be generated and delivered in pdf format at the end of the project. The contractor is solely responsible for providing Tetra Tech with As-Built drawing markups.

Special inspections as outlined in the Chapter 17 of the 2014 Florida Building Code are not part of our scope of services. As part of Task 1.3, Tetra Tech will develop a special inspections specification that will outline the inspection requirements for the construction. The City of Pompano Beach is to hire the special inspector in order to provide oversight to the construction process in accordance with the building code requirements.

### **III. ASSUMPTIONS and EXCLUSIONS**

We have determined the following assumptions and exclusions as being critical to our proposed scope and compensation:

- The City will provide Tetra Tech copies of all available existing construction plans and specifications and access to the site when required for field observations and measurements.
- The scope of work required for this work authorization follows the recommendations from Tetra Tech's Hurricane Hardening Study dated June 30, 2016.

- Design services are limited to architectural and structural engineering. Geotechnical engineering may be required if the basement of the HSP I-4 needs to be retrofitted to accommodate a new egress door. Geotechnical services, if required, will be an additional service.

Building commissioning nor Mechanical, Electrical, or Plumbing services are excluded from Tetra Tech's scope of work.

#### IV. COMPENSATION

The total Lump Sum compensation for the Scope of Services described in Section II is \$129,885 and will be invoiced monthly on a percentage complete by subtask. The compensation for the Scope of Services by subtask is summarized below.

Task	Description	Fee
1.1	Data Collection, Review, and Preparation	\$6,120
1.2	Design	\$78,270
1.3	Prepare Opinion of Probable Construction Costs	\$2,865
1.4	Permitting	\$3,010
1.5	Bidding Assistance	\$4,460
1.6	Construction Phase Services	\$35,160
<b>Lump Sum Total</b>		<b>\$129,885</b>

#### V. SCHEDULES

The project will commence within 2 weeks of notice to proceed. Submittal of the 75 percent deliverables are anticipated to take 10 weeks. Review time is anticipated to be 2 weeks. Permitting and final deliverables will be submitted 6 weeks after receipt of all City comments. Construction phase services will be provided during construction, which is anticipated to extend through 12 months.

**"CITY":**

Witnesses:

**CITY OF POMPANO BEACH**

\_\_\_\_\_

By: \_\_\_\_\_  
LAMAR FISHER, MAYOR

\_\_\_\_\_

By: \_\_\_\_\_  
DENNIS W. BEACH, CITY MANAGER

Attest:

\_\_\_\_\_  
ASCELETA HAMMOND, CITY CLERK

(SEAL)

Approved As To Form:

\_\_\_\_\_  
MARK E. BERMAN, CITY ATTORNEY

STATE OF FLORIDA  
COUNTY OF BROWARD

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, 2016 by **LAMAR FISHER** as Mayor, **DENNIS W. BEACH** as City Manager and **ASCELETA HAMMOND** as City Clerk of the City of Pompano Beach, Florida, a municipal corporation, on behalf of the municipal corporation, who are personally known to me.

NOTARY'S SEAL:

\_\_\_\_\_  
NOTARY PUBLIC, STATE OF FLORIDA

\_\_\_\_\_  
(Name of Acknowledger Typed, Printed or Stamped)

\_\_\_\_\_  
Commission Number

Witnesses:

Audra Kelly  
Karen Miller

**"CONTRACTOR":**

Tetra Tech, Inc

(Print name of company)

By: [Signature]

Print Name: Richard A. Lemmon

Title: Senior Vice President

**ACKNOWLEDGMENT OF CONTRACTOR, IF A CORPORATION**

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

}  
}  
} ss:

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally came  
and appeared \_\_\_\_\_,  
to me known, who, being by me duly sworn, did depose and say that he resides at \_\_\_\_\_  
\_\_\_\_\_, that he is the \_\_\_\_\_  
of Tetra Tech, Inc., the corporation described in  
and which executed the foregoing instrument; that he knows the seal of said corporation; that one of  
the impressions affixed to said instrument is an impression of such seal; that he is the proper official  
of said corporation designated to execute such contract, that he has authority so to do, that he  
executed same for and in behalf of said corporation, and this his act is the act and deed of said  
corporation.

Witness my hand and official notarial seal at \_\_\_\_\_  
\_\_\_\_\_ the day and year above written.

\_\_\_\_\_  
Notary Public

My Commission Expires: \_\_\_\_\_

WA 2 - Pompano Beach WTP Hardening Design Services 082616\_draft rev  
Tt #200BP-Pompano

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082616

*see attached certificate.*  
*KS 9/6/16*

**CALIFORNIA JURAT WITH AFFIANT STATEMENT****GOVERNMENT CODE § 8202**

- ☒ See Attached Document (Notary to cross out lines 1-6 below)  
☐ See Statement Below (Lines 1-6 to be completed only by document signer[s], not Notary)

\_\_\_\_\_  
*Signature of Document Signer No. 1*\_\_\_\_\_  
*Signature of Document Signer No. 2 (if any)*

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

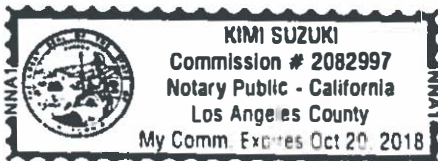
State of California

County of Los AngelesSubscribed and sworn to (~~or affirmed~~) before meon this 6th day of September, 2016  
by \_\_\_\_\_  
Date Month Year(1) Richard A. Lemmon

(and (2) \_\_\_\_\_),

*Name(s) of Signer(s)*

proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Signature Kimi Suzuki*Signature of Notary Public*

*Seal*  
*Place Notary Seal Above*

**OPTIONAL**

Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_ Document Date: \_\_\_\_\_

Number of Pages: \_\_\_\_\_ Signer(s) Other Than Named Above: \_\_\_\_\_

Tt Price Proposal			Labor Plan											Price Summary / Totals					
Work Authorization No. 2 WTP Building Hardening Design  Design and other services for WTP Building Hardening Design Submitted to: City of Pompano Beach (Attn: Alessandra Deltico)  Contract Type: Lump Sum			Bill Rate >	210.00	215.00	135.00	165.00	165.00	85.00	115.00	140.00	135.00	70.00	90.00	ODCs		129,885		
			Proj Area >													Specify Add'l Fees on Setup		0	
																	Technology Use Fee		
																	Total Price		129,885
															Pricing by Resource				
			Total Labor Hrs	Sr. Project Manager	Sr. Engineer 1	Project Engineer 1	Sr. Architect 2	Project Engineer 2	Engineering Designer 1	Engineering Designer 3	Architect 2	Project Engineer 1	Project Assistant 2	Senior Construction Administrator	Labor	Travel	Task Pricing Totals		
Project Phases / Tasks			1,001	17	9	342	110	32	186	180	32	81	3	10	127,885	2,000	129,885		
1.1 - Data Collection, Review, and Preparation			62	2	-	-	-	-	40	20	-	-	-	-	6,120	-	6,120		
1.2 - Design			614	8	8	236	42	32	104	152	32	-	-	-	78,270	-	78,270		
1.3 - Prepare Opinion of Probable Construction Costs			19	2	-	9	9	-	-	-	-	-	-	-	2,865	-	2,865		
1.4 - Permitting			22	1	1	5	5	-	4	-	-	5	1	-	3,010	-	3,010		
1.5 - Bidding Assistance			36	4	-	8	6	-	6	-	-	-	2	10	4,460	-	4,460		
1.6 - Construction Phase Services			248	-	-	84	48	-	32	8	-	76	-	-	33,160	2,000	35,160		
Totals			1,001	17	9	342	110	32	186	180	32	81	3	10	127,885	2,000	129,885		