

February 7, 2022

Jeff Jiang, P.E.  
**CITY OF HOLLYWOOD**  
Department of Public Utilities  
Engineering and Construction Services Division  
Post Office Box 229045  
Hollywood, Florida 33022

Hollywood Southern Regional WWTP  
Clarifier No. 3 Repair  
City Project No. **xx-xxxx**

---

Dear Mr. Jiang:

As requested, Hazen and Sawyer, D.P.C. (Hazen) is pleased to offer engineering services for the repair of Clarifier No. 3 at the Hollywood Southern Regional Wastewater Treatment Plant (SRWWTP).

### **BACKGROUND**

Existing Clarifier No 3, constructed in 1975, has failed due to a broken elbow joint and pipe segment located at the base of the clarifier mechanism, below grade and within the 48-in clarifier feed line. Repair is required to return the clarifier to service. Due to the location of failure, the entire clarifier mechanism must be dismantled, removed and then re-installed once repairs are completed. Because of the age of the clarifier mechanism, it is possible that repairs to the dismantled mechanism may be required prior to re-installation in which case replacement of the mechanism may be the more cost-effective alternative. It is the scope of this project to prepare contract documents for the repair of Clarifier No. 3 and plan for the potential replacement of its mechanism.

### **SCOPE OF SERVICES**

#### **Task 1 – Detailed Design**

The intent of the project is to repair a failed 16-in diameter 90-degree elbow joint and pipe segment on the return sludge line located below grade within the 48-in diameter clarifier feed. Due to the location of failure, access to the area of repair requires that the entire clarifier mechanism be dismantled, relocated and then re-installed once repairs are completed. Based on information received from a contractor onsite which inspected the failure, Hazen will prepare contract documents suitable for bidding the work.

It is noted that because of the age of the clarifier mechanism, it is possible that repairs to the dismantled mechanism may be required prior to re-installation in which case replacement of the mechanism may be the more cost-effective alternative. Therefore, the contract documents shall also include an alternate bid item for complete replacement of the mechanism in the event it is deemed necessary. No concrete repair or replacement of weirs, scum baffles, or density current baffles is envisioned.

## **Task 2– Cost Opinion**

A preliminary cost opinion was previously provided. Hazen shall provide a final cost opinion on the project budget upon submittal of the completed contract documents.

## **Task 3– Meetings**

The scope of work herein was based on City staff input and available information. Due to the defined nature of the repair work, no meetings will be necessary. Hazen shall submit completed contract documents to the City. City comments received shall be addressed prior to advertisement for bidding.

## **Task 4 – Bid Phase Services**

CONSULTANT shall provide assistance to the City during the bidding phase for the project. Activities to be performed are as follows: attend a pre-bid conference, reply to bidders' questions, draft up to two addenda to the technical aspects of the work for City distribution, review the Bid Proposal form, prepare a Bid Tabulation, check contractor references of the lowest responsive bidder, and issue a recommendation of award. Contract document packages will be produced and sold by the City.

## **KEY ASSUMPTIONS**

- The intent of the project is limited to repair of a failed 16-in diameter return sludge line 90-degree elbow joint and pipe segment located at the base of and within the 48-in diameter clarifier feed.
- Previous plans and specifications in their present format will be used to the extent possible.
- No concrete repair needs have been identified. Concrete repair is not envisioned and will be addressed by Change Order if needed.
- Existing underground electrical conduit, electrical feeds, instrumentation conduit are adequate for the envisioned project and will not require expansion or replacement
- Surveying services, underground utility locates and geotechnical investigations are not envisioned
- The proposed work is considered maintenance and permitting is not envisioned, including with the City of Hollywood Building Department. No permitting, plan submittal or responses to Building Department comments is anticipated or included.
- No owner-furnished / pre-purchasing of equipment is anticipated
- No shop drawing or product submittal after acceptance of final design is included.
- Value engineering and other outside reviews (other than City staff review) are not anticipated
- No local minority business enterprise or local small business enterprise participation is envisioned
- The City will competitively bid the project and enter into an agreement with an outside contractor to complete the work. No prequalification of contractors will be performed.
- The City will provide front end documents applicable to the project.
- The development of conformed contract documents will be performed by others
- Services during construction, if desired, will be included under a separate work order

## **COMPENSATION**

The engineering services for this project will be performed on a Not-to-Exceed basis in the amount of \$45,333. A fee breakdown is attached.

## **SCHEDULE**

Engineering services will be completed within 90 days of receipt of the Notice-to-Proceed and requested information from manufacturers.

Engineering services for the project will be performed as part of our Professional Services Agreement for General Engineering Consultant Services (Agreement) dated October 2017. Services provided by Hazen shall be limited to those services specifically identified in this work order.

We look forward to your reply. In the meantime, should you have any questions, please contact us.

Very truly yours,

**HAZEN AND SAWYER, P.C.**



J. Philip Cooke, P.E.  
Senior Associate

c: *File No. 4321/1.0*  
*J. McMahon*

*Attachment*

CITY OF HOLLYWOOD  
SOUTHERN REGIONAL WASTEWATER TREATMENT PLANT  
Clarifier No 3 Repair  
Cost Breakdown

<u>Tasks</u>	<u>Senior Associate</u>	<u>Associate</u>	<u>Senior Principal Engineer</u>	<u>Engineer</u>	<u>Designer</u>	<u>Draftsman</u>	<u>Secretarial</u>	<u>Subtotal</u>	<u>Cost</u>
LABOR									
Task 1 - Detailed Design	30	54	26	30	28	28	0	196	\$ 34,564
Task 2 - Cost Opinion	2	8	0	4	0	0	4	18	\$ 3,012
Task 3 - Meetings	2	2	0	2	0	0	2	8	\$ 1,343
Task 4 - Bid Phase Services	4	22	0	0	0	0	8	34	\$ 6,314
Subtotal	38	86	26	36	28	28	14	256	\$ 45,233
DIRECT EXPENSES									
Out-of-pocket									\$ 100
Subtotal									\$ 100
<b>Total (Not-to-Exceed)</b>									<b>\$ 45,333</b>
Maximum Hourly Raw Labor Rate*	\$81.81	\$66.41	\$56.79	\$38.50	\$46.20	\$29.84	\$23.10		
* Overall multiplier = 3.2									