



December 9, 2020

Richard Pereira, Project Manager
City of Delray Beach Public Works
434 South Swinton Ave
Delray Beach, FL 33444

pereirar@mydelraybeach.com

Re: Scope of Services and Fee Proposal
North Swinton Avenue Underground Utility Improvements (RFQ 2020-007)

Project Limits:

- Underground utilities – NE/NW 3rd Street to NW 25th Court
 - Reclaimed Water Branch 1: Tangerine Trail to Plumosa School of the Arts north campus
 - Reclaimed Water Branch 2: NE 17th Street to Plumosa School of the Arts south campus
- Roadways – North of Lake Ida Road to south of SW 36th Street (north city limits)

Dear Mr. Pereira,

WGI, Inc. (WGI) is pleased to provide this scope and fee proposal to the City of Delray Beach (City) for professional services on the above-referenced project. Our scope of services and corresponding fees are detailed below. In addition, it is agreed that WGI's services will be performed pursuant to the contract terms in conditions contained in RFQ 2020-007.

PROJECT UNDERSTANDING

Roadway & Pavement

The Historic North Swinton Avenue is experiencing pavement deterioration including uneven surfaces of the roadways, excessive sinkholes, asphalt cracking and accelerated deterioration adversely impacting roadway stability and rideability. This has increased maintenance and shortened the lifespan of resurfacing projects. There are also instances of non-continuous sidewalks that prohibit pedestrian connectivity throughout the roadway corridor.

In addition, the City would like to include improved bicycle / pedestrian connectivity from the North Swinton Avenue corridor to the dedicated bicycle lanes within the NE 2nd Avenue (Seacrest Boulevard) corridor along NW 22nd Street and improvements to the sidewalk located at the NE corner of NE 2nd Avenue and NW 22nd St intersection that were not included in the NE 2nd Avenue Beautification project. The City has also requested that WGI include the drainage improvements at the SW corner of NE 2nd Avenue and NW 22nd Street that were not included in the NE 2nd Avenue Beautification project.

Drainage

The City was provided the "Professional Civil Engineering Condition Assessment Report – Swinton Avenue Roadway Improvement" report prepared by Engenuity Group, Inc. on September 13, 2019 which provided an assessment of pipe conditions and suggestions for the repair and/or replacement on a

portion of the project. The recommendations provided call for the use of CIPP liner for repair. The City has requested that WGI review the recommendations contained in the report and substantiate the recommended repair.

Potable Water and Sanitary

The City has informed WGI that utility infrastructure within the corridor is at varying levels of age and condition and any required utility upgrades are to be incorporated into the design of the improvements as part of this scope. The utility improvements include potable water main, sanitary gravity main and sanitary sewer force main, and reclaimed water main.

The sanitary improvement and investigation (for age and condition) limits are from NW 25th Court south to NE 22nd Street. The sanitary force main investigation report from City Lift Stations P105 and 105, will include a condition review and improvement recommendations.

The water main investigation and improvements are limited to existing connections to an existing cast iron 6" main and that are to be reconnected to an existing ductile iron 8" main from just north of NW 25th Court at the City of Boynton Beach's meter south to NW 24th Street.

Reclaimed water transmission limits are from NE/NW 3rd Street north to NW 24th Court. The reclaim main distribution mains will service both Plumosa School of the Arts campuses: along Tangerine Trail, and NW 17th Street to include service connections to the right of way of all adjacent properties.

Route Survey

WGI will perform a Route Survey for design purposes of N. Swinton Ave, from NE 3rd Street to SW 36th Ave; Tangerine Trail, from N. Swinton Ave to Seacrest Blvd; and NE 17th Street, from N. Swinton Ave to NE 2nd Ave; including 25 feet beyond the radius returns of side streets.

- Prepare survey calc file and field package information;
- Research public records for deeds, plats, R/W maps, and survey control.
- Locate, check, and establish horizontal and vertical control;
- Locate existing monumentation for right-of-way establishment.
- Locate above ground visible improvements within the right-of-way, including significant landscaping (trees/shrubs).
- Locate storm sewer structures including invert elevations, pipe sizes, types, and connectivity.
- Locate gravity sanitary sewer structures including flow line elevations, connectivity, and pipe size and type if obtainable.
- Obtain spot elevations (topography) at approximately 20-foot cross-sections along the route, including centerline, edge of pavement, sidewalks, driveways, and grade breaks.
- Obtain spot elevations 15 feet beyond the right-of-way at driveways to determine slope.
- Set a minimum of three permanent horizontal and vertical control points.
- Process, check and review field information.
- Create and label centerline stationing from south to north and west to east where applicable.
- Right-of-way determination by Professional Surveyor and Mapper.
- Prepare Route Survey and project deliverables.
- Final review and signature by Professional Surveyor and Mapper.

Title Search and Title Review (Allowance)

The western right-of-way varies along the N Swinton Ave corridor. During the Data Collection and Design Phases, WGI will assist the City of identify locations along the N Swinton Ave corridor of which prohibit the completion of the project. Services for this task include:

- Provide up to 15 Title Searches (Property Information Reports);
- Review and incorporate relevant documents into the survey;

Subsurface Utility Exploration – Vacuum Excavation

WGI will provide an ASCE 38-02 Quality Level A field investigation within the project limits (Exhibit A), up to thirty (30) vacuum excavation test holes are anticipated for facility verification and depth confirmation. WGI will provide survey and location of utility test holes using network corrected GNSS surveying methods. Proposal is based on providing up to thirty (30) vacuum excavation test holes at locations as directed by the EOR.

SCOPE OF SERVICES

PHASE I – DATA COLLECITON

WGI will perform data collection efforts to provide the City and design team the necessary existing information, including:

1. Attend Project Kickoff Meeting with the City to set the schedule and project expectations
2. Schedule and initiate the following data collection activities
 - 2.1. Geospatial Services
 - 2.1.1. Perform topographical survey to confirm existing topographical information such as: trees, utility poles, manholes, water/sewer/drainage structures, pavement widths, driveways, sidewalks, longitudinal and cross slopes, above ground appurtenances, hardscape, etc.
 - 2.1.2. Perform R/W survey to determine R/W width throughout the project's corridor.
 - 2.2. Geotechnical Engineering
 - 2.2.1. Perform forty (40) asphalt pavement cores (approximately every 200') at a two-foot (2') depth to determine pavement condition, and two (2) LBR tests sampling on adjacent roadways.
 - 2.2.2. Perform fourteen (12) standard penetration tests (SPT) borings to a depth of 10ft (approximately every 600').
 - 2.2.3. Perform four (4) borehole permeability (BHP) tests to determine hydraulic conductivity of the subsoils for the drainage improvements.
 - 2.3. Utility Coordination
 - 2.3.1. Submit 811 Sunshine State One Call of Florida and submit utility coordination letters to each listed utility agency owner (UAO).
 - 2.3.2. Prepare Utility Coordination Packages and distribute to each listed (UAO).
 - 2.3.3. Coordinate with each UAO to provide either a "Utilities Clear" letter, or an exhibit of their existing facilities within the project's corridor.
 - 2.3.4. Meet with FPL to coordinate existing FPL facilities and determine if there are any proposed and/or ongoing FPL improvement projects within the project's corridor and throughout the project's duration.
 - 2.4. Perform televised investigation efforts on the existing gravity sanitary sewer system from NW 25th Court south to NE 22nd Street.

2.5. Tree and Landscape Inventory

- 2.5.1. Perform tree survey and create tree inventory list to document existing tree species adjacent within the R/W, throughout the project's corridor.
- 2.5.2. Perform landscape survey to document existing landscape within the R/W, throughout the project's corridor.

- 3. Prepare a Public Involvement Plan and webpage which will outline public involvement activities from the project commencement up to construction. In addition, the Public Involvement Plan (PIP) will include the following efforts:
 - 3.1. Create resident and stakeholder database within the project's affected project area.
 - 3.2. Provide updates and information to the City's Public Information Officer to post to the City's social media accounts.
 - 3.3. Setup and staff a project hotline acting as the first point of contact for impacted stakeholders.
 - 3.4. Prepare notification flyers and letters with project information and will distribute to stakeholders.
 - 3.5. Locate appropriate public meeting locations, attend, and provide meeting documentation and record stakeholder responses.
- 4. Meet with City to review results of the data collection efforts

PHASE II-VI – DESIGN

Due to the size and complexity of the project, the design of North Swinton Avenue will be completed in the following 5 phases (project phases 2-6):

PHASE II – 15% DESIGN

- 2. Preliminary Design Report (15%)
 - 2.1. Compile results of data collection efforts.
 - 2.2. Prepare a draft basis-of-design memo to support the design & construction direction to be implemented.
 - 2.3. Prepare conceptual level design plans including typical R/W section, utility improvements, and drainage improvements.
 - 2.4. Develop potential cross sections that address varying right-of-way (ROW) widths.
 - 2.5. Develop potential bicycle/pedestrian connectivity plan and analyze the feasibility of the use of sharrows.
 - 2.6. Review of existing ROW vegetation.
 - 2.7. Submittal to City.
 - 2.8. Meet with City to review results of the Preliminary Design Report.
 - 2.9. Schedule, Notify Stakeholders and Conduct Public Outreach Meet #1.

PHASE III – 30% DESIGN

- 3. 30% Design Documents
 - 3.1. Finalize basis of design memo and submit to the City.
 - 3.2. Preparation of 30% design plans, including:

- 3.2.1. Prepare Demolition plan noting specific areas of pavement, sidewalk, utilities, etc. to be demolished for the project's construction.
- 3.2.2. Prepare Horizontal alignment plan of the roadway and sidewalk.
- 3.2.3. Prepare Roadway plans showing the limits of reconstruction/restoration of the pavement.
- 3.2.4. Prepare typical sections for the project's R/W and specific sections for segments of the corridor with variable R/W widths.
- 3.2.5. Prepare drainage plans showing limits of reconstruction/restoration, and structures to be replaced.
- 3.2.6. Prepare horizontal utility improvement plans showing limits of utility improvements and identify utility conflicts.
- 3.2.7. Prepare landscape and irrigation plans showing limits of proposed landscape and irrigation, utilizing the City's approved tree list and following FPL's right-tree-right-place list.
- 3.2.8. Prepare lighting plans showing location and spacing of streetlight poles, using the City's standard streetlight.
- 3.2.9. Prepare a list of technical specifications for the project.
- 3.2.10. Prepare Engineer's Opinion of Probable Construction Costs (OPCC).
- 3.2.11. Prepare preliminary permit applications, as required to construct the project.
- 3.3. Attend pre-application meetings with regulatory agencies and prepare meeting documents and issue meeting minutes to the City.
- 3.4. Submittal package to the City for review.
- 3.5. Meet with City to review results of 30% design document submittal review.
- 3.6. Prepare a stormwater design analysis.
- 3.7. Preparation of the Public Involvement Plan (PIP).

PHASE IV – 60% DESIGN

4. 60% Design Documents
 - 4.1. Incorporate comments from 30% design document review
 - 4.2. Preparation of 60% design documents
 - 4.2.1. Update demolition plan based on comments from City and revisions in pavement and sidewalk alignment.
 - 4.2.2. Revise horizontal alignment plan based on comments from City and add horizontal control to the roadway centerline and sidewalks.
 - 4.2.3. Review existing topography and update roadway plans based on comments from the City and establish roadway profile.
 - 4.2.4. Cut roadway cross-sections at every 100' and label elevations and offsets from centerline.
 - 4.2.5. Update typical sections based on City comments.
 - 4.2.6. Prepare pavement design package based on geotechnical engineering results.
 - 4.2.7. Prepare pavement marking and signage plans.
 - 4.2.8. Prepare Maintenance of Traffic (MOT) plans.
 - 4.2.9. Review existing topography and prepare sidewalk plans and profiles.
 - 4.2.10. Update utility plans based on City comments and prepare water, sewer, and reclaim profiles and details.
 - 4.2.11. Create utility Conflict Matrix and agency coordination leading to UWS

- 4.2.12. Update landscape and irrigation plans based on City comments and coordination efforts with residents.
- 4.2.13. Update lighting plans based on City comments and prepare electrical conduit plans and electrical service rack plans. Coordinate electrical service connection location with FPL.
- 4.2.14. Assemble technical specifications and supplemental general conditions.
- 4.2.15. Update Engineer's Opinion of Probable Construction Costs (OPCC)
- 4.2.16. Quality control review for milestone submittal.
- 4.2.17. Submit permit applications for review and signature to the City and submit applications to regulatory agencies.
- 4.3. Prepare Right-of-Way / easement documents (parcel sketches, legal descriptions, appraisals)
- 4.4. Submittal package to the City for review.
- 4.5. Meet with City to review results of 60% design document submittal review.
- 4.6. Schedule, notify stakeholders and conduct Public Outreach Meeting #2.
- 4.7. Stormwater system design (sub).
- 4.8. Continued public involvement (sub).

PHASE V – 90% DESIGN

5. 90% (Constructability) Design Documents

- 5.1. Incorporate 60% design document review comments.
- 5.2. Prepare of 90% design documents.
 - 5.2.1. Finalize Demolition plans.
 - 5.2.2. Finalize Horizontal alignment plan.
 - 5.2.3. Finalize Roadway plans and profiles.
 - 5.2.4. Finalize Roadway cross-sections.
 - 5.2.5. Finalize Typical sections.
 - 5.2.6. Finalize Pavement Design and details.
 - 5.2.7. Finalize Pavement marking and signage plans.
 - 5.2.8. Finalize MOT plans.
 - 5.2.9. Finalize Sidewalk plans and profiles.
 - 5.2.10. Finalize Utility plans, profiles and details.
 - 5.2.11. Finalize Landscape and irrigation plans and details.
 - 5.2.12. Finalize Lighting plans and details.
 - 5.2.13. Assist City Purchasing Department in preparing Invitation to Bid Contract (ITBC) and Technical specifications.
 - 5.2.14. Finalize Engineer's Opinion of Probable Construction Costs (OPCC).
 - 5.2.15. Prepare contract time estimate.
 - 5.2.16. Quality control review for milestone submittal.
 - 5.2.17. Update and submit Permit status log.
- 5.3. Submittal package to the City for review.
- 5.4. Meet with City to review results of 90% design document submittal review.
- 5.5. Stormwater system design (sub).
- 5.6. Continued public involvement (sub).

PHASE VI – 100% DESIGN

6. 100% (Production) Documents

- 6.1. Incorporate 90% design document review comments.
- 6.2. Prepare 100% production documents, including:
 - 6.2.1. Demolition plan.
 - 6.2.2. Horizontal alignment plan.
 - 6.2.3. Roadway plans and profiles.
 - 6.2.4. Roadway cross-sections.
 - 6.2.5. Typical sections.
 - 6.2.6. Pavement Design and details.
 - 6.2.7. Pavement marking and signage plans.
 - 6.2.8. MOT plans.
 - 6.2.9. Sidewalk plans and profiles.
 - 6.2.10. Utility plans, profiles and details.
 - 6.2.11. Landscape and irrigation plans and details.
 - 6.2.12. Lighting plans and details.
 - 6.2.13. Invitation to Bid Contract (ITBC) and Technical specifications.
 - 6.2.14. Engineer's Opinion of Probable Construction Costs (OPCC).
 - 6.2.15. QA documents.
 - 6.2.16. Permit status log.
- 6.3. Submittal package to the City.
- 6.4. Final stormwater design (sub).
- 6.5. Continued public involvement (sub).

PHASE VII – BIDDING AND NEGOTIATION

7. 100% (Production) Documents

- 7.1. Assist the City with final preparation of ITBC Documents pre-advertisement (including bid tab).
- 7.2. Attendance at pre-bid meeting.
- 7.3. Assist the City responding to and addressing contractor RFIs.
- 7.4. Assist the City with contractor recommendation of award.
- 7.5. Bid assistance stormwater (sub).

PHASE VIII (A) – POST DESIGN SERVICES (of Project Phase A)

8a. Post Design Services for South Phase (A).

- 8a.1. Post design services - review of contractor submittals / Respond to RFIs

PHASE VIII (B) – POS DESIGN SERVICES (of Project Phase B)

8a. Post Design Services for South Phase (B).

- 8b.1. Post design services - Review of contractor submittals / Respond to RFIs

COMPENSATION

Phase	Description	Roadway	Water & Sewer	Total Fee
I	Data Collection	\$129,888.50	\$22,921.50	\$ 152,810.00
II	Design (15%)	\$66,164.00	\$11,676.00	\$ 77,840.00
III	Design (30%)	\$115,917.05	\$20,455.95	\$ 136,373.00
IV	Design (60%)	\$153,895.05	\$27,157.95	\$ 181,053.00
V	Design (90%)	\$136,678.30	\$24,119.70	\$ 160,798.00
VI	Design (100%) – Construction Documents	\$93,560.35	\$16,510.65	\$ 110,071.00
VII	Bidding and Negotiation	\$22,417.05	\$3,955.95	\$ 26,373.00
VIII(A)	Post Design Services (Project Phase A)	\$15,825.30	\$2,792.70	\$ 18,618.00
VIII(B)	Post Design Services (Project Phase B)	\$15,825.30	\$2,792.70	\$ 18,618.00
	Sub-Total	<i>\$750,170.90</i>	<i>\$132,383.10</i>	
	Allowances			
	Title Search & Title Review			\$ 25,950.00
	Permit Review Fees			\$ 5,500.00
	Total Fees			\$ 914,004.00

BASIS OF THIS PROPOSAL

This proposal is based on the following:

1. WGI shall be entitled to rely on the completeness and accuracy of all information provided by the City.
2. Civil engineering specifications and details will be included.
3. Scope of work does not include the design or analysis of the existing sanitary lift station (P105 & 105).
4. Scope of work does not include a hydraulic analysis of the City utility systems, including water, sewer, force main, and reclaimed water.
5. It is anticipated the proposed drainage improvements will have a point of legal positive outfall.
6. Significant scope and/or plan modifications will require an amendment to this contract. WGI will submit a separate proposal for those services.
7. Services for the proposed reclaimed water system will not be included for that portion located within the Swinton Road right-of-way.
8. The project will be designed in one phase; permitted and constructed in two phases.
9. Vertical control will be based on the North American Vertical Datum of 1988 (NAVD 88);
10. Horizontal control will be based on the State Plane Coordinate System of 1983, Florida East Zone;
11. Title searches are included in this proposal as an allowance, not to exceed.
12. Title conflict resolution and sketch and legal descriptions are not included in this scope but can be performed for an additional fee.
13. This is not a Boundary or ALTA Survey.
14. Utility records research is not included.
15. Subsurface Utility Designation is not included.
16. WGI proposes to provide ASCE 38-02 Quality Level A (QLA) investigation, on the existing

utilities for facility verification and depth confirmation, within the project limits (Exhibit A).

17. Survey services and survey location of test holes is included.
18. WGI will vacuum excavate utility facilities at the proposed locations, as directed by EOR, and provide a depth, size and material of the facility, and then backfill the test hole with native soil, compact with a pneumatic tamper to existing grade.
19. Geophysical prospecting techniques, although highly reliable, are subject to outside interference, which are beyond the control of WGI, and may impede the effectiveness of subsurface utility investigations. Soil conditions, utility materials, size, depth, salt water and conductivity may prevent the location of some subsurface utilities. WGI utilizes state of the art equipment and methodology during all phases of utility investigations, but no guarantee is hereby expressed that all facilities will be detected.
20. Generally, utilities found by vacuum excavation can be visually exposed to a depth equal to the water table; an air lance probe will be used for deeper utilities; however, visual confirmation may not be possible for utilities lying below the water table or utilities within directional bores. Note that the absence of identified utilities does not guarantee “no utility conflict”; and
21. If WGI does not have access to sub-surface infrastructures from the surface features, the likelihood of a successful investigation is greatly diminished. The sub-surface investigation will be concluded at the sole discretion of WGI after determination of all resources, means, and methods have been exhausted. Payment will be promulgated on the hourly rates per our standard fee schedule, regardless of the result of the investigation.
22. Drafting and/or other CADD services are included.
23. CLIENT shall facilitate access for WGI field staff.
24. Basic work zone safety includes safety road signs and traffic cones.
25. Traffic control, lane closures, if needed are included.
26. ASCE 38-02 Quality Level B utility investigation (designates) on existing utilities will not be provided.
27. Investigation of irrigation, gravity sewer is not included.
28. No FPL power pole and/or “corbra head” relocations are included in the project. The proposed lighting will be designed for pedestrian lighting in accordance with the City’s typical lighting fixtures.
29. Permits review fees, if needed, will be paid for by WGI and invoiced to the City.
30. Select backfill material, flowable fill or other material not included.

N. Swinton Ave Improvements - 20-007

Prepared By: Stephen Cherry, PE
Date: December 9, 2020
City Project No.

FEE ESTIMATE

Date: December 9, 2020	ENGINEERING						LANDSCAPE ARCHITECT			ENVIRONMENTAL		
City Project No.	\$ 210.00	\$ 185.00	\$ 160.00	\$ 150.00	\$ 100.00	\$ 110.00	\$180.00	\$100.00	\$85.00	\$200.00	\$180.00	\$120.00

			SENIOR PROJECT MANGER	PROJECT MANAGER	SENIOR ENGINEER	PROJECT ENGINEER	ENGINEER INTERN	DESIGNER	SENIOR PROJECT MANAGER	DESIGNER	ENTRY LEVEL DESIGNER	PRINCIPAL ENVIRONMENTAL SCIENTIST	SENIOR ENVIRONMENTAL SCIENTIST	ENVIRONMENTAL SCIENTIST	Task Total	use fee:													
PHASE	TASK	SUB	TASK DESCRIPTION																										
1			Data Collection																										
	1		4	4	4											\$ 2,220.00													
	2			4		8										\$ 1,940.00													
	3			8		8										\$ 2,680.00													
	4								6	12	20	4	16	24		\$ 10,540.00													
	5		4	4	8				4							\$ 3,580.00													
	6																												
		a	Geotech (TSF)													\$ 29,629.75													
		b	Survey													\$ 79,720.00													
		c	SUE													\$ 22,500.00													
			Data Collection Hourly Total													8.0	20.0	12.0	16.0	0.0	0.0	10.0	12.0	20.0	4.0	16.0	24.0		
			Data Collection Hourly Subtotal													\$ 1,680.00	\$ 3,700.00	\$ 1,920.00	\$ 2,400.00			\$ 1,800.00	\$ 1,200.00	\$ 1,700.00	\$ 800.00	\$ 2,880.00	\$ 2,880.00	\$ 152,809.75	\$ 152,810
2			Preliminary Design Report (15%)																										
	1			24	24											\$ 8,280.00													
	2			12	24											\$ 6,060.00													
	3			24	80											\$ 17,240.00													
	4			12	40											\$ 8,620.00													
	5			12	40											\$ 8,620.00													
	6			8	24											\$ 5,320.00													
	7			24	40											\$ 10,840.00													
	8			8	8											\$ 2,760.00													
	9			20	40											\$ 10,100.00													
			Preliminary Design Report Hourly Total													0.0	144.0	320.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
			Preliminary Design Report Hourly Subtotal														\$ 26,640.00	\$ 51,200.00									\$ 77,840.00	\$ 77,840	
3			30% Design Documents																										
	1			12	24											\$ 6,060.00													
	2																												
	1			2	4		8	12								\$ 3,130.00													
	2			6	12		20	20								\$ 7,230.00													
	3			12	20		40	40								\$ 13,820.00													
	4			6	12		20	20								\$ 7,230.00													
	5			6	12		20	20								\$ 7,230.00													
	6								20	45	30					\$ 10,650.00													
	7		4	6		19	30									\$ 7,800.00													
8			8	24											\$ 5,320.00														
9			4	16		24									\$ 5,700.00														
10			6	16											\$ 3,670.00														
11			6	16		40									\$ 7,670.00														
3			6	20											\$ 4,310.00														
4			6	16											\$ 3,670.00														
5			4	8				8							\$ 3,460.00														
6			Stormwater Analysis (MR)													\$ 19,559.78													
7			Prepare Public Involvement Plan (TMS)													\$ 19,862.82													
			30% Design Documents Hourly Total													4.0	90.0	200.0	19.0	202.0	112.0	28.0	45.0	30.0	0.0	0.0	0.0		
			30% Design Documents Hourly Subtotal													\$ 840.00	\$ 16,650.00	\$ 32,000.00	\$ 2,850.00	\$ 20,200.00	\$ 12,320.00	\$ 5,040.00	\$ 4,500.00	\$ 2,550.00			\$ 136,372.60	\$ 136,373	
4			60% Design Documents																										
	1			4	12		20	20								\$ 6,860.00													
	2																												
	1			4	8		20	20								\$ 6,220.00													
	2			4	8		20	20								\$ 6,220.00													
	3			8	12		40	40								\$ 11,800.00													
	4			4	8		20	20								\$ 6,220.00													
	5			4	8		20	20								\$ 6,220.00													
	6			4	12		12	12								\$ 5,180.00													
	7			4	8		20	20								\$ 6,220.00													
8			4	12		20	20								\$ 6,860.00														
9			4	12		20	20								\$ 6,860.00														
10			4	12		20	20								\$ 6,860.00														
11			4	8		20	20								\$ 6,220.00														
12								39	61	55					\$ 17,795.00														
13		5	9		14	40									\$ 8,815.00														
14			4	12		20	20								\$ 6,860.00														
15			4	12		24									\$ 5,060.00														
16			4	12				4							\$ 3,380.00														
17			4	12											\$ 2,660.00														
3			4	8		24									\$ 4,420.00														
4			6	12											\$ 3,030.00														
5			4	4				8							\$ 2,820.00														
6			10	20											\$ 5,050.00														
7			Stormwater Design (MR)													\$ 19,559.78													
8			Public Involvement (TMS)													\$ 19,862.82													
			60% Design Documents Hourly Total													5.0	101.0	212.0	14.0	360.0	272.0	51.0	61.0	55.0	0.0	0.0	0.0		
			60% Design Documents Hourly Subtotal													\$ 1,050.00	\$ 18,685.00	\$ 33,920.00	\$ 2,100.00	\$ 36,000.00	\$ 29,920.00	\$ 9,180.00	\$ 6,100.00	\$ 4,675.00			\$ 181,052.60	\$ 181,053	
5			90% (Constructability) Design Documents																										
	1			4	12		20	20								\$ 6,860.00													
	2																												
	1			4	6		20	20								\$ 5,900.00													
	2			4	6		20	20								\$ 5,900.00													
	3			8	12		40	40								\$ 11,800.00													
	4			4	6		20	20								\$ 5,900.00													
	5			4	6		20	20								\$ 5,900.00													
	6			6	8		12	12								\$ 4,910.00													
	7			4	6		20	20								\$ 5,900.00													
8			4	8		20	20								\$ 6,220.00														
9			6	8		20	20								\$ 6,590.00														
10			6	8		20	20								\$ 6,590.00														
11								22	44	42					\$ 11,930.00														
12		5	9		14	40									\$ 8,815.00														
13			4	8		20	20								\$ 6,220.00														
14			4	8		20	20								\$ 6,220.00														
15			4	8		24									\$ 4,420.00														
16			6	12				4							\$ 3,750.00														
17			4	6											\$ 1,700.00														
3			6	12											\$ 3,030.00														
4			4	4				8							\$ 2,820.00														
5			Stormwater Design (MR)													\$ 19,559.78													
6			Public Involvement (TMS)													\$ 19,862.82													
			90% (Constructability) Design Documents Hourly Total													5.0	95.0	144.0	14.0	336.0	272.0	34.0	44.0	42.0	0.0	0.0	0.0		
			90% (Constructability) Design Documents Hourly Subtotal													\$ 1,050.00	\$ 17,575.00	\$ 23,040.00	\$ 2,100.00	\$ 33,600.00	\$ 29,920.00	\$ 6,120.00	\$ 4,400.00	\$ 3,570.00			\$ 160,797.60	\$ 160,798	
6			100% (Production) Design Documents																										
	1			8	24		10	10								\$ 7,420.00													
	2																												
	1			4	8		12	12								\$ 4,540.00													
	2			4	8		12	12								\$ 4,540.00													
	3			8	16		20	20								\$ 8,240.00													
	4			4	12		16	16							</														

EXHIBIT A
SCOPE OF SERVICES & DELIVERABLES
Proposal to Provide Engineering Design and Bid Services for the North Swinton Avenue Roadway Underground Utility Improvements Project

Services to be provided by: Mock•Roos

Services provided to: Wantman Group (WGI)

Proposal Date: December 2, 2020

Proposal Terms

I. Project Description:

The City of Delray Beach has selected WGI to perform the design of underground utility improvements within the North Swinton Avenue roadway corridor from NE 4th Street (Lake Ida Blvd.) north to SW 36th Avenue. It is anticipated that the existing drainage system is adequately sized and will either be replaced in kind and location and/or lined in place. All project permitting will be completed by WGI. Mock•Roos will provide engineering design and bid services for the recommended stormwater improvements as outlined below in **B. Scope of Services**.

II. Scope of Services:

1. Attend a Project kick-off meeting (up to 3 hours) with City and WGI design team. Review, and provide comments on WGI prepared meeting minutes.
2. Prepare for, and attend during design, progress/review meetings (up to 3 hours/meeting) with the City and WGI design team (assumes up to 3). Review and provide comments on WGI prepared meeting minutes.
3. Perform ongoing coordination with the City and WGI design team during design.
4. Attend public outreach meetings with the City, WGI and City's residents (assumes up to 4 meetings, up to 3 hours/meeting). Public outreach plan and preparation and distribution of outreach exhibits/information to be prepared/performed by WGI.
5. Perform a review of the Condition Assessment Report, dated September 13, 2019, as prepared by Engenuity Group. Discuss review summary with WGI.
6. Perform a review of the topographic survey and basemap performed and prepared by WGI.

7. Perform site visit(s) to review existing drainage facilities. Photo document site visit(s).
8. Develop a computer model of the drainage system for the project area (from 5th Street to 22nd Street), for the purpose of confirming the adequacy of the existing stormwater pipe sizes. The following information will be required from the City/WGI:
 - Existing pipe network, including pipe sizes, inverts, material – to be provided by the City

The following assumptions will be made:

- LiDAR from PBC will be used to determine contributing area to the roadway drainage system
- USACE TR-55 manual will be used to estimate some parameters for the project contributing area
- Soils and land cover information provided by WGI will be used for sub-basin hydrology
- Existing RCP, recently cleaned, will be assigned a Manning's N of 0.12 throughout the system. Proposed pipe, with CIPP lining, will be assigned the appropriate Manning's N value to reflect this material.
- The simulations for evaluating pipe size will be limited to the 3-year/1-day event and the 10-year/1-day event (both as presented by SFWMD).

If any pipes within the project area appear to be undersized, a recommendation will be made to upsize the pipe during this construction project.

9. Prepare engineering plans and construction specifications will follow a standard Preliminary (30%), Intermediate (60%), Pre-Final (90%) and Final (100%) completion phases.
10. Prepare Engineer's Opinion of Probable Construction Cost at Intermediate (60%) and Pre-Final (90%).
11. Attend two (2) pre-bid meetings.
12. Review and address bidder's requests for information (RFIs) and assist the City issue appropriate addendums.
13. Provide Post Design Services as requested.

EXHIBIT A
ENGINEERING CONSULTANT FEES
Proposal to Provide Engineering Design and Bid Services for North Swinton Avenue Roadway Underground Utility Improvements Project

Task		Task Description	Mock•Roos					TOTAL
			Project Director	Senior Project Manager	Senior Professional Engineer	Engineering Intern I/CADD	Sr. Admin. Assistant	
			\$185.00	\$175.00	\$170.00	\$100.00	\$50.00	
	1	Attend Kickoff Meeting/Review Meeting Minutes	3		4		1	\$1,285
	2	Meetings During Design (Assumes 3)		9	12		2	\$3,715
	3	Ongoing Coordination during Design	2	4	12		2	\$3,210
	4	Attend Public Outreach Meetings (Assumes 4)		6	6	8	2	\$2,970
	5	Review Condition Assesment Report			6		2	\$1,120
	6	Review Topographic Survey/Basemap			10		1	\$1,750
	7	Perform Site Visit(s)			8	8	2	\$2,260
	8	Drainage System Modeling and Simulations		2	48	60	2	\$14,610
	9	Prepare Engineering Plans and Specifications	4	12	44	100	8	\$20,720
	10	Engineer's Opinion of Probable Construction Cost	1		6	8	2	\$2,105
	11	Attend 2 Pre-Bid Meetings			6			\$1,020
	12	Respond to RFIs		2	10	8	2	\$2,950
	13	Post Design Services Allowance						\$6,500
		Labor Total Hours	10	35	172	192	26	
		Labor Hourly Billing Rate	\$185	\$175	\$170	\$100	\$50	
		Labor Individual Totals	\$1,850	\$6,125	\$29,240	\$19,200	\$1,300	
						Engineering Total Fees		57,715
						Lump Sum Allowances		\$6,500
						Project Total		\$64,215

City of Delray Beach - Professional Engineering Design Services for the North Swinton Avenue Roadway Underground Utility Improvements

RFQ No. 2020-007

Public Involvement Scope for WGI

The Merchant Strategy (TMS) will prepare a Public Involvement Plan (PIP) and webpage within 30 calendar days after Notice to Proceed. The PIP will include resident and stakeholder databases. We will develop a project webpage to be hyperlinked to the City's website and will post updates, MOT changes, notifications, and any other needed information throughout the duration of the design schedule. TMS will provide updates and information to the City PIO to post to the City's social media accounts. TMS will setup and staff a project hotline acting as first point of contact for impacted stakeholders.

TMS will create one notification flyer with information on the project scope, limits, schedule, anticipated impacts, and contact information for the Public Involvement Manager. We will find appropriate public meeting locations (or make provisions for virtual meetings) for two public meetings, develop and deliver two meeting notifications, staff each meeting, assist with set up and take down, and provide a summary that includes meeting notes, sign in sheets, comment cards, and all written comments, questions, and responses. TMS will provide PPE equipment for the two public meetings including disposable masks, hand sanitizers and distance spacers to comply with CDC and local Covid-19 guidelines. TMS will also attend the kickoff meeting, progress meetings with the project team, and meetings with the Historic Preservation board and provide meeting notes.



ESTIMATE OF WORK EFFORT FOR WGI
City of Delray Beach
Professional Engineering Design Services for North Swinton
Avenue Roadway Underground Utility Improvements
RFQ No. 2020-007

Task No.	Task	Public Involvement Project Manager	PI Manager Rate		Public Involvement Specialist	PI Specialist Rate		Total Staff Hours	Total Cost	Details
1.00 Public Involvement Plan										
1.10	Create PIP		\$ 150.00	\$ -	15	\$ 100.00	\$ 1,500.00	15	\$ 1,500.00	TMS will create a Public Involvement Plan (PIP) which will be updated and maintained throughout the life of the project.
1.20	PIP QA/QC	1	\$ 150.00	\$ 150.00		\$ 100.00	\$ -	1	\$ 150.00	TMS will provide a supervisory employee to review for quality assurance.
2.00 Database Creation										
2.10	Resident and HOA Database		\$ 150.00	\$ -	10	\$ 100.00	\$ 1,000.00	10	\$ 1,000.00	TMS will research the names and addresses of HOAs, property owners and tenants in the impacted area and edit the database as needed. This task will include formatting a database and preparation for mail-merge.
2.20	Stakeholder Database		\$ 150.00	\$ -	10	\$ 100.00	\$ 1,000.00	10	\$ 1,000.00	TMS will develop a stakeholder database including public officials, elected officials, places of worship, schools, the Historic Preservation Board and other interested parties and edit the database as needed. This task will include formatting a database and preparation for mail-merge.
2.30	Database QA/QC	1	\$ 150.00	\$ 150.00		\$ 100.00	\$ -	1	\$ 150.00	TMS will provide a supervisory employee to review databases for quality assurance.
3.00 Notification Flyer										
3.10	Create and Edit Notification Flyer and/or Letter		\$ 150.00	\$ -	6	\$ 100.00	\$ 600.00	6	\$ 600.00	TMS will create one notification flyer and/or letter, in accordance to City policy, providing information on proposed project scope, limits, schedule, anticipated impacts and contact information Public Involvement Manager, which will be mailed to all stakeholders. Client will be provided a copy for edits.
3.20	Preparation for and Mailing of Notification Flyer and/or Letter		\$ 150.00	\$ -	6	\$ 100.00	\$ 600.00	6	\$ 600.00	TMS will prepare (print, fold, stuff, stamp) notification flyer and/or letter for delivery via U.S. Postal Service.
3.30	Notification QA/QC	1	\$ 150.00	\$ 150.00		\$ 100.00	\$ -	1	\$ 150.00	TMS will provide a supervisory employee to review notification flyer and/or letter for quality assurance.
4.00 Project Webpage and Social Media										
4.10	Create Project Webpage ONE-TIME FEE		\$ 150.00	\$ -		\$ 100.00	\$ -			TMS will create and develop a project webpage to be hyperlinked to the City's website for continual public outreach, including updates and questions up to award of construction contract. ONE-TIME FEE which is outlined under "estimated expenses" below.
4.20	Webpage Maintenance and Updates		\$ 150.00	\$ -	120	\$ 100.00	\$ 12,000.00	120	\$ 12,000.00	TMS will post updates, MOT changes, notifications and any other needed information to the project webpage throughout the duration of the design schedule. Information will be provided to client for approval prior to posting.
4.30	Social Media Updates		\$ 150.00	\$ -	60	\$ 100.00	\$ 6,000.00	60	\$ 6,000.00	TMS will provide updates, MOT changes, notifications and any other needed information to the City for posting to the City's social media accounts throughout the duration of the design schedule.
4.40	Website and Social Media QA/QC	9	\$ 150.00	\$ 1,350.00		\$ 100.00	\$ -	9	\$ 1,350.00	TMS will provide a supervisory employee to review for quality assurance.
5.00 Project Hotline										
5.10	Setup and Staff Project Hotline		\$ 150.00	\$ -	150	\$ 100.00	\$ 15,000.00	150	\$ 15,000.00	TMS will set up and staff a project hotline and be the first point of contact during working hours (Monday through Friday 8 am - 5 pm) throughout the duration of the design schedule.
5.20	Monthly Hotline Reports		\$ 150.00	\$ -	15	\$ 100.00	\$ 1,500.00	15	\$ 1,500.00	TMS will provide client and City with weekly and monthly hotline reports summarizing hotline communications.
5.30	QA/QC	7	\$ 150.00	\$ 1,050.00		\$ 100.00	\$ -	7	\$ 1,050.00	TMS will provide a supervisory employee to review hotline set up and monthly reports.
5.00 Public Meeting, Hearing and/or Presentation (Two Meetings)										
5.10	Find Venue		\$ 150.00	\$ -	2	\$ 100.00	\$ 200.00	2	\$ 200.00	TMS will find a venue for two Public Meetings, Public Hearings and/or Public Presentations and will handle all logistics. If COVID-19 prevents gathering in large groups, meetings, hearings and/or presentations can be held virtually via platform which allows for public comments which moderator can reply to.
5.20	Create and Edit Invitation		\$ 150.00	\$ -	2	\$ 100.00	\$ 200.00	2	\$ 200.00	TMS will create two invitations - one for each of two public meetings to be mailed to all stakeholders.
3.20	Preparation for and Mailing Invitation		\$ 150.00	\$ -	6	\$ 100.00	\$ 600.00	6	\$ 600.00	TMS will prepare (print, fold, stuff, stamp) invitation for delivery via U.S. Postal Service.
5.30	Attendance	6	\$ 150.00	\$ 900.00	8	\$ 100.00	\$ 800.00	14	\$ 1,700.00	TMS will provide two (2) staff to attend two (2) public meetings. TMS will help set up and take down, and will prepare sign in sheets and comment cards. TMS will prepare meeting notes with all written comments.
5.40	Follow Up		\$ 150.00	\$ -	2	\$ 100.00	\$ 200.00	2	\$ 200.00	TMS will summarize informal meeting notes and sent to client along with sign in sheets and comment cards.
5.50	QA/QC	1	\$ 150.00	\$ 150.00		\$ 100.00	\$ -	1	\$ 150.00	TMS will provide a supervisory employee to review all material and logistics.
6.00 Meeting with Historic Preservation Board (EACH MEETING)										
6.10	Attend Meeting with Historic Preservation Board	1	\$ 150.00	\$ 150.00		\$ 100.00	\$ -	1	\$ 150.00	TMS will attend meeting with the Historic Preservation Board.
6.20	Follow Up		\$ 150.00	\$ -	1	\$ 100.00	\$ 100.00	1	\$ 100.00	TMS will summarize informal meeting notes and provide to client.
6.30	QA/QC	1	\$ 150.00	\$ 150.00		\$ 100.00	\$ -	1	\$ 150.00	TMS will provide a supervisory employee to review
7.00 Kickoff Meeting										
7.10	Attend Kickoff Meeting	3	\$ 150.00	\$ 450.00	3	\$ 100.00	\$ 300.00	6	\$ 750.00	TMS will attend the kickoff meeting and will prepare sign in sheets.
8.00 Progress Meetings										
8.10	Attend Progress Meetings with Project Team	30	\$ 150.00	\$ 4,500.00	15	\$ 100.00	\$ 1,500.00	45	\$ 6,000.00	TMS will attend project meetings with the project team on an as needed basis.
9.00 Miscellaneous/Contingency Hours										
9.10	Miscellaneous/Contingency Hours	5	\$ 150.00	\$ 750.00	5	\$ 100.00	\$ 500.00	10	\$ 1,250.00	To be used as directed
TOTAL OF ESTIMATED HOURS		66	\$ 150.00	\$ 9,900.00	436	\$ 100.00	\$ 43,600.00	502	\$ 53,500.00	
ESTIMATED COSTS									\$ 4,073.40	Develop Project Webpage \$2,000.00 Printing one flyer and two meeting invitations - estimated 1,410 sheets at \$0.61/each = \$860.10 Envelopes for one flyer and two meeting notices - estimated 4,140 envelopes at \$0.08 each = \$112.80 Postage for one flyer and two meeting notices - estimated 1,410 stamps at \$0.55/each = \$775.50 PPE Equipment (masks, hand sanitizers and distance spacers) for two meetings = \$325.00
TOTAL OF ESTIMATED HOURS AND COSTS									\$ 57,573.40	



June 25, 2020

WGI
2035 Vista Parkway
West Palm Beach, FL 33411
Attn: Mr. Stephen Cherry, P.E.

**Re: Proposal for Geotechnical Engineering Services
North Swinton Avenue Utility and Roadway Improvement
Delray Beach, Florida
TSF Proposal No.: 2006-394**

Dear Stephen:

As requested, TSF is pleased to submit this proposal for the above-referenced project. The proposal is based on an email dated June 24, 2020. The proposed utility and roadway improvement of N Swinton Avenue from Lake Ida Road to SW 36th Avenue in Delray Beach, Florida. This proposal includes an outline of our proposed scope of work, an estimate of the total fees, and our anticipated schedule for completion of the work.

PROPOSED SCOPE OF WORK

As requested, our proposed scope work for the study is as follows:

- 1.) Forty (40) asphalt cores (Approx. every 200 feet) and a 2 feet deep boring at each asphalt core location. Two (2) LBR tests (sampling adjacent to roadway)
- 2.) Fourteen (14) Standard Penetration Tests (SPT) borings to a depth of 10 feet (approximately every 600 feet).
- 3.) Four (4) Borehole Permeability (BHP) tests to determine hydraulic conductivity of the subsoils for drainage improvements.

Core/Boring locations will be approximately located in the field by our personnel by measuring distances with a tape from known reference points. Elevations at boring locations can be interpreted from topographic plans if furnished by others.

Prior to drilling at the project site, TSF will notify the local utility companies and request that underground utilities be marked. Our experience, however, is that the utility companies will not

mark privately owned utilities. Our proposal assumes that private utility lines will be located in the field by others prior to mobilization of the drill rig.

Upon completion of the field exploration, laboratory testing will be performed on selected samples. The study will be summarized in accordance with the FDOT's Soil and Foundation Manual.

A geotechnical engineer will evaluate the results of all drilling and laboratory testing. A report will be issued that contains the exploration data, a discussion of the site and subsurface conditions, pavement design recommendations for the roadway, and BHP test results.

ESTIMATED FEES

It is proposed that the fee for the performance of the services outlined above be determined on a unit price basis in accordance with the attached Fee Schedule and that the work be performed pursuant to TSF's General Conditions enclosed herewith and incorporated into this proposal. Based on the estimate, the fees are anticipated to be **\$25,765.00**.

Our estimate covers the work needed to present our findings and recommendations in a formal report. Not included are reviews of drawings, preparation of construction specifications, special conferences and any other work requested after submittal of our report.

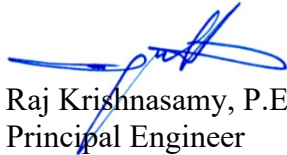
SCHEDULE AND AUTHORIZATION

TSF will proceed with the work after receipt of a signed copy of this proposal. With our present schedule, we can commence work within several days of project approval (weather permitting and permit approval). The fieldwork will take about six days to complete. The written report can be submitted about two weeks after completion of the field exploration, depending on the extent of the laboratory-testing program. Verbal preliminary recommendations can be made to appropriate parties prior to submittal of the written report.

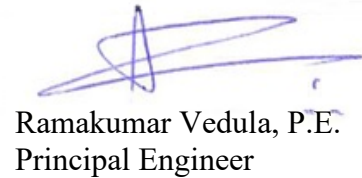
We at TSF appreciate the opportunity to submit this proposal and look forward to working with you on this project. If you should have any questions concerning our proposal, please contact our office.

Respectfully submitted,

TIERRA SOUTH FLORIDA, INC.



Raj Krishnasamy, P.E.
Principal Engineer



Ramakumar Vedula, P.E.
Principal Engineer

Attachments:

1. General Conditions
2. Fee Estimate

AUTHORIZED BY:	INVOICE TO:
Name:	Firm:
Title:	Name:
Date:	Address:

Tierra South Florida's General Conditions

1. **SCOPE OF WORK:** Work means the specific geotechnical, analytical, testing or other service to be performed by Tierra South Florida, Inc. (TSF) as set forth in TSF's proposal. Client's acceptance of the scope of work and these General Conditions. Additional work ordered by Client shall also be subject to these General Conditions. "Client" refers to the person or business entity ordering the work to be done by TSF. Client shall communicate these General Conditions to each and every third party to whom Client transmits any part of TSF's work. TSF shall have no duty or obligation to any third party greater than that set forth in TSF's proposal, Client's acceptance of TSF's proposal and these General Conditions. The ordering of work from TSF, or the reliance on any of TSF's work, shall represent acceptance of the terms of TSF's proposal and these General Conditions, regardless of the terms of any subsequently issued document.
2. **RIGHT-OF-ENTRY** -The client will provide right-of-entry for TSF and all necessary equipment in order to complete the work. While TSF will take all reasonable precautions to minimize any damage to the property, it is understood by Client that in the normal course of work some damage may occur; the correction of which is not part of this agreement.
3. **DAMAGE TO EXISTING MAN-MADE OBJECTS** -The Client, will provide the location of all underground utilities or obstructions to TSF who, in the prosecution of their work, will take all reasonable precautions to avoid damage or injury to any such subterranean structure or utility. The Owner agrees to hold TSF harmless for any damages to subterranean structures which are not called to TSF's attention and correctly shown on the plans furnished and will reimburse TSF for any expenses in connection with any claims or suits including reasonable attorney fees at the trial and appellate levels.
4. **IN-PLACE MATERIALS TESTING** -TSF will not be responsible for repair or damage to portions of structures designated for in-place materials testing. Repairs can be made for aesthetic reasons if requested in advance of the work to be performed. The cost for labor and materials would be charged.
5. **SAMPLE RETENTION** -TSF will retain all soil and rock samples obtained for geotechnical explorations for 30 days. Samples subjected to Construction Materials and Laboratory testing are disposed of subsequent to testing. Further storage or transfer of samples can be made at Client's expense upon written authorization.
6. **DEFINITION OF RESPONSIBILITY (OBSERVATION SERVICES)** - The presence of our field representative will be for the purpose of providing observation and field testing. Our work does not include supervision or direction of the actual work of the contractor, his employees or agents. The contractor for this project should be so advised.
 - 6.1. The Contractor should also be informed that neither the presence of our field representative or the observation and testing by our firm shall excuse him in any way for defects discovered in his work. It is understood that TSF will not be responsible for the Contractor's job or site safety on his project. That will be the sole responsibility of the contractor.
7. **STANDARD OF CARE** -Service performed by TSF under this Agreement will be conducted in a manner consistent with that level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty, expressed or implied, is made.
 - 7.1. Client recognizes that subsurface conditions may vary from those encountered at the location where borings, surveys or explorations are made by TSF and that the data, interpretations and recommendations of TSF are based solely on the information available to it. TSF shall not be responsible for the interpretation by others of information developed.
8. **ORAL AGREEMENTS** -No oral agreement, guarantee, promise, representation or warranty shall be binding.
9. **OWNERSHIP OF DOCUMENTS** -All reports, boring logs, field data and notes, laboratory test data, calculations, estimates and other documents prepared by TSF, as instruments of service, shall remain the property of TSF until final payment is received and a letter of copyright transfer has been executed.
10. **BASIS OF PAYMENT** -Payment is due within 30 days of date of invoice. Payments not made when due shall bear interest at eighteen (18) percent annum or at the maximum rate allowed by law from the date of the invoice until same is paid.
 - 10.1. If the Client fails to make any payment due to TSF for service and/or expenses within 60 days of date of invoice, TSF may, after giving seven days' written notice to Client, suspend services until all outstanding amounts have been paid to TSF in full. Further, TSF may, in addition to withholding services, or singularly, withhold reports, plans and other documents not paid in full by the Client. In the event that final payment for completed work is not made, TSF shall request that all copyrighted documents which were submitted to client be returned and all information used in project plans be removed from project documents.
 - 10.2. In the event it is necessary to take legal action to effect collection, whether or not litigation is commenced, the Client agrees to reimburse TSF for expenses in connection with any claims or suits, including reasonable attorney's fees, including but not limited to the trial and appellate levels.
 - 10.3. This contract shall be governed by the laws of the State of Florida.
11. **CONSTRUCTION REVIEW** - TSF cannot accept responsibility for any design work unless the work includes services for construction review to determine whether or not the work performed is in substantial compliance with TSF's conclusions and recommendations.
12. **INDEMNIFICATION** -TSF agrees to hold harmless and indemnify Client from and against liability arising out of TSF's negligent performance of the work. Client agrees to indemnify and hold TSF harmless from all liability including all costs, attorney's fees and expenses of defense for any claims by any other person or corporation which may arise out of the performance or breach of this contract for which TSF was not solely negligent.
13. **LIMITATION OF LIABILITY** -The Client/Owner agrees to limit TSF's liability for negligent professional acts, errors or omissions, such that the total aggregate liability of TSF shall not exceed \$50,000 or the total fee for the services rendered on this project; whichever is greater. The Owner further agrees to require the contractor and his subcontractors a similar limitation of liability suffered by the contractor or the subcontractors arising from TSF's negligent professional acts, errors or omissions.
 - 13.1. If Client prefers to have higher limits on professional liability, TSF agrees to increase the limits up to a maximum of \$1,000,000 upon Client's written request at the time of accepting our proposal provided that Client agrees to pay an additional consideration of 5 percent of our total fee. The additional charge for the higher liability limits is because of the greater risk assumed and is not strictly a charge for additional professional liability insurance.
14. **INSURANCE** -TSF represents and warrants that it and its agents, staff and consultants employed by it are protected by Worker's Compensation insurance and Employer's Liability Insurance in conformance with applicable state laws. TSF has such coverage under public liability and property damage insurance policies that TSF deems to be adequate. A Certificate of Insurance can be supplied evidencing such coverage upon request.
 - 14.1. Within the limits and conditions of such insurance, TSF agrees to indemnify and save client harmless from and against any loss, damage or liability arising from any negligent acts by TSF, its agents, staff and consultants employed by it. TSF shall not be responsible for any loss, damage or liability beyond the amounts, limits and considerations of such insurance. TSF shall not be responsible for any loss, damage or liability arising from any acts by clients, its agents, staff and other consultants employed by it.
 - 14.2. Cost of the above coverage is included in our quoted fees. If additional coverage or increased limits of liability are required, TSF will endeavor to obtain the requested insurance and charge separately for costs associated with additional coverage or increased limits.
15. **TERMINATION** -This agreement may be terminated by either party upon seven days written notice in the event of substantial failure by the other party to perform in accordance with the terms thereof. Such termination shall not be effective if the substantial failure has been remedied before expiration of the period specified in the written notice. In the event of termination, TSF shall be paid for services performed to the termination notice date plus reasonable termination expenses.
 - 15.1. In the event of termination or suspension for more than three months, prior to completion of all reports contemplated by this Agreement, TSF may complete a report on the services performed to the date of notice of termination or suspension. The expenses of termination or suspension shall include all direct costs for TSF in completing such analyses, records and reports.
16. **CLIENT'S OBLIGATION TO NOTIFY TSF** - Client represents and warrants that it has advised TSF of any known or suspected hazardous materials or conditions, utility lines and pollutants at any site at which TSF is to do work hereunder, and unless TSF has assumed in writing the responsibility of locating subsurface objects, structures, lines or conduits, Client agrees to defend, indemnify and save TSF harmless from all claims, suits, losses, costs and expenses, including reasonable attorney's fees as a result of personal injury, death or property damage occurring with respect to TSF's performance of its work and resulting to or caused by contact with subsurface or latent objects, structures, lines or conduits where the actual or potential presence and location thereof were not revealed to TSF by Client.
17. **HAZARDOUS MATERIALS** -This agreement shall not be interpreted as requiring TSF to assume the status of an owner, operator, generator, storer, transporter, treater or disposal facility as those terms appear within RCRA or within any Federal or State statute or regulation governing the generation, transportation, treatment, storage and disposal of pollutants.

_____ Please initial for acceptance

TIERRA SOUTH FLORIDA, INC.

	Unit	# of Units	Unit Price		Total
I. FIELD INVESTIGATION					
Mobilization of Men and Equipment					
Truck-Mounted Equipment	Trip	1	\$	350.00	\$ 350.00
SPT Borings 0 - 50 ft depth	L.F.	220	\$	12.00	\$ 2,640.00
50 - 100 ft depth	L.F.	0	\$	14.00	\$ 0.00
Grout Boreholes 0 - 50 ft depth	L.F.	220	\$	5.50	\$ 1,210.00
50 - 100 ft depth	L.F.	0	\$	6.50	\$ 0.00
Casing Allowance 0 - 50 ft depth	L.F.	0	\$	7.00	\$ 0.00
50 - 100 ft depth	L.F.	0	\$	9.00	\$ 0.00
Borehole Permeability Test	Each	4	\$	300.00	\$ 1,200.00
Asphalt Cores	Each	40	\$	125.00	\$ 5,000.00
II. LABORATORY TESTING					
Visual Examination by Staff Engineer	Hour	8	\$	85.00	\$ 680.00
Natural Moisture Content Tests	Test	8	\$	10.00	\$ 80.00
Grain-Size Analysis - Full Gradation	Test	8	\$	60.00	\$ 480.00
LBR	Test	2	\$	330.00	\$ 660.00
Organic Content Tests	Test	4	\$	45.00	\$ 180.00
III. FIELD ENGINEERING AND TECHNICAL SERVICES					
Site Recon./Utility Coordination/MOT					
Sr. Engineering Technician	Hour	12	\$	65.00	\$ 780.00
Maintenance of Traffic	Day	4	\$	1800.00	\$ 7,200.00
IIIA. ENGINEERING AND TECHNICAL SERVICES					
Principal Engineer	Hour	4	\$	145.00	\$ 580.00
Senior Geotechnical Engineer	Hour	10	\$	125.00	\$ 1,250.00
Project Engineer	Hour	25	\$	115.00	\$ 2,875.00
Draftperson	Hour	10	\$	60.00	\$ 600.00
TOTAL FEE FOR GEOTECHNICAL SERVICES				\$	25,765.00