

AMENDMENT TO WORK ORDER FOR

Phase 2 - Segment 3, Cell 3 Liner Construction
(Project Name)

This Amendment 2 to Work Order Number 1 is entered into as of _____, pursuant to that certain Continuing Contract Agreement, dated May 2, 2023, ("Agreement"), by and between INDIAN RIVER COUNTY, a political subdivision of the State of Florida ("COUNTY") and Geosyntec Consultants, Inc. ("Consultant").

1. The COUNTY has selected the Consultant to perform the professional services set forth in existing Work Order Number 1, with an Effective Date of 4 April 2023.
2. The COUNTY and the Consultant desire to amend this Work Order as set forth on Exhibit A (Modification to Scope of Work), attached to this Amendment and made part hereof by this reference. The professional services will be performed by the Consultant within the timeframe set forth in the Work Order, or as amended in Exhibit A, all in accordance with the terms and provisions set forth in the Agreement.
3. From and after the Effective Date of this Amendment, the above-referenced Work Order is modified as set forth in this Amendment. 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 Amendment as of the date first written above.

CONSULTANT:

BOARD OF COUNTY COMMISSIONERS
OF INDIAN RIVER COUNTY

By: _____

By: _____
Susan Adams, Chairman

Print Name: _____

Title: _____

BCC Approved Date: _____

Attest: Ryan L. Butler, Clerk of Court and Comptroller

By: _____
Deputy Clerk

Approved: _____
John A. Titkanich, Jr., County Administrator

Approved as to form and legal sufficiency: _____
Chris Hicks, Assistant County Attorney

Scope, thresholds and amendment number confirmed by: _____
Purchasing

EXHIBIT A

PROFESSIONAL SERVICES

24 July 2024

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

**Subject: Amendment 2 - Engineering and Construction Support Services Project
Phase 2 - Construction Cell 3 Liner Construction
Indian River County Class I Landfill
Vero Beach, Indian River County, Florida
Geosyntec Project No. FL9363B**

Dear Mr. Mehta:

Geosyntec Consultants, Inc. (Geosyntec) is pleased to submit this proposal to the Indian River County (IRC) Solid Waste Disposal District (SWDD) to provide additional engineering design and construction support services related to the Phase 2 - Cell 3 liner construction of the Class I Landfill (hereafter referred to as the Project) at the IRC Landfill (IRCL) facility located in Vero Beach, Florida. The additional engineering and construction support services are required to complete the construction of the Cell 3 liner and leachate control systems to facilitate preparation of the construction completion certification report for submittal to FDEP. This proposal presents the scope of work, schedule, and budget estimate for the additional services related to Phase 2 – Segment 3 Cell 3 liner construction activities and was prepared in response to a request from Mr. Himanshu Mehta, P.E., Managing Director of SWDD following discussions between him and Mr. Ron T. Jones, BCEE, Assistant Managing Director of SWDD and Dr. Timothy Copeland, P.E and Dr. Kwasi Badu-Tweneboah, P.E. both of Geosyntec.

Geosyntec has prepared this proposal (professional services) as Exhibit A of Amendment 2 to Work Order No. 1, pursuant to that certain Continuing Contract Agreement for Professional Services, 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 is organized to present: (i) project background; (ii) proposed scope of work; (iii) and 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 active 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 complete by the end of Calendar Year (CY) 2024 and has therefore recommended that SWDD considers construction of Cell 3 during CY 2023-2024. Phase 1 construction of Cell 3 of the Segment 3 Expansion started in July 2023 and was completed in February 2024. This phase involved placement and compaction of fill material to bring the grades to the bottom of the liner system. Phase 2 construction of Cell 3 of the Segment 3 Expansion includes the installation of the liner and leachate control systems and is currently under construction.

On 20 February 2024 SWDD authorized Amendment 1 to Work Order 1 to Geosyntec to provide engineering and construction support services related to Phase 2 Liner Construction activities for Cell 3. The scope of services includes construction management (CM, quality assurance/quality control (QA/QC) services, resident engineering and preparation of construction completion certification report for submittal to FDEP. Geosyntec had previously completed the construction documents and assisted SWDD through the procurement process to select Comanco Environmental Corporation (COMANCO) as the contractor for the liner construction activities. COMANCO was issued the notice to proceed (NTP) on 1 April 2024 and had an estimated substantial completion by 31 July 2024. As such, Geosyntec assumed up to 4 months for the liner construction activities after mobilization by the contractor; however, after approximately 3 months since the NTP, the actual liner construction started on 26 June 2024. COMANCO has now estimated substantial completion by 11 October 2024.

This proposal addresses the additional engineering design and construction support services required to complete Phase 2 of the Project, including additional engineering design services requested by SWDD, additional construction support services including additional CM, onsite QA/QC support, and survey certification support required to substantially complete construction by the contractor.

PROPOSED SCOPE OF WORK

The additional scope of work is divided into the following four phases:

- Phase 1 – General Consulting/Meeting Support/Project Management;
- Phase 3 – QA/QC Services;
- Phase 4 – Construction Management;
- Phase 8 – Miscellaneous Engineering Support Services.

Phase 1 – General Consulting/Meeting Support/Project Management

Under this phase, Geosyntec will perform project management responsibilities, such as correspondence with SWDD and FDEP, review of subcontractors' invoices, project coordination, and administration including monthly invoicing throughout the extended project schedule.

Phase 3 – QA/QC Services

This phase includes the additional labor and expenses for the QA/QC services to substantially complete construction (which is estimated to be by 11 October 2024). Geosyntec's QA/QC personnel have been on site since 16 April 2024 by monitoring other construction activities under Change Orders 1 & 3. As previously indicated actual liner construction work started on 26 June 2024 and substantial completion of the Cell 3 liner construction is estimated to be on 11 October 2024. Therefore, an additional 3 months of QA/QC services is projected to complete this Project based on the contractor's current schedule estimation.

As part of this phase, additional site visits are required by the subcontracted surveyor, Peavey & Associates (Peavey) to perform as-built surveys of completed sections in order to expedite construction. Peavey's unit rate proposal for the additional work is included as Attachment A.

Phase 4 – Construction Management

The originally approved Work Order assumed CM support services for a 4-month construction duration. As of 20 June 2024, the projected project schedule surpassed the four (4) month projection based on the contractor's response to Change Order No. 2. Additionally, tracking and reviewing time and materials (T&M) invoices for Change Orders 1, 3, 4 & 5 and unanticipated additional site visits at the request of SWDD have increased the overall initial scope. The additional support projected to finish this Project will include an additional three (3) months of contracting services based on the contractors' current schedule estimation. Therefore, Geosyntec will provide CM support services for an additional three (3) months. This includes preparation

and participation in weekly construction progress meetings, preparation meeting minutes, and review of contractor's submittals including payment application requests and time and material billing reports.

Phase 8 – Miscellaneous Engineering Support Services

This phase addresses the additional engineering support services associated with the operation of the Class I Landfill including the submersible pumps located in Cell 2 and Leachate Lift Station. During project progress meetings with SWDD, Geosyntec was asked to evaluate replacing the submersible pumps located in the Cell 2 LDS manhole and in the main Pump Station for Cells 1 to 4.

Geosyntec is also assisting SWDD to evaluate the timelines for placing waste in the north slopes of Cell 2 as well as recommendations/suggestions regarding the existing landfill gas (LFG) systems in the area.

BUDGET ESTIMATE

A budget estimate for the scope of work outlined in Phase 1, 3, 4, & 8 of this proposal is summarized in the following table. A detailed budget estimate is provided as Attachment B.

• Phase 1 – General Consulting/Meeting Support/Project Management	\$3,710.07
• Phase 3 – QA/QC Services	\$130,214.30
• Phase 4 – Construction Management	\$24,950.45
• Phase 8 – Miscellaneous Engineering Support Services	\$11,630.38
TOTAL	\$170,505.20

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,



Timothy Copeland, Ph.D., P.E.
Project Engineer



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

Attachments

Attachment A: Peavey Unit Rate Proposal

Attachment B: Detailed Budget Estimate

ATTACHMENT A
PEAVEY PROPOSAL



Peavey & Associates

Surveying & Mapping, PA

9399 North Lake Buffum Road Fort Meade, FL 33841

Phone: 863-738-4960

Email: DebPeavey@peaveysurveying.com

June 27, 2024 revised

Mr. Kwasi Badu-Tweneboah, Ph. D. P.E.
Geosyntec Consultants
1200 Riverplace Boulevard, Suite 710
Jacksonville, Florida 32207

RE: Indian River County Vero Beach Landfill Cells 3 Construction

I am pleased to offer the following proposal for surveying services at the above referenced project location.

1. SCOPE OF SERVICES

The project consists of the following surveying services located at the above location as follows:

PHASE 1-Site Preparation Surveying

- Task Four- Stakeout locations of groundwater monitoring wells and gas monitoring probes.
- Task Five- Survey TOC (northing, easting, and elevation in NGVD29) for individual wells. Survey shall be prepared in accordance with the FDEP permit. Providing three (3) signed and sealed hard copies and electronic file.

PHASE 11- Cell Construction Surveying

- Task One: As-built survey of the preparation of the liner grade surface & anchor trench. (3 trips)
- Task Two: As-built survey of the secondary liner geomembrane. Panels, repairs, destructs. (4 trips)
- Task Three: As-built survey of the primary liner geomembrane. Panels, repairs, destructs, and liner tie-in. (4 trips)
- Task Four: As-built survey of the 2' protective layer surface. (4 trips)
- Task Five: As-built of the leachate collection system corridor pipes, sumps, manholes, force main, etc. (2 trips)
- Task Six: As-built survey of the final improvements. Edge of liner markers and stormwater improvements. (2 trips)
- Task Seven: Volume calculations for conformance check and for measurement and final payment purposes.



Peavey & Associates

Surveying & Mapping, PA

9399 North Lake Buffum Road Fort Meade, FL 33841

Phone: 863-738-4960

Email: DebPeavey@peaveysurveying.com

Survey shall be on a square grid spaced not wider than 50 feet. Five copies of the final as-built drawings and electronic copy in Cadd will be provided.

2. REQUIREMENTS OF CLIENT

- Receipt of an executed agreement.
- Hard copy of the approved construction plans
- Digital copy of plans. (pdf and cadd)

3. PROFESSIONAL FEES

Compensation for the outlined services will be on a lump sum basis, billed monthly for completion percentages of work in progress, as followed:

PHASE 1 - Site Preparation Surveying

Task Four:	1,500.00
Task Five:	<u>2,500.00</u>
TOTAL	\$4,000.00

PHASE 2 - Cell Construction Surveying

Task One:	5,000.00
Task Two:	6,000.00
Task Three:	6,000.00
Task Four:	6,000.00
Task Five:	4,000.00
Task Six:	4,000.00
Task Seven:	<u>1,000.00</u>
TOTAL	\$32,000.00

PROJECT TOTAL \$36,000.00

4. ACCEPTANCE OF TERMS

Services requested by the CLIENT not listed in the above scope of work will be provided on a time and material basis in accordance with the "Hourly Rate Schedule" attached hereto as Exhibit "A".

If the proceeding is satisfactory to you, please return a signed copy of this Agreement. Invoicing will occur monthly based upon the percentage or hours of work completed.



Peavey & Associates

Surveying & Mapping, PA

9399 North Lake Buffum Road Fort Meade, FL 33841

Phone: 863-738-4960

Email: DebPeavey@peaveysurveying.com

Sincerely,

Deborah L. Peavey, PSM

Agreed to and accepted by: _____

Owner or Owner's Authorized Agent Date

EXHIBIT A

HOURLY RATE SCHEDULE

Senior Project Surveyor	\$175.00
Survey Crew	\$175.00
Additional trip for subgrade (\$175 per hour at 4hrs)	\$700

ATTACHMENT B

DETAILED BUDGET ESTIMATE

Table 1

BUDGET ESTIMATE
PHASE 2 - LINER INSTALLATION FOR CELL 3 CONSTRUCTION AMENDMENT #2
CLASS I LANDFILL - SEGMENT 3 EXPANSION
INDIAN RIVER COUNTY, FLORIDA

PHASE 1: GENERAL CONSULTING/MEETING SUPPORT/PROJECT MANAGEMENT

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$294.00	3	\$882.00
b. Principal	Hr	\$274.00	0	\$0.00
c. Senior Professional	Hr	\$254.00	0	\$0.00
d. Project Professional	Hr	\$224.00	3	\$672.00
e. Professional	Hr	\$198.00	0	\$0.00
f. Senior Staff Professional	Hr	\$178.00	0	\$0.00
g. Staff Professional	Hr	\$154.00	0	\$0.00
Subtotal Professional Services				\$1,554.00
B. Technical/Administrative Services				
a. Site Manager/Construction Manager	Hr	\$142.00	0	\$0.00
b. Senior Engineering Technician	Hr	\$99.00	0	\$0.00
c. Engineering Technician	Hr	\$83.00	0	\$0.00
d. Senior Designer	Hr	\$190.00	0	\$0.00
e. Designer	Hr	\$160.00	0	\$0.00
f. Senior Drafter/Senior CADD Operator	Hr	\$145.00	0	\$0.00
g. Project Administrator	Hr	\$85.00	3	\$255.00
h. Clerical	Hr	\$65.00	0	\$0.00
Subtotal Technical/Administrative Services				\$255.00
C. Indirect Expenses				
a. Subcontractor Services	Each	\$0.00	1.12	\$0.00
Subcontractor Services				\$0.00
D. Direct Expenses				
a. Lodging	Day	\$150.00	0	\$0.00
b. Per Diem	Day	\$55.00	0	\$0.00
c. Communications Fee	3% Labor	\$0.03	\$1,809	\$54.27
d. CADD Computer System	Hr	\$15.00	0	\$0.00
e. Vehicle Rental & Fuel	Day	\$150.00	12	\$1,800.00
f. 8"x11" Photocopies	Each	\$0.09	120	\$10.80
g. CADD Drawings	Each	\$3.00	12	\$36.00
Subtotal Reimbursables				\$1,901.07
TOTAL ESTIMATED BUDGET : PHASE 1				\$3,710.07

Table 2

BUDGET ESTIMATE
PHASE 2 - LINER INSTALLATION FOR CELL 3 CONSTRUCTION AMENDMENT #2
CLASS I LANDFILL - SEGMENT 3 EXPANSION
INDIAN RIVER COUNTY, FLORIDA

PHASE 3: QA/QC SERVICES

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$294.00	15	\$4,410.00
b. Principal	Hr	\$274.00	0	\$0.00
c. Senior Professional	Hr	\$254.00	0	\$0.00
d. Project Professional	Hr	\$224.00	20	\$4,480.00
e. Professional	Hr	\$198.00	10	\$1,980.00
f. Senior Staff Professional	Hr	\$178.00	0	\$0.00
g. Staff Professional	Hr	\$154.00	0	\$0.00
Subtotal Professional Services				\$10,870.00
B. Technical/Administrative Services				
a. Site Manager/Construction Manager	Hr	\$142.00	400	\$56,800.00
b. Senior Engineering Technician	Hr	\$99.00	140	\$13,860.00
c. Engineering Technician	Hr	\$83.00	0	\$0.00
d. Senior Designer	Hr	\$190.00	0	\$0.00
e. Designer	Hr	\$160.00	8	\$1,280.00
f. Senior Drafter/Senior CADD Operator	Hr	\$145.00	0	\$0.00
g. Project Administrator	Hr	\$85.00	0	\$0.00
h. Clerical	Hr	\$65.00	0	\$0.00
Subtotal Technical/Administrative Services				\$71,940.00
C. Indirect Expenses				
a. Subcontractor Services - Peavey	Each	\$10,000.00	1.12	\$11,200.00
a. Subcontractor Services - Excel	Each	\$0.00	1.12	\$0.00
a. Subcontractor Services - TRI	Each	\$0.00	1.12	\$0.00
Subcontractor Services				\$11,200.00
D. Direct Expenses				
a. Lodging	Day	\$150.00	120	\$18,000.00
b. Per Diem	Day	\$55.00	120	\$6,600.00
c. Communications Fee	3% Labor	\$0.03	\$82,810	\$2,484.30
d. CADD Computer System	Hr	\$15.00	8	\$120.00
e. Vehicle Rental & Fuel	Day	\$150.00	60	\$9,000.00
f. 8"x11" Photocopies	Each	\$0.09	0	\$0.00
g. CADD Drawings	Each	\$3.00	0	\$0.00
Subtotal Reimbursables				\$36,204.30
TOTAL ESTIMATED BUDGET : PHASE 3				\$130,214.30

Table 3

BUDGET ESTIMATE
PHASE 2 - LINER INSTALLATION FOR CELL 3 CONSTRUCTION AMENDMENT #2
CLASS I LANDFILL - SEGMENT 3 EXPANSION
INDIAN RIVER COUNTY, FLORIDA

PHASE 4: CONSTRUCTION MANAGEMENT

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$294.00	10	\$2,940.00
b. Principal	Hr	\$274.00	0	\$0.00
c. Senior Professional	Hr	\$254.00	0	\$0.00
d. Project Professional	Hr	\$224.00	50	\$11,200.00
e. Professional	Hr	\$198.00	10	\$1,980.00
f. Senior Staff Professional	Hr	\$178.00	0	\$0.00
g. Staff Professional	Hr	\$154.00	0	\$0.00
Subtotal Professional Services				\$16,120.00
B. Technical/Administrative Services				
a. Site Manager/Construction Manager	Hr	\$142.00	0	\$0.00
b. Senior Engineering Technician	Hr	\$99.00	0	\$0.00
c. Engineering Technician	Hr	\$83.00	0	\$0.00
d. Senior Designer	Hr	\$190.00	10	\$1,900.00
e. Designer	Hr	\$160.00	0	\$0.00
f. Senior Drafter/Senior CADD Operator	Hr	\$145.00	0	\$0.00
g. Project Administrator	Hr	\$85.00	2	\$170.00
h. Clerical	Hr	\$65.00	5	\$325.00
Subtotal Technical/Administrative Services				\$2,395.00
C. Indirect Expenses				
a. Subcontractor Services	Each	\$0.00	1.12	\$0.00
Subcontractor Services				\$0.00
D. Direct Expenses				
a. Lodging	Day	\$150.00	6	\$900.00
b. Per Diem	Day	\$55.00	6	\$330.00
c. Communications Fee	3% Labor	\$0.03	\$18,515	\$555.45
d. CADD Computer System	Hr	\$15.00	10	\$150.00
e. Vehicle Rental & Fuel	Day	\$150.00	30	\$4,500.00
f. 8"x11" Photocopies	Each	\$0.09	0	\$0.00
g. CADD Drawings	Each	\$3.00	0	\$0.00
Subtotal Reimbursables				\$6,435.45
TOTAL ESTIMATED BUDGET : PHASE 4				\$24,950.45

Table 4

BUDGET ESTIMATE
PHASE 2 - LINER INSTALLATION FOR CELL 3 CONSTRUCTION AMENDMENT #2
CLASS I LANDFILL - SEGMENT 3 EXPANSION
INDIAN RIVER COUNTY, FLORIDA

PHASE 8: MISCELLANEOUS ENGINEERING SUPPORT SERVICES

ITEM	BASIS	RATE	QUANTITY	ESTIMATED COST
A. Professional Services				
a. Senior Principal	Hr	\$294.00	7	\$2,058.00
b. Principal	Hr	\$274.00	0	\$0.00
c. Senior Professional	Hr	\$254.00	0	\$0.00
d. Project Professional	Hr	\$224.00	10	\$2,240.00
e. Professional	Hr	\$198.00	16	\$3,168.00
f. Senior Staff Professional	Hr	\$178.00	10	\$1,780.00
g. Staff Professional	Hr	\$154.00	0	\$0.00
Subtotal Professional Services				\$9,246.00
B. Technical/Administrative Services				
a. Site Manager/Construction Manager	Hr	\$142.00	0	\$0.00
b. Senior Engineering Technician	Hr	\$99.00	0	\$0.00
c. Engineering Technician	Hr	\$83.00	0	\$0.00
d. Senior Designer	Hr	\$190.00	10	\$1,900.00
e. Designer	Hr	\$160.00	0	\$0.00
f. Senior Drafter/Senior CADD Operator	Hr	\$145.00	0	\$0.00
g. Project Administrator	Hr	\$85.00	0	\$0.00
h. Clerical	Hr	\$65.00	0	\$0.00
Subtotal Technical/Administrative Services				\$1,900.00
C. Indirect Expenses				
a. Subcontractor Services	Each	\$0.00	1.12	\$0.00
Subcontractor Services				\$0.00
D. Direct Expenses				
a. Lodging	Day	\$150.00	0	\$0.00
b. Per Diem	Day	\$55.00	0	\$0.00
c. Communications Fee	3% Labor	\$0.03	\$11,146	\$334.38
d. CADD Computer System	Hr	\$15.00	10	\$150.00
e. Vehicle Rental & Fuel	Day	\$150.00	0	\$0.00
f. 8"x11" Photocopies	Each	\$0.09	0	\$0.00
g. CADD Drawings	Each	\$3.00	0	\$0.00
Subtotal Reimbursables				\$484.38
TOTAL ESTIMATED BUDGET : PHASE 8				\$11,630.38