

**CONSULTANT COMPETITIVE NEGOTIATION ACT (CCNA)**  
**CONTINUING PROFESSIONAL ARCHITECTURAL**  
**AND ENGINEERING SERVICES AND OTHER SERVICES**

**WORK AUTHORIZATION FORM**

**PURSUANT TO REQUEST FOR PROPOSAL  
(RFP) # FY 2018-2019-012**

1. The Firm receiving the Work Authorization will have five (5) business days to return the completed Work Authorization to the Project Manager via email.
2. The Work Authorization must include all costs for the Project utilizing a Fee Worksheet with hours and fees per Exhibit B - Hourly Billing Rates for Tasks Orders. The Cost Proposal must include a narrative schedule of deliverables and a summary of compensation which could be through an excel worksheet.
3. The costs for the Project must include all meetings and all costs required for the Project.

Task No.	Task Description
1.	Pre-Design: <b>See Exhibit A - Scope of Services Proposal</b>
2.	Design: <b>See Exhibit A - Scope of Services Proposal</b>
3.	Post Design Services: <b>See Exhibit A - Scope of Services Proposal</b>
4.	Bidding Services: <b>See Exhibit A - Scope of Services Proposal</b>
5.	<p>General Tasks: <b>See Exhibit A - Scope of Services Proposal</b></p> <ul style="list-style-type: none"> <li>a. Kick-Off Meeting</li> <li>b. Site Visit</li> </ul> <p>Submittals are ONLY deemed accepted if approved in writing by the City.</p>
	<b>TOTAL COSTS ITEMS 1 - 6 \$ \$ See Exhibit A - Scope of Services Proposal</b>

## **Work Authorization**

Under  
Agreement between the City of Hallandale Beach and  
**R.J. Behar and Company, Inc.**

For

### **DPW Compound Outfall Analysis and Design Services and Equipment Parking Lot Design Services**

RFP # FY 2018-2019-012 CONSULTANT COMPETITIVE NEGOTIATION ACT (CCNA)  
CONTINUING PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES

This Work Authorization is issued pursuant to the Agreement between the City of Hallandale Beach ("City") and R.J. Behar and Company, Inc. ("Consultant") for RFP # FY 2018-2019-012 CONSULTANT COMPETITIVE NEGOTIATION ACT (CCNA) CONTINUING PROFESSIONAL ARCHITECTURAL AND ENGINEERING SERVICES (the "Agreement"), which was approved by the City Commission on August 5, 2020 via Resolution # 2020-054.

1. This Work Authorization permits Consultant to provide the services described in Exhibit "A" to this Work Authorization, attached hereto and incorporated herein. These services are authorized by Article 3 of the Agreement.

2. **Compensation and Method of Payment.**

2.1 Payment for the services authorized by this Work Authorization will be in accordance with Article 10 of the Agreement and the agreed method of compensation is as follows (Check those boxes that apply. Amounts indicated herein should not include any sums set aside as contingency. Monies indicated as contingency in project budgets or estimates are subject to the change order authorization provisions of the Agreement):

☒ 2.1.1 **Maximum Amount Not-To-Exceed Compensation.** City shall pay Consultant for the performance of all services set forth in Exhibit A to this Work Authorization, pursuant to the terms of the Agreement, up to a maximum amount not-to-exceed of **\$156,326.83**. It is understood that the method of compensation is that of "maximum amount not-to-exceed" which means that Consultant shall perform all services set forth herein for total compensation in the amount of or less than that stated above.

☐ 2.1.2 **Lump Sum Compensation.** City shall pay Consultant for the performance of all services provided pursuant to Exhibit A, as required under the terms of the Agreement, a total lump sum of \$(    ).

☐ 2.1.3 Reimbursable Expenses. City has established a maximum amount not-to-exceed of \$\_\_\_\_\_ for potential reimbursable expenses that may be utilized pursuant to Section 9.2 of the Agreement.

2.2 Payments for this Work Authorization shall be charged against: Budget account #3695-565010-P2303.

3. Time for Performance.

3.1 Consultant shall perform the services described in Exhibit A within the time periods specified in the Project Schedule included in Exhibit A. The Project Manager shall issue to Consultant a written Notice to Proceed for said time periods to commence.

3.2 ☐ If this box is checked, liquidated damages shall be applicable. In the event Consultant fails to complete the services identified in Exhibit "A" to this Work Authorization, on or before the Time for Performance set forth herein, Consultant shall pay to City the sum of \$\_\_\_\_\_ for each calendar day after the applicable Time for Performance, plus approved time extensions thereof, until completion of the service. These amounts are not penalties but are liquidated damages to City for its inability to proceed with, and complete, the service in a timely manner pursuant to the agreed upon Schedule. Liquidated damages are hereby fixed and agreed upon by the parties, recognizing the impossibility of precisely ascertaining the amount of damages that will be sustained by City as a consequence of such delay, and both parties desiring to obviate any question or dispute concerning the amount of said damages and the cost and effect of the failure of Consultant to complete the services within the applicable Time for Performance. This provision shall not affect the rights and obligations of either party as set forth in Section 3.7 of the Agreement.

4. The terms and conditions of the Agreement are hereby incorporated into this Work Authorization. Nothing contained in this Work Authorization shall alter, modify, or change in any way the terms and conditions of the Agreement with the City.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature: CITY OF HALLANDALE BEACH through its authorization to execute same and R.J. Behar and Company, Inc. signing by and through its Vice President duly authorized to execute same.

CITY

ATTEST:

CITY OF HALLANDALE BEACH

\_\_\_\_\_  
CITY CLERK

By: \_\_\_\_\_  
City Manager

\_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_.

**(CITY ATTORNEY SIGNATURE NOT REQUIRED UNDER \$25,000)**

Approved as to legal sufficiency and form by  
CITY ATTORNEY

\_\_\_\_\_  
City Attorney

\_\_\_\_\_ Day of \_\_\_\_\_, 20\_\_\_\_.

[CONSULTANT EXECUTION ON FOLLOWING PAGE]



IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the respective dates under each signature. R.J. Behar and Company, Inc. signing by and through its Vice President, Juan H. Vazquez, PE, duly authorized to execute same.

**CONTRACTOR MUST EXECUTE THIS CONTRACT AS INDICATED BELOW. USE CORPORATION OR NONCORPORATION FORMAT, AS APPLICABLE.** If the Company President does not sign the Contract, there must be a Secretary's Certificate Form provided to the CITY of Hallandale Beach, Florida indicating designee signing, has the authority to sign.

**R.J. BEHAR AND COMPANY, INC.**

ATTEST:

Dereth Behar  
(Secretary)

By

Juan H. Vazquez, PE, Vice President

(Corporate Seal) OR (NOTARY)

(Type Name and Title Signed Above)

11<sup>th</sup> Day of April, 2023

OR

(ONLY If not incorporated sign

below).

WITNESSES:

\_\_\_\_\_  
(PRINT NAME)

\_\_\_\_\_  
(PRESIDENT OR VICE-PRESIDENT)

\_\_\_\_\_  
(PRINT NAME)

\_\_\_\_\_  
(TYPE NAME & SIGNED ABOVE)

STATE OF FLORIDA  
COUNTY OF \_\_\_\_\_

**NOTARY SEAL**

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_, 20\_\_, by \_\_\_\_\_.

Signature of Notary

Name of Notary Printed, or Stamped

Personally Known \_\_\_\_\_ OR Produced Identification \_\_\_\_\_

Type of Identification Produced \_\_\_\_\_



**R.J.Behar & Company, Inc.**  
Engineers • Planners

October 26, 2022

Rev 12.28.22

*Via email: pkunen@hallandalebeachfl.gov*

Peter A. Kunen, P.E., CFM  
Assistant Director of Public Works/City Engineer  
City of Hallandale Beach Public Works Department  
630 NW 2<sup>nd</sup> Street,  
Hallandale Beach, FL 33009

**RE: RFP # FY 2018-2019-012 Consultant Competitive Negotiation Act (CCNA)  
Continuing Professional Architectural and Engineering and Other Services  
Proposal for the Public Works Compound Outfall Analysis and Design, and the  
Equipment Parking Lot Design Services.  
Discipline: Civil Engineering**

Dear Mr Kunen:

In accordance with Resolution No 2020-054 awarding RFP # FY 2018-2019-012 Consultant Competitive Negotiation Act (CCNA) Continuing Professional Architectural and Engineering and Other Services, attached please find the proposal for the subject project.

**SCOPE OF WORK**

1. See attached scope of work and fee proposal.

This proposal, when executed, shall be incorporated in and become an integral part of the Agreement of Professional Services between the City and R. J. Behar & Company, Inc., hereafter referred to as the Agreement.

Please do not hesitate to contact me should you have any questions or require any additional information.

Sincerely,  
**R.J. BEHAR & COMPANY, INC.**

A handwritten signature in blue ink, appearing to read 'Juan H. Vazquez'.

Juan H. Vazquez, P.E., PH, BCEE  
Vice President

L:\City of Hallandale Beach\PW Site Outfall\CoverLetterdoex.docx

## **SCOPE OF SERVICES**

**Proposal For Public Works (PW) Compound Outfall Analysis and Design Services, and the  
DPW Equipment Parking Lot Design Services.**

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

**Discipline: Civil Engineering Services  
10/25/2021**

### **I. Introduction**

The City of Hallandale Beach (City) plans to perform improvements to their Department of Public Works (DPW) compound. The project is located in the vicinity of NW 6<sup>th</sup> Ave and NW 2<sup>nd</sup> Street. Currently the overall site houses the Public Works building, the Water Treatment Plant and the sanitation fleet vehicles. There is an existing drainage system of interconnected inlets and pipes that eventually discharge to the existing pond at the northwest corner of the site. The pond does not have an outfall and runoff is stored until it percolates and dissipates underground.

This project entails evaluating the possibility of constructing an outfall from the DPW site to the lake (Chaves Lake) that is located west of the project. Chaves Lake is the main stormwater management facility within the area. The lake is connected to the Hallandale High School, which is further connected to the I-95 Pump Station within the City of Pembroke Park. The pump station consists of three 40 cfs each, pumps plus a standby pump. The pump station total discharge is limited to 120 cfs. The current Chaves Lake drainage basin according to the permit information (permit No 06-02942-P) is 740 Acres and it has an approximate storage of 151.35 Ac-ft at elevation 6.0' NGVD29 or 4.5' NAVD88.

The DPW site is not currently part of the drainage basin for Chaves Lake. The site has a total area of 9.58 Acres or 1.3% of the lake basin area. The DPW site existing estimated runoff volume generated for a 25-yr-72-hr storm is 9.64 Ac-ft or 6.4% of the lake storage at elevation 4.5' NAVD88. This evaluation intends to determine the feasibility of providing an overflow connection to Chaves Lake without impacting the operation and need to adjust the pump station capacity. The lake drainage basin will increase by 1.3%.

In addition, the City wants to redeveloped an area identified as the DPW Equipment Parking Lot, which is adjacent and east of the future Electric Vehicle (EV) Bus Charging Facility.

The scope of services will include evaluation of the overall Chaves Lake basin, design of the outfall pipe with connection to the lake, design of the new equipment parking lot (geometrics, grading, drainage, lighting) and modification of the existing water surface permit/license.

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

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



### **1. Field Review**

Field visits will be required to refine the scope of the improvements. This task will consist of a review of the outfall route and documenting existing conditions with photos and notes. Two field reviews are anticipated for this project.

### **2. Overall Coordination**

RJ Behar will coordinate the drainage for the DPW compound including the improvements for the sanitation vehicles parking area, the Electric Vehicle (EV) Bus Charging Facility and new equipment parking lot to make sure the project are compatible. RJ Behar will prepare one master drainage plan including all the proposed improvements and remaining systems for the DPW compound.

### **3. Data Collection**

Research should be conducted to review the project's existing records including the City's atlases, As-built plans, existing permits, and utility plans. The research efforts involve telephone conversations and meetings with agency staff, as well as reviewing record drawings and obtaining stormwater and utility atlases, flood maps, water table maps and others. Information will be collected from the City, SFWMD, FDOT and Broward County.

### **4. Drainage Analysis and Report**

RJ Behar will make efforts to obtain the AdICPR computer model files used for the I-95 Pump Station project's permitting (Permit No 06-02942-P). If not available, the models will be recreated from the paper permit files. The original model used the AdICPR version 2.2. The models will be updated to the AdICPR version 4 and compared to the original calculations. Once deemed acceptable, the model will be modified to add the drainage area of the PW site and proposed outfall.

A drainage report will be prepared outlining the evaluations performed, conclusions and the design of the proposed modifications.

### **5. Parking Lot Design**

A conceptual layout of the new parking area will be prepared for review and comments by the City. The Autoturn software will be executed to review the ingress, egress and turn radii to the site area.

### **6. Lighting Analysis**

The lighting analysis will include:

- Photometric Calculations
- Electrical Power Supply Design

### **7. Plans Preparation**

Final designs and plans will be prepared based on the results of our field reviews, analyses, and discussions with the City's Staff. RJ Behar shall prepare preliminary plans (60%) and final plans (100%) of the proposed improvements and submit to the City for review and approval.

The following is a preliminary list of drawings:

Key Sheet  
General Notes and Quantities  
Outfall Plans and Profiles  
Temporary Traffic Control Plans (NW 8<sup>th</sup> Ave)  
Demolition Plan  
Parking Lot Sections  
Site Plan  
Grading and Drainage Plan  
Signing and Marking Plan  
Lighting Plan  
Power Supply and Details  
Drainage Details  
Miscellaneous Civil/Site Details  
Erosion and Sediment Control Notes and Details

**Notes:** No landscape plans are included in the project.

#### **8. Estimates of Probable Cost**

RJ Behar will provide an Engineer's Opinion of Probable Cost at 60% and another final one with the final signed and sealed plans to use for comparison with the bids from contractors. The cost estimate shall include a detailed tabulation of all portions of the project.

#### **9. Technical Specifications**

Construction Specifications Institute (CSI) Format Specifications will be prepared for this project.

#### **10. Utility Coordination and Utility Meeting**

- a. Utility Coordination: A design ticket will be requested from Sunshine One Call. All of the utilities identified on the ticket will be contacted and atlases for the utilities' facilities in the area will be solicited. The information from the utilities will be included in the drawings. This task includes follow up with the utility companies to coordinate and resolve any possible conflicts.
- b. Utility Meeting: Attend one utility coordination meeting, if necessary, with all utilities to go over conflicts and any relocations. This could also be done by phone.

#### **11. Progress Meetings**

Three progress meetings are expected for the project to discuss scope, progress and City comments. The meetings will be conducted by phone. Minutes will be prepared outlining the major items and decisions discussed at the meetings.

#### **12. Permitting**

It is anticipated that Permit No 06-02942-P (I-95 Pump Station) will need to be modified for the proposed outfall improvements. License SWM2004-038-0 is anticipated to require modification

## **Public Works Compound Outfall Analysis and Design Services and DPW Equipment Parking Lot Design Services.**

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for the proposed DPW Equipment Parking Lot improvements. RJ Behar will prepare the application forms and submit to SFWMD and Broward County Environmental Protection and Growth Management Department (BC EPGMD). If work within the lake shore is necessary, a BC EPGMD Environmental Resource License will also be required.

A dewatering permit is not expected. Tree removal permitting is not included.

### **13. Bidding Assistance**

RJ Behar shall provide plans and specifications to the City for distribution to contractors. The City will provide the front-end documents. These will be reviewed for consistency with the project specifications. RJ Behar shall respond to requests for information (RFI's).

- a. Meetings: Attend Pre-bid meeting(s).
- b. Addendums: RJ Behar shall prepare all necessary responses to RFI's to answer questions posed by contractors.

### **14. Survey**

See proposal from Javier Bidot and Associates (JBA). The fee from JBA includes preparing easement language for a possible pipe connection between NW 8<sup>th</sup> Avenue and Chaves Lake through the Chaves Lake Apartments property.

### **15. Subsurface Utility Engineering (SUE)**

See Subsurface Utility Engineering proposal from Inframap.

### **16. Geotechnical**

See attached proposal from Federal Engineering and Testing.

### **17. Post Design Engineering Services**

- a. During the construction there may be a need to attend the following meetings:
  - i. Pre-Construction Meeting (2 meetings, one for Sanitation vehicles parking and one for DPW Equipment Parking Lot and Outfall project)
  - ii. Construction Progress meetings
- b. During the construction there may be a need to perform field reviews. RJ Behar shall attend field reviews as required by the City. Six (6) inspections and one final inspection have been considered.
- c. Throughout the duration of the construction there may be a need to review shop drawings and submittals, provide clarifications, respond to request for information (RFI) and review change orders. RJ Behar will create a log, review the shop drawings and will determine whether these are acceptable for construction or whether a re-submittal is required. Eight (8) shop drawings, eight (8) material submittals, four (4) RFI's and four (4) other submittals have been considered.

## **Public Works Compound Outfall Analysis and Design Services and DPW Equipment Parking Lot Design Services.**

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- d. During the construction there may be a need to perform plan revisions. RJ Behar shall perform plan revisions as required by the Project to include Quality Control and supervision. Two plan revision has been considered.
- e. At the end of the project RJ Behar will review the As-built plans prepared by the contractor and prepare the final certification. No Record drawings will be provided.

### **Notes:**

The City will provide the location of City owned existing utilities.



**FEE PROPOSAL SUMMARY**

**R.J. BEHAR & COMPANY**

**PROJECT DESCRIPTION: Public Works Compound Outfall Analysis and Design Services and Equipment Parking Lot Design Services**

**SUMMARY**

Outfall Analysis and Design Services	\$ 80,707.81
Equipment Parking Lot	\$ 45,635.76
Overall Coordination and Master Drainage Plan	\$ 5,621.22
Bid and Post Design Services	\$ 18,362.04
<u>Permit Fees Budget (As required by permit agencies)</u>	<u>\$ 6,000.00</u>
<b>TOTAL</b>	<b>\$ 156,326.83</b>

**FEE PROPOSAL SUMMARY**
**R.J. BEHAR & COMPANY**
**PROJECT DESCRIPTION: Public Works Compound Outfall Analysis and Design Services**

ACTIVITY	DIRECTOR, ENGINEER		PROJECT MANAGER		ENGINEER		JR. ENGINEER				MANHOURS BY ACTIVITY	TOTAL COST BY ACTIVITY
	STAFF HOURS	\$ 246.00 HOURLY RATE	STAFF HOURS	\$ 223.00 HOURLY RATE	STAFF HOURS	\$ 146.00 HOURLY RATE	STAFF HOURS	\$ 105.00 HOURLY RATE	STAFF HOURS	HOURLY RATE		
Field Visits (1 visit)	0	\$ -		\$ -	3.0	\$ 438.00	3.0	\$ 315.00		\$ -	6	\$ 753.00
Data Collection	0	\$ -	1.0	\$ 223.00	4.0	\$ 584.00	3.0	\$ 315.00		\$ -	8	\$ 1,122.00
Drainage Analysis and Report	12	\$ 2,952.00	43.0	\$ 9,589.00	14.0	\$ 2,044.00	3.0	\$ 315.00		\$ -	72	\$ 14,900.00
Key Sheet	0	\$ -	0.0	\$ -	1.0	\$ 146.00	3.0	\$ 315.00		\$ -	4	\$ 461.00
General Notes and Quantities (1 sheet)	0	\$ -	0.0	\$ -	2.0	\$ 292.00	4.0	\$ 420.00		\$ -	6	\$ 712.00
Outfall Plans and Profiles (3 sheets)	4	\$ 984.00	3.0	\$ 669.00	14.0	\$ 2,044.00	33.0	\$ 3,465.00		\$ -	54	\$ 7,162.00
Temporary Traffic Control Plans (2 sheets)	12	\$ 2,952.00	2.0	\$ 446.00	8.0	\$ 1,168.00	10.0	\$ 1,050.00		\$ -	32	\$ 5,616.00
Ofall Details (1 sheet)	2	\$ 492.00	1.0	\$ 223.00	4.0	\$ 584.00	9.0	\$ 945.00		\$ -	16	\$ 2,244.00
Misc. Detail Sheets (1 sheets)	0	\$ -	0.0	\$ -	2.0	\$ 292.00	4.0	\$ 420.00		\$ -	6	\$ 712.00
Erosion Control Details (1 sheet)	0	\$ -	0.0	\$ -	2.0	\$ 292.00	6.0	\$ 630.00		\$ -	8	\$ 922.00
Estimates of Probable Cost	2	\$ 492.00	0.0	\$ -	2.0	\$ 292.00	5.0	\$ 525.00		\$ -	9	\$ 1,309.00
Specifications	4	\$ 984.00	1.0	\$ 223.00	4.0	\$ 584.00	7.0	\$ 735.00		\$ -	30	\$ 2,526.00
Utility Coordination	0	\$ -	1.0	\$ 223.00	4.0	\$ 584.00	7.0	\$ 735.00		\$ -	12	\$ 1,542.00
Utility Meeting	0	\$ -	2.0	\$ 446.00	2.0	\$ 292.00	0.0	\$ -		\$ -	4	\$ 738.00
Progress Meetings (2 meetings)	4	\$ 984.00	4.0	\$ 892.00	0.0	\$ -	0.0	\$ -		\$ -	8	\$ 1,876.00
Permitting (SFWM, EPGMD)	4	\$ 984.00	4.0	\$ 892.00	16.0	\$ 2,336.00	20.0	\$ 2,100.00		\$ -	44	\$ 6,312.00
<b>TOTAL</b>	<b>44</b>	<b>\$ 10,824.00</b>	<b>62</b>	<b>\$ 13,826.00</b>	<b>82</b>	<b>\$ 11,972.00</b>	<b>117</b>	<b>\$ 12,285.00</b>	<b>0</b>	<b>\$ -</b>	<b>319</b>	<b>\$ 48,907.00</b>

LABOR FEE	\$ 48,907.00
DIRECT REIMBURSABLES - travel, parking, printing (L.S. @ 2.0%)	\$ 978.14
SUBCONSULTANTS	
SURVEY (JA Bidot & Assoc.)	\$ 8,000.00
GEOTECHNICAL by Federal Engineering and Testing	\$ 2,435.00
SUBTOTAL	<b>\$ 60,320.14</b>
UTILITY LOCATES (Inframap)	\$ 20,387.67
<b>TOTAL:</b>	<b>\$ 80,707.81</b>

Assumptions:  
plan sheets @ 30 scale

Notes:  
1) Permit Fees not included.  
2) Assuming no changes to the I-95 Pump station



**PROJECT DESCRIPTION: Public Works Equipment Parking Lot Design Services**

ACTIVITY	DIRECTOR, ENGINEER		PROJECT MANAGER		ENGINEER		JR. ENGINEER				MANHOURS	TOTAL COST
											BY ACTIVITY	BY ACTIVITY
		\$ 246.00		\$ 223.00		\$ 146.00		\$ 105.00				
	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE		
Field Visits (1 visit)	0	\$ -		\$ -	3.0	\$ 438.00	3.0	\$ 315.00		\$ -	6	\$ 753.00
Data Collection	0	\$ -	1.0	\$ 223.00	4.0	\$ 584.00	3.0	\$ 315.00		\$ -	8	\$ 1,122.00
Drainage Analysis and Report	4	\$ 984.00	6.0	\$ 1,338.00	2.0	\$ 292.00	0.0	\$ -		\$ -	16	\$ 2,614.00
Key Sheet	0	\$ -	0.0	\$ -	1.0	\$ 146.00	3.0	\$ 315.00		\$ -	4	\$ 461.00
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	\$ -	1.0	\$ 223.00	3.0	\$ 438.00	8.0	\$ 840.00		\$ -	12	\$ 1,501.00
Parking Lot Sections (1 sheet)	0	\$ -	1.0	\$ 223.00	6.0	\$ 876.00	17.0	\$ 1,785.00		\$ -	24	\$ 2,884.00
Site Plan (1 Sheet)	4	\$ 984.00	2.0	\$ 446.00	9.0	\$ 1,314.00	21.0	\$ 2,205.00		\$ -	36	\$ 4,949.00
Grading and Drainage Plan (1 sheet)	0	\$ -	2.0	\$ 446.00	8.0	\$ 1,168.00	22.0	\$ 2,310.00		\$ -	32	\$ 3,924.00
Signing and Marking Plan (1 sheet)	0	\$ -	1.0	\$ 223.00	4.0	\$ 584.00	11.0	\$ 1,155.00		\$ -	16	\$ 1,962.00
Lighting Plan (1 sheet)	0	\$ -	1.0	\$ 223.00	5.0	\$ 730.00	14.0	\$ 1,470.00		\$ -	20	\$ 2,423.00
Power Supply and Miscellaneous Details	0	\$ -	1.0	\$ 223.00	5.0	\$ 730.00	12.0	\$ 1,260.00		\$ -	18	\$ 2,213.00
Drainage Details (1 sheet)	2	\$ 492.00	1.0	\$ 223.00	4.0	\$ 584.00	9.0	\$ 945.00		\$ -	16	\$ 2,244.00
Misc. Detail Sheets (1 sheets)	0	\$ -	1.0	\$ 223.00	3.0	\$ 438.00	8.0	\$ 840.00		\$ -	12	\$ 1,501.00
Erosion Control Details (1 sheet)	0	\$ -	0.0	\$ -	2.0	\$ 292.00	6.0	\$ 630.00		\$ -	8	\$ 922.00
Estimates of Probable Cost	2	\$ 492.00	0.0	\$ -	2.0	\$ 292.00	5.0	\$ 525.00		\$ -	9	\$ 1,309.00
Specifications	4	\$ 984.00	1.0	\$ 223.00	4.0	\$ 584.00	7.0	\$ 735.00		\$ -	32	\$ 2,526.00
Utility Coordination	0	\$ -	1.0	\$ 223.00	4.0	\$ 584.00	7.0	\$ 735.00		\$ -	12	\$ 1,542.00
Utility Meeting	0	\$ -	2.0	\$ 446.00	2.0	\$ 292.00	0.0	\$ -		\$ -	4	\$ 738.00
Progress Meetings (2 meetings)	4	\$ 984.00	4.0	\$ 892.00	0.0	\$ -	0.0	\$ -		\$ -	8	\$ 1,876.00
Permitting (EPGMD)	4	\$ 984.00	4.0	\$ 892.00	16.0	\$ 2,336.00	0.0	\$ -		\$ -	28	\$ 4,212.00
												\$ -
TOTAL	24	\$ 5,904.00	30	\$ 6,690.00	89	\$12,994.00	160	\$16,800.00	0	\$ -	327	\$ 42,388.00

LABOR FEE	\$ 42,388.00
DIRECT REIMBURSABLES - travel, parking, printing (L.S. @ 2.0%)	\$ 847.76
SUBCONSULTANTS	
SURVEY (JA Bidot & Assoc.)	\$ 2,400.00
GEOTECHNICAL	
SUBTOTAL	\$ 45,635.76
UTILITY LOCATES (Not included)	
TOTAL:	\$ 45,635.76

Notes:  
1) Permit Fees not included.

**FEE PROPOSAL SUMMARY**  
**R.J. BEHAR & COMPANY**  
**PROJECT DESCRIPTION: Public Works Compound Drainage Coordination**

ACTIVITY	DIRECTOR, ENGINEER		PROJECT MANAGER		ENGINEER		JR. ENGINEER				MANHOURS	TOTAL COST
	STAFF HOURS	\$ 246.00		\$ 223.00		\$ 146.00		\$ 105.00			BY ACTIVITY	BY ACTIVITY
		HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE		
Overall Project Coordination	3	\$ 738.00	3.0	\$ 669.00	0.0	\$ -	6.0	\$ 630.00		\$ -	12	\$ 2,037.00
Master Drainage Plan	0	\$ -	6.0	\$ 1,338.00	6.0	\$ 876.00	12.0	\$ 1,260.00		\$ -	24	\$ 3,474.00
												\$ -
TOTAL	3	\$ 738.00	9	\$ 2,007.00	6	\$ 876.00	18	\$ 1,890.00	0	\$ -	36	\$ 5,511.00
Assumptions: plan sheets @ 30 scale	LABOR FEE											\$ 5,511.00
	DIRECT REIMBURSABLES - travel, parking, printing (L.S. @ 2.0%)											\$ 110.22
	SUBCONSULTANTS											
	SURVEY											
	GEOTECHNICAL											
	SUBTOTAL											\$ 5,621.22
	UTILITY LOCATES											
TOTAL:											\$ 5,621.22	

Assumptions:  
plan sheets @ 30 scale

Notes:

**FEE PROPOSAL SUMMARY**

**R.J. BEHAR & COMPANY**

**PROJECT DESCRIPTION: Public Works Compound Outfall Analysis and Design Services and Equipment Parking Lot Design Services**

ACTIVITY	DIRECTOR, ENGINEER		PROJECT MANAGER		ENGINEER		JR. ENGINEER				MANHOURS	TOTAL COST
											BY ACTIVITY	BY ACTIVITY
	STAFF HOURS	\$ 246.00		\$ 223.00		\$ 146.00		\$ 105.00	STAFF HOURS	HOURLY RATE		
		HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE	STAFF HOURS	HOURLY RATE		
Bid Assistance	0	\$ -	6.0	\$ 1,338.00	0.0	\$ -	18.0	\$ 1,890.00		\$ -	24	\$ 3,228.00
Post Design Services	0	\$ -	8.0	\$ 1,784.00	30.0	\$ 4,380.00	82.0	\$ 8,610.00		\$ -	120	\$ 14,774.00
												\$ -
TOTAL	0	\$ -	14	\$ 3,122.00	30	\$ 4,380.00	100	\$ 10,500.00	0	\$ -	144	\$ 18,002.00
Assumptions:					LABOR FEE							\$ 18,002.00
					DIRECT REIMBURSABLES - travel, parking, printing (L.S. @ 2.0%)							\$ 360.04
					SUBCONSULTANTS							
					SURVEY							\$ -
					GEOTECHNICAL							\$ -
					SUBTOTAL							\$ 18,362.04
					UTILITY LOCATES							\$ -
				TOTAL:							\$ 18,362.04	

Assumptions:

Notes:

**POST DESIGN SERVICES HOURS**

	Quantity	hrs	total hrs
Preconst Meeting	2	4	8
Const Progress Meetings	4	2	8
Inspections	7	4	28
shop drawings and materials	16	2	32
RFIs	4	2	8
Other submittals	4	2	8
Plan rev	2	12	24
Final Cert	1	4	4

120

**JAVIER E. BIDOT & ASSOCIATES, CORP**  
**LAND SURVEYORS • CONSULTANTS**

October 25, 2022.

Mr. Juan Vazquez, PE  
Principal  
RJ Behar & Company, Inc.  
6861 SW 196<sup>th</sup> Avenue  
Suite 302  
Pembroke Pines, FL 33332

**Re: Proposal for Site Survey – Site and Offsite Improvements to Storm Sewer System at DPW Compound, City of Hallandale Beach, Broward County, Florida.**

Gentlemen,

Let me thank you at the outset for considering us an option for quality surveying services.

The present is in response to the request for proposals received October 11 and 25, 2022, for the existing conditions and topographic survey at the site of proposed offsite storm sewer improvements in Hallandale Beach. The offsite improvements corridor is shown on Figure 1, below. The on-site improvements portion of this project is shown on Figure 2.



*Figure 1. Project location and schematic survey limits (RFP Image).*



Figure 2. Onsite improvements project location and schematic survey limits (RFP Image).

Our detailed proposal follows.

## I. Statement of Work

- A. Existing conditions and topographic survey within the survey limits to include the following:
  1. Horizontal & Vertical Control- We will utilize existing survey control at project site.
  2. Existing Conditions Survey – We will perform Existing Conditions Survey of the subject outlined on figure 1, including but not limited to abutting road frontage, property corners found, fences, trees with a 4" or larger DBH, shrubbery and dense wood area demarcation, buildings, etcetera.
  3. Property Lines and Public Right of Way- We will portray the public right of way and adjacent property limits, based strictly on Public Records.

4. Topographic Survey – We will collect data on a 20' grid, in a manner sufficient to produce a digital terrain model (DTM), that will be graphically represented as 0.50 feet contours.
  5. Sketch of Survey and Legal Descriptions - We will provide up to 1 easement description and sketch of survey based on Client's outline of a prospective easement across Chavez Lakes Apartment site. Description and sketch will be submitted within 10 working days of request.
- B. Utility Location and Identification Survey – We will survey the existing visible drainage, water distribution, power, gas, and sanitary systems within the subject. Work will be compliant with ASCE specification 3802, quality level C. Existing utility marks at site, if any, will be located and shown in the drawing as "information by others". Please refer to Subsurface Utility Survey statement, attached.
- C. Exclusions –
- Any work not specifically outlined above.
  - **Any excavation or probing.**
  - Filing of any non-survey environmental or city documentation.
  - Right of entry coordination.
  - ASCE spec 3802, QL-B and A, GPR and Subsurface Utility Survey.
- D. Deliverables – We will provide up to 6 signed and sealed plots. Copies of digital files in AutoDesk AutoCad format will be provided.

## II. Schedule

Mobilization for this task shall occur within 15 working days from NTP. Deliverables shall be submitted within 25 working days from mobilization. This proposal assumes all site and offsite work will be performed in one mobilization.

Final deliverables will be submitted within 3 working days from receiving client comments.

## III. Fees

Base fees for offsite improvements (Fig.1) are, as a lump sum, \$5,800.00.



Optional fees for on-site improvements (Fig.2), are as a lump sum, \$2,400.00.

Optional fees for sketch of survey and description, \$450.00.

Optional fees for stakeout of easement corners, per mobilization, \$1,750.00.

Payment terms are 60 days.

IV. General Conditions and Important Notes:

1. Our proposal is based on a maximum PPE level D (hard hat, boots, eye, ear, PFD and hand protection) when necessary.
2. Our proposal is based on our present liability insurance limits, certificates to be furnished upon request.
3. This proposal is valid for 30 days.

I'm available to meet with you at your convenience to discuss the terms disclosed herein or any related matter.

Cordially,



Javier E. Bidot, PSM

Principal

JEB/jeb

## STANDARD ENCLOSURE – UNDERGROUND UTILITY SURVEYS

The American Society of Civil Engineers, under specification 3802, has defined the discipline of Subsurface Utility Engineering as the management of risks and databases pertaining to the utility and underground asset mapping at various Quality Levels, among other technical parameters.

The following is the list of existing Quality Levels for the diverse utility mapping tasks possible under this discipline:

Quality Level D – Typically referred to as the research and consultation of the diverse sources of records and maps and reporting them to the project owner or Engineer.

Quality Level C – This level adds the survey of the assets based only on the above ground evidence. This includes the location of poles, manholes, hydrants, etc, graphically represented in the context of existing records.

Quality Level B – This level adds to the record research and land survey, the designation of underground assets by means of diverse forms of induction, including but not limited to sound and electromagnetic induction, ground penetrating radar, etcetera.

Quality Level A – This level of survey adds the physical uncovering of assets for verification by various means including but not limited to hand excavation, vacuum excavation and others. This level provides the highest level of accuracy and is the most expensive modality of utility surveys.

### **The present task is proposed to Quality Level C accuracy.**

*Limitations and Disclaimer – Subsurface Utility Surveys (SUS/SUE) bring a significant benefit to asset owners, contractors and other entities in the manner they point out existing underground assets to be conserved. SUS/SUE activities rely on the interpretation of an instrument generated signal in order to designate an asset. Signals are affected by soils type, humidity, contamination and the proximity of other assets to the subject and locations with the effect of degrading the accuracy of the asset position.*

*While it has been established that quality level D, C and B SUS/SUE studies render a return to investment ratio better than 10 to 1, there is no substitute to non-destructive excavation to accurately determine the location and depth of underground assets. Therefore, client shall specify that any contractor working onsite perform its excavation with workmanlike methods and extreme care in the vicinity of survey marks or in the vicinity of utilities identified in his drawings and assume any contingent, direct and indirect liabilities as owner of the excavation.*



FROM  
Scott Dyson  
Federal Engineering & Testing, Inc.  
3370 NE 5th Ave  
Oakland, Park, FL 33334  
[www.fed-eng.com](http://www.fed-eng.com)  
PHONE  
954-784-2941

FOR  
R.J. Behar & Company, Inc.  
TO  
Juan Vazquez  
EMAIL  
[jvazquez@rjbehar.com](mailto:jvazquez@rjbehar.com)  
PHONE  
954-680-7771

QUOTE NUMBER  
2101618  
DATE  
October 13, 2022  
VALID UNTIL  
November 12, 2022 at 10:00 AM

## Proposed Geotechnical Services @ 630 NW 2nd Street, Hallandale Beach, FL 33009

### Regarding Proposed Outfall

Thank you for contacting Federal Engineering & Testing, Inc. ("F.E.T.") Please find below our Proposal for the services you have requested, as well as the accompanying Agreement for said services. If the Proposal and Agreement meet with your approval, please sign within the online portal. Upon receipt of the signed documents, F.E.T. will commence the services agreed to therein.

Please send us the plans and specifications for the structure(s) once available. Thank you!



### Scheduling and Turn-around-time

I will call in for **public** utility locates today. The Client is responsible for informing F.E.T. of the location of all **private** utilities on site and marking them out. Please review and sign this electronic proposal at your earliest convenience. Once confirmed, I will reserve the above day on the schedule.

Soil Boring reports that are less than 40 FT are generated 3 – 5 business days after the day of the test.

Soil Boring reports that are greater than 40 FT are generated 1 – 4 weeks after the day of the test depending on the complexity of the project.

#### 10' Truck Mounted Soil Boring

Our drilling crew will perform a 10' deep soil boring via a truck mounted drill rig. This test is needed to determine the structural integrity of the underlying soils to confirm that it can support the new structure. We must have access for a (two-wheel drive dually pickup) truck mounted drill rig and about 11' of clearance to the selected test boring location.

350.00  
x 6  
2,100.00

<p><b>Laboratory Soil Analysis</b></p> <p>This fee covers the cost of having the soil that our drillers find, analyzed at our lab by a soil scientist. The soil scientist will look and determine if the soils have any properties that make them unsuitable to build upon them. He will also visually classify the soils.</p>	<p>35.00 x 6 210.00</p>
<p><b>Mobilization</b></p> <p>This fee covers the cost of mobilizing our drilling equipment to the job site. (This fee may vary by distance from our main office in Oakland Park, FL)</p>	<p>100.00 x 1 100.00</p>
<p><b>Digitally Signed Report</b></p> <p>Includes a digitally signed and sealed report, created per city, and suitable for e-filing.</p>	<p>25.00 x 1 25.00</p>
<p><input type="checkbox"/> <b>Additional Copies</b></p> <p>Reports delivered via USPS include (2) embossed signed and sealed reports. If more than (2) physical copies are required, please select the quantity needed.</p>	<p>25.00 x 1 25.00 Not selected</p>
<div>Options selected</div> <div>Total</div>	<div>0 of 1</div> <div><b>\$2,435.00</b></div>

### Payment Options & Details

- 1) Prepay in full less any additional charges with check, credit card, ACH or bank transfer. Any additional fees will be billed after completion.
- 2) 50% down with the remainder due at completion before the release of reports.
- 3) If you are an existing B2B client payment term arrangements, nothing has changed for you.
- 4) \*\*Job cancellations pre-paid via credit card will be refunded LESS a 5% charge.\*
- 5) **\*\*Same day cancellations will result in a \$185.00 cancellation fee\***

For your convenience you can pay online directly from the invoice once it is sent to you.

### Drill Rig and Equipment Access

Price is contingent upon F.E.T. having sufficient access for truck mounted drill equipment. The client is responsible for providing access on site.



### Required Laboratory Testing

We are required by the Florida Building Code to determine the soil's bearing capacity. If we find organic soil or fine grained material that would cause settlement issues, we have to run an organic content test or number 200 sieve wash of the unsuitable material in our lab. The analysis is needed to determine the appropriate foundation recommendation for those soil conditions.

## Disclaimers

If Soil Borings are to be performed, areas to be tested must be clearly marked. If building is not staked out or if an existing structure is in its place, the report will be preliminary. Additional borings must be done once the footprint of the structure is cleared and staked out in order to receive complete foundation recommendations.

F.E.T. shall not be responsible for the acts or omissions of the contractor, any subcontractor, or any of the contractor's or subcontractor's agents or employees or any other person performing any of the work under a construction contract, including failure to complete work according to a construction contract, engineering plans and/or architectural drawings.

F.E.T. does not claim responsibility for any existing damage and/or any damage caused to the above-referenced site and/or its underground utilities during time of service by F.E.T. Prior to commencement of Services, Owner shall provide to F.E.T. the location of electric, gas, and any other underground utilities.

**\*\*Job cancellations pre-paid via credit card will be refunded LESS a 5% charge.\***

**Same day cancellations will result in a \$185.00 cancellation fee\***

## Terms and Conditions

Client acknowledges and agrees that this Agreement for Engineering Services is subject to the Terms and Conditions attached hereto and provided in the link below, which are hereby expressly incorporated by reference into this Agreement as if fully set forth herein. Client further agrees that Client has read the Terms and Conditions, or has been given the opportunity to view same, and intends to be bound thereby. Please see attached terms and conditions. By accepting this proposal you agree to all terms and conditions.

 [ONLINE TERMS & CONDITIONS](#)

## Licensed and Insured

Federal Engineering & Testing, Inc. is a licensed and insured Professional Engineering firm in Broward County. We carry Professional, General and Pollution Liability including an umbrella policy for General and Automobile Liability. We also have a Workers Compensation policy for all of our employees. Please see our attached Certificates for proof of insurance and licensing. If you have questions about our coverage please let us know.

 [PL - GL - UMB](#)

 [Auto](#)

 [FET WC](#)

## Reviews [See all reviews](#)



Supreme and A+ Company of which I will classify as being 2nd to none. Scott, was more than amazing and kept every single promise he made while displaying nothing but honesty and professionalism. I could hardly believe how ...

*by Lillie Hall*



Scott and the entire federal engineering team were extremely responsive, helpful, and made sure to tailor their services to my specific needs. The crew that did the borings was very prompt, knowledgeable, and respectful. Big ...

*by Nick Di Staulo*



Wonderful company to work with. They were very responsive to our needs. Scheduling of our job was on time and preformed without any problems or issues. I would strongly recommend Federal Engineering & Testing. Great company!

*by Beth Schunk*

October 12, 2022

R.J. Behar & Company, Inc.  
6861 S.W. 196 Avenue, Suite 302  
Pembroke Pines, FL 33332

Juan H. Vazquez, PE  
E: [jvazquez@rjbehar.com](mailto:jvazquez@rjbehar.com)  
O: 954.680.7771

Re: City of Hallandale Beach Public Works Compound Outfall Analysis and Design Project  
Hallandale Beach, FL  
Subsurface Utility Engineering Services

Dear Mr. Vazquez:

We have prepared this proposal to perform subsurface utility engineering services including air vacuum excavation test holes for the above referenced project. We have received the following files by email dated October 11, 2022 attached identifying the project locations:

- Location Map.pdf

Our scope of work shall be performed in accordance with the Procedures, Exclusions and Assumptions identified below and will follow *ASCE 38-02 Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data* including the following:

1. **Quality Level A - Air Vacuum Excavation Test Holes** – Air vacuum excavation test holes will be performed at the proposed test hole locations. This proposal includes 25 test holes at utility conflict locations.

#### **Quality Level D - Utility Records Research**

1. Entities will be identified and contacted that are likely to own utilities within the project limits. We will request documentation on subsurface utilities from these sources. Gathered materials will be used as an aid in the identification of the number, identity, size, and material of utilities located in the field, and they will not be used as a substitute for actual geophysical location unless the system cannot be verified electronically using industry standard techniques for this level of investigation. The client will make all information gathered available to InfraMap.

#### **Quality Level A - Air Vacuum Excavation Test Holes**

During utility locating by air / vacuum test holes InfraMap will complete the following tasks:

1. **Agency Coordination** – InfraMap will comply with laws and regulations concerning excavation by coordinating with utility inspectors, property owners, "ONE CALL" and others as required.
2. **Anticipated Permits** – InfraMap will prepare and coordinate throughout the permitting process and will bill the associated fees as a direct expense.
3. **Test hole conflict identification and field locate** – If InfraMap has not performed the utility designating prior to the test hole task, and we identify a discrepancy between existing utility location on client provided





plans and what is in the field, we will notify the Client prior to any test hole work. We will make recommendations if utilities are not where the records maps indicate, or a utility is discovered that is not shown on any records and is not detectable during the electronic sweep. Inframap will contact the client and discuss strategies to address the unpredictable field conditions. Inframap will work with the client in the identification of additional test holes or removal of test holes from future scope of work.

4. **MOT** - Maintenance and Protection of Traffic in local jurisdiction will be provided in accordance with the *Florida Department of Transportation (FDOT) FY 2022-23 Standard Plans*, latest edition or other applicable requirements.
5. **Test hole** – Inframap will perform the following for the test hole task:
  - a. Excavate a test hole using air/ vacuum excavation. Provide all precautions necessary to perform the work safely and to cause no damage to the utility. The test hole will be of the minimum size required to expose the utility and record the following information:
    - i. Depth below grade (cover).
    - ii. Utility material, shape, and overall condition.
    - iii. Approximate diameter of pipes, cables, conduits, and the configuration of multiple conduit systems.
    - iv. The general directional trend of the utility.
    - v. Thickness, type, and condition of paving material.
    - vi. General soil conditions.
  - b. Install a survey marker (PK or hub and tack) directly over the centerline of pipes or edge of concrete structures or conduit banks at grade. Ribbon of appropriate APWA / ULCC color will be installed in the backfill from utility to grade. Indicate on the test hole form the placement of the marker relative to the utility cross section. Record the location of the marker with a minimum of three swing tie measurements to convenient existing permanent structures on site.
  - c. Backfill test hole with excavated material in 6-inch lifts by air pneumatic tamping. Restore test hole area to the original condition. Repair and restore all pavement cuts to ensure a long-lasting repair utilizing asphalt cold patch.
6. **Survey** - Survey of test hole locations to provide northing, easting and elevations of pin or hub associated with each test hole. Survey will be performed by utilizing applicable client provided established survey control.
7. **CAD** - The survey data will be processed into a test hole utility file in AutoCAD (dwg) format with symbols depicting horizontal locations of test holes.
8. **Quality Assurance / Quality Control review** – QA/QC review of the test hole reports will be completed to compare the findings of the test hole to the available utility information. Inframap will evaluate and resolve any discrepancies.
9. **Deliverables** – Deliverables will include a test hole inventory summary table, individual test hole reports, and updated existing utility file in AutoCAD (dwg) format.

#### **Exclusions and Assumptions:**

1. The targeting of subsurface utilities, although highly reliable, is expressly understood to represent an approximate location of the target facility as marked on the ground surface. The accuracy of targeting is subject to certain factors beyond our control such as limitations of available technology and field conditions that may include, but are not limited to depth of utility, electrical conductivity of utility, site conditions and access.

2. Our electronic equipment cannot locate non-conductive pipe systems and or fiber optic line without tracer wire.
3. Concrete Pavement with reinforcement, as well as guide rails and chain link fence, could interfere with our electronic equipment at times to locate utilities.
4. Overhead utilities, irrigation systems, septic drain fields, residential/commercial services, and confined space entry are not included in this scope of work. In addition, gravity structure investigations including storm water and sanitary sewer are not included.
5. At this time, geotechnical borings or subgrade information have not been provided. Large stones, shale, coral, construction debris, or other subsurface conditions including a high groundwater table may limit the ability of our equipment to excavate to the utility and or make it very difficult to visually verify the utility condition and material.
6. In order to provide a cost-effective service that causes minimal disturbance to site amenities and utilities, and is acceptable to permitting agencies, the size of the Test Hole excavation is kept to a minimum. The diameter of most pipes greater than 24" cannot be recovered directly from one test hole and it may be necessary to perform additional holes.
7. This proposal assumes test holes will be repaired consistent with the cold patch specifications above. Depending upon test holes locations and/or local, county and state permit requirements, permanent asphalt patch repairs either using hot mix asphalt, asphalt infrared services or cement subbase, are out of the scope of these services. If required, an out-of-scope proposal or supplemental agreement will be prepared before proceeding further.
8. If a single test hole location is selected at a point where two or more utilities intersect (or trend close together), a single test hole may not be feasible to obtain information for all requested utilities. The utility of higher elevation may be of sufficient size as to prohibit further excavation in the existing test hole. To reach the utility of lower elevation in this instance a separate (additional) test hole will be required.
9. Encased systems and non-encased conduit banks are typically exposed on one edge. This allows the test hole to be excavated down the side of the utility until a discernable bottom edge can be evaluated. Although it is usually possible to determine the bottom edge of these systems, it is not possible to determine conditions under these or other utility systems, such as concrete over pour and other utilities. It is important for the designer to remember that the bottom edge of an encased system or unencased conduit bank may not represent its lowest point, and that the shape of the system may not be the same on both sides. The width of these systems may not be determined from a single test hole. Encased systems and unencased conduit banks may require two test holes to document the width (and both of the sides top and bottom elevations).
10. Recoverable and accurate survey control, which can be accessed during mobilization, will be provided by the client. In the event the survey control is not located near the proposed utility investigation, a survey traverse will be required. This proposal does not include services to perform a survey traverse to transfer control to the work site. If required, same will be included on a time and materials basis if it cannot be absorbed into the existing budget.
11. This service will be provided with due diligence and in a manner consistent with standards of the subsurface utility mapping industry. Every reasonable effort will be made to locate all systems of interest whether indicated on records available to us or not. However, we do not guarantee that all existing utility systems can or will be detected. It may not be possible to detect utilities that we do not have prior knowledge of, such as systems that are not depicted on records available to us. Further, this service is not intended to detect non-utility structures such as but not limited to foundations, buried tanks, septic



systems, wells, tunnels, concrete or metal structures, or the true size and limits of subsurface utility vaults and manholes.

## FEE SCHEDULE

<b><u>QUALITY LEVEL A - UTILITY TEST HOLE SERVICES</u></b>			
<b><u>Resource</u></b>	<b><u>Rate</u></b>	<b><u>Units (Hrs)</u></b>	<b><u>Fee</u></b>
Test Hole 0'-6' (\$/ea.)	\$ 468.93	25	\$ 11,723.25
Contingent Feet (\$/ft beyond 6' in depth)	\$ 112.00	3	\$ 336.00
Project Manager, PLS	\$ 189.49	8	\$ 1,515.92
Utility Location Manager	\$ 150.16	8	\$ 1,201.28
Test Hole Setup	\$ 184.00	8	\$ 1,472.00
Party Chief	\$ 94.73	12	\$ 1,136.76
Instrument Operator	\$ 88.92	12	\$ 1,067.04
CAD Technician	\$ 89.38	10	\$ 893.80
Administrative	\$ 85.81	2	\$ 171.62
<b><u>Direct Expenses</u></b>	<b><u>Rate</u></b>	<b><u>Units</u></b>	
Mileage (\$/mi.)	\$ 0.625	880	\$ 550.00
Arrow Board (\$/day)	\$ 80.00	4	\$ 320.00
	<b>TOTAL FEE ESTIMATE</b>		<b>\$ 20,387.67</b>

Our total estimated cost for this project is **\$20,387.67**. If you have any questions or concerns regarding this proposal, please do not hesitate to call Lee Reumann at (561)818-8770 or email [leumann@inframap.net](mailto:leumann@inframap.net). We look forward to working with R.J. Behar & Company on this project.

Regards,

Lee Reumann  
Survey Manager