

Phase 2 - Construction Of Cell 3 Segment 3 Expansion

This Indian River County (IRC) Landfill Work Order Number ___ is entered into as of this ___ day of _____, 202_, in accordance with FS 287.055, Consultant’s Competitive Negotiation Act per the Request for Qualification #2023031for Engineering Consulting Services for Landfill Closure, Landfill Gas System Expansion, and Cell Construction, dated April 4, 2023 (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), 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 Section 1 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:
Geosyntec Consultants, Inc.

**BOARD OF COUNTY COMMISSIONERS
OF INDIAN RIVER COUNTY**

By: _____

By: _____
, Chairman

Print Name: _____

BCC Approved Date: _____

Title: _____

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

By: _____
Deputy Clerk

Approved: _____
Michael C. Zito, Interim County Administrator

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

EXHIBIT A
PROFESSIONAL SERVICES

28 March 2023

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

**Subject: Proposal to Provide Engineering Services for Construction Contract Procurement
Phase 2 – Construction of Cell 3 of Segment 3 Expansion
Indian River County Class I Landfill
Vero Beach, Indian River County, Florida**

Dear Mr. Mehta:

Geosyntec Consultants (Geosyntec) is pleased to submit this proposal to the Indian River County (IRC) Solid Waste Disposal District (SWDD) for the provision of engineering support services for construction contract procurement related to Phase 2 construction of Cell 3 of Segment 3 Expansion (hereafter referred to as the Project) of 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 for the preparation of construction and contract documents, development of engineer's construction cost estimate, and contractor procurement assistance.

The proposal was prepared in response to a 28 March 2023 request from Mr. Himanshu Mehta P.E., Managing Director of SWDD, during a telephone conversation with Dr. Kwasi Badu-Tweneboah, P.E. of Geosyntec. Geosyntec has prepared this proposal as Exhibit A of Work Order No. 1 for the Agreement for Engineering Consulting Services for Landfill Closure, Landfill Gas System Expansion, and Cell Construction dated 4 April 2023 (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 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 in Vero Beach, Florida. The SWDD administers the management and operation of the Class I landfill at the IRCL facility. The Class I Landfill includes the closed Segment 1/Infill/Segment 2 vertical expansion, and Segment 3 lateral expansion (Segment 3). The total footprint area of Segment 3 is 76 acres and consists of eight cells that are being constructed in phases as needed. Segment 3, Cell 1, directly east of and on top of the east slope of Segment 2, was constructed in 2013. Segment 3, Cell 2 was constructed in 2020. Republic Services of Florida LP (Republic), the operator of the Class I Landfill, has estimated that filling of Cell 2 will be nearly completed by the end of Calendar Year (CY) 2023 and has therefore recommended that SWDD considers construction of Cell 3 during CY 2023. In order to expedite Cell 3 construction, SWDD would like to implement it in two phases, as follows:

- Phase 1: Site preparation activities consisting primarily of the earthwork for construction of the subgrade for Cell 3; the fill material will be obtained from off-site borrow sources with the actual placement and compaction to be performed by a contractor through the procurement process.
- Phase 2: Construction of the Cell 3 liner and leachate control systems to be performed by a contractor selected through a separate procurement process.

On 22 November 2023, the SWDD Board authorized Geosyntec to prepare the construction and contract documents, and contractor procurement support, construction management (CM), and construction quality assurance (CQA) services during the placement and compaction of the fill material for the subgrade for Phase 1 of Cell 3 construction. The request for bids from contractors is scheduled to be advertised by the County by 30 March 2023 with a bid opening date of 5 May 2023.

This proposal addresses the engineering and support services required to procure a construction contract for Phase 2 of the Project, including preparation of construction documents, engineer's construction cost estimate, and contractor procurement assistance. Geosyntec understands that following the preparation of the construction bid documents and cost estimate, SWDD Staff intends to request SWDD's Board authorization to commence the bidding process for the project.

PROPOSED SCOPE OF WORK

This project includes professional engineering and support services that will be performed for the procurement of a construction contract for the approximately 10.5-acre Cell 3 of Segment 3 of the

Class I Landfill. The scope of work is based on the requirements of Chapter 62-701, Florida Administrative Code (FAC) and Geosyntec's understanding of the Project based on information provided by the SWDD.

Geosyntec will provide all engineering services necessary for the procurement of the construction contract. For budgeting purposes, the scope of work has been divided into four (4) phases, as presented below.

- Phase 1 – General Consulting/Meeting Support/Project Management;
- Phase 2 – Review of Background Documents;
- Phase 3 – Preparation of Construction Documents; and
- Phase 4 – Contractor Procurement Support Services.

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, engineering drawings, and other documents required to support the Project's meetings and coordination activities.

A kickoff meeting with SWDD is proposed before the start of project activities so that the specific project requirements can be discussed. We suggest that this meeting be attended by Republic so that their input on Cell 3 construction can be provided. If required by SWDD, Geosyntec will prepare for and attend a meeting with the SWDD Board to explain the project scope and budget requirements. 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.

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 any technical or administrative issues that require SWDD's attention and the current status of the budget and schedule.

For the purpose of this budget estimate, Geosyntec has included four meetings: (i) one kickoff meeting with SWDD (and Republic, if possible); (ii) one meeting with the SWDD Board, if requested by SWDD; (iii) one progress review meeting with SWDD; and (iv) one final review meeting with SWDD to present the Construction Documents and the construction cost estimate. Additional meetings are addressed in the remaining phases of this proposal.

Phase 2 – Review of Background Documents

Geosyntec designed and permitted the Segment 3 lateral expansion in 2010 and followed up with the construction documents, contractor procurement support, and construction certification services for the 11-acre Cell 1 from 2012 to 2013. The original Segment 3 liner and leachate control system design utilized sideslope risers and submersible pumps to convey leachate from the leachate collection system (LCS) and leak detection system (LDS) pumps via force main to leachate treatment and disposal facility. In January 2018, CDM Smith, retained by SWDD, submitted a permit modification application to FDEP to include a gravity LCS and LDS that conveys leachate to a new pump station located north of the Class I Landfill. This permit modification application was approved by FDEP, and Cell 2 was constructed with this gravity LCS and LDS systems with liner penetrations to the pump station. It is also understood that the new pump station was designed and constructed to handle the combined leachate from Cells 2, 3, and 4 of Segment 3.

Therefore, under this phase Geosyntec will review the following documents and drawings for the preparation of Cell 3 liner construction:

- “Application for an Intermediate Permit Modification for a Class Landfill Permit Nos. 0128769-022-SC & 0128769-023-SO, Indian River County Landfill, Indian River County, Florida”, prepared by CDM Smith, dated January 26, 2018;
- Construction Drawings for Segment 3 Cell 2 Expansion, Segment 2 Partial Closure, and Landfill Gas System Expansion, dated January 2018;
- As-built Survey Drawings for Cell 2 construction including new leachate force main and pump station, October 16, 2019; and
- “Subsurface Soil Exploration and Geotechnical Engineering Evaluation, Proposed Segment No. 3 Cell 3, Indian River County Class Landfill, Indian River County, Florida”, prepared by Andersen Andre Consulting Engineers, Inc., dated January 25, 2023.

Geosyntec will review these documents and any others provided by SWDD during the kick-off meeting to prepare the construction documents for Cell 3.

Phase 3 - Preparation of Construction Documents

Geosyntec will prepare the construction documents (drawings, technical specifications, material quantities, and CQA Plan) required to procure a contractor for Phase 2 construction of Cell 3 of Segment 3 Expansion. Construction drawings will be prepared utilizing the Permit Modification Drawings prepared by CDM Smith (and any applicable Permit Drawings initially prepared by Geosyntec) and will include control points along changes in grade, and other critical locations, including 50-ft grid intervals, to facilitate construction and certification of the Project.

Technical Specifications and the CQA Plan will be compiled as part of the Construction Documents. The specifications will be prepared using the industry-standard Construction Specification Institute (CSI) format. Geosyntec will also prepare a bid sheet with estimate of material quantities for the contractor procurement.

Also under this phase, Geosyntec will prepare an Engineer's Estimate of Probable Construction Cost for the Project to serve as a basis for comparison of bids during the procurement process. Probable construction cost will be based on estimated construction quantities for the project and engineering estimate of the probable unit cost for each item. Probable construction costs will be based on such catalogues as R.S. Means, information provided by product manufacturers, and Geosyntec's professional judgment and experience with similar expansion and liner system installation projects.

Geosyntec will also prepare a construction schedule based on Geosyntec's understanding of the project and experience with similar landfill construction projects.

Phase 4 – Contractor Procurement Services

Under this phase, Geosyntec will prepare construction documents for procuring a construction contractor for Phase 2 construction. This will include preparation of the request for bid (RFB) documents; attending the pre-bid meeting; responding to bidders' questions and preparing required updates to the bidding document throughout the bid preparation process; evaluating bids; and preparing a recommendation to SWDD of the preferred bid for Phase 2 construction. Our budget is based on the assumption that the entire RFB package including the construction drawings, specifications document, responses to questions and project update will be uploaded by the County's Purchasing Division onto Demandstar website where it will be available for downloading by candidate contractors wishing to respond to the RFB. Geosyntec will provide

the County's Purchasing Division a complete package of the RFB for uploading onto the Demandstar website. SWDD will provide the front-end documents prepared for Phase 1 to be modified by Geosyntec for incorporation into the RFB package.

Geosyntec will attend the pre-bid meeting with potential contractors to describe the Project and its requirements and answer questions at the pre-bid meeting. During the bidding process, Geosyntec will respond to written questions by issuing addenda. Preparation of addenda may require revisions to the Construction Drawings or material quantities as necessary to allow comparison and evaluation of bids from the contractors. Geosyntec will manage the procurement process, review and evaluate the bids submitted in compliance with the requirements of the RFB process, and prepare a recommendation with supporting rationale for the selection of the preferred candidate contractor for construction of Phase 2 of the Project.

SCHEDULE

Geosyntec has prepared a schedule for construction contract procurement of the Segment 3 Expansion, which is included as Exhibit B. The schedule, as presented, assumes a start date of 4 April 2023. The first two months will be used to complete the Phase 3 Construction Drawings and other Construction Documents described above. Geosyntec assumes that the bid package will be completed and ready for posting by 15 June 2023. Geosyntec has assumed that the procurement phase including obtaining Board authorization will extend over a period of two to three months leading to the selection of the construction contractor by 15 October 2023.

Geosyntec recognizes the importance of the schedule for SWDD and their need to obtain the required disposal capacity from Cell 3 of Segment 3 Expansion of the Class I landfill. 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 \$139,129.70. A budget estimate for the scope of work outlined in Phases 1 through 4 of this proposal is summarized in the following table, and a detailed budget estimate is provided as Exhibit C.

Phase 1: General Consulting/Meeting Support/Project Management	\$31,027.98
Phase 2: Review of Background Documents	\$22,898.44
Phase 3: Preparation of Construction Documents	\$56,928.16
Phase 4: Contractor Procurement Services	<u>\$28,275.12</u>
TOTAL	\$139,129.70

Mr. Himanshu Mehta, P. E.
28 March 2023
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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 cost 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 the undersigned with questions you may have as you review this proposal.

Sincerely,



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

Attachments

EXHIBIT B
PROJECT SCHEDULE

Cell 3 of Segment 3 Expansion - Phase 2 Construction
Indian River County Landfill
Vero Beach, Florida

ID	Task Name	Duration	Start	Finish	er	2nd Quarter				3rd Quarter			4th Quarter		
						Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
1	SWDD Work Authorization	0 days	Tue 4/4/23	Tue 4/4/23			◆ 4/4								
2	Project Kick-off	0 days	Wed 4/5/23	Wed 4/5/23			◆ 4/5								
3	Prepare Bid Documents	40 days	Mon 4/10/23	Fri 6/2/23			■								
4	Prepare Requests for Bids Package	9 days	Mon 6/5/23	Thu 6/15/23				■							
5	Advertisement	1 day	Thu 6/15/23	Thu 6/15/23					■						
6	Mandatory Pre-Bid Meeting	1 day	Wed 7/5/23	Wed 7/5/23						■					
7	Bids Preparation	25 days	Thu 7/6/23	Wed 8/9/23						■					
8	Bids Review and Preparation of Agenda Package	16 days	Thu 8/10/23	Thu 8/31/23							■				
9	Procurement	17 days	Tue 9/19/23	Wed 10/11/23								■	■		
10	SWDD Board Meeting and Contractor Selection	1 day	Tue 9/19/23	Tue 9/19/23									■		
11	Selected Contractor Satisfies Contract Requirements	15 days	Wed 9/20/23	Tue 10/10/23										■	
12	Chairman Executes Construction Contract	1 day	Wed 10/11/23	Wed 10/11/23											■

Task ■ Milestone ◆ Summary ◀▶

EXHIBIT C
DETAILED BUDGET ESTIMATE

Table 1

BUDGET ESTIMATE
PHASE 2 - CELL 3 LINER CONSTRUCTION CONTRACTOR PROCUREMENT
CLASS I LANDFILL - SEGMENT 3 EXPANSION
INDIAN RIVER COUNTY, FLORIDA

PHASE 1: PROJECT MANAGEMENT/MEETINGS

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$294.00	30	\$8,820.00
b. Principal	Hr	\$274.00	0	\$0.00
c. Senior Professional	Hr	\$254.00	24	\$6,096.00
d. Project Professional	Hr	\$224.00	0	\$0.00
e. Professional	Hr	\$198.00	0	\$0.00
f. Senior Staff Professional	Hr	\$178.00	60	\$10,680.00
g. Staff Professional	Hr	\$154.00	0	\$0.00
Subtotal Professional Services				\$25,596.00
B. Technical/Administrative Services				
a. Senior Designer	Hr	\$190.00	4	\$760.00
b. Designer	Hr	\$160.00	0	\$0.00
c. Senior Drafter/Senior CADD Operator	Hr	\$145.00	0	\$0.00
d. Project Administrator	Hr	\$85.00	12	\$1,020.00
e. Clerical	Hr	\$65.00	6	\$390.00
Subtotal Technical/Administrative Services				\$2,170.00
C. Reimbursables				
a. Lodging	Day	\$150.00	8	\$1,200.00
b. Per Diem	Day	\$55.00	8	\$440.00
c. Communications Fee	3% Labor	\$0.03	\$27,766	\$832.98
d. CADD Computer System	Hr	\$15.00	4	\$60.00
e. Vehicle Rental & Fuel	Day	\$150.00	4	\$600.00
f. 8"x11" Photocopies	Each	\$0.09	100	\$9.00
g. CADD Drawings	Each	\$3.00	40	\$120.00
Subtotal Reimbursables				\$3,261.98
TOTAL ESTIMATED BUDGET : PHASE 01				\$31,027.98

Table 2

**BUDGET ESTIMATE
 PHASE 2 - CELL 3 LINER CONSTRUCTION CONTRACTOR PROCUREMENT
 CLASS I LANDFILL - SEGMENT 3 EXPANSION
 INDIAN RIVER COUNTY, FLORIDA**

PHASE 2: REVIEW OF BACKGROUND DOCUMENTS

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$294.00	12	\$3,528.00
b. Principal	Hr	\$274.00	0	\$0.00
c. Senior Professional	Hr	\$254.00	16	\$4,064.00
d. Project Professional	Hr	\$224.00	0	\$0.00
e. Professional	Hr	\$198.00	0	\$0.00
f. Senior Staff Professional	Hr	\$178.00	42	\$7,476.00
g. Staff Professional	Hr	\$154.00	0	\$0.00
Subtotal Professional				\$15,068.00
B. Technical/Administrative Services				
a. Senior Designer	Hr	\$190.00	32	\$6,080.00
b. Designer	Hr	\$160.00	0	\$0.00
c. Senior Drafter/Senior CADD Operator	Hr	\$145.00	0	\$0.00
d. Project Administrator	Hr	\$85.00	0	\$0.00
e. Clerical	Hr	\$65.00	0	\$0.00
Subtotal Technical/Administrative				\$6,080.00
C. Reimbursables				
a. Lodging	Day	\$100.00	0	\$0.00
b. Per Diem	Day	\$55.00	0	\$0.00
c. Communications Fee	3% Labor	\$0.03	\$21,148	\$634.44
d. CADD Computer System	Hr	\$15.00	32	\$480.00
e. Vehicle Rental & Fuel	Day	\$150.00	0	\$0.00
f. 8"x11" Photocopies	Each	\$0.09	400	\$36.00
g. CADD Drawings	Each	\$3.00	200	\$600.00
Subtotal Reimbursables				\$1,750.44
TOTAL ESTIMATED BUDGET : PHASE 02				\$22,898.44

Table 3

**BUDGET ESTIMATE
 PHASE 2 - CELL 3 LINER CONSTRUCTION CONTRACTOR PROCUREMENT
 CLASS I LANDFILL - SEGMENT 3 EXPANSION
 INDIAN RIVER COUNTY, FLORIDA**

PHASE 3: PREPARATION OF CONSTRUCTION DOCUMENTS

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$294.00	22	\$6,468.00
b. Principal	Hr	\$274.00	0	\$0.00
c. Senior Professional	Hr	\$254.00	28	\$7,112.00
d. Project Professional	Hr	\$224.00	0	\$0.00
e. Professional	Hr	\$198.00	0	\$0.00
f. Senior Staff Professional	Hr	\$178.00	26	\$4,628.00
g. Staff Professional	Hr	\$154.00	56	\$8,624.00
Subtotal Professional				\$26,832.00
B. Technical/Administrative Services				
a. Senior Designer	Hr	\$190.00	136	\$25,840.00
b. Designer	Hr	\$160.00	0	\$0.00
c. Senior Drafter/Senior CADD Operator	Hr	\$145.00	0	\$0.00
d. Project Administrator	Hr	\$85.00	0	\$0.00
e. Clerical	Hr	\$65.00	0	\$0.00
Subtotal Technical/Administrative				\$25,840.00
C. Reimbursables				
a. Lodging	Day	\$100.00	0	\$0.00
b. Per Diem	Day	\$55.00	0	\$0.00
c. Communications Fee	3% Labor	\$0.03	\$52,672	\$1,580.16
d. CADD Computer System	Hr	\$15.00	136	\$2,040.00
e. Vehicle Rental & Fuel	Day	\$150.00	0	\$0.00
f. 8"x11" Photocopies	Each	\$0.09	400	\$36.00
g. CADD Drawings	Each	\$3.00	200	\$600.00
Subtotal Reimbursables				\$4,256.16
TOTAL ESTIMATED BUDGET : PHASE 02				\$56,928.16

Table 4

**BUDGET ESTIMATE
 PHASE 2 - CELL 3 LINER CONSTRUCTION CONTRACTOR PROCUREMENT
 CLASS I LANDFILL - SEGMENT 3 EXPANSION
 INDIAN RIVER COUNTY, FLORIDA**

PHASE 4: CONTRACTOR PROCUREMENT

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$294.00	26	\$7,644.00
b. Principal	Hr	\$274.00	0	\$0.00
c. Senior Professional	Hr	\$254.00	20	\$5,080.00
d. Project Professional	Hr	\$224.00	0	\$0.00
e. Professional	Hr	\$198.00	0	\$0.00
f. Senior Staff Professional	Hr	\$178.00	50	\$8,900.00
g. Staff Professional	Hr	\$154.00	0	\$0.00
Subtotal Professional Services				\$21,624.00
B. Technical/Administrative Services				
a. Senior Designer	Hr	\$190.00	24	\$4,560.00
b. Designer	Hr	\$160.00	0	\$0.00
c. Senior Drafter/Senior CADD Operator	Hr	\$145.00	0	\$0.00
d. Project Administrator	Hr	\$85.00	0	\$0.00
e. Clerical	Hr	\$65.00	8	\$520.00
Subtotal Technical/Administrative Services				\$5,080.00
C. Reimbursables				
a. Vehicle Rental & Fuel	Day	\$150.00	2	\$300.00
b. Per Diem	Day	\$55.00	2	\$110.00
c. Communications Fee	3% Labor	\$0.03	\$26,704	\$801.12
d. CADD Computer System	Hr	\$15.00	24	\$360.00
e. 8"x11" Photocopies	Each	\$0.09	0	\$0.00
f. CADD Drawings	Each	\$3.00	0	\$0.00
Subtotal Reimbursables				\$1,571.12
TOTAL ESTIMATED BUDGET : PHASE 03				\$28,275.12