

## **Public Works Compound Stormwater System Modification**

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### **SCOPE OF SERVICES**

#### **Supplemental Proposal For Public Works Compound Stormwater System Modification**

#### **Design Services**

#### **RFP # FY 2018-2019-012 Consultant Competitive Negotiation Act (CCNA) Continuing Professional Architectural and Engineering and Other Services**

#### **Discipline: Civil Engineering Services**

**3/22/2023**

#### **I. Introduction**

The City of Hallandale Beach (City) will be reconfiguring the Public Works compound (DPW) to better utilize the existing space. The City desires to fill in the area located in the northwest corner of DPW that is currently occupied by a stormwater retention pond. This area would be used for the city's sanitation fleet vehicles. The scope of services included design of the new parking lot (geometrics, grading, drainage, lighting) and modification of the existing water surface permit/license.

The project was designed under the premise that the existing water wells on site (3 and 5) were out of service and planned for abandonment. The plan now is for the wells to remain on an emergency backup use only. Due to the permit requirements regarding wells 3 and 5, the drainage system will have to be redesigned to have all French drain, underground system and detention areas dry (1' above the water table) and to remove any drainage from the wellfield protection zone # 1. Below is the scope of work of this supplemental:

#### **II. Scope of Work**

##### **A. Design Analysis**

##### **1. Drainage Analysis and Report**

RJ Behar will perform calculations necessary for the redesign of the drainage improvements, the updated drainage report will be used to obtain the surface water permit. The redesign will involve recalculating the French drains as a dry system (this will reduce its capacity), redesign of the underground storage system (most likely increase footprint and use smaller pipes), redesign of the dry retention swale (lower invert) to increase storage and redesign of the NW 3<sup>rd</sup> St dry retention swale and possible connection to the other site system.

##### **2. Plans Preparation**

Due to the drainage redesign, the following plan sheets will need to be updated:

Key Sheet

General Notes and Quantities

- Demolition Plan (update layout)
- Site Plan
- Grading and Drainage Plan
- Dry Retention Swale Plan and Sections
- Signing and Marking Plan (update layout)
- Water and Sanitary Plan (update layout)
- NW 3<sup>rd</sup> St Paved Access Road
- Lighting Plan (update layout)
- Miscellaneous Civil/Site Details

The underground storage system will most likely increase in footprint in order to maintain the same volume. The proposed lighting pole foundations will need to be checked to avoid conflict with the underground storage system.

### **3. Estimates of Probable Cost**

RJ Behar will update the cost estimate based on the revised design.

### **4. Technical Specifications**

RJ Behar will update the technical specifications.

### **5. Progress Meetings**

One progress meeting is included to discuss the progress or any comments with the City and County.

### **6. Permitting**

RJ Behar will submit the updated plans and calculations to the County with responses to the current request for additional information (RAI) to obtain the permit.

**The cost of this supplemental is \$ 31,254.00. See attached fee breakdown.**

**The estimated time to complete the drainage redesign is 3 weeks after receiving the NTP.**

**FEE PROPOSAL SUMMARY**

**R.J. BEHAR & COMPANY**

**PROJECT DESCRIPTION: Public Works Compound Stormwater System Modification Design Services - Supplemental**

ACTIVITY	DIRECTOR, ENGINEER		PROJECT MANAGER		ENGINEER		JR. ENGINEER				MANHOURS BY ACTIVITY	TOTAL COST BY ACTIVITY
	STAFF HOURS	\$ 246.00	STAFF HOURS	\$ 223.00	STAFF HOURS	\$ 146.00	STAFF HOURS	\$ 105.00	STAFF HOURS	HOURLY RATE		
		HOURLY RATE		HOURLY RATE		HOURLY RATE		HOURLY RATE				
Field Visits (1 visit)	0	\$ -		\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Data Collection	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Parking Lot Design	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Drainage Analysis and Report	6	\$ 1,476.00	24.0	\$ 5,352.00	7.0	\$ 1,022.00	11.0	\$ 1,155.00		\$ -	48	\$ 9,005.00
Photometric Calculations	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Electrical Power Supply Design	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Key Sheet	0	\$ -	0.0	\$ -	1.0	\$ 146.00	1.0	\$ 105.00		\$ -	2	\$ 251.00
General Notes and Quantities (1 sheet)	0	\$ -	0.0	\$ -	2.0	\$ 292.00	4.0	\$ 420.00		\$ -	6	\$ 712.00
Demolition Plan (1 sheet)	0	\$ -	0.0	\$ -	1.0	\$ 146.00	3.0	\$ 315.00		\$ -	4	\$ 461.00
Parking Lot Sections (1 sheet)	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Site Plan (1 Sheet)	0	\$ -	0.0	\$ -	2.0	\$ 292.00	4.0	\$ 420.00		\$ -	6	\$ 712.00
Grading and Drainage Plan (1 sheet)	3	\$ 738.00	9.0	\$ 2,007.00	13.0	\$ 1,898.00	11.0	\$ 1,155.00		\$ -	36	\$ 5,798.00
Signing and Marking Plan (1 sheet)	0	\$ -	0.0	\$ -	1.0	\$ 146.00	1.0	\$ 105.00		\$ -	2	\$ 251.00
Lighting Plan (1 sheet)	0	\$ -	2.0	\$ 446.00	3.0	\$ 438.00	7.0	\$ 735.00		\$ -	12	\$ 1,619.00
Power Supply and Miscellaneous Details	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Truck Wash Station details	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Detail Sheets (2 sheets)	2	\$ 492.00	1.0	\$ 223.00	4.0	\$ 584.00	9.0	\$ 945.00		\$ -	16	\$ 2,244.00
Erosion Control Details (1 sheet)	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Estimates of Probable Cost	1	\$ 246.00	0.0	\$ -	2.0	\$ 292.00	5.0	\$ 525.00		\$ -	8	\$ 1,063.00
Specifications	2	\$ 492.00	2.0	\$ 446.00	4.0	\$ 584.00	8.0	\$ 840.00		\$ -	16	\$ 2,362.00
Utility Coordination	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Utility Meeting	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Progress Meetings (1 meeting)	1	\$ 246.00	1.0	\$ 223.00	0.0	\$ -	0.0	\$ -		\$ -	2	\$ 469.00
Permitting (Site Plan and EPGMD)	4	\$ 984.00	14.0	\$ 3,122.00	8.0	\$ 1,168.00	4.0	\$ 420.00		\$ -	30	\$ 5,694.00
Bid Assistance (Not Included)	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
Post Design Services (Not Included)	0	\$ -	0.0	\$ -	0.0	\$ -	0.0	\$ -		\$ -	0	\$ -
<b>TOTAL</b>	<b>19</b>	<b>\$ 4,674.00</b>	<b>53</b>	<b>\$ 11,819.00</b>	<b>48</b>	<b>\$ 7,008.00</b>	<b>68</b>	<b>\$ 7,140.00</b>	<b>0</b>	<b>\$ -</b>	<b>188</b>	<b>\$ 30,641.00</b>
LABOR FEE											\$ 30,641.00	
DIRECT REIMBURSABLES - travel, parking, printing (L.S. @ 2.0%)											\$ 613.00	
SUBCONSULTANTS												
SURVEY (JA Bidot & Assoc.)											\$ -	
GEOTECHNICAL by Federal Engineering and Testing											\$ -	
SUBTOTAL											<b>\$ 31,254.00</b>	
UTILITY LOCATES (Not Included)											\$ -	
<b>TOTAL:</b>											<b>\$ 31,254.00</b>	

Note:

- 1) Permit Fees not included.