

January 18, 2023

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
Grit Removal
City Project No. 2023-9421

Dear Mr. Jiang:

As requested, Hazen and Sawyer, D.P.C. (Hazen) is pleased to offer engineering services for the removal of grit for selected processes at the Hollywood Southern Regional Wastewater Treatment Plant (SRWWTP).

BACKGROUND

The prevalence of inert solids, such as sand and grit, inherent in the wastewaters of south Florida, render certain treatment units vulnerable to the accumulation of these inert solids over time. In particular, the oxygenation trains at the SRWWTP allow for the collection of grit which consequently reduces the effective volume of these biological treatment units prompting the need for periodic removal. The objective of this project is to develop contract documents for competitive bidding of grit removal services at the SRWWTP.

SCOPE OF SERVICES

Task 1 – Detailed Design

The intent of the project is to develop bid documents for the procurement of grit removal services for the five oxygenation trains at the SRWWTP, the three grit chambers, the interceptor box, the oxygenation flow distribution box, the clarifier flow splitter boxes 1 & 2, the clarifier influent boxes 1 & 2, the clarifier 5-8 flow distribution box, and clarifiers 2 & 4. The project design will describe the sequence of work necessary to allow for continuous operation of the SRWWTP and structure the work on a per-unit basis such that the City may opt to increase or decrease the facilities to be addressed as project budget allows. Oxygenation Train grit removal will require removal of aerators in sequence and use of the City's existing steel support structure to avoid disassembly of the mixers during cleaning. It is understood that the amount of inert solids to be removed is not known at this time and such information cannot be determined as the units are currently in service. While no concrete repair or coating of the interior is envisioned, the project will allow for assessment of concrete surfaces to determine the level of repair efforts needed to be addressed in a future project. The contract documents will require pressure washing of the walls and ceiling of each train and grit chamber after grit removal sufficient to allow inspection of the coatings and/or assessment of substrate. Contingency shall be included in the contract documents to facilitate the repair of mixers as needed during the project.

Task 2 – Cost Opinion

Hazen shall provide a final cost opinion on the project budget upon submittal of the competed contract documents.

Task 3 – Meetings and Communication

The scope of work herein was based on City staff input and available information. Hazen shall submit completed contract documents to the City. One meeting is envisioned to receive City comments to be addressed prior to advertisement for bidding.

Task 4 – Bid Phase Services

Hazen 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 removal of grit as described. No surface repair, mixer repair or replacement is included.
- Previous plans and specifications in their present format will be used to the extent possible.
- 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 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.
- 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 \$85,724. 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.

A handwritten signature in blue ink, appearing to read "J. Philip Cooke".

J. Philip Cooke, P.E.
Senior Associate

c: File No. 4321/1.0
J. McMahon

Attachment

CITY OF HOLLYWOOD
SOUTHERN REGIONAL WASTEWATER TREATMENT PLANT
Grit Removal
Cost Breakdown

<u>Tasks</u>	Labor Hours								<u>Subtotal</u>	<u>Cost</u>
	<u>Senior Officer</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>		
LABOR										
Task 1 - Detailed Design	0	60	108	52	60	56	56	0	392	\$ 69,128
Task 2 - Cost Opinion	0	4	16	0	8	0	0	8	36	\$ 6,024
Task 3 - Meetings and Communication	0	4	4	0	4	0	0	4	16	\$ 2,686
Task 4 - Bid Phase Services	0	8	24	0	0	0	0	8	40	\$ 7,786
Subtotal	0	76	152	52	72	56	56	20	484	\$ 85,624
DIRECT EXPENSES										
Out-of-pocket										\$ 100
Subtotal										\$ 100
Total (Not-to-Exceed)										\$ 85,724
Maximum Hourly Raw Labor Rate*	\$85.66	\$81.81	\$66.41	\$56.79	\$38.50	\$46.20	\$29.84	\$23.10		
* Overall multiplier = 3.2										