

**PALM BEACH COUNTY
BOARD OF COUNTY COMMISSIONERS
AGENDA ITEM SUMMARY**

Meeting Date: May 15, 2018

☒ Consent

[] Regular

[] Workshop

☐ Public Hearing

Department: Facilities Development & Operations

I. EXECUTIVE BRIEF

Motion and Title: **Staff recommends motion to approve:** Consultant Services Authorization (CSA) No. 2 with Alan Gerwig & Associates, Inc. (R-2017-0026) to provide engineering services for the Water Utilities Department Water Treatment Plants (WUD WTPs) No. 2, 3, 8, 9 & 11 Sodium Hypochlorite Sun Shade Structures (project) in the amount of \$105,425.90.

Summary: The project consists of design, permitting and construction administration services for the construction of pre-engineered shade structures over existing hypochlorite tanks at five water treatment facilities. Alan Gerwig & Associates, Inc. has a continuing services contract for structural engineering services which provides for a Small Business Enterprise (SBE) participation goal of 100%. Alan Gerwig & Associates, Inc.'s SBE participation on this CSA is 67%. When added to the consultant's participation to date, the SBE participation is 73%. Alan Gerwig & Associates, Inc. is a Palm Beach County business and will be using all Palm Beach County sub-consultants. Funding for this work is from the Water Utilities Department Capital Improvement Fund. (Capital Improvements Division) Countywide (LDC)

Background and Justification: The Florida Department of Health requested the sodium hypochlorite storage tanks to be shielded from direct sunlight as a condition of issuing the permits to replace the storage tanks. These services will provide site investigation and foundation design unique to each site for pre-manufactured shade structures.

Attachments:

1. Location Maps (5)
2. Budget Availability Statement
3. Consultant Services Authorization No. 2

Recommended by:

Department Director

Date _____

Approved by:

County Administrator

Date _____

II. FISCAL IMPACT ANALYSIS

Fiscal Years	2018	2019	2020	2021	2022
Capital Expenditures	\$105,425.90				
Operating Costs					
External Revenues					
Program Income (County)					
In-Kind Match (County)					
NET FISCAL IMPACT	\$105,425.90	-0-	-0-	-0-	-0-
# ADDITIONAL FTE POSITIONS (Cumulative)					
Is Item Included in Current Budget:	Yes		X	No	
Does this item include the use of federal funds?	Yes			No	X

Budget Account No: Fund 4011 Dept 721 Unit W006 Object 6502

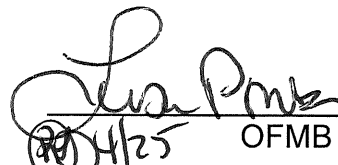
B. Recommended Sources of Funds/Summary of Fiscal Impact:

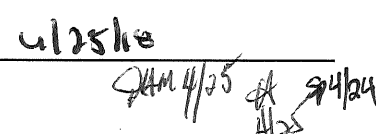
Funding for this project is from the Water Utilities Department Capital Improvement Fund.


C. Departmental Fiscal Review:


III. REVIEW COMMENTS:

A. OFMB Fiscal and/or Contract Development and Control Comments:


OFMB




Contract Administrator



B. Legal Sufficiency:


Assistant County Attorney

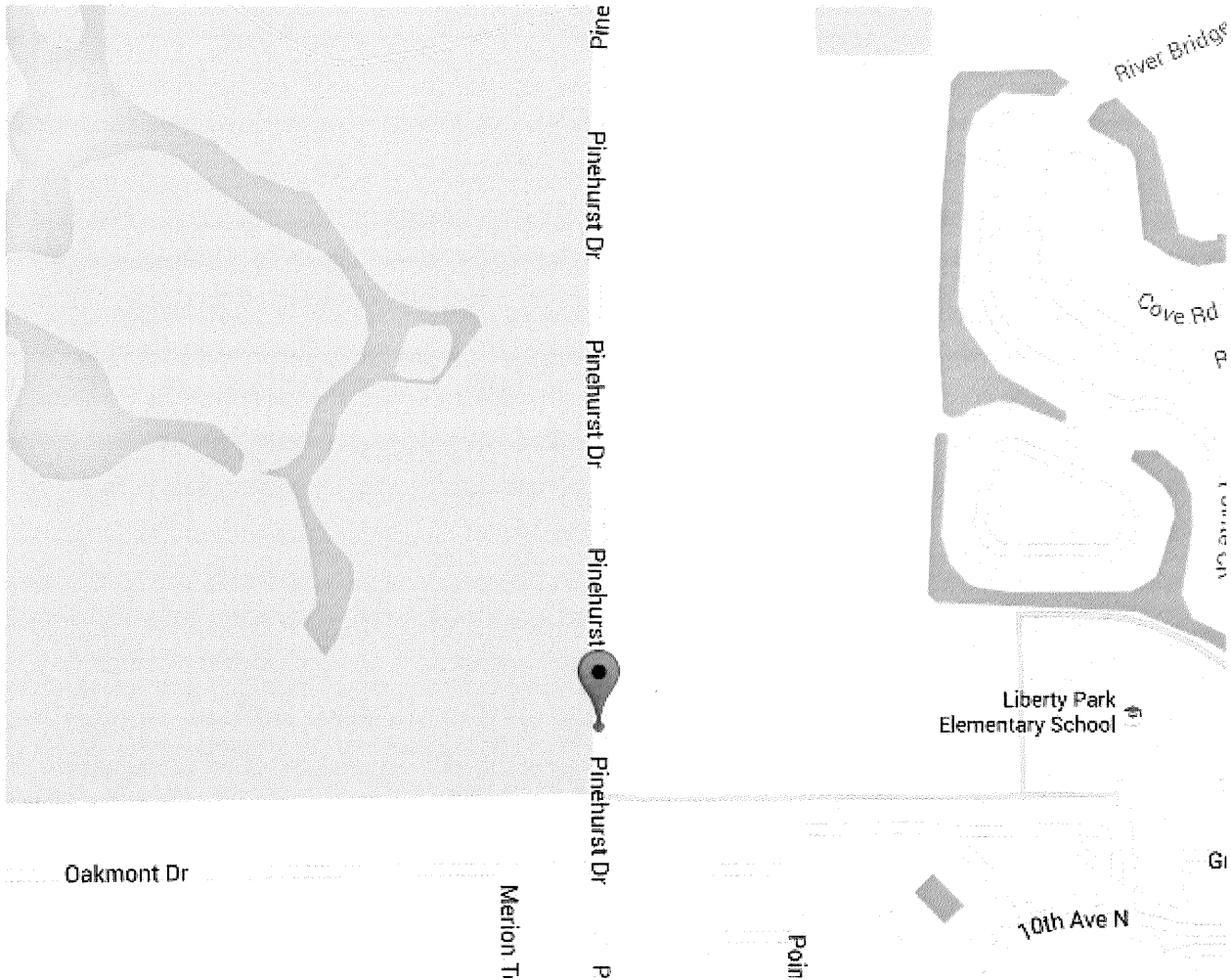
C. Other Department Review:


Department Director

This summary is not to be used as a basis for payment.

LOCATION MAP

WUD WTP No. 2

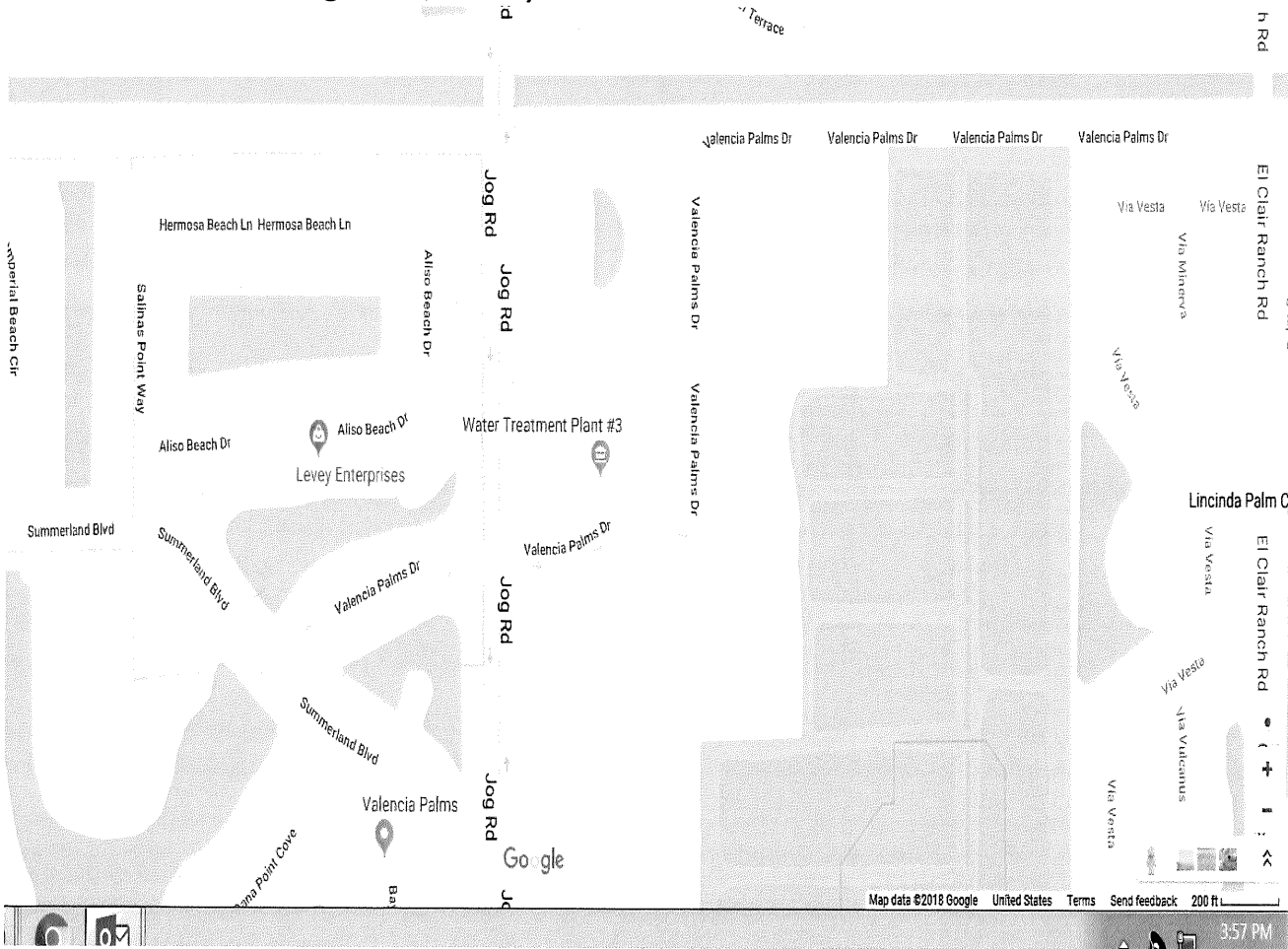


ATTACHMENT 1

LOCATION MAP

Project: WUD WTP No. 3

Address: 13026 S. Jog Road, Delray Beach



ATTACHMENT 1

LOCATION MAP

Project: WUD WTP#8

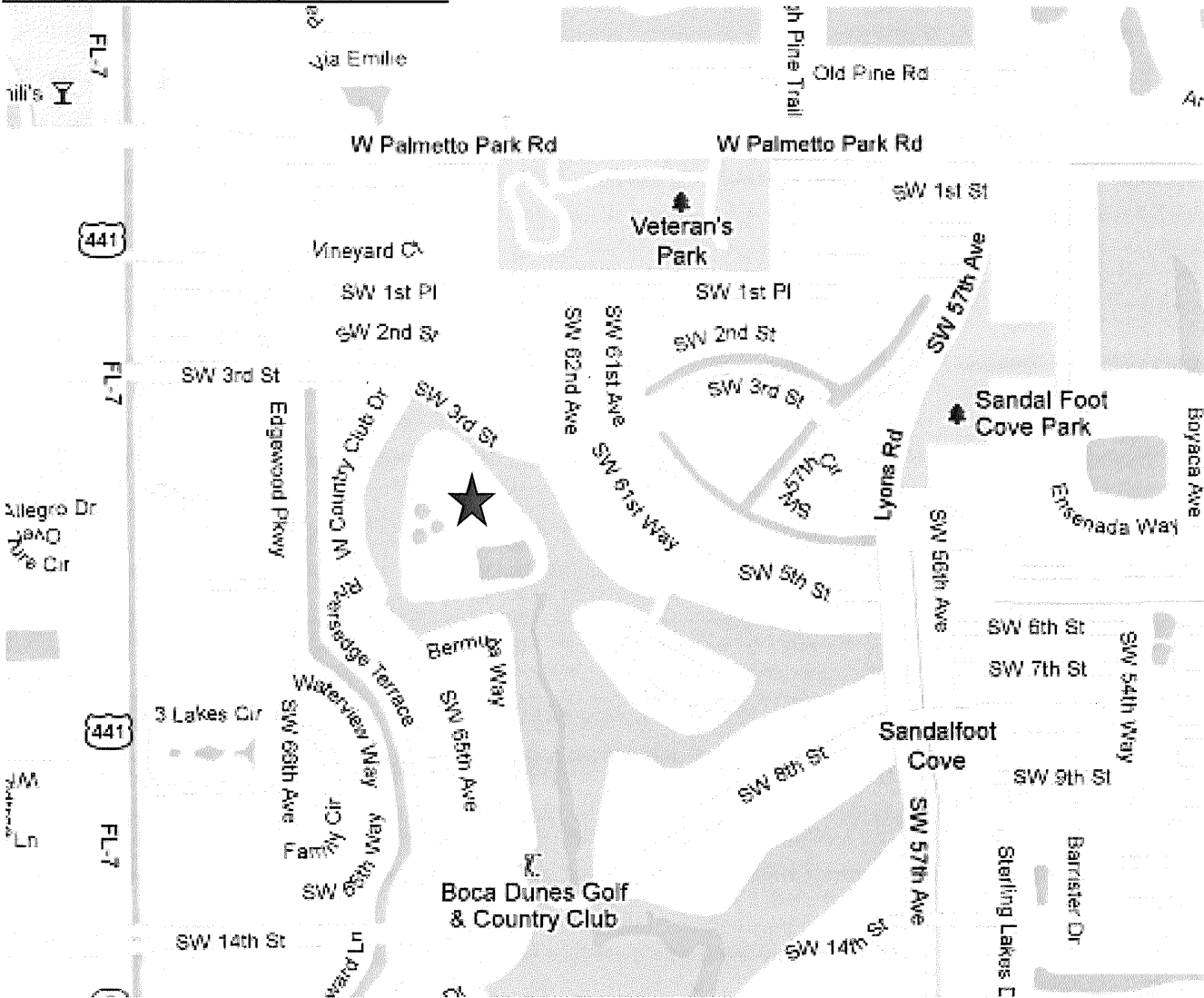


ATTACHMENT 1

LOCATION MAP

Project Name: WUD WTP #9

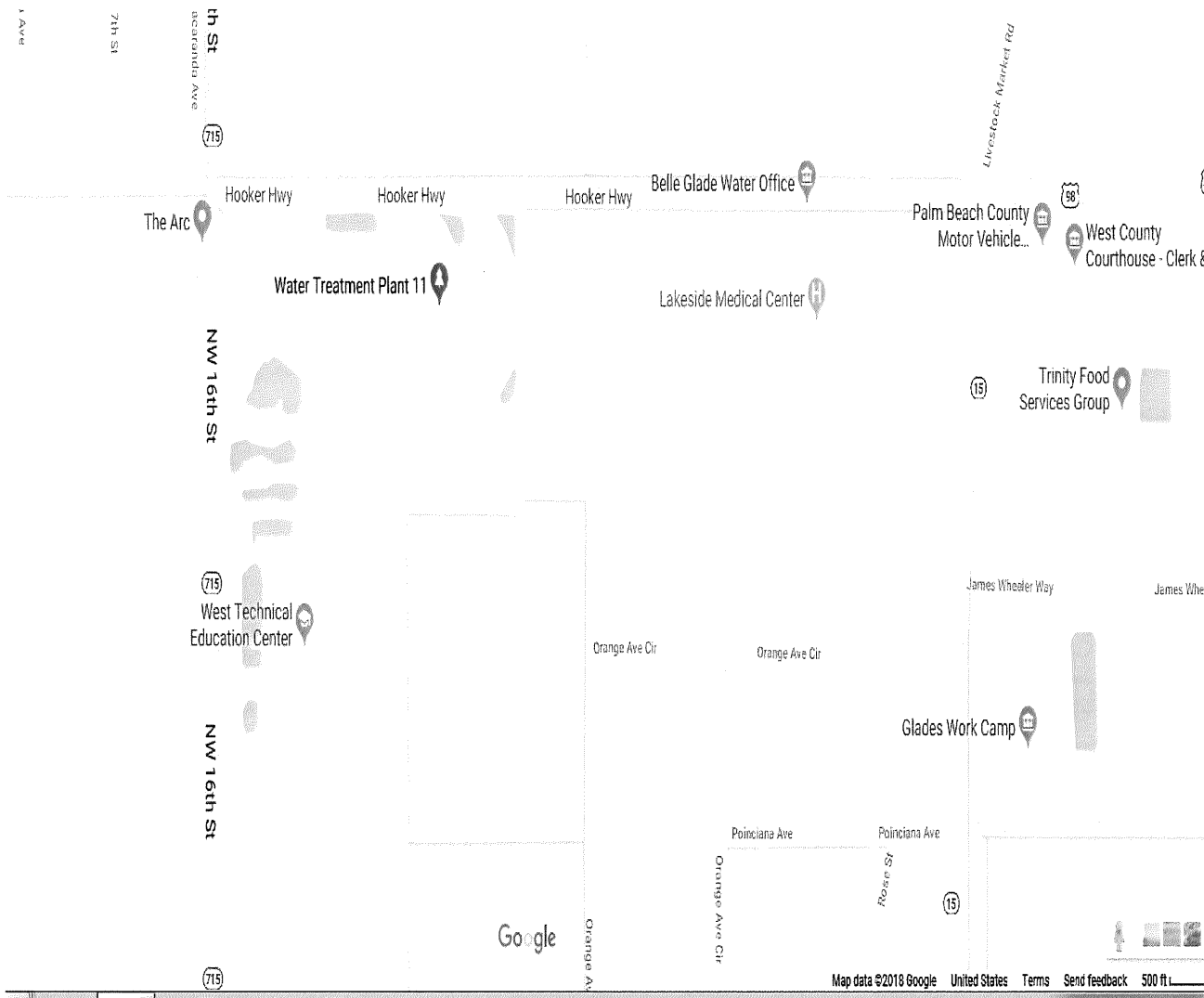
22438 SW 7th Street, Boca Raton



ATTACHMENT 1

LOCATION MAP

WUD WTP #11 – Address: 39700 Hooker Highway, Belle Glade



ATTACHMENT 1

BUDGET AVAILABILITY STATEMENT

REQUEST DATE: 03/26/18

REQUESTED BY: Dylan Battles

PHONE: 233-2059

PROJECT TITLE: WUD WTP #2, 3, 8, 9 & 11 Sodium Hypochlorite Sun Shade Structures

(Same as CIP or IST, if applicable)

ORIGINAL CONTRACT AMOUNT: N/A - Annual

IST PLANNING NO.:

REQUESTED AMOUNT: \$105,425.90

BCC RESOLUTION#: R-2017-0026

DATE: 01/10/17

CSA or ~~CHANGE ORDER~~ NUMBER: CSA #2

LOCATION:

BUILDING NUMBER:

DESCRIPTION OF WORK/SERVICE LOCATION:

PROJECT/~~W.O.~~ NUMBER: 18312

CONSULTANT/~~CONTRACTOR~~: Alan Gerwig & Associates

PROVIDE A BRIEF STATEMENT OF THE SCOPE OF SERVICES TO BE PROVIDED BY THE CONSULTANT/~~CONTRACTOR~~:

Professional services shall include design, permitting, bidding and construction administration services for the construction of pre-engineered shade structures over existing hypochlorite tanks at five water treatment facilities.

CONSTRUCTION	\$
PROFESSIONAL SERVICES	\$105,425.90
STAFF COSTS*	\$
EQUIP. / SUPPLIES	\$
CONTINGENCY	\$
TOTAL	\$105,425.90

* By signing this BAS your department agrees to these CID staff charges and your account will be charged upon receipt of this BAS by FD&O. Unless there is a change in the scope of work, no additional staff charges will be billed. If this BAS is for construction costs of \$250,000 or greater, staff charges will be billed as actual and reconciled at the end of the project. If the project requires Facilities Management or ESS staff your department will be billed actual hours worked upon project completion.

BUDGET ACCOUNT NUMBER(S) (Specify distribution if more than one and order in which funds are to be used):

FUND: 4011 DEPT: 721 UNIT: W006 OBJ: 6502

IDENTIFY FUNDING SOURCE FOR EACH ACCOUNT: (check and provide detail for all that apply)

☐ Ad Valorem (Amount \$ _____) ☐ Infrastructure Sales Tax (Amount \$ _____)
☐ State (source/type: _____ Amount \$ _____) ☐ Federal (source/type: _____ Amount \$ _____)
☐ Grant (source/type: _____ Amount \$ _____) ☐ Impact Fees: (Amount \$ _____)
☒ Other (source/type: _____ Amount \$ ALL) WUD USER FEES

Department: WATER UTILITIES

BAS APPROVED BY:  DATE 4/5/2018

ENCUMBRANCE NUMBER: _____

ATTACHMENT 2

CONSULTANT SERVICES AUTHORIZATION

Alan Gerwig & Associates, Inc
Annual Structural Engineering Consultant

WUD WTP #2, 3, 8, 9 & 11 SODIUM HYPOCHLORITE SUN SHADE STRUCTURES PROJECT NO. 18312

This consultant services authorization is for professional engineering services for Water Treatment Plants 2, 3, 8, 9 & 11 located throughout Palm Beach County.

Professional services shall include design, permitting, bidding and construction administration services for the construction of pre-engineered shade structures over existing hypochlorite tanks at five water treatment facilities.

A new Department of Environmental Protection (DEP) regulation requires all sodium hypochlorite storage tanks to be shielded from direct sunlight. These services will provide site investigation and foundation design unique to each site for pre-manufactured shade structures.

SBE participation for this Authorization is 67%. When added to the Consultant's participation to date, the resulting SBE participation is 73%. The Consultant's contract goal is 100%.



CONSULTANT SERVICES AUTHORIZATION

Alan Gerwig & Associates, Inc
Annual Structural Engineering Consultant

**WUD WTP #2, 3, 8, 9 & 11 SODIUM HYPOCHLORITE SUN SHADE STRUCTURES
PROJECT NO. 18312
DISTRICT - VARIOUS**

THIS AUTHORIZATION NO. 2 to the Contract dated 01/10/17 (R-2017-0026) between Palm Beach County and the Consultant identified herein is for the Consultant Services described in Item 4 of this Authorization.

1. **CONSULTANT:** Alan Gerwig & Associates, Inc.
2. **History:** Not applicable. This authorization is for a new project.
3. **Services completed to date:** Not applicable. This authorization is for a new project.
4. **Description of Services to be provided by Consultant:** design, permitting, bidding and construction administration services for the construction of pre-engineered shade structures over existing hypochlorite tanks at four water treatment facilities, as detailed on the attached revised proposal dated February 12, 2018.
5. **Compensation:** The compensation to be paid to the Consultant for the requested services shall be:

Lump Sum charge of **\$105,425.90**

6. **This Authorization may be terminated by the County without cause or prior notice. In the event of termination not the fault of the Consultant, the Consultant shall be compensated for all services performed to termination date, together with reimbursable expenses (if applicable) then due.**

Consultant agrees to waive any and all claims for lost profits or anticipated future profits in the event of a termination with or without the cause under this Contract.

7. If not previously provided or for a new project, the Consultant shall provide County with an executed Conflict of Interest Disclosure Form, attached hereto and incorporated herein.
8. All terms, conditions, and obligations of the original Contract shall remain in full force and effect, unless specifically noted as follows: No changes.
9. **Time of Commencement:** Consultant shall begin work promptly on the requested services upon receipt of this executed document which shall constitute official **“Notice to Proceed”**.

IN WITNESS WHEREOF, this Authorization is accepted, subject to the terms and conditions of the aforementioned Contract.

ATTEST:

SHARON R. BOCK, CLERK &
COMPTROLLER

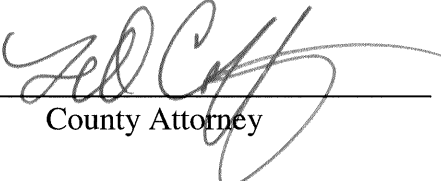
PALM BEACH COUNTY BOARD,
FLORIDA
Political Subdivision of the State of Florida
BOARD OF COUNTY COMMISSIONERS


By: _____
Deputy Clerk

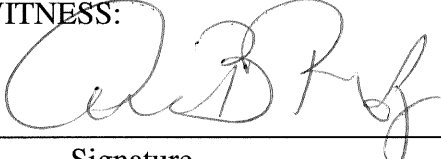
Melissa McKinlay, Mayor

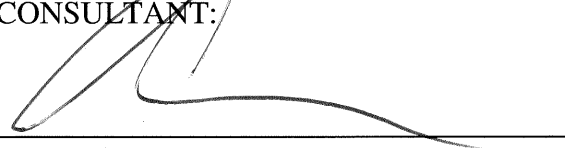
APPROVED AS TO FORM
AND LEGAL SUFFICIENCY

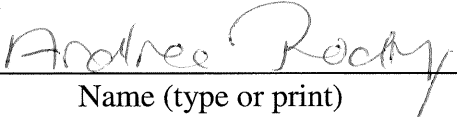
APPROVED AS TO TERMS
AND CONDITIONS

By:  _____
County Attorney

By:  _____
Director - FD&O

WITNESS:
 _____
Signature

CONSULTANT:
 _____
Signature

 _____
Name (type or print)

Alan Gerwig, P.E.

Name (type or print)

President

Title

(Corporate Seal)

12798 W. Forest Hill Boulevard
Suite 204
Wellington, FL 33414
Phone: (561) 792-9000
Fax: (561) 792-9901
CA No. 7969

Alan Gerwig & Associates, Inc.
Consulting Engineers



February 12, 2018

Dylan Battles
Facilities Systems Project Manager
Palm Beach County Capital Improvements Division
2633 Vista Parkway
West Palm Beach, FL 33411

Re: Proposal for Engineering Services
PBC Project No. 18312 - WUD Sun Covers WTP 2,3,8 & 11

Dear Mr. Battles:

Alan Gerwig & Associates ("Consultant") is pleased to submit this letter of agreement ("Agreement") for providing professional engineering services to PBC CID ("Client") for the above-referenced project. Our project understanding, the scope of services and design fees are as follows.

Project Understanding:

Palm Beach County Capital Improvement Department is requesting design, permitting, bidding and construction observation services for the construction of pre-engineered shade structures over existing hypochlorite tanks at five water treatment facilities. The facilities receiving the shade structures are WTP No.s 2, 3, 8, 9 and 11 (Lake Region). The shade structures are to be manufactured and pre-engineered. The foundations will be located outside of the existing secondary containment walls and provide clearance above the tanks as required by Palm Beach County Water Utility Department. Providing the design and construction bid documents for the foundations for the structures and manufacturer details and specifications for the shade structures is the purpose of these scope of services.

Alan Gerwig & Associates will retain sub-consultants to provide location topographical survey, subsurface utility locations and geotechnical engineering and soils testing.

Scope of Professional Services:

Design Services

1. Collect and review all available plans of the related structures in the immediate vicinity of the shade structures.
2. Perform a site inspection and coordinate the topographic survey, subsurface utility locating operation and soft digs and the geotechnical investigations that are to be performed by the sub-consultants.
3. Collaborate with shade structure manufacturer's designers to obtain typical design data and drawings of shade structures. Foundation design will be based on typical factored loads

- provided by the manufacturer at the base plate generated by the appropriate wind and gravity loads.
4. Review the manufacturer's plans and calculations for compliance with the Florida Building Code and ASCE 7 loads and combination. Particularly attention will be given to the design in the critical areas such as wind velocity, exposure category, etc.
 5. Prepare preliminary site plan and plan and elevations of the shade structures at each location for review and approval by the Owner. Plan development will incorporate the GPR and soft dig data showing the location of all discovered underground pipes. Appropriate foundation locations will be identified for each structure support and preliminary foundation sizes will be depicted.
 6. Upon receipt of approval of the horizontal and vertical geometry of the manufacture's structural system by the Owner, the final design and preparation of the construction documents will commence on that basis. Plans will include the necessary details, notes, and specifications necessary to purchase and construct the structures over the existing tanks and restore the disturbed sodded and/or paved grade surfaces.
 7. Provide construction documents to the Owner for submission to Palm Beach County Building Department and address building department review comments.

Post Design Services

8. Respond to contractor's request for information
9. Attend pre-bid meeting and pre-construction meeting
10. Review shop drawings
11. Review pay applications, change orders and provide letters of review.
12. Perform construction observations, prepare final punch list and construction certification. Site visits include one per week for 16 weeks and 8 OAC meeting (every other OAC meeting)
13. Project closeout – compile project manual with all construction drawings, specifications, shop drawings, materials testing reports, field reports, manufacture's warrantee's, and certifications. Deliver in paper and electronic format (PDF).

Deliverables:

1. Construction bid documents (3 copies). In addition to the signed and sealed copies, the electronic copies in PDF formats will be provided on a flash drive. One Project manual in paper and electronic (PDF) format at project closeout.
2. As-Builts (PDF and CAD files)

Design Fees:

Provide the above scope of services for a lump sum fee of:

Design Services

Prime Consultant (AGA)	\$55,332.96
Survey Subconsultant (CGA)	\$10,765.00
Subsurface Scanning Subconsultant (GRPS)	\$9,900.00
Geotechnical Subconsultant (Tierra of SF)	<u>\$14,057.50</u>
Design Services Total	\$90,055.46

Post Design Services

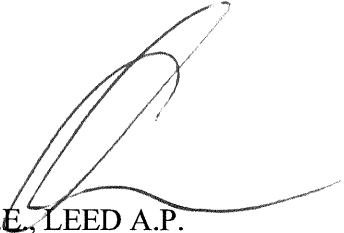
\$15,370.44

Total

\$105,425.90

We appreciate the opportunity to provide these services to you. Please contact me if you have any questions.

Sincerely,



Alan Gerwig, P.E., LEED A.P.
President

FINANCIAL MANAGEMENT PLAN

Project	WUD Hypochlorite Shade Structures
Project No.	
PM	Alan Gerwig, P.E.

Date December 19, 2017
Revised 2-27-18

Task Outline		TOTALS	Sr. Engineer	Proj. Manager	Proj. Engineer	Engineer	Designer	E.I.	
Design									
Project Management - Subconsultant Coord.		\$5,985.60	10.00	30.00					
Visit 5 Sites at Initial & 90% Des. Complete		\$5,335.80	20.00			20.00			
Collaboration with Shade Struct. Mfg.		\$4,049.28	4.00	8.00			24.00		
Preliminary Design - Structure Configuration (5 sites)		\$13,585.44	16.00	50.00			40.00		
Review Configuration with WUD Staff		\$865.44		6.00					
Final Site Civil Plans-Geometry/Grade Mod. (5 sites)		\$14,444.40	8.00	32.00		40.00	48.00		
Final Structural Plans and Details. (5 sites)		\$9,634.08	8.00	24.00		48.00			
Address Building Dept Comments		\$1,432.92		8.00			3.00		
Subtotal		\$55,332.96							
Post Design Services									
RFI Responses, Shop Drawing Review		\$1,557.72		8.00		4.00			
Attend Pre-Bid Meeting (includes site visits)		\$1,153.92		8.00					
Review Pay Applications (5 pay Apps @ 2hr ea.)		\$1,442.40		10.00					
Construction Observations		\$11,216.40	10.00	25.00			64.00		
Subtotal		\$15,370.44							
TOTAL HOURS		576	76	209	0	112	179	0	
BILLING RATE			165.84	\$144.24	\$122.58	\$100.95	\$93.00	90.00	
TOTAL DOLLARS		\$70,703.40	12,603.84	\$30,146.16	\$0.00	\$11,306.40	\$16,647.00	\$0.00	
Subcontractors			Cost		Notes				
Surveyor			10,765.00						
Geotechnical Engineer			14,057.50						
Subsurface Scanning			9,900.00						
Total Subcontracts			\$ 34,722.50						
Material Dollars Supplies, Printing, Copies, Etc.					Summary				
					Total Hours 576				
					Total Labor Dollars \$70,703.40				
					Material Dollars \$0.00				
Miscellaneous Dollars					Miscellaneous Dollars \$0.00				
Travel, Lodging, Meals, Mileage, Etc. \$ -					Subcontractors \$34,722.50				
					Total Project \$105,425.90				
Distribution									
() Accounting									
() Other									

SCHEDULE 1

LIST OF PROPOSED SBE-M/WBE PRIME AND/OR SUBCONTRACTOR PARTICIPATION

PROJECT NAME OR BID NAME: WUD SUN COVERS WTP 2,3,8 & 11

PROJECT NO. OR BID NO.: 18312

NAME OF PRIME BIDDER: Alan Gerwig & Associates, Inc.

ADDRESS: 12798 W. Forest Hill Blvd. Suite 201 Wellington FL 33414

CONTACT PERSON: Alan Gerwig P.E

PHONE NO.: 561-792-9000

FAX NO.: 561-792-9901

BID OPENING DATE: _____

USER DEPARTMENT: Capital Improvements

THIS DOCUMENT IS TO BE COMPLETED BY THE PRIME CONTRACTOR AND SUBMITTED WITH BID PACKET. PLEASE LIST THE NAME, CONTACT INFORMATION AND DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY ALL SBE -M/WBE SUBCONTRACTORS ON THIS PROJECT. IF THE PRIME IS AN SBE-M/WBE, PLEASE ALSO LIST THE NAME, CONTACT INFORMATION AND DOLLAR AMOUNT OR PERCENTAGE OF WORK TO BE COMPLETED BY THE PRIME ON THIS PROJECT.

Name, Address and Phone Number	(Check one or both Categories)		DOLLAR AMOUNT OR PERCENTAGE OF WORK				
	M/WBE Minority Business	SBE Small Business	Black	Hispanic	Women	Caucasian	Other (Please Specify)
1. Alan Gerwig & Associates Inc. 12798 W. Forest Hill Blvd. Suite 201 Wellington FL 33414	<input type="checkbox"/>	<input checked="" type="checkbox"/>	_____	_____	_____	<u>\$70,703.40</u>	_____
2. _____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____
3. _____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____
4. _____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____
5. _____	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____	_____	_____	_____

(Please use additional sheets if necessary)

Total

\$70,703.40

Total Bid Price \$ 105,425.90

Total SBE-M/WBE Participation Dollar Amount or Percentage of Work \$70,703.40

Note:

1. The amount listed on this form for a subcontractor must be supported by price or percentage listed on the signed Schedule 2 or signed proposal in order to be counted toward goal attainment.
2. Firms may be certified by Palm Beach County as an SBE and/or and M/WBE. If firms are certified as both an SBE and N/WBE, please indicate the dollar amount or percentage under the appropriate category.
3. M/WBE information is being collected for tracking purposes only.

Revised 03/15/2011

OSBA SCHEDULE 2
LETTER OF INTENT TO PERFORM AS AN SBE-M/WBE

This document must be completed by ALL SBE-M/WBE's and submitted with your proposal. Specify in detail, the particular work items to be performed and the dollar amount and/or percentage for each work item. SBE credit will only be given for items which the SBE-M/WBE's is certified to perform. Failure to properly complete Schedule 2 will result in your SBE participation not being counted.

PROJECT NUMBER: #18312 PROJECT NAME: WUD Sun Covers WTP 2,3,8 & 11

TO: Alan Gerwig & Associates Inc.
(Name of Prime Consultant)

The undersigned is certified by Palm Beach County as a - (check one or more, as applicable):

Small Business Enterprise X Minority Business Enterprise _____
Black _____ Hispanic _____ Women _____ Caucasian X Other (Please Specify) _____

Date of Palm Beach County Certification: _____

The undersigned is prepared to perform the following described work in connection with the above project. Additional Sheets May Be Used As Necessary

Item Description	Qty/Units	Unit Price	Total Price/ Percentage
Engineering Design Services			<u>\$70,703.40</u>
Post Design Services			

at the following price or percentage 70,703.40
(SBE Prime or Subconsultant's Quote)

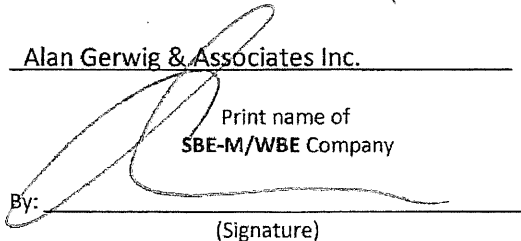
and will enter into a formal agreement for work with you contingent upon your execution of a contract with Palm Beach County.

If undersigned intends to sub-subcontract any portion of this job to a certified SBE-M/WBE or a non-SBE Subconsultant, please list the name of that Subconsultant and the amount below.

Price or Percentage _____
(Name of Subconsultant)

The Prime affirms that it will monitor the **SBE-M/WBE** listed to ensure the **SBE-M/WBE** perform the work with their own work force. The undersigned **SBE-M/WBE** Prime or **SBE-M/WBE** Subconsultant affirms that it has the resources necessary to perform the work listed without subcontracting to a non-certified SBE or any other certified SBE Subconsultants except as noted above.

The undersigned Subconsultant understands that the provision of this form to Prime Consultant does not prevent Subconsultant from providing quotations to others.

Alan Gerwig & Associates Inc.
Print name of
SBE-M/WBE Company
By: 
(Signature)

Alan Gerwig P.E. President
Print name/title of person executing on behalf
of SBE-M/WBE

CONFLICT OF INTEREST DISCLOSURE FORM

PROJECT #18312

WUD WTP #2,3,8,9 & 11 Sodium Hypochlorite Sun Shade Structures

CONSULTANT represents that it presently has no interest, either direct or indirect, which would or could conflict in any manner with the performance of services for the County, except as follows:

SEE ATTACHED

(Attach additional sheets as needed.)

CONSULTANT further represents that no person having any interest shall be employed for said performance. By signing below, CONSULTANT certifies that the information contained herein is true and correct and constitutes all current potential conflicts of interest which may influence or appear to influence CONSULTANT'S judgment or quality of services being provided to the County.

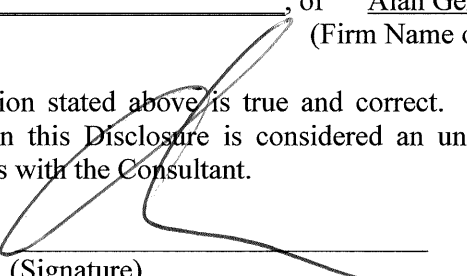
CONSULTANT shall promptly notify the COUNTY in writing by certified mail of all potential conflicts of interest that may arise in the future through any prospective business association, interest or other circumstance which may influence or appear to influence CONSULTANT'S judgment or quality of services being provided to the County. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that CONSULTANT may undertake and request an opinion of the COUNTY as to whether the association, interest or circumstance would, in the opinion of the COUNTY, constitute an unacceptable conflict of interest if entered into by the CONSULTANT.

If, in the sole opinion of the COUNTY, the prospective business association, interest or circumstance of CONSULTANT would constitute an unacceptable conflict of interest to the COUNTY, the COUNTY shall so state in the notification and the CONSULTANT shall not enter into said association, interest or circumstance.

THIS DISCLOSURE is submitted by Alan Gerwig, P.E., as
(Name of Individual)

President, of Alan Gerwig & Associates Inc.
(Title/Position) (Firm Name of Consultant)

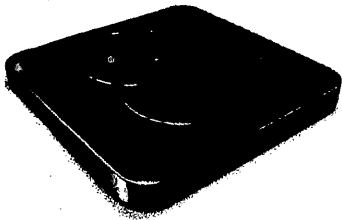
who hereby certifies that the information stated above is true and correct. Further, it is hereby acknowledged that any misrepresentation by the Consultant on this Disclosure is considered an unethical business practice and is grounds for sanctions against future County business with the Consultant.


(Signature)

4/4/18
(Date)

Conflict of Interest Disclosure Form Attachment

1. Anne Gerwig is owner of 1% of the company of Alan Gerwig & Associates, Inc. and is serving as of Mayor of Wellington. The plain language of the code requires abstention when a vote would result in a special financial benefit. The issue of the special financial benefit turns on whether that financial benefit shared with similarly situated members of the general public. While Palm Beach County is a customer or client of Mayor Gerwig's outside business, voting on matters unrelated to her outside business but benefitting the County would not result in a special financial benefit to her public customer or client, as a government entity represents all residents within its political boundaries. In the event any item would come before her that would offer a special financial benefit to her or her business relating to this contract would require her to rescue herself from that item thereby removing any conflict of interest for herself, AGA or Palm Beach County. (For reference see Palm Beach County Commission on Ethics RQO 11-92)
2. Simon Coleman, P.E., serves on the Palm Beach County Environmental Appeals Board and hears appeals to the Palm Beach County Health Department pf permit applications for onsite sewage disposal systems and potable water wells that meet the State standards but do not meet Palm Beach County standards.



Calvin, Giordano & Associates, Inc.
EXCEPTIONAL SOLUTIONS™

Building Code Services
Civil Engineering / Roadway
& Highway Design
Coastal Engineering
Code Enforcement
Construction Engineering &
Inspection (CEI)
Construction Services
Data Technologies &
Development
Electrical Engineering
Engineering
Environmental Services
Facilities Management
Geographic Information
Systems (GIS)
Governmental Services
Indoor Air Quality
Landscape Architecture
Planning
Project Management
Redevelopment
& Urban Design
Surveying & Mapping
Traffic Engineering
Transportation Planning
Water / Utilities Engineering
Website Development

1800 Eller Drive
Suite 600
Fort Lauderdale, FL
33316
954.921.7781 phone
954.921.8807 fax

www.cgasolutions.com

December 13, 2017

Mr. Alan Gerwig, P.E., LEED AP
President
Alan Gerwig & Associates, Inc.
12798 W. Forest Hills, Blvd. Suite 201
Wellington, FL 33414

RE: PBC WUD Treatment Plants – Topographic Surveys

Dear Mr. Gerwig:

We are pleased to submit this proposal for Professional Surveying Services for the above referenced project. We understand the survey tasks are to prepare a Map of Topographic Survey for the areas as identified in the exhibits as provided for Palm Beach County WUD Treatment Plants, Numbers: 2, 3, 8, 9 and 11. Please consider the following scope of services and proposed fees.

Scope of Services

Topographic Survey

CGA will locate all above ground improvements within the project areas identified in the exhibits attached hereto. Horizontal locations and vertical elevations will be provided for such items as edge of pavement, buildings, asphalt pavement, containment walls, concrete pads, sidewalks and visible above ground utilities. Visible above ground utilities refer to the visible structures (e.g., manholes, valve boxes, inlets, etc.) typically associated with storm drainage, sanitary sewer, potable water, electric, gas, telephone and cable television. The highest elevation for any tanks or associated appurtenances on top of the tanks within the containment wall area will be measured. Though no other survey measurement of above-ground improvements within containment area will be located.

Sub-surface & Soft-dig As-Built

Upon completion of underground utility locates, as done by others, CGA will survey the above ground paint markings of the various utilities and depict the locations on the Topographic Survey. Any soft-dig bore holes will be measured both horizontally and vertically and shown on the Topographic Survey together with any as-built information as provided by the utility locate company.

Page 2

December 13, 2017

Mr. Alan Gerwig, P.E., LEED AP
President

All survey documents will be prepared in accordance with the Standards of Practice requirements for Surveying and Mapping in the State of Florida as set forth by Chapter 5J-17 of the Florida Administrative Code, pursuant to Florida Statutes Chapter 472.027

Proposed Survey Fees

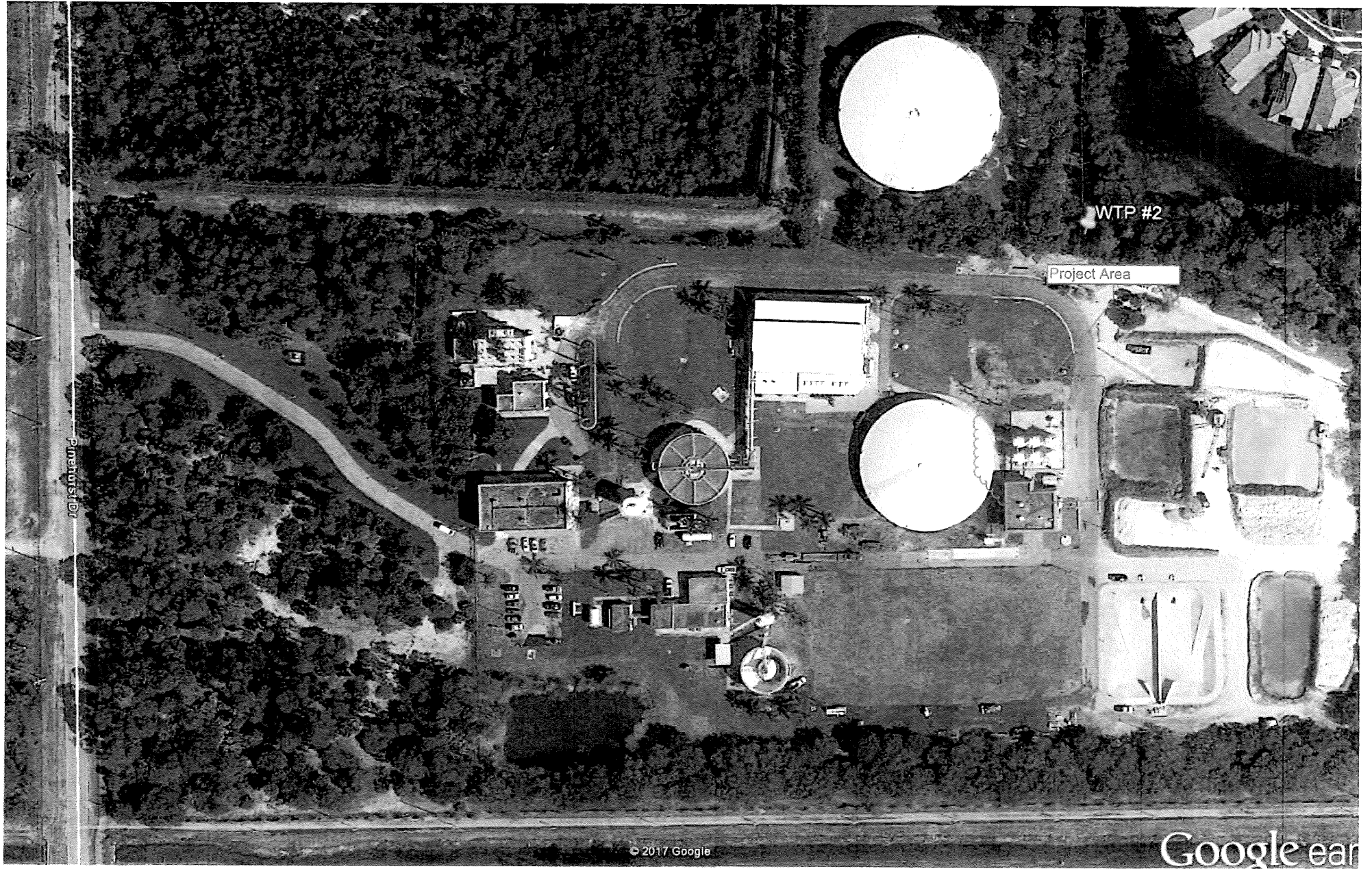
Treatment Plant	Topographic Survey	Utility Locate As-Built
• WTP #2	\$ 1,565.00	\$ 535.00
• WTP #3	\$ 1,565.00	\$ 535.00
• WTP #8	\$ 1,495.00	\$ 465.00
• WTP #9	\$ 1,635.00	\$ 600.00
• WTP #11	\$ 1,700.00	\$ 670.00

Upon review of this proposal if you have any questions or comments please contact me. We appreciate the opportunity to provide this proposal and look forward to working with you on this project.

Calvin, Giordano & Associates, Inc.



Steven M. Watts, PSM
Director of Survey



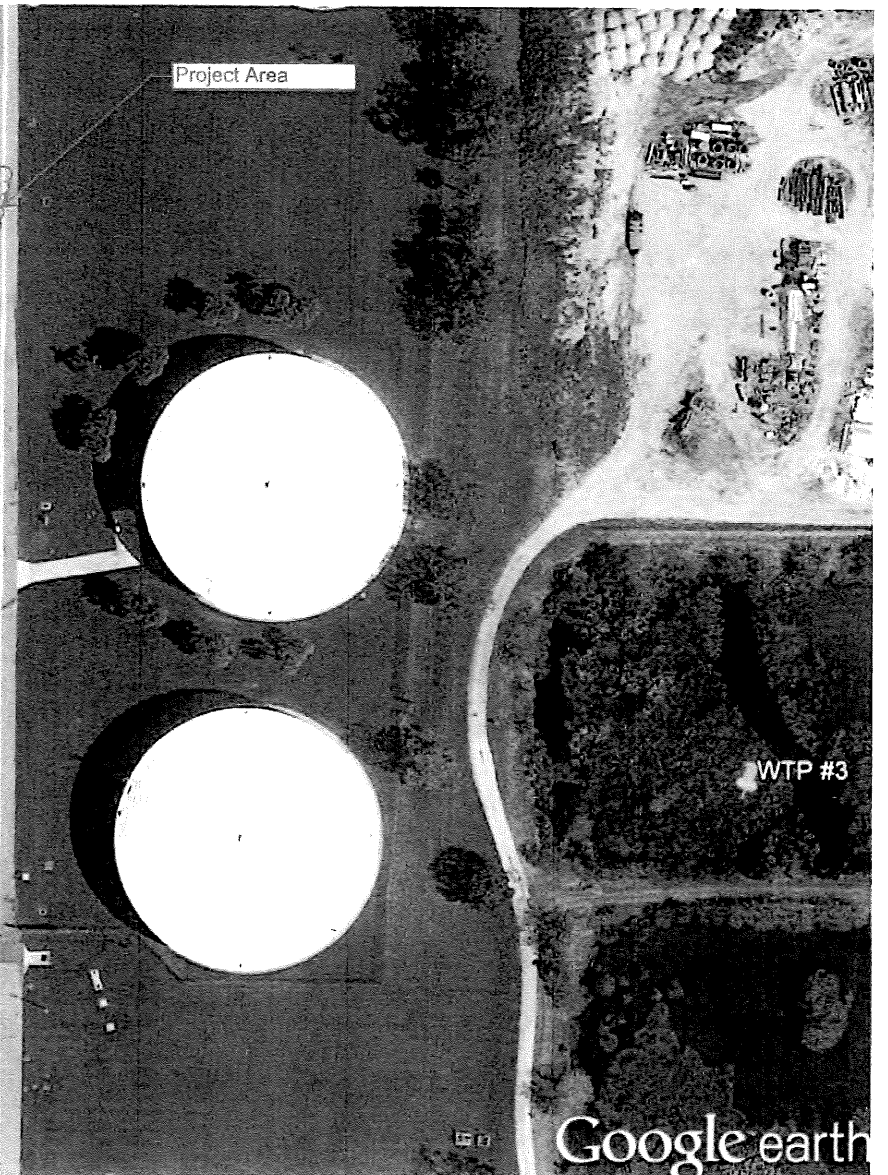
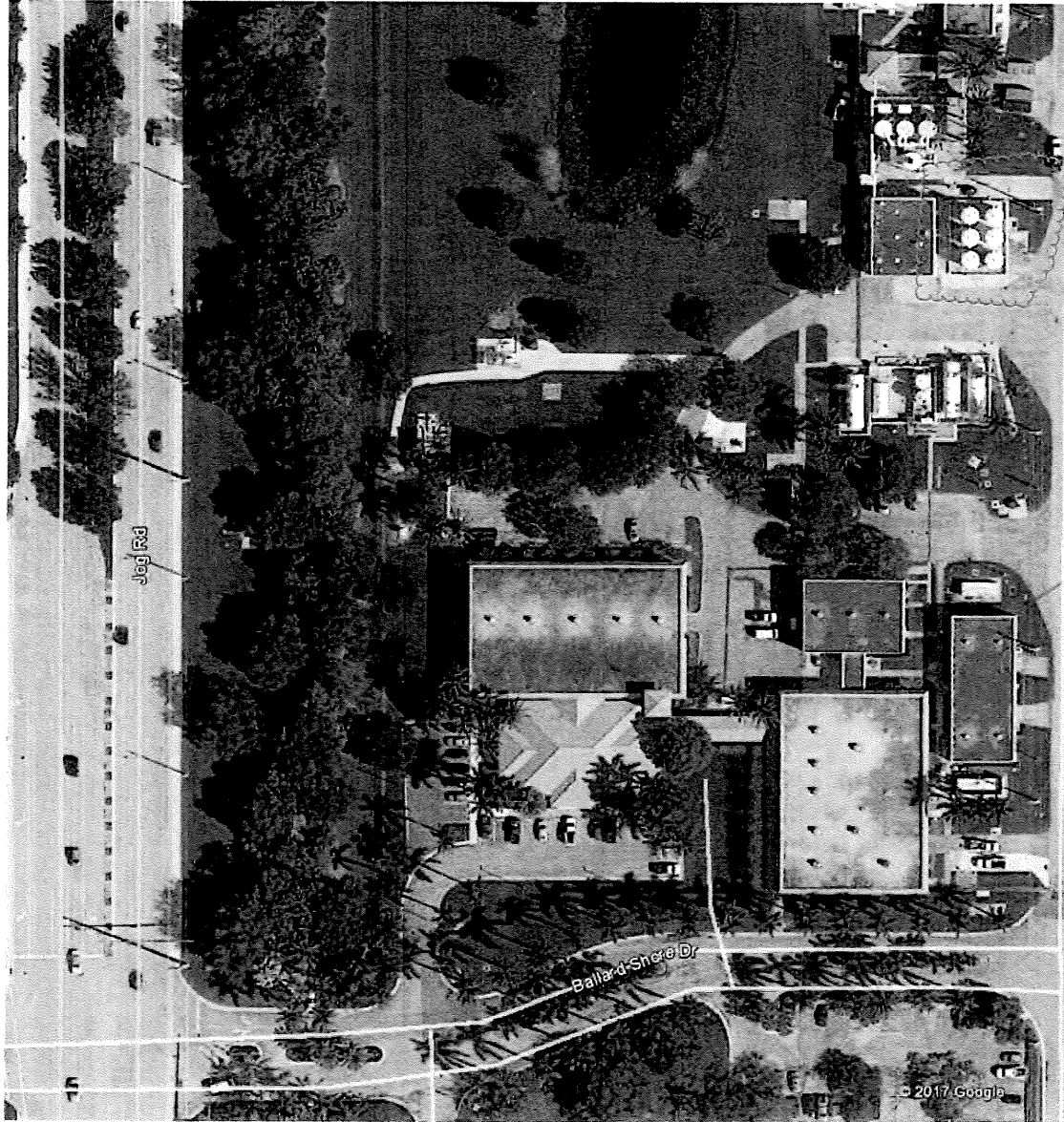
WTP #2

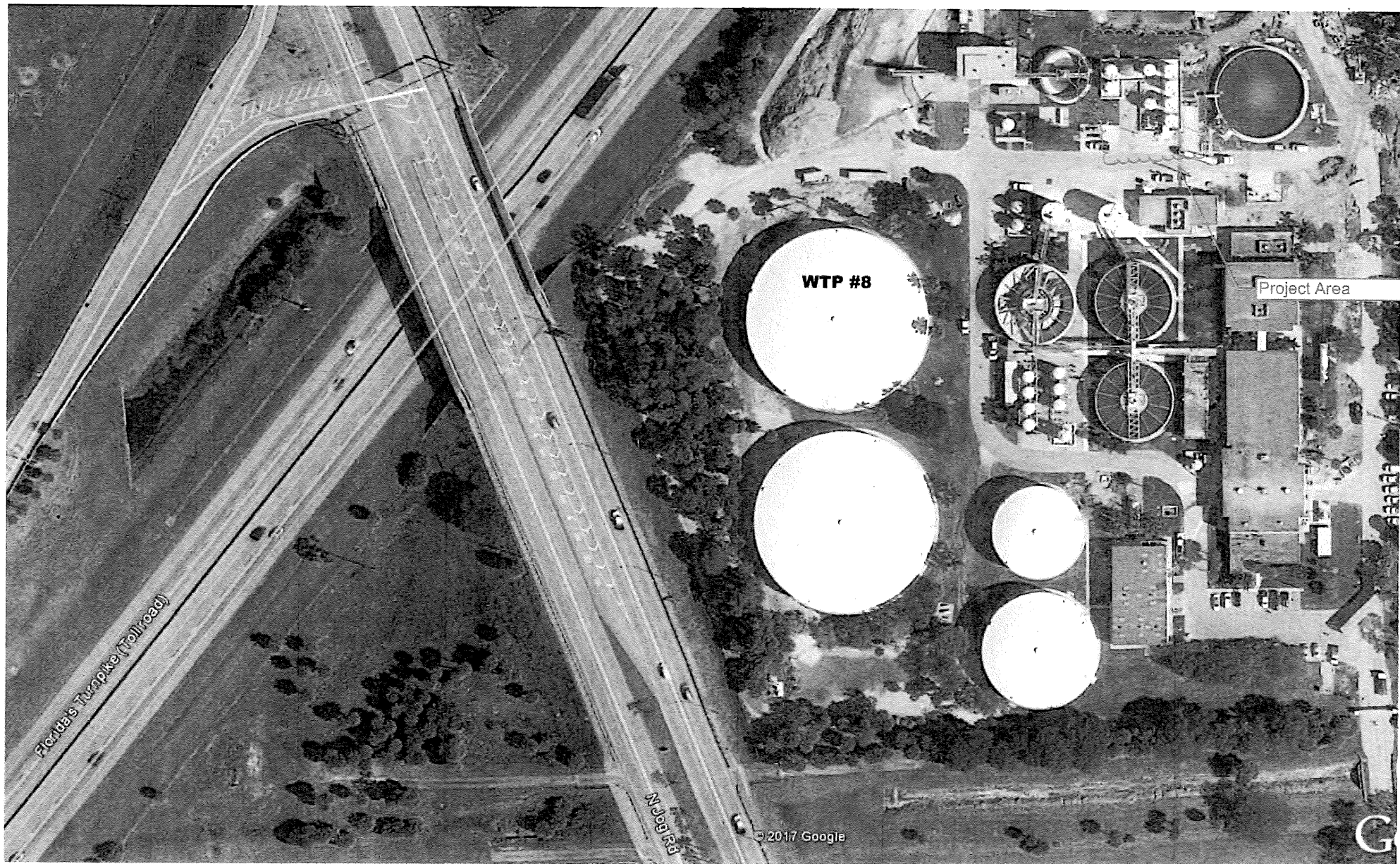
Project Area

Pinehurst Dr

© 2017 Google

Google earth





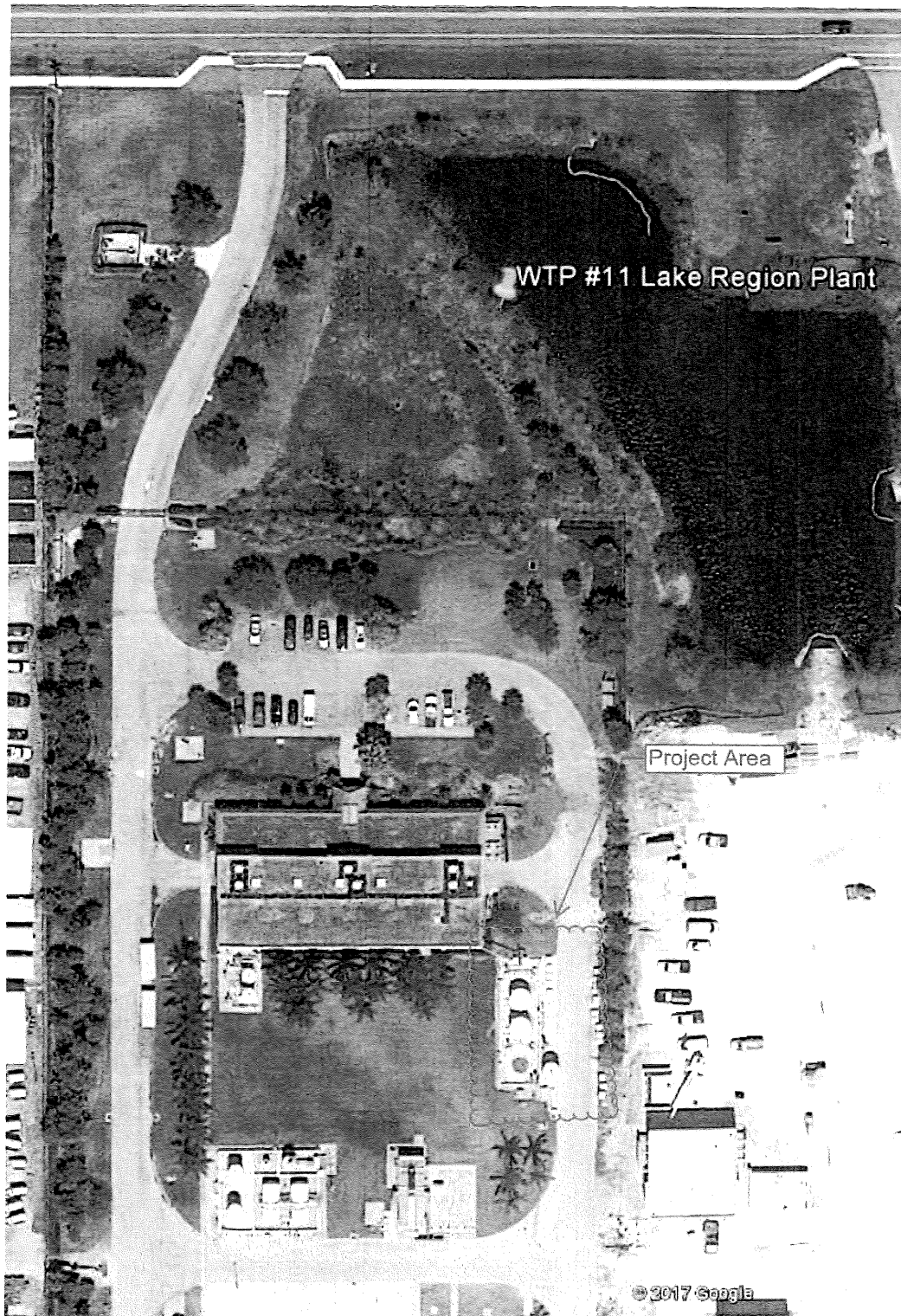
WTP #9

Project Area

© 2017 Google

Google earth







**SUBSURFACE
SCANNING
SOLUTIONS**

December 11, 2017

Alan Gerwin & Associates, Inc.

Attn: Alan Gerwig

Project: PBC WUD

GPRS appreciates the opportunity to provide this proposal. I encourage you to visit our website (www.gprsinc.com) and contact any of the numerous references listed. Our insurance certificate and W-9 can also be downloaded [here](#). Please feel free to contact me if you have any questions, or if you need additional information.

SCOPE OF WORK

We understand the scope to be searching for underground utilities in the area shown in Figures 1-5. We will attempt to trace any utilities for which there are structures visible from the work area. The client will be responsible to provide drawings or notify GPRS of any utilities known to be entering the work area for which there are no apparent surface features or structures that are visible from the work area. The areas should be laid out, marked, and cleared of obstructions prior to our arrival in order to avoid additional charges.

EQUIPMENT

400/350 MHz GPR Antenna. The antenna is mounted in a stroller frame which rolls over the surface. The surface needs to be reasonably smooth and unobstructed in order to obtain readable scans. Obstructions such as curbs, landscaping, and vegetation will limit the feasibility of GPR. The data is displayed on a screen and marked in the field in real time. GPR works by sending pulses of energy into a material and recording the strength and the time required for the return of the reflected signal. Reflections are produced when the energy pulses enter into a material with different electrical properties from the material it left. The strength of the reflection is determined by the contrast in signal speed between the two materials. The total depth achieved can be as much as 8' or more with this antenna but can vary widely depending on the conductivity of the materials. Depths provided should always be treated as estimates as their accuracy can be affected by multiple factors. For more information, please visit:

- **400 MHz GPR Antenna:** [Link](#)
- **350 MHz GPR Antenna:** [Link](#)
- **Electromagnetic Pipe Locator.** The EM locator can detect the electromagnetic fields from live power or radio frequency signals. It can also be used in conjunction with a transmitter to connect directly to accessible, metallic pipes, risers, or tracer wires. A current is sent through the pipe or tracer wire at a specific frequency and the resulting EM field can then be detected by the receiver. The receiver is moved over the surface without coming in contact with the ground so it is not affected by terrain. Depths provided should always be treated as estimates as their accuracy can be affected by

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Dusty.gilvin@gprsinc.com • www.gprsinc.com

Corporate Headquarters: 7540 New West Rd., Toledo, OH 43617. EIN #: 31-1803412



SUBSURFACE SCANNING SOLUTIONS

multiple factors. Depths achieved can be as much as 20' depending on the type of signal being traced or methods used. For more information, please visit: [Link](#)

- **Traceable Rodder.** The rodder has a copper wire encased in 5/16" of fiberglass. The line is pushed through accessible pipes before placing an electromagnetic signal on the wire which is then traced from the surface. The maximum traceable depth is 10' depending on the soil conditions and the maximum distance is 300'. The line can be pushed through a pipe with direct access such as a conduit at a pull box or a storm drain catch basin. We will not be able to push through deeper pipes within manholes. The signal cannot be located through metallic pipes. For more information, please visit: [Link](#)

OPTIONAL EQUIPMENT

- **GPS.** This handheld GPS unit offers accuracy down to 4 inches, however, the accuracy will depend on the satellite environment and obstructions and should not be considered to be survey-grade. Features can be collected as points, lines, or areas and then exported into Google Earth or overlaid on a CAD drawing. For more information, please visit: [Link](#)
- **512 Hz Sonde.** The sonde can be connected to the end of the traceable rodder and pushed through an accessible pipe. This sonde transmits a signal at a 512 Hz frequency that can pass through cast iron pipes or nonmetallic pipes and be detected at depths of up to 10'-15' depending on the conditions. The signal can then be located from the surface using RD. For more information, please visit: [Link](#)
- **Sewer Camera.** The sewer camera has a 2" diameter, self-leveling camera head that provides high quality images in pipes up to 9" in diameter. There is also a 512 MHz sonde behind the camera that can be located from above ground and provide the depth to the pipe for pipes up to 10' deep. The locatable signal from the sonde will not pass through metal pipes or solid metal barriers except for cast iron. The camera and sonde are pushed through the pipe and access will need to be obtained through a cleanout or an open pipe within arm's reach and can be pushed through for a maximum of 200'. Access to confined spaces such as manholes would need to be provided and facilitated by the client. Video and photos of the interior of the pipe can be provided but GPRS does not provide inspection services or make judgements regarding the integrity of the pipes. For more information, please visit: [Link](#)

FIGURE 1

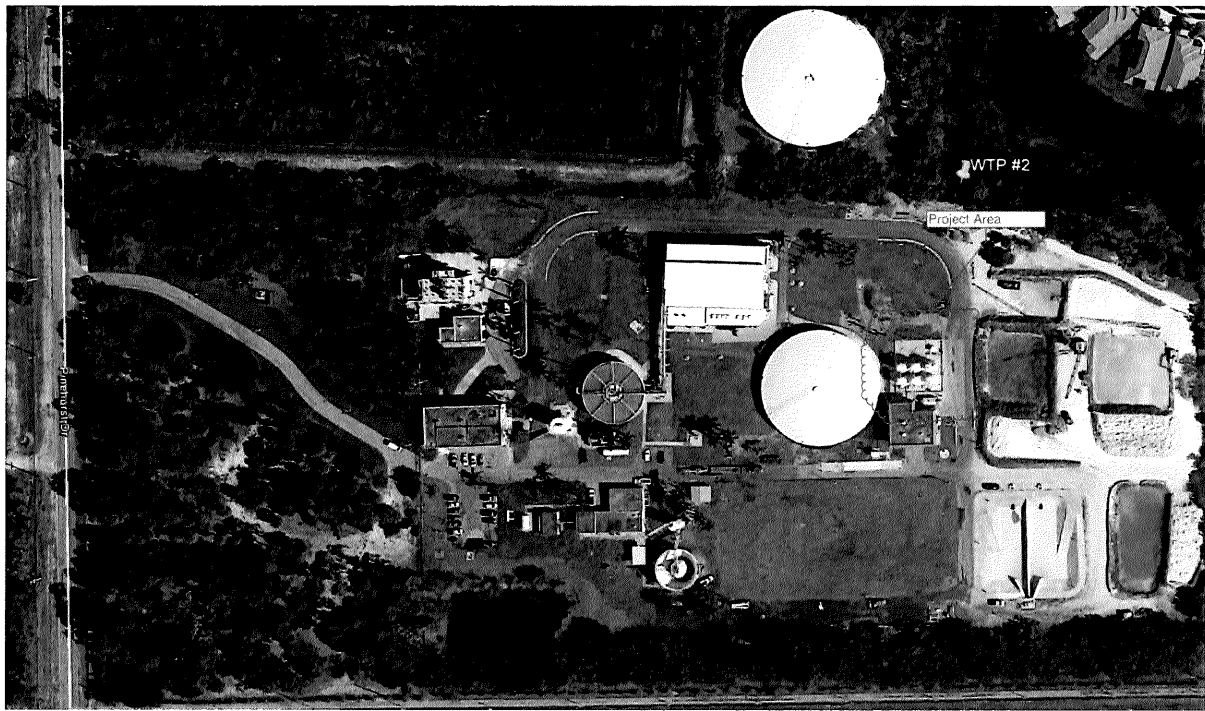
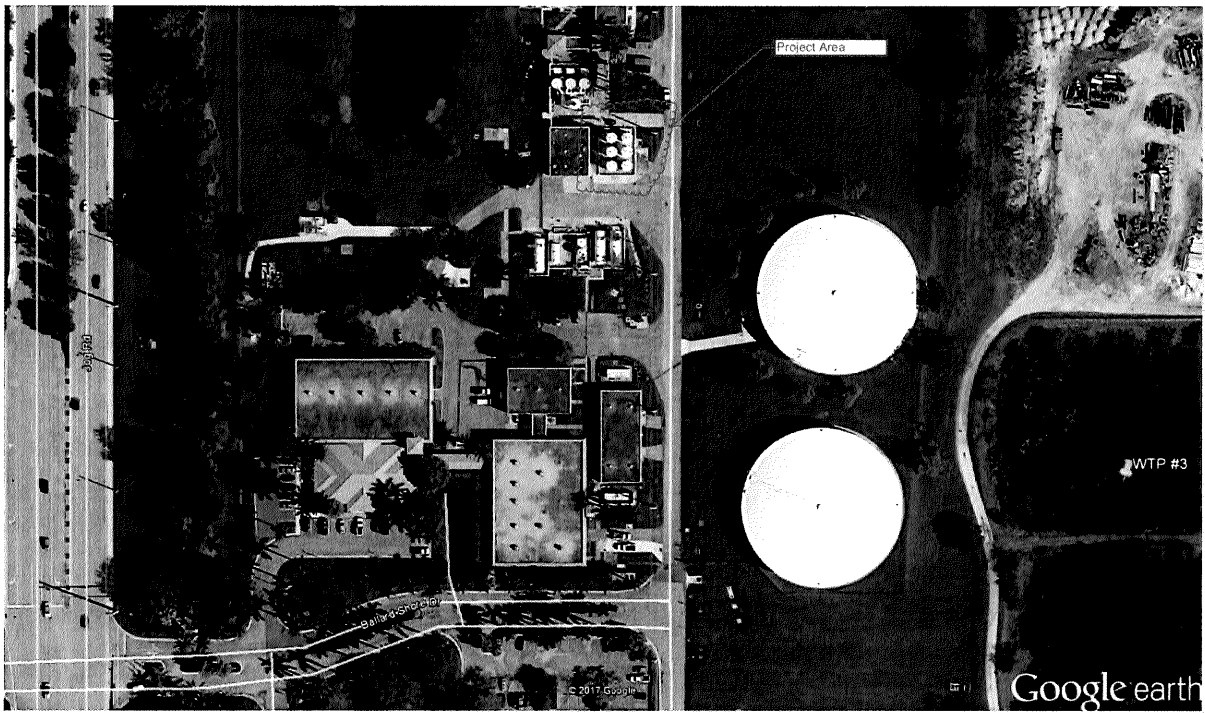


FIGURE 2





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FIGURE 3

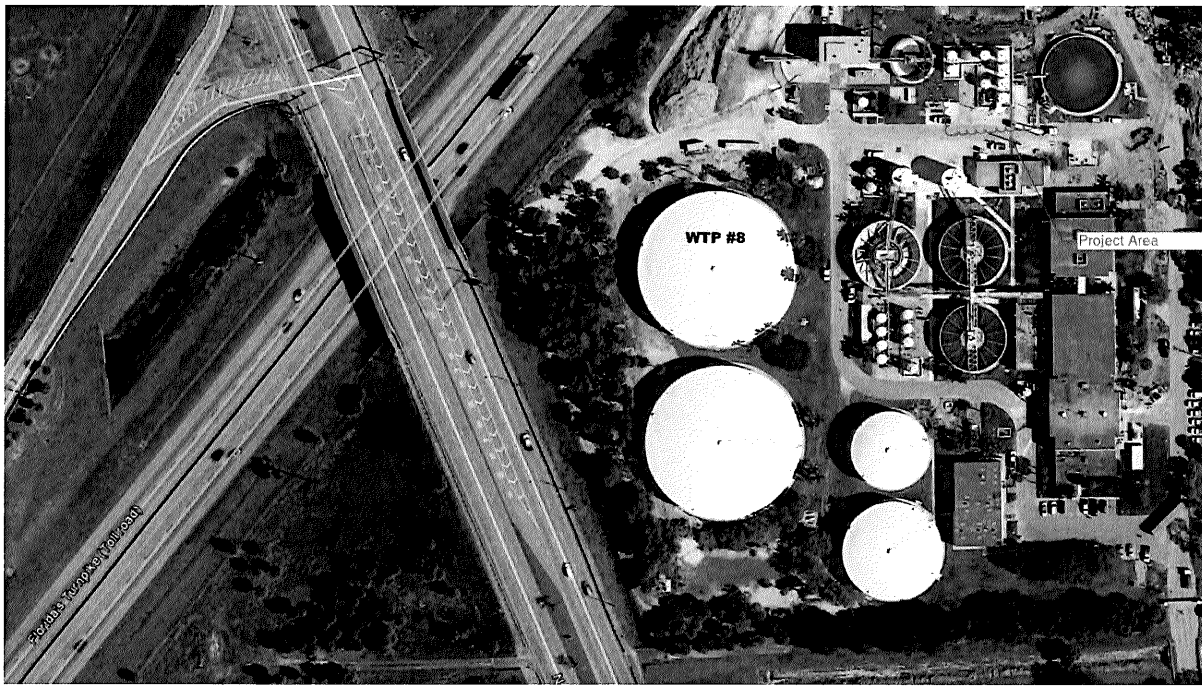
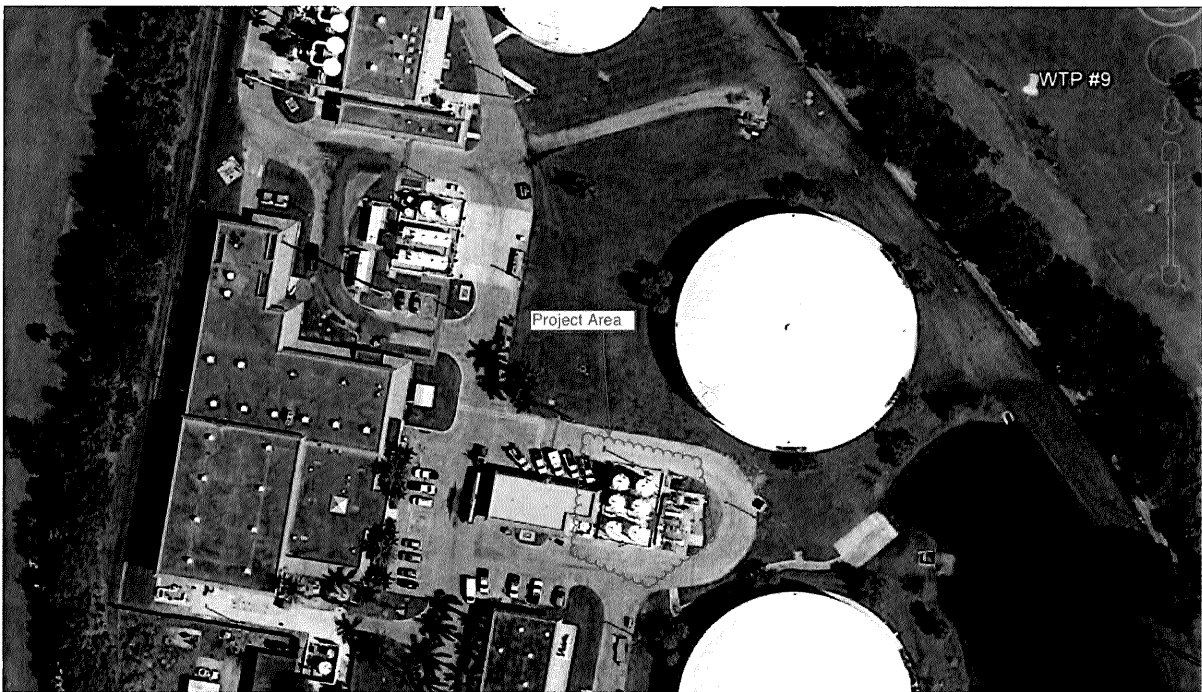


FIGURE 4





**SUBSURFACE
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FIGURE 5





SUBSURFACE SCANNING SOLUTIONS

PROJECT COSTS

SERVICE	SCOPE	PRICE
SCANNING/FIELD MARKINGS	Searching for underground utilities in the areas shown in Figures 1-5.	\$4,000
INITIAL MOBILIZATION	Included at no charge	\$0
SOFT DIG	10 soft dig locations: Price is based on 8 hours per day M-F. Pricing is an estimate only. Actual quantities will be billed up or down. See page 7 for T&C's	\$5,650
TOTAL		*\$9,650
OPTIONAL SERVICES (INITIAL IF DESIRED)		
WRITTEN REPORT	Basic report of findings with photos and example data.	Initial <input checked="" type="checkbox"/> \$250
UTILITY SKETCH	Google Earth image showing utility findings. Results are not survey-grade accuracy.	Initial <input type="checkbox"/> INC
CAD DRAWING	Findings will be added as a layer to an existing CAD drawing or added to an aerial image background. Results are not survey-grade accuracy.	Initial <input type="checkbox"/> \$600

* This price assumes that we will be given access to perform the work during normal weekday business hours (6am-5pm). As-builts and any other applicable drawings should be made available to GPRS prior to the project. A thorough utility search can only be completed if GPRS is given access to all utility structures, interior and exterior. This service is never a replacement for the use of the state One Call system (811). All of our technicians have OSHA-10 safety training or greater. Site-specific safety training is not included in this quote. Please notify us if this project requires additional safety training.

TERMS & CONDITIONS

1. GPRS, Inc. provides Ground Penetrating Radar (GPR) services in concrete and underground applications, including assisting in the detection of finding electrical conduits and reinforcing steel (including rebar, post tension cables, and wire mesh) in concrete, and location services in accordance with ASCE Standard 38-02, Quality Level "B". GPR is a great tool for detecting objects embedded in concrete and underground, however, site restrictions and environmental conditions can limit the accuracy and effective depth of GPR. For concrete scanning, these conditions could include, but are not limited to, moisture present in the concrete, amount of reinforcing steel reflection, depth of target being located, etc. Customer also fully understands that the GPR equipment cannot scan the 4" up to any wall/ceiling/corner. With these factors in mind, GPRS CANNOT guarantee it will be able to locate ALL reinforcing steel and conduits on site. Similarly, for underground scanning, depth is completely dependent on the composition of soils in the area being surveyed. Customer fully understands that for every foot in depth penetration with the GPR equipment, the pipe/utility must be at least 1" in diameter to be located. For example, at 4 feet in depth, the pipe/utility must be 4" or larger to be detected. Some types of pipes are very difficult to locate, such as clay or concrete pipes, and empty PVC type pipes. Given these factors, GPRS CANNOT guarantee it will be able to locate ALL utilities on site.
2. Our goal is to provide you with the answers to your questions regarding what lies below the surface, and where it is located. Customer acknowledges it understands that our answers are based upon the quality of the data retrieved and what GPRS believes lies below the surface. The decision to proceed with cutting, coring, drilling, boring, or excavation is left entirely up to the customer.
3. GPRS will not accept liability for an inaccurate interpretation or any other reason, and customer agrees to release and indemnify GPRS and its owners and agents from all losses and damages from all alleged negligence and/or contract claims by customer or any third party. These terms and conditions supersede any other previous terms and conditions either oral or written.
4. Payment is due upon receipt of invoice.
5. If for some reason the technician arrives on site and the work is cancelled there will be a charge of \$500.00

ACCEPTED AND AGREED:

Billing Company Name: _____

Billing Address: _____

Company Phone/Email: _____ PO#: _____ Job#: _____

Print Name: _____ Signature: _____ Date: _____

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SUBSURFACE SCANNING SOLUTIONS

Soft Dig Terms & Conditions

General Notes & Conditions:

1. Travel rates apply when traveling from the closest Badger Operation to the client's project site.
2. It is assumed unless otherwise told that a dump site shall be available at or near the jobsite. Travel to and from a designated dump site is considered part of the work day.
3. It is assumed that water will be available on site. Please advise if alternate arrangements will need to be made.
4. Any additional third party services provided by Badger Daylighting outside of our typical hydrovac activities like a water truck shall be charged out at cost + 15%.
5. In no event shall Badger Daylighting be liable for any special, indirect, incidental, consequential (including loss of profit), or punitive damages.
6. With any Hydrovac project, there are possible additional charges that are application and site specific. For example, items such as water trucks, specialized equipment and attachments (remote hose, etc), crew trucks, and other items may be required. Rather than provide an extensive listing of all possible considerations, this is best implemented on a project-by-project basis and evaluated at the field operations level. The information presented in this document represents the complete proposal.
7. This proposal is valid for 30 days from the date posted on this proposal document.
8. Terms of Payment - Net 30 days from date of invoice.
9. 0% retainage is withheld.
10. Taxes – tax will be added to quoted pricing as required by State/Province/Local governments.

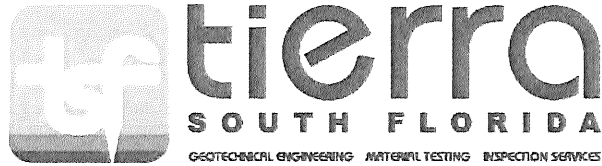
Client responsibility Includes:

1. Access to the Hydrovac site. Permits and permission from property owners, utilities, and government agents.
2. Surface locates, survey marks and traffic control, if needed unless agreed to in writing prior.
3. Breaking, removal, and restoration of asphalt and or concrete unless agreed to in writing prior.
4. Establish, maintain and remediate accessible water source and disposal site.
5. Specific direction and locations for Hydrovac excavation.
6. Backfill and site restoration unless agreed to in writing prior to completing work.
7. Materials to secure and cover the excavation unless agreed to in writing prior.
8. Shoring, maintenance and barricading.
9. Ownership of the soil and debris removed by the Hydrovac including any soils or debris contaminated or suspect.
10. Any project delays caused by others that result in downtime of Badger Hydrovac units will be billed at the hourly rates.
11. It is understood that the client will provide all specialty PPE which will include, but is not limited to, Self Contained Breathing Apparatus, trailer unit, masks, attachments, and other related equipment. If specialty wet suits or other PPE are required to be supplied by Badger, they will be charged on a cost plus 15% basis.
12. Pay for all specialized training that is required by contractor/owner to be on the site to work.
13. Notify Badger of all billing requirements and any appropriate purchase orders, job numbers, AFE, etc. that would be necessary to release payment to Badger. This must be done prior to the first day of work.
14. Notify Badger of any of the following: Certified payrolls, OCIP requirements, Prevailing wage requirements, additional insurance requirements over what Badger already has in place.
15. Make a best efforts to coordinate a full day of work.

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February 12, 2018
December 12, 2017

Alan Gerwig & Associates, Inc.
12798 W. Forest Hill Blvd, Suite 201
Wellington, FL 33414

Attn: Alan Gerwig, P.E., LEED AP
President

Re: **Proposal for Geotechnical Services**
Proposed Shade Structures – 5 locations
Palm Beach County, Florida
Tierra South Florida Proposal No.: 1712-741 Revised

Dear Alan:

As requested, Tierra South Florida, Inc. (TSF) is pleased to submit this revised proposal for the above-referenced project. It is our understanding that the project will include shade structures which will be a structural frame with fabric covering stretched over existing utility plant in Greenacre, Delray Beach, Boca Raton, West Palm Beach and Belle Glade in Palm Beach County, Florida. This proposal includes an outline of our propose scope of work, an estimate of the total fees, and our anticipated schedule for completion of the work.

PROPOSED SCOPE OF WORK

All work performed by TSF will be in general accordance with PBC standards. We understand that structural frame will be supported on auger cast piles. We propose to drill one SPT boring to a depth of 35 feet below existing grade at each location, or about 10 feet below anticipated pole length.

Within the SPT boring, disturbed sample collection will be performed in general accordance with the requirements of ASTM D 1587, respectively. Boring will be approximately located in the field by our personnel by measuring distances with a tape from known reference points. We assume that others will identify any underground utilities existing in the exploratory area. Elevations at boring locations can be interpreted from topographic plans if furnished by others.

Upon completion of the field exploration, laboratory testing will be performed on selected samples. 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, recommendations for foundation design, and a discussion of some construction considerations.

ESTIMATED FEES

Our fee for the performance of the services outlined above will be **\$14,057.50**.

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

This estimated fee assumes that the site is readily accessible to our truck-mounted drilling equipment. Any bulldozer or wrecker services required to provide access pathways or mobility assistance to our truck-mounted drill rig are not included in this proposal. Private utilities will be located by others.

Boring, sampling, and testing requirements are a function of the subsurface conditions encountered. Therefore, the estimated fee previously indicated is approximate, and compensation for the exploration will be based on the actual work and tests performed. We will endeavor to keep the exploration cost at a minimum consisting with good engineering practice.

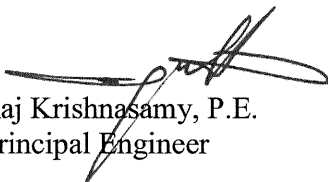
SCHEDULE AND AUTHORIZATION

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 fieldwork will take five days to complete. The written report can be submitted about 2 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, Inc. 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

RK:

AUTHORIZED BY:	INVOICE TO:
Firm:	Firm:
Name:	Name:
Title:	Address:
Date:	Phone #:
	Fax #:

TIERRA SOUTH FLORIDA, INC.
ATTACHMENT
FEE SCHEDULE FOR GEOTECHNICAL SERVICES

	Unit	# of Units		Unit Price		Total
I. FIELD INVESTIGATION						
Mobilization of Men and Equipment						
Truck-Mounted Equipment	Trip	5	\$	350.00	\$	1,750.00
Standard Penetration Test Borings (By Truck-Mounted Equipment)						
0 - 50 ft depth	L.F.	175	\$	12.00	\$	2,100.00
50 - 100 ft depth	L.F.	0	\$	14.00	\$	0.00
Grout-Seal Boreholes (By Truck-Mounted Equipment)						
0 - 50 ft depth	L.F.	175	\$	5.50	\$	962.50
50 - 100 ft depth	L.F.	0	\$	6.50	\$	0.00
Casing Allowance (By Truck-Mounted Equipment)						
0 - 50 ft depth	L.F.	175	\$	7.00	\$	1,225.00
50 - 100 ft depth	L.F.	0	\$	9.00	\$	0.00
Borehole Permeability Tests	Test	0	\$	275.00	\$	0.00
Traffic Control (1-man crew with safety equipments)	Day	0	\$	800.00	\$	0.00
Auger Borings (Roadway)	L.F.	0	\$	9.00	\$	0.00
II. LABORATORY TESTING						
Visual Examination by Project Engineer	Hour	5	\$	120.00	\$	600.00
Natural Moisture Content Tests	Test	5	\$	10.00	\$	50.00
Grain-Size Analysis - Full Gradation	Test	5	\$	60.00	\$	300.00
Grain-Size Analysis - Single Sieve	Test	0	\$	25.00	\$	0.00
Organic Content Tests	Test	5	\$	50.00	\$	250.00
III. FIELD ENGINEERING AND TECHNICAL SERVICES						
Site Recon./Utility Coordination/Traffic Control						
Sr. Engineering Technician	Hour	16	\$	70.00	\$	1,120.00
IIIA. ENGINEERING AND TECHNICAL SERVICES						
Principal Engineer	Hour	5	\$	150.00	\$	750.00
Senior Geotechnical Engineer	Hour	10	\$	130.00	\$	1,300.00

TIERRA SOUTH FLORIDA, INC.
ATTACHMENT
FEE SCHEDULE FOR GEOTECHNICAL SERVICES

	Unit	# of Units		Unit Price		Total
Project Engineer	Hour	25	\$	120.00	\$	3,000.00
Draftperson	Hour	10	\$	65.00	\$	650.00
TOTAL FEE FOR GEOTECHNICAL SERVICES =					\$	14,057.50