CCNA2018 WORK ORDER 12

SOUTH GIFFORD ROAD LANDFILL

This Work Order Number <u>12</u> is entered into as of this __ day of <u>May</u>, <u>2021</u>, pursuant to that certain Continuing Contract Agreement, dated April 17, 2018, renewed and amended as of May 18, 2021 (collectively referred to as the "Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Geosyntec Consultants, Inc. ("Consultant").

The COUNTY has selected the Consultant to perform the professional services set forth on Exhibit A (Scope of Work), attached to this Work Order and made part hereof by this reference. The professional services will be performed by the Consultant for the fee schedule set forth in Exhibit A (Fee Schedule), attached to this Work Order and made a part hereof by this reference. The Consultant will perform the professional services within the timeframe more particularly set forth in Exhibit A (Time Schedule), attached to this Work Order and made a part hereof by this reference all in accordance with the terms and provisions set forth in the Agreement. Pursuant to paragraph 1.4 of the Agreement, nothing contained in any Work Order shall conflict with the terms of the Agreement and the terms of the Agreement shall be deemed to be incorporated in each individual Work Order as if fully set forth herein.

IN WITNESS WHEREOF, the parties hereto have executed this Work Order as of the date first written above.

CONSULI	ANI:	OF INDIAN RIVER COUNTY
By: Print Nan	Joseph Applegate	By:, Chairman
Title:	Senior Principal	BCC Approved Date:
		Attest: Jeffrey R. Smith, Clerk of Court and Comptroller
		By:
		Approved: Jason E. Brown, County Administrator
A	approved as to form and leg	al sufficiency: Dylan T. Reingold, County Attorney

EXHIBIT A PROFESSIONAL SERVICES



6770 South Washington Avenue, Suite 3 Titusville, Florida 32780 PH 321.269.5880 FAX 321.269.5813

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27 April 2021

Mr. Himanshu H. Mehta, P.E. Managing Director Solid Waste Disposal District Indian River County 1325 74th Avenue SW Vero Beach, Florida 32968

Subject: Proposal to Provide One Year of Groundwater Monitoring/Reporting and Related

Consulting Services

Former South Gifford Road Landfill Vero Beach, Indian River County, Florida

Dear Mr. Mehta:

Geosyntec Consultants (Geosyntec) is pleased to submit this letter proposal to the Indian River County (IRC) Solid Waste Disposal District (SWDD) to provide professional services for Florida Department of Environmental Protection (FDEP)-required activities associated with continued implementation of the groundwater monitoring for the chlorinated volatile organic compound (CVOC) plume at the Former South Gifford Road Landfill located in Vero Beach, Indian River County, Florida (Site). This fee proposal is based on correspondence with the FDEP and discussions with IRC. As requested by IRC, this fee proposal includes budget to complete two semi-annual monitoring and reporting events for the plume monitoring well network, as well as related consulting services to prepare an annual pollution liabilities evaluation report for identified IRC-owned environmental liabilities and represent IRC during interactions with regulatory agencies. Geosyntec has prepared this proposal (professional services as Exhibit A) as Work Order No. CCNA-2018 WO No. 12 for the Continuing Contract Agreement for Professional Services between IRC SWDD and Geosyntec. The remainder of this letter provides an overview of the project background, a description of the proposed scope of work, a budget estimate, and a discussion of the schedule for accomplishment of the work described herein.

Uncertainty as a result of the COVID-19 pandemic is impacting operations in every aspect of our economy. In this proposal, we have presented Geosyntec's anticipated budget and schedule for the scope of work described. As circumstances change, we may need to adjust how and when the scope is delivered, as well as any other impacts to the budget and schedule. In the event that a change is required, we will discuss the situation with you so we can reach a mutually acceptable solution.

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PROJECT BACKGROUND

As part of the long-term monitoring activities for the identified CVOC plume associated with the South Gifford Road Landfill, a network of monitoring wells will require sampling on an annual or semi-annual basis to: (i) confirm that the CVOC plume is not migrating by monitoring the lateral and vertical extent; (ii) evaluate the impact of source and dissolved plume bioremediation to assess CVOC plume centerline concentrations over time; and (iii) assess the impact of biological and physical natural attenuation processes on CVOC plume degradation.

In consideration of the ongoing natural attenuation processes occurring at the site, the enhancement of these biological processes via the injection of an electron donor was proposed and agreed to in concept by the FDEP in correspondence dated 2 August 2006. In response to FDEP's request and supported by groundwater monitoring results, Geosyntec conducted an injection event in 2017 [Remedial Action Plan Modification Addendum No. 3 (RAPM 3)] to remediate recalcitrant CVOC groundwater impacts in the former source area. Semi-annual performance monitoring associated with bioremediation implementation was conducted from 2017 to 2020 at monitoring wells GR-MW30B and GR-MW37B and six additional monitoring well locations for analysis of CVOCs, dissolved gases, TOC, and/or microbial populations (Dhc and vcrA). In April 2021, FDEP approved to discontinue performance monitoring at GR-MW30B and GR-MW37B, discontinue analysis of dissolved gases, TOC, and microbial populations (Dhc and vcrA) at six additional monitoring well locations, and discontinue CVOC sample collection at five monitoring well locations where CVOCs had not been detected for at least three consecutive sampling events. Semi-annual groundwater monitoring for CVOCs only at 42 monitoring well locations will be conducted in 2021, as well as semi-annual reporting.

PROPOSED SCOPE OF WORK

The proposed scope of work consists of semi-annual groundwater monitoring and reporting and related activities to be performed on behalf of IRC SWDD at the Former South Gifford Road Landfill. For the purpose of budgeting, the scope of work has been divided into the following tasks:

- Task 1 Project Management;
- Task 2 Meetings/Regulatory Interaction;
- Task 3 Annual Pollution Remediation Liabilities Evaluation;
- Task 4 Semi-Annual Sampling Activities; and
- Task 5 Data Evaluation and Semi-Annual Reporting.

The remainder of this section presents a general description of the activities to be performed in each task.

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<u>Task 1 – Project Management:</u> Under this task, Geosyntec will perform project planning and management responsibilities, such as correspondence with IRC SWDD and FDEP, invoice review, project coordination, and project administration. The budget includes five hours per sampling/reporting event and one hour per month for the project manager (22 hours total), one hour for the senior principal-in-charge, and one hour per month (12 hours total) for the administrative assistant.

<u>Task 2 – Meetings/Regulatory Interaction:</u> Under this task, Geosyntec will prepare for and attend up to two meetings, with IRC SWDD, FDEP, and/or IRC Board of County Commission, as necessary. It has been assumed that one of these meetings will be in person and one meeting will be by video or conference call. Also, under this task, four hours has been included for the senior principal-in-charge to provide ongoing support to IRC SWDD related to interaction and negotiation with FDEP.

<u>Task 3 – Annual Pollution Remediation Liabilities Evaluation:</u> As requested by IRC SWDD, under this task, Geosyntec will prepare the annual environmental liability evaluation. This document is prepared annually in response to Governmental Accounting Standards Board Statement No. 49 (GASB No. 49), Accounting and Financial Reporting for Pollution Remediation Obligations, which requires the inclusion and calculation of pollution remediation obligations. The objective of GASB No. 49 is to enhance the usefulness and comparability of pollution remediation obligation information reported by state and local governments. It has been assumed that the report will include evaluation of two sites, including South Gifford Road Closed Landfill (4701 41st Street) and Former Premier Citrus Property (375 82nd Street). In addition, two hours have been included for a Florida registered professional engineer to conduct an independent review of the liability evaluation.

<u>Task 4 – Semi-Annual Sampling Activities:</u> Under this task, Geosyntec will perform 2021 field activities related to the performance monitoring and plume groundwater monitoring. The semi-annual activities will include field preparation, groundwater sampling, and water level measurements. Field preparation activities will include scheduling and staffing, subcontracting, coordination with the analytical laboratory, field equipment preparation, procurement of Passive Diffusion Bag (PDB) samplers, and notifying FDEP and Vero Beach Municipal Airport of the field schedule.

Geosyntec will perform the groundwater sampling activities associated with the CVOC plume monitoring well network. Sampling activities in 2021 will be completed with a combination of PDB samplers and traditional low-flow sampling techniques and will transition to PDB samplers only in 2022. PDBs are anticipated to be purchased from EON Products, one of the few suppliers of this type of passive sampling device. Groundwater sampling activities will be executed using a two-person sampling crew and will be performed in general accordance with the FDEP Standard Operating Procedures (SOPs). The proposed summer 2021 field event (tentatively scheduled for June) will include sampling of nine monitoring wells (seven wells using PDBs and two wells with traditional sampling techniques). The summer 2021 field event is budgeted to include one-half day for groundwater sampling activities and one day for PDB deployment for the next sampling event (total of one and one-half [1.5] field days each with two persons). The proposed winter 2021 field event

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(tentatively scheduled for December) will include sampling of 42 monitoring wells (all using PDBs). The winter 2021 field event is budgeted to include a total of two and one-half (2.5) days (with two persons) for groundwater sampling activities and PDB deployment for the summer 2022 field event. Consistent field documentation and field protocols will be utilized to develop reliable data to support the natural attenuation evaluation for the groundwater plume. The groundwater samples will be analyzed in accordance with the sampling plan summarized in the 2020 Annual Groundwater Monitoring Report. Quality control samples are proposed to be collected at a rate of 5% of total samples as required by the most recent FDEP SOPs.

Geosyntec will conduct a complete round of groundwater level measurements concurrent with each semi-annual groundwater sampling event (budgeted for one day with two-person field team for each event). Depth to groundwater measurements will be recorded to the nearest 0.01-ft in each monitoring well, including existing monitoring wells and applicable City of Vero Beach wells (assumed up to 95 wells per event). Due to wet site conditions and difficult access to certain well clusters, costs for rental of a utility task vehicle are included for one day of groundwater level measurements and one day of sampling per event (4 total days).

It is anticipated that purge water (investigation-derived waste [IDW]) will be containerized in 55-gallon polyethylene drums and temporarily staged on Site for characterization prior to removal and disposal. Costs are included herein for purchase of one 55-gallon polyethylene drum and for one-half day of drum disposal oversight for one person.

During the monitoring well inventory during the winter 2020 field event, Geosyntec personnel observed damage to one monitoring well, GR-MW06C, and maintenance activities are necessary to replace one bollard and repair the above ground polyvinyl chloride (PVC) well casing which needs to be reattached to the aboveground portion of the well casing. Geosyntec will provide oversight for a subcontractor to make the repairs. Costs are included for one day of oversite (with one person) and for subcontractor costs. A Florida-licensed surveyor will survey the repaired monitoring well and monitoring well GR-MW37B, installed in 2017.

Overall, for field activities, budget has been included for seven and one-half field days for one person, six field days for a second person, (i.e., 13.5 man days), mobilization time for field personnel, and associated field expenses for sampling.

<u>Task 5 – Data Evaluation and Semi-Annual Reporting:</u> Under this task, Geosyntec will perform data evaluation activities and reporting. The reporting includes preparation of one summer 2021 report (simplified format) and one winter 2021 report for submittal to FDEP.

The summer 2021 report will be a letter report with attachments, including a monitoring well location map and tables of the field and laboratory results. Data evaluation activities for the summer 2021 report

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will include database management, screening results against applicable regulatory criteria, and summary data table preparation. This report is due to FDEP by 31 July 2021.

The winter 2021 report will be consistent with the groundwater monitoring reports historically submitted to FDEP for this Site and the data evaluation activities will include database management, screening results against applicable regulatory criteria, GIS figure preparation, time trend analyses, and/or statistical data analyses. The winter 2021 annual report will be supported by attachments containing Chain-of-Custody sheets, field notes and observations, water sampling logs, maps, graphs, analytical results, quantitative statistical evaluation, and other applicable materials. As part of the statistical analysis, trend analysis graphs showing temporal concentrations of constituents and a summary of the Mann-Kendall statistics will be included to identify increasing, decreasing, or no trends in groundwater constituent concentrations. Historical data summaries will be included for monitoring wells recommended for removal from the monitoring plan.

The draft summer and winter 2021 reports will be submitted to IRC SWDD for review prior to submittal to FDEP. Each final report will be signed and sealed by a Florida registered professional engineer or geologist.

SCHEDULE

The semi-annual groundwater sampling events will be tentatively conducted in June and December 2021 as described herein. Reports will be submitted to FDEP to meet required deadlines.

BUDGET ESTIMATE

A budget estimate for the scope of work outlined in Tasks 1 through 5 of this proposal is summarized in the following table, and a detailed budget estimate is provided as Attachment A. The budget estimate presented in this proposal is based on Geosyntec's understanding of the project requirements, our experience gained from executing similar tasks for SWDD since 2002 at the Site, and experience with groundwater monitoring and reporting activities at similar facilities. Geosyntec will not exceed the budget estimate without prior approval and written authorization from IRC SWDD. Due to reduction in the number of monitoring wells in the FDEP-approved sampling plan, discontinuation of certain laboratory analyses, and sampling only with PDBs versus traditional purging methods, the overall professional service hours were reduced by 10%.

Mr. Himanshu H. Mehta, P.E. 27 April 2021 Page 6	Geosyntec consultants	
Task 1 – Project Management	\$5,745	
Task 2 – Meetings/Regulatory Interaction	\$6,794	
Task 3 – Annual Pollution Remediation Liabilities Evaluation	\$3,640	
Task 4 – Semi-Annual Sampling Activities	\$50,976	
Task 5 – Data Evaluation and Semi-Annual Reporting	\$17,184	
TOTAL	\$84,339	

CLOSURE

Geosyntec appreciates this opportunity to offer our services. If this proposal is acceptable, please indicate your agreement by signing the attached work authorization, which references this proposal. Please return one signed work authorization. Please call Crystal Towns at 850.483.5102 with questions you may have as you review this proposal.

Sincerely,

Crystal Towns, P.G.

Geologist

Joseph Applegate, P.G.

Senior Principal Geologist

Joseph J. Appleyate

Attachments

Table 1

APRIL 2021 BUDGET ESTIMATE SOUTH GIFFORD ROAD LANDFILL

TASK 1: Project Management

ITEM	BASIS	RATE	QUANTITY	ESTIMATED BUDGET
A. Professional Services				
Senior Principal	hr	\$260	1	\$260
Project Professional	hr	\$203	22	\$4,466
	\$4,726			
B. Technical/Administrative Services				
Project Administrator	hr	\$71	12	\$852
Sub	\$852			
C. Reimbursables				
Communications Fee	3% labor	0.03	5,578	\$167
	\$167			
TOT	\$5,745			

Table 2

APRIL 2021 BUDGET ESTIMATE SOUTH GIFFORD ROAD LANDFILL

TASK 2: Meetings/Regulatory Interaction

ITEM	BASIS	RATE	QUANTITY	ESTIMATED BUDGET
A. Professional Services				
Senior Principal	hr	\$260	16	\$4,160
Project Professional	hr	\$203	12	\$2,436
	\$6,596			
C. Reimbursables				
Communications Fee	3% labor	0.03	6,596	\$198
	\$198			
TOT	\$6,794			

Table 3

APRIL 2021 BUDGET ESTIMATE SOUTH GIFFORD ROAD LANDFILL

TASK 3: Annual Pollution Remediation Liabilities Evaluation

ITEM	BASIS	RATE	QUANTITY	ESTIMATED BUDGET	
A. Professional Services					
Senior Principal	hr	\$260	4	\$1,040	
Project Professional	hr	\$203	4	\$812	
Senior Staff Professional	hr	\$154	10	\$1,540	
	Subtotal Professional Services				
B. Technical/Administrative Services					
Project Administrator	hr	\$71	2	\$142	
Suk	\$142				
C. Reimbursables					
Communications Fee	3% labor	0.03	3,534	\$106	
	\$106				
TO	\$3,640				

Table 4

APRIL 2021 BUDGET ESTIMATE SOUTH GIFFORD ROAD LANDFILL

TASK 4: Semi-Annual Sampling Activities

ITEM	BASIS	RATE	QUANTITY	ESTIMATED BUDGET
A. Professional Services				
Senior Principal	hr	\$260	4	\$1,040
Project Professional	hr	\$203	14	\$2,842
Senior Staff Professional	hr	\$154	112	\$17,248
Staff Professional	hr	\$132	92	\$12,144
	•	Subtotal Prof	essional Services	\$33,274
B. Technical/Administrative Services				
Project Administrator	hr	\$71	2	\$142
	Subtotal Tecl	nnical/Admini	istrative Services	\$142
C. Subcontractors				
Monitoring Well Repair	quote	\$1,342	1	\$1,342
Monitoring Well Survey	quote	\$1,278	1	\$1,278
Drum Transport/Disposal	each	\$276	1	\$276
Laboratory Analysis for VOCs	each	\$64	54	\$3,456
	Su	btotal Subcor	ntractor Services	\$6,352
D. Reimbursables				
Communications Fee	3% labor	0.03	\$33,416	\$1,002
Miscellaneous Supplies	day	\$50	10	\$500
PDBs for Winter 2021 event (includes shipping)	quote	\$32	42	\$1,344
PDBs for Summer 2022 event (includes shipping)	quote	\$32	9	\$288
Drum for Purge Water	each	\$50	1	\$50
Lodging - Summer (6), Winter (8), Well Repair (1)	day	\$164	16	\$2,624
Per Diem - Summer (6), Winter (8), IDW (1), Well Repair (1)	day	\$55	15	\$825
Utility Task Vehicle Rental	day	\$209	4	\$836
Field Vehicle - Summer (6), Winter (8), IDW (1), Well Repair (1)	day	\$80	16	\$1,280
Overnight Cooler-Test America	each	\$95	3	\$285
Groundwater Sampling Kit (per sampler)	day	\$300	6	\$1,800
Water Level Measurement Kit (2 person team)	day	\$60	2	\$120
PDB Deployment Kit	day	\$100	2	\$200
Equipment Shipping	each	\$54	1	\$54
Subtotal Reimbursables				
	TOTAL EST	IMATED BU	DGET : TASK 4	\$50,976

Notes:

- $1. \ Lodging \ rates \ were \ taken \ from \ the \ GSA \ website \ for \ the \ Vero \ Beach \ area \ (https://www.gsa.gov/travel/plan-book/per-diem-rates/).$
- 2. Groundwater Sampling Kit includes two sets of the following: water level indicator, peristaltic pump, water quality meter (pH, temperature, conductivity, dissolved oxygen, and oxidation reduction potential), turbidity meter, tubing, and miscellaneous field supplies.
- 3. Water Level Measurement Kit includes: water level indicator and miscellaneous field supplies.
- 4. PDB Deployment Kit includes: miscellaneous field supplies necessary to suspend and deploy PDBs.

Table 5

APRIL 2021 BUDGET ESTIMATE SOUTH GIFFORD ROAD LANDFILL

TASK 5: Data Evaluation and Semi-Annual Reporting

ITEM	BASIS	RATE	QUANTITY	ESTIMATED BUDGET
A. Professional Services				
Senior Principal	hr	\$260	5	\$1,300
Project Professional	hr	\$203	38	\$7,714
Senior Staff Professional	hr	\$154	32	\$4,928
	Sub	\$13,942		
B. Technical/Administrative Services				
Designer	hr	\$143	16	\$2,288
Clerical	hr	\$55	4	\$220
Sub	\$2,508			
C. Reimbursables				
Communications Fee	3% labor	0.03	\$16,450	\$494
Specialized Computer Applications	hr	\$15	16	\$240
	\$734			
TOT	\$17,184			