

March 27, 2023

Juan Jose Figueroa, 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 CMS
City Project No. 22-9525

Dear Mr. Figueroa:

As requested, Hazen and Sawyer, P.C. (Hazen) is pleased to offer engineering services during construction for the Clarifier No. 3 Repair project (Project) 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. As a result, this work order addresses engineering services during construction for the Clarifier No. 3 Repair project.

SCOPE OF SERVICES

Task 1 – Construction Administration Services

Hazen shall provide limited services for the management of the project during the construction phase. Such management activities shall include limited coordination and general correspondence with the CITY, Construction Contractor and subcontractors as well as handling and processing of submittals. This task also includes requests for contract interpretations and clarifications required by the Contractor which do not result in the submittal of formal Requests for Information. At the City's request, the level of effort associated with this task is two (2) hours per week for a period of 70 weeks (480 calendar days for final completion).

Task 2 – Contract Interpretations and Clarifications

Hazen shall log requests for information and issue necessary technical interpretations and clarifications of the Construction Contract Documents in a timely manner. For purposes of estimating level of effort associated with this task, it is assumed that four (4) requests for information will be addressed by Hazen.

Task 3 – Orders for Change

Hazen shall develop/issue requests for routine project cost and/or schedule changes from the Contractor. Changes may be the result of unforeseen conditions or interferences arising during routine progress of work or additional improvements requested by CITY after the project bid date and processed as Change Orders or Field Orders. Hazen shall evaluate the impact of the change request in terms of project cost and schedule. Hazen shall prepare a recommendation of the change request and if accepted, a statement noting that the requested cost/schedule impacts are fair and reasonable. Hazen's analysis of the change request shall be forwarded to CITY for processing. This Scope of Services has been based upon the preparation of two (2) Requests for Proposal and two (2) orders for change. It is noted that Hazen' Scope of Services does not include claims analysis or litigation support.

Task 4 – Submittal Review

Hazen shall log, track, review and process shop drawings and any other submittals which the Construction Contractor is required to submit within twenty-one (21) working days of receipt of the submittal except for special items requiring longer review time if so noted in the Construction Contract Documents. The review shall be for conformance with the design intent and compliance with the information presented in the Construction Contract Documents. Hazen shall determine the acceptability of materials and equipment proposed by the Construction Contractor. This Scope of Services has been based upon the review and processing of a maximum of forty-six (46) submittals, including re-submittals.

Task 5 – Applications for Payment

Upon review and acceptance by the RPR that the portion of the Work has been sufficiently completed in accordance with the Contract Documents, Hazen shall process applications for payment and review accompanying data, confirm the amounts owed, and recommend approval of payments due the Contractor. It is understood that Hazen's recommendation of any payment requested in an application for payment constitutes a representation by Hazen to the CITY, based on the on-site observations of construction in progress by the RPR that construction has progressed to the point indicated and on the review of the application for payment and the accompanying data and schedules. In addition, it is understood that to the best of Hazen's knowledge, information and belief, the quality of construction is in substantial accordance with the Contract Documents, subject to an evaluation of construction upon substantial completion, to the results of any subsequent tests called for in the Contract Documents and any qualifications stated in the recommendation; and that the Contractor is due the amount recommended. For the purposes of estimating the level of effort associated with this subtask, it is assumed that Hazen shall review up to sixteen (16) pay requests.

Task 6 – Construction Meetings

Hazen shall attend meetings as follows:

Preconstruction Conference – Hazen shall conduct a preconstruction conference attended by representatives of CITY and by the construction contractor. Hazen shall provide the attendees with a written summary of the meeting which will be distributed electronically.

Construction Progress Meetings – As requested by the City during the project (up to a maximum of 3 meetings), Hazen shall prepare an agenda, conduct a progress meeting with the Construction Contractor and the CITY to review project status and identify issues that may affect the project schedule. Hazen shall produce a brief hand-written summary of critical issues discussed at each

progress meeting and updated versions of shop drawing submittal, RFI, and Orders for Change logs.

Task 7 – Field Observation Services

Hazen shall conduct periodic on-site observations of construction to assist in determining if construction is proceeding in substantial accordance with the Contract Documents. Periodic observations for this effort are based on forty (70) hours of observation over the allowable 480 day construction period. It is important to note that in performance of the duties outlined herein, Hazen shall not:

- Undertake any of the responsibilities of Contractor or its subcontractors, nor direct any of their work
- Advise on or issue directions pertaining to any aspect of the means, method, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents
- Advise on, or issue directions about, safety precautions and programs related to the Contractor's Work
- Approve any interruptions or modification of CITY's facilities without the approval of CITY

This scope of services is based upon the assumption that the CITY shall provide a full-time (8 hours per day, 5 days per week) Resident Project Representative (RPR) to provide field observation services of the proposed Work. The RPR will perform the following duties and responsibilities:

- Attend pre-construction conference, progress meetings and other job conferences
- Serve as the construction liaison, working primarily with the Contractor(s) superintendent(s) and plant staff
- Assist in obtaining additional details or information when required at the job site
- Conduct on-site observations of construction in progress (including specialized field tests) to assist in determining if construction is proceeding in substantial accordance with the Contract Documents
- Review all approved submittals and inform the Contractor whenever the RPR believes that construction is unsatisfactory, faulty or defective, does not conform to the Contract Documents, does not meet the requirements of any inspections, tests or approval required to be made, or has been damaged before final payment
- Immediately inform the Contractor upon the commencement of any construction requiring a submittal, if the submittal has not been accepted
- Visually review quantity, suitability and method of storage of materials, equipment and supplies delivered to the construction site
- Verify that operating and maintenance procedures are available to the City before equipment start-up and operator training is conducted by the Contractor
- Observe, record, and report appropriate details relative to testing and start-up procedures
- Prepare and submit daily reports and project photographs to Hazen and maintain a daily diary or log book, recording hours on the job site, weather conditions, data pertaining to

questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general and specific observations in more detail as in observing test procedures. Record names, addresses and telephone numbers of Contractor, subcontractor and major supplier personnel.

- Accompany visiting inspectors representing public or other agencies having jurisdiction over the Project(s), and record the outcome of these inspections in the daily report
- Review applications for payment with the Contractor for accuracy, back-up detail and completeness
- Document During the course of construction, verify that certificates, warranties, maintenance and operation manuals and other data required to be assembled and furnished by the Contractor are applicable to the items actually installed
- Before issuance of a determination of substantial completion, prepare a list of items requiring completion or correction, in concert with the CITY. Participate in the final inspection
- Coordinate with the CITY and Contractor for necessary shutdowns and interruptions of CITY facilities

Task 8 –Startup Services

Hazen shall coordinate and monitor startup activities of the project. A total of forty (40) hours of onsite attendance is envisioned for the phased implementation of clarifier mechanisms, controls and associated equipment.

Task 9 – Project Closeout

Upon receiving notice from the Contractor that the project is substantially complete, Hazen, in conjunction with appropriate CITY staff, shall develop a “punch list” of the project. The “punch list” shall include items needing completion or correction prior to consideration of final acceptance. Hazen shall develop the list with assistance from CITY. The list shall be forwarded to the Contractor by the CITY. Upon notification from the Contractor that all remaining “punch list” items have been resolved, Hazen, in conjunction with appropriate CITY staff, shall perform a final review of the finished project.

Task 10 – Record Drawings

Hazen shall prepare and distribute to the CITY within sixty (60) days of the date of receipt of final marked-up, red-lined field drawings from the Construction Contractor and CITY and all RPR daily reports, two sets of 22” x 34” signed and sealed prints of the 17 contract drawings. The record drawings shall incorporate those changes made during the construction process, based on the marked-up prints, drawings and other data furnished by the Construction Contractor and CITY to Hazen with each pay application.

KEY ASSUMPTIONS

- Hazen shall not be responsible for the acts or omissions of any construction contractor, any construction subcontractor, the City's RPR, outside inspectors or any other person (except Hazen's own employees, subconsultants or agents) at the project site
- Hazen shall not be responsible for construction contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto. Hazen shall issue all technical instructions to the Contractor and shall interpret all technical requirements of the Construction Contract documents.
- Hazen services during construction are provided on the basis that consulting services are minimized and that City staff provide support and direction during construction. This work order was prepared on the basis that City will provide inspection and financial tracking and administration.
- Use of collaborative software for document control and record keeping is not included
- Normal 8-hour workdays, 5 days per week are assumed
- No materials testing/specialty materials observations by laboratories/specialty forms are included
- Existing equipment is being replaced such that no additional customers, equipment or processes are being added, therefore O&M Manuals or O&M Manual updates are not included
- No training by Hazen is anticipated
- Due to the nature of the work (repair), permitting is not included
- Permitting for requested changes or additional construction efforts and permit tracking will be performed by others and is not included
- The development of conformed contract documents for construction are not included
- The selected Contractor will maintain full responsibility for meeting safety and environmental regulations and conditions
- The selected Contractor will be required to coordinate its work efforts with the City or its agent as required to allow for the timely construction observation of work
- The City's RPR will receive and review Contractor applications for payment

COMPENSATION

<u>Description</u>	<u>Cost</u>
Labor	
Task 1 – Construction Administration Services	\$28,244
Task 2 – CDCs/RFIs	\$2,600
Task 3 – Orders for Change	\$2,470
Task 4 – Submittal Review	\$51,217
Task 5 – Applications for Payment	\$8,723
Task 6 – Construction Meetings	\$3,676
Task 7 – Limited Field Services	\$10,595
Task 8 – Startup Services	\$6,860
Task 9 – Project Closeout	\$2,985
Task 10 – Record Drawings	\$2,994
Sub-Total Labor	\$120,364
Direct Expenses	
Miscellaneous (postage, shipping, etc.)	\$100
Sub-Total Direct Expenses	\$100
TOTAL (Not-to-Exceed)	<u>\$120,464</u>

The services as outlined above will be performed on a not-to-exceed basis for \$120,464. A fee breakdown used to develop the fee is attached.

SCHEDULE

Per the Contract Documents, a construction duration of 450 days to substantial completion and an addition 30 days to final completion is anticipated. We are prepared to proceed with these services immediately.

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 and Sawyer, D.P.C. 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

Attachment

c: *File No. 4321-073/1.0*
J. McMahon

**CITY OF HOLLYWOOD
SOUTHERN REGIONAL WASTEWATER TREATMENT PLANT
Clarifier No. 3 Repair CMS
City Project No. 22-9525
Fee Breakdown**

<u>Tasks</u>	<u>Senior Associate</u>	<u>Senior Principal Engineer</u>	<u>Principal Engineer</u>	<u>Engineer</u>	<u>Draftsman</u>	<u>Secretarial</u>	<u>Subtotal</u>	<u>Cost</u>
LABOR								
Task 1 - Construction Administration Services	35	105	0	0	0	0	140	\$ 28,244
Task 2 - CDCs/RFIs	2	6	0	8	0	0	16	\$ 2,600
Task 3 - Orders for Change	1	9	0	0	6	0	16	\$ 2,470
Task 4 - Submittal Review	23	46	0	299	0	0	368	\$ 51,217
Task 5 - Pay Requests	0	48	0	0	0	0	48	\$ 8,723
Task 6 - Construction Meetings	6	0	10	0	0	8	24	\$ 3,676
Task 7 - Limited Field Services	0	0	70	0	0	0	70	\$ 10,595
Task 8 - Startup Services	4	12	24	0	0	0	40	\$ 6,860
Task 9 - Project Closeout	4	4	8	0	0	0	16	\$ 2,985
Task 10 - Record Drawings	1	0	0	9	17	0	27	\$ 2,994
Subtotal	76	230	112	316	23	8	765	\$ 120,364
DIRECT EXPENSES								
Miscellaneous (postage, shipping, etc.)								\$ 100
Subtotal								\$ 100
Total (Not-to-Exceed)								\$ 120,464
Maximum Hourly Raw Labor Rate*	\$81.81	\$56.79	\$51.98	\$38.50	\$29.84	\$23.10		
* Overall multiplier = 3.2								