



CITY OF POMpano BEACH
100 W Atlantic Blvd, Pompano Beach, FL 33060

WORK AUTHORIZATION NO: 5	COPBFL Project Manager: Gary Eagle Phone: 954-786-5521 Email: gary.eagle@copbfl.com COPBFL Contract Specialist: Antonio Pucci Phone: 954-786-5574 Email: Antonio.Pucci@copbfl.com
Firm Name: HDR Engineering, Inc. Address: 1475 Centrepark Blvd. Suite 230 City/State/Zip: West Palm Beach, FL 33401	Firm's Contact Representative: Cody Parham Phone: 561.209.6641 Email: Cody.Parham@hdrinc.com
<p>In accordance with solicitation number E-10-22, Ordinance number 2023-07 dated November 8, 2022 for the performance of Air Park Consulting Services. The desired task outcome will be the delivery of construction phase engineering services for the Runway 10-28 Safety Enhancements construction project at the Pompano Beach Airpark (PMP). Specific project components and fee are shown in the attached Exhibit "A". the City of Pompano Beach hereby directs the firm to perform the services for the project as detailed in the attached scope of work, attached hereto and made a part of this Work Authorization for the amount specified below.</p> <p>All terms and conditions of the Original Contract dated November 14, 2022 approved via Ordinance No. 2023-07 remain unchanged and in full force and effect.</p>	
Description: See attached Exhibit "A" for a detailed scope breakdown.	
Total Work Authorization Amount: \$883,396 CIP/Account No. (For City's internal use): 23-012 465-7730-542.65-12	
Firm/Contractor Approval: See Signature Pages Below	City of Pompano Beach Approval: See Signature Pages Below

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed the day and year hereinabove written.

Witnesses:

CITY OF POMPANO BEACH

By: _____
REX HARDIN, MAYOR

By: _____
GREGORY P. HARRISON, CITY MANAGER

Attest:

KERVIN ALFRED, CITY CLERK

(SEAL)

APPROVED AS TO FORM:

MARK E. BERMAN, CITY ATTORNEY

STATE OF FLORIDA
COUNTY OF BROWARD

The foregoing instrument was acknowledged before me this _____ day of _____, 20__ by **REX HARDIN** as Mayor, **GREGORY P. HARRISON** as City Manager, and **KERVIN ALFRED** as City Clerk of the City of Pompano Beach, Florida, a municipal corporation, on behalf of the municipal corporation, who is personally known to me.

NOTARY'S SEAL:

NOTARY PUBLIC, STATE OF FLORIDA

(Name of Acknowledger Typed, Printed or Stamped)

Commission Number

"CONTRACTOR"

HDR Engineering, Inc.
(Print or type name of company here)

Witnesses:

Michelle J Pardo
Michelle J Pardo
(Print or Type Name)
Kathleen Blackwell
Kathleen Blackwell
(Print or Type Name)

By: Katie E. Duty

Print Name: Katie E. Duty

Title: Vice President

Business License No. _____

STATE OF FLORIDA

COUNTY OF HILLSBOROUGH

The foregoing instrument was acknowledged before me this 18th day of October, 2023, by _____
Katie E. Duty as Vice President of _____

HDR Engineering, Inc., a Florida corporation on behalf of the corporation **Or** a Florida limited liability
company on behalf of the company. He/she is personally known to me or who has produced _____

(type of identification) as identification.

NOTARY'S SEAL:



MICHELLE J. PARDO
Commission # HH 045144
Expires September 22, 2024
Bonded Thru Budget Notary Services

Michelle J. Pardo
NOTARY PUBLIC, STATE OF FLORIDA

Michelle J. Pardo
(Name of Acknowledger Typed, Printed or Stamped)

HH 045144
Commission Number

EXHIBIT A

GENERAL SCOPE OF SERVICES

This document serves as a formal description of the scope of services for the efforts to be performed by the consultant (the CONSULTANT) to provide professional services to the City of Pompano Beach, Florida (OWNER).

GENERAL

After completion of design and bid phase services, the Owner wishes for the Consultant to provide construction phase services. The services consist of the following scope items:

- Construction administration
 - Generally described as information review and processing, such as submittal review, Requests for Information (RFIs), contractor pay application review, evaluation of substitutions, certification. This work is typically performed under the supervision of the Engineer of Record (EOR).
- Resident Project Representative (RPR)
 - Generally described as the firm(s) duly authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observations of tests of the contract work performed or being performed, or of the materials furnished by the Contractor, and acting directly or through an authorized representative.
 - Full-time on site RPR during construction
 - Part-time as needed on site RPR prior to mobilization and after substantial completion
 - Construction materials testing

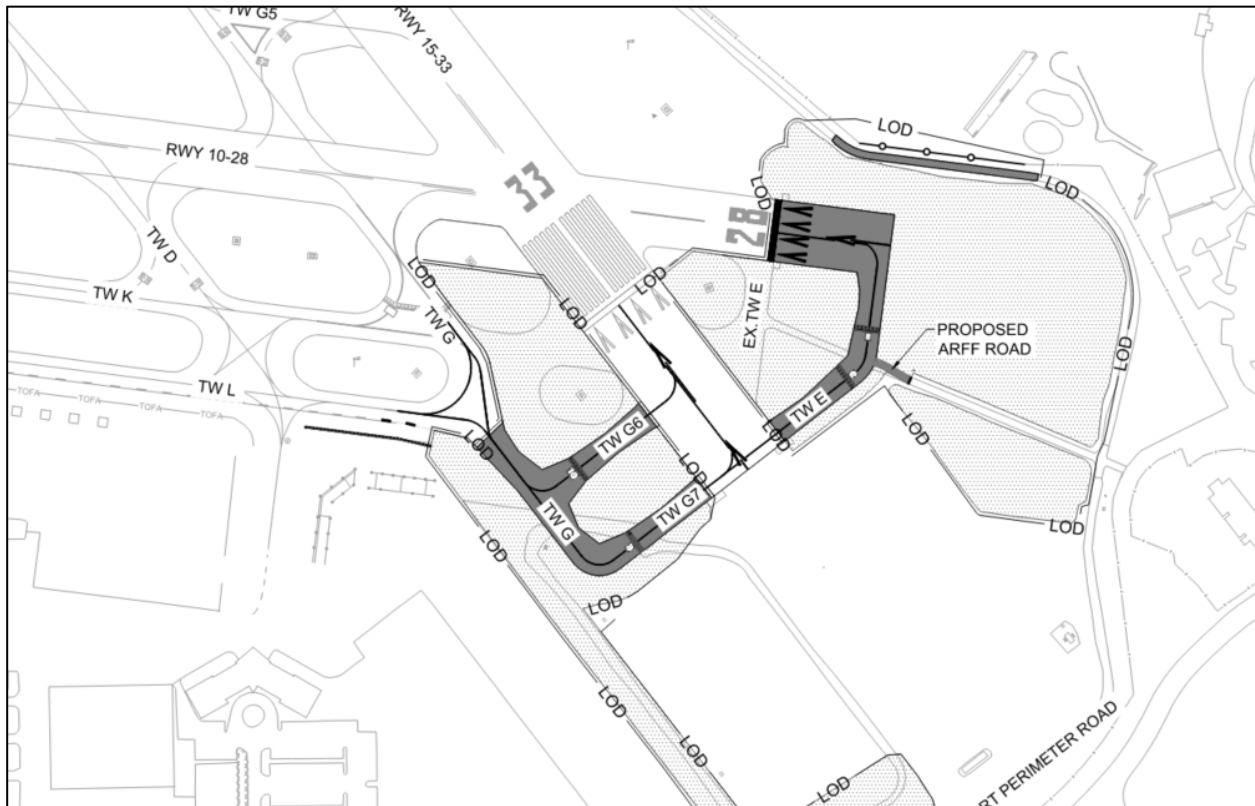


Figure 1 – Project Area Exhibit

Project Schedule

The schedule of CONSULTANT'S services shall follow the construction schedule. The anticipated construction schedule is as follows:

- 60 calendar days / 9 weeks / 2 months mobilization period from NTP to start of field work
 - Construction administration services are based on this duration
- 193 calendar days / 28 weeks / 7 months from start of field work to substantial completion
 - RPR and CA services are based on this duration
- 45 calendar days / 7 weeks / 2 months from substantial to final completion
 - RPR and CA services are based on this duration
 - Substantial completion and final completion services are based on this duration
- 383 days / 55 weeks / 13 months from NTP to final completion, with contingency.

Construction Phasing

Construction Phase	Duration (Calendar Days)	Work Hours
Pre-Construction	60	
Mobilization	60	N/A
Construction	193	
Staging Area and Haul Route Setup	16	None
Work Area 1	85	7am – 4pm, M-F
Work Area 2	32	7am – 4pm, M-F
Work Area 3	51	7am – 4pm, M-F
Work Area 3A*	27	7am – 4pm, M-F
Work Area 4	9	7am – 4pm, M-F
Post-Construction	45	
Substantial Completion	45	N/A
Contingency	85	
Total	383	

*Sub-phase concurrent with above phase

Task 1 Resident Project Representative

- Resident Project Representative (RPR). CONSULTANT will provide the services of an RPR at the Site to provide observation of Contractor's work. The CONSULTANT shall provide daily observation reports to the Owner.

Service	Preconstruction Phase	Construction Phase	Substantial Completion Phase
Civil RPR	24 hrs/wk x 9 weeks	32 hrs/wk x 40 weeks	24 hrs/wk x 7 weeks
Electrical RPR	16 hrs/wk x 9 weeks	24 hrs/wk x 40 weeks	16 hrs/wk x 7 weeks

- Preconstruction meeting. The CONSULTANT shall lead the project construction kickoff meeting. The CONSULTANT will develop the agenda and issue notes.
- The CONSULTANT shall lead up to 55 weekly construction progress meetings. The CONSULTANT will develop the agenda and issue notes.
- Contract documents. Maintain the current record version of the contract documents throughout the construction phase.
- Schedule. CONSULTANT shall review the contractor's weekly look ahead schedule for the duration of active construction.
- Change Proposals and Claims: CONSULTANT will review and respond to up to 10 Change Proposals. CONSULTANT will review each duly submitted Change Proposal from Contractor and recommend either denying the Change Proposal in whole, recommend approving it in whole, or

recommend denying it in part and approving it in part. CONSULTANT shall maintain a tracking log of change proposal status.

- The CONSULTANT shall review the following technical specification submittals for compliance with the contract documents as a supplement to the EOR's review.
 - Contractor Quality Control Plan
 - Safety Plan Compliance Document
 - Asphalt Laydown/Lighting Plan
- The CONSULTANT will review up to 13 contractor pay applications and recommend either rejection, approval, or partial approval to the Owner.
- The CONSULTANT will issue punch lists at the completion of each phase and track resolution of the items. CONSULTANT shall issue a substantial completion recommendation for each phase upon completion of the punch lists.
- After notice from Contractor that Contractor considers the entire work ready for its intended use, in company with Owner, EOR, and Contractor, visit the site to review the work and determine the status of completion. The CONSULTANT shall perform a substantial completion site visit review and provide a punch list of open items for the contractor to address. CONSULTANT will incorporate the Owner's and EOR's punch list items into the master punch list. CONSULTANT will recommend to the Owner on what date the substantial completion notice should be recorded.
- The CONSULTANT shall perform a final completion site visit to observe the contractor's work to address the punch list. CONSULTANT will recommend to the Owner on what date the final completion notice should be recorded.
- Contractor's Completion Documents. CONSULTANT will receive from Contractor, review, and transmit to Owner maintenance and operating instructions, schedules, guarantees, bonds, certificates, or other evidence of insurance required by the Construction Contract Documents, certificates of inspection, tests and approvals. CONSULTANT will receive from Contractor, review, and transmit to Owner the annotated record documents which are to be assembled by Contractor in accordance with the Construction Contract Documents to obtain final payment. The extent of CONSULTANT's review of record documents shall be to check that Contractor has submitted all pages.
- Construction Materials Testing
 - Schedule and review owner's quality assurance inspection and testing as described in the Volume II - Technical Specifications.
 - Performance of tests and inspections work to be performed by SUBCONSULTANT TSF.
 - Density tests of soils and base courses using nuclear density methods, proctor tests, gradation tests and organic content tests
 - Senior engineering technician to assist with asphalt plant testing during initial test section and production
 - Engineering technician for concrete testing and compression testing of concrete cylinders
 - Daily reports to RPR

Task 2 Construction Administration

- The EOR will attend the preconstruction meeting
- The CONSULTANT shall attend up to 55 weekly construction progress meetings. The CONSULTANT will review the RPR's agenda and notes and respond if requested.
- Stakeholder Coordination.
 - CONSULTANT shall prepare up to 5 exhibits depicting upcoming airfield closures and renaming of taxiways for owner's use when meeting with stakeholders.

- The consultant shall produce a construction management plan and submit it to the FAA on behalf of the owner.
- The CONSULTANT shall maintain, update, and distribute contract documents throughout the duration of the project.
- Schedule. CONSULTANT shall review the contractor's weekly schedule for the duration of active construction up to 55 weeks.
- Clarifications and Interpretations: Accept from Contractor and Owner submittal of matters concerning the requirements of the Construction Contract Documents (sometimes referred to as requests for information—RFIs), or relating to the acceptability of the Work under the Construction Contract Documents. Within 2 weeks, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Construction Contract Documents for up to 20 RFIs. CONSULTANT shall maintain a tracking log of RFI status.
- Change Proposals and Claims: CONSULTANT will review and respond to up to 10 Change Proposals. CONSULTANT will review each duly submitted Change Proposal from Contractor and recommend either denying the Change Proposal in whole, recommend approving it in whole, or recommend denying it in part and approving it in part.
- The CONSULTANT shall review project technical specification submittals for compliance with the contract documents.
- The CONSULTANT will evaluate and respond to up to 5 contractor requests for substitution.
- Inspections and Tests
 - Review owner's quality assurance inspection and testing as described in the technical specifications for compliance with the contract documents.
- The CONSULTANT will review up to 13 contractor pay applications and recommend either rejection, approval, or partial approval to the CITY. Consultant shall review pay applications for Buy American, DBE and Davis-Bacon wage rate documentation.
- Consultant shall submit quarterly DBE monitoring reports to the FAA
- Consultant shall perform FAA grant support services, consisting of monthly project progress reports.
- Consultant shall coordinate the FAA NAVAID check flights
- After notice from Contractor that Contractor considers the entire Work ready for its intended use, in company with CITY and Contractor, visit the Site to review the Work and determine the status of completion. The CONSULTANT shall perform a substantial completion site visit review and provide a punch list of open items for the contractor to address. CONSULTANT will rely on the RPR to incorporate the EOR's comments and create a master punch list.
- The CONSULTANT shall perform a final completion site visit to observe the contractor's work to address the punch list. CONSULTANT will advise on the disposition of punch list items to the RPR.
- CONSULTANT shall obtain the contractor's record drawings and review for agreement with the RPR's notes.
- Certifications. The CONSULTANT shall provide the EOR's certification to the following:
 - Funding agencies FAA and FDOT, if requested.
 - South Florida Water Management District Environmental Resource Permit Notice of Construction
 - Form 7460-2 'Notice of Actual Construction'

Task 3 Wildlife Mitigation Services

- Initial Survey- CONSULTANT will perform a 100% Florida burrowing owl survey and a 100% gopher tortoise survey of the project site after the Contractor NTP, within 90 days of the permit application submittal, and prior to mobilization. This survey will occur outside of the typical Florida Burrowing Owl

- nesting season, which is from February 15 to July 10. (3 x 8-hr field days, plus one day travel for two people, plus coordination)
- CONSULTANT will summarize the results of the survey in a report.
 - CONSULTANT will participate in one virtual meeting with the construction team to present the results of the survey and discuss if burrows (and required buffer areas) can be avoided and protected during construction.
 - FWC Permitting
 - If potentially occupied owl burrows are identified within the project area and cannot be avoided and protected, CONSULTANT will prepare and submit an FWC Migratory Bird Nest Removal Permit and Burrowing Owl Supplemental application after the initial survey to start the permitting process prior to Contractor mobilization.
 - If potentially occupied gopher tortoise burrows are identified, CONSULTANT will prepare and submit an FWC 10 or Fewer Burrows Permit application, after the initial survey to start the permitting process prior to Contractor mobilization.
 - Scoping, Excavation, and 48-hr Pre-construction Survey - Upon permit approval, CONSULTANT will perform a site visit within 48-hours prior to the of commencement of construction and outside of the typical Florida Burrowing Owl nesting season to : (4 8-hr field days, plus one day travel for two people, plus coordination)
 - Florida Burrowing Owl
 - perform a pre-construction wildlife survey within 48-hours period before construction mobilization begins to determine if any new potentially occupied burrows or active nests (i.e., burrows with eggs or flightless young) are present.
 - scope the on-site burrows to verify that they are unoccupied (without eggs or flightless young); and
 - for burrows that are confirmed to be unoccupied, scoping will be followed by excavation of the burrow by hand.
 - Gopher Tortoise
 - Relocate up to one gopher tortoise to a suitable on- or off-site location, dependent on what is approved by FWC.
 - Permit and recipient site fees are listed under 'Wildlife Mitigation' or 'Permit Fees' in the fee calculation, if provided.
 - CONSULTANT will participate in one virtual meeting with the construction team to coordinate the survey activities and where contractor can work. CONSULTANT will advise contractor of any burrowing owl burrows that could not be excavated if any are found to be occupied.
 - Due to anticipated impacts to up to 14 potentially occupied Florida burrowing owl burrows outside of the breeding season, mitigation will be required. Mitigation will also be required if any gopher tortoise must be relocated.

Task 4 Subconsultant QEE

Construction administration and Senior RPR for mobilization, construction phase and substantial completion for electrical, signage, and lighting components.

- Consists of attending pre-construction meeting with Owner, Contractor and RPR Team.
- Consists of preparation of conformed documents for construction.
- Consists of 16 hours weekly of support during the Preconstruction Phase.
- Consists of electrical submittal(s) reviews and approvals.
- Consists of Engineer of Record attend weekly meeting with Owner, Contractor and RPR Team.
- Consists of 24 hours weekly of on-site observation during the Construction Phase and attendance to progress meetings.

- Consists of 8 hours weekly of on-site observation on Fridays during the absence of City staff during the Construction Phase
- Consists of up to 4 hours of monthly of site visits during the Construction Phase by the Engineer of Record.
- Consists of request for information (RFI) reviews and responses.
- Consists of change order reviews and comments.
- Consists of (1) on-site visit for substantial completion walk through and creation of electrical punch list items.
- Consists of 16 hours weekly of support during the Substantial Completion Phase.
- Consists of (1) on-site visit for final completion inspection and review of electrical punch list items.
- Consists of review of Contractor “Red Line Plan Mark-ups” (As-Builts).
- Consists of creation of Record Drawings based on Contractor “Red Line Plan Mark-ups.”
- QEE to provide Record Drawings to CONSULTANT in AutoCAD 2020 and PDF Format.

Task 5 Airspace Obstruction Evaluation

Through subconsultant NV5, CONSULTANT shall provide new vertical stereo digital imagery at a physical image scale of 1" = 1,339' of Runway 10-28. The aerial imagery will cover the Runway 28 area using a Digital Mapping Camera II-230 (DMC II-230), or comparable. Per FAA Policy Guidance issued 9/22/22, Obstacle Authoritative Source (OAS) obstacle data will be evaluated, updated, and/or incorporated into the (OAS) obstacle data (263 existing objects in OAS within the boundary) as a part of this project. NV5 Geospatial will be responsible for updates to the OAS data using the FAA's Runway Airspace Management tool.

From the 1"= 1,339' imagery, produce the following:

- 12" Color Digital Orthophoto

Mobilize a ground survey crew and provide:

- Runway ends
- Runway thresholds
- Runway profile – 50 foot stations
- New or relocated on airport Runway 28 NAVAIDs

Control Surveying

The aerial photography will be completed with ABGPS control which will be used for the base control for the geo-referencing of the aerial imagery. NV5 Geospatial will process the ABGPS data using COR stations and reference it to the project control datums:

- Horizontal: North American Datum of 1983/2011 (NAD 83(2011)), in the FL State Plane Coordinate System, East Zone in US survey feet.
- Vertical: North American Vertical Datum of 1988 (NAVD 88)

Orthophoto Mapping

Use the control solution and imagery to generate a Digital Elevation Model (DEM) of the airport runway. The imagery will be processed into color digital orthophotos using the aforementioned DEM to rectify the images. Orthophotos for the airport property area will be developed with a 1.0' pixel resolution.

Orthos will be delivered in a GeoTIFF file format.

Deliverables

NV5 Geospatial will submit data collected and associated deliverable in the formats specified in the appropriate advisory circulars to the FAA Office of Airports, Airports Surveying-GIS Program. Data submissions to the FAA will be through the program's web site at <http://airports-gis.faa.gov>. The AC 150/5300-17C project data deliveries that will not be submitted through the web site will be delivered on external hard drives or DVDs. The 18B deliverables that will be uploaded to the AGIS website consist of:

- Statement of Work, Imagery Plan and Survey and Quality Control Plan
- Image Delivery
- Runway ends
- Runway thresholds
- Runway profile
- New or relocated NAVAIDs
- Color digital orthophotos
- FGDC compliant metadata
- Final Report
- Color digital orthophotos with a 1.0' pixel resolution in GeoTIFF (airport property)

CONSULTANT shall review the new imagery to validate previously determined obstacle data and review the existing OAS features for updates in the FAA's Runway Airspace Management (RAM) Tool.

Deliverables

Task	Deliverables
1 Resident Project Representative	<ul style="list-style-type: none"> • Daily RPR Reports • Quality assurance inspections and test reports • Meeting notes • Change Order recommendations and log • Pay Application recommendations • Phase completion recommendation • Recommendation of substantial completion and punchlist • Recommendation of final completion • Contractor's completion documents • Copies of QA reports • All submittals in PDF format unless noted
2 Construction Administration	<ul style="list-style-type: none"> • Airfield status exhibits • RFI responses • Change Order recommendations • Pay Application recommendations • Recommendation of substantial completion and punchlist • Recommendation of final completion • Engineer's certification to funding agencies • All submittals in PDF format unless noted
3 Wildlife Mitigation Services	<ul style="list-style-type: none"> • Report • Permits as required by site conditions
4 QEE	<ul style="list-style-type: none"> • Conformed electrical drawings • Electrical submittal reviews and approvals • RFI responses
5 NV5	<ul style="list-style-type: none"> • Data submissions to FAA Office of Airports Surveying-GIS Program through web site at http://airports-gis.faa.gov • AC 150/5300-17C project data deliveries via external hard drive or DVD • 18B deliverables to AGIS website consisting of: <ul style="list-style-type: none"> ○ Statement of Work, Imagery Plan and survey and Quality Control Plan ○ Image Delivery ○ Runway Ends ○ Runway Thresholds ○ Runway Profile ○ New or relocated NAVAIDs ○ Color digital orthophotos ○ FGDC compliant metadata • Final Report

Assumptions

- If construction extends beyond the timeframe stated in this Contract, additional services may be required.
- Coordination with Federal Aviation Administration (FAA) to identify FAA underground facilities will be conducted by Owner.
- Opinions of probable project cost or probable construction cost provided by Consultant are made on the basis of information available to Consultant and on the basis of Consultant's experience and qualifications and represents its judgment as an experienced and qualified professional engineer. However, since Consultant has no control over the cost of labor, materials, equipment or services furnished by others, or over the construction contractor(s') methods of determining prices, or over

competitive bidding or market conditions, Consultant does not guarantee that proposals, bids or actual project or construction cost will not vary from opinions of probable cost Consultant prepares.

- Consultant's observation or monitoring portions of the work performed under construction contracts shall not relieve construction contractor(s) from responsibility for performing work in accordance with applicable contract documents. Consultant shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction. Consultant shall not be responsible for the acts or omissions of construction contractor(s) or other parties on the project. The Owner agrees to contractually require its construction contractor(s) to indemnify Consultant for damages resulting from the negligence of the contractor and its subcontractors. The Owner also agrees to include a provision in the construction contract with its contractor(s) requiring them to name Consultant as an additional insured on contractor(s') commercial general liability insurance.
- CONSULTANT, as the applicant's designated agent, will meet minimum qualifications to scope or excavate a burrow as part of an incidental take permit, as defined by FWC.
- The project site is comprised of approximately 13.5 acres, including the haul route and staging area.
- Per FWC guidance: The FWC typically issues permits only for excavation and filling of inactive burrows (i.e., burrows that do not contain eggs or flightless young), except in situations involving health and human safety.
- USFWS federal permit is not anticipated as long as the project 1) occurs outside of breeding season and 2) avoids impacts to active nest burrows (i.e., burrows containing eggs or flightless young) in accordance with the Migratory Bird Treaty Act (16 USC 703-712).
- The FWC 10 or Fewer Burrows Permit is suitable for sites with: 1) 10 or fewer gopher tortoise burrows on the development site, 2) sites that cannot avoid disturbance to all tortoise burrows on the development site by 25 feet or more, and 3) suitable habitat will remain on-site following site development or the gopher tortoises will be relocated off-site to a permitted recipient site by an authorized agent.
- Permit amendments for owls returning to site 48 hours after initial excavation and filling of burrows are excluded.

Schedule

The services will be provided concurrent with the construction schedule stated above.

Compensation

CONSULTANT will accomplish the services outlined in this Scope of Services for the fee of \$883,806.00. Billings will be monthly based on the progress of the tasks.

The following tasks represents the fee amount for reference:

Task	Fee
1 RPR	\$322,978.00
2 Construction Administration	\$282,411.00
3 Wildlife Mitigation	\$31,586.00
4 Subconsultant QEE	\$168,356.00
5 Subconsultant NV5	\$31,305.00
6 Subconsultant TSF	\$18,570.00
7 Permit Fees	\$5,000.00
8 Reimbursables	\$23,190.00
Total	\$883,396.00

Exhibit B
Work Break Down Fee Schedule
Additional Services for R-2017-0409 PBI Central Airfield Improvements 'Construction Services'

LABOR TASKS	Sr. Project Manager	Project Manager	Sr. Engineer	Staff Engineer	Senior Inspector	Project Field Inspector	Senior Graphics/GIS	Graphics/GIS	Sr. EI	Designer	Sr. Admin Assistant	LABOR SUBTOTALS	Task Total
Contract Rate	\$293.00	\$258.00	\$246.00	\$205.00	\$223.00	\$186.00	\$177.00	\$118.00	\$115.00	\$110.00	\$120.00		
Task 1 Resident Project Representative (T&E)													
Civil RPR					334	1336						1,670	
												0	
1 - Subtotal Hours	0	0	0	0	334	1336	0	0	0	0	0	1670	
1 - Subtotal Estimated Labor Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$74,482.00	\$248,496.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$322,978.00	\$322,978.00
Task 2 Construction Administration (LS)													
PM and sub admin (16 hr setup + 2 hr/mo *13 mo + 8 hr closeout)		50		16							60	126	
Preconstruction meeting		8		16					4			28	
Construction progress meeting		110		60								170	
Stakeholder Coordination		8		32					32			72	
Construction Management Plan	5	10		30								45	
Maintain contract documents				40					40			80	
Construction schedule review		15		30								45	
Clarification and Interpretations (RFIs)	8	48	90	100					40			286	
Review change proposals	10	24		80					32			146	
Front End and Tech Spec submittal review	16	10		30					85			141	
Substitution Request evaluation	5	10		24					8			47	
Review contractor pay applications (13)		8		13					8			29	
DBE monitoring	15											15	
Grant support		15							20			35	
NAVAID check flight		20		10								30	
Substantial Completion site visit and punch list		10							8			18	
Final completion site visit and recommendation		8							6			14	
Review contractor's completion documents		10							30			40	
EOR Certifications				8								8	
Review/document QA inspections and tests		4							40			44	
2 - Subtotal Hours	59	368	90	489	0	0	0	0	353	0	60	1,419	
2 - Subtotal Estimated Labor Cost	\$17,287.00	\$94,944.00	\$22,140.00	\$100,245.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40,595.00	\$0.00	\$7,200.00	\$282,411.00	\$282,411.00
Task 3 Wildlife Mitigation (LS)													
Initial Survey							2	54		40		96	
FWC Permitting							6	32		10		48	
Scoping, Excavation and Pre-Con Survey							2	66		58		126	
3 - Subtotal Hours	0	0	0	0	0		10	152	0	108	0	270	
3 - Subtotal Estimated Labor Cost	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$1,770.00	\$17,936.00	\$0.00	\$11,880.00	\$0.00	\$31,586.00	\$31,586.00
Total Hours	59	368	90	489	334	1336	10	152	353	108	60	3,359	
Billable Hourly Rate	\$293.00	\$258.00	\$246.00	\$205.00	\$223.00	\$186.00	\$177.00	\$118.00	\$115.00	\$110.00	\$120.00		
Total HDR Labor Effort	\$17,287	\$94,944	\$22,140	\$100,245	\$74,482	\$248,496	\$1,770	\$17,936	\$40,595	\$11,880	\$7,200	\$636,975.00	\$636,975.00

Subconsultants

TASK	DESCRIPTION	QUANTITY								ITEM	UNIT COST	AMOUNT
	Expenses											
4	OEE	1								LS	\$168,356.00	\$168,356.00
5	NVS	1								LS	\$31,305.00	\$31,305.00
	TSF	1								T&E	\$18,570.00	\$18,570.00
	Permit Fees	1								T&E	\$5,000.00	\$5,000.00
TOTAL EXPENSES												\$223,231.00

Reimbursables (T&E)

Reproduction	# Drawings	# Pages	# Sets										
	@	@											
	\$ 3.00	\$ 0.50											
Conformed for construction drawings	115		5								\$ 1,725.00		
Meeting Exhibits	10		10								\$ 300.00		
Project Manual		458	5								\$ 1,145.00		
												Total Reproduction	\$ 3,170.00
Postage/Delivery	# Packages	#Packages											
	@	@											
	\$ -	\$ -											
Conformed for construction documents	0	0									\$ -		
												Total Postage/Delivery	\$ -
Travel			Airfare @	Car @	Fuel @	Lodging @	Vehicles	Months @	Meals @	Parking			
	# People	# Days	\$ 300.00	\$ 100.00	\$ 3.50	\$ 250.00		\$ 700.00	\$ 75.00	\$ 20.00			
	\$ -	\$ -											
Construction Vehicle							1	13			\$ 9,100.00		
Environmental Support Visits (2 visit per month for 13 month construction)	1	26	0	26	1,820.00				\$ 26.00	0	\$ 10,920.00		
												Total Travel	\$ 20,020.00
												Reimbursables (Not to Exceed)	\$23,190.00
												Total	\$883,396.00

March 24, 2023

Matthew Wilke, P.E.
HDR, Inc.
1917 S. 67th Street
Omaha, NE 68106

Project: 040289 | Pompano Beach Airpark (PMP) As Built for Runway 10/28

Dear Mr. Bowdoin,

This summary of work describes our understanding of the scope of work and services required for an As Built Survey at Pompano Beach Airpark located in Pompano Beach, FL. The project will be done in compliance with AGIS policies. The Advisory Circulars identified below detail the data collection requirements and accuracies for the project and the verification process by the Federal Aviation Administration (FAA) and the National Geodetic Survey (NGS).

- AC 150/5300-16B "General Guidance and Specifications for Aeronautical Surveys: Establishment of Geodetic Control and Submission to the National Geodetic Survey"
- AC 150/5300-17C, Change 1 "Standards for Using Remote Sensing Technologies in Airport Surveys"
- AC 150/5300-18B, Change 1 "Survey and Data Standards for Submission of Aeronautical Data Using Airports GIS"

Summary of Work

For this project, we will acquire new vertical stereo digital imagery at a physical image scale of 1" = 1,339' of the runway. The aerial imagery will cover the Runway 28 area using a Digital Mapping Camera II-230 (DMC II-230), or comparable. In addition, and per FAA Policy Guidance issued 9/22/22, we will be evaluating, updating, and/or incorporating the Obstacle Authoritative Source (OAS) obstacle data (263 existing objects in OAS within the boundary shown in Exhibit 1) as a part of this project. NV5 Geospatial will be responsible for any updates to the OAS data using the FAA's Runway Airspace Management tool.

From the 1"= 1,339' imagery, we will produce the following:

- 12" Color Digital Orthophoto

We will also mobilize a ground survey crew and provide:

- Runway ends
- Runway thresholds
- Runway profile – 50 foot stations
- New or relocated on airport Runway 28 NAVAIDs

Quality Standards

The project has been designed to conform to the National Map Accuracy Standards for 12" inch orthophoto production. In addition, we insure that the photogrammetric mapping will meet all FAA and NGS standards. We will exercise reasonable care and will conform to the standards of practice ordinarily used by the photogrammetric profession.

Project Area

The project area encompasses the Runway 28 area of Pompano Beach Airpark (PMP).

Control Surveying

The aerial photography will be completed with ABGPS control which will be used for the base control for the geo-referencing of the aerial imagery. NV5 Geospatial will process the ABGPS data using COR stations and reference it to the project control datums:

Horizontal: North American Datum of 1983/2011 (NAD 83(2011)), in the FL State Plane Coordinate System, East Zone in US survey feet.

Vertical: North American Vertical Datum of 1988 (NAVD 88)

Orthophoto Mapping

We will use the control solution and imagery to generate a Digital Elevation Model (DEM) of the airport runway. The imagery will be processed into color digital orthophotos using the aforementioned DEM to rectify the images. Orthophotos for the airport property area will be developed with a 1.0' pixel resolution. Orthos will be delivered in a GeoTIFF file format.

Production Schedule

We will work with you to finalize a mutually agreeable schedule for the project after FAA Control Plan approvals. We will make a reasonable effort to maintain the agreed-upon schedule. However, should the project be interrupted by technical problems beyond our control, including control deficiencies or map file re-deliveries rescheduling may become necessary.

Deliverables

NV5 Geospatial will submit all data collected and associated required deliverable in the formats specified in the appropriate advisory circulars to the FAA Office of Airports, Airports Surveying-GIS Program. All data submissions to the FAA will be through the program's web site at <http://airports-gis.faa.gov>.

The AC 150/5300-17C project data deliveries that will not be submitted through the web site will be delivered on external hard drives or DVDs.

The 18B deliverables that will be uploaded to the AGIS website include:

- Statement of Work, Imagery Plan and Survey and Quality Control Plan
- Image Delivery
- Runway ends
- Runway thresholds
- Runway profile
- New or relocated NAVAIDs
- Color digital orthophotos
- FGDC compliant metadata
- Final Report

We will deliver the following items to HDR:

- Color digital orthophotos with a 1.0' pixel resolution in GeoTIFF (airport property)

We will also review the new imagery to validate previously determined obstacle data and review the existing OAS features for any updates in the FAA's Runway Airspace Management (RAM) Tool.

All digital files will be delivered on external hard drive, FTP, email, or CD/DVD.

Cost and Payment Terms

Compensation for the above services will be provided as a lump sum cost of U.S. \$31,305.00

Client Responsibilities

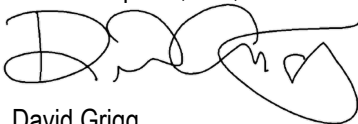
The successful and timely completion of this project is dependent upon a number of elements and work tasks, some of which involve participation by HDR. You will be responsible for designating a representative for the project who will have the authority to transmit instructions, receive information, and make timely decisions with respect to the services provided by NV5 Geospatial.

NV5 Geospatial Representative

Jill Mahoney, Project Manager and Marlin Zook, Technical Manager, will represent us during the performance of the services to be provided under this agreement. Each has the authority to transmit and receive instructions and make decisions with respect to the services. Each is authorized to commit the necessary resources towards completing the services described herein.

We look forward to working with you and your staff to complete this project in a timely and cost effective manner. Should you have any questions, please call our office at (803) 351-3136 or email me at the address shown below.

Sincerely,
NV5 Geospatial, Inc.,



David Grigg
Aviation Program Director
David.Grigg@nv5.com

April 21, 2023

Mr. Cody Parham, PE
HDR, Inc.
1475 Centrepark Boulevard – Suite 230
West Palm Beach, FL 33401-7412

Subject: Electrical Construction Services (CA) Fee Proposal for the Pompano Beach
Airpark (PMP) – Runway 10-28 Safety Enhancements

Dear Cody:

Quantum Electrical Engineering, Inc. (QUANTUM) is pleased to provide HDR a construction services fee proposal for the PMP Runway 10-28 Safety Enhancement project. This proposal is based on a total construction duration of 315 calendar days, including a 76 calendar day Preconstruction Phase, 195 calendar day Construction Phase and 44 calendar days for Substantial Completion.

The following items are included in our scope:

- Includes attending pre-construction meeting with PMP, Contractor and RPR Team.
- Includes preparation of conformed documents for construction.
- Includes 16 hours weekly of support during the Preconstruction Phase.
- Includes electrical submittal(s) reviews and approvals.
- Includes Engineer of Record attend weekly meeting with PMP, Contractor and RPR Team.
- Includes 24 hours weekly of on-site observation during the Construction Phase including attendance to progress meetings. Includes 8 hours weekly of on-site observation on Fridays during the absence of City staff during the Construction Phase
- Includes up to 4 hours of monthly of site visits during the Construction Phase by the Engineer of Record.
- Includes request for information (RFI) reviews and responses.
- Includes change order reviews and comments.
- Includes (1) on-site visit for substantial completion walk through and creation of electrical punch list items.
- Includes 16 hours weekly of support during the Substantial Completion Phase.
- Includes (1) on-site visit for final completion inspection and review of electrical punch list items.
- Includes review of Contractor “Red Line Plan Mark-ups” (As-Builts).
- Includes creation of Record Drawings based on Contractor “Red Line Plan Mark-ups.”
- QUANTUM to provide Record Drawings to HDR in AutoCAD 2020 and PDF Format.
- HDR shall provide all printing of plans/record drawings.

Our proposed Not-to-Exceed fee is:
(See attachment breakdown)

\$ 169,356.00

Sincerely,

A handwritten signature in blue ink, appearing to read 'Amy L. Champagne-Baker'.

Amy L. Champagne-Baker, PE
President

Pompano Beach Airpark- Runway 10-28 Safety Enhancements
QUANTUM ELECTRICAL ENGINEERING, INC.
CA SERVICES SCOPE FEE SUMMARY
FEE PROPOSAL 4/21/2023

	Rate	\$180.00	\$160.00	\$140.00	\$90.00	\$140.00	\$48.00		
	Proj. Mgr.	Prof. Eng	Proj. Eng	CADD/Tech	Field Eng./RPR	Admin	Total		TOTAL
PHASE OF WORK	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Expenses	TASK COST
Construction Services (CA)									
Pre-Construction Conference		2			2		4		\$600.00
Prepare Conformed Documents		1		2			3		\$340.00
Preconstruction Support (16hrs/wk for 11wks)		10			176		186		\$26,240.00
Attendance of Weekly Construction meetings (45 meetings)		45					45		\$7,200.00
Review and Approve Shop Drawings		20			16	6	42		\$5,728.00
On-site Observation during Construction (24hrs/wk for 28wks)					672	28	700		\$95,424.00
Site Visit (4hrs/month for 7 months)		28					28		\$4,480.00
Respond to Requests for Information (RFI)		16		8	4		28		\$3,840.00
Change Order Request Review and Insuance		8		4	8		20		\$2,760.00
Pay Application Reviews (10 pay apps@2hrs/ea)					20		20		\$2,800.00
Substantial Completion Walk Through (1)		8			8	1	17		\$2,448.00
Substantial Completion Support (16hrs/wk for 6wks)					96	6	102		\$13,728.00
Final Completion Walk Through (1)		8					8		\$1,280.00
Review As-builts					4		4		\$560.00
Prepare Record Documents		1		8		1	10		\$928.00
Subtotal	0	147	0	22	1006	42	1217		\$168,356.00
Grand Total Hours	0	147	0	22	1006	42	1217		\$168,356.00
Grand Total Labor Cost	\$0.00	\$23,520.00	\$0.00	\$1,980.00	\$140,840.00	\$2,016.00			



April 13, 2023

HDR, Inc.
1475 Centrepark Boulevard
Suite 230
West Palm Beach, FL 33401
Attn: Mr. Matthew Wilke, P.E.
email: matthew.wilke@hdrinc.com

**Re: Proposal for Construction Material Testing Services
Runway 10-28 Safety Enhancements, Pompano Beach Airpark (PMP)
City of Pompano Beach, Florida
TSFGeo Proposal No. 2203-167**

Dear Mr. Wilke:

As requested, TSFGeo is pleased to submit this proposal for providing QA Construction Material Testing for the above-referenced project. Herein, we provide a general discussion of services that we understand will be required for this project, present our Schedule of Fees for such services.

PROJECT DESCRIPTION

Our proposal is based on construction documentation provided to this office, technical specifications and FAA/FDOT general provisions. We understand that the project will include embankment, subgrade, base and asphalt reconstruction/resurfacing. Backfill for electrical conduit and fixtures are also anticipated.

SCOPE OF SERVICES

The following scope of services will be required at this project:

- Density tests (using nuclear density methods) on embankment fill and backfill along with representative Proctor tests, gradation and organic content tests;
- Density tests (using nuclear density methods) on stabilized subgrade and basecourse material, along with representative LBR tests and gradation tests;
- Provide senior engineering technician to assist with asphalt plant testing during initial test section;
- Provide senior engineering technician to assist with asphalt plant inspections and testing during production; and,
- Issue daily reports in FAA format to Civil Designer.

QUALIFICATIONS

TSF will provide experienced technical personnel to perform the necessary testing and inspection services in accordance with the project specifications. We propose to accomplish the scope of our services on a unit rate basis in accordance with the attached fee breakdown. TSF's fees will be determined by the actual amount of technical time expended for this project and the amount of laboratory testing performed.

TSF's laboratory and personnel fully comply with the standards of ASTM, ACI, AASHTO, AISC, AWS and FAA standards. Our laboratory maintains CMEC and FDOT certification and is staffed by experienced and certified field and laboratory personnel. In addition, we are currently providing similar services in vicinity airports and are very familiar with the general site conditions as well as the local construction practices.

ESTIMATED FEES

We proposed to accomplish the above services on a unit rate schedule basis using the attached rates for an estimated amount of **\$ 18,570.00.**

We appreciate the opportunity to offer our services for your project. Should you have any questions or need additional information, do not hesitate to contact me at (561) 687-8536.

Respectfully submitted,
TSFGEO



Wilson Gonzalez
Construction Services



Morgan Dickinson, P.E.
Principal Engineer

Attachments: Fee Breakdown

Fees Breakdown for Construction Materials Testing Services

ITEM	Quantity	Rate	Units	Extended
Field and Laboratory Testing Services				
SOILS				
In-place density tests (min 5 tests/trip)	100	\$ 30.00	test	\$ 3,000.00
Standard Proctor	4	\$ 105.00	test	\$ 420.00
Modified Proctor	2	\$ 125.00	test	\$ 250.00
LBR	2	\$ 300.00	test	\$ 600.00
Gradation	8	\$ 75.00	test	\$ 600.00
Organic Content	6	\$ 50.00	test	\$ 300.00
Carbonate Content Test	1	\$ 100.00	test	\$ 100.00
Subtotal				\$ 5,270.00
CONCRETE/GROUT/MORTAR:				
Engineering Technician-Part time rate-(4 hours) includes stand-by	20	\$ 260.00	trip	\$ 5,200.00
Engineering Technician-Part time rate-beyond 4 hours	0	\$ 65.00	hour	\$ -
Compression Testing of Concrete Cylinders-(set of 5)	10	\$ 150.00	set	\$ 1,500.00
Additional Concrete Cylinders	0	\$ 18.00	each	\$ -
Subtotal				\$ 6,700.00
Asphalt Testing				
Asphalt Plant Facility Inspection	5	\$ 900.00	day	\$ 4,500.00
Subtotal				\$ 4,500.00
Professional and Technical Services*				\$ -
Principal Engineer	10	\$ 165.00	hour	\$ 1,650.00
Project Engineer	0	\$ 115.00	hour	\$ -
Administrative Services	10	\$ 45.00	hour	\$ 450.00
Subtotal				\$ 2,100.00
Total Estimated Fees				\$ 18,570.00

General Notes:

Please note the following procedures will apply to our services:

- 1- Field work hours for inspectors are Monday thru Friday, 8:00AM to 5:00PM.
- 2- We need 24 hours' notice by contacting our office (561) 687-8536 prior to any site visit.
- 3- We can accommodate weekend inspections if necessary with a minimum of 48 hours' notice.
- 4- Field work beyond 8 hours/day, night time and weekends (OT) will be billed at the regular rate times 1.5
- 5- Stand-by time will be billed at hourly rate listed.

AUTHORIZATION

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

Runway 10-28 Safety Enhancements-Pompano Beach Airpark (PMP)
TSFGeo Proposal No. 2303-167

TSFGeo's General Conditions

1. **SCOPE OF WORK** - Work means the specific geotechnical, analytical, testing or other service to be performed by TSFGeo as set forth in TSFGeo'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 TSFGeo. Client shall communicate these General Conditions to each and every third party to whom Client transmits any part of TSFGeo's work. TSFGeo shall have no duty or obligation to any third party greater than that set forth in TSFGeo's proposal, Client's acceptance of TSFGeo's proposal and these General Conditions. The ordering of work from TSFGeo, or the reliance on any of TSFGeo's work, shall represent acceptance of the terms of TSFGeo'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 TSFGeo and all necessary equipment in order to complete the work. While TSFGeo 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 TSFGeo 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 TSFGeo harmless for any damages to subterranean structures which are not called to TSFGeo's attention and correctly shown on the plans furnished and will reimburse TSFGeo 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** - TSFGeo 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** - TSFGeo 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 TSFGeo 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 TSFGeo 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 TSFGeo and that the data, interpretations and recommendations of TSFGeo are based solely on the information available to it. TSFGeo 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 TSFGeo, as instruments of service, shall remain the property of TSFGeo until final payment is received and a letter of copyright transfer 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 TSFGeo for service and/or expenses within 60 days of date of invoice, TSFGeo may, after giving seven days' written notice to Client, suspend services until all outstanding amounts have been paid to TSFGeo in full. Further, TSFGeo 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, TSFGeo 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 TSFGeo 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** - TSFGeo 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 TSFGeo's conclusions and recommendations.
12. **INDEMNIFICATION** -TSFGeo agrees to hold harmless and indemnify Client from and against liability arising out of TSFGeo's negligent performance of the work. Client agrees to indemnify and hold TSFGeo 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 TSFGeo was not solely negligent.
13. **LIMITATION OF LIABILITY** -The Client/Owner agrees to limit TSFGeo's liability for negligent professional acts, errors or omissions, such that the total aggregate liability of TSFGeo 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 TSFGeo's negligent professional acts, errors or omissions.
 - 13.1. If Client prefers to have higher limits on professional liability, TSFGeo 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** -TSFGeo 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. TSFGeo has such coverage under public liability and property damage insurance policies that TSFGeo 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, TSFGeo agrees to indemnify and save client harmless from and against any loss, damage or liability arising from any negligent acts by TSFGeo, its agents, staff and consultants employed by it. TSFGeo shall not be responsible for any loss, damage or liability beyond the amounts, limits and considerations of such insurance. TSFGeo 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, TSFGeo 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, TSFGeo 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, TSFGeo 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 TSFGeo in completing such analyses, records and reports.
16. **CLIENT'S OBLIGATION TO NOTIFY TSFGeo** - Client represents and warrants that it has advised TSFGeo of any known or suspected hazardous materials or conditions, utility lines and pollutants at any site at which TSFGeo is to do work hereunder, and unless TSFGeo has assumed in writing the responsibility of locating subsurface objects, structures, lines or conduits, Client agrees to defend, indemnify and save TSFGeo 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 TSFGeo'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 TSFGeo by Client.
17. **HAZARDOUS MATERIALS** -This agreement shall not be interpreted as requiring TSFGeo 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.

Initial _____