

September 24, 2020

Ms. Wilhelmina Montero, P.E. Engineering and Construction Services Division City of Hollywood Department of Public Utilities 1621 North 14<sup>th</sup> Avenue Hollywood, Florida 33020

RE: Proposal for Engineering Consulting Services for:
Parkside Water Main Replacement Program: City Project No. 14-5123
Pembroke Road to Hollywood Blvd., from S. 21<sup>st</sup> Ave. to U.S.1

Dear Ms. Montero:

Kimley-Horn and Associates, Inc., (hereinafter referred to as "Consultant", "We" or "Kimley-Horn"), is pleased to submit this letter agreement (the "Agreement") for professional engineering consulting services to the City of Hollywood Department of Public Utilities (hereinafter referred to as "Client" or "City") relative to the above-referenced project ("Project").

## PROJECT UNDERSTANDING

- It is our understanding that the Project construction documents were prepared, permitted and issued for bid by "Atkins North America" (Atkins, or "EOR") under separate contract, and that a Contractor has been selected.
- 2) It is also our understanding that the scope of construction phase services under the Atkins contract is very limited. Therefore, the City of Hollywood has requested a proposal from Kimley-Horn to provide supplemental construction phase services for the Project to assist Atkins and the City in completing the construction and closing out the construction contract with the selected Contractor.
- 3) In order to provide these services for a project designed by others, Kimley-Horn provides the following conditions, all of which were found acceptable by the Client:
  - a. Atkins will remain as the responsible Engineer of Record (EOR) throughout the course of construction and until Project is closed out.
  - b. Atkins will perform any re-designs necessary to complete the Project
  - c. Atkins will attend and direct the pre-construction meeting with the City and selected contractor, including recording and distributing minutes.
  - d. Atkins will be responsible for reviewing and making recommendations to the Client in writing with respect to the following:
    - Contractor's project schedule
    - Submittals from the contractor including pre-construction videos, shop drawings, product cut sheets, product substitution requests and various work plans
    - RFIs or RAIs from the contractor
    - Pay Applications from the Contractor
    - Field Orders and Change Orders



- As-built drawings submitted by the Contractor reviewed against field redlines and the approved plans for each FDEP partial clearance package
- e. Atkins will also attend the following:
  - 18 construction progress meetings throughout the 26-month anticipated duration of construction.
  - Periodic site visits during construction of the proposed water mains to observe progress and witness tests (as often as deemed appropriate by Atkins for the type of work involved) and prepare site observation reports.
- f. Atkins will take the lead in, and coordinate, the following:
  - FDEP water main clearance process, to be performed as several partial clearance packages, so several packages will have to be prepared and submitted
  - Close-out of FDOT Utility Permit
  - Closeout of City Building Department permit
  - Close out of permits with Broward County Public Works Highway and Traffic Engineering Divisions
  - Final Record Drawings
- 4) In accordance with the construction contract, the total contract time required to complete construction is 790 days, or 26 months, including final completion and closeout. In the event construction extends beyond 790 days, Kimley-Horn will submit an amendment for additional services to cover the additional time.
- 5) The City of Hollywood Public Utilities Inspectors will provide the following services:
  - a. Daily inspection services
  - b. Attend pressure tests and provide pressure test calculations and reports to the team.
  - c. Oversee the chlorination process of the water mains and collection of bacteriological samples, receive the sample test results and circulate to the team.
- 6) It is assumed that no work is proposed within S. Dixie Highway (Broward County Public Works) right-of-way. If work is proposed within S. Dixie Highway, an additional permit close-out will be required from the Broward County Highway Construction and Engineering Division, which will be performed as an additional service.
- 7) It is our understanding that a Maintenance of Traffic (MOT) plan or Traffic Control Plan (TCP) must be submitted for approval to the Florida East Coast (FEC) Railway and the City prior to any Subsurface Utility Exploration (SUE) around the railroad crossing at Washington Street just west of S. 21<sup>st</sup> Avenue. It is also our understanding that the Client will require that the selected Contractor prepare and submit the MOT to the above referenced agencies, and that they physically implement it prior to the SUE work.

#### SCOPE OF SERVICES

#### Task 1 – Assistance with Owner SRF Compliance

Kimley-Horn will assist the City with specific Owner-related compliance and reporting requirements of the Florida Department of Environmental Protection (FDEP) State Revolving Fund (SRF) Program Supplementary Conditions as follows:

1.1 <u>American Iron and Steel (AIS) requirements</u> – We will assist the City by providing the following services:



- Once the EOR approves the shop drawings, we will prepare an AIS matrix identifying AISeligible products for the Project in order to track the compliance process.
- Review AIS certification letters obtained by the Contractor from vendors/manufacturers and coordinate with the Contractor to provide any missing information.
- Identify City-specified products that are not available AIS-compliant, coordinate with the Contractor to provide AIS-compliant alternatives and present to ECSD to either accept the alternates or pursue waivers for the specified products.
- All letters and information collected will be catalogued in the event records are audited by FDEP.
- If the decision is made to pursue any waivers, that service will be performed under Task 2.
- 1.2 Compliance with Davis-Bacon Act We will assist the City by providing the following services:
  - Review Contractor's and subcontractor's certified payroll on a monthly basis and compare the payroll rates with prevailing wage rates (provided by others) to ensure compliance with the Davis-Bacon Act.
  - Review monthly records of labor interviews performed and provided by City Inspectors and report discrepancies back to City and Contractor.
  - Keep track of labor-payroll field interviews of Contractor and Subcontractor crews, report monthly progress to City staff and of the need for additional interviews.
- 1.3 Attend Quarterly Meetings and Site Visits with SRF Inspector Kimley-Horn will attend up to nine (9) regular quarterly meetings followed by Project drive-throughs with the SRF Inspector. Meetings will take place at the Wastewater Treatment Plant, Building A, located at 1621 N 14<sup>th</sup> Avenue, Hollywood, FL 33020. At the meetings, Kimley-Horn will provide copies of the following:
  - AIS certification letters and exceptions/waivers
  - Monthly site observation reports
  - Weekly payroll records provided by the Contractor
  - Contractor/subcontractor employee interview reports

#### Task 2 – Applications for Waivers from AIS Requirements (Allowance)

Work under this task is to be authorized by the Client on an as-needed basis in the event there are any iron or steel products required for the Project that do not comply with AIS requirements or cannot be procured domestically. Kimley-Horn will coordinate with the EOR, City staff, the Contractor and USEPA (EPA) to prepare and submit requests for AIS waivers to the EPA. Kimley-Horn will rely on the Contractor to provide sufficient evidence and justification for the inability to procure the items domestically, or any significant hardships to the Project if obligated to procure the products domestically. Fees under this Task will be billed as needed on a time and materials basis.

## Task 3 – Monthly Construction Progress Meetings

Kimley-Horn will attend a local pre-construction meeting with the Client, EOR and Contractor, as well as 26 regular monthly construction progress meetings throughout the course of construction. Kimley-Horn will prepare meeting agendas providing updates on the progress of the work and impacts to the construction schedule, and record/distribute minutes of the meetings.



# **Task 4 - Monthly Construction Site Observations**

Kimley-Horn will attend 26 monthly construction site visits to observe, take photos and make notes regarding the progress of the work. Kimley-Horn will also prepare and distribute site visit reports.

It is Kimley-Horn's understanding that the EOR will be performing site walk-throughs at substantial and final completion, issuing punch-lists of corrective items to the Contractor, and issuing EOR's acceptance letter for the completed work in order to close out the Project.

# Task 5 - Field Orders and Change Orders (Allowance)

Kimley-Horn will assist the EOR by performing specific site visits to observe and record certain field conditions that are causing the Contractor to request Field Orders, Change Orders or other claims. Kimley-Horn will provide the field information to the EOR, and the EOR will determine whether the Contractor's request is justified and valid, as well as provide a recommendation about amounts due the Contractor. Fees under this Task will be billed as needed on a time and materials basis.

# Task 6 - Broward County Traffic Pavement Markings Closeout

It is assumed that no work will occur within the right-of-way of S. Dixie Highway. Upon completion of all new traffic pavement markings on the Project, Kimley-Horn will provide the following services:

- 1) Visit the site to observe the performance (by others) of retroreflectivity tests on the new traffic pavement markings in accordance with FDOT testing method FM 5-600.
- 2) Kimley-Horn will review photos provided by the Contractor for all new traffic pavement markings and compare them against the approved plans for consistency with BCTED approvals, and to make sure no photos are missing. Kimley-Horn will coordinate with the Contractor if there is additional information required. We will caption the photos by sheet number, street, station and direction for easier review.
- 3) Kimley-Horn will prepare and submit a request for inspection of the new traffic pavement markings to the Broward County Traffic Engineering Division (BCTED). The package includes:
  - Engineer's certification letter
  - b. Copies of the plans approved by BCTED
  - c. Records of the retroreflectivity tests
  - d. Photos of all new pavement markings cross-referenced
  - e. Certificate of competency from the pavement marking subcontractor

Once BCTED performs their inspection, any comments will be forwarded to the Contractor to address and make field corrections. After corrections are made and comments addressed by the Contractor, Kimley-Horn will notify BCTED a second time to perform a follow-up inspection. Once the approval letter from BCTED is received, the approval will be catalogued and distributed to the team.



# Task 7 - FEC Railroad Crossing Subsurface Utility Exploration (SUE)

The Client requested that existing underground utilities running across and along the Florida East Coast (FEC) Railroad crossing of Washington Street be verified using SUE. It is assumed that no work is being performed within S. Dixie Highway right-of-way. Kimley-Horn will perform the following services:

- A new Sunshine Design Ticket will be opened, and records of existing utilities will be requested from utility owners/providers for the right-of-way of Washington Street lying between the rightsof-way of S. Dixie Highway and S. 21<sup>st</sup> Avenue, including the FEC railroad crossing.
- 2) Upon receiving responses from all utility owners/providers on the Sunshine Ticket, Kimley-Horn will provide this information to our subconsultant, T2UE Engineers, to perform Utility Designation services and sweep the area of the FEC right-of-way using Multi-channel Ground Penetrating Radar (GPR). The limits of the SUE will be the asphalt pavement of Washington Street between the East edge of pavement of S. Dixie Highway and the West edge of pavement of S. 21st Avenue.
- 3) Based on the locations provided by the GPR, T2UE will perform test holes to map the alignments and depths of any existing underground utilities that do not appear to be located where indicated on utility record drawings. An allowance task for test holes is provided, including a maximum of 20 test holes with a 4-hole minimum per daily mobilization.
- 4) In order for T2UE crews to be able to complete the test holes within the Washington Street and FEC R/R rights-of-way, a maintenance of traffic (MOT) or traffic control plan (TCP) must be prepared, approved by FEC, the City and BCTED, and implemented prior to the test holes. It is our understanding that the City's selected Contractor will be responsible for providing the MOT/TCP for the underground utility exploration work. Preparation, approval and/or implementation of a MOT/TCP is not included in this scope of services.
- Once the test holes are completed, the information will be provided to the EOR to be overlaid on the approved plans to verify if any redesigns need to be completed by the EOR to resolve utility conflicts with the proposed trenchless water main crossing. Any permit fees required for maintenance of traffic (MOT) will be paid directly by the Client.
- 6) T2UE's detailed scope of services relating to the designation, GPR sweep and test holes is attached as "Exhibit B".

#### **ADDITIONAL SERVICES**

If authorized by City in writing, the Consultant will provide additional services that may be required above and beyond those described in the above tasks. These services may include, but are not limited to, the following:

- 1) Attendance to meetings and field visits beyond the anticipated contract time of 26 months
- 2) Any other services not specifically listed in the above Tasks



# **EXCLUDED SERVICES**

The following services are excluded from the Scope of Work:

- 1) Providing Engineer of Record services
- 2) Providing any re-designs necessary to complete the Project
- Reviewing and providing comments on the Contractor's project schedule and submittals including pre-construction videos, shop drawings, product cut sheets, product substitution requests and various work plans
- 4) Responding to RFIs or RAIs from the Contractor
- 5) Reviewing Contractor Applications for Payment
- 6) Responding to Field Orders and Change Orders
- 7) Reviewing Project as-built drawings submitted by the Contractor against field redlines and the approved plans for each FDEP partial clearance package
- 8) FDEP water main clearance process, to be performed as several partial clearance packages, so several packages will have to be prepared and submitted
- 9) Close-out of any permits with the exception of BCTED Traffic Markings
- 10) Providing Final Record Drawings
- 11) Fulltime field representation

#### TO BE PROVIDED BY CITY

- 1) Copies of Conformed Construction Documents, Contract Manual and permits/approvals
- 2) Most recent copy of "Florida Department of Environmental Protection State Revolving Fund Program Supplementary Conditions for Formally Advertised Construction Procurement"
- 3) Current "Prevailing Wages" for the Project in accordance with the Davis-Bacon Act.

# PROJECT SCHEDULE

Kimley-Horn will provide its services as expeditiously as practicable with the goal of meeting the Contract time of 790 days.

# FEE AND BILLING

Kimley-Horn will perform the services in Tasks 1, 3, 4, 6 and Subtasks 7.1 and 7.2 for the lump sum labor fees shown in the following table. Kimley-Horn will perform the services in "Allowance" Tasks 2, 5 and 7.3 on an as-needed basis if authorized by the Client in writing. Allowance Tasks will be billed hourly based on the hourly rates contained in the Staff-Hour Estimate attached herein as "Exhibit A", and "Exhibit B" from the Professional Services Agreement for General Engineering Consulting Services for Water, Sewer, Reuse and Stormwater Infrastructure Projects (City Project No. 17-1325) between the City of Hollywood and Kimley-Horn and Associates, Inc. In addition to the labor fees, direct reimbursable expenses will be billed in accordance with the terms of the Professional Services Agreement. All permitting, application, and similar project fees will be paid directly by the Client.



# **Lump Sum Fees**

Task No.	Description	Lump Sum Fee
1	Assistance with Owner SRF Compliance	
	1.1 – American Iron and Steel (AIS) Requirements	\$10,614.26
	1.2 – Compliance with Davis-Bacon Act	\$25,010.85
	1.3 - Attend Quarterly Meetings and Site Visits with SRF Inspector	\$23,446.81
3	Monthly Construction Progress Meetings	\$80,097.21
4	Monthly Construction Site Visits	
6	Broward County Traffic Pavement Markings Closeout	\$23,212.14
7	FEC Railroad Crossing Subsurface Utility Exploration (SUE)	
	7.1 – Underground Utilities Records Search	\$25,010.85
	7.2 – Utility Designating and Multi-channel GPR (Sub-consultant)	\$13,380.00
	Total Lump Sum Fee	\$261,315.54

#### **Allowance Tasks**

Task No.	Description	Lump Sum Fee
2	Applications for Waivers from AIS Requirements (Allowance)	\$30,079.80
5	Field Orders and Change Orders (Allowance)	\$30,079.80
	7.3 – Test Holes (Sub-consultant Allowance)	\$13,470.00
	Total Allowance Fees	\$73,629.59

#### Reimbursable Expenses

Task No	. Description	Expense Fee
EXP 1	Miscellaneous Reimbursable Expenses	\$3,000.00
Grand T	otal All Tasks	\$337,945.13

Lump sum labor fees will be invoiced monthly based upon the overall percentage of services performed. Allowance Tasks will be billed as time and materials, and Reimbursable expenses will be invoiced based upon expenses incurred. Payment will be due within 25 days of your receipt of the invoice and should include the invoice number and Kimley-Horn project number.

## **CLOSURE**

The terms and conditions of the Professional Services Agreement for General Engineering Consulting Services for Water, Sewer, Reuse and Stormwater Infrastructure Projects (City Project No. 17-1325) between the City of Hollywood and Kimley-Horn and Associates, Inc. ("Agreement"), hereby incorporated by reference, shall govern this scope of services. "Consultant" shall refer to Kimley-Horn and Associates, Inc., and "Client" shall refer to the City of Hollywood Department of Public Utilities. The terms and conditions of the Agreement shall govern this scope of services.

If you concur in all the foregoing and wish to direct us to proceed with the services, please have authorized persons execute both copies of this Agreement in the spaces provided below, retain one copy, and return the other to us. We will commence services only after we have received a fully executed Authorization to Proceed. Fees and times stated in this Agreement are valid for sixty (60) days after the date of this letter.



We appreciate this opportunity to continue serving the City of Hollywood. Please don't hesitate to contact Juan Jimenez at (305) 535-7784 or email at <a href="mailto:juan.jimenez@kimley-horn.com">juan.jimenez@kimley-horn.com</a> if you have any questions.

Sincerely, KIMLEY-HORN AND ASSOCIATE	S, INC.
Jorge L. Fernandez, P.E. Vice-President	Juan E. Jimenez, P.E. Project Manager / Associate
Enclosures: Sub-consultant Fee Proposal	
Agreed to this day of	, 2020.
CITY OF HOLLYWOOD A Municipality	
(Print or Type Name and Title)	
(Email Address)	
	, Witness
(Print or Type Name)	
Official Seal:	



# EXHIBIT "A" STAFF-HOUR ESTIMATE



# STAFF - HOUR ESTIMATE

**Project Name:** Parkside Water Main Replacement Program

City Project No. 14-5123

Client: City of Hollywood Dept. of Public Utilities

Date Prepared: 9/23/2020

Estimated By: Juan E. Jimenez, PE

## **LUMP SUM TASKS**

		DIRECT LABOR (STAFF HOURS)										
		Principal	Senior	Project	Prof.	Project	Engineer	CADD	Support		Sub	
KH Task #	KHA Task Name		Prof.	Manager	Engineer	Engineer	Analyst	Designer	Staff	Total	Consultants	
	Subtask Name/Description	P8	P7	P6	P4	Р3	P2	D7	N	KH	(Refer to	TOTAL
		(hours)	(hours)	(hours)	(hours)	(hours)	(hours)	(hours)	(hours)	Labor	Exhibit A)	PER TASK
	Distribution	1.0%	10.0%	20.0%	25.0%	35.0%	0.0%	5.0%	4.0%	hours	(\$)	(\$)
1	Assistance with Owner SRF Compliance											
	1.1 – American Iron and Steel (AIS) Requirements	0.5	6.5	13.5	17.0	23.5	0.0	3.5	2.5	67.0	\$ -	\$ 10,614.26
	1.2 – Compliance with Davis-Bacon Act	1.5	15.5	31.5	39.5	55.0	0.0	8.0	6.5	157.0	\$ -	\$ 25,010.85
	1.3 - Attend Quarterly Meetings and Site Visits with SRF Inspector	1.5	14.5	29.5	37.0	51.5	0.0	7.5	6.0	147.0	\$ -	\$ 23,446.81
3	Monthly Construction Progress Meetings	5.0	50.5	100.5	126.0	176.0	0.0	25.0	20.0	503.0	\$ -	\$ 80,097.21
4	Monthly Construction Site Visits	4.0	38.0	76.0	95.0	133.0	0.0	19.0	15.0	380.0	\$ -	\$ 60,543.44
6	Broward County Traffic Pavement Markings Closeout	1.5	14.5	29.0	36.5	51.0	0.0	7.5	6.0	145.0	\$ -	\$ 23,212.14
7	FEC Railroad Crossing Subsurface Utility Exploration (SUE)											
	7.1 – Underground Utilities Records Search	1.5	15.5	31.5	39.5	55.0	0.0	8.0	6.5	157.0	\$ -	\$ 25,010.85
	7.2 – Utility Designating and Multi-channel GPR (Sub-consultant)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$13,380.00	\$ 13,380.00
_	Subtotal (Hours)	15.5	155.0	311.5	390.5	545.0	0.0	78.5	62.5	1556.0		
	Hourly Rates (\$/hr.)	\$ 362.97	\$ 273.57	\$ 196.63	\$ 155.59	\$ 117.12	\$109.43	\$ 111.14	\$ 85.49			
_	Total by Classification	\$5,626.04	\$42,403.35	\$61,250.25	\$60,757.90	\$63,830.40	\$ -	\$8,724.49	\$5,343.13		\$13,380.00	\$ 261,315.54

## **ALLOWANCE TASKS**

			DIRECT LABOR (STAFF HOURS)									
		Principal	Senior	Project	Prof.	Project	Engineer	CADD	Support		Sub	
KH Task #	KHA Task Name		Prof.	Manager	Engineer	Engineer	Analyst	Designer	Staff	Total	Consultants	
	Subtask Name/Description	P8	P7	P6	P4	Р3	P2	D7	N	KH	(Refer to	TOTAL
		(hours)	(hours)	(hours)	(hours)	(hours)	(hours)	(hours)	(hours)	Labor	Exhibit A)	PER TASK
	Distribution	1.0%	10.0%	20.0%	25.0%	35.0%	0.0%	5.0%	4.0%	hours	(\$)	(\$)
2	Applications for Waivers from AIS Requirements (Allowance)	2.0	19.0	37.5	47.0	66.0	0.0	9.5	8.0	188.0	\$ -	\$ 30,079.80
5	Field Orders and Change Orders (Allowance)	2.0	19.0	37.5	47.0	66.0	0.0	9.5	8.0	188.0	\$ -	\$ 30,079.80
7	FEC Railroad Crossing Subsurface Utility Exploration (SUE)											
	7.3 – Test Holes (Sub-consultant Allowance)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	\$13,470.00	\$ 13,470.00
	Subtotal (Hours)	4.0	38.0	75.0	94.0	132.0	0.0	19.0	16.0	188.0		
	Hourly Rates (\$/hr.)	\$ 362.97	\$ 273.57	\$ 196.63	\$ 155.59	\$ 117.12	\$109.43	\$ 111.14	\$ 85.49			
_	Total by Classification	\$1,451.88	\$10,395.66	\$14,747.25	\$14,625.46	\$15,459.84	\$ -	\$2,111.66	\$1,367.84		\$13,470.00	\$ 73,629.59

REIMBURSABLE EXPENSES \$ 3,000.00

GRAND TOTAL \$ 337,945.13



# EXHIBIT "B" SUB-CONSULTANT PROPOSAL



September 22 2020

Attn: Juan Jimenez, PE Kimley-Horn 355 Alhambra Circle, Suite 1400 Miami, Florida 33134 Juan.jimenez@kimley-horn.com

RE: Subsurface Utility Exploration

Project name – Hollywood Beach Utility Improvements

Dear Mr. Jimenez:

We are pleased to provide you this proposal for miscellaneous subsurface utility exploration task for the Hollywood Beach Utility Improvements project. Please accept this letter as our official scope of services and fee.

#### **Limits of Survey:**

See attached "Project Limits".

# **Scope of Services:**

T2 will complete a SUE investigation in general accordance with ASCE Standard 38-02: Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data. T2 will search for the existence and approximate location of subsurface utilities within the project limits except those listed under Exclusions below. The specific work includes:

- Records Research through customary means:
  - o Identify utilities anticipated to exist in the project area.
  - Compile record utility information obtained through customary means and as provided by the client.
  - o Contact Sunshine 811 for utility owner response and inventory.
- Field Investigation
  - O Utilize multi-channel ground penetrating radar (MCGPR) to scan the area of Washington Street falling between the west edge of pavement of S. 21<sup>st</sup> Avenue and the east edge of pavement of S. 21<sup>st</sup> Avenue. This information will assist with identifying potential utilities and conflicts. All data obtained shall be extracted to an AutoCAD file and a KMZ file.
  - Designate utilities within project area.
  - o Perform up to twenty (20) test holes in locations as specified by client.
  - Survey of subsurface designations, test holes and above ground utility indicators and appurtenances.

T2 UES, Inc.

5670 Zip Drive Fort Myers, FL 33905 USA

Phone +1 239 277 0722

www.T2ue.com



- Office
  - o Project coordination between client, field crews and MOT subcontractor.
  - o Process and map field data and prepare final deliverables.
  - o Prepare final report for submittal.

#### **Basis and Assumptions:**

Unless specifically stated otherwise in the Scope of Services, this proposal is conditioned on the following. Differences may result in necessary changes to the proposed scope and fee.

- Any permit fees required shall be paid by the City.
- All field work can be completed within normal business hours.
- Minimum request of four (4) test holes per day with a total of five (5) mobilizations.
- All elevation data shall be obtained through GPS methods and have a vertical accuracy of 0.15 feet.
- MOT services shall be provided by the City at no additional cost to T2.
- Maximum depth of a test hole shall not exceed eight (8) feet. If water is encountered, utility information may not be able to be obtained.
- Test Holes in pavement will be made by saw cut; circular coring is not included. Asphalt
  restoration will be with standard cold patch; hot patching is not included. Backfilling will
  be with compacted native backfill; special backfill is not included.

#### **Exclusions:**

The following utilities and / or components will not be investigated:

- Storm and sewer drains
- Service lines
- Traffic control. Street light and signage wiring
- Irrigation lines
- Underground storage tanks, piping and wiring
- Electronic depths

#### **Deliverables**

Upon completion of field effort, the following deliverable shall be provided:

- CAD file of utilities and achieved quality levels. All horizontal data shall be in the North American Datum of 1983 (2011 adjustment), Florida East Zone, U.S. Survey feet. All vertical data shall be in the North American Vertical Datum of 1988.
- Signed and sealed report summarizing the work and results.
- Test hole data sheets and photos.

#### Schedule:

Barring any unforeseen conditions, T2 is prepared to proceed with the work within two (2) weeks of executed contract.



#### **Limitation & Standard of Care:**

Subsurface Utility Engineering is a professional practice defined by the American Society of Civil Engineers (ASCE.) T2 conducts utility investigations in general accordance with ASCE 38: Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data. Identifying and mapping underground utilities is a result of gathering evidence from various sources and exact utility locations are not confirmed unless visually exposed and surveyed, and then only at those specific exposed locations. T2 will meet the prevailing standard of care for services provided and does not guarantee that all utilities can or will be identified, detected or precisely mapped.

#### Fee:

T2 proposes to provide the Scope of Services for a lump sum fee determing Multi-channel ground-penetrating radar	\$3,400.00
LUMP SUM TOTAL FEE	<u>\$13,380.00</u>
Test holes	\$13,470.00

Thank you for considering us to provide you with these services. Please feel free to contact me with any questions you may have.

Sincerely,

Scott Urquhart, PSM

PRINCIPAL – SURVEY

UTILITY ENGINEERING & SURVEYING

BRANCH MANAGER

T2 UES, Inc.

