

CCNA2018 WORK ORDER 11

ENGINEERING AND PERMITTING SERVICES

This Work Order Number 11 is entered into as of this ___ day of _____, 2021_, 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.

CONSULTANT:

BOARD OF COUNTY COMMISSIONERS

OF INDIAN RIVER COUNTY

By: _____
Jim Langenbach, P.E.

By: _____
Joseph E. Flescher, Chairman

Title: _____
Vice-President

BCC Approved
Date: _____

Attest: Jeffrey R. Smith, Clerk of Court and Comptroller

By: _____
Deputy Clerk

Approved: _____
Jason E. Brown, County Administrator

Approved as to form and legal sufficiency: _____
Dylan T. Reingold, County Attorney

4 May 2021

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

**Subject: Proposal for Engineering and Permitting Services
Class I Landfill – Indian River County Landfill Facility
Vero Beach, Indian River County, Florida**

Dear Mr. Mehta:

INTRODUCTION

Geosyntec Consultants (Geosyntec) is pleased to submit this proposal to the Indian River County (IRC) Solid Waste Disposal District (SWDD) to provide professional engineering services for the Class I Landfill at the IRC Landfill (IRCL) facility located in Vero Beach, Indian River County, Florida. The proposal presents the scope of work, schedule, and budget estimate to provide engineering and permitting services for the proposed 30,000 gallons per day (gpd) leachate evaporator at the Class I Landfill. The proposal was prepared in response to a 25 March 2021 email request from Mr. Himanshu Mehta P.E., Managing Director of SWDD, to Dr. Kwasi Badu-Tweneboah, P.E. of Geosyntec and prior and subsequent telephone conversations. Geosyntec has prepared this proposal as Exhibit 1 of CCNA-2018-WO No. 11, pursuant to Renewal and Amendment No. 1 to the Agreement for Continuing Services dated May 18, 2021 between Geosyntec Consultants, Inc. (CONSULTANT) and Indian River County, a political subdivision of the State of Florida, 1801 27th Street, Vero Beach, Florida 32960 (COUNTY).

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

PROJECT BACKGROUND

The IRCL facility is located in southern Indian River County, east of Interstate 95, south of Oslo Road, and west of Rangeline Road (74th Avenue SW) in Vero Beach, Florida. The waste materials disposed at the IRCL facility include residential, commercial, agricultural, and industrial Class I waste as well as C&D debris from unincorporated Indian River County and municipalities of Vero Beach, Orchid, Fellsmere, Sebastian, and Indian River Shores, Florida. The IRCL occupies 276 acres, with 22 acres used for construction and demolition (C&D) debris disposal. The C&D debris disposal facility is presently inactive and, as such, the Class I landfill 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 0128769-029-SO-IM, dated December 16, 2020 (Class I Solid Waste Permit). This landfill facility is also currently operating under Title V Air Operation Permit No. 0610015-005-AV, effective June 1, 2017.

A Residuals Dewatering Facility (RDF) is also operated at the IRCL facility by the IRC Department of Utility Services (IRCDUS). Leachate from the Class I landfill and centrate (i.e., dewatering liquids) from the RDF are transmitted via force main to the West Regional Wastewater Treatment Facility (WRWWTF) for treatment and disposal.

Heartland, in collaboration with Indian River Eco District, LLC (IRED) of Lufkin, Texas, conducted a pilot study to demonstrate the effectiveness of Heartland's system to evaporate leachate from the IRC Landfill. Geosyntec was requested by SWDD to conduct an independent evaluation of the pilot study which was completed in February 2020. Heartland and its partners, Proximo Energy and IRED, have subsequently, on March 23, 2021, submitted a proposal to design, build, install and operate a 30,000 gpd leachate evaporation plant featuring a Heartland Concentrator™ system to be located at the IRC Landfill, that will be used to treat all of IRC's Class I landfill leachate during a period of at least fifteen (15) years under the terms of a take-or-pay off-take agreement with SWDD. Geosyntec has been requested by SWDD to provide a proposal for the engineering and permitting services required to implement the above-mentioned proposal from Heartland. This proposal describes professional services to be provided in fulfillment of the aforementioned request.

PROPOSED SCOPE OF WORK

This project includes professional engineering services for filing solid waste Operation Permit and Title V Air Operation Permit modification applications with the FDEP for the IRCL facility to install and operate the leachate evaporator. The scope of work is based on the requirements of Chapter 62-701, Florida Administrative Code (F.A.C.), Chapter 403 of the Florida Statute (F.S.), Chapters 62-4, 62-210 and 62-213 of the F.A.C., and Geosyntec's understanding of the project based on information provided by the SWDD and presented in Heartland's proposal as well as the solid waste and Title V air permitting requirements.

For budgeting purposes, the scope of work has been divided into three (3) phases, as presented below.

- Phase 1—General Consulting/Meeting Support/Project Management;
- Phase 2 —Class I Landfill Solid Waste Operation Permit Modification Application; and
- Phase 3 – Title V Permit Modification (Revision) Application

Each of these phases is briefly described below.

Phase 1 –General Consulting/Meeting Support/Project Management

Phase 1 consists of three components: general consulting, meeting support, and project management. Geosyntec will provide SWDD with consulting services necessary to initiate the Project. Geosyntec will prepare presentation graphics, and other documents required to support the Project's meetings and coordination activities.

A kickoff meeting with SWDD and Heartland (and its partners), is proposed before the start of project activities so that the specific project requirements can be discussed. If required by SWDD, Geosyntec will prepare for and attend a meeting with the SWDD Board to explain the project scope and budget requirements. Geosyntec will also schedule and attend, with SWDD staff, meetings with the FDEP Solid Waste Section in Tallahassee and Southeast District (SED) Division of Air Resource Management (DARM) of FDEP to discuss specific permitting issues. In addition, review meetings will be held with SWDD as necessary during the various phases of the project implementation schedule. Following each meeting, Geosyntec will prepare meeting minutes that document decisions reached in the meetings.

For the purpose of this budget estimate, Geosyntec has included five (5) meetings: (i) one (1) kickoff meeting with SWDD and Heartland (and its partners); (ii) one (1) in-progress design review meeting with SWDD; (iii) two (2) meetings with FDEP and SWDD staff; and (iv) one (1) meeting with the SWDD Board, if requested by SWDD. The FDEP meetings will consist of: (i) one (1) meeting with the Tallahassee office on the solid waste operations permit modification application; (ii) one (1) meeting with the SED's DARM office in West Palm Beach on the Title V permit revision application. If possible, both meetings will be held via teleconference to reduce overall costs to the project.

Project management activities will include budget and schedule tracking, invoice review, and project communications, including the preparation of a monthly progress report. The project report will include a description of the activities completed during the month and planned activities for the following month. In addition, the progress report will identify technical or administrative issues that require SWDD's attention and the current status of the budget and schedule.

Phase 2 – Class I Landfill Solid Waste Operation Permit Modification Application

Task 2.1: Solid Waste Operations Permit Modification Application Package

For the leachate evaporator to be installed and operated at the IRCL facility to treat leachate from the Class I landfill a modification would be required of the facility's Class I Solid Waste Permit. Also, based on review of Heartland's proposal, residuals from the evaporation would have to be disposed in the Class I landfill. These residuals, which are essentially in liquid (or leachate) form, would require disposal or recirculation back into the Class I landfill. Therefore, the Class I landfill permit will require modification and approval by FDEP for leachate recirculation. Geosyntec will

prepare the FDEP solid waste operation permit modification application for the Class I landfill at IRCL site. Geosyntec will complete FDEP Form No. 62-701.900(1) titled “Application for a Permit to Construct, Operate, Modify or Close a Solid Waste Management Facility” and address the additional information items required by the form. The following activities will be performed to prepare the permit modification application for the Class I landfill:

- Prepare an engineering report addressing the requirements of Rule 62-701.320, F.A.C. The report will also demonstrate how SWDD plans to comply with new or revised laws or rules relating to construction, operation, or closure of the Class I Landfill.
- Revise and update the Operations and Training Plan to include the leachate evaporator and recirculation, as necessary, for the Class I Landfill.
- Describe the leachate procedures per Part G.4 of Form 62-701.900(1) as required by subsection 62-701.400(5), F.A.C., including:
 - general procedures for recirculating leachate;
 - procedures for controlling leachate runoff and minimizing leachate runoff with stormwater;
 - procedures for preventing perched water conditions and gas buildup;
 - alternate methods for leachate management when it cannot be recirculated due to weather or runoff conditions, surface seeps, wind-blown spray, or elevated levels of leachate head on the liner; and
 - methods of gas management in accordance with Rule 62-701.530, F.A.C.

In addition to revisions to the Operations and Training Plan, Geosyntec will perform HELP model analysis to estimate the impacts on the head of leachate over the liner as a result of leachate recirculation.

- Prepare engineering permit drawings for the proposed leachate evaporator including site layout and piping plan from the existing landfill gas flare station to the proposed location for the evaporator. (Geosyntec has assumed that these drawings would be prepared and provided by Heartland and its partners for the permit application.) Therefore, no budget for preparing permit drawings is included in the proposal.
- Address any prohibitions that may apply to the facility in accordance with Rule 62-701.300, F.A.C.
- Compile a list of enforcement actions.
- Complete the required FDEP Form 62-701.900(1) and prepare a transmittal letter to FDEP that summarizes the permit modification application package.

Geosyntec will provide one (1) electronic and one (1) hardcopy of the solid waste permit modification application to FDEP Tallahassee and two (2) copies (1 electronic and 1 hardcopy) to SWDD. Activities required for the compilation, reproduction and distribution of the permit application package are included in this phase.

The permit fee will be \$250 for a minor modification to the solid waste operation permit. Geosyntec has included this fee in the budget estimate in order expedite the permitting process.

Task 2.2: Response to Regulatory Comments

Following submittal of the permit modification application, Geosyntec will meet with FDEP Solid Waste Section in Tallahassee to present and discuss the application package. This meeting will be held via teleconference in order to reduce overall costs to the project. Geosyntec will provide FDEP with written responses to requests for additional information (RAIs) throughout the course of the renewal permit review process. For the purpose of the budget estimate, Geosyntec has estimated one response to FDEP RAIs will be required.

Geosyntec will also review and provide comments on the draft Solid Waste Operations Permit Modification issued by FDEP to ensure that it is consistent with the facility requirements and does not contain unexpected compliance and monitoring requirements.

Phase 3 – Title V Permit Revision Application

Task 3.1: Title V Air Operation Permit Revision Application Package

Under this phase, Geosyntec will prepare the FDEP Title V Air Operation Permit revision application to include the leachate evaporator for the IRCL facility. Geosyntec will complete FDEP, DARM Form No. 62-210.900(1) titled “Application for Air Permit - Long Form” and address the additional information items required by the form. The following items will be obtained from Heartland, as applicable, to prepare the permit revision/modification application:

- Facility plot plan;
- Process flow diagram;
- Precautions to prevent emissions of unconfined particulate matter;
- List of insignificant activities;
- Identification of applicable requirements;
- Compliance report and plan;
- Description of proposed changes to the current Title V Air Operation Permit;
- Fuel analysis or specification;
- Detailed description of control equipment;
- Procedures for startup and shutdown;
- Operation and maintenance plan;

- Previously submitted information; and
- Identification of applicable requirements.

Geosyntec will describe the additional emission unit (i.e., the evaporator) for the IRCL facility, and calculate the emissions of air pollutants expected to be released into the environment by its operation. Geosyntec will complete the required FDEP Form 62-210.900(1) and prepare a transmittal letter(s) to FDEP that summarizes the permit modification application package.

Task 3.2: Response to Regulatory Comments

Following submittal of the permit revision application, Geosyntec will meet with the SED office of the FDEP-DARM to present and discuss the application package. This meeting will be held via teleconference in order to reduce overall costs to the project. Geosyntec will provide FDEP with written responses to RAIs throughout the course of the permit application review process. For the purpose of the budget estimate, Geosyntec has estimated one response to FDEP RAI will be required.

Geosyntec will also review and provide comments on the draft Title V Modified (Revised) Permit issued by FDEP to ensure that it is consistent with the facility requirements and does not contain unexpected compliance and monitoring requirements.

SCHEDULE

Geosyntec will proceed with the implementation of this scope of services immediately upon receipt of authorization to proceed from SWDD. Geosyntec anticipates submitting the solid waste application to FDEP by 30 June 2021 assuming a start date of 18 May 2021. The Title V Air application is anticipated to be submitted to FDEP by 16 July 2021. Geosyntec has assumed that the required permits will be obtained within about two to three months of submission to FDEP. Responses to FDEP comments will be performed during this period. Therefore, it is anticipated that the permit modifications for the Project will be issued by September/October 2021.

Geosyntec will work with SWDD to refine the project schedule and set the milestones necessary to meet the needs of the Project. Throughout the duration of the Project, Geosyntec will work diligently to meet those milestones and the schedule developed for the Project.

BUDGET ESTIMATE

Geosyntec proposes to perform the above-referenced work on a lump sum basis for \$64,891.96. A budget estimate for the scope of work outlined in Phases 1 through 3 of this proposal is summarized in the following table, and a detailed budget estimate is provided as Attachment A.

Phase 1: General Consulting/Meeting Support/Project Management	\$20,345.18
Phase 2: Solid Waste Operation Permit Modification Application	\$22,146.72
Phase 3: Title V Permit Revision Application	<u>\$22,400.06</u>
TOTAL	\$64,891.96

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 our attention. Please call either of the undersigned with questions you may have as you review this proposal.

Sincerely,



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

Attachments

ATTACHMENT A
DETAILED BUDGET ESTIMATE

BUDGET ESTIMATE

**Phase 1: General Consulting/Meeting Support/Project Management
Class I Landfill Engineering and Permitting Services, Indian River County Landfill Facility
Vero Beach, Florida**

ITEM	BASIS	RATE	QUANTITY	ESTIMATED BUDGET
A. Professional Services				
a. Senior Principal	Hr	\$260	0	\$0.00
b. Principal	Hr	\$245	32	\$7,840.00
c. Senior Professional	Hr	\$225	17	\$3,825.00
d. Project Professional	Hr	\$203	27	\$5,481.00
e. Professional	Hr	\$176	0	\$0.00
f. Senior Staff Professional	Hr	\$154	0	\$0.00
g. Staff Professional	Hr	\$132	0	\$0.00
Subtotal Professional Services				\$17,146.00
B. Technical/Administrative Services				
a. CADD Designer	Hr	\$143	4	\$572.00
b. Senior Drafter/Senior CADD Operator	Hr	\$126	0	\$0.00
c. Project Administrator	Hr	\$71	8	\$568.00
d. Clerical	Hr	\$55	4	\$220.00
Subtotal Technical/Administrative Services				\$1,360.00
C. Reimbursables				
a. Lodging	Day	\$100	0	\$0.00
b. Per Diem	Day	\$55	0	\$0.00
c. Communications Fee	3% Labor	0.03	\$18,506	\$555.18
d. CADD Computer System	Hr	\$15	4	\$60.00
e. Vehicle Rental & Fuel	Day	\$150	7	\$1,050.00
f. 8"x11" Photocopies	Each	\$0.12	200	\$24.00
g. CADD Drawings	Each	\$3	50	\$150.00
Subtotal Reimbursables				\$1,839.18
TOTAL ESTIMATED BUDGET : PHASE 01				\$20,345.18

BUDGET ESTIMATE

**Phase 2: Class I Landfill Solid Waste Operations Permit Modification Application
Class I Landfill Engineering and Permitting Services, Indian River County Landfill Facility
Vero Beach, Florida**

ITEM	BASIS	RATE	QUANTITY	ESTIMATED BUDGET
A. Professional Services				
a. Senior Principal	hr	\$260	0	\$0.00
b. Principal	hr	\$245	16	\$3,920.00
c. Senior Professional	hr	\$225	12	\$2,700.00
d. Project Professional	hr	\$203	24	\$4,872.00
e. Professional	hr	\$176	0	\$0.00
f. Senior Staff Professional	hr	\$154	44	\$6,776.00
g. Staff Professional	hr	\$132	0	\$0.00
Subtotal Professional Services				\$18,268.00
B. Technical/Administrative Services				
a. Designer	hr	\$143	12	\$1,716.00
b. Senior Drafter/Senior CADD Operator	hr	\$126	0	\$0.00
c. Project Administrator	hr	\$71	0	\$0.00
d. Clerical	hr	\$55	8	\$440.00
Subtotal Technical/Administrative Services				\$2,156.00
C. Reimbursables				
a. Lodging	Day	\$100	0	\$0.00
b. Per Diem	Day	\$55	0	\$0.00
c. Communications Fee	3% labor	0.03	\$20,424	\$612.72
d. CADD Computer System	hr	\$15	12	\$180.00
e. 8"x11" Photocopies	Each	\$0.12	1,000	\$120.00
f. CADD Drawings	Each	\$3	270	\$810.00
Subtotal Reimbursables				\$1,722.72
TOTAL ESTIMATED BUDGET : PHASE 02				\$22,146.72

BUDGET ESTIMATE

Phase 3: Title V Air Permit Modification Application

Class I Landfill Engineering and Permitting Services, Indian River County Landfill Facility

Vero Beach, Florida

ITEM	BASIS	RATE	QUANTITY	ESTIMATED BUDGET
A. Professional Services				
a. Senior Principal	hr	\$260	0	\$0.00
b. Principal	hr	\$245	24	\$5,880.00
c. Senior Professional	hr	\$225	16	\$3,600.00
d. Project Professional	hr	\$203	20	\$4,060.00
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
Subtotal Professional Services				\$19,700.00
B. Technical/Administrative Services				
a. Designer	hr	\$143	10	\$1,430.00
b. Senior Drafter/Senior CADD Operator	hr	\$126	0	\$0.00
c. Administrative Assistant/PA	hr	\$71	2	\$142.00
d. Clerical	hr	\$55	6	\$330.00
Subtotal Technical/Administrative Services				\$1,902.00
C. Reimbursables				
a. Lodging	Day	\$100	0	\$0.00
b. Per Diem	Day	\$55	0	\$0.00
c. Communications Fee	3% labor	0.03	\$21,602	\$648.06
d. CADD Computer System	hr	\$15	10	\$150.00
e. 8"x11" Photocopies	Each	\$0.12	0	\$0.00
f. CADD Drawings	Each	\$3	0	\$0.00
Subtotal Reimbursables				\$798.06
TOTAL ESTIMATED BUDGET : PHASE 03				\$22,400.06