



July 7, 2017

Bobby Bazan
Water Resource Specialist
Post Oak Savannah Groundwater Conservation District
310 E. Avenue C
Milano, TX 76556

RE: Proposal for POSGCD Groundwater Management System

Dear Mr. Bazan,

We are pleased to present the following scope of services and fee schedule to develop and host a web-based Groundwater Management System for the Post Oak Savannah Groundwater Conservation District. Per your request, Halff Associates has prepared the attached proposal to meet the District's data needs and to provide GIS and database hosting services. This proposal outlines the tasks that will be performed to develop a web-based system for the District to use for the management of the groundwater resources. The management system will include a secured web-based database application and GIS web maps.

The enclosed contract proposal includes Attachment 'A' – Scope of Services, Attachment 'B' – Fee Summary, Attachment 'C' – Data Ownership, Exhibit A – Hourly Rate Schedule, Exhibit B – Halff Standard Unit Pricing Schedule, Exhibit C – Task Order Template, and Halff Associates' Agreement for Professional Services on a Task Order Basis. The fee for this project is lump sum in the amount of \$37,000 with billing made monthly. The fees quoted in this proposal will be honored for up to 60 days from the date of this proposal. The signed Agreement by both parties will serve as Notice to Proceed (NTP). Professional services will begin upon NTP and receipt of data from the Post Oak Savannah Groundwater Conservation District.

We trust this proposal meets your requirements for this project. We appreciate the opportunity to be of service to you, and trust that our association on this project will be mutually beneficial. Please feel free to contact us if you have any questions or comments concerning this proposal.

Sincerely,

HALFF ASSOCIATES, INC.

A handwritten signature in blue ink, appearing to read "Erin L. Atkinson".

Erin L. Atkinson, P.E., CFM, GISP
Vice President

ATTACHMENT 'A'

Scope of Services

Background

The Post Oak Savannah Groundwater Conservation District (POSGCD) desires to have a web-based Groundwater Management System created to manage the groundwater resources the District is responsible for. Halff Associates, Inc. (Halff) proposes to develop this system using Esri's ArcGIS Server and Microsoft's SQL Server applications to store and manage the District's data. POSGCD currently maintains the District information in a Microsoft Access file. Halff will design the District's database based on the data contained within the Access file and then import the available information. Additionally, POSGCD would like Halff to provide web-based applications that allow the District to view, edit, and manage their data using web forms and web maps. Halff will also provide the hosting services required to support these applications. The Groundwater Management System will result in a fully integrated GIS and database framework accessible from a variety of platforms, including traditional PCs, laptops, tablets, and smart phones using standard internet browsers like Chrome, Internet Explorer, Firefox, or Safari. The design of the system will be flexible and expandable which will allow the District to enhance the application as new requirements are identified.

Scope of Work

Halff has developed a basic Groundwater Management System that can be used as a starting point for creating a custom database application solution. This web-based application, <https://chickadee.halff.com>, was presented to the District and will serve as the base framework for the development of the POSGCD Groundwater Management System. Halff has reviewed the District's Microsoft Access database (PostOak_DB_2003_august_23_2013_bobby_v5.mdb) and determined that the basic system will need some modifications to account for the existing information that the District stores in the Access database. Halff proposes to make the following changes to the basic system in order to preserve the District's existing data:

- The District's current well table contains 12 data fields that are not accounted for in the basic database schema, these fields will be added to the database
- The water level graph will be modified from a bar chart to a line graph
- Add the functionality to retrieve continuously monitored water level data from a third party site that is collecting the hourly data based on telemetry technology
- Add a database table to store the continuously monitored water level data
- Add a database table that will be related to the well data for water quality information
- Add database functionality to support aggregated well systems.

The database design approach that Halff uses strives to minimize the amount of duplicate data entry. This is accomplished by supporting 1-to-Many database relationships, for example one well owner may own multiple wells. If a well owner's contact information changes, the 1-to-Many relationship allows the District staff to make the change to a single entry that is then reflected across all associated wells. To leverage the benefits of database relationships Halff proposes to normalize the existing Access data as follows:

- Transfer the owner information associated with the well to an Owner database table
- Transfer the driller information associated with the well to a Driller database table.

With the exception of proposed additions and changes list above, all remaining existing data fields within the Access database not mentioned above have a corresponding data field that already exists in the basic system.

Halff will import the District's existing GIS datasets for use as reference layers within the web map applications and integrate the raster datasets representing top and bottom of each aquifer formation to support generating virtual drill logs.

User Application Interfaces

The following user application interfaces will be included with the POSGCD Groundwater Management System.

Database Management Application

- Secured application for use by District staff
- Allows District staff to edit well and tabular information
- Dashboard displaying overall district management metrics and notifications
- Well, Permit, and Owner search pages
- Well, Permit, and Owner detail pages
- Custom query and report tool

Web Map Applications

- Public and Secured web maps
- Web map functionality
 - Toggle layers on and off
 - Printing
 - Measurement tool
 - Search
 - Link to well details
 - Radius, or buffer zone, searches against existing or proposed well locations
 - Virtual drill log showing modeled thickness intervals based on aquifer formations

GIS Reference Layers – these datasets can be added to the existing District GIS layers and made available in the web map application. Halff will include the District’s existing GIS layers as well as data available from other publically available sources like TWDB, TNRIS, USGS, TCEQ and others. Additional datasets can also be obtained or created to meet the District’s needs.

- TWDB/USGS monitoring wells
- TWDB Major/Minor aquifers
- Ground surface elevation model
- Political jurisdictions
- Parcels from county appraisal districts (if available digitally)
- TWDB groundwater index grid
- Groundwater Conservation District (GCD) boundaries
- Groundwater Management Area (GMA) boundaries
- CCN boundaries
- Geologic Atlas of Texas
- Surface water features, i.e. streams and water bodies
- NWS rainfall measurements/accumulations

Basemap Layers – standard basemap layers available from Esri:

- Aerial/Satellite imagery
- Streets
- Hybrid of imagery and streets
- Topographic
- National Geographic
- Light gray canvas

Optional Basemap Layer

- TNRIS, a subdivision of the TWDB, currently has a program the District can participate in to obtain Google imagery. If the District chooses to pay for and subscribe to this service, this imagery can be included as an additional basemap option

All web map GIS layers will be stored in Esri’s enterprise geodatabase format. The geodatabase format supports importing and exporting the GIS data from a variety of formats.

Mobile Data Access

The web-based applications designed by Halff use responsive design principles which allows the management system to be accessed from a broad variety of devices including desktops, laptops, tablets, and smartphones. The District will be able to view and edit the well information as long as the device is connected to the internet via Wi-Fi or a cellular network. Additionally, Halff can design mobile specific applications to support field work processes if needed by the District.

Security Administration

Halff has developed a role-based security module that allows the District to control access to all the web based applications presented in this scope of work. Roles can be defined for District staff, authorized users, well owners, public access, and others to meet the needs of the District. The District will be able to administer the accounts used for accessing the web maps, database interface, and mobile apps without having to contact Halff to have accounts created, modified, or deleted.

Web Map and Database Hosting

The database application and web maps developed for this project will be hosted on Halff's corporate servers which physically reside in Richardson, TX. Halff's IT department has a formal backup and disaster recovery plan in place which includes offsite virtualized servers, emergency power backup (short term and long term), and redundant internet connections. The hosting service includes server monitoring, security and user account administration, database administration, and web map monitoring. Technical support will be provided via phone or web based conference calls.

Future Enhancements

Once the initial Groundwater Database Management system has been deployed for District use, Halff will work with POSGCD to define any custom enhancements needed by the District to support the management of the groundwater resources. Each enhancement will include scoping coordination and estimated effort prior to starting the work.

ATTACHMENT 'B'

Fee Summary

PROPOSED FEE SCHEDULE

- I. Groundwater Management System Development \$32,000
- II. Annual Hosting Services..... \$5,000

TOTAL LUMP SUM FEE \$37,000

The total fee of \$37,000 is a lump sum fee and will not be exceeded without prior approval from the Post Oak Savannah Groundwater Conservation District. This lump sum fee will be invoiced on a monthly basis after notice to proceed has been received. Halff will coordinate with the District to establish the billing schedule.

Additional services may be requested by the Post Oak Savannah Groundwater Conservation District on a task order basis. Halff will develop a separate scope and fee for each additional service and obtain approval from the District prior to initiating work on the additional services. Miscellaneous services may also be requested by POSGCD on a time and materials basis, a summary of current hourly billing rates is provided on **Exhibit A** along with a current unit pricing schedule on **Exhibit B**.

Unless otherwise stated, fees quoted in this proposal exclude state and federal sales taxes on professional services. Current Texas law requires assessment of sales tax on certain kinds of surveying services, but does not require sales taxes on other professional services. In the event that new or additional state or federal taxes are implemented on the professional services provided under this contract during the term of the work, such taxes will be added to the applicable billings and will be in addition to the quoted fees and budgets. Services shall be invoiced monthly based on percent of project completed. Direct costs, including printing, plotting, and reproduction, postage, messenger service, specialized equipment (such as GPS), long distance telephone calls and vehicle mileage will be considered reimbursable and will be billed at 1.10 times the direct cost incurred.

The fees and budgets established above do not include revisions once the project is underway. If revisions are requested, a revision to the scope and budget will be required.

ATTACHMENT 'C'

Data Ownership

All data developed during this project shall be considered the property of the Post Oak Savannah Groundwater Conservation District. This shall include the items listed under Attachment 'A' as well as any GIS data layers developed through additional task orders executed under this contract. Upon request from the Post Oak Savannah Groundwater Conservation District, Halff will provide the database and GIS datasets developed under this contract in an ArcGIS file geodatabase format at no additional cost.

EXHIBIT A**Hourly Rate Schedule**

A summary of current hourly billing rates for miscellaneous services (as of July 2017):

Project Manager	\$175 — \$250
Database Programmer	\$85 — \$175
Sr. GIS	\$90 — \$125
Jr. GIS	\$60 — \$90
GIS Intern	\$30 — \$60
Clerical	\$45 — \$75
Contract Administration	\$65 — \$90

EXHIBIT B
Half Standard Unit Pricing Schedule (as of July 2017)

Unit Code	Unit Description	Unit of Measure	\$ per Unit
REPRODUCTION			
BINDBK	Binding Booklets	Per Set	\$5.00
BINDPL	Binding Plans	Per Set	\$5.00
BLUEPR	Blacklines	Per Each	\$1.00
COPY1	Copies and Scans – Legal and Letter / B&W	Per Sheet	\$0.10
COPY2	Copies and Scans – Oversize (11x17) / B&W	Per Sheet	\$0.20
COPY3	Copies and Scans – Legal and Letter / Color	Per Sheet	\$0.75
COPY4	Copies and Scans – Oversize (11x17) / Color	Per Sheet	\$1.50
FCMNT	Foam Core Mount	Per Sq Ft	\$4.00
PLOT1	Plots – Full Size / B&W	Per Plot	\$1.00
PLOT2	Plots – Full Size / Color	Per Plot	\$15.00
PLTCSF	Plots – Color – Sq Ft	Per Sq Ft	\$2.50
PLTBSF	Plots – B&W – Sq Ft	Per Sq Ft	\$0.15
ENVIRONMENTAL			
ATV	All Terrain Vehicle	Per Day	\$35.00
AUGER	Hand Auger	Per Day	\$15.00
BOAT	Boat Rental	Per Day	\$50.00
CLWSMP	Colliwasa Samplers	Per Each	\$10.00
DB	Disposable Bailers (0.75" and 2")	Per Each	\$8.00
DIP	Dual Interphase Probe (for free product measuring)	Per Day	\$25.00
DPB	Disposable Pressure Bailers (2")	Per Each	\$15.00
ENVSUY	Environmental Survey Equipment (for Gradient/Elevation)	Per Day	\$100.00
MICRON	10 Micron Filters (for Low Flow Sampling – Metal)	Per Each	\$20.00
OVN	Organic Vapor Meter (OVM)	Per Day	\$75.00
PROXRS	PROXRS Receiver	Per Hour	\$20.00
SED	Sediment / Sludge Sampler	Per Day	\$45.00
SILICN	Silicon Tubing (for Low Flow Sampling)	Per Foot	\$2.00
TEFLON	Teflon Tubing (for Low Flow Sampling)	Per Foot	\$1.00
WLI	Water Level Indicator	Per Day	\$15.00
SURVEY			
ATV	All Terrain Vehicle	Per Day	\$35.00
BOAT	Boat Rental	Per Day	\$50.00
GATOR	John Deere Gator – Laser Scanner	Per Day	\$100.00
GPS	GPS Survey Equipment	Per Hour	\$36.00
GPSHH	GPS Survey Equipment Hand Held	Per Day	\$20.00
MON1	Small Brass Markers; Type I Survey Monuments	Per Each	\$55.00
MON2	Survey Monumentation; Type II R-O-W Markers	Per Each	\$220.00
MON3	Survey Monumentation; Type III GPS Markers	Per Each	\$220.00
PROXRS	PROXRS Receiver	Per Hour	\$20.00
SECCHI	Secchi Disk	Per Day	\$10.00
SUE			
ATV	All Terrain Vehicle	Per Day	\$35.00
GPS	GPS Survey Equipment	Per Hour	\$36.00
GPSHH	GPS Survey Equipment Hand Held	Per Day	\$20.00
M*DV	Mileage Rate for Mobilization / Demobilization of the Designating Vehicle	Per Mile	\$2.68
MI*SVY	Mileage Rate for Mobilization / Demobilization of a Survey Truck	Per Mile	\$2.68
MI*TCV	Mileage Rate for Mobilization / Demobilization of a Traffic Control Vehicle	Per Mile	\$2.68
MI*VE	Mileage Rate for Mobilization / Demobilization of the Vacuum Excavating Vehicle	Per Mile	\$5.68
VAC*HD	Heavy Duty Vacuum Excavation Truck	Per Hour	\$100.00
VACTRK	Vacuum Truck Charge	Per Hour	\$75.00
OTHER			
CD	Burn CD / DVD	Per Each	\$10.00
DELIV1	Delivery / Courier in Area	Per Delivery	\$15.00
DELIV2	Delivery / Courier Out of Area	Per Delivery	\$40.00
EMILES	Unit Based Miles for eExpense	Per Mile	\$0.54 *
DIS1	Digital Imaging Server	Per Day	\$75.00
DIS2	Digital Imaging Server	Per Day	\$150.00
DIS3	Digital Imaging Server	Per Day	\$300.00
GISPEN	GIS Digital Map Pen	Per Day	\$30.00
MISC	Miscellaneous	Per Unit	\$1.00
RF4	RF4 Realflow Software	Per Day	\$100.00
POSTGE	Postage	Per Ounce	\$0.47

* or current IRS rate

EXHIBIT C

Task Order Template for Additional Services

**POSGCD Groundwater Database Management Support
 Task Order Authorization No. XX
 Date**

Scope of Work:	1. <i>Task description</i>
Deliverables:	1. <i>Deliverable description</i>
Items Furnished by POSGCD:	1. <i>Description</i>
Schedule:	<i>Due Date</i>
Fees:	Total Fee: \$XXX.XX

Halff Associates is performing the services above under the terms and conditions described in the **Agreement For Professional Services** for the **POSGCD Groundwater Database Management Support** project, dated *MM/DD/YYYY*, between Halff Associates and the Post Oak Savannah Groundwater Conservation District. Halff Associates will bill the above described services under AVO XXXXX, Phase GIXX.

Submitted

Approved

Halff Associates, Inc.

**Post Oak Savannah Groundwater
 Conservation District**

 Erin Atkinson, PE, CFM, GISP

Title: Vice President

Title: _____

Date: _____

Date: _____

AGREEMENT FOR PROFESSIONAL ENGINEERING SERVICES ON A TASK ORDER BASIS

This Agreement for Professional Engineering Services, hereinafter called "Agreement," is entered into by the **Post Oak Savannah Groundwater Conservation District** an **entity created by the Texas Legislature** of the State of Texas, hereinafter referred to as "Client", duly authorized to act by the **Board of Directors** of said Client, and **HALFF ASSOCIATES, INC.**, a Texas corporation, acting through a duly authorized officer, herein called "Engineer," relative to Engineer providing professional engineering services to the Client. Client and Engineer when mentioned collectively shall be referred to as the "Parties".

WITNESSETH:

For the mutual promises and benefits herein described, the Client and Engineer agree as follows:

1. Term of Agreement. This Agreement shall become effective on the date of its execution by both Parties, and shall continue in effect thereafter until terminated as provided herein.

2. Services to be Performed by Engineer. Engineer shall provide to the Client basic engineering services on an "as needed" or "task order" basis as determined by the Client which services may include, but will not be limited to, those services normally rendered by an engineer to a similar client. It is anticipated that such services may include, but not be limited to planning, surveying, project design, project development, and consultation regarding general engineering issues, review of documentation, GIS services, database services, and defined construction phase services to assist the Client, as determined by the Client. Engineer, upon specific written request by the Client, will prepare a detailed fee schedule for the Client's review and approval. Should the Client request, Engineer may agree to assist the Client in developing and preparing a scope(s) of services responsive to a particular Task Order. Such task orders shall be bound by and interpreted by the terms of this Agreement. Task Orders shall be numbered sequentially. Task Orders will be individual stand-alone proposals and when executed by both Parties shall incorporate the terms of this Agreement such that this Agreement shall be amended. Engineer shall perform its obligations under this Agreement as an independent contractor and not as an agent or fiduciary of any other party.

3. Compensation of Engineer. Client agrees that Engineer shall be paid for any services requested by the Client, at the hourly rates reflected on **Exhibit A**, attached hereto, plus reasonable and necessary reimbursable expenses (Direct Costs) incurred by Engineer in the performance of the requested services. Direct costs shall include, but are not limited to, long distance telephone, postage, equipment, expendables, mileage, subcontractors or special consultants, freight, testing fees, copies and blueprints. See **Exhibit B** for the current Unit Pricing Schedule for direct costs. Direct Costs shall be billed at 1.1 times actual costs. If additional services, trips or expenses are requested, Engineer will not provide such additional services until authorized by the Client in writing to proceed.

Engineer agrees to submit monthly statements to the Client for basic professional engineering services. These statements will be based upon Engineer's actual services performed and reimbursable expenses incurred, if any, and the Client shall endeavor to make prompt payments. Each monthly invoice submitted by Engineer to the Client shall be reasonably itemized to show the amount of work performed during that month broken down by the identity of the person(s) performing such work, the amount of time expended by such person(s) in performing that work, the billing rate for each such person, and a brief summary of the work performed by each such person. If the Client fails to pay Engineer within thirty (30) calendar days of the receipt of Engineer's invoice, Engineer may, after giving ten (10) days written notice to the Client, suspend professional engineering services until payment is received. Client agrees that Engineer shall be entitled to interest on accounts that are greater than 45 days and such interest shall be reimbursed to Engineer at a rate of one percent (1%) per month. The assessment of interest on accounts receivable shall not preclude Engineer from suspending services as described above.

4. Client's Obligations. The Client agrees that it will (i) designate a specific person to act as the Client's representative, (ii) provide Engineer with any previous studies, reports, data, budget constraints, special Client requirements, or other pertinent information known to the Client, when necessitated by a project, (iii) assist Engineer in obtaining access to property necessary for performance of Engineer's work for the Client, (iv) make prompt payments in response to Engineer's statements and (v) respond in a timely fashion to requests from Engineer. Engineer is entitled to rely upon and use, without independent verification and without liability, all information and services provided by the Client or the Client's representatives.

5. Termination of Work - Either the Client or the Engineer may terminate this Agreement at any time with or without cause upon giving the other Party ten (10) calendar days' prior written notice. Client agrees that termination of Engineer for Client's convenience shall only be utilized in good faith, and shall not be utilized if either the purpose or the result of such termination is the performance of all or part of Engineer's services under this Agreement by Client or by another service provider. Following Engineer's receipt of such termination notice the Client shall, within ten (10) calendar days of Client's receipt of Engineer's final invoice, pay the Engineer for all services rendered and all costs incurred up to the date of Engineer's receipt of such notice of termination.

6. Ownership of Documents - Upon Engineer's completion of services and receipt of payment in full, Engineer shall grant to Client a non-exclusive license to possess the final drawings and instruments produced in connection with Engineer's performance of the work under this Agreement, if any. Said drawings and instruments may be copied, duplicated, reproduced and used by Client for the purpose of constructing, operating and maintaining the improvements. Client agrees that such documents are not intended or represented to be suitable for reuse by Client or others for purposes outside the Scope of Services of this Agreement. Notwithstanding the foregoing, Client understands and agrees that any and all computer programs, GIS applications, proprietary data or processes, and certain other items related to the services performable under this Agreement are and shall remain the sole and exclusive property of Engineer and may not be used or reused, in any form, by Client without the express written authorization of Engineer. Client agrees that any reuse by Client, or by those who obtain said information from or through Client, without written verification or adaptation by Engineer, will be at Client's sole risk and without liability or legal exposure to Engineer or to Engineer's employees, agents, representatives, officers, directors, affiliates, shareholders, owners, members, managers, attorneys, subsidiary entities, advisors, subconsultants or independent contractors or associates. Engineer may reuse all drawings, reports, data and other information developed in performing the services described by this Agreement in Engineer's other activities.

7. Notices. Any notices to be given hereunder by either party to the other may be affected either by personal delivery, in writing, or by registered or certified mail.

8. Sole Parties and Entire Agreement. This Agreement shall not create any rights or benefits to anyone except the Client and Engineer, and contains the entire agreement between the parties. Oral modifications to this Agreement shall have no force or effect.

9. Indemnification. Engineer does hereby agree to indemnify Client and its officials, officers, agents, representatives, employees and invitees from and against liability, claims, suits, demands and/or causes of action, (including, but not limited to, reasonable attorney's fees and costs of litigation), which arise by reason of death or injury to property or persons but only to the extent caused by the negligent act or omission or willful misconduct of Engineer, Engineer's employees, agents, representatives, officers, directors, affiliates, shareholders, owners, members, managers, attorneys, subsidiary entities, advisors, subconsultants or independent contractors or associates.

In the event that the Client and Engineer are alleged or found to be concurrently negligent, the Parties agree that all liability shall be calculated on a comparative basis of fault and responsibility and that neither Party shall be required to defend or indemnify the other Party for that Party's negligent or intentional acts, errors or omissions.

10. Insurance. Engineer shall, at its own expense, purchase, maintain and keep in force throughout the duration of this Agreement and for a period of three years thereafter, professional liability insurance. The limits of liability shall be \$1,000,000 per claim and in the aggregate. For coverage provided on a claims-made basis, Engineer agrees to use its best efforts to maintain this policy for a period of four (4) years after the cessation of any work for the Client or shall purchase the extended reporting period or "tail" coverage insurance providing equivalent coverage for the same period of time. Engineer shall submit to the Client a certificate of insurance prior to commencing work for the Client.

11. Prompt Performance by Engineer. All services provided by Engineer hereunder shall be performed in accordance with the degree of care and skill ordinarily exercised under similar circumstances by competent members of the engineering profession in the State of Texas applicable to such engineering services contemplated by this Agreement.

12. Client Objection to Personnel. If at any time after entering into this Agreement, the Client has any reasonable objection to any of Engineer's personnel, or any personnel, professionals and/or consultants retained by Engineer, Engineer shall promptly propose substitutes to whom the Client has no reasonable objection, and Engineer's compensation shall be equitably adjusted to reflect any difference in Engineer's costs occasioned by such substitution.

13. Assignment and Delegation. Neither the Client nor Engineer may assign their rights or delegate their duties without the written consent of the other party. This Agreement is binding on the Client and Engineer to the fullest extent permitted by law. Nothing herein is to be construed as creating any personal liability on the part of any Client officer, employee or agent.

14. Jurisdiction and Venue - This Agreement shall be administered under the substantive laws of the State Texas (and not its conflicts of law principles) which shall be used to govern all matters arising out of, or relating to, this Agreement and all of the transactions it contemplates, including without limitation, its validity, interpretation, construction, performance and enforcement. Exclusive venue shall lie in Milam County, Texas.

15. Integration, Merger and Severability – This Agreement and the authorized Task Orders are fully incorporated herein and represent the entire understanding of Client and Engineer. No prior oral or written understanding shall be of any force or effect with respect to those matters covered herein. The Agreement may not be modified or altered except in writing signed by both Parties. This Agreement constitutes, represents and is intended by the Parties to be the complete and final statement and expression of all of the terms and arrangements between the Parties to this Agreement with respect to the matters provided for in this Agreement. This Agreement supersedes any and all prior or contemporaneous agreements, understandings, negotiations, and discussions between the Parties and all such matters are merged into this Agreement. Should any one or more of the provisions contained in this Agreement be determined by a court of competent jurisdiction or by legislative pronouncement to be void, invalid, illegal, or unenforceable in any respect, such voiding, invalidity, illegality, or unenforceability shall not affect any other provision hereof, and this Agreement shall be considered as if the entirety of such void, invalid, illegal, or unenforceable provision had never been contained in this Agreement.

16. Exclusivity of Remedies – The Parties acknowledge and agree that the remedies set forth in this Agreement, including those set forth in Article 9. Indemnification and Article 20. Agreed Remedies are and shall remain the Parties' sole and exclusive remedy with respect to any claim arising from, or out of, or related to, the subject matter of this Agreement. The Parties agree that Engineer is to have no liability or responsibility whatsoever to Client for any claim(s) or loss(es) of any nature, except as set forth in this Agreement. No Party shall be able to avoid the limitations expressly set forth in this Agreement by electing to pursue some other remedy.

17. Timeliness of Performance - Engineer shall perform its professional services with due and reasonable diligence consistent with sound professional practices.

18. Dispute Resolution. In the event of any disagreement or conflict concerning the interpretation of this Agreement, and such disagreement cannot be resolved by the signatories hereto, the signatories agree to schedule a series of no less than two meetings of senior personnel of Client and Engineer in which the disagreement or conflict will be discussed. The first of such meetings will be scheduled as soon as possible following identification of such disagreement or conflict and the second meeting must occur within thirty (30) days following the initial meeting. Subsequent meetings, if any may be scheduled upon mutual agreement of the parties. The parties agree that these two meetings are conditions precedent to the institution of legal proceedings unless such meetings will adversely affect the rights of one or more of the parties as such rights relate to statutes of limitation or repose.

19. Signatories. The Client and Engineer mutually warrant and represent that the representation of each who is executing this Agreement on behalf of the Client or Engineer, respectively, has full authority to execute this Agreement and bind the entity so represented.

INTENTIONALLY LEFT BLANK

20. Agreed Remedies - IN RECOGNITION OF THE RELATIVE RISKS AND BENEFITS OF THE PROJECT TO BOTH THE CLIENT AND THE ENGINEER, AND ACKNOWLEDGING THAT THE ALLOCATION OF RISKS AND LIMITATIONS OF REMEDIES ARE BUSINESS UNDERSTANDINGS BETWEEN THE PARTIES AND THESE RISKS AND REMEDIES SHALL APPLY TO ALL POSSIBLE LEGAL THEORIES OF RECOVERY. CLIENT FURTHER AGREES, TO THE FULLEST EXTENT PERMITTED BY LAW, AND NOTWITHSTANDING ANY OTHER PROVISIONS OF THIS AGREEMENT OR ANY REFERENCE TO INSURANCE OR THE EXISTENCE OF APPLICABLE INSURANCE COVERAGE, THAT THE TOTAL LIABILITY, IN THE AGGREGATE, OF THE ENGINEER AND ENGINEER'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, AND SUBCONSULTANTS TO THE CLIENT OR TO ANYONE CLAIMING BY, THROUGH OR UNDER THE CLIENT, FOR ANY AND ALL CLAIMS, LOSSES, COSTS OR DAMAGES WHATSOEVER ARISING OUT OF, RESULTING FROM, OR IN ANY WAY RELATED TO, THE SERVICES UNDER THIS AGREEMENT FROM ANY CAUSE OR CAUSES OF THE ENGINEER OR THE ENGINEER'S OFFICERS, DIRECTORS, EMPLOYEES, AGENTS, AND SUBCONSULTANTS, SHALL NOT EXCEED THE ENGINEER'S FEE FOR THE SERVICES PERFORMED UNDER THIS AGREEMENT OR \$50,000, WHICHEVER IS GREATER. INCREASED LIMITS MAY BE NEGOTIATED FOR ADDITIONAL FEE.

Further, it is the intent of the Parties to this Agreement that Engineer's services under this Agreement shall not subject Engineer's individual employees, officers or directors to any personal legal exposure for claims and risks associated with the services performed or performable under this Agreement.

21. Waiver - Any failure by Engineer to require strict compliance with any provision of this Agreement shall not be construed as a waiver of such provision, and Engineer may subsequently require strict compliance at any time, notwithstanding any prior failure to do so.

IN WITNESS WHEREOF, the parties, having read and understood this Agreement, have executed such in duplicate copies, each of which shall have full dignity and force as an original, on the ____ day of _____, 20__.

HALFF ASSOCIATES, INC.

**CLIENT: POST OAK SAVANNAH
GROUNDWATER CONSERVATION DISTRICT**

By: 
Signature

By: _____
Signature

Erin Atkinson
Printed Name

Printed Name

Vice President
Title

Title

July 7, 2017
Date

Date