WORK ORDER 19

2023 Compliance Monitoring

This Work Order Number 19 is entered into as of this _____ day of January, 2023, pursuant to that certain Continuing Consulting Engineering Services 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 B (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 C (Time Schedule), 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.

CONSULTANT:	BOARD OF COUNTY COMMISSIONERS
	OF INDIAN RIVER COUNTY
Ву:	
Print Name: <u>Jim Langenbach, PE</u>	Joseph H. Earman, Chairman
Title: <u>Vice – President</u>	BCC Approved Date:
	Attest: Jeffrey R. Smith, Clerk of Court and Comptroller
	Ву:
	Deputy Clerk
	Approved:
	Michael C. Zito, Interim County Administrator
Approved as to form and	l legal sufficiency:
.,	Dylan Reingold, County Attorney

EXHIBIT A PROFESSIONAL SERVICES



1200 Riverplace Boulevard Suite 710 Jacksonville, FL 32207

> PH 904-858-1818 FAX 904-396-7143

www.geosyntec.com

5 January 2023

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 2023 Compliance Monitoring,

Reporting and Other Technical Support Services Class I Landfill and C&D Debris Disposal Facility

Indian River County Landfill Facility Vero Beach, Indian River County, Florida

Dear Mr. Mehta:

Geosyntec Consultants, Inc. (Geosyntec) is pleased to submit this letter proposal to the Indian River County (IRC) Solid Waste Disposal District (SWDD) to provide professional services supporting the operation of the Class I landfill and Construction and Demolition (C&D) debris disposal facility at the IRC Landfill (IRCL) site located in Vero Beach, Indian River County, Florida. The proposal presents the scope of work, schedule, and budget estimate for the compliance monitoring, reporting and other technical support services related to the operation of the solid waste disposal facilities in 2023.

Geosyntec has prepared this proposal (professional services as Exhibit A of CCNA-2018-WO No. 19, pursuant to that certain Continuing Contract Agreement for Professional Services, dated 17 April 2018, renewed and amended as of 18 May 2021 (collectively referred to as the "Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Geosyntec ("Consultant").

The remainder of this proposal presents: (i) project background; (ii) proposed scope of services; (iii) schedule; and (iv) budget estimate.

PROJECT BACKGROUND

The IRCL site is located south of Oslo Road, west of Range Line Road (74th Avenue) and east of Interstate 95 in Section 25, Township 33 South, Range 38 East in Indian River County, Florida. The IRCL site occupies 276 acres, with approximately 141.5 acres permitted for Class I disposal,

19 acres is comprised of Cell 1 C&D debris disposal facility, and 2.5 acres consists of a C&D debris recycling facility.

The Class I landfill currently accepts both Class I waste and C&D debris for disposal under the Florida Department of Environmental Protection (FDEP) Construct and Operate Permit Modification Nos. 0128769-026-SC-IM and 0128769-033-SO-MM, dated November 30, 2022 (Class I Permit). The C&D debris disposal facility operates under FDEP Permit No. 0128769-032-SO-24, dated June 1, 2022 (C&D Permit).

Semi-Annual Water Quality Compliance Monitoring and Reporting

The Water Quality Monitoring Plan (WQMP) for each of the IRCL facilities permits (which is listed as Appendix 3 of each permit) indicates that groundwater and surface water quality monitoring are required. Semi-annual sampling of the Class I landfill and C&D debris disposal facility groundwater monitoring wells shall be conducted in January and July 2023. The samples collected from the Class I landfill and C&D debris disposal facility monitoring wells shall be analyzed for the routine monitoring parameters listed in Section II.3 (Class I Permit) and Paragraph 8 (C&D Permit) of the WQMP, respectively, as required by paragraphs 62-701.510(5)(c) & (7)(a) and 62-701.730(8)(d), Florida Administrative Code (F.A.C.). Samples from one surface water monitoring site (SW-2) shall be collected semi-annually in January and July, if water is discharging from the stormwater pond. The samples, if collected, shall be analyzed for the list of parameters listed in Section III.2 of the Class I Landfill WQMP, as required by paragraphs 62-701.510 (5)(d) and (7)(b), F.A.C.

Geosyntec will perform the field sampling activities, and the analytical testing will be conducted by Eurofins Scientific Laboratory (Eurofins), the analytical laboratory contracted with, and direct bill to, SWDD. The results of the annual and semi-annual water-quality monitoring events are to be reported to FDEP within 60 days of receipt of analysis from the laboratory.

Quarterly Assessment Monitoring for the C&D Debris Disposal Facility

Geosyntec understands that results of routine sampling of C&D debris disposal facility groundwater monitoring well (MW-21S) in January 2017 indicated exceedances of benzene and sodium groundwater cleanup target levels (GCTLs). As a result, SWDD was requested by FDEP to initiate evaluation monitoring in accordance with subsection 62-701.510(6), F.A.C. Pursuant to this request SWDD installed one groundwater monitoring well (MW-49S) in July 2017. These and other wells (MW-21S, MW-33S, MW-35S, MW-40S, MW-49S, MW-50S, MW-51S, and MW-52S) and seven surface water (SW) Lateral Canal (LC) sample sites (SW-LC1, SW-LC2, SW-LC3, LC-SW4, LC-SW5, LC-SW6, and LC-SW8) have been sampled quarterly from July 2017 to October 2020 under an evaluation monitoring program with FDEP. However, in

correspondence dated 14 October 2019 from FDEP to SWDD, the FDEP approved SWDD's request to replace the evaluation monitoring of the eight groundwater wells and surface water sample sites with quarterly assessment monitoring and with the addition of other parameters (arsenic, benzene, naphthalene, and other semi-volatile organic compounds [VOCs]) to the suite of parameters to be analyzed for at these wells. The FDEP also requested sampling of additional surface water sites in the Lateral C Canal for the purpose of establishing background waterquality conditions. Therefore, in 2020 Geosyntec working on behalf of SWDD sampled all seven surface water sites except for April 2020 where the FDEP agreed to a reduction to three locations. The reduction to three surface water sampling locations was approved for sampling events and the total number of surface water sampling locations is assumed to be seven for the 2023 sampling events. In 2021, Geosyntec working on behalf of SWDD eliminated six surface water sampling locations (SW-LC2, LC-SW5, LC-SW7, LC-SW8, LC-SW9 and LC-SW10) and discontinued the sampling of MW-33S and MW-35S. Additionally, Geosyntec working on behalf of SWDD in 2021 reduced the collection frequency of arsenic, benzene, naphthalene, 1methylnaphthalene, 2-methylnaphthalene, acenaphthene, and anthracene at MW-21S and MW-49S from quarterly to semi-annual. Geosyntec will continue working with FDEP to further reduced the surface and groundwater quarterly sampling scope at the C&D debris disposal facility in 2023 in order to provide overall cost savings to the County.

Therefore, in addition to the semi-annual sampling of the C&D debris disposal facility monitoring wells in January and July 2023, six wells and four surface water sample sites will also be sampled in April and October 2023 as part of the 2023 compliance monitoring and reporting program.

Quarterly Assessment Monitoring for the Class I Landfill

A comment letter from FDEP dated 6 May 2020 provided comments regarding the results of the January 2020 Semi-Annual Water Quality Monitoring Report for the Class I landfill. FDEP provided notification to SWDD to initiate evaluation monitoring at all monitoring wells with detected exceedances above applicable groundwater cleanup target levels (GCTLs) for pH, ammonia, chloride, sodium, total dissolved solids (TDS) and arsenic. Geosyntec provided a response to comments (RTC) letter to the FDEP comment letter on 28 May 2020 which focused on the long-term trends with the dataset available from the FDEP Water Assurance Compliance System (WACS) database and requested a reduction of evaluation monitoring locations from 25 locations (as originally requested by the FDEP in the 8 May 2020 letter) to four (4) locations (specifically downgradient of MW-3S, MW-14S, MW-44S and MW-44I). FDEP approved this request in a letter dated 14 August 2020 and the 90-day evaluation monitoring period was initiated on 17 September 2020 through a second RTC letter provided to FDEP. Geosyntec installed the three (3) groundwater evaluation monitoring wells in November 2020 (evaluation

monitoring well not installed downgradient of MW-14S since MW-14S was already located at the edge of the Class I landfill zone of discharge), sampled the four (4) quarterly wells and collected field parameters from two staff gauges (C5-SW1 and C5-SW3) for Total Ammonia Nitrogen [TAN] calculation in November 2020. During the 2021 quarterly sampling, Geosyntec working on behalf of SWDD reduced the quarterly parameters analyzed and negotiated the use of a site-specific ammonia GCTL based on TAN calculations thus adding a surface water screening location north of MW-53S.

Therefore, sampling of the four Class I landfill groundwater evaluation monitoring wells and four surface water field parameter screening locations will be included in the 2023 quarterly monitoring and reporting program.

Title V Air Operation Permit Compliance

The SWDD was issued a Title V Air Operation renewal permit (Permit No. 0610015-008-AV), proposed on 7 December 2022. The permit requires that the SWDD prepare and submit to FDEP and the U.S. Environmental Protection Agency (USEPA), Region 4 the following:

- Annual statement of compliance (within 60 days after the end of the calendar year);
- Electronic Annual Operating Report (AOR) and Title V Emissions Fee (on or before April 1 of each year, for the previous calendar year);
- Semi-Annual Monitoring Report (scheduled for March 1 and August 29); and
- Results of an annual landfill gas (LFG) sulfur content test (Annual Emissions Report for Sulfur Dioxide letter report and included in the Electronic Annual Operating Report).

The annual emissions fee is automatically calculated based on emissions reported for marked pollutants on the FDEP's electronic Annual Operating Report (EAOR). Upon submission of the EAOR, the Annual Title V Emissions Fee invoice is generated, and this must be paid by April 1, 2023 for the 2022 reporting period.

Landfill Gas Migration Monitoring

The Class I Landfill solid waste permit also requires quarterly monitoring of LFG migration around the perimeter of the site and within enclosed structures.

Multi Sector General Permit

The SWDD authorization to discharge the overflow of stormwater from the sedimentation pond into the C-6 canal is governed by a five-year Multi Sector General Permit (MSGP) issued by FDEP. The permit requires that the outfall be sampled quarterly during the first and fourth year of the permit for a list of parameters and the results reported to the FDEP by the first quarter of the fifth year of the permit.

Storage Tank Groundwater Monitoring Wells Installation, Sampling and Reporting

Permit Modification No. 0128769-033-SO-MM and Approval of Request for Alternate Procedure – SWAP 22-1 (i.e., Order), effective July 22, 2022, authorized SWDD to use an existing 500,000-gallon tank as a leachate storage tank for the proposed leachate evaporator system for the Class I Landfill. Conditions of this approval require SWDD to install four new groundwater monitoring wells (MW-49 to MW-52) around the periphery of the leachate storage tank, conduct an initial and three additional sampling events (on a weekly basis), and conduct two quarterly sampling events after the initial filling of the tank with leachate. SWDD is required to provide FDEP with monitoring well installation report, background groundwater quality report from the initial four sampling events, first semi-annual groundwater monitoring report with results of the first two quarterly sampling events, and first annual summary report. The installation report is due 90 days from the effective date of the Order with the background quality report due 30 days from installation of the monitoring wells. The first semi-annual and annual summary reports are due 240 days and 400 days, respectively, from initial filling of the tank with leachate from the Class I Landfill for the leachate evaporator. It is understood that the leachate storage tank is anticipated to go into operation the first quarter of 2023; however exact dates are unknown. However, Geosyntec has included the scope of work and budget estimate to complete the reporting requirements of the Order.

This proposal presents the scope of work and budget estimate for the: (i) semi-annual water-quality compliance monitoring and reporting for the Class I landfill and C&D debris disposal facility; (ii) quarterly assessment monitoring of the eight groundwater wells and three surface water sample sites for the C&D debris disposal facility; (iii) compliance with Title V permit requirements; (iv) compliance with MSGP permit requirements; (v) other technical and miscellaneous permit compliance support services that may be required by SWDD in 2023; and (vi) storage tank monitoring wells installation, sampling and reporting as required by the Order.

PROPOSED SCOPE OF SERVICES

The proposed scope of services includes activities to be performed on behalf of SWDD for the compliance monitoring reporting and other technical support services for the Class I landfill and C&D debris disposal facility. For the purpose of budgeting, the scope of work has been divided into the following six (7) main phases:

- Phase 1 General Consulting/Meeting Support/Project Management;
- Phase 2 Semi-Annual Sampling and Reporting;
- Phase 3 Quarterly Assessment Monitoring and Reporting;
- Phase 4 Title V Permit Compliance and Reporting; and
- Phase 5 Technical and Miscellaneous Permit Compliance Support and Reporting; and
- Phase 6 Storage Tank Groundwater Monitoring Well Installation, Sampling and Reporting.

The above scope of services is based on current regulations and reporting requirements for the IRCL facility as previously discussed above. An amendment to this scope of services may be needed should there be any regulatory changes that result in additional work. The remainder of this section presents a general description of the activities to be performed in each phase.

<u>Phase 1 – General Consulting/Meeting Support/Project Management</u>

Under this phase, Geosyntec will perform project planning and management responsibilities, such as correspondence with SWDD and FDEP, invoice review, project coordination, and project administration. Geosyntec has also included budget for preparation and attendance (by two Geosyntec personnel) at one meeting with SWDD and/or FDEP, as needed.

Phase 2 – Semi-Annual Sampling and Reporting

Geosyntec will assist SWDD to perform the semi-annual sampling and prepare the water-quality monitoring reports as required by the WQMP. Geosyntec will assist SWDD with conducting all field sampling preparation activities, including scheduling, staffing, subcontracting, and field equipment preparation. Prior to collecting the groundwater samples in January and July 2023, Geosyntec will perform water-level measurements from the 56 groundwater monitoring wells and 1 staff gauge (SG-12). Geosyntec will then perform semi-annual sampling of the Class I landfill and C&D debris disposal facility groundwater monitoring wells in January (34 wells) and July (25 wells) of 2023. We will also perform semi-annual (January and July) sampling of the surface water site (SW-2), if its discharging from the stormwater pond.

It is estimated that data collection and sampling will take five (5) full days in January and four (4) full days in July for the semi-annual monitoring and reporting for the Class I landfill and C&D debris disposal facility. Geosyntec will deliver the samples to Eurofins laboratory for analytical testing under SWDD's contract (i.e., Eurofins laboratory will directly invoice SWDD).

The laboratory analytical testing will be conducted by Eurofins testing laboratory. The samples collected from the Class I landfill monitoring wells will be analyzed for the routine monitoring parameters listed in paragraph 7 of the WQMP and in accordance with paragraph 62-701.510(5)(c) & (7)(a), F.A.C. The samples collected from the C&D debris disposal facility monitoring wells, with the exception of the quarterly assessment wells, will be analyzed for the routine monitoring parameters listed in paragraph 8 of the WQMP and in accordance with 62-701.739(8)(d), F.A.C. The samples from the surface water site (SW-2) will be analyzed for the list of parameters listed in Section III.2 of the Class I Landfill WQMP, as required by paragraphs 62-701.510 (5)(d) and (7)(b), F.A.C. Geosyntec will assist SWDD in coordinating the analytical testing activities with Eurofins, notify FDEP prior to sampling as required by the WQMP, review and evaluate the analytical test results, and prepare the semi-annual reports.

The results of water-quality sampling under the WQMP will be presented in a report supported by attachments containing chain-of-custody sheets, field notes and observations, water sampling logs, maps, analytical results, and any other applicable materials. The reports will include groundwater completion report form and groundwater elevation contour map, both signed and sealed by a Florida registered professional engineer. These reports will be submitted to SWDD for review prior to submittal to FDEP. The reports (in Adobe format) and analytical data Electronic Data Deliverable (EDD) will be submitted electronically to FDEP using the ADaPT software in accordance with Section V.E of the WQMP. According to the WQMP, monitoring test results must be submitted to FDEP within 60 days from completion of laboratory analyses.

<u>Phase 3 – Quarterly Assessment Monitoring and Reporting (Both C&D Debris Disposal Facility and Class I Landfill)</u>

Geosyntec will perform quarterly sampling events for Calendar Year 2023 (January, April, July, and October) of six (6) groundwater wells (MW-21S, MW-40S, MW-49S, MW-50S, MW-51S, and MW-52S) and four (4) surface water sample sites (SW-LC1, SW-LC3, LC-SW4, and LC-SW6) for the C&D debris disposal facility and at four (4) groundwater monitoring wells (MW-14S, MW-53S, MW-54S, and MW-54I) and four (4) surface water samples (C5-SW1, SW-MW-14S, SW-MW-53S, and SW-MW-54S) for the Class I landfill.

The January and July sampling will be performed as part of the semi-annual sampling program under Phase 2 for the C&D debris disposal facility and assumed to take three (3) days to

complete. The April and October data collection and sampling will each take four (4) days to complete. Geosyntec will deliver the samples to Eurofins laboratory for analytical testing under SWDD's contract (i.e., Eurofins will directly invoice SWDD for laboratory charges).

For the C&D debris disposal facility, the quarterly assessment monitoring samples (including those collected in January and July) will be analyzed for the routine monitoring parameters listed in Paragraph 8 of the WQMP (C&D Permit) plus arsenic and benzene.

For the Class I landfill, the quarterly assessment groundwater monitoring samples will be sampled for parameters as required by subparagraph 62-701.510(6)(a)3, F.A.C. The surface water samples will be screened for field parameters.

Geosyntec will assist SWDD in coordinating the analytical testing activities with Eurofins, notify FDEP prior to sampling as required by the WQMP, review and evaluate the analytical test results, and prepare a letter report for each quarterly assessment monitoring event.

The letter reports will be submitted in draft forms to SWDD for review and comment and will be finalized, with SWDD's comments implemented, for submittal to FDEP. Any changes to the monitoring and reporting requirements that might be requested by FDEP based on the results of the quarterly assessment monitoring will be performed under Phase 5 below.

Phase 4 – Title V Permit Compliance and Reporting

Geosyntec will assist SWDD in complying with the operation, monitoring, and reporting requirements for of the active landfill gas collection and control system (GCCS) under the current Title V Air Operation Permit No. 0610015-008-AV. The following permit compliance support services will be provided:

- **Statement of Compliance:** Geosyntec will prepare and submit the annual Statement of Compliance for the Class I Landfill. This compliance document must be submitted to FDEP within 60 days after the end of the calendar year, as required by subparagraph 62-213.440(3)(a)(2), F.A.C.
- Electronic Annual Operating Report (EAOR): Geosyntec will prepare and submit to FDEP the EAOR for the Class I landfill for the calendar year 2022. This report be submitted on or before April 1 of each calendar year, as required by subsection 62-210.370(3), F.A.C. As part of this task, Geosyntec will perform calculations to estimate the annual emission rates of non-methane organic compounds (NMOCs) and VOCs from the LFG to determine if the facility designation has changed from voluntary to mandatory with regard to operation and reporting requirements of the active GCCS under the New

Source Performance Standards (NSPS) requirements. The results of the annual LFG sulfur content test will be used in the EAOR calculations. In the event of a status change, Geosyntec will advise SWDD of its implications.

- **Semi-Annual Monitoring Report:** Geosyntec will prepare and submit two semi-annual monitoring reports to demonstrate compliance with the federal requirements of the Title V permit. The reports will address the following permit conditions or compliance requirements:
 - O Submittal of reports of any required monitoring at least every 6 months. All instances of deviations from permit requirements must be clearly identified in such reports.
 - Reporting, in accordance with requirements of subsection 62-210.700(6) and Rule 62-4.130, F.A.C.., of deviations from permit requirements, including those attributable to upset conditions defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventative measures taken.
 - o Reports shall be accompanied by a responsible official, pursuant to subsection 62-213.420(4), F.A.C.

The reports will only address deviations from the Title V permit conditions. Landfill and LFG operation and maintenance (O&M) data are not required to be reviewed and submitted to FDEP per the Title V permit.

- Annual Title V Emissions Fee: The EAOR application used for reporting to FDEP will automatically calculate the annual emission fee for the facility. Geosyntec will notify SWDD of the fee amount and will submit the check for payment of the fee on behalf of SWDD prior to the April 1 deadline.
- Annual LFG Sulfur Content Test: Geosyntec will collect three samples of LFG annually to determine the sulfur content in accordance with ASTM Method D5504-12 or D7493. The samples will be tested by a certified air testing laboratory. The laboratory test results will be used to calculate sulfur emissions and a report prepared for submittal to FDEP. The LFG sulfur content test and reporting will be completed no later than 31 December 2023.

Phase 5 - Technical and Miscellaneous Permit Compliance Support and Reporting

Under this phase, Geosyntec will provide SWDD with technical support and miscellaneous permit compliance support services related to the Class I landfill and C&D disposal facility on an as needed basis. These services may include:

- reporting required by the Multi-Sector Generic Permit for stormwater discharge;
- assist SWDD in finalizing the draft SWPPP that was completed and submitted to SWDD in January 2016;
- quarterly monitoring and reporting of the LFG monitoring wells located at the perimeter of the site and also in enclosed structures;
- miscellaneous permit and compliance support services;
- assistance with preparing annual budgets for SWDD;
- preparing agenda items for and attending SWDD Board of County Commissioners meetings upon request;
- quarterly methane readings as required by the Class I landfill permit;
- sampling and reporting for additional monitoring wells and surface water for the C&D debris disposal facility depending on the results of the semi-annual and quarterly sampling and analytical testing; and
- other services as needed.

As part of these services, Geosyntec proposes to assist SWDD with the evaluation and resolution of issues pertaining to the exceedances in select analytes of the C&D debris disposal facility and Class I landfill monitoring wells and surface sample sites should these issues arise.

Phase 6 - Storage Tank Monitoring Wells Installation, Sampling and Reporting

In accordance with Table 2 of the Order, Geosyntec will assist SWDD with the following:

- installation of four new groundwater monitoring wells by a Florida Licensed driller and preparation of well construction report for submittal to FDEP;
- initial and three additional sampling events, performed weekly, of the four installed groundwater monitoring wells, analytical testing by Eurofins under direct contract to SWDD, and preparation of the background water quality report for submittal to FDEP;
- two quarterly sampling of the wells following the initial filling of the storage tank with leachate from the Class I Landfill, analytical testing by Eurofins under direct contract to SWDD, and preparation of the first semi-annual groundwater monitoring report for submittal to FDEP: and
- two additional quarterly sampling of the wells, analytical testing by Eurofins under direct contract to SWDD, and preparation of the first annual summary report for submittal to FDEP.

SCHEDULE

Geosyntec will initiate work immediately upon receipt of Notice to Proceed (NTP) from SWDD. The compliance reports required by each permit will be completed and submitted to FDEP before the deadlines discussed above. Other technical and miscellaneous permit compliance support services will be provided on an as-needed basis.

BUDGET ESTIMATE

Geosyntec proposes to perform the above-referenced work on a lump sum basis for \$270,152.97. A budget estimate for the scope of work outlined in Phases 1 through 6 of this proposal is summarized in the following table, and a detailed budget estimate is provided as Attachment 1. 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 during 2007 and 2008 as well as 2020 through 2022, and experience with compliance monitoring, and reporting at similar facilities.

TOTAL	\$270,152.97
Reporting	\$65,532.52
Phase 6 – Storage Tank Monitoring Wells Installation, Sampling and	
Phase 5 – Technical and Miscellaneous Permit Compliance Support	\$29,333.68
Phase 4 – Title V Permit Compliance and Reporting	\$23,027.64
Phase 3 – Quarterly Assessment Monitoring and Reporting	\$72,429.18
Phase 2 – Semi-Annual Sampling and Reporting	\$50,169.87
Phase 1 – Project Management/Meetings	\$29,660.08

Geosyntec will invoice SWDD each month of the project on a lump sum, percent complete basis in accordance with our Agreement. Additional services or any significant change in the scope of work will be performed using the Rate Schedule included in our Agreement. Geosyntec will not exceed the budget estimate without prior approval and written authorization from SWDD.

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 to Dr. Badu-Tweneboah's attention. Please call either of the undersigned with questions you may have as you review this proposal.

Sincerely,

Cristina Graver, P.E. Senior Engineer

Kwasi Badu-Tweneboah, Ph.D., P.E. Senior Principal Engineer

Copies – Ron T. Jones – SWDD

Attachment 1– Detailed Budget Estimate

ATTACHMENT 1 BUDGET ESTIMATE

BUDGET ESTIMATE 2023 COMPLIANCE MONITORING, REPORTING AND OTHER TECHNICAL SUPPORT SERVICES CLASS I LANDFILL AND C&D DEBRIS DISPOSAL FACILITY INDIAN RIVER COUNTY, FLORIDA

PHASE 01: GENERAL CONSULTING/MEETING SUPPORT/PROJECT MANAGEMENT

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$260	10	\$2,600.00
b. Principal	Hr	\$245	0	\$0.00
c. Senior Professional	Hr	\$225	30	\$6,750.00
d. Project Professional	Hr	\$203	80	\$16,240.00
e. Professional	Hr	\$176	0	\$0.00
f. Senior Staff Professional	Hr	\$154	4	\$616.00
g. Staff Professional	Hr	\$132	0	\$0.00
	Subt	otal Professi	onal Services	\$26,206.00
B. Technical/Administrative Services				
a. Designer	Hr	\$143	0	\$0.00
b. Senior Drafter/Senior CADD Operator	Hr	\$126	0	\$0.00
c. Project Administrator	Hr	\$71	30	\$2,130.00
d. Clerical	Hr	\$55	0	\$0.00
Sub	total Technic	al/Administra	tive Services	\$2,130.00
C. Reimbursables				
a. Lodging	Day	\$100	0	\$0.00
b. Per Diem	Day	\$55	0	\$0.00
c. Communications Fee	3% Labor	\$0.03	\$28,336	\$850.08
d. CADD Computer System	Hr	\$15	0	\$0.00
e. Vehicle Rental & Fuel	Day	\$150	3	\$450.00
f. 8"x11" Photocopies	Each	\$0.12	200	\$24.00
g. CADD Drawings	Each	\$3	0	\$0.00
	\$1,324.08			
ТО	\$29,660.08			

BUDGET ESTIMATE 2023 COMPLIANCE MONITORING, REPORTING AND OTHER TECHNICAL SUPPORT SERVICES CLASS I LANDFILL AND C&D DEBRIS DISPOSAL FACILITY INDIAN RIVER COUNTY, FLORIDA

PHASE 02: SEMI-ANNUAL SAMPLING AND REPORTING

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$260	10	\$2,600.00
b. Principal	Hr	\$245	0	\$0.00
c. Senior Professional	Hr	\$225	24	\$5,400.00
d. Project Professional	Hr	\$203	35	\$7,105.00
e. Professional	Hr	\$176	16	\$2,816.00
f. Senior Staff Professional	Hr	\$154	130	\$20,020.00
g. Staff Professional	Hr	\$132	0	\$0.00
	Subtota	l Professio	nal Services	\$37,941.00
B. Technical/Administrative Services				
a. Designer	Hr	\$143	0	\$0.00
b. Senior Drafter/Senior CADD Operator	Hr	\$126	20	\$2,520.00
c. Project Administrator	Hr	\$71	8	\$568.00
d. Clerical	Hr	\$55	0	\$0.00
Subtotal	Technical/	Administrat	ive Services	\$3,088.00
C. Reimbursables				
a. Field Vehicle	Day	\$150	10	\$1,500.00
b. Miscellaneous Supplies	Day	\$50	10	\$500.00
c. Communications Fee	3% Labor	\$0.03	\$41,029	\$1,230.87
d. Lodging	Day	\$164	10	\$1,640.00
e. Groundwater Sampling Kit (per sampler)	Day	\$300	10	\$3,000.00
f. Water Level Measurement Kit (per sampler)	Day	\$30	10	\$300.00
g. Per Diem	Day	\$55	10	\$550.00
h. CADD Computer System	Hr	\$15	20	\$300.00
i. 8"x11" Photocopies	Each	\$0.12	500	\$60.00
j. CADD Drawings	Each	\$3	20	\$60.00
Subtotal Reimbursables				\$9,140.87
TOTAL	ESTIMATE	D BUDGET	: PHASE 02	\$50,169.87

BUDGET ESTIMATE 2023 COMPLIANCE MONITORING, REPORTING AND OTHER TECHNICAL SUPPORT SERVICES CLASS I LANDFILL AND C&D DEBRIS DISPOSAL FACILITY INDIAN RIVER COUNTY, FLORIDA

PHASE 03: QUARTERLY ASSESSMENT MONITORING AND REPORTING

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$260	10	\$2,600.00
b. Principal	Hr	\$245	0	\$0.00
c. Senior Professional	Hr	\$225	40	\$9,000.00
d. Project Professional	Hr	\$203	70	\$14,210.00
e. Professional	Hr	\$176	20	\$3,520.00
f. Senior Staff Professional	Hr	\$154	204	\$31,416.00
g. Staff Professional	Hr	\$132	0	\$0.00
	Subtota	Il Professio	nal Services	\$60,746.00
B. Technical/Administrative Services				
a. Designer	Hr	\$143	0	\$0.00
b. Senior Drafter/Senior CADD Operator	Hr	\$126	20	\$2,520.00
c. Project Administrator	Hr	\$71	0	\$0.00
d. Clerical	Hr	\$55	8	\$440.00
Subtotal	Technical/	Administrat	ive Services	\$2,960.00
C. Reimbursables				
a. Field Vehicle	Day	\$150	10	\$1,500.00
b. Miscellaneous Supplies	Day	\$50	10	\$500.00
c. Communications Fee	3% Labor	\$0.03	\$63,706	\$1,911.18
d. Lodging	Day	\$164	8	\$1,312.00
e. Groundwater Sampling Kit (per sampler)	Day	\$300	8	\$2,400.00
f. Water Level Measurement Kit (per sampler)	Day	\$30	8	\$240.00
g. Per Diem	Day	\$55	8	\$440.00
h. CADD Computer System	Hr	\$15	20	\$300.00
i. 8"x11" Photocopies	Each	\$0.12	500	\$60.00
j. CADD Drawings	Each	\$3	20	\$60.00
Subtotal Reimbursables				\$8,723.18
TOTAL	ESTIMATE	D BUDGET	: PHASE 03	\$72,429.18

BUDGET ESTIMATE 2023 COMPLIANCE MONITORING, REPORTING AND OTHER TECHNICAL SUPPORT SERVICES CLASS I LANDFILL AND C&D DEBRIS DISPOSAL FACILITY INDIAN RIVER COUNTY, FLORIDA

PHASE 04: TITLE V PERMIT COMPLIANCE AND REPORTING

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST	
A. Professional Services					
a. Senior Principal	Hr	\$260	5	\$1,300.00	
b. Principal	Hr	\$245	0	\$0.00	
c. Senior Professional	Hr	\$225	20	\$4,500.00	
d. Project Professional	Hr	\$203	40	\$8,120.00	
e. Professional	Hr	\$176	30	\$5,280.00	
f. Senior Staff Professional	Hr	\$154	0	\$0.00	
g. Staff Professional	Hr	\$132	0	\$0.00	
	Subtota	l Professio	nal Services	\$19,200.00	
B. Technical/Administrative Services					
a. Designer	Hr	\$143	0	\$0.00	
b. Senior Drafter/Senior CADD Operator	Hr	\$126	4	\$504.00	
c. Project Administrator	Hr	\$71	4	\$284.00	
d. Clerical	Hr	\$55	0	\$0.00	
Subtotal Technical/Administrative Services					
C. Reimbursables					
a. Lodging	Day	\$100	2	\$200.00	
b. Per Diem	Day	\$55	2	\$110.00	
c. Communications Fee	3% Labor	\$0.03	\$19,988	\$599.64	
d. CADD Computer System	Hr	\$15	4	\$60.00	
e. Vehicle Rental & Fuel	Day	\$150	2	\$300.00	
f. 8"x11" Photocopies	Each	\$0.12	500	\$60.00	
g. CADD Drawings	Each	\$3	20	\$60.00	
h. Subcontractor	LS	\$1,500	1.1	\$1,650.00	
	\$3,039.64				
TOTAL ESTIMATED BUDGET : PHASE 04				\$23,027.64	

Table 5

BUDGET ESTIMATE 2023 COMPLIANCE MONITORING, REPORTING AND OTHER TECHNICAL SUPPORT SERVICES CLASS I LANDFILL AND C&D DEBRIS DISPOSAL FACILITY INDIAN RIVER COUNTY, FLORIDA

PHASE 05: TECHNICAL MISCELLANEOUS COMPLIANCE SUPPORT SERVICES

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$260	10	\$2,600.00
b. Principal	Hr	\$245	0	\$0.00
c. Senior Professional	Hr	\$225	40	\$9,000.00
d. Project Professional	Hr	\$203	40	\$8,120.00
e. Professional	Hr	\$176	0	\$0.00
f. Senior Staff Professional	Hr	\$154	40	\$6,160.00
g. Staff Professional	Hr	\$132	0	\$0.00
	Subtota	l Professio	nal Services	\$25,880.00
B. Technical/Administrative Services				
a. Designer	Hr	\$143	0	\$0.00
b. Senior Drafter/CADD Operator	Hr	\$126	8	\$1,008.00
c. Project Administrator	Hr	\$71	8	\$568.00
d. Clerical	Hr	\$55	0	\$0.00
Subtotal	Technical/	Administrat	ive Services	\$1,576.00
C. Reimbursables				
a. Lodging	Day	\$100	2	\$200.00
b. Per Diem	Day	\$55	2	\$110.00
c. Communications Fee	3% Labor	\$0.03	\$27,456	\$823.68
d. CADD Computer System	Hr	\$15	8	\$120.00
e. Vehicle Rental & Fuel	Day	\$150	2	\$300.00
f. 8"x11" Photocopies	Each	\$0.12	200	\$24.00
g. CADD Drawings	Each	\$3	100	\$300.00
	\$1,877.68			
TOTAL	\$29,333.68			

BUDGET ESTIMATE 2023 COMPLIANCE MONITORING, REPORTING AND OTHER TECHNICAL SUPPORT SERVICES CLASS I LANDFILL AND C&D DEBRIS DISPOSAL FACILITY INDIAN RIVER COUNTY, FLORIDA

PHASE 06: STORAGE TANK MONITORING WELLS INSTALLATION & REPORTING

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$260	20	\$5,200.00
b. Principal	Hr	\$245	0	\$0.00
c. Senior Professional	Hr	\$225	52	\$11,700.00
d. Project Professional	Hr	\$203	0	\$0.00
e. Professional	Hr	\$176	74	\$13,024.00
f. Senior Staff Professional	Hr	\$154	120	\$18,480.00
g. Staff Professional	Hr	\$132	0	\$0.00
	l Professio	nal Services	\$48,404.00	
B. Technical/Administrative Services				
a. Designer	Hr	\$143	0	\$0.00
b. Senior Drafter/Senior CADD Operator	Hr	\$126	12	\$1,512.00
c. Project Administrator	Hr	\$71	8	\$568.00
d. Clerical	Hr	\$55	0	\$0.00
Subtota	Subtotal Technical/Administrative Services			
C. Reimbursables				
a. Lodging	Day	\$100	10	\$1,000.00
b. Per Diem	Day	\$55	10	\$550.00
c. Communications Fee	3% Labor	\$0.03	\$50,484	\$1,514.52
d. CADD Computer System	Hr	\$15	8	\$120.00
e. Vehicle Rental & Fuel	Day	\$150	10	\$1,500.00
f. 8"x11" Photocopies	Each	\$0.12	0	\$0.00
g. CADD Drawings	Each	\$3	8	\$24.00
h. Subcontractor	LS	\$9,400	1.1	\$10,340.00
Subtotal Reimbursables				
TOTAL ESTIMATED BUDGET : PHASE 06				\$65,532.52