



An employee-owned company

February 10, 2010

Mr. Steven G. Morgan
Solid Waste Section
Southwest District
Florida Department of Environmental Protection
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Dept. Of Environmental Protection

FEB 23 2010

Southwest District

RE: Lena Road Class I Landfill Operation Permit Renewal
Pending Permit No.: 39884-018-SO/01, Manatee County
WACS ID No.: SWD-41-44795
Closure and Long-term Care Cost Estimate

Dear Mr. Morgan:

Enclosed please find 4 copies of the "Closure Cost Estimate Form for Solid Waste Facilities (FDEP Form #62-701.900(28) Effective 01/06/2010) for the above referenced project. The closure and long-term care costs were recalculated for this application per your letter dated December 10, 2009. We are submitting this form separately since Manatee County is using the Financial Test for financial assurance, and the updated cost estimates are due to FDEP by March 1, 2010. We are assembling the rest of the information requested and will submit it shortly.

Sincerely,

Joseph L. Miller, P.E. #39157
Project Manager

Cc: Mike Gore, Manatee County Solid Waste Division Manager
Bryan White, Manatee County Landfill Superintendent
Jeanne Detweiler, Manatee County Division/Landfill



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form # 62-701.900(28), F.A.C.

Form Title: Closure Cost Estimating Form
For Solid Waste Facilities

Effective Date: January 6, 2010

Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Manatee County Lena Road Class I Landfill WACS ID: SWD4144795
Permit Application or Consent Order No.: 39884-018-SO/01 Expiration Date: _____
Facility Address: 3333 Lena Road, Bradenton, FL 34211
Permittee or Owner/Operator: Manatee County Government - Utilities Department
Mailing Address: 3333 Lena Road, Bradenton, FL 34211

Latitude: 27° 28' 10" Longitude: 82° 26' 35"
Coordinate Method: US State Plane Datum: NAD 1983 (90)
Collected by: Patrick McCormack, P.S.M. Company/Affiliation: PBS&J

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
Stage I	132	1972	32			
Stage III	66	2004	10	4		
Stage II	118	2014	26	26		

Total disposal unit acreage included in this estimate: Closure: 286 Long-Term Care: 316

Facility type: ☒ Class I ☐ Class III ☐ C&D Debris Disposal
(Check all that apply) ☐ Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- | | | |
|--|--|--|
| <input type="checkbox"/> Letter of Credit* | <input type="checkbox"/> Insurance Certificate | <input type="checkbox"/> Escrow Account |
| <input type="checkbox"/> Performance Bond* | <input checked="" type="checkbox"/> Financial Test | <input type="checkbox"/> Form 29 (FA Deferral) |
| <input type="checkbox"/> Guarantee Bond* | <input type="checkbox"/> Trust Fund Agreement | |

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

Northwest District
160 Government Center
Pensacola, FL 32502-5794
850-595-8380

Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7580
904-807-3300

Central District
3319 McGuire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pky.
Tempe Terrace, FL 33637
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-681-6600

FEB 23 2010

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate adjustment below.

☐ (a) Inflation Factor Adjustment

☒ (b) Recalculated or New Cost Estimates

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on the Department approved closing cost estimate dated: _____

Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02		Inflation Adjusted Closing Cost Estimate:
_____	x _____	=	_____

This adjustment is based on the Department approved long-term care cost estimate dated: _____

Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor, e.g. 1.02		Inflation Adjusted Annual Long-Term Care Cost Estimate:
_____	x _____	=	_____

Number of Years of Long Term Care Remaining: _____ x _____ = _____

Inflation Adjusted Long-Term Care Cost Estimate: _____ = _____

Signature by: ☐ Owner/Operator ☐ Engineer (check what applies)

Signature	Address
_____	_____
Name & Title	City, State, Zip Code
_____	_____
Date	E-Mail Address
_____	_____
Telephone Number	

IV. ESTIMATED CLOSING COST (check what applies)☒ **Recalculated Cost Estimate**☐ **New Facility Cost Estimate**

Notes: 1. Cost estimates for the time period when the extent and manner of landfill operation makes closing most expensive.

2. Cost estimate must be certified by a professional engineer.

3. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.

4. In some cases, a price quote in support of individual item estimates may be required.

Description	Unit	Number of Units	Cost / Unit	Total Cost
1. Proposed Monitoring Wells (Do not include wells already in existence.)				
	EA	0	0	0
Subtotal Proposed Monitoring Wells:				0
2. Slope and Fill (bedding layer between waste and barrier layer):				
Excavation	CY	0	0	0
Placement and Spreading	CY	462,000	1.88	868,560
Compaction	CY	462,000	0.64	295,680
Off-Site Material	CY	462,000	2	924,000
Delivery	CY	462,000	2	924,000
Subtotal Slope and Fill:				3,012,240
3. Cover Material (Barrier Layer):				
Off-Site Clay	CY	0	0	0
Synthetics - 40 mil	SY	1,384,240	4.05	5,606,172
Synthetics - GCL	SY	0	0	0
Synthetics - Geonet	SY	1,384,240	7.2	9,966,528
Synthetics - Other (explain)		0	0	0
Subtotal Cover Material:				15,572,700
4. Top Soil Cover:				
Off-Site Material	CY	923,000	2	1,846,000
Delivery	CY	923,000	2	1,846,000
Spread	CY	923,000	1.88	1,735,240
Subtotal Top Soil Cover:				5,427,240
5. Vegetative Layer				
Sodding	SY	1,384,240	1.5	2,076,360
Hydroseeding	AC	0	0	0
Fertilizer	AC	0	0	0
Mulch	AC	0	0	0
Other (explain)		0	0	0
Subtotal Vegetative Layer:				2,076,360
6. Stormwater Control System:				
Earthwork	CY	0	0	0
Grading	SY	0	0	0
Piping	LF	18,900	65	1,228,500
Ditches	LF	0	0	0
Berms	LF	0	0	0
Control Structures	EA	216	2,400	518,400
Other (explain)		0	0	0
Subtotal Stormwater Control System:				1,746,900

Description	Unit	Number of Units	Cost / Unit	Total Cost
7. Passive Gas Control:				
Wells	EA	0	0	0
Pipe and Fittings	LF	0	0	0
Monitoring Probes	EA	0	0	0
NSPS/Title V requirements	LS	1	0	0
Subtotal Passive Gas Control:				0

8. Active Gas Extraction Control:				
Traps	EA	20	3,600	72,000
Sumps	EA	2	15,000	30,000
Flare Assembly	EA	1	250,000	250,000
Flame Arrestor	EA	0	0	0
Mist Eliminator	EA	0	0	0
Flow Meter	EA	0	0	0
Blowers	EA	0	0	0
Collection System	LF	48,000	50	2,400,000
Other (explain) <u>Extraction Wells</u>	LF	10,500	80	840,000
Subtotal Active Gas Extraction Control:				3,592,000

9. Security System:				
Fencing	LF	0	0	0
Gate(s)	EA	0	0	0
Sign(s)	EA	0	0	0
Subtotal Security System:				0

10. Engineering:				
Closure Plan Report	LS	1	210,000	210,000
Certified Engineering Drawings	LS	1	265,000	265,000
NSPS/Title V Air Permit	LS	1	40,000	40,000
Final Survey	LS	1	25,000	25,000
Certification of Closure	LS	1	15,000	15,000
Other (explain) _____		0	0	0
Subtotal Engineering:				555,000

Description	Hours	Cost / Hour	Hours	Cost / Hour	Total Cost
11. Professional Services					
	<u>Contract Management</u>		<u>Quality Assurance</u>		
P.E. Supervisor	400	150	400	150	120,000
On-Site Engineer	2,000	120	2,000	120	480,000
Office Engineer	400	100	400	100	80,000
On-Site Technician	0	0	2,000	80	160,000
Other (explain) _____	0	0	0	0	0

Description	Unit	Number of Units	Cost / Unit	Total Cost
Quality Assurance Testing	LS	1	115,469	115,469
Subtotal Professional Services:				955,469

Subtotal of 1-11 Above: 32,937,909

12. Contingency 5 % of Subtotal of 1-11 Above 1,646,895.45

Subtotal Contingency: 1,646,895.45

Estimated Closing Cost Subtotal: 34,584,804.45

Description	Total Cost
13. Site Specific Costs	
Mobilization	500,000
Waste Tire Facility	33,030
Materials Recovery Facility	0
Special Wastes	0
Leachate Management System Modification	0
Other (explain) _____	0
Subtotal Site Specific Costs:	533,030

TOTAL ESTIMATED CLOSING COSTS (\$): 35,117,834.45

V. ANNUAL COST FOR LONG-TERM CARE

See 62-701.600(1)a.1., 62-701.620(1), 62-701.630(3)a. and 62-701.730(11)b. F.A.C. for required term length. For landfills certified closed and Department accepted, enter the remaining long-term care length as "Other" and provide years remaining.

(Check Term Length) ☐ 5 Years ☐ 20 Years ☒ 30 Years ☐ Other, ____ Years

Notes: 1. Cost estimates must be certified by a professional engineer.

2. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.

3. In some cases, a price quote in support of individual item estimates may be required.

All items must be addressed. Attach a detailed explanation for all entries left blank.

Description	Sampling Frequency (Events / Year)	Number of Wells	(Cost / Well) / Event	Annual Cost
1. Groundwater Monitoring [62-701.510(6), and (8)(a)]				
Monthly	12	28	25	8,400
Quarterly	4	0	0	0
Semi-Annually	2	29	567	32,886
Annually	1	0	0	0
Subtotal Groundwater Monitoring:				41,286
2. Surface Water Monitoring [62-701.510(4), and (8)(b)]				
Monthly	12	0	0	0
Quarterly	4	0	0	0
Semi-Annually	2	2	619	2,476
Annually	1	0	0	0
Subtotal Surface Water Monitoring:				2,476
3. Gas Monitoring [62-701.400(10)]				
Monthly	12	0	0	0
Quarterly	4	20	70	5,600
Semi-Annually	2	0	0	0
Annually	1	0	0	0
Subtotal Gas Monitoring:				5,600
4. Leachate Monitoring [62-701.510(5), (6)(b) and 62-701.510(8)(c)]				
Monthly	12	0	0	0
Quarterly	4	0	0	0
Semi-Annually	2	0	0	0
Annually	1	4	967	3,868
Other (explain) _____	0	0	0	0
Subtotal Leachate Monitoring:				3,868

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. Leachate Collection/Treatment Systems Maintenance				
<u>Maintenance</u>				
Collection Pipes	LF	35,176	0.63	22,160.88
Sumps, Traps	EA	42	100	4,200
Lift Stations	EA	4	150	600
Cleaning	LS	1	1,000	1,000
Tanks	EA	0	0	0

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. (continued)				
<u>Impoundments</u>				
Liner Repair	SY	0	0	0
Sludge Removal	CY	0	0	0
<u>Aeration Systems</u>				
Floating Aerators	EA	0	0	0
Spray Aerators	EA	0	0	0
<u>Disposal</u>				
Off-site (Includes transportation and disposal)	1000 gallon	28,000	8	224,000
Subtotal Leachate Collection / Treatment Systems Maintenance:				251,960.88
6. Groundwater Monitoring Well Maintenance				
Monitoring Wells	LF	1	1,000	1,000
Replacement	EA	1	2,000	2,000
Abandonment	EA	1	1,000	1,000
Subtotal Groundwater Monitoring Well Maintenance:				4,000
7. Gas System Maintenance				
Piping, Vents	LF	100	60	6,000
Blowers	EA	0	0	0
Flaring Units	EA	1	25,000	25,000
Meters, Valves	EA	0	0	0
Compressors	EA	0	0	0
Flame Arrestors	EA	0	0	0
Operation	LS	1	60,000	60,000
Subtotal Gas System Maintenance:				91,000
8. Landscape Maintenance				
Mowing	AC	350	260	91,000
Fertilizer	AC	0	0	0
Subtotal Landscape Maintenance:				91,000
9. Erosion Control and Cover Maintenance				
Sodding	SY	500	3	1,500
Regrading	AC	2	500	1,000
Liner Repair	SY	25	100	2,500
Clay	CY	0	0	0
Subtotal Erosion Control and Cover Maintenance:				5,000
10. Storm Water Management System Maintenance				
Conveyance Maintenance	LS	1	6,000	6,000
Subtotal Storm Water Management System Maintenance:				6,000
11. Security System Maintenance				
Fences	LF	1	1,000	1,000
Gate(s)	EA	1	500	500
Sign(s)	EA	1	200	200
Subtotal Security System Maintenance:				1,700

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	1	23,000	23,000
Subtotal Utilities:				23,000

13. Leachate Collection/Treatment Systems Operation

Operation

P.E. Supervisor	HR	50	150	7,500
On-Site Engineer	HR	50	100	5,000
Office Engineer	HR	0	0	0
OnSite Technician	HR	100	80	8,000
Materials	LS	1	0	0

Subtotal Leachate Collection/Treatment Systems Operation: 20,500

14. Administrative

P.E. Supervisor	HR	50	150	7,500
On-Site Engineer	HR	100	100	10,000
Office Engineer	HR	0	0	0
OnSite Technician	HR	500	80	40,000
Other Truck	LS	1	12,000	12,000

Subtotal Administrative: 69,500

Subtotal of 1-14 Above: 616,890.88

15. Contingency	5	% of Subtotal of 1-14 Above	30,844.544
Subtotal Contingency:			30,844.544

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
16. Site Specific Costs				
Annual Reports to FDEP		1	30,000	30,000
Long-term Care Permit Renewal		0.1	50,000	5,000
Title V Surface Emission Monitoring		1	3,650	3,650
Subtotal Site Specific Costs:				38,650

ANNUAL LONG-TERM CARE COST (\$ / YEAR): 686,385.424

Number of Years of Long-Term Care: 30

TOTAL LONG-TERM CARE COST (\$): 20,591,562.72

VI. CERTIFICATION BY ENGINEER

This is to certify that the Cost Estimates pertaining to the engineering features of this solid waste management facility have been examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and/or long-term care of the facility and comply with the requirements of Rule 62-701.630 F.A.C. and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Cost Estimates shall be submitted to the Department annually, revised or adjusted as required by Rule 62-701.630 F.A.C.



Joseph L. Miller, Project Manager

Name and Title (please type)

February 10, 2010

Date

P.E. #39177

Florida Registration Number
(please affix seal)

PBS&J, 482 South Keller Road

Mailing Address

Orlando, Florida 32810

City, State, Zip Code

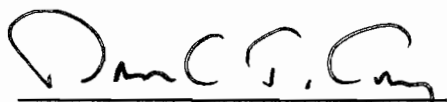
jlmiller@pbsj.com

E-Mail address (if available)

407-806-4153

Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR



Signature of Applicant

Daniel T. Gray, Director

Name and Title (please type)

dan.gray@mymanatee.org

E-Mail address (if available)

Manatee County Utilities Department

4410 66th Street West

Mailing Address

Bradenton, FL. 34210

City, State, Zip Code

941-792-8811

Telephone Number

LENA ROAD CLASS I LANDFILL CLOSURE COST ESTIMATE

1. Proposed monitoring wells – Not applicable. Monitoring wells exist at closure.
2. Slope and Fill (bedding layer between waste and barrier layer) – The remaining landfill foot print for closure is 286 acres, which multiplied by 43,560 square feet per acre, equals 12,458,160 square feet. It is assumed that an average of one foot of fill is required to level up the landfill surface and provide a minimum of six inches of bedding soil for the geomembrane. The volume of in-place soil is estimated at 12,458,160 square feet times 1 foot thick divided by 27 cubic feet per cubic yard, which equals 461,413 cubic yards, which is rounded to 462,000 cubic yards. Quote for delivery of fill to the top of the landfill is \$3.45 per cubic yard based on a recent bid for cover soil (See attached Purchase Order dated 01/08/10). The unit cost was increase by 15% to \$4.00 per cubic yard in-place to allow for the difference between truck cubic yards and in-place cubic yards. In the cost estimate sheet, this is broken down into \$2.00 per cubic yard for material and \$2.00 per cubic yard for delivery. The cost for placement and spreading comes from page 305 of RS Means, and for compaction the cost is shown on page 317 (attached).
3. Cover Material (Barrier Layer) – The remaining landfill footprint is 286 acres, which multiplied by 43,560 square feet per acre and divided by 9 square feet per square yard, equals 1,384,240 square yards. The proposed barrier layer is a 40 mil LLDPE geomembrane, textured on the side slopes, and smooth on the top. A high flow capping geocomposite is required on the landfill side slopes over the geomembrane and under the cover soil to drain seepage through the cover soil and stabilize the slope. The unit price of \$0.45/SF (\$4.05/SY) for the 40 mil LLDPE geomembrane and \$0.80/SF (\$7.20/SY) for the high flow capping geocomposite were provided by GSE based on current projects GSE is bidding in the Southeast. The unit prices are installed prices and include material and labor.
4. Top Soil Cover - The landfill footprint is 286 acres, which multiplied by 43,560 square feet per acre, equals 12,458,160 square feet. Two feet of fill is required to cover the geomembrane. The volume of in-place soil is estimated at 12,458,160 square feet times 2-feet thick divided by 27 cubic feet per cubic yard, which equals 923,000 cubic yards. The unit cost for off-site material and delivery is the same as in Item 2.
5. Vegetative Layer – The vegetative layer will be sod. The quantity is 1,384,240 square yards, which is the same as the barrier layer estimated in Item 3. The estimated unit cost is \$1.50 per square yard based on recent projects. The unit price includes irrigation, maintenance and a year warranty.
6. Storm water Control System – The storm water control system is already in –place on the west side of the Stage I Landfill. The remaining system consists of 54 down-comers spaced 300-foot on-center along the perimeter of the landfill. The down-comers will be 18, 24 and 30-inch diameter polyethylene pipe with an average unit

cost of \$65 per foot installed. The down comers are an average of 350-feet each with three inlet structures and one outlet structure. The inlet control structures will be similar to FDOT Type ditch bottom inlets, and the outlet control structure will be "U" Type concrete endwalls with grates and energy dissipaters estimated at an average unit cost of \$2,400 each (See page 463 of RS Means attached).

7. Gas Controls: Passive – Not applicable since an active extraction system is proposed.
8. Gas Control: Active Extraction – An active gas collection system with a flare is in place for the Stage I Landfill and for the first phase of the Stage III Landfill. It is estimated that the approximately 150-acre of the Stage III and II Landfills will require one gas collection well per acre with an average length of 70-feet, or about 10,500 feet total, which is shown as the other on the estimate as "other". The remaining landfill collection pipe for the Stage II Landfill and the remaining portion of the Stage III Landfill is estimated at 48,000 linear feet.
9. Security System – Not applicable. Landfill security system is in place.
10. Engineering – Estimate provided by PBS&J based on recent similar engineering assignments. See spreadsheet included with these notes.
11. Professional Services - Estimate provided by PBS&J based on recent similar engineering assignments. See spreadsheet included with these notes.
12. Contingency – 5% based on PBS&J experience with other similar closure projects.
13. Site Specific Costs – Mobilization at \$500,000. The Lena Road Waste Tire Processing Facility Closure Estimate approved by FDEP in the permit issued June 3, 2009 was \$33,030. Since the white goods are scrap metal that can be recycled, no closure cost estimate is required for this facility. The Household Hazardous Waste Drop-off is a waste processing facility and is exempt from this closure cost estimate per 62-701.710 Waste Processing Facilities (1) (e) 2. 3.

LENA ROAD CLASS I LANDFILL ANNUAL COST FOR LONG-TERM CARE

1. Groundwater Monitoring – Based on PBS&J cost for similar sampling and testing for Hardee County. (See attached Cost Summary Sheet)
2. Surface Water Monitoring – Based on PBS&J cost for similar sampling and testing for Hardee County. (See attached Cost Summary Sheet)
3. Gas Monitoring – Estimate provided by PBS&J are as summarized below:

Technician @ \$80/hr and 8 hours on site	\$640
One day truck rental, gas, etc.	\$150
One day equipment rental	\$100
Office time to prepare report 2 hours @ \$80/hr	\$160
Two hours of PE review time @ \$150/hr	\$300
Mailing and miscellaneous	\$ 50
Total	\$1,400

Based on reading 20 probes or points, the cost per point is \$70 per point.

4. Leachate Monitoring – Based on PBS&J cost for similar sampling and testing for Hardee County. (See attached Cost Summary Sheet)
5. Leachate Collection/Treatment Systems Maintenance – Stage I, II and III has 35,176 feet of leachate collection pipe based on the recent cleaning done by Florida Jetclean. A copy of their invoice is included for reference. The cost was \$0.63 per foot. There are 42 manholes and four lift stations that must be maintained and cleaned out.

The leachate estimate for long-term care period is based on the average volume of leachate collected per acre from the 132 acre Stage I Landfill, which is filled and has a 30 acre cap on a portion of the landfill, for the last four years as summarized below:

Estimate of Leachate Volume based on Stage I Landfill	
Year	Leachate
2006	11,858,830 gallons
2007	7,699,350 gallons
2008	15,983,610 gallons
2009	10,610,328 gallons
Total	46,152,118 gallons
Average per year	11,538,029 gallons
Average per year per acre	87,409 gallons per acre
Total number of acres at closure	316 acres
Total annual volume of leachate	27,621,341 gallons

This amount was rounded to 28,000 thousand gallons per year.

The treatment costs, including pumping costs, are estimated at \$8/1000 gallons.

6. Groundwater Monitoring Well Maintenance – Allowance for replacement and abandonment of groundwater monitoring wells assuming not more than one well would have to be installed and one well abandoned in a year. Installation includes \$1,000 for initial sampling and testing for background parameters for a new or replacement well.
7. Gas System Maintenance – Allowance for replacement of pipes, valves, flexible connections, etc. We assumed an annual allowance for maintenance of the flare, which includes the blowers, meters, etc., at 10% per year based on a capital replacement cost of \$400,000. The operating costs are based on a technician checking and adjusting the wells and flare station monthly plus six additional days for miscellaneous work, or about 60 days per year at \$1,000 per day. Costs include transportation.
8. Landscape Maintenance – The vegetative cover be maintained at less than 18-inches in height. Mowing costs are based on mowing 10 times a year at \$26/acre based on R. S. Means cost guide page 339 (attached). The 350 acres for mowing includes the 316-acre landfill footprint, and 34-acres of miscellaneous grassed areas adjacent to the landfill footprint.
9. Erosion Control & Cover Maintenance – Allowance for filling depressions and replacing sod.
10. Storm Water Management System Maintenance – Allowance for cleaning out catch basins, ditches, etc. is based on a three-man crew and truck at \$150 per hour and 40 hours per year.
11. Security System Maintenance – Allowance for fence, gate and sign repair and replacement.
12. Utilities – \$23,000. Landfill gas management system: \$16,000 per year - Based on \$0.12/KWH, and a 20 hp motor using 15 Kilowatts of electricity or \$1.80 per hour for 24 hours per day and 365 days per year. Four leachate pump stations with 10 hp motors pumping 100 GPM operating a total of 4,700 hours per year using 7.5 Kilowatts of electricity at \$0.12 per kilowatt hour or about \$4,500 per year. For lights and miscellaneous, allow about \$2,500 per year.
13. Leachate Collection/Treatment System Operation – There is no treatment system. There is operation and maintenance for the pump stations
14. Administrative – Estimate provided by PBS&J based on administration of similar projects. The estimate includes monthly site inspections to check the height and condition of vegetation, condition of the cap, the storm water management system, landfill gas collection and flaring system and general condition of the closed landfill. The estimate also includes preparation of the leachate generation

reports, landfill gas reports and annual update for the financial assurance cost estimate form.

15. Contingency — 5% based on PBS&J experience with other similar closure projects.

Site Specific Costs — There are three site-specific costs: 1) renewal of the long-term care permit, 2) preparation of the annual and biennial groundwater, surfacewater and leachate monitoring reports and annual update of the Financial Assurance Cost Estimate Form, and 3) NSPS Title V Monitoring. The costs for Items 1 and 2 are given in Table 1 and Table 2 respectively, which are included at the end of this section. The NSPS Title V Monitoring costs are summarized in Table 3, which follows this paragraph. The distance for surface monitoring at the 316-acre site is based on walking a 3.5-mile perimeter plus a minimum of 100-foot grid on the landfill or about 26 miles. The total distance is estimated at 30-miles, and a production rate of at least 10-miles per day for an estimate of 3-days.

TABLE 3 – ESTIMATE OF SURFACE MONITORING COSTS

Technician @ \$80/hr and 24 hours on site	\$1,920
Three day truck rental, gas, etc.	\$ 300
Hotel - two nights	\$ 200
Per diem @ \$50/day	\$ 150
Three day equipment rental @ \$100/day	\$ 300
Office time to prepare report 4 hours @ \$80/hr	\$ 320
Two hour of PE review time @ \$150/hr	\$ 300
Mailing, miscellaneous and contingency	<u>\$ 160</u>
Total	\$3,650

For closed landfills, the surface emissions are checked only once per year.

u:\so\projects\manatee ii\wa-11 renew lena ldf operation permit\closure cost estimate\attachment to financial assurance form.doc



MANATEE COUNTY PURCHASING
Mail Invoice To:
CLERK OF THE CIRCUIT COURT
MANATEE COUNTY FINANCE DEPARTMENT
P.O. BOX 1000
BRADENTON, FL 34206-1000
SEND SEPARATE INVOICES FOR EACH SHIPMENT

PURCHASE ORDER NO.:	P0100904
PAGE:	Page 1 of 1
ORDER DATE:	01/08/10
DATE REQUIRED:	01/08/10
TERMS:	NET 45
SHIP VIA:	SESTWAY
F.O.B.:	DESTINATION
CONFIRMED TO:	TASK 100473MR

VENDOR

V001630 (941) 907-0041
SMR AGGREGATES INC
5875 QUARRY DR
SARASOTA, FL 34240

SHIP TO

S0305
UTILITY OPERATIONS
LANDFILL OPERATIONS
3333 LENA ROAD
BRADENTON, FL 34202
Requested by: Jeanne Detweiler

ITEM	QUANTITY	U/M	DESCRIPTION	UNIT PRICE	TOTAL PRICE
------	----------	-----	-------------	------------	-------------

PRICING, TERMS AND CONDITIONS PER IFB 10-0473MR
SEALED BID

PROCUREMENT IN ACCORDANCE WITH THE PROVISIONS
OF MANATEE COUNTY CODE OF LAW, AS DETAILED IN
ORDINANCE 09-52.

MANATEE COUNTY CONTACT: MIKE GORE

VENDOR CONTACT: MARK AVERY, SMR

*****THIS PURCHASE ORDER *****
***** HAS BEEN FAXED TO *****
***** THE VENDOR; HARD *****
***** COPY TO FOLLOW *****

***** VENDOR PLEASE NOTE *****
***** TO EXPEDITE YOUR PAYMENT *****
***** DOCUMENT FOR ON ALL INVOICES *****

001	379,500	EA	COVER MATERIAL FOR LENA ROAD LANDFILL TO MEET TECHNICAL SPECS AS DETAILED IN IFB 10-0473MR @ \$3.45/CUBIC YARD. ESTIMATED NEED OF 110,000 CUBIC YARDS TO BE DELIVERED ON AN "AS REQUIRED" BASIS	1.00	379,500.00
-----	---------	----	---	------	------------

400-0010900-552000

379,500.00

TOTAL 379,500.00

Requisition #: R042926

Reference #:

Buyer:

MARY ANN RUSSELL SENIOR BUYER (941) 749-3044

See Reverse Side For Terms and Conditions

A PACKING LIST MUST ACCOMPANY EVERY SHIPMENT.

FLORIDA SALES TAX EXEMPT. CERT. NO. 05-801262200C-6.

F.E.T. EXEMPT CERT. NO. 59-78-0089 K.

NO DEVIATION IN THE TERMS AND CONDITIONS OR SPECIFICATIONS OF THIS PURCHASE CONTRACT
SHALL BE MADE UNLESS SPECIFICALLY AUTHORIZED BY MANATEE COUNTY PURCHASING.

Approved By:



NEW FOR 2009!

Line items found in this cost data that have the icon shown above are green.

The identified items fall into a broad definition of what is considered green.

Please see page ix for more information.

2009

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Construction Publishers & Consultants
63 Smiths Lane
Kingston, MA 02364-3008
(781) 422-5000

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Site Work & Landscape Cost Data

28th Annual Edition

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31 23 Excavation and Fill

31 23 23.20 Hauling

		Crew	Daily Output	Labor Hours	Unit	Material	2009 Base Costs			Total Incl O&P
							Labor	Equipment	Total	
1650	30 MPH ave, cycle 4 miles	B-34B	144	.056	L.C.Y.		1.78	3.70	5.48	6.80
1652	cycle 6 miles		132	.061			1.94	4.04	5.98	7.40
1654	cycle 8 miles		120	.067			2.13	4.44	6.57	8.15
1656	cycle 10 miles		108	.074			2.37	4.94	7.31	9.10
1660	35 MPH ave, cycle 4 miles		156	.051			1.64	3.42	5.06	6.30
1662	cycle 6 miles		144	.056			1.78	3.70	5.48	6.80
1664	cycle 8 miles		132	.061			1.94	4.04	5.98	7.40
1666	cycle 10 miles		120	.067			2.13	4.44	6.57	8.15
1668	cycle 20 miles		84	.095			3.04	6.35	9.39	11.70
1669	cycle 30 miles		72	.111			3.55	7.40	10.95	13.60
1670	cycle 40 miles		60	.133			4.26	8.90	13.16	16.30
1672	40 MPH, cycle 6 miles		144	.056			1.78	3.70	5.48	6.80
1674	cycle 8 miles		132	.061			1.94	4.04	5.98	7.40
1676	cycle 10 miles		120	.067			2.13	4.44	6.57	8.15
1678	cycle 20 miles		96	.083			2.66	5.55	8.21	10.20
1680	cycle 30 miles		72	.111			3.55	7.40	10.95	13.60
1682	cycle 40 miles		60	.133			4.26	8.90	13.16	16.30
1684	cycle 50 miles		48	.167			5.35	11.10	16.45	20.50
1694	45 MPH ave, cycle 6 miles		144	.056			1.78	3.70	5.48	6.80
1696	cycle 10 miles		132	.061			1.94	4.04	5.98	7.40
1698	cycle 20 miles		96	.083			2.66	5.55	8.21	10.20
1700	cycle 30 miles		84	.095			3.04	6.35	9.39	11.70
1702	cycle 40 miles		60	.133			4.26	8.90	13.16	16.30
1704	cycle 50 miles		60	.133			4.26	8.90	13.16	16.30
1706	50 MPH ave, cycle 10 miles		132	.061			1.94	4.04	5.98	7.40
1708	cycle 20 miles		108	.074			2.37	4.94	7.31	9.10
1710	cycle 30 miles		84	.095			3.04	6.35	9.39	11.70
1712	cycle 40 miles		72	.111			3.55	7.40	10.95	13.60
1714	cycle 50 miles		60	.133			4.26	8.90	13.16	16.30
2000	Hauling, 8 CY truck, small project cost per hour	B-34A	8	1	Hr.		32	41	73	94
2100	12 CY Truck	B-34B	8	1			32	66.50	98.50	123
2150	16.5 CY Truck	B-34C	8	1			32	74.50	106.50	131
2200	20 CY Truck	B-34D	8	1			32	76	108	133
2300	Grading or dump, or embankment if required, by dozer	B-10B	1000	.012	L.C.Y.		46	1.08	1.54	1.88
2310	Spotter or fill or cut, if required	1 Clab	8	1	Hr.		31.50		31.50	49
2500	Dust control, light	B-59	1	8	Day		256	425	681	860
2510	Heavy		50	16			510	850	1,360	1,725
2600	Haul road maintenance	B-86A	1	8			330	550	880	1,100
3014	16.5 CY truck, 15 min. wait/Ld./Uld., 15 MPH, cycle 0.5 mile	B-34C	462	.017	L.C.Y.		.55	1.29	1.84	2.27
3016	cycle 1 mile		413	.019			.62	1.44	2.06	2.53
3018	cycle 2 miles		347	.023			.74	1.71	2.45	3.01
3020	cycle 4 miles		248	.032			1.03	2.40	3.43	4.23
3022	cycle 6 miles		198	.040			1.29	3	4.29	5.30
3024	cycle 8 miles		165	.048			1.55	3.60	5.15	6.35
3025	cycle 10 miles		132	.061			1.94	4.50	6.44	7.95
3026	20 MPH ave, cycle 0.5 mile		479	.017			.53	1.24	1.77	2.18
3028	cycle 1 mile		429	.019			.60	1.39	1.99	2.44
3030	cycle 2 miles		380	.021			.67	1.56	2.23	2.75
3032	cycle 4 miles		281	.028			.91	2.12	3.03	3.73
3034	cycle 6 miles		231	.035			1.11	2.57	3.68	4.53
3036	cycle 8 miles		198	.040			1.29	3	4.29	5.30
3038	cycle 10 miles		165	.048			1.55	3.60	5.15	6.35
3040	25 MPH ave, cycle 4 miles		314	.025			.81	1.89	2.70	3.33

31 23 Excavation and Fill

31 23 23.20 Hauling

		Crew	Daily Output	Labor-Hours	Unit	Material	2009 Base Costs		Total	Total Incl O&P
							Labor	Equipment		
8360	10 MPH, cycle 2000 ft	B-34J	1020	.008	L.C.Y.		.25	2.01	2.26	2.60
8370	cycle 3000 ft		1020	.008			.25	2.01	2.26	2.60
8380	cycle 4000 ft		960	.008			.27	2.13	2.40	2.75
8390	cycle 0.5 mile		1020	.008			.25	2.01	2.26	2.60
8400	cycle 1 mile		900	.009			.28	2.27	2.55	2.94
8410	cycle 2 miles		780	.010			.33	2.63	2.96	3.39
8420	cycle 4 miles		600	.013			.43	3.41	3.84	4.41
8430	15 MPH, cycle 2000 ft		1080	.007			.24	1.90	2.14	2.45
8440	cycle 3000 ft		1020	.008			.25	2.01	2.26	2.60
8450	cycle 4000 ft		1020	.008			.25	2.01	2.26	2.60
8460	cycle 0.5 mile		1080	.007			.24	1.90	2.14	2.45
8470	cycle 1 mile		960	.008			.27	2.13	2.40	2.75
8480	cycle 2 miles		840	.010			.30	2.44	2.74	3.15
8490	cycle 4 miles		660	.012			.39	3.10	3.49	4.01
8500	20 MPH, cycle 2 miles		900	.009			.28	2.27	2.55	2.94
8510	cycle 4 miles		780	.010			.33	2.63	2.96	3.39
8520	25 MPH, cycle 2 miles		960	.008			.27	2.13	2.40	2.75
8530	cycle 4 miles		840	.010			.30	2.44	2.74	3.15

31 23 23.23 Compaction

6010	COMPACTOR	R312323-30								
6020	Riding, vibrating roller, 6" lifts, 2 passes	B-10Y	3000	.004	E.C.Y.		.15	.16	.31	.40
6030	3 passes		2300	.005			.20	.20	.40	.52
6040	4 passes		1900	.006			.24	.25	.49	.64
6060	12" lifts, 2 passes		5200	.002			.09	.09	.18	.23
6080	3 passes		3500	.003			.13	.13	.26	.35
6100	4 passes		2600	.005			.18	.18	.36	.47
6600	Sheepsfoot or wobbly wheel roller, 6" lifts, 2 passes	B-10G	2400	.005			.19	.48	.67	.81
6620	3 passes		1735	.007			.26	.66	.92	1.12
6640	4 passes		1300	.009			.35	.88	1.23	1.50
6680	12" lifts, 2 passes		5200	.002			.09	.22	.31	.37
6700	3 passes		3500	.003			.13	.33	.46	.56
6720	4 passes		2600	.005			.18	.44	.62	.75
6000	Towed sheepsfoot or wobbly wheel roller, 6" lifts, 2 passes	B-10D	10000	.001			.05	.15	.20	.24
6020	3 passes		2000	.006			.23	.77	1	1.20
6030	4 passes		1500	.008			.30	1.03	1.33	1.59
6050	12" lifts, 2 passes		6000	.002			.08	.26	.34	.40
6060	3 passes		4000	.003			.11	.39	.50	.60
6070	4 passes		3000	.004			.15	.52	.67	.80
6200	Vibrating roller, 6" lifts, 2 passes	B-10C	2600	.005			.18	.57	.75	.90
6210	3 passes		1735	.007			.26	.86	1.12	1.35
6220	4 passes		1300	.009			.35	1.15	1.50	1.79
6250	12" lifts, 2 passes		5200	.002			.09	.29	.38	.45
6260	3 passes		3465	.003			.13	.43	.56	.67
6270	4 passes		2600	.005			.18	.57	.75	.90
7000	Walk behind, vibrating plate 18" wide, 6" lifts, 2 passes	A-1D	200	.040			1.26	.16	1.42	2.13
7020	3 passes		185	.043			1.37	.17	1.54	2.31
7040	4 passes		140	.057			1.81	.23	2.04	3.05
7200	12" lifts, 2 passes	A-1E	560	.014			.45	.07	.52	.78
7220	3 passes		375	.021			.67	.10	.77	1.17
7240	4 passes		280	.029			.90	.14	1.04	1.55
7500	Vibrating roller 24" wide, 6" lifts, 2 passes	B-10A	420	.029			1.09	.35	1.44	2.03
7520	3 passes		280	.043			1.63	.52	2.15	3.05

32 01 Operation and Maintenance of Exterior Improvements

32 01 30 - Operation and Maintenance of Site Improvements

32 01 30.20 Snow Removal		Crew	Daily Output	Labor-Hours	Unit	Material	2009 Base Costs		Total	Total Ind O&P
							Labor	Equipment		
0300	Power, 24" blower	A-1M	1200	.007	C.F.		.21	.04	.25	.38
0320	2" - 4" deep, single driveway (10' x 50')		8	1	Eq.		31.50	6.60	38.10	56.50
0340	Double driveway (20' x 50')		4.50	1.778			56	11.70	67.70	100
0360	4" - 10" deep, single driveway		6	1.333			42	8.80	50.80	75
0380	Double driveway		3.25	2.462			78	16.20	94.20	139
0400	10" - 15" deep, single driveway		4	2			63	13.20	76.20	113
0420	Double driveway		2.25	3.556			112	23.50	135.50	200
0440	For heavy wet snow, add								20%	

32 01 90 - Operation and Maintenance of Planting

32 01 90.13 Fertilizing

0010 FERTILIZING										
0100	Dry granular, 4#/M.S.F., hand spread	1 Clab	24	.833	M.S.F.	2.22	10.53		12.77	18.80
0110	Push rotary	"	140	.057		2.22	1.81		4.03	5.25
0120	Tractor towed spreader, 8'	B-66	500	.016		2.22	.62	.46	3.30	3.89
0130	12' spread		800	.010		2.22	.39	.29	2.90	3.35
0140	Truck whirlwind spreader		1200	.007		2.22	.26	.19	2.67	3.04
0180	Water soluble, hydro spread, 1.5 # /MSF	B-64	600	.027		2.25	.83	.55	3.63	4.38
0190	Add for weed control					.38			.38	.42

32 01 90.19 Mowing

0010 MOWING										
1650	Mowing brush, tractor with rotary mower	B-84	22	.364	M.S.F.		15.05	12.45	27.50	36
1660	Light density		13	.615			25.50	21	46.50	61.50
1670	Medium density		9	.889			37	30.50	67.50	88.50
1680	Heavy density		13	.615			25.50	21	46.50	61.50
2000	Mowing, brush/grass, tractor, rotary mower, highway/airport median		1	8	Day		248	194	442	595
2010	Traffic safety flashing truck for highway/airport median mowing	A-2B	1	8	Day					
4000	Lawn mowing, improved areas, 16" hand push	1 Clab	48	.167	M.S.F.		5.25		5.25	8.15
4050	Power mower, 18" - 22"		65	.123			3.89		3.89	6.05
4100	22" - 30"		110	.079			2.30		2.30	3.56
4150	30" - 32"		140	.057			1.81		1.81	2.80
4160	Riding mower, 36" - 44"	B-66	300	.027			1.04	.77	1.81	2.42
4170	48" - 58"	"	480	.017			.65	.48	1.13	1.51
4175	Mowing with tractor & attachments									
4180	3 gang reel, 7'	B-66	930	.009	M.S.F.		.34	.25	.59	.77
4190	5 gang reel, 12'		1200	.007			.26	.19	.45	.60
4200	Cutter or sickle bar, 5', rough terrain		210	.038			1.49	1.10	2.59	3.45
4210	Cutter or sickle bar, 5', smooth terrain		340	.024			.92	.68	1.60	2.13
4220	Drainage channel, 3' sickle bar		5	1.600	Mile		62.50	.46	108.50	145
4250	Lawnmower, rotary type, sharpen (all sizes)	1 Clab	10	.800	Eq.		25.50		25.50	39
4260	Repair or replace part		7	1.143	"		36		36	56
5000	Edge trimming with weed whacker		5760	.001	L.F.		.04		.04	.07

32 01 90.23 Pruning

0010 PRUNING										
0020	1-1/2" caliper	1 Clab	84	.095	Eq.		3.01		3.01	4.67
0030	2" caliper		70	.114			3.61		3.61	5.60
0040	2-1/2" caliper		50	.160			5.05		5.05	7.85
0050	3" caliper		30	.267			8.45		8.45	13.05
0060	4" caliper, by hand	2 Clab	21	.762			24		24	37.50
0070	Aerial lift equipment	B-85	38	1.053			35.50	23	58.50	80
0100	6" caliper, by hand	2 Clab	12	1.333			42		42	65.50
0110	Aerial lift equipment	B-85	20	2			67	43.50	110.50	151
0200	7" caliper, by hand	2 Clab	7.50	2.133			67.50		67.50	105

1 326 / 1000

33 47 Ponds and Reservoirs

33 47 13 - Pond and Reservoir Liners

33 47 13.53 Reservoir Liners HDPE		Daily Labor- Crew Output Hours		Unit	Material	2009 Base Costs Labor Equipment		Total	Total Incl O&P
1010	RESERVOIR LINERS HDPE								
1011	Membrane lining								
1012	30 mil thick	3 Skwk	1850	.013	S.F.	.44	.53	.97	1.30
1013	60 mil thick		1600	.015	"	.81	.61	1.42	1.84
1014	60 mil thick		1.60	15	M.S.F.	810	615	1,425	1,850
1015	120 mil thick		1440	.017	S.F.	1.83	.68	2.51	3.06

33 49 Storm Drainage Structures

33 49 13 - Storm Drainage Manholes, Frames, and Covers

33 49 13.10 Storm Drainage Manholes, Frames and Covers

1010	STORM DRAINAGE MANHOLES, FRAMES & COVERS								
1020	Excludes footing, excavation, backfill (See line items for frame & cover)								
1050	Brick, 4' inside diameter, 4' deep	D-1	1	16	Eu.	400	580	980	1,325
1051	6' deep		.70	22.857		555	830	1,385	1,850
1052	8' deep		.50	32	V.L.F.	710	1,175	1,885	2,550
1053	For depths over 8', add		4	4		162	145	307	400
1054	Concrete blocks (radial), 4' I.D., 4' deep		1.50	10.667	Eu.	350	390	740	970
1055	6' deep		1	16		460	580	1,040	1,375
1056	8' deep		.70	22.857		575	830	1,405	1,875
1057	For depths over 8', add		5.50	2.909	V.L.F.	59	106	165	225
1058	Concrete, cast in place, 4' x 4', 8" thick, 4' deep	C-14H	2	24	Eu.	560	945	1,517.95	2,100
1059	6' deep		1.50	32		810	1,250	2,077.30	2,850
1060	8' deep		1	48		1,150	1,900	3,076	4,225
1061	For depths over 8', add		8	6	V.L.F.	132	236	371.24	515
1062	Precast, 4' I.D., 4' deep	B-22	4.10	7.317	Eu.	880	269	1,196.50	1,425
1063	6' deep		3	10		1,100	370	1,534.50	1,850
1064	8' deep		2	15		1,325	550	1,972	2,400
1065	For depths over 8', add		16	1.875	V.L.F.	181	69	262.10	320
1066	5' I.D., 4' deep	B-6	3	8	Eu.	910	273	1,281	1,525
1067	6' deep		2	12		1,225	410	1,782	2,125
1068	8' deep		1.50	16		1,550	545	2,291	2,750
1069	For depths over 8', add		12	2	V.L.F.	202	68	294.50	355
1070	6' I.D., 4' deep		2	12	Eu.	1,500	410	2,057	2,400
1071	6' deep		1.50	16		1,925	545	2,666	3,175
1072	8' deep		1	24		2,375	820	3,489	4,200
1073	For depths over 8', add		8	3	V.L.F.	310	102	366.50	545
1074	Slab tops, precast, 8" thick								
1075	4' diameter manhole	B-6	3	3	Eu.	209	102	366.50	430
1076	5' diameter manhole		7.50	3.200		415	109	563	665
1077	6' diameter manhole		7	3.429		595	117	754	880
1078	Steps, heavyweight cast iron, 7" x 9"	1 Bric	40	.200		12.95	8.10	21.05	26.50
1079	8" x 9"		40	.200		19.45	8.10	27.55	34
1080	12" x 10-1/2"		40	.200		22	8.10	30.10	37
1081	Standard sizes, galvanized steel		40	.200		18.75	8.10	26.85	33
1082	Aluminum		40	.200		25.50	8.10	33.60	40.50



4171 Essen Lane, Baton Rouge, LA 70809

Project: Option Years - Tomoka Farms Road - Drilling & Completion <130 VF Depth
Location: Daytona Beach, FL

Date: 4/25/2008
Quote: L-4671

Bid Item	Bid Item Description	U/M	QTY	Unit Price	Cost
1	Mobilization / Demobilization of Drilling Crew and Equipment	LS	TBD	\$8,000.00	
2	Drilling / Completion 0' - 275'	VF	TBD	\$139.00	
3	Drilling / Completion 276' - 549'	VF	TBD	\$117.00	
4	Drilling / Completion 550' - 999'	VF	TBD	\$86.00	
5	Drilling / Completion 1000' +	VF	TBD	\$80.00	
		EA	TBD	\$715.00	
	Mobilization / Demobilization Rate Includes:				
	* 1 Supervisor				
	* 2 Technician				
	* 1 AF-100 Track Mounted Drill Rig Delivery				
	* 2 Crew Trucks				
	* Motel / Perdiem				

* SE&I's proposed pricing is based upon performance of work under Contract #C-1269 for IFB #08-B-44 SR between COUNTY OF VOLUSIA, FL and Shaw Environmental, Inc. and the following clarifications within any resulting agreement between the parties.

* Email or Telephone response will be provided to County of Volusia within 3 working days. Mobilization will be within 30 calendar days.

* Drilling and Completion Rate is estimated at approximately 500 VF per week.

* Items NOT INCLUDED in the above Mobilization rate are as follows:

- Procurement of Performance & Payment Bonds
- Recording of Performance & Payment Bonds
- Preconstruction Video
- Material Freight
- Supply of Spare Parts
- Unload / Preweld of Piping
- Temporary Erosion / Sedimentation Controls
- Wellfield Startup



4171 Essen Lane, Baton Rouge, LA 70809

Project: Tomoka Farms
Location: Daytona Beach, FL

Date: 8/27/2008
Quote:

Bid Item	Bid Item Description	U/M	QTY	Unit Price	Cost
1	Supply and Install 12" HDPE Pipe	LF	0	\$40.00	\$0.00
2	Supply and Install 18" HDPE Pipe	LF	0	\$65.00	\$0.00
3	Supply and Install Sump with Standard QED Pump	EA	0	\$15,000.00	\$0.00
4	Supply and Install U-Trap	EA	0	\$3,600.00	\$0.00
					\$0.00
					\$0.00
					\$0.00
					\$0.00
Total					\$0.00

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY - LENA ROAD LANDFILL
FINANCIAL ASSURANCE COST ESTIMATE FORM
COST ESTIMATE FOR ITEM 10 ENGINEERING
Prepare by PBS&J February 10, 2010

LABOR COSTS		TASK 10.A Closure Plan Report	TASK 10.B Certified Engineering Drawings	TASK 10.C NSPS Title V Air Permit	TASK 10.D Final Survey	TASK 10.E Certification of Closure			Total Labor Fee	Total Hours
Name or Classification	Rate									
Principal	\$195	100	80	20	4	8			\$41,340	212
Sr. Project Manager	\$165	250	600	80	12	20			\$158,730	962
Senior Project Engineer	\$145			80	20	60			\$23,200	160
Project Engineer	\$120	500	800						\$156,000	1300
Designer/Technician	\$80	500	400	80					\$78,400	980
Admin. Assistant	\$70	160	160	40		10			\$25,900	370
Construction Project Rep.	\$120								\$0	0
Construction Inspector	\$80								\$0	0
Survey Crew	\$ 125				140				\$17,500	140
P.E. Supervisor	\$ 130									
Total Hours		1510	2040	300	176	98	0	0		4124
Total Labor Dollars		\$171,950	\$253,800	\$37,900	\$23,160	\$14,260	\$0	\$0	\$501,070	

DIRECT COSTS	TASK 10.A Closure Plan	TASK 10.B Certified Engineering Drawings	TASK 10.C NSPS Title V Air Permit	TASK 10.D Final Survey 0	TASK 10.E Certification of Closure	0	0	Total Direct Costs
Aerial Photographs/Topo. map	\$12,000							\$12,000
Equipment								\$0
Printing	\$770	\$1,000	\$200	\$360	\$200			\$2,530
Photographs	\$250	\$500						\$750
Per Diem		\$2,000						\$2,000
Hotel		\$1,000						\$1,000
Reproduction	\$2,000	\$2,000	\$200		\$200			\$4,400
Mileage	\$2,000	\$2,500	\$300	\$1,000	\$340			\$6,140
Federal Express	\$600	\$200	\$100	\$480				\$1,380
Testing	\$10,430	\$2,000	\$1,300					\$13,730
FDEP Permit Fee	\$10,000							\$10,000
Construction Truck								\$0
Total Direct Charges	\$38,050	\$11,200	\$2,100	\$1,840	\$740	\$0	\$0	\$53,930
FEE FOR TASK	\$210,000	\$265,000	\$40,000	\$25,000	\$15,000	\$0	\$0	\$555,000

FINANCIAL ASSURANCE COST ESTIMATE FORM
ITEM 11 PROFESSIONAL SERVICES - QUALITY ASSURANCE TESTING
MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY - LENA ROAD LANDFILL CLOSURE
February 10, 2010

FEATURE	TEST	AREA Sq. Ft.	TEST FREQUENCY	NUMBER OF TESTS	COST PER TEST	TOTAL COST PER TEST
Geomembrane	Thickness	12,500,000	100,000	125	\$ 8	\$ 1,000
	Density	12,500,000	100,000	125	\$ 15	\$ 1,875
	Tensile Properties	12,500,000	100,000	125	\$ 50	\$ 6,250
	Tear Resistance	12,500,000	100,000	125	\$ 80	\$ 10,000
	Carbon Black Content	12,500,000	100,000	125	\$ 25	\$ 3,125
	Carbon Dispersion	12,500,000	100,000	125	\$ 30	\$ 3,750
	Seam Peel & Shear	12,500,000	9,000	1,389	\$ 25	\$ 34,722
Geonet/Composite	Carbon Black Content	12,500,000	100,000	125	\$ 25	\$ 3,125
	Density	12,500,000	100,000	125	\$ 15	\$ 1,875
	Hydraulic transmissivity	12,500,000	500,000	25	\$ 100	\$ 2,500
	Mass/unit area	12,500,000	100,000	125	\$ 10	\$ 1,250
	Peel Strength	12,500,000	100,000	125	\$ 55	\$ 6,875
	Tensile Strength & Elongation	12,500,000	100,000	125	\$ 55	\$ 6,875
	Thickness	12,500,000	100,000	125	\$ 8	\$ 1,000
SOILS	Sieve Analysis	12,500,000	1,000,000	13	\$ 50	\$ 625
	Modified Proctor Test	12,500,000	1,000,000	13	\$ 110	\$ 1,375
	In-situ Density Test (Nuclear)	12,500,000	20,000	625	\$ 30	\$ 18,750
					SUBTOTAL:	\$ 104,972
					10.0% CONTINGENCY:	\$ 10,497
					TOTAL:	\$ 115,469

Note 1. Area of 40 mil synthetic geomembrane 12,500,000 Square Feet
Note 2. Area of synthetic geonet composite 12,500,000 Square Feet
Note 3. Area of compacted soils based on three 12-inch thick lifts. 12,500,000 Square Feet
Note 4. Geomembrane and geonet/composite test unit prices provided by TRI/Environmental, Inc.
Note 5. Soil test unit prices provided by Ardaman & Associates.

Hardee County Water Quality and Landfill
Gas Monitoring and Reporting

PBS&J
June 16, 2006

Surface Water – Semi –annual sampling 1 location
Per sample ____\$619____ Yearly____\$1,238____

Ground Water-Semi –annual sampling 7 locations
Per point x (7 locations) = ____\$567____ Yearly ____\$7,938____

Leachate Annual Sampling 1 Location
Per Sample ____\$967____

Ground Water Elevations- Semi-Annual 25 Locations
Per point x (25 locations) = ____\$25____ Yearly ____\$1,250____

Landfill Gas Testing and Reporting-Quarterly testing 15 Locations
Per Point ____\$67____ x (15 Locations)= ____\$1,005____ Yearly ____\$4,020____

Semi-Annual Groundwater Report – 2 Per year
Per Report ____\$950____ Yearly ____\$1,900____

TOTAL ANNUAL COST = \$17,313

PBSJ

Florida Jetclean

19019 Fern Meadow Loop

Lutz FL 33558

800-226-8013

Invoice

Number: 9653

Date: May 29, 2009

Bill To:

Post, Buckley, Schuh & Jernigan, Inc.
482 South Keller Rd
Orlando, FL 32810

Ship To:

PO Number	Terms	Project
100008517 01.S	Net 30	Lena Road. LF

Date	Description	Amount
5/26 - 5/29	High-pressure water-jetting of 35,176' of 6" / 8" leachate collection piping as instructed.	22,160.88
APPROVED FOR PAYMENT DATE <u>June 19, 2009</u> BY <u>J. Miller</u> JOB # <u>100008517.01.S</u>		
Total		\$22,160.88

Please note our new address.

Please pay against invoice. No statement will be sent.

$$\frac{\$22,160.88}{35,176'} = \$0.63/\text{ft}$$

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY - LENA ROAD LANDFILL

FINANCIAL ASSURANCE COST ESTIMATE FORM
COST ESTIMATE FOR ITEM 16 SITE SPECIFIC COSTS - ANNUAL REPORTS
 Prepare by PBS&J February 10, 2010

LABOR COSTS		Semi-Annual Water Monitoring Reports	Bi-annual Water Monitoring Report	Up-date Financial Assurance Cost Estimate					Total Labor Fee	Total Hours
Name or Classification	Rate									
Principal	\$195	1	1	1					\$585	3
Sr. Project Manager	\$165	4	8	2					\$2,310	14
Senior Hydrogeologist	\$145	40	60						\$14,500	100
Project Engineer	\$120			8					\$960	8
Designer/Technician	\$80	16	80						\$7,680	96
Admin. Assistant	\$70	8	16	4					\$1,960	28
									\$0	0
									\$0	0
									\$0	0
Total Hours		69	165	15	0	0	0	0		249
Total Labor Dollars		\$8,495	\$17,735	\$1,765	\$0	\$0	\$0	\$0	\$27,995	

DIRECT COSTS		Semi-Annual Water Monitoring Reports	Bi-annual Water Monitoring Report	Up-date Financial Assurance Cost Estimate	0	0	0	0	Total Direct Costs
					0	0	0	0	
Aerial Photographs/Topo. map					0	0	0	0	\$0
Equipment									\$0
Printing	\$100	\$500	\$50						\$650
Photographs									\$0
Per Diem									\$0
Hotel									\$0
Reproduction									\$0
Mileage	\$300	\$300	\$200						\$800
Federal Express	\$45	\$45	\$20						\$110
Testing									\$0
Miscellaneous	\$160	\$220	\$65						\$445
Construction Truck									\$0
Total Direct Charges	\$605	\$1,065	\$335	\$0	\$0	\$0	\$0	\$0	\$2,005

FEE FOR TASK	\$9,100	\$18,800	\$2,100	\$0	\$0	\$0	\$0	\$30,000
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MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY - LENA ROAD LANDFILL

FINANCIAL ASSURANCE COST ESTIMATE FORM
COST ESTIMATE FOR ITEM 16 SITE SPECIFIC COSTS - RENEW LONG-TERM CARE PERMIT
 Prepare by PBS&J February 10, 2010

LABOR COSTS		Site	Permit						
Name or Classification	Rate	Visit	Application					Total Labor Fee	Total Hours
Principal	\$195	4	8					\$2,340	12
Sr. Project Manager	\$165	16	60					\$12,540	76
Senior Hydrogeologist	\$145	16	100					\$16,820	116
Project Engineer	\$120							\$0	0
Designer/Technician	\$80	20	120					\$11,200	140
Admin. Assistant	\$70	4	16					\$1,400	20
								\$0	0
								\$0	0
								\$0	0
Total Hours		60	304	0	0	0	0	0	364
Total Labor Dollars		\$7,620	\$36,680	\$0	\$0	\$0	\$0	\$0	\$44,300

DIRECT COSTS	0	0	0	0	0	0	0	0	Total Direct
	Site	Permit							
	Visit	Application							
		0	0	0	0	0	0	0	Costs
Aerial Photographs/Topo. map									\$0
Equipment									\$0
Printing	\$100	\$200							\$300
Photographs		\$100							\$100
Per Diem									\$0
Hotel		\$400							\$400
Reproduction									\$0
Mileage	\$600	\$1,000							\$1,600
Federal Express	\$100	\$200							\$300
Testing									\$0
Miscellaneous	\$400	\$600							\$1,000
Permit Fee		\$2,000							\$2,000
Total Direct Charges	\$1,200	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0	\$5,700

FEE FOR TASK	\$8,820	\$41,180	\$0	\$0	\$0	\$0	\$0	\$0	\$50,000
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