TASK ORDER NO. 01 Jacobs Engineering Group, Inc. South Regional WWTP – Design Headworks Scrubber Rehabilitation

THIS TASK ORDER is made and	entered into by and between the City of Hollywood, Florida
hereinafter referred to as "City"	and, Jacobs Engineering Group, Inc., hereinafter referred to
as "Consultant", dated	, 2024, between the City and Consultant;

WHEREAS, the Master Agreement between the City and Consultant provides that requirements for professional services are to be set forth in tasks orders;

IT IS AGREED as follows:

SECTION A. BACKGROUND AND INTENT

The City desires to select a Firm from its General Consulting Services Pool (GCSP) to provide professional engineering services related to the design, permitting and bidding assistance for the Headworks Scrubber Rehabilitation project, located at the City's South Regional Wastewater Treatment Plant (SRWWTP). The project consists of the rehabilitation of the existing scrubber system in-kind which has passed its useful life, including scrubber vessel/media, chemical system, compressors, and air duct as needed. The intent of this task order is for a consultant to provide design, permitting, and bidding assistance services for these improvements. The specific scope of work is detailed in Section C of this task order.

SECTION B. PROJECT REPRESENTATIVES

For City of Hollywood: Roger Bezerra

954-921-3930

rbezerra@hollywoodfl.org

For Consultant: GJ Schers, PMP

954-513-1540

GJ.Schers@jacobs.com

SECTION C. SCOPE OF WORK

Consultant will provide professional services for the design, permitting, and bidding for the headwork scrubber rehabilitation. The improvements will consist of replacement in-kind, as detailed below.

- a) Demolish/replace equipment (in-kind, with same treatment capacity and air flow rates) with new as follow:
 - 1. Both blowers, and its local disconnect.
 - 2. Blower motor starters in switchgear room.
 - 3. Caustic fill connection, bulk storage, day storage, feed system, interconnecting pipework, containment and control panel.
 - 4. Recirculation pumps, interconnecting pipework and its control panel.
 - 5. Scrubber media and other deficiencies inside the vessels.
 - 6. Dampers and ductwork brackets/supports.
 - 7. Isolation valves and expansion joints.
 - 8. pH control system, local control panel and update to SCADA.

- b) General site improvements:
 - 1. Minor improvements to electrical, local controls, instrumentation, and SCADA systems, where necessary.
 - 2. Site piping, sidewalk, and roadway modifications were necessary.

The existing FRP vessels, FRP ductwork and supporting slab will remain as is.

The professional services tasks to perform the design of the improvements mentioned above are identified as follows:

Task 1 - Project Management

This task includes project setup, preparation of support documents for monthly invoicing, project controls support, and project closeout. In addition to project initiation (kick-off), the Consultant will attend up to one monthly in-person or remote coordination meeting with City, as needed, to discuss project progress and coordination. A project initiation meeting will be held to identify roles, responsibilities, and communication protocols for project team members; identify critical success factors; and discuss the overall project work plan, deliverables, schedule, and critical milestones.

Deliverables: electronic copy (pdf)

- 1. Progress monthly coordination meeting's agenda, meeting minutes and action item log.
- 2. Monthly invoice concurrent with the work completed and supported by a Monthly Progress Report (MPR).
- 3. Schedule updates in MS Project format and to be included in MPR.
- 4. Meeting minutes from any coordination meetings with City staff and Building Department (up to 3 meetings)
- 5. Response to comment, in table format, for any City's comments received from deliverables reviews in Task 2-4.

Task 2 - Preliminary (30%) Design

The Consultant will prepare a preliminary technical memorandum (TM) detailing scope of work, major equipment sizing presented in tables and equipment cut sheets, supported by 30% design drawings. The Consultant will:

- 1. Attend a site visit to inspect and detail scope of work for piping, mechanical, electrical, structural and I&C components to be removed and replaced.
- 2. Review existing and available information.
- 3. Draft conceptual design criteria of the odor control system while comparing proposed design criteria with existing infrastructure size. State if existing odor control system can handle the design criteria basis.
- 4. Review odor sources from Headwork area.
- 5. Detail item by item (mechanical, electrical, piping) scope of work to be detailed at 30% design.

30% design drawings will consist of:

- Cover and index
- Demolition sheets with photographs
- Layout drawing with vessel, ductwork and piping
- Equipment drawings with new equipment specs shown on drawings
- Electrical single line diagram
- Instrumentation diagram

Consultant will organize a review meeting with City to discuss the 30% Design. A meeting summary will be prepared to document the conclusions and actions of the meeting. The comments made by City will be incorporated into the 90% Design.

Deliverables: electronic copy (pdf)

1. Preliminary TM, including 30% design drawings

Task 3 – 90% Design

After The City has approved the preliminary design documents (30% design) and therewith the location of the new equipment, piping, Consultant will develop the design to 90% design documents. The design drawings will follow the CAE/CAD standards of Consultant and will be developed in MicroStation 3D. Consultant's master technical specifications (Division 02 - 49) will be used as the basis for all specifications.

The 90% design will be used as the 'Permit Set'.

Consultant will organize a review meeting with City to discuss progress and design drawings status at an approximate 90% completion level. A meeting summary will be prepared to document the conclusions and actions of the meeting. The comments made by City will be incorporated into the 100% detailed design documents.

Deliverables: electronic copy (pdf)

1. 90% design deliverable (drawings and technical specifications).

Task 4 -100% Design

Under this task, Consultant will develop the detailed design from 90% to 100% design completion. The final deliverable will be a Bid Set based on City's requirements consisting of drawings and technical specifications.

The drawings will cover approximately 40 sheets, including:

- 12 cover, index, abbreviations, general notes, and discipline legends sheets.
- 2 demolition plan view sheets with photographs.
- 3 proposed piping plans, sections, and detail sheets.
- 6 process mechanical general arrangement sheets with plan views, cross-sections, piping arrangement details and other specific details for the equipment.
- 4 electrical sheets covering single line diagrams, lighting and grounding plans, panel schedule, riser diagrams and electrical plans.
- 3 instrumentation and control sheets covering P&IDs, and a block diagram.
- 2 civil; sidewalk, and roadway modifications were necessary.
- 8 standard detail sheets from different disciplines.

Comments from the Building Department will be incorporated in the 100% Design.

Consultant will develop a Class 2 estimate of probable construction costs, in accordance with the AACE International Recommended Practice No. 56R-08.

At the 100% completion level, Consultant will organize a review meeting with City to discuss the draft detailed design documents. A meeting summary will be prepared to document the conclusions and actions of the meeting.

Deliverables: electronic copy (pdf)

- 1. 100% design deliverable (drawings and specifications)
- **2.** Class 2 estimate of probable construction costs.

Task 5- Permitting Assistance

The following services will be performed by Consultant:

Develop application documents for the City's Building Department Permit of the
proposed facility improvements covering electrical, structural, civil and mechanical
design/inspection disciplines. The work will include coordination of a remote Teams
pre-application meeting with the City's Building Department to discuss proposed
improvements and to verify the application requirements. The work will cover
responses to up to three requests for additional information (RFI) from the
Department. It is anticipated that the permit application will be submitted shortly
after the 90% Design Deliverable has been issued.

Deliverables: electronic copy (pdf)

1. Preliminary permit application package to be submitted to the City's Building Department on behalf of City.

Task 6 - Bidding Assistance

The following services will be performed by Consultant:

- Assist City in preparing the bid package. City will prepare Division 0; Consultant will coordinate between Division 0 and Division 1. Consultant will assist City with Bid Form and in obtaining bids for construction and attend the pre-bid conference.
- Prepare for City's approval written addenda as appropriate to interpret, clarify or expand the bid documents. The Consultant will coordinate with City during the bidding process and be available to assist City in addressing bidders' questions and comments at any time during the bidding process.
- Review and advise City as to the qualifications of prospective contractors and subcontractors, suppliers, and others proposed by the bidder and will assist in the evaluation of bids received for determination of compliance with the bidding requirements and recommendation of the lowest responsive and responsible bidder. City will be responsible for making the final selection of the successful bidder.

The final deliverable will be a Bid Package based on City's requirements consisting of drawings, technical specifications and other documents which fix and describe the requirements of the project. City will provide the Division 0 or 'front end' specifications with Consultant input.

Deliverables: electronic copy (pdf)

- 1. Support documents for bid package, including pricing/bid schedule, description of minimum requirements, and anticipated construction schedule.
- 2. Technical information for bidding addenda.
- 3. Bid award recommendation letter and supporting documentation.

SECTION E. CITY'S RESPONSIBILITY

City shall provide the following items to Consultant:

- a) As-built drawings and existing topographical survey information will be handed over to a Consultant to perform the work and are sufficiently detailed to perform the work.
- b) Original design criteria and equipment information (if available) for the scrubber, and all associated equipment. This information may be covered in the O&M manual or may be available from the original shopdrawing submittal.
- c) MS Word version of City's Division O/front-end specification.

- d) Payment of permit fees.
- e) City's project manager who will be Consultant's main point of contact during the project. This project manager will consolidate the City's comments to draft deliverables with the goal of responding within two weeks of each submittal date.
- f) Site and operational data and other information requested by Consultant as available.

SECTION F. CONSULTANT SERVICES SPECIFICALLY NOT INCLUDED

- a) Design services for making substantial structural, architectural and HVAC modifications to the Headwork's room is not included.
- b) Odor control system to be used and general arrangement is same as existing technology and design. Existing FRP vessels, FRP ductwork and supporting slab will remain as is. There are no provisions in the scope to evaluate different types of odor control technologies such as with biological scrubbers.
- c) Geotechnical field investigations and engineering. This is based on the assumptions that the scope of this project doesn't require new foundations.
- d) Field investigations to locate existing utilities on site. It is assumed that the location of existing utilities is shown accurately on record drawings or actual location can be identified by plant personnel on site. This is also based on the assumption that the scope of this project is not impacted by existing utilities.
- e) Any investigative and design of remediation work of possible hazardous waste, asbestos, lead paint or other types of contamination.
- f) Representation in public, community outreach or commission meetings.
- g) It is assumed that the City agrees with maintaining the MCC on the 2nd floor of the adjacent building.
- h) Contract documents for multiple construction projects. It is assumed that all improvements described herein will be covered under a single construction contract and will be based on the approximate drawing list included in this scope of work.
- i) In providing opinions of cost, financial analyses, economic feasibility projections, and schedules for the project, Consultant has no control over cost or price of labor and materials; unknown or latent conditions of existing equipment or structures that may affect operation or maintenance costs; competitive bidding procedures and market conditions; time or quality of performance by operating personnel or third parties; and other economic and operational factors that may materially affect the ultimate project cost or schedule.
- j) The scope is a replace equipment "in kind" and therefore If changes are needed in equipment size from the existing, there will be a need to request additional budget to develop a new design criteria and size the new equipment.
- k) The level of effort has been based on assumptions that existing as-built drawings and O&M manual and other relevant data will be provided to Consultant and it will be utilized with added photos to depict the replacement scope. Consultant will reasonably rely upon the accuracy, timeliness, and completeness of this information/data provided by the City or other third parties without independent verification. Additional effort by Consultant due to invalid data or information provided by the Client or other third-parties, may entitle Consultant to additional Compensation.
- I) The level of effort assumed for Task 5: Permitting Assistance and Task 6: Bidding Assistance is 60 hours and 30 hours respectively.
- m) The design doesn't include changes classification of the room where the MCC is located, nor any other Headwork room impacted by the headworks scrubber rehabilitation.

SECTION H. SCHEDULE

Deliverables shall be provided per the following schedule:

Task	Description	Calendar Days from NTP ¹
1	Project Management	NTP + 360 days
2	Preliminary (30%) Design ¹	NTP + 60 days
3	90% Design ¹	NTP + 180 days
4	100% Design ¹	NTP + 270 days
5	Permitting Assistance	NTP + 320 days
6	Bidding Assistance ²	NTP + 360 days

Notes:

- 1. Includes two weeks for City's review of Deliverables.
- 2. Bidding assistance tasks shall be performed on an as-needed basis.

SECTION I. BASIS OF COMPENSATION

The fee for the scope of work described in Section C is **\$197,600** labor and **\$2,400** expenses, for a total lump sum of **\$200,000**. County shall periodically compensate Consultant a portion of the task fee based on mutually agreed-upon percentages of completion of each task.

Task	Description	Fee
1	Project Management	\$13,042
2	Preliminary (30%) Design	\$62,952
3	90% Design	\$72,290
4	100% Design	\$32,936
5	Permitting Assistance	\$10,810
6	Bidding Assistance	\$5,570
	Total Labor	\$197,600
	Expenses	\$2,400
	TOTAL	\$200,000

SECTION J. ACCEPTANCE

IN WITNESS WHEREOF, the parties hereto have executed this Amendment on the dates indicated below. $\,$

	For:	CITY OF HOLLYWOOD, FLORIDA	
ATTEST:	As approved by the board on		
	Date:		
	By:		
WITNESS:	For:	Jacobs Engineering Group, Inc.	
		Dada	
	Bv:	David Ashman, Vice President	