

ADDENDUM No. 4
SOLID WASTE DISPOSAL DISTRICT
INDIAN RIVER COUNTY LANDFILL
PHASE 2 - CELL 3 - SEGMENT 3 EXPANSION (11.5 AC.)
ENGINEER'S ESTIMATE

Item No.	Work Description/Item	Units	Estimated Quantity	Unit Cost (\$)	Total Cost (\$)
General Site Preparation					
1	Mobilization and Demobilization (not-to-exceed 5% of total bid) (Note I)	LS	1	\$ 250,000.00	\$ 250,000.00
2	Surveying & As-Built Drawings (Note II)	LS	1	\$ 54,000.00	\$ 54,000.00
				Subtotal Site Preparation =	\$ 304,000.00
Earthwork (Includes Grading and In-place Compaction Note III)					
3	General and Structural Fill				
	A. Site Grading and Leveling of Top of Liner Subbase Prior to Geosynthetics Installation (Primarily Cut)	cyd	1,400	\$ 16.50	\$ 23,100.00
				Subtotal Earthwork =	\$ 23,100.00
Cell 3 Liner System (Note IV)					
4	Liner Protective Layer				
	A. 24-in. Liner Protective Layer with Grading and Compaction	cyd	36,000	\$ 16.50	\$ 594,000.00
	B. Intercell Separation Berm	cyd	1,200	\$ 16.50	\$ 19,800.00
	C. Temporary Intercell Berm with Rain Flap	cyd	1,700	\$ 16.50	\$ 28,050.00
5	Primary Geocomposite Drainage Layer	sq ft	499,500	\$ 1.00	\$ 499,500.00
6	Primary 60 mil Textured HDPE Geomembrane	sq ft	499,500	\$ 1.17	\$ 584,415.00
7	Secondary Geocomposite Drainage Layer	sq ft	499,500	\$ 1.00	\$ 499,500.00
8	Secondary 60 mil Textured HDPE Geomembrane	sq ft	499,500	\$ 1.17	\$ 584,415.00
9	Geosynthetic Clay Liner	sq ft	499,500	\$ 1.36	\$ 679,320.00
10	Electrical Leak Location Survey	LS	1	\$ 35,000.00	\$ 35,000.00
11	Liner System Tie-in (Extrusion Weld/Double-track Fusion Weld)	LF	1,300	\$ 12.50	\$ 16,250.00
12	Geomembrane Rainflap				
	A. Geomembrane Rainflap	sq ft	37,100	\$ 1.17	\$ 43,407.00
	B. Extrusion Weld - Geomembrane Sacrificial Rainflap to Primary HDPE Geomembrane	LF	1,300	\$ 9.00	\$ 11,700.00
13	Anchor Trench	LF	2,900	\$ 9.00	\$ 26,100.00
				Subtotal Cell 3 Liner System =	\$ 3,621,457.00
Leachate Collection & Detection System					
14	LCS Corridor				
	A. Granular Drainage Material (AASHTO No. 57)	cyd	1,000	\$ 150.00	\$ 150,000.00
	B. Geotextile Filter/Cushion with 2-in. overlap and sewn at seam	sq yd	900	\$ 4.00	\$ 3,600.00
15	LDS Additional Geonet Drainage Layer in Corridor	sq yd	1,920	\$ 9.00	\$ 17,280.00
16	LDS Granular Drainage Material (AASHTO No. 4)	cyd	80	\$ 200.00	\$ 16,000.00
17	10-in. Dia. SDR 17 Solid HDPE Carrier Pipe (Leachate Collection + Leachate Detection + Leachate Gravity Line + Horizontal Direction Drill)	LF	510	\$ 115.00	\$ 58,650.00
18	12-in. Dia. SDR 21 Solid HDPE Containment Pipe (Leachate Collection + Leachate Detection + Leachate Gravity Line + Horizontal Direction Drill)	LF	510	\$ 115.00	\$ 58,650.00
19	10-in. Dia. SDR 17 LDS Perforated Pipe & Fittings	LF	350	\$ 115.00	\$ 40,250.00
20	10-in. Dia. SDR 17 LCS Perforated Pipe & Fittings	LF	1,300	\$ 115.00	\$ 149,500.00
21	Toe Drain (Note VII)				
	A. 6-in. Dia. SDR 17 Perforated HDPE Pipe	LF	1,250	\$ 115.00	\$ 143,750.00
	B. Toe Drain Connector and Reducer	each	2	\$ 650.00	\$ 1,300.00
	C. Granular Drainage Material (AASHTO No. 57)	cyd	200	\$ 150.00	\$ 30,000.00
	D. Geotextile Filter/Cushion with 2-in. overlap and sewn at seam	sq yd	1,560	\$ 4.00	\$ 6,240.00
22	Jet Cleaning and Video Inspection of LCS and LDS	LS	1	\$ 11,350.00	\$ 11,350.00
23	Trenches with Unpaved Easements	LF	300	\$ 8.00	\$ 2,400.00
24	Excavation, Grading, and Compaction for Sump	LS	1	\$ 1,428.00	\$ 1,428.00
25	10-in. Dia. Perforated Leachate Detection Manifold	each	1	\$ 10,000.00	\$ 10,000.00
26	LCS & LDS Cleanout				
	A. 10-in. Dia. Solid SDR-17 LCS Cleanout Pipe with Gasket, Secure Boot and all other Fittings	LF	20	\$ 125.00	\$ 2,500.00
	B. 4'X5'X5" Fiber Reinforced Concrete Collar	each	3	\$ 629.68	\$ 1,889.04
	C. 10-in. Dia. Solid SDR-17 LDS Cleanout Pipe with Gasket, Secure Boot and all other Fittings	LF	130	\$ 125.00	\$ 16,250.00
	D. LCS & LDS Cleanout Cap and fittings	each	3	\$ 600.00	\$ 1,800.00
	E. WYE Fittings for LCS Cleanout	each	1	\$ 750.00	\$ 750.00
27	Wall Sleeve with Mechanical Seal	each	12	\$ 95.00	\$ 1,140.00
28	Liner Penetration Box	each	3	\$ 8,000.00	\$ 24,000.00
29	Valve and Box with Box Pad	each	1	\$ 5,000.00	\$ 5,000.00
30	Concrete Slab for Control Panel	each	1	\$ 1,800.00	\$ 1,800.00

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31	Electrical, Control Panel, Grounding & Lightning Protection (Note V)	LS	1	\$ 45,000.00	\$ 45,000.00
32	LDS Pump Station Sump Pump	each	1	\$ 200,000.00	\$ 200,000.00
33	LCS Manhole	each	1	\$ 9,000.00	\$ 9,000.00
34	Reinforcements around openings	LS	1	\$ 5,000.00	\$ 5,000.00
35	Liner Markers (Post- 4"x4"x8')	each	2	\$ 150.00	\$ 300.00
36	Bollard Post with Encasement	each	5	\$ 1,100.00	\$ 5,500.00
37	Limit of Waste Markers	each	6	\$ 25.00	\$ 150.00
38	Marker Tape	LF	800	\$ 5.00	\$ 4,000.00
39	Post Mounted Pipe Support	each	2	\$ 50.00	\$ 100.00
40	8-Ft. Aluminium Sign Post with 2-Ft. Dia. Concrete Footing	each	1	\$ 450.00	\$ 450.00
41	24-in. x 20-in. Warning Sign	each	1	\$ 400.00	\$ 400.00
42	Sandbags	each	1,000	\$ 12.50	\$ 12,500.00
43	Rain Tarp (Dura Skirm 12 BV or approved equivalent) with Ropes & Ties	sq ft	334,000	\$ 0.30	\$ 100,200.00
Subtotal Leachate Collection Sump =					\$ 1,138,127.04
Drainage Ditch, Access Road and Entrance Road					
44	Regrading	LF	100	\$ 16.00	\$ 1,600.00
45	Access Roads and Ramps				
	A. RCA - Provided by the Client (Labor Only)	cyd	150	\$ 60.00	\$ 9,000.00
	B. Stabilizer Material	cyd	100	\$ 45.00	\$ 4,500.00
46	24-in. by 36-in. RCP Elliptical Culvert	LF	130	\$ 150.00	\$ 19,500.00
Subtotal Drainage Ditch & Access Road =					\$ 34,600.00
Miscellaneous					
47	Erosion and Sediment Controls	LS	1	\$ 100,000.00	\$ 100,000.00
48	Site Restoration including Vegetation	acres	1.35	\$ 35,000.00	\$ 47,250.00
Total Miscellaneous =					\$ 147,250.00
SUBTOTAL =					\$ 5,268,534.04
15% CONTINGENCY =					\$ 790,280.11
TOTAL =					\$ 6,058,814.15

- I. Mobilization/Demobilization (Item 1) shall include any partial demobilization required for all components of construction specified herein and in the Construction Drawings and Technical Specifications.
- II. The survey activities (Item 2) shall include surveying of existing conditions prior to construction, as-built surveys of subbase, liner protective cover, leachate collection system, a final survey and any surveying needed throughout the duration of the project.
- III. Earthwork quantities are in-place compacted quantities. Earthwork pay items include all cost to haul, place, compact, and grade general/structural fill.
- IV. All geosynthetic quantities provided are installation quantities for bid estimate purposes. Material supply quantities shall be based on installer take-off estimate, approved by Owner. Supply quantities shall include waste, slope, anchor trench, overlap, and any other adjustment factors necessary to supply all material to complete the work. Install pay quantities will be based on actual square footage verified by 3rd party survey.
- V. Includes all material, equipment and labor required to install pumps, piping, meters, valves, and other components/instrumentation at the leachate collection and detection systems and sumps.
- VI. Quantities presented herein are estimated quantities and should be verified by Contractor. If quantities are found to be significantly different, Contractor shall notify Construction Manager. Quantities not provided shall be estimated and verified by Contractor. Payment shall be made on surveyed and calculated quantities in accordance with the Technical Specifications.
- VII. Toe drain is currently pending permit modification approval by FDEP.