

## Task Order for the Lake Worth Beach Geotechnical Engineer Services

### TASK ORDER NO. 7

THIS TASK ORDER ("Task Order") is made on the \_\_\_\_ day of \_\_\_\_\_, 2021, between the **City of Lake Worth Beach**, a Florida municipal corporation located at 7 North Dixie Highway, Lake Worth Beach, Florida 33460 ("City") and RADISE International, LC, a Florida corporation ("Consultant").

#### 1.0 **Project Description:**

The City desires the Consultant to provide those services as identified herein and generally described as: **Lake Worth Beach Test Wells 17B and 18B** (the "Project").

#### 2.0 **Scope**

Under this Task Order, the Consultant will provide professional services to the City as detailed in the Consultant's Proposal, dated May 6, 2021, attached hereto and incorporated herein as Exhibit "1".

#### 3.0 **Schedule**

The services to be provided under this Task Order shall be completed within 70 calendar days (50 business days) from the City's approval of this Task Order or the issuance of a Notice to Proceed.

#### 4.0 **Compensation**

This Task Order is issued for a unit price, not to exceed amount of \$107,971.00. The attached proposal identifies all costs and expenses included in the unit price, not to exceed amount.

#### 5.0 **Project Manager**

The Project Manager for the Consultant is Andrew Nixon, P.E., phone: (561) 841-0103; email: andrew.nixon@radise.net; and, the Project Manager for the City is Julie Parham, PE, phone: (561) 586-1798; email: jparham@lakeworthbeachfl.gov.

#### 6.0 **Progress Meetings**

The Consultant shall schedule periodic progress review meetings with the City Project Manager as necessary but every 30 days as a minimum.

#### 7.0 **Authorization**

This Task Order is issued in compliance with the Consultants' Competition Negotiation Act, section 287.055, Florida Statutes, and pursuant to the First Amendment to Agreement for Professional Services between the City of Lake Worth Beach and the Consultant, dated March 11, 2020 ("Agreement" hereafter). If there are any conflicts between the terms and conditions of this Task Order and the Agreement, the terms and conditions of the Agreement shall prevail; however, the specific scope of services set forth in this Task

Order shall take precedence over any other more general description of services.

IN WITNESS WHEREOF the parties hereto have made and executed this Task Order on the day and year first above written.

**CITY OF LAKE WORTH BEACH, FLORIDA**

By: \_\_\_\_\_  
Betty Resch, Mayor

ATTEST:

By: \_\_\_\_\_  
Deborah M. Andrea, City Clerk

APPROVED AS TO FORM AND  
LEGAL SUFFICIENCY:

APPROVED FOR FINANCIAL  
SUFFICIENCY

By: \_\_\_\_\_  
Glen J. Torcivia, City Attorney

By: \_\_\_\_\_  
Bruce T. Miller, Financial Services Director

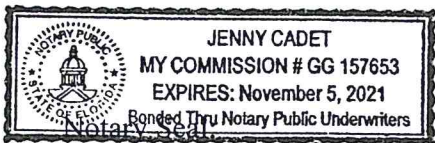


Consultant: **RADISE International, LC**

By: \_\_\_\_\_  
Print Name: Panneer Shanmugam, PE  
Title: President

STATE OF Florida )  
COUNTY OF Palm Beach )

THE FOREGOING instrument was acknowledged before me by means of  physical presence or  online notarization on this 6 day of May 2021, by Panneer Shanmugam, as the President [title] of RADISE International, LC [vendor's name], a Limited Company [corporate description], who is personally known to me or who has produced \_\_\_\_\_ as identification, and who did take an oath that he or she is duly authorized to execute the foregoing instrument and bind the CONTRACTOR to the same.



\_\_\_\_\_  
Notary Public Signature

# Exhibit 1



May 6, 2021

**City of Lake Worth Beach**  
7 North Dixie Highway  
Lake Worth Beach, Florida 33460

Attention: Julie Parham, PE  
Phone: 561-586-1798  
Email: [jparham@lakeworthbeachfl.gov](mailto:jparham@lakeworthbeachfl.gov)

**RE: Proposal for Test Wells  
City of Lake Worth Beach Test Wells 17B and 18B  
Palm Beach County, Florida**

---

Dear Mrs. Parham, P.E.

RADISE International, L.C. (RADISE) is pleased to submit this proposal for the above referenced project. It is our understanding that the City of Lake Worth Beach needs to relocate two aquifer production wells. Two new potential well sites have been identified within the City limits. Therefore, RADISE proposes to conduct a subsurface exploration and test well program to determine the lithology and water quality at the potential well sites. This proposal presents our proposed scope of work, and establishes our schedule and fee for performing the work.

## SCOPE OF SERVICES

The proposed scope of work for the project consists of the following:

1. RADISE will visit each site to field mark (paint and/or stake) the planned test locations and observe existing site conditions.
2. RADISE will notify Sunshine State One-Call of Florida, Inc. (SSOCOF) of the planned explorations to allow affected utility companies the opportunity to mark the location of buried utility lines in the proposed exploration areas. See below for further details.
3. Earth Tech Drilling (ETD) will mobilize a sonic drilling rig to advance a boring to a depth of 300 feet at each site to develop the site lithology. The borings will be performed in general accordance with the procedures recommended in ASTM D-6914 with continuous core samples collected throughout the explored depths. The core samples will be approximately 4 inches in diameter. The borings will be logged by a RADISE representative.
4. During boring advancement, ETD will install a temporary well with 5 feet of well screen in 20 feet intervals from the water table to a depth of 300 feet. Sampling will start at a depth of 60 feet below grade. A sample of water will be obtained by a Stantec representative from each interval using a drop hose and analyzed in the field for total dissolved solids and conductivity; samples will be labeled and retained.

5. Following the groundwater sampling program, ETD will install a 4-inch PVC casing within each borehole to the top of the first encountered limestone layer or to full depth to help prevent borehole cave-in.
6. Geophysical logging (caliper, gamma ray and dual induction) will then be performed within each borehole by Lee Logging LLC.
7. Following completion of the logging operations, RADISE will backfill the PVC casing with grout.
8. RADISE will visually classify the collected soil samples in the field with laboratory confirmation/QC verification of classifications using the Unified Soil Classification System (USCS). RADISE will assign and perform a series of laboratory test to ascertain soil index properties for the soils encountered in the borings.
9. RADISE will provide a Geotechnical Data Report summarizing the gathered information and laboratory test results.

We assume that access to the boring locations is readily available to our drilling equipment. In addition, we assume that permission from land owners, if different than the City, has been received to allow us to conduct our studies.

Prior to the mobilization of our drilling equipment, we will notify Sunshine 811 of our planned exploration to allow affected utility companies the opportunity to mark the location of buried “public” utility lines in the proposed exploration areas. The locating process will require a lead time of 3 to 5 business days. RADISE cannot take responsibility for damages to “private” underground lines or structures and/or underground services which do not subscribe to SSOCOF; their locations should be provided by the client prior to commencement of the field work. For further assurance, we recommend that a private underground utility locator be retained to scan the proposed boring locations using ground penetrating radar technology to identify underground utilities.

### **SCHEDULE/DELIVERABLES**

Upon receiving written authorization to proceed, we will commence with field marking of the boring locations and preparation of the utility locate request. Mobilization for the drilling operations will occur soon after Sunshine 811 clearance of boring locations is received from the contacted utilities. These two upfront activities are expected to require about 4 weeks to complete.

The specified field drilling work is expected to require 8 days to complete. The geophysical logging is expected to require 2 days to complete. The borehole grouting is expected to require 2 days to complete. The laboratory testing program will require about 2 weeks to complete following completion of field work and the summary report can be completed within 2 weeks after completion of the laboratory testing program. We expect to provide the final report signed and sealed by a registered professional engineer within 10 weeks of notice to proceed; however, accelerations of this schedule may be facilitated if needed.

### COMPENSATION & TERMS

Based upon our understanding of the project and interpretation of your requirements, we propose to perform the scope of work outlined previously on a unit price, not to exceed amount of **\$107,971.00**, as detailed in the Fee Breakdown on Attachment A. Our work will be performed in accordance with the terms and conditions of our City of Lake Worth Beach service contract (RFQ No. 18-303).

Soil samples obtained from the drilling operations will be retained by RADISE for a period of 90 days from the date of drilling and then they will be discarded unless alternate terms are agreed to in writing with the client.

### CLOSURE

RADISE appreciates the opportunity to provide our services for this project, and trust that the scope of work and fee presented in this proposal are clear and understandable. Should the proposal contents require any clarification or amplification, please feel free to contact us.

Sincerely,

**RADISE International, L.C.**



**Andrew Nixon, P.E.**  
Operations Manager

Attachments: A - Fee Breakdown



**ATTACHMENT A - FEE BREAKDOWN**  
**Test Wells**  
**City of Lake Worth Beach Test Wells 17B and 18B**  
**Palm Beach County, Florida**

	Qty	Unit	Unit Price	Total
<b>1.0 FIELD EXPLORATION</b>				
1.1 Stake borings, utility clearance & project coordination (Project Engineer)	16	Hour	\$ 135.00	\$ 2,160.00
1.2 Sonic Borings & Well Construction (2 to 300') - 4 days/site				
1.2.1 Sonic Rig Mobilization*	1	Each	\$ 1,200.00	\$ 1,200.00
1.2.2 Daily Personnel Mobilization*	8	Day	\$ 375.00	\$ 3,000.00
1.2.3 Sonic Daily Rate*	8	Day	\$ 3,900.00	\$ 31,200.00
1.2.4 8" Sonic Over Ride Casing*	600	Foot	\$ 28.00	\$ 16,800.00
1.2.5 Compact Track Loader/Water Support*	8	Day	\$ 475.00	\$ 3,800.00
1.2.6 1" PVC Well Materials*	600	Foot	\$ 10.00	\$ 6,000.00
1.2.7 4" PVC Well Materials*	600	Foot	\$ 18.00	\$ 10,800.00
1.2.8 Wooden Core Boxes (10' per box)*	60	Each	\$ 55.75	\$ 3,345.00
1.2.9 Groundwater Sampling Standby*	26	Each	\$ 95.00	\$ 2,470.00
1.2.10 Hydrant Meter*	1	Each	\$ 1,000.00	\$ 1,000.00
1.2.11 Senior Engineering Technician (8 days @ 12 hrs/day)	96	Hour	\$ 60.00	\$ 5,760.00
1.3 Geophysical Logging - 1 day/site				
1.3.1 Geophysical Logging**	2	Well	\$ 2,200.00	\$ 4,400.00
1.3.2 Senior Engineering Technician (2 days @ 12 hrs/day)	24	Hour	\$ 60.00	\$ 1,440.00
1.4 Borehole Grouting - 1 day/site				
1.4.1 Drill Equipment Mobilization	1	Each	\$ 350.00	\$ 350.00
1.4.2 Borehole Grouting	600	Foot	\$ 8.00	\$ 4,800.00
		<b>TOTAL FIELD SERVICES</b>		<b>\$ 98,525.00</b>
<b>2.0 LABORATORY SERVICES</b>				
2.1 Laboratory Visual Classification QC/Verification (Project Engineer)	6	Hour	\$ 135.00	\$ 810.00
2.2 Moisture Content (15 tests/boring)	30	Each	\$ 12.00	\$ 360.00
2.3 Grain Size Distribution (15 tests/boring)	30	Each	\$ 88.00	\$ 2,640.00
		<b>TOTAL LABORATORY SERVICES</b>		<b>\$ 3,810.00</b>
<b>3.0 PROFESSIONAL ENGINEERING AND REPORTING SERVICES</b>				
3.1 Senior Project Engineer	6	Hour	\$ 155.00	\$ 930.00
3.2 Project Engineer	30	Hour	\$ 135.00	\$ 4,050.00
3.3 Draftsman	8	Hour	\$ 58.00	\$ 464.00
3.4 Administrative Assistant	4	Hour	\$ 48.00	\$ 192.00
		<b>TOTAL PROFESSIONAL SERVICES</b>		<b>\$ 5,636.00</b>
		<b>TOTAL AMOUNT</b>		<b>\$ 107,971.00</b>

\* Provided by Earth Tech Drilling, Inc. (at Cost; Backup attached)

\*\* Provided by Lee Logging LLC (at Cost; Backup attached)



**EARTH TECH  
DRILLING**  
Environmental / Geotechnical  
**954-974-2424**

2703 NW 19th Street, Pompano Beach, FL 33069

Monitoring Wells Sparge Wells Direct Push  
Geotechnical Drilling SONIC Drilling

		DATE	4/26/2021	
CLIENT: Radise	Andrew Nixon	PHONE	(561) 841-0103	
SITE: City of Lake Worth Beach Test Wells				
PROPOSED SCOPE OF WORK:				
(2) 300' Sonic Soil Borings w/ Water Samples collected every 20' Starting at 60' - using 1" PVC (Non-Prepack) (13 Samples per)				
Installation of a 4" x up to 300' PVC Casing				
8" Override Casing used to install the 4" PVC				
Grout Abandon Boring done by Radise after Geophysical Logging				
Wooden 5' Sonic Core Boxes				
<b>SONIC DRILL</b>				
	Unit	Unit Rate	Number of Units	Extended Price
Sonic Daily Rate (Compact Track) Price Includes a ten hour work day ( 7 to 5 ) Unless otherwise stated in this quote.				
Sonic Daily Rate	per day	\$3,900.00	8	\$31,200.00
Sonic Per Foot Rate	per foot			\$0.00
6" Casing	per foot	\$28.00	600	\$16,800.00
8" Sonic Over Ride Casing				\$0.00
Compact Track Loader / Water Support	per day	\$475.00	8	\$3,800.00
<b>WELL MATERIALS</b>				
1" PVC Well Material (includes all annular backfill)	per foot	\$10.00	600	\$6,000.00
2" PVC Well Material (includes all annular backfill)	per foot			\$0.00
4" PVC Well Material (includes all annular backfill)	per foot	\$18.00	600	\$10,800.00
1" x 5' Prepacked Well Screen	each			\$0.00
Wooden Core Boxes (Supplied by client)	each	\$55.75	60	\$3,345.00
Well Completion (includes 30 min. development, 8" bolt-down manhole, concrete pad & lockable well cap)				
4" x 4" Protective Riser completion	per well			\$0.00
12" Bolt-down completion	per well			\$0.00
	each			\$0.00
Above Grade Protector (Aluminum)	per well			\$0.00
<b>MISCELLANEOUS</b>				
Mobilization (Sonic Drill with all associated equipment)	roundtrip	\$1,200.00	1	\$1,200.00
Daily Mobilization (to and from site per day)	per day	\$375.00	8	\$3,000.00
Per Diem	per night			\$0.00
Permits	each			\$0.00
Decontamination Pad (incl. setup & breakdown)	lump sum			\$0.00
GW Samples (Estimated at 15 Minutes per sample)	each	\$95.00	26	\$2,470.00
Hydrant Meter / Water Support	ls	\$1,000.00	1	\$1,000.00
DOT Approved 55-gal Drum	each	\$60.00		\$0.00
Vacuum/Air Knife Bore Hole Clearing	per day			\$0.00
Development Time	per hour			\$0.00
Soil Boring Abandonment	per foot	\$8.00	0	\$0.00
Hand Work for Soil Borings and Wells	lump sum			\$0.00
Standby / Difficult Moving Time	per hour	\$450.00		\$0.00
Days to Complete Scope of Work	8	Submitted By: Charles Bucher	TOTAL QUOTE PRICE	\$79,615.00

# Lee Logging LLC

7786 Oak Grove Circle  
Lake Worth FL, 33467  
leeloggingllc@gmail.com  
(954) 304-6396



QUOTE #1

## BILL TO

Radise International. LC.  
4152 West Blue Heron Blvd. Suite 1114  
Riviera Beach, FL 33404  
Ph: (561) 841-0103

## SHIP TO

Lake Worth FL

Quote Date: 4/26/2021

Valid for:

DESCRIPTION	QTY	UNIT PRICE	TOTAL
4" Diameter PVC casing. Estimated TD 300'			
Mobilization / Demobilization / Rig Up Fee / Packoff XY Caliper / Gamma Ray Dual Induction / SP	EA	\$2,200.00	\$4,400.00
	-		0.00
	-		0.00
		<b>SUBTOTAL</b>	<b>\$4,400.00</b>
		<b>DISCOUNT</b>	<b>0.00</b>
		<b>SUBTOTAL LESS DISCOUNT</b>	<b>\$4,400.00</b>
		<b>TAX RATE</b>	<b>0.00%</b>
		<b>TOTAL TAX</b>	<b>0.00</b>
		<b>SHIPPING/HANDLING</b>	<b>0.00</b>
		<b>Quote Total</b>	<b>\$ 4,400.00</b>

Thank you for your business!

## Terms & Instructions

\* Field copies and final copies included

\*\* 6" Riser pipe with 2" side port male camlock and packoff assembly available as needed