Mr. Clece Aurelus, P.E.
Engineering Support Service Manager
City of Hollywood
Department of Public Utilities
1621 N. 14th Avenue
Hollywood, Florida 33022

# RE: SANITARY SEWER LIFT STATION E8 REHABILITATION CTA PROPOSAL NO. 2020-S04.268

Dear Mr. Aurelus:

We are pleased to submit this proposal for Professional Consulting Services in connection with the Lift Station E8 Rehabilitation.

Lift Station E-8 is a sewage repump station serving the east area of the City of Hallandale Beach. It is near the end of its useful life and consists of 2 dry pit pumps with normal electrical motor that are installed on the 2nd Floor of a Submerged Pump Wetwell configuration. During heavy rain events such as hurricanes, the wet well surcharges and the wastewater enters the pump room, which renders the lift station un-operational. To solve ongoing operational issues and maintain continuous operation of this critical pump stations, the pump station configuration needs to be completely changed to isolate the pumps from wetwell or it needs to be converted to a submersible lift station. To meet the future growth from Hallandale Beach area, the pump size will need to be increased and other related improvements will be completed. Improvements will consist of replacing internal piping to the Station wall including valves and fittings, rehabilitating the existing concrete floor, walls, ceiling, vaults, wet well, dry well, access hatch and concrete pillars, replace electrical meter and main, replace motor control panels and rewire new pumps, new RTU, new SCADA, rewire and replace branch wiring outlets and fixtures, generator with double wall tank with leak detection, etc. Specifically, our proposed scope of services and fees are as follows:

### I. SURVEYING SERVICES

# 1.1 <u>Prepare Design Survey</u> (CTA Task No. 11050) Obtain field survey information and prepar

Obtain field survey information and prepare an engineering base sheet for the existing sewage Lift Station E8 using the 3D Laser Scanner. The survey information shall include detailed dimensions on pipes, pumps, panels, tanks, etc. to provide the base for the engineering design. A survey base sheet will be prepared for civil engineering design.

Lump Sum.....\$20,229.12

CREVEN THO//IPSON



& ASSOCIATES INC.

Engineers Planners Surveyors Landscape Architects

3563 NW 53<sup>rd</sup> Street Fort Lauderdale, FL 33309-6311 Phone: (954) 739-6400

Fax: (954) 739-6409

# II. <u>ENGINEERING SERVICES - CIVIL - ELECTRICAL - STRUCTURAL DESIGN</u>

# 2.1 Pump Station Update Technical Memorandum CTA Task No. 31004)

Prepare a technical memorandum to address the modifications to the existing Pump Station E8 including preliminary costs based on three (3) options for the modifications. The three (3) options are as follows:

- Modify PS E8 to completely separate the existing wet well from the dry well including access to both wells.
- Convert the existing PS E8 to a submersible pump setup with only a wet well.
- Construct a new submersible station on the west side of existing PS E8 and remove the existing building after completion of the new station.

Three (3) options will be presented to the City for review and approval of an option.

*Lump Sum......\$39,332.00* 

# 2.2 <u>Wastewater Hydraulic Analysis Report</u> (CTA Task No. 31004)

Prepare a wastewater hydraulic analysis to determine the pump capacity requirements based on the existing wastewater transmission main size. City shall supply all information relevant to the analysis such as as-builts, run times, pressures, wet well design parameters and all else necessary to conduct the hydraulic analysis. Report shall also discuss the potential to construct a new lift station on the Site in lieu of a complete rehabilitation of the existing station.

# 2.3 <u>Investigation and Data Collection (CTA Task No. 31025)</u>

Provide investigation and data collection for existing Pump Station E8, including franchise utilities and standard infrastructure improvements. Coordinate with City regarding operation and maintenance of existing pump station to accommodate proposed design.

Lump Sum......\$9,169.92

# 2.4 <u>Final Engineering Plans</u> (CTA Task No. 31025)

Prepare Engineering Plans, Contract Documents and Bidding Assistance for modifications to the existing sewage Lift Station E8. The upgrades will include the replacement of pumps and piping, electrical upgrades and replacement, structural work, tank replacement, SCADA, mechanical engineering, etc. The upgrades proposed to the station shall allow the station to remain in service during construction either by use of by-pass pumping, phased construction or another mechanism. Pumps will be sized based on the hydraulic analysis to be performed and any technical provided by City of Hollywood.

*Lump Sum......\$167,354.00* 

- 2.5 <u>Prepare and Process On-site Engineering Permit Applications</u> (CTA Task No. 31080) Prepare and process permit applications and supporting documents through appropriate state and local agencies including:
  - Broward County Environmental Protection and Growth Management Department -Wastewater
  - Florida Department of Environmental Protection Wastewater
  - City of Hollywood

City of Hollywood will provide all necessary reports/documents/modeling data required to secure wastewater permits from BCEP&GMD and FDEP.

*Lump Sum......\$8,478.72* 

# III. REIMBURSABLE EXPENSES

3.1 Reimbursable Expenses (CTA Task No. XPEN)

Reimbursable expenses shall include printing, mylars, copying, postage, photographic services, Federal Express and courier services.

#### IV. CONTINGENCY

4.1 Contingency

Contingency allowance shall be as directed by the City for additional services not identified within the Project Scope. No work shall take place under this Task without authorization from the City.

Allowance ......\$10,000.00

#### **SUMMARY OF FEES**

SUBTOTAL- SURVEYING, ENGINEERING, AND	
CONSTRUCTION OBSERVATION SERVICES	\$263,249.20
SUBTOTAL REIMBURSABLES & CONTINGENCY	\$10,500.00
TOTAL	\$273,749.20

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#### **PROJECT SCHEDULE**

# **SERVICES NOT INCLUDED**

Additional services will be performed as authorized in writing by the Client. Additional services include but are not limited to the following:

- 1. Environmental Permitting or Consulting Services.
- 2. Water and Storm Drainage Improvements/Calculations.
- 3. Construction Related Services.
- 4. Exterior Improvements to LS E8.
- 5. Site Planning and Processing
- 6. Landscape Architectural and Tree Removal permitting Services.
- 7. Geotechnical Testing (shall be provided by client if required).
- 8. Utility locates and test holes (shall be provided by client if required).
- 9. Soil analysis and testing.
- 10. Material testing.
- 11. Services required by additional governmental regulations which might be put into effect after the date of this agreement.
- 12. Any additional services requested by Client.

# **Acceptance**

This proposal and fee schedules are based on acceptance within 30 days of the date of preparation. If not accepted by you within that time period, we reserve the right to re-evaluate the terms and conditions contained herein.

The above will be subject to the terms and conditions as specified in the Contract Documents. If the proposed work and fees contained herein are agreeable with you, please provide a Purchase Order and a Notice to Proceed.

Should you have any questions regarding the above, please do not hesitate to call.

Sincerely,

CRAVEN THOMPSON & ASSOCIATES, INC.

PATRICY J. GIBNEY, P.E. Vice P. esident, Engineering

PJG/tg

EXHIBIT D STAFF TIME ESTIMATE

	Hourly	Hours per Task										Totals	
		Task 1.1 Task 2.1 Task 2.2 Task 2.3 Task 2.4 Task 2.5 Task 3.1 Task 4.1 Task 5.1											
	Rate	0001	0002	0003	0004	0005	0006	0007	0008	0009	Hours	Cost	
<u>Administration</u>													
Principal	\$220.00										0	\$0.00	
Administrative Assistant	\$65.00										0	\$0.00	
Sub Total											0	\$0.00	
Engineering													
Principal Engineer	\$201.60		4	4		4					12	\$2,419.20	
Sr. Supervising Engineer	\$181.44	4	40	16	8	80	8				156	\$28,304.64	
Senior Engineer	\$129.60	4	80	80	24	160	40				384	\$49,766.40	
Project Engineer	\$129.00		80	40	40	240	16				416	\$49,700.40	
Senior CADD Technician	\$95.04		00	40	40	160	10				160	\$15,206.40	
Senior CADD Technician	φ95.04					160							
0.1.7.1	<b></b>										0	\$0.00	
Sub Total											1,128	\$143,619.84	
Construction													
Construction Manager	\$152.64										0	\$0.00	
Senior Field Representative	\$95.04										0	\$0.00	
Field Representative	\$77.76										0	\$0.00	
Sub Total	ψσ										0	\$0.00	
											-	44.00	
Surveying													
Principal Surveyor	\$158.40	16									16	\$2,534.40	
Professional Land Surveyor	\$135.36	24									24	\$3,248.64	
Land Surveyor	\$112.32	40									40	\$4,492.80	
Senior CADD Technician	\$95.04										0	\$0.00	
Survey Laserscan Crew	\$250.56	12									12	\$3.006.72	
Survey Crew (2 man)	\$129.60	48									48	\$6,220.80	
Sub Total											140	\$19,503.36	
Cost per Task		\$20,229.12	\$27,648.00	\$18,685.44	\$9,169.92	\$78,912.00	\$8,478.72	\$0.00	\$0.00	\$0.00		\$163,123.20	
Budget per Task		\$20,229.12	\$27,648.00	\$18,685.44	\$9,169.92	\$78,912.00	\$8,478.72	\$0.00	\$0.00	\$0.00		\$163,123.20	
Subconsultants													
Mechanical Engineering - RGD	, I					\$8,790.00						\$8.790.00	
		\$8,790.00 \$4,000.00 \$40,000.00								\$8,790.00 \$40,000.00			
Structural Engineering - TRC			\$4,000.00 \$7,684.00			\$40,000.00							
Electrical Engineering - Hillers Subconsultants Sub Total		\$0.00	\$7,684.00 \$11,684.00	\$0.00	\$0.00	\$39,652.00 \$88,442.00	\$0.00	\$0.00	\$0.00	\$0.00		\$39,652.00 \$100,126.00	
Subconsultants Sub Total		φυ.00	φ11,084.00	φυ.υυ	φυ.υυ	φοο, <del>44</del> ∠.00	φυ.υυ	φυ.υυ	φυ.υυ	φυ.υυ		φ100,126.00	
Total		\$20,229.12	\$39,332.00	\$18,685.44	\$9,169.92	\$167,354.00	\$8,478.72	\$0.00	\$0.00	\$0.00			
Direct Expenses	į	•		·		·		\$500.00		·		\$500.00	
Contingency									\$10,000.00			\$10,000.00	
Grand Total		\$20,229.12	\$39,332.00	\$18,685.44	\$9,169.92	\$167,354.00	\$8,478.72	\$500.00	\$10,000.00	\$0.00		\$273,749.20	
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