

Prepared for:



Omni Waste of Osceola County, LLC
1501 Omni Way
St. Cloud, Florida 34773

RESPONSE TO FIRST REQUEST FOR ADDITIONAL INFORMATION

**RENEWAL PERMIT APPLICATION TO OPERATE
PHASES 1 THROUGH 4 OF THE J.E.D. SOLID WASTE
MANAGEMENT FACILITY**

Prepared by:

Geosyntec 

consultants

13101 Telecom Drive, Suite 120
Temple Terrace, Florida 33637

Project Number FL1962

RECEIVED

FEB 10 2012

DEP Central Dist.

February 2012

ATTACHMENT 5

Revised Cost Estimate for Cells 1 through 8



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: J.E.D. Solid Waste Management Facility WACS ID: 89544
Permit Application or Consent Order No.: SC49 & SO49-199726-017 & 005 Expiration Date: 8/16/2016 - 1/11/2012
Facility Address: 1501 Omni Way, Saint Cloud, Florida 34773
Permittee or Owner/Operator: Omni Waste of Osceola County, LLC (a wholly owned subsidiary of WSI, Inc.)
Mailing Address: 1501 Omni Way, Saint Cloud, Florida 34773

Latitude: 28° 03' 32" Longitude: 81° 05' 46"
Coordinate Method: DGPS Datum: WGS84
Collected by: Johnston's Surveying Company/Affiliation: Johnston's Surveying

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
Phase 1/Cells 1-4	27.9	Jan 2004	4 to 8 years	1 to 2 years		
Phase 2/Cells 5-7	35.7	Mar 2009	3 to 6 years	1 to 2 years		
Phase 3/Cell 8	11.3	N/A	1 to 2 years	1 to 2 years		

Total disposal unit acreage included in this estimate: Closure: 74.9 Long-Term Care: 100

Note: The disposal unit acreage of 11.9 acres represents the two-dimensional area. The three-dimensional area - used in the calculations - is equal to 12.3 acres.

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

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- ☐ Letter of Credit* ☒ Insurance Certificate ☐ Escrow Account
☐ Performance Bond* ☐ Financial Test ☐ Form 29 (FA Deferral)
☐ Guarantee Bond* ☐ 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 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3787
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

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 a 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 exp

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			
			Subtotal Proposed Monitoring Wells:	
2. Slope and Fill (bedding layer between waste and barrier layer):				
Excavation	CY			
Placement and Spreading	CY	126,243	\$4.51	\$569,355.93
Compaction	CY			
Off-Site Material	CY			
Delivery	CY			
			Subtotal Slope and Fill:	\$569,355.93
3. Cover Material (Barrier Layer):				
Off-Site Clay	CY			
Synthetics - 40 mil	SY	378,730	\$3.51	\$1,329,342.30
Synthetics - GCL	SY			
Synthetics - Geonet	SY			
Synthetics - Other (explain)	SY	333,476	\$3.87	\$1,290,552.12
Geocomposite Drainage Layer			Subtotal Cover Material:	\$2,619,894.42
4. Top Soil Cover:				
Off-Site Material	CY			
Delivery	CY			
Spread	CY	189,365	\$4.54	\$859,717.10
			Subtotal Top Soil Cover:	\$859,717.10
5. Vegetative Layer				
Sodding	SY	378,730	\$1.23	\$465,837.90
Hydroseeding	AC			
Fertilizer	AC	78.25	\$1,562.00	\$122,226.50
Mulch	AC			
Other (explain)	SY	63,121.7	\$4.54	\$286,572.52
Vegetative soil cover (6-in thick layer)			Subtotal Vegetative Layer:	\$874,636.92
6. Stormwater Control System:				
Earthwork	CY	23,884	\$4.54	\$108,433.36
Grading	SY			
Piping	LF	37,250	\$10.83	\$403,417.50
Ditches	LF			
Berms	LF			
Control Structures	EA			
Other (explain) "Wye" connection	EA	72	\$2,246.56	\$161,752.32
inlet structures			Subtotal Stormwater Control System:	\$673,603.18

Description	Unit	Number of Units	Cost / Unit	Total Cost
7. Passive Gas Control:				
Wells	EA	41	\$8,775.19	\$359,782.79
Pipe and Fittings	LF	14,507	\$48.57	\$704,604.99
Monitoring Probes	EA			
NSPS/Title V requirements	LS	1		
Subtotal Passive Gas Control:				\$1,064,387.78
8. Active Gas Extraction Control:				
Traps	EA	2	\$6,700.00	\$13,400.00
Sumps	EA			
Flare Assembly	EA			
Flame Arrestor	EA			
Mist Eliminator	EA			
Flow Meter	EA			
Blowers	EA			
Collection System	LF			
Other (explain) gas flare station	EA	1	\$318,970.79	\$318,970.79
Subtotal Active Gas Extraction Control:				\$332,370.79
9. Security System:				
Fencing	LF			
Gate(s)	EA			
Sign(s)	EA			
Subtotal Security System:				
10. Engineering:				
Closure Plan Report	LS	1	\$15,000.00	\$15,000.00
Certified Engineering Drawings	LS	1		
NSPS/Title V Air Permit	LS	1		
Final Survey	LS	1	\$136,937.50	\$136,937.50
Certification of Closure	LS	1	\$10,000.00	\$10,000.00
Other (explain)				
Subtotal Engineering:				\$161,937.50

Description	Hours	Cost / Hour	Hours	Cost / Hour	Total Cost
11. Professional Services					
	<u>Contract Management</u>		<u>Quality Assurance</u>		
P.E. Supervisor					
On-Site Engineer					
Office Engineer					
On-Site Technician					
Other (explain)	1	\$214,677	1	\$500,913	\$715,590.00

Description	Unit	Number of Units	Cost / Unit	Total Cost
Quality Assurance Testing	LS	1	\$50,091.30	\$50,091.30
Subtotal Professional Services:				\$765,681.30

Subtotal of 1-11 Above: \$7,921,584.92

12. Contingency 5 % of Subtotal of 1-11 Above \$396,079.25

Subtotal Contingency: \$396,079.25

Estimated Closing Cost Subtotal: \$8,317,664.16

Description	Total Cost
13. Site Specific Costs	
Mobilization	<u> </u>
Waste Tire Facility	<u> </u>
Materials Recovery Facility	<u> </u>
Special Wastes	<u> </u>
Leachate Management System Modification	<u> </u>
Other (explain) <u>see financial assurance</u>	<u>\$748,735.13</u>
<u>notes</u>	
Subtotal Site Specific Costs:	<u>\$748,735.13</u>

TOTAL ESTIMATED CLOSING COSTS (\$): \$9,066,399.29

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	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	33	\$772.73	\$51,000.18
Annually	1	_____	_____	_____
Subtotal Groundwater Monitoring:				\$51,000.18
2. Surface Water Monitoring [62-701.510(4), and (8)(b)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	2	\$325.00	\$1,300.00
Annually	1	_____	_____	_____
Subtotal Surface Water Monitoring:				\$1,300.00
3. Gas Monitoring [62-701.400(10)]				
Monthly	12	_____	_____	_____
Quarterly	4	1	\$670.00	\$2,680.00
Semi-Annually	2	1	\$7,500.00	\$15,000.00
Annually	1	1	\$12,700.00	\$12,700.00
Subtotal Gas Monitoring:				\$30,380.00
4. Leachate Monitoring [62-701.510(5), (6)(b) and 62-701.510(8)c]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	8	\$926.00	\$7,408.00
Other (explain) Leachate	1	1	\$1,050.00	\$1,050.00
Subtotal Leachate Monitoring:				\$8,458.00
ponds				

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. Leachate Collection/Treatment Systems Maintenance				
<u>Maintenance</u>				
Collection Pipes	LF	_____	_____	_____
Sumps, Traps	EA	8	\$858.63	\$6,869.04
Lift Stations	EA	_____	_____	_____
Cleaning	LS	1	\$926.66	\$926.66
Tanks	EA	_____	_____	_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. (continued)				
<u>Impoundments</u>				
Liner Repair	SY	371	\$3.54	\$1,313.34
Sludge Removal	CY			
<u>Aeration Systems</u>				
Floating Aerators	EA	1	\$250.00	\$250.00
Spray Aerators	EA			
<u>Disposal</u>				
Off-site (Includes transportation and disposal)	1000 gallon	4	\$40.00	\$160.00
Subtotal Leachate Collection / Treatment Systems Maintenance:				\$9,519.04
6. Groundwater Monitoring Well Maintenance				
Monitoring Wells	LF			
Replacement	EA	3	\$130.94	\$392.82
Abandonment	EA	3	\$29.11	\$87.33
Subtotal Groundwater Monitoring Well Maintenance:				\$480.15
7. Gas System Maintenance				
Piping, Vents	LF	50	\$50.00	\$2,500.00
Blowers	EA	1	\$2,500.00	\$2,500.00
Flaring Units	EA			
Meters, Valves	EA			
Compressors	EA			
Flame Arrestors	EA			
Operation	LS	1	\$5,800.00	\$5,800.00
Subtotal Gas System Maintenance:				\$10,800.00
8. Landscape Maintenance				
Mowing	AC	100	\$240.00	\$24,000.00
Fertilizer	AC			
Subtotal Landscape Maintenance:				\$24,000.00
9. Erosion Control and Cover Maintenance				
Sodding	SY	1,210	\$1.23	\$1,488.30
Regrading	AC			
Liner Repair	SY	1	\$2,500.00	\$2,500.00
Clay	CY			
Subtotal Erosion Control and Cover Maintenance:				\$3,988.30
10. Storm Water Management System Maintenance				
Conveyance Maintenance	LS	1	\$2,500.00	\$2,500.00
Subtotal Storm Water Management System Maintenance:				\$2,500.00
11. Security System Maintenance				
Fences	LS	1	\$350.00	\$350.00
Gate(s)	EA	1	\$250.00	\$250.00
Sign(s)	EA	1	\$20.00	\$20.00
Subtotal Security System Maintenance:				\$620.00

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	1	\$77,105.96	\$77,105.96
			Subtotal Utilities:	\$77,105.96

13. Leachate Collection/Treatment Systems Operation

Operation

P.E. Supervisor	HR			
On-Site Engineer	HR			
Office Engineer	HR			
OnSite Technician	HR	156	\$60.00	\$9,360.00
Materials	LS	1	\$500.00	\$500.00
Subtotal Leachate Collection/Treatment Systems Operation:				\$9,860.00

14. Administrative

P.E. Supervisor	HR	8	\$150.00	\$1,200.00
On-Site Engineer	HR	8	\$120.00	\$960.00
Office Engineer	HR			
OnSite Technician	HR	8	\$65.00	\$520.00
Other Administrative/overhead	LS	1	\$9,600.00	\$9,600.00
Subtotal Administrative:				\$12,280.00

Subtotal of 1-14 Above: \$242,291.63

15. Contingency	5	% of Subtotal of 1-14 Above		\$12,114.58
Subtotal Contingency:				\$12,114.58

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
16. Site Specific Costs				
Subtotal Site Specific Costs:				

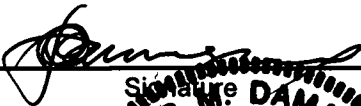
ANNUAL LONG-TERM CARE COST (\$ / YEAR): \$254,406.21

Number of Years of Long-Term Care: 30

TOTAL LONG-TERM CARE COST (\$): \$7,632,186.34

VI. CERTIFICATION BY ENGINEER

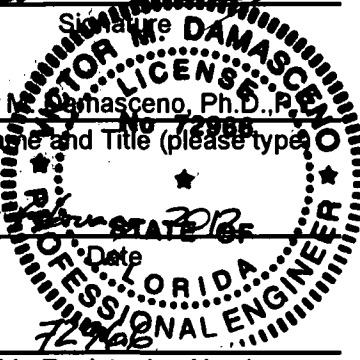
This is to certify that the Cost Estimates pertaining to the engineering features of this solid waste management facility have been examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, the Cost Estimates are a true, correct and complete 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(4), F.A.C.



Victor M. Damasceno, Ph.D., P.E.
Name and Title (please type)

8/28/08
Date

72796
Florida Registration Number
(please affix seal)



13101 Telecom Drive, Suite 120

Mailing Address

Temple Terrace, Florida 33637

City, State, Zip Code

VDamasceno@Geosyntec.com

E-Mail address (if available)

813-558-0990

Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR



Signature of Applicant

Mike Kaiser, Regional Engineer

Name and Title (please type)

MKaiser@Wasteservicesinc.com

E-Mail address (if available)

1501 Omni Way

Mailing Address

Saint Cloud, Florida 34773

City, State, Zip Code

(904)673-0446

Telephone Number



2893 Executive Park Drive, Suite 305, Weston, Florida 33331

January 24, 2011

RE: Omni Waste of Osceola County, LLC

To Whom It May Concern:

This is to confirm that Michael Kaiser is an authorized signatory of Omni Waste of Osceola County, LLC (the "Corporation"), with authority to execute and deliver all documents and instruments required in connection with environmental matters for the Corporation, including without limitation, permit applications, modifications and financial assurances for permits issued to the Corporation.

Omni Waste of Osceola County, LLC

A handwritten signature in black ink, appearing to read "Will P. Hulligan", is written over a horizontal line.

William P. Hulligan
Manager

Waste Services, Inc.

A handwritten signature in black ink, appearing to read "Will P. Hulligan", is written over a horizontal line.

William P. Hulligan
Executive Vice President, U.S. Operations

**FINANCIAL ASSURANCE COST ESTIMATE FOR
CLOSURE OF CELLS 1-8:
NOTES AND CALCULATIONS
J.E.D. SOLID WASTE MANAGEMENT FACILITY**

The information provided below presents the methods and assumptions used to estimate the cost for the items listed on the Florida Department of Environmental Protection (FDEP) Form 62-701.900(28), F.A.C., "Closure Cost Estimating Form for Solid Waste Facilities" (January 6, 2010). The section numbers noted below correspond to the item numbers on FDEP Form 62-701.900(28), F.A.C. The original and closed two-dimensional areas for each Cell are as follows:

Cell	Original Area	Area Closed	Remaining Area to be Closed
Cell 1	18	10.2	7.8
Cell 2	12	7.2	4.8
Cell 3	12	3.7	8.3
Cell 4	11	4.0	7.0
Cell 5	11.2	0	11.2
Cell 6	12.5	0	12.5
Cell 7	12	0	12
Cell 8	11.3	0	11.3
Totals	100	25.1	74.9

I. GENERAL INFORMATION

The financial assurance cost estimate presented on the FDEP Form 62-701.900(28) provides the closure and long-term care costs for Cells 1-8 at the J.E.D. Solid Waste Management facility in Osceola County, Florida. The closure and long-term care costs were estimated using unit cost rates from 3rd party contractors that have recently, or are presently, performing work at the facility and/or previous FDEP approved unit cost rates with inflation adjustments issued by the FDEP for years 2010, 2011 and 2012. Provided in Appendix A-1 are 3rd party bid/contract documents from contractors and suppliers who submitted bid quotes for the partial closure project that is planned to start mid February 2012. These parties included RCS Excavation (RCS) - earthworks, Comanco Construction Corporation - geosynthetics installation, Agru America – geomembrane supply, and Skaps Industries – geocomposite supply.

The unit cost rates for placement of intermediate, protective cover and vegetative soils shown on the earthworks bidsheet by RCS were based on excavation and hauling of soils RCS from the offsite 3rd party Bronson borrow area located directly west of the permitted disposal area. Omni has executed an agreement with the Bronson borrow area owners (Bronsons) for purchase of the soils from the offsite borrow area. Environmental Resource and Water Use

Permits were issued to the Bronsons by the South Florida Water Management District for operation of the borrow area.

Based on the e-mail correspondence provided in Appendix A-1 from Kimley-Horn and Associates dated April 7, 2011, approximately 6,277,128 cubic yards of soil was available at the borrow area as of April 2011. This remaining volume is sufficient to complete the closure construction described herein. As provided in the agreement between Omni and the Bronsons, Omni is required to make future remaining payments for the soils totaling \$1,700,000 through 2016. Thus the unit cost rate for purchase of soil to complete closure construction is included in the estimates at \$0.27/cubic yard ($\$1,700,000/6,277,128 \text{ yd}^3$). The agreement between Omni and the Bronsons is available at the JED facility for FDEP review.

IV. ESTIMATED CLOSING COST

1. Proposed Monitoring Wells

The groundwater monitoring well system for Phases 1 through 3 (Cells 1 through 10) has already been completed. Therefore, no costs have been included as part of this financial assurance revision.

2. Slope and Fill (Bedding layer/Intermediate Cover)

Soils purchased and transported from the offsite Bronson borrow area will be used for intermediate cover. The total estimated volume is 126,243 cubic yards (yd^3) for the 1-ft thick intermediate cover layer over the waste surface. The cost per yd^3 includes purchase, excavation, hauling, placement, spreading, grading, and compaction. The estimated cost for slope and fill material is as follows:

As presented in Figure 1, the two-dimensional top deck area for Cells 1 through 8 covers approximately 9.35 acres and the 3:1 side slope area is equal to 90.65 acres resulting in a total area of approximately 100 acres. However, 25.1 acres along the side slopes of Phases 1 and 2 have been closed, as such, the total side slope area to be closed is equal to approximately 65.6 acres. To account for the additional area attributed to the 3:1 side slopes the plan areas are multiplied by 1.05. Therefore, the 3:1 side slope area is $65.6 \text{ acres} \times 1.05 = 68.9 \text{ acres}$ plus the 9.35 acre top deck area equals a total corrected area of approximately **78.25 acres**.

- $(78.25 \text{ acres} \times 43,560 \text{ ft}^2/\text{acre} \times 1 \text{ ft cover thickness}) \div 27 \text{ ft}^3/\text{yd}^3 = 126,243 \text{ yd}^3$
- $126,243 \text{ yd}^3 @ (\$4.24/\text{yd}^3 + \$0.27/\text{yd}^3) = \mathbf{\$569,355.93}$

3. Cover Material (Barrier Layer)

The final cover system for the JED facility is comprised of (from bottom to top):

- 12 inch intermediate cover soil layer (Item No.2 above)
- 40-mil PE geomembrane
- geocomposite drainage layer (on 3:1 side slopes only)
- 18-inch cover protective soil layer (Item No. 4 below)

- 6-inch vegetative soil layer (Item No. 5 below)

Cost for geosynthetics includes material and installation costs. The estimated quantities are:

40-mil geomembrane (textured sideslopes and smooth top-deck):

Textured on Sideslopes (Purchase \$2.25/yd² & Install \$1.29/yd²):

- $68.90 \text{ acres} \times 43,560 \text{ ft}^2/\text{acre} \div 9 \text{ ft}^2/\text{yd}^2 = 333,476 \text{ yd}^2$
- $333,476 \text{ yd}^2 \text{ 40-mil textured geomembrane @ } \$3.54/\text{yd}^2 = \$1,180,505.04$

Smooth on Top Deck (Purchase \$1.98/yd² & Install \$1.29/yd²)

- $9.35 \text{ acres} \times 43,560 \text{ ft}^2/\text{acre} \div 9 \text{ ft}^2/\text{yd}^2 = 45,254 \text{ yd}^2$
- $45,254 \text{ yd}^2 \text{ 40-mil smooth geomembrane @ } \$3.27/\text{yd}^2 = \$147,980.58$

To calculate the average cost for 40-mil geomembrane for the FDEP form, the total cost to purchase and install was divided by the total area installed:

- $(\$1,180,505.04 + \$147,980.58) \div (333,476 \text{ yd}^2 + 45,254 \text{ yd}^2) = \$3.51/\text{yd}^2$
- Total average cost 40-mil geomembrane = $\$3.51/\text{yd}^2 \times 378,730 \text{ yd}^2 = \mathbf{\$1,329,342.30}$

Geocomposite Drainage Layer (on 3:1 side slopes only):

Geocomposite (Purchase \$3.15/yd² & \$0.72/yd²):

- $78.25 \text{ acres} - 9.35 \text{ acres (top deck)} = 68.9 \text{ acres}$
- $68.9 \text{ acres} \times 43,560 \text{ ft}^2/\text{acre} \div 9 \text{ ft}^2/\text{yd}^2 = 333,476 \text{ yd}^2$
- $333,476 \text{ yd}^2 \text{ geocomposite drainage layer @ } \$3.87/\text{yd}^2 = \mathbf{\$1,290,552.12}$

The total cost for final cover materials (excluding the intermediate and vegetative soil layers) is **\$2,619,894.42**.

4. Top Soil Cover (Protective Cover Layer)

Soils purchased and transported from the offsite Bronson borrow area will be used for the protective cover. Cost for the 18-inch cover protective soil layer includes purchase, excavation, hauling, placement, spreading, grading, and compaction.

- $(78.25 \text{ acres} \times 43,560 \text{ ft}^2/\text{acre} \times 1.5 \text{ ft cover thickness}) \div 27 \text{ ft}^3/\text{yd}^3 = 189,365 \text{ yd}^3$
- $189,365 \text{ yd}^3 \text{ cover soils @ } (\$4.27/\text{yd}^3 + \$0.27/\text{yd}^3) = \mathbf{\$859,717.10}$

5. Vegetative Layer

The vegetative soil layer consists of a 6 inch layer over the protective cover layer. The estimated volume is 63,121.7 yd³. Soils purchased and transported from the offsite Bronson borrow area will be used for the vegetative layer. The cost per cubic yard includes hauling, placing, spreading, and grading.

The final cover area will be sodded. Sodding costs include all labor and materials.

- $78.25 \text{ acres} \times 43,560 \text{ ft}^2/\text{acre} \div 9 \text{ ft}^2/\text{yd}^2 = 378,730 \text{ yd}^2$
- $378,730 \text{ yd}^2 \text{ Bahia sod @ } \$1.23/\text{yd}^2 = \mathbf{\$465,837.90}$

Fertilizer (Amendments) for the vegetative soil layer is \$1,040.50 per acre.

- $78.25 \text{ acres} \times \$1,562.00/\text{acre} = \mathbf{\$122,226.50}$

The estimated cost for the vegetative soil layer is as follows:

- $(78.25 \text{ acres} \times 43,560 \text{ ft}^2/\text{acre} \times 0.5 \text{ ft cover thickness}) \div 27 \text{ ft}^3/\text{yd}^3 = 63,121.7 \text{ yd}^3$
- $63,121.7 \text{ yd}^3 @ (\$4.27/\text{yd}^3 + \$0.27/\text{yd}^3) = \mathbf{\$286,572.52}$

The total cost for the vegetative layer (vegetative soil cover and sod) is **\$874,636.92**

6. Storm Water Control System

Storm water control components that will be installed during closure consist of side slope drainage swales, inlet structures on the side slope bench swales, seepage header piping, and HDPE corrugated down chute pipes. The earthwork estimate includes excavation, hauling, placement, spreading, grading, and compaction of the additional soils required on the drainage benches for sloping and cover over the down chute piping.

Using the adjusted unit rates on the Worksheet – Earthworks provided in Appendix A-1, the total cost for the storm water control system is estimated to be **\$673,603.18** as indicated below.

- Earthwork: Additional soil to construct drainage swales is calculated based on the typical cross-section detail for the drainage swale from the ERP Lateral Expansion Permit Drawings and using the average depth of the swale = 20.6 ft² per linear foot of swale and placement cost for protective cover soils:
 - $23,884 \text{ yd}^3 @ (\$4.27/\text{yd}^3 + \$0.27/\text{yd}^3) = \mathbf{\$108,433.36}$
- Piping (material and installation):
 - 31,900 ft of 4-inch HDPE corrugated pipe @ \$7.77/ft = \$247,863.00 (the cost of the 4-inch drainage pipe includes the cost of the pipe and installation (RCS @ \$6.77/ft), 3-ft wide strip of geomembrane used to wrap the pipe (Agu @ \$1.00/ft material and cost to cut estimated).
 - 4,600 ft of 18-inch HDPE corrugated pipe @ \$28.27/ft = \$130,042.00
 - 750 ft of 24-inch HDPE corrugated pipe @ \$34.16/ft = \$25,620.00

Additional material cost for 24-inch pipe is \$6.89/ft. See ADS invoices in Appendix A-1 showing cost difference (no increase in labor and equipment cost to install). Lengths of 18 and 24-inch pipe represent plan dimensions with 10% slope and bench correction applied. All concrete drainage inlets and outfall piping at the perimeter road are installed during Cell construction. See Figure 1 provided in Appendix A-1.

To calculate an average cost per foot of pipe for the FDEP form, the total pipe cost above has been divided by the total length of pipe to be installed:

- $(\$247,863.00 + \$130,042.00 + \$25,620.00) \div (31,900 \text{ ft} + 4,600 \text{ ft} + 750 \text{ ft}) = \mathbf{\$10.83/\text{ft}}$

- A concrete pad and grate will be installed with each “wye” connection – which joins the bench swale pipes to the main side slope downchute – to hold the piping in place and reduce erosion. Seventy-two (72) concrete pads remain to be installed in Cells 1-8 as shown on Figure 1 provided in Appendix A-1. Each concrete pad will be 6-inches thick with dimensions of approximately 7.5-ft x 7.5-ft and fitted with a galvanized grate. The cost to install all fittings, concrete and grates is: 72 structures × \$2,246.56 = **\$161,752.32**

7. Passive Gas Control

The JED facility has an active gas collection and control system (GCCS) within the Phase 1 and 2 development areas (i.e., Cells 1-7), which will be expanded with the closure and development of subsequent cells. The costs associated with the installation of the passive gas control elements were calculated utilizing the proposed GCCS design as provided in the Lateral Expansion Solid Waste Permit Drawings (Sheet 29 of 40). Costs include materials and installation. Presently, with the exception of gas extraction well GW-31, all header and lateral piping and gas extraction wells have been installed in Cells 1-4. Additional header and lateral piping and gas extraction wells have been installed in Cells 5 and 6 and the lower tier (2 total) horizontal gas collectors in Cell 7. Shown on Figure 2 in Appendix A-2 is an outline of the area depicting the remaining GCCS that would require installation under current closer of Cells 1-8. In addition to the GCCS shown on Figure 2, two (2) additional horizontal collectors will be required in Cell 7 and four (4) total in Cell 8. The gas extraction wells have been categorized as Shallow (<50 ft), Intermediate (50-100 ft), and Deep (100-150 ft). For estimating purposes the well depths have been assumed as 50, 100 and 150 ft of which 15 ft is solid well casing and the remainder is perforated zone casing.

Provided in Appendix A-2 are bid quotes from Shaw Environmental for recent vertical and horizontal gas collector well installation work completed in December 2011 and installation of the landfill gas flare in the fall of 2008. The unit rates shown in the bid quotes have been used in the calculations below. A 2012 inflation adjustment was not added to the 2011 unit rates from Shaw Environmental since this work was just recently completed.

Gas Wells [drilling, perforated pipe section (including gravel), solid pipe section (including soil backfill), and well head]: Drilling @ \$28.00/ft, perforated pipe section @ \$57.00/ft, solid pipe section @ \$42.50/ft, and well heads @ \$700.00 each.

- 16-Shallow depth gas wells @ \$4,732.50/gas well = **\$75,720.00**
- 11-Intermediate depth gas wells @ \$8,982.50/gas well = **\$98,807.50**
- 14-Deep gas wells @ \$13,232.50/gas well = **\$185,255.00**

To calculate an average cost per gas well for the FDEP form, the total well costs above have been divided by the proposed number of gas wells:

- $(\$75,720.00 + \$98,807.50 + 185,255.00) \div 41 \text{ wells} = \mathbf{\$8,775.19 \text{ per well}}$

Lateral piping (6-inch SDR-17 HDPE Pipe):

The total plan dimension length for 6-inch lateral pipe has been increased by 10% to allow for a 3:1 slope correction factor and additional length required for vertical risers to connect to the adjacent extraction well.

- $6,350 \text{ ft} \times 1.10 = 6,985 \text{ ft} @ \$20.00/\text{ft} = \mathbf{\$139,700.00}$

Header piping (12-inch SDR-17 HDPE Pipe):

The total plan dimension length of 12-inch header pipe has been increased by 10% to allow for varying bury depths to meet the required minimum 5% slope (sideslope areas) and a 3:1 slope correction for the cross over header.

- $2,320 \text{ ft} \times 1.10 = 2,552 \text{ ft} @ \$42.00/\text{ft} = \mathbf{\$107,184.00}$

Horizontal Collectors Cell 7 & 8 (10-inch SDR-17 HDPE Pipe with Stone Backfill):

- $4,970 @ \$68.72/\text{ft} + 6 \text{ well heads} @ \$700.00 = \mathbf{\$345,738.40}$

Other Remaining Installation Costs:

Other remaining costs listed on the Shaw Environmental bid quote provided in Appendix A-2 = **\$78,500.00**

To calculate the cost per foot of gas system piping, the total pipe cost has been divided by the total estimated length of pipe:

- $(\$139,700.00 + \$107,184.00 + \$345,738.40 + \$78,500.00) \div (6,985 + 2,552 + 4,970) \text{ ft} = \mathbf{\$46.26/\text{ft}}$

It is assumed that an additional 5% of the pipe cost is needed for fittings.

- $(\$46.26 \times 1.05) = \mathbf{\$48.57/\text{ft}}$

The total cost for the lateral and header piping and fittings is:

- $\$48.57/\text{ft} \times 14,507 \text{ ft} = \mathbf{\$704,604.99}$

Perimeter gas monitoring probes have already been installed for Phases 1 through 3 (i.e., Cells 1-10). NSPS Title V requirements have been met.

The total cost for passive gas controls is **\$1,064,387.78**

8. Active Gas Control

Based on the proposed GCCS design, two gas flare stations will be installed as part of the GCCS for Phases 1 through 3. One gas flare station was already installed as part of the Phase 1, Sequence 1 and 2 GCCS installation (for Cells 1 through 6). Purchase and installation costs are provided in Appendix A-2. The estimated cost of the second gas flare is equal to $\$229,035.00 + \$89,935.79 = \mathbf{\$318,970.79}$.

Two additional condensate J-traps will be installed as part of the GCCS system within the footprint of Cell 7 and 8. The cost per condensate trap is $\$6,700 \times 2 = \$13,400.00$

The total cost for active gas extraction control is **\$332,370.79**.

9. Security System

The perimeter fencing and gates were installed as part of the Phase 1 construction and therefore have not been included as part of this closure cost estimate.

10. Engineering

Closure Plan Report – The closure plan is included as part of the permit renewal application. Geosyntec has estimated **\$15,000** to update this plan.

Final Survey – bid quote survey costs by RCS for the partial closure of Phase 1 Event 2 are $\$35,000 \div 20 \text{ acres} = \$1,750/\text{acre}$. The costs associated with the final survey are $\$1,750/\text{acre} \times 78.25 \text{ acres} = \$136,937.50$.

Certification of Closure – Geosyntec has estimated **\$10,000** to prepare the closure certification report.

11. Professional Services

These costs are based on Geosyntec estimates and labor rates. It is estimated that approximately 3 percent of construction cost will be needed for contract/construction management, which equates to $0.03 \times \$7,155,903.62 = \$214,677$.

It is estimated that approximately 7 percent of construction cost will be needed for construction quality assurance (CQA), which equates to:

- $0.07 \times \$7,155,903.62 = \$500,913$.

Quality assurance testing is estimated to be 10 percent of the CQA cost estimate and is based on the requirements of the CQA Plan, estimated quantities, and Geosyntec's experience. This equates to:

- $0.10 \times \$500,913.25 = \$50,091.30$.

12. Contingency

A contingency factor for closure costs of 5 percent is estimated based on the current unit rate cost pricing used for this estimate.

13. Site Specific Costs

The following additional costs represent additional work required by the Earthworks Contractor in completing the closure project that have not included in the above costs estimates for liner and stormwater piping (See RCS Bid Quote Items 1,2,4,5,6,7,9,13,14,&18).

Other site specific costs include:

- Mobilization and Demobilization

- Development, offloading and staging geosynthetics liner materials
- Borrow area development and management
- Site fencing at borrow area
- NOI, SWPPP, sediment and erosion controls
- Expose existing cap liner at anchor trench
- Excavation and backfilling of anchor trenches
- Remove existing upslope stormwater piping and rip-rap
- Flushing of existing stormwater control structures and outfall piping
- Waste/closure limit markers

The total unit rate cost for the above listed items is equal to \$9,568.50/acre. The total Site Specific Costs for Cells 1-8 is $\$9,568.50 \times 78.25 \text{ acres} = \$748,735.13$.

V. ANNUAL COST FOR LONG TERM CARE

The unit costs for calculation of the long-term care costs provided below are based on current 3rd party costs or previously approved unit costs with FDEP inflation adjustments applied.

1. Ground Water Monitoring

The groundwater monitoring well network for Phases 1 through 3 (Cells 1-10) has already been installed. The long-term care cost for monitoring of groundwater wells was calculated based on the e-mail cost quote provided by Geo-Services and Consulting, Inc.(GSC), dated December 22, 2011. A copy is provided in Appendix A-3. The total cost for each semi-annual event (less leachate sampling and analysis) equals \$25,500.00. The cost per well is shown below:

- $\$25,500.00/\text{Event} \div 33 \text{ Wells} = \$772.73/\text{Well}/\text{Event}$

2. Surface Water Monitoring

Labor costs for collecting surface water samples in accordance with the facility's permits is included in the above estimates for ground water monitoring as noted in the cost quote by GSC. Typically the sampling locations are dry and labor costs are minimal to perform the services. If in the event a sample is collected, laboratory costs of **\$325.00/sample** are quoted by GSC in Appendix A-3. It is assumed that two samples will be collected for each Semi-annual event on the FDEP form.

3. Landfill Gas Monitoring

The landfill gas monitoring probes will be monitored quarterly for concentrations of combustible gases. The long-term care cost associated with the landfill gas monitoring shown below are based on an hourly rate for a technician consultant (\$65.00/hour) and current time required to perform the monitoring at the 16 gas probe locations by in-house staff (4 hours).

The cost to perform the monitoring includes field and travel time.

- $(4 \text{ hrs field} + 2 \text{ hrs travel}) \times \$65.00/\text{hr} = \$390.00$
- Monitoring equipment rental and travel costs - \$150.00/event

- Time to prepare report - 2 hrs @ \$65.00/hr = \$130.00

Total cost per monitoring event equals $\$390.00 + \$150.00 + \$130.00 = \670.00

Other gas and air monitoring costs required by the facility permits are provided in the January 30, 2012 cost proposal by Golder Associates provided in Appendix A-3. The additional costs are listed below and shown as an annual cost in Section 3 of the FDEP form.

- NSPS Reporting - \$7,500.00 (Semi-Annual)
- Title V Permit Reporting (AOR) - \$5,600.00 (Annual)
- Visible Emissions and Sulfur Testing at Flare - \$2,900.00 (Annual)
- Greenhouse Gas Reporting - \$4,200.00 (Annual)

4. Leachate Monitoring

A leachate sample will be collected annually from Cells 1 through 8. Additionally, one sample is collected at the leachate aeration pond to meet the requirements of the City of St. Cloud for disposal of leachate at their WWTP. The leachate sampling costs include all labor, equipment, and laboratory analyses as provided in the cost quote by GSC provided in Appendix A-3.

- Leachate monitoring unit rate cost at cell sumps equals **\$926.00/sump/year**
- Leachate monitoring unit rate cost at leachate pond equals **\$1,050.00/pond/year**

Total annual leachate monitoring cost equals $(8 \text{ sumps} \times \$926.00/\text{sump/year}) + (1 \text{ pond} \times \$1,050.00/\text{pond/year}) = \mathbf{\$8,458.00/year}$

5. Leachate Collection/Treatment System Maintenance

For the long term care cost estimate, the following maintenance activities have been assumed:

Leachate pumps: Assumed that pumps require annual maintenance and Cells 1 through 8 will require one primary and one secondary replacement pump once during the 30-year monitoring period:

- Annual maintenance = \$500.00/year
- Leachate pump replacement cost = $(\$6,354.00 + \$4,405.00) \div 30 \text{ years} = \$358.63/\text{year}$
A leachate pump cost quote by EPG Companies is provided in Appendix A-3
- Total estimated annual cost for pumps per cell = **\$858.63/year**

Cleaning: Assumed that one system cleaning/jetting every 10 years within the 30-year monitoring period will be required (total of 3 cleanings). Provided in Appendix A-3 is a cost quote from Florida JetClean to perform the system flushing required for Cells 1-6 for the recent 5-yr permit renewal application.

- $(\$9,266.64 \times 3) \div 30 \text{ years} = \mathbf{\$926.66/year}$.

Leachate storage containers: Long term care for the leachate storage ponds assumes that each of the four bladder liners will require replacement over the 30-year monitoring period. Replacement cost has been assumed to be \$9,850.00 per flexible bladder as estimated below.

Approximately 22,500 ft² or 2,500 yd² of geomembrane required for each bladder (150 ft by 150 ft unit). As noted in Section 3 of the Closure Cost Estimates, installation and purchase cost for 40-mil textured geomembrane equals \$3.54/yd². Assume \$1,000/bladder to clean and remove existing bladder. The unit cost for each bladder replacement equals 2,500 yd² × \$3.54/yd² + \$1,000.00 = \$9,850.00/bladder

Total long-term care cost for the four bladder replacements based on a square yard and cost per year for the FDEP form is as follows:

- 4 bladders × \$9,850.00/bladder = \$39,400.00 ÷ 30 = \$1,313.34/year ÷ \$3.54/yd² = **371.0 yd²/year**

Leachate Aeration: Assume **\$250.00/year** to maintain the leachate aeration system piping, pumps and electrical controls. Cost for electricity is included Section 12.

Leachate disposal: Leachate generation rate after closure was assumed to be 20 percent of the annual average leachate generation rate for maximum waste height that was obtained from the HELP model Analysis (see Case 4 analyzed for maximum waste thickness of 220 ft in the calculation package entitled *Leachate Management System*).

- 24.63 ft³/ac/year or 184.3 gal/ac/year × 100 acres × 20 percent = 3,684.90 gal/year → use minimum unit of 1,000 gallons as shown on FDEP form 4,000 gallons/year × \$0.04/gallon for transportation and disposal = **\$160.00/year**.

Leachate haul rates for Stafford Transport and disposal costs for the City of St. Cloud are provided in Appendix A-3.

Therefore, total long-term care cost for leachate system maintenance = **\$9,519.04/year**.

6. Groundwater Monitoring Well Maintenance

The long-term care cost for maintenance of groundwater monitoring wells was calculated based on the assumption that one monitoring well per phase would need to be replaced, thus, one monitoring well per phase would need abandonment. Unit rate costs to replace and abandon the monitoring wells were based on the recent cost proposal by GCS to abandon and install wells GW-22 for the Cell 8 project. The cost quote by GCS is provided in Appendix A-3.

- Average cost per well to replace/30 years = \$3928.33 ÷ 30 = **\$130.94**
- Average cost per well to abandon/30 years = \$873.33 ÷ 30 = **\$29.11**

7. Gas System Maintenance

Approximately one hundred and sixteen (116) gas wells will eventually be installed within the footprint of Cells 1 through 8. It is estimated that an additional \$50 per well/year will be needed for maintenance (\$50 × 116 wells = **\$5,800**). It is assumed that **\$2,500/year** will be required for general maintenance of both skid mounted flare station (includes blowers, meters, valves and flame arrestors). It is assumed 50 ft of lateral or header piping will require replacement or repair at an average cost of **\$50.00/ft**.

8. Landscape

The long-term care cost estimate assumes a 100-acre area will require mowing four times per year (closure cap 78.25 acres and other perimeter stormwater retention areas). Provided in Appendix A-3 is a current quote for mowing services at the facility.

- $4 \text{ times/year} \times \$60.00/\text{acre} = \text{\$240.00/acre/year}$

9. Erosion Control and Cover Maintenance

The long-term care cost for erosion control and cover maintenance assumes that a 0.25-acre (1,210 yd²) area will require maintenance (i.e., sodding) per year, as such, 1,210 yd² @ \$1.23/yd² = \$1,488.30/year. The lump sum cost for material and equipment mobilization costs to perform maintenance and general grading of the protective liner for resodding is estimated @ \$2,500/year. The total cost associated with the erosion control and cover maintenance, per year, is equal to **\$3,988.30**.

10. Storm Water Management System Maintenance

Maintenance is estimated to occur on an annual basis. For the long-term care cost, a lump-sum cost of \$2,500 has been assumed to mobilize a rubber tire mounted excavator and operator to clean and clear storm water ditches.

11. Security System Maintenance

Approximately 200 ft of barbed wire fencing is assumed to require repairs or replacement @ \$1.75/ft (includes material and labor). See attached quote for new fencing provided in Appendix A-3. More so, an estimated \$250.00 will be required for gate maintenance. The cost to replace the front gate sign is equal to \$100.00. This financial assurance assumes that the front gate sign will be replaced once every 5 years, resulting in a yearly cost of \$20/year. The total cost associated with security system maintenance, per year, is equal to **\$620.00**.

12. Utilities

The long-term care cost estimate for Phases 1 through 3 assumes that the power requirements for site equipment (i.e., pumps, lights, blowers, etc.) will cost \$4,018.30 per month. Provided in Appendix A-3 are electrical service statements from Progress Energy that shows the December 2011 billings for Cells 1-7, administration office, gas flare, and leachate holding ponds. The average monthly bill for Cells 1-7 is \$54.72. Below are the corresponding estimated annual electrical billings. A water well and septic system is provided for the administration office. It is assumed maintenance of the well and septic system will cost \$500.00/year.

- Electric costs Cells 1-8 equals $\$54.72/\text{month} \times 12 \text{ months/year} = \text{\$5,253.12/year}$
- Electric costs administration office $\$631.34/\text{month} \times 12 \text{ months/year} = \text{\$7,576.08/year}$
- Electric costs gas flare $\$1,982.49 \times 12 \text{ months/year} \times 2 \text{ flares} = \text{\$47,579.76/year}$
- Electric costs leachate holding ponds $\$1,349.75 \times 12 \text{ months/year} = \text{\$16,197.00/year}$
- Maintenance of water well and septic system for administration office = **\$500.00/year**

Total annual utilities costs = **\$77,105.96/year**

13. Leachate Collection/Treatment Systems Operation

Leachate collection/treatment system operation cost estimates are based on weekly monitoring by a technician for total of 3 hours/week × 52 weeks/year @ \$60/hour = **\$9,360/year**. Additional material maintenance costs for the pumps and aeration system at the storage holding ponds is assumed as **\$500.00/year**.

14. Administrative

The administrative long-term cost estimates that 20 hours per month will be expended towards administrative/overhead activities @ \$40.00/hour (i.e., \$9,600). More so, one 3rd party engineer (@\$120.00/hr) and one technician (@\$65.00/hr) are expected to perform a yearly site inspection under oversight of a P.E. Supervisor (@150.00/hr). The yearly site inspection is estimated to require 8 hours from each on-site personnel and supervisor. The total yearly administrative cost for the facility is equal to **\$12,280.00**.

15. Contingency

A contingency factor for long-term care costs of 5 percent is estimated based on the current unit rate cost pricing and level of detail provided for this estimate.

16. Site Specific Costs

No additional site specific costs are estimated.

FIGURES



SIDE SLOPE
AREA
90.65 ACRES

TOP DECK
AREA
9.35 ACRES

Geosyntec[®]
consultants

J.E.D. SOLID WASTE MANAGEMENT FACILITY

FINAL COVER SYSTEM GRADING PLAN

DATE: DEC. 2011

PROJECT NO. FL1962

FIGURE NO.

1

Poor Quality-Original

APPENDIX A-1

Earthwork and Liner Support Documents for Closure Estimates

2.0 BID FORM AND PRICE LIST

2.1 BID FORM

PARTIAL LANDFILL CLOSURE CONSTRUCTION - EVENT 2 - PHASE 1
DISPOSAL AREA
JED SOLID WASTE MANAGEMENT FACILITY

Submitted by: RCS Excavation, Inc (Aeron J. Smith)

Bidder: RCS Excavation, Inc

Date: 1/31/12

Bid Contact(s):

Address: 851 Lake June Rd

City: Lake Placid State: FL Zip:

PHONE: 863-441-1240 FAX: 863-582-9292

EMAIL: amanda@rcsexcavation.com

STATE CONTRACTOR'S LICENSE TYPE NUMBER: CUC1223965

A Corporation of the State of FL

CORPORATE Officers: (President) A. J. Smith
SEAL

(Secretary) Amanda Smith
(Treasurer)

Designated by "X" Officers authorized to sign Contracts.

ATTEST BY: Amanda Smith TITLE: Secretary
851 Lake June Rd
Lake Placid, FL 33852

WITNESS: Michael J. Smith TITLE:

CONTRACT FORM

The work shall be performed under a formal agreement to be entered into between the OWNER and the CONTRACTOR using the OWNER's Contract form. The Contract and all other Contract Documents referred to herein above form the Total Agreement.

2.1 BID FORM (Continued)

Substantial completion of Work by _____ (date).

email electronic copy of bid to: **Mr. Mike Kaiser, mkaiser@wsii.us**

mail sealed copies of bids to: **Mr. Mike Kaiser
Waste Services, Inc.
1099 Miller Drive
Altamonte Springs, FL, 32701**

I have received and examined the Bid Package provided by Omni Waste of Osceola County, LLC for the referenced work. I have reviewed in detail the contents of the Bid Package, including the Scope of Work, Plans and Specifications. I submit the following bid with the understanding that:

1. All bids shall remain firm for a minimum of sixty calendar (90) days from due date of submittal.
2. I will enter into and execute an Agreement Between OWNER and CONTRACTOR, in accordance with the sample contract and its attachments provided in the Bid Package.
3. I may be requested by Omni Waste of Osceola County, LLC. to prepare evidence of financial ability to perform the terms of this bid.
4. I acknowledge the receipt of the following addenda:
 - a) _____ dated 11/26/12
 - b) _____ dated _____
 - c) _____ dated _____

Name of Bidder (Company Name)

RC Services, Inc.

Signature/Date

DA Smith, 11/31/12

Title

President

(Printed Name)

DA Smith

2.4 BID WORKSHEET:

RCS Excavation

JED Solid Waste Management Facility (JED Landfill) Partial Closure Construction - Event 2 - Phase 1 Disposal Area

January 9, 2012

Item	Description	Unit	Quantity	Unit Price	Sub-Total
1	Mobilization and Demobilization (not to exceed 5% of total bid) (See Note 1)	LS	1	\$59,000.00	\$59,000
2	Development, Offloading and Staging Geosynthetic Liner Materials (See Note 2)	LS	1	\$14,730.00	\$14,730
3	Surveying & As-builts (See Note 3)	LS	1	\$35,000.00	\$35,000
4	Borrow Area Development and Management (See Note 4)	LS	1	\$62,091.00	\$62,091
5	Silt Fencing at Borrow Area	LF	5,000	\$0.83	\$4,150
6	NOI, SWPPP, Sediment and Erosion Controls (BMP's)	LS	1	\$3,000.00	\$3,000
7	Expose Existing Geosynthetic Cap Liner at Cell 1-4 Anchor Trench Tie-in	LF	2,900	\$5.32	\$15,428
8	Placement and Grading of 12" Intermediate Cover Layer (See Note 6)	CY	35,750	\$4.24	\$151,580
9	Excavation and Backfilling of Anchor Trenches	LF	990	\$5.32	\$5,267
10	Placement and Grading of 24" Protective/Vegetation Layer (See Note 6)	CY	92,800	\$4.27	\$396,256
11	18" Diameter Stormwater Piping (See Note 7)	LF	1,612	\$28.27	\$45,571
12	18" Diameter Stormwater Inlet Structures at Benches (See Note 8)	EA	22	\$2,246.56	\$49,424
13	Remove Existing Upslope Stormwater Piping, Rip-Rap and Inlet Grates for Cell 1-4 Tie-in	LS	1	\$5,174.40	\$5,174
14	Flushing of Existing Stormwater Control Structures and Outfall Piping (See Note 9)	LS	1	\$19,530.00	\$19,530
15	4-inch Diameter Seepage Header Pipe (solid and perforated)	LF	5,100	\$6.77	\$34,527
16	Vegetation Layer Soil Amendments	AC	20.2	\$1,562.00	\$31,552
17	Sodding	SY	97,500	\$1.23	\$119,925
18	Waste/Closure Limit Markers	EA	5	\$600.00	\$3,000
				Total Bid	\$1,055,206

See Notes Below and Scope of Work - Section I of Contract Agreement:

Note 1 - One half of total cost will be paid upon mobilization and one half upon demobilization.

Note 2 - Contractor shall haul, place and grade six inches (6") of clean soils to provide smooth flat location to store liner materials. Location will be at the top deck area immediately south of the closure limits. Location and dimensions are shown on Figure 1 of the bid documents.

Note 3 - Six (6) signed and sealed hard copies and one each (pdf and CAD file) of all as-built drawings must be provided to Owner at completion of project.

Note 4 - Borrow Area Development and Management (Item 4) shall be in accordance with SFWMD ERP and WUP, and Kimley-Horn and Associates drawings dated March 2011. This item also includes any necessary survey, clearing, grubbing, dewatering, grading and restoration activities for the borrow area and haul road. Vegetation cleared at the borrow area shall be stockpiled in the active Cell 7 area in a location designated by the Owner.

Note 5 - Includes haul and placement of clean fill soil to achieve waste grade elevations (account for existing waste underfill). Regrading of overfill soils/wastes shall be included in the unit rate. Assumed 12" depth required. Final quantity will be determined based on pre-construction survey.

Note 6 - Unit rate and payment will be based on in-place compacted volumes based on design grades. No additional payment will be made for overfilling, tolerance allowance, settlement and/or erosion. 10% risk allowance made by Owner for settlement. Payment will be based on quantity shown. Contractor to assume all other quantity risk due to settlement and erosion. Contractor shall provide full time employee to be stationed at the main access and haul road intersection to direct cross traffic during site operating hours.

Note 7 - Unit rate shall include miscellaneous fittings (elbows, bends, bands and ties, gaskets etc.) required to complete the stormwater piping. Pay item does not include Y-fittings at the bench locations.

Note 8 - Includes all costs for Y-fittings, pipe extensions, inlet grates and concrete to complete the stormwater inlet structures at the bench locations.

Note 9 - Includes flushing of all new and existing stormwater piping in closed areas, and stormwater structures and piping at the landfill perimeter road area.

Note 10 - Provide unit rate cost savings if soils are hauled from the borrow area during non operational hours (5:00 p.m. to 5:00 a.m.). Contractor shall provide all lighting and all necessary safety measures to ensure hauling can be done in a safe manner. Contractor shall propose quantity.

Note 11 - Full time security guard shall be stationed at the facility access gate if Contractor operates outside of weekday operating hours (5:00 p.m. to 5:00 a.m.) and on Saturdays or Sundays.

→ Items 1, 2, 4, 5, 6, 7, 9, 13, 14 & 18 not included in Liner or Stormwater estimates.

Sum = \$191,370.00 ⇒ Cost/acre = \$191,370.00 / 20 = 9,568.50

2.4 BID WORKSHEET:

Comanco Construction - Geosynthetics Installation

JED Solid Waste Management Facility (JED Landfill) - Partial Closure Construction - Event 2 - Phase 1 Disposal Area

M/P Item	Description	Unit	Bid Estimate Install Quantity	Install Unit Price	Install Sub-Total	Bid Estimate Material Supply Quantity	Material Unit Price	Material Sub-Total	Total
1	Mobilization and Demobilization	LS	1	\$5,000	\$5,000	NA			\$5,000
2	Tie-In to Existing 40-mil Liner at Existing Closure	LF	2,900	\$4.00	\$11,600	NA			\$11,600
3	40-mil Textured Geomembrane	SF	880,000	\$0.100	\$88,000	1,013,350	NA	NA	\$88,000
4	Geocomposite	SF	610,000	\$0.080	\$48,800	711,525	NA	NA	\$48,800
5	8" Diameter Gas Well Boots	EA	30	\$350.000	\$10,500	NA	NA	NA	\$10,500
6	6" Diameter Lateral Boots	EA	30	\$350.000	\$10,500	NA	NA	NA	\$10,500
					\$174,400			\$0	\$174,400

WSI Notes:

1. Install and material supply quantities are provided for bid estimate purposes. Install pay quantities will be based on actual square footage verified by 3rd party survey (including anchor trench). Material supply quantities shall be based on Installers 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.
2. Earthwork Contractor will offload and stage geosynthetics materials delivered to the site. Material Supplier will furnish strappings on the rolls for offloading.
3. Installation quotes will be evaluated on cost and time to complete the work - both are important. Please indicate how many crews can be placed on the project and estimated time.
4. Material Supply Unit Price INCLUDES FREIGHT and is a DELIVERED TO FACILITY price. The JED Facility is exempt from sales tax.
5. Material specifications are attached. Material Unit Price includes all MQC testing as required by the specifications.
6. Earthwork Contractor will supply and place the seepage header pipe. Geomembrane installer shall cut, wrap and sew the geocomposite around the pipe.

Bidder Notes:

COMANCO estimates that the installation work will take approximately thirty-eight (38) good weather work days for one crew to complete. Our crew will work six (6) ten (10) hour work days per week.

Seepage Header Pipe Wrap item includes pipe placement, wrapping and sewing of composite, geomembrane flap, approximately 5,100 lf of welding for geomembrane flap, and twenty (20) 4" pipe boots for seepage header pipe solid outlets.

COMANCO assumes that all weld rod for the liner installation will be provided by the Owner. We estimate that the project will require approximately 88 boxes of weld rod.

$$\begin{aligned}
 - \text{Total Items 1, 2, 6 \& 7} &= \$5,000 + \$11,600 + \$10,500 + \$10,500 \\
 &= \$37,500 \text{ (Add to install cost for 40 mil)}
 \end{aligned}$$

$$\begin{aligned}
 - \text{Average add-on to install unit rate cost for Items 1, 2, 6 \& 7} \\
 &= \$37,500 / 880,000 \text{ sf} = \$0.043 / \text{sf} = \$0.387 / \text{sy}
 \end{aligned}$$

$$\begin{aligned}
 - \text{Total 40-mil installation unit cost rate} &= (\$0.10 / \text{sf}) (9 \text{ sf/sy}) \\
 &+ \$0.387 / \text{sy} = \$1.29 / \text{sy}
 \end{aligned}$$

$$\begin{aligned}
 - \text{Unit cost rate for geocomposite} &= (\$0.08 / \text{sf}) (9 \text{ sf/sy}) \\
 &= \$0.72 / \text{sy}
 \end{aligned}$$



QUOTATION - Revised 1/17/12

Mr. M. Kaiser
Waste Services, Inc.
Email: mkaiser@wsii.us

Project Number: 120117125
Project Name: JED Partial Closure
Location: St. Cloud, FL
Application: Landfill
Bid Date: January 17, 2012
Terms: Net 30 days

11 rolls / truck for LLDPE - 6 trucks

Product	Quantity	Roll Size	F.O.B.	Unit Price	Total Price	Warranty
40 mil LLDPE Microspike®	718,520 SF 44 Rolls	23' x 710'	Georgetown, SC	\$.2346/sf	\$ 168,564.79	Agru Standard
40 mil LLDPE Smooth®	288,075 SF 15 Rolls	23' x 835'	Georgetown, SC	\$.2081/sf	\$ 59,948.41	Agru Standard
8-250-8 Composite	677,730 SF 246 Rolls	14.5' x 190'	Georgetown, SC	\$.3974/sf	\$ 269,329.90	Agru Standard
5mm HDPE Weld Rod	440 LBS 20 Spools	22 lb spools	Georgetown, SC	\$4.25/lb	\$ 1,870.00	
Cutting Fees	5 Cuts			\$250.00	\$ 1,250.00	
Estimated Freight	6 Trucks		St. Cloud, FL	\$1,600.00	\$ 22,400.00 9,600.00	

Note: Prices are valid for 30 days from date of quotation. Freight prices are estimates only. Customers will be charged actual freight costs at time of shipping.

Exceptions/Clarifications and Special Requirements: Clarifications will be sent to you upon specification review. Agru Standard 1 Year Warranty will apply.

Comments:

- Unless otherwise specified, Agru America standard material specification values and testing will apply for this quotation and the Customer agrees that Agru America standard values will be acceptable according to this quote.
- Agru America Standard Warranty shall apply.
- Agru America General Terms and Conditions will apply.
- If the material quantity changes from the above square footage, a revised quotation must be issued.
- Agru America reserves the right to pass along any verifiable resin increases from the resin supplier up to time of material shipment.
- Shipping dates are estimates only and Agru America will not be held liable for any delays due to shipping.
- Any costs associated with third party testing will be the responsibility of the customer.
- Interest will accrue on unpaid balances at 1 1/2% per month and Purchaser is responsible for collection costs and attorney fees.

Customer Acknowledgment

P. O. No.: _____
Date: _____

Signature: _____
Title: _____

Please return to:

Paul W. Barker

Fax: 843-527-2738

Your material supplier - not your competition!

ADDED COST For Shipping: Weld Rod = (\$1870.00 + \$9,600) / 1,006,595 sf

40 mil LLDPE Textured = \$0.25/sf = \$2.25/sy
1000 - \$1.90 /...

material from Stone Ind.

PROGRESSIVE WASTE SOLUTIONS PURCHASE ORDER FORM

P.O. Number

Geosynthetics Material Supplier's Project Number

Project Title: JED Partial Closure Phase 1

Owner: WSI / Progressive Waste Solutions

Address: 1099 Miller Drive

Altamonte Springs FL 32701

Phone/Fax: 904-673-0446

Attention: Mike Kaiser

Site Name: JED Landfill

Address: 1501 Omni Way

St Cloud 34773

Phone/Fax: /

Attention:

Third Party Conformance Testing? Y ☐ N ☐

CQA firm or Lab

Phone/Fax:

Attention:

Date: 18-Jan-12

Material Supplier Skaps Industries

335 Athena Drive

Athens GA 30601

Phone/Fax: 770-564-1857 / 770-564-1818

Attention:

Estimated Ship Date

Required Delivery Date

Payment Terms (Days) 30

Routing Flatbed

F.O.B. Plant

MATERIAL SUPPLY

Item #	Item Description	Number of Rolls	Roll Width	Roll Length	Total Full Roll Quantity	Unit	Unit Price	Extended Price Total
1	Transnet 270-2-8	241	14.0	200	674,800		\$ 0.3300	\$ 222,684.00
2	Freight Estimate				9		\$ 1,400.0000	\$ 12,600.00
3					-			\$ -
4					-			\$ -
5					-			\$ -
6					-			\$ -
7					-			\$ -
8					-			\$ -
9					-			\$ -
10					-			\$ -
11					-			\$ -
Total Amount								\$ 235,284.00

TERMS AND CONDITIONS

- All manufacturing, conformance testing, material properties, and delivery of material shall be in accordance with the site specific CQA plan and project requirements.

APPROVALS

Engineer:

Date:

ACKNOWLEDGMENT

Geosynthetic Material Supplier

Date:

$$\begin{aligned}
 &\text{Unit Rate Including Shipping} \\
 &= \$235,284 / 674,800 \text{ sf} \\
 &= \$0.35 / \text{sf} = \$3.15 / \text{sf}
 \end{aligned}$$

ADS
ADVANCED DRAINAGE SYSTEMS, INC.
www.ads-pipe.com
51-0105666

PAGE 1

INVOICE DATE OCT 24, 2011
INVOICE NO. 15404188

PMT. DUE DATE NOV 23, 2011 CUST NO. 34871
PMT. DUE \$3,524.69 BILL TO CUST NO. 34871
SHIP DATE OCT 24, 2011

CREDIT/DEBIT NO.
ORDER NO. 10695677 / 1306639
CUST P.O. NO. J.E.D. LANDFILL
SALES REP NAME Delegetu, Christopher
WAREHOUSE P67
SHIP TO

BILL TO

Attn: Accounts Payable
ERC GENERAL CONTRACTING
890 CARTER ROAD SUITE 170
WINTER GARDEN FL 34787

ERC GENERAL CONTRACTING
JS J.E.D. LANDFILL
1501 OMNI WAY
SAINT CLOUD FL 34773

TERMS NET 30
BOL. NO. 1179747
TRACKING NUMBER 0

Nestor

QTY ORDERED	QTY SHIPPED	U/M	PRODUCT NUMBER	DESCRIPTION	UNIT PRICE	AMOUNT
20	20	FT	306500201B	30" DWALL HWY. WTIB SOLID 20'	20.330	406.60
140	140	FT	246500201B	24" DWALL HWY. WTIB SOLID 20'	14.670	2,053.80
400	400	FT	066500201B	6" DWALL HWY. WTIB SOLID 20'	1.950	780.00
3	3	EA	02021.0	2# CAN BLUE LUBRICANT	.000	0.00
1	1	EA	DELIVERY FREIGHT	FREIGHT CHARGE ONLY	50.000	50.00
			CHARGE	FUEL SURCHARGE		24.30
				IB DISCOUNT		-15.73
SUB-TOTAL						3,298.97
TOTAL TAX						225.72

24" ADS Cost/UF

INVOICE TOTAL \$3,524.69 USD

CSP IPOL ENTERED BY IPOL

Freight and Special Order Disclaimers:

1. Quotes must be accepted within 30 days from above quotation date. Orders must be shipped within 10 days of order placement.
2. Freight/Drop charges will apply per the following parameters (order values listed below are not inclusive of Nyloplast, Baysever or inserts. Too or non stock special order products which will incur actual freight charges or fuel surcharge as appropriate):
 - a. All orders \$1,500 or greater will be delivered freight prepaid.
 - b. All orders less than \$1,500 where ADS has ample time to catch up the remainder of truck will incur a \$50 (minimum) drop charge.
 - c. All orders less than \$1,500 where ADS does not have ample time to catch up the remainder of truck will incur the normal common carrier LTL rate.
 - d. Chase drop charges are separate and in addition to any applicable fuel surcharges.
3. ADS reserves the right to re-note when the quantities change by more than 10%. Prices quoted do not include state, local or use taxes. Prices quoted are based on the total project. Specific products such as Nyloplast Drain and Catch Basins, Custom pipe or specially fabricated products will be offered only as an engineered system with ADS pipe. All returns are subject to a 25% restocking fee. Nyloplast, Nyloplast, non-standard geotextiles and specially ordered items cannot be returned. The quantities listed are estimated based on our interpretation of the project quantities. The bidder is responsible for confirming quantities. ADS does not imply that the material will be accepted on any jobsite for any specific project unless stated otherwise. Technical clarification is available upon request.

IF YOU HAVE QUESTIONS RELATED TO THIS INVOICE, PLEASE CALL 888-367-7471. INQUIRIES MUST BE SUBMITTED WITHIN 30 DAYS FROM DATE OF INVOICE.

A 1.00% PER MONTH (A RATE OF 12.00% PER ANNUUM) SERVICE CHARGE WILL BE BILLED ON PAST DUE AMOUNT. BUYER ACCEPTS ALL TERMS AND CONDITIONS ON BOTH SIDES HERE OF THIS FORM, NONE OF WHICH MAY BE CHANGED BY BUYER. ACCEPTANCE OF ANY SHIPMENT BY BUYER IS AN ACCEPTANCE OF THE TERMS OF THIS DOCUMENT, NOT WITHSTANDING ANY TERMS OR CONDITIONS CONTAINED IN ANY ACKNOWLEDGMENT OR OTHER FORM OF BUYER. SUBJECT TO TERMS AND CONDITIONS PRINTED ON REVERSE SIDE.



TO PAY BY CREDIT CARD CALL 888-524-7173

CONTINUED

ADS
ADVANCED DRAINAGE SYSTEMS, INC.
www.ads-pipe.com
81-0105665

PAGE 1



INVOICE DATE SEP 02, 2011
INVOICE NO. 15339828

PMT. DUE DATE OCT 02, 2011
PMT. DUE \$ 613.68
CUST NO. 34871
BILL TO CUST NO. 34871
SHIP DATE SEP 02, 2011

CREDIT/DEBIT NO.
ORDER NO. T0656152 / 1226569
CUST P.O. NO. 1788
SALES REP NAME Hush, Allan R
WAREHOUSE P67
SHIP TO

BILL TO

Attn: Accounts Payable
ERC GENERAL CONTRACTING
890 CARTER ROAD SUITE 170
WINTER GARDEN FL 34787

ERC GENERAL CONTRACTING
JS JED LANDFILL
1501 OMNI WAY
SAINT CLOUD FL 34773

TERMS NET 30
BOL. NO. 1106116
TRACKING NUMBER 0

QTY ORDERED	QTY SHIPPED	U/M	PRODUCT NUMBER	DESCRIPTION	UNIT PRICE	AMOUNT
60	60	FT	18650020HB	18" DWALL HWY. WTIB.SOLID.20'	8.720	526.80
1	1	EA	DELIVERY FREIGHT CHARGE	FREIGHT CHARGE ONLY	50.000	50.00
				FUEL SURCHARGE		3.95
				IB DISCOUNT		-3.69
SUB-TOTAL						577.06
TOTAL TAX						36.62

INVOICE TOTAL \$ 613.68 USD

CSR TSHROPSHIRE ENTERED BY TSHROPSHIRE

18" ADS Cost / LF

Freight and Special Order Disclaimer:

1. Quotes must be accepted within 30 days from above quotation date. Orders must be shipped within 30 days of order placement.
2. Freight/Drop charges will apply per the following parameters (order values listed below are not inclusive of Piggyback, Boysaver, or Inserta Tee or on stock special order products which will incur actual freight charges or first warehouse as appropriate):
 - a. All orders \$3,500 or greater will be delivered freight prepaid.
 - b. All orders less than \$3,500 where ADS has ample time to match up the remainder of truck will incur a \$50 (minimum) drop charge.
 - c. All orders less than \$3,500 where ADS does not have ample time to match up the remainder of truck will incur the actual common carrier LTL rate.
 - d. These drop charges are separate and in addition to any applicable fuel surcharges.
3. ADS reserves the right to re-quote when the quantities change by more than 10%. Prices quoted are not fastest stock, local or ex stock. Prices quoted are based on the most product. Specific products such as Nyloplast Drain and Catch Basins, Custom Pipe or Specialty Polypropylene products will be offered only when engineered systems with ADS pipe. All orders are subject to a 2.5% production fee. Polypropylene, non-standard quantities and specialty ordered items cannot be returned. The quantities listed are estimated based on our interpretation of the product quantities. The buyer is responsible for confirming quantities. ADS does not imply that the quantity will be accepted as any quantity for any specific project unless stated otherwise. Technical consultation is available upon request.

IF YOU HAVE QUESTIONS RELATED TO THIS INVOICE, PLEASE CALL 888-367-7473. INQUIRIES MUST BE SUBMITTED WITHIN 30 DAYS FROM DATE OF INVOICE.

A 1.00% PER MONTH (A RATE OF 12.00% PER ANNUM) SERVICE CHARGE WILL BE BILLED ON PAST DUE ACCOUNT. BUYER ACCEPTS ALL TERMS AND CONDITIONS ON BOTH SIDES HERE OF THIS FORM, NONE OF WHICH MAY BE CHANGED BY BUYER. ACCEPTANCE OF ANY STATEMENT BY BUYER IS AN ACCEPTANCE OF THE TERMS OF THIS DOCUMENT, NOT WITHSTANDING ANY TERMS OR CONDITIONS CONTAINED IN ANY ACKNOWLEDGEMENT OR OTHER FORM OF BUYER. SUBJECT TO TERMS AND CONDITIONS PRINTED ON REVERSE SIDE.



TO PAY BY CREDIT CARD CALL 888-524-7373

CONTINUED

[illegible]

Cells 1-8 Financial Assurance
Cost Estimate

Figure 1

From: Conerly, Bo
Sent: Thursday, April 07, 2011 6:31 PM
To: 'Michael Kaiser'
Subject: FW: JED Volumes

Hey Mike

I just checked the website again and it still has the same information (WUP complete, ERP under review). I'll give Jose a call tomorrow if it hasn't been updated in the morning.

The excavation volumes are presented below. The North (1,413,599.82 cy) is from 60' to 45'. The South (3,292,291.71 cy) is from is the excavation in the 4 phases going down to 45' but leaving the berms. The Berm volume (1,571,237.30 cy) is obviously the volume in the berms for both the south and north areas. Total volume is 6,277,128.83 cy.

Let me know if you have any questions.

Robert "Bo" Conerly, P.E.
Kimley-Horn and Associates, Inc.
4 West Oak Street, Suite E
Arcadia, FL 34266
Office: 863-993-2518
Fax: 941-379-4352
bo.conerly@kimley-horn.com

This e-mail from Kimley-Horn and Associates, Inc. and any files transmitted with it may contain confidential information. It is intended solely for the individual named above. If you are not the intended recipient, please notify the sender and delete it immediately. Any other use or distribution is prohibited.

Remaining Soil Volume in Branson Barron Area.

APPENDIX A-2

Gas Collection and Control System Support Documents for Closure Estimates

Cell 1-8 Financial Assurance Cost Estimate

Shaw Bid Quote

BID WORKSHEET

JED Solid Waste Management Facility

Phase 2 Cells 3-6 Gas Collection and Control System Expansion

rev. 9/19/2011b

Item/Description	Unit	Quantity	Unit Cost	Subtotal Cost
General				
Mobilization/Demobilization	LS	1	max 5% of Total	\$ 13,400.00
Track Truck Mobe/Demobe (if needed)	LS	1	\$ 1,820.00	\$ 1,820.00
Tracked Haul Truck (if needed)	WK	1	\$ 4,500.00	\$ 4,500.00
HDPE Header and Lateral Piping				
Excavation and Connection to Existing Lateral Stubouts	EA	11	\$ 1,800.00	\$ 19,800.00
6" SDR-17 Lateral Pipe	LF	3120	\$ 20.00	\$ 62,400.00
12" SDR-17 Header Pipe	LF	400	\$ 42.00	\$ 16,800.00
Valves and Other Components				
12" ASAHI Ty57 Nitrile Seal Butterfly Valve /w Ext.	EA	3	\$ 3,650.00	\$ 10,950.00
6" Header Access Riser (Detail 10A/B-11)	EA	4	\$ 750.00	\$ 3,000.00
Fittings	LS	1	\$ 3,580.00	\$ 3,580.00
Gas Extraction Wells				
Gas Well Head Assembly	EA	13	\$ 700.00	\$ 9,100.00
Benching for Wells	EA	13	\$ 400.00	\$ 5,200.00
8" Sch 80 PVC Perforated Gas Extraction Well Section	LF	1360	\$ 57.00	\$ 77,520.00
8" Sch 80 PVC Solid Gas Extraction Well Section	LF	235	\$ 42.50	\$ 9,987.50
Vertical Well Drilling (36-inch diameter)	LF	1600	\$ 28.00	\$ 44,800.00
TOTAL CONSTRUCTION COSTS				\$ 282,857.50

Notes:

1. Mobilization and demobilization shall not exceed 5% of total.
2. Quantities shall be used and bid as provided.
3. Lateral pipe quantities include 6% slope correction and 15' allowance at well locations for vertical connections and stubouts.
4. Unit rate for perforated gas extraction well section shall include gravel pack.
5. Unit rate for solid gas extraction well section shall include bentonite plugs, isolation rings, and soil backfill.
6. Fittings shall include all elbows, tees, flange adapters, blind flanges, gaskets, bolts etc. to complete the lateral connections to the wells and existing laterals. Butterfly Valve and Header Access Riser items include fittings specific to those items.

Fitting cost as % of pipe cost

Remaining Other Installation Costs

\$ 76,850.00 - \$

$$\left[\frac{3580}{62,400 + 16,800} \right] \times 100 = 4.86\%$$

use 5%

Mob/Demob - 13,400.00

2. Track Haul Truck - \$ 18,000 - (4 weeks)

3. 6 Connections to Existing Laterals - \$ 10,800 - (not header)

4. 5-12" Valves - \$ 18,250 -

Poor Quality Original

Cell 7 GCS Horizontal Collectors



ENVIRONMENTAL CORPORATION

COMANCO Environmental Corporation
4301 Sterling Commerce Dr
Plant City, FL 33566-7372
Ph: (813) 988-8829 Fx: (813) 988-8953

Prepared By:
Scotty Martone Estimator
Quote Date: December 1, 2011
Quote Expiration: December 15, 2011

Mr. Mike Kaiser
Waste Services, Inc.
1099 Miller Drive
Altamonte Springs, Florida 32701
Cell: 904/673-0446
Fax: 407/831-7506
E-mail: mkaiser@wasteservicesinc.com

Project Information:
JED Cell 7 Horizontal Collector
JED Solid Waste Facility, St. Cloud, Florida
Proposal Number: 03115182

COMANCO Environmental Corporation (CEC) is pleased to provide you with the following proposal for the supply and installation of the items and appurtenances as indicated below:

\$ 68,721.40

CEC Provided Equipment					
Item	Item Description	Quantity	Unit	Unit Price	Total
1	Mobilization/Demobilization	1	EA	\$ 3,000.00	\$ 3,000.00
2	Supply & Install Horizontal Collector with Stone	1,750	LF	\$ 67.00	\$ 117,250.00
Stone Option Total (Mob/Demob Included)					\$ 120,250.00
3	Supply & Install Horizontal Collector with Tire Chips	1,750	LF	\$ 45.00	\$ 78,750.00
Tire Chip Option Total (Mob/Demob Included)					\$ 81,750.00

WSI Provided Equipment					
Item	Item Description	Quantity	Unit	Unit Price	Total
4	Mobilization/Demobilization	1	EA	\$ 1,500.00	\$ 1,500.00
5	Supply & Install Horizontal Collector with Stone	1,750	LF	\$ 63.00	\$ 110,250.00
Stone Option Total (Mob/Demob Included)					\$ 111,750.00
6	Supply & Install Horizontal Collector with Tire Chips	1,750	LF	\$ 41.00	\$ 71,750.00
Tire Chip Option Total (Mob/Demob Included)					\$ 73,250.00

- 1.) Mobilization / Demobilization:** This proposal includes one (1) mobilization/demobilization. Any and each additional mobilizations/demobilizations, if necessary, shall be billed at the rate listed in this proposal.
- 2.) Labor:** Our proposal is based on a five (5) day work week, ten (10) hours each day, utilizing non-union, non-prevailing wage labor.
- 3.) Performance / Payment Bond:** The cost of the performance/payment bond (if applicable) will be 2.0% of the total estimated cost shown above.
- 4.) Taxes:** Any applicable material and/or freight sales taxes are included in this proposal.

Gas Flare Purchase 2008



Shaw® LFG Specialties, LLC.

Corporate Headquarters:
LFG Specialties LLC
16406 US Route 224 E
Findlay, OH 45840-9761
Main: (419)424-4999
Fax: (419)424-4991

**UTILITY FLARE SYSTEM
MODEL PCFT1444I12**

LFG SPECIALTIES SALES AGREEMENT NO. 030802R1

Date: April 7, 2008

PRESENTED TO:

**Mr. Mike Kaiser
Waste Services Inc.
1501 Omni Way
St. Cloud, FL 34773
(904)673-0446**

PREPARED BY:

**Lee Zink, Senior Application Engineer
16406 US Route 224 E
Findlay, OH 45840
(419) 425-6190**

PRESENTED BY:

**Robert Johnston, National Sales Manager
11560 Great Oaks Way, Suite 500
Alpharetta, GA 30022
(770)667-7789**

PROJECT REFERENCE:

**J.E.D. Solid Waste Management Facility
Omni Waste of Osceola County, LLC
St. Cloud, FL**

SALES AGREEMENT

This sale agreement "Agreement" which includes the Equipment Specification and Terms and Conditions of Sale below is entered into on the undersigned date, by and between the seller, LFG Specialties, L.L.C. "LFG Specialties", a Louisiana corporation, and purchaser, _____ (hereinafter "Purchaser").

- A. LFG Specialties is the manufacturer of certain flare "Equipment" more fully described in paragraph 1, below, "Equipment Quote".
- B. Purchaser wishes to purchase from LFG Specialties such Equipment on the terms and conditions set forth herein.

Therefore, in consideration of the covenants contained herein and for other good and valuable consideration, the legal sufficiency of which is acknowledged, the parties wishing to be legally bound agree as follows:

I. EQUIPMENT SPECIFICATION

Purchaser hereby agrees to purchase from LFG Specialties such Equipment and Services as described in this Agreement per the following and subject to the standard "Terms and Conditions of Sales" herein:

A. **Equipment Scope:**

LFG Specialties' scope of equipment supply and brief description of the system is listed below. For a more detailed system description please see Section G.

1. One LFG Specialties fully assembled skid mounted landfill gas candlestick flare including:
 - One flare Model CFT1444112 with peripheral equipment (capacity 360-3600 SCFM of landfill gas at 30-50% methane content)
 - **Designed and constructed to operate as a complete unit to minimize installation and start-up time completely fabricated, assembled, pre-wired and tested prior to shipment.**
 - **Stack to be delivered completely wired from the stack junction box to the thermocouples, UV eye and igniter. Also from the stack junction box to the main control and power panels.**
 - One 12 in. Shand & Jurs Model 94307 flame arrester
 - One propane pilot assembly with automatic igniter system
 - One 200 lb. propane tank (propane to be supplied by others)
 - Two Houston Service Industries Model 12602 or equal multistage centrifugal landfill gas blowers with direct drive, blower bearing RTDs and 75 HP, 460 VAC, three phase, explosion proof motors (each blower is rated for 1350 – 3600 SCFM @ 55 in. w.c. inlet vacuum and 15 in. w.c. discharge pressure, 100 deg. F, 100 ft. asl.)
 - Associated instrumentation including vacuum, pressure and temperature gauges
 - Two sets of associated Flex Couplings, manual isolation valves, and check valves
 - One 14 in. fail safe automatic pneumatic header valve (Note: LFG Specialties takes exception to the electric valve)
 - One 48 in. condensate knock out pot with 20 micron demister/filter, 14 in. inlet and 14 in. outlet, sight glass, level switch, and drain port
 - Condensate drain piping and automatic drip traps
 - One control rack with:
 - ◆ Flame-Trol III automatic flare controller with touch-screen interface with blower amp and blower hours displays
 - ◆ Main power disconnect and step down transformer
 - ◆ Structural roof for heat and weather protection
 - Two 75 HP Variable Frequency Drives and vacuum transmitter

- One each thermal dispersion Flow Meter with totalizer and Yokogawa six channel paperless chart recorder to record flame temperature and landfill gas flow
- One eight channel Raco Verbatim Autodialer
- 10 ft. wide by 40 ft. long structural steel skid
- All skid components interconnecting piping and wiring
- Three copies of O & M Manual, cut sheets, and drawings

2010, 2011 & 2012
inflation adjustments

Notes:

1. System is designed to meet or exceed the requirements in specification section 11910.
2. All installation by others
3. Landfill gas supply system must be properly engineered to provide a stable gas supply for the flare system to function properly.
4. A properly designed condensate removal system must be in place within 50 ft. upstream of the flare system for reliable operation.
5. The flare system must be supplied power from a stable energy source with a voltage deviation of no more than 7%.

B. Price Schedule: $\$220,120 \times 1.02 \times 1.01 \times 1.01 = \$229,035.00$

Price for the LFG Specialties Model PCFT1444I12 Utility Flare System as described in Section A, item 1 FOB Findlay, OH, excluding tax, is

\$ 205,930.00

Three days of start-up assistance and training (travel and living expenses are included)

\$ 4,690.00

*NOTE: Should the system not be commissioned by LFG Specialties, the warranty will be void.

Estimated shipping and handling from LFG Specialties shop to site (shipping to be charged at actual cost plus 15% handling fee)

\$ 9,500.00

ALL PRICING IS FOB — FINDLAY, OHIO

Options:

1. One day of Semi-Annual or Annual Preventative Maintenance (travel and living expenses are included). Price is per visit. Additional information available upon request.

PRICE ADDER:

\$ 3,764.00

C. Shipment Terms:

Shipment terms are F.O.B. LFG Specialties' facilities, Findlay, Ohio. LFG Specialties Sales Agreement calls for the Purchaser to pay all installation costs, freight from our facility to the project site, and all applicable taxes and necessary freight insurance.

D. Shipment Schedule:

LFG Specialties makes every effort to meet our Customers delivery requests and special requirements. Delivery for the flare system outlined in this Agreement is:

Submittal Drawings: 4 weeks after receipt of order for submittal drawings
Equipment Shipment: 12 to 16 weeks from receipt of approval for submittal drawings
(Actual delivery to be determined at time of submittal approval)

BID WORKSHEET
J.E.D. Solid Waste Management Facility
Phase 1 - Gas Collection and Control System
Revised May 9, 2008 - Mike Kaiser

Item/Description	Unit	Quantity	Unit Cost	Subtotal Cost
General:				
Mobilization/Demobilization	LS	1	5% of Total	\$ 19,800.00
Erosion and Sediment Control	LS	1	\$ 7,760.00	\$ 7,760.00
Survey	LS	1	\$ 11,300.00	\$ 11,300.00
HDPE Header and Lateral Piping				
6" SDR-17 Lateral Pipe	LF	2800	\$ 18.00	\$ 50,400.00
8" SDR-17 Lateral Pipe	LF	200	\$ 24.00	\$ 4,800.00
12" SDR-17 Pipe, Header	LF	350	\$ 34.00	\$ 11,900.00
14" SDR-17 Pipe, Header	LF	310	\$ 41.00	\$ 12,710.00
18" SDR-17 Pipe, Header	LF	1650	\$ 59.00	\$ 97,350.00
20" SDR-17 Pipe, Header	LF	310	\$ 79.00	\$ 24,490.00
24" SDR-17 Pipe, Header	LF	100	\$ 160.00	\$ 16,000.00
Valves and Other Components				
Fittings	LS	1	\$ 15,000.00	\$ 15,000.00
Header Access Riser (Header High Points)	EA	1	\$ 1,000.00	\$ 1,000.00
14" Isolation Butterfly Valve	EA	1	\$ 8,200.00	\$ 8,200.00
18" Isolation Butterfly Valve	EA	1	\$ 16,000.00	\$ 16,000.00
20" Isolation Butterfly Valve	EA	1	\$ 19,000.00	\$ 19,000.00
Gas Extraction Wells				
Gas Well Head Assembly	EA	29	\$ 1,200.00	\$ 34,800.00
8" Sch 80 PVC Perforated Gas Extraction Well Section	LF	1410	\$ 51.50	\$ 72,815.00
8" Sch 80 PVC Solid Gas Extraction Well Section	LF	587	\$ 34.00	\$ 19,958.00
Vertical Well Drilling (36-inch diameter)	LF	1910	\$ 27.00	\$ 51,570.00
Condensate Collection & Management				
Condensate Drains at Leachate Cleanouts	EA	3	\$ 6,500.00	\$ 19,500.00
HDPE 36" Dia. Knockout Pot at Flare Station	EA	1	\$ 15,000.00	\$ 15,000.00
Condensate Management System at Flare Station	LS	1	\$ 18,000.00	\$ 18,000.00
Gas Flare Station				
Flare Station Pad (Excavation, Fill and Grading)	LS	1	\$ 13,000.00	\$ 13,000.00
Gas Flare Station Receiving & Installation	LS	1	\$ 10,900.00	\$ 10,900.00
Electrical	LS	1	\$ 23,000.00	\$ 23,000.00
8' Tall Chain Link Fencing	LF	160	\$ 29.00	\$ 4,640.00
4' Wide Man Gate	EA	1	\$ 520.00	\$ 520.00
Sodding	SF	1000	\$ 2.00	\$ 2,000.00
12" Thick 3/4" Gravel with Geofabric	SF	1250	\$ 3.50	\$ 4,375.00
Retaining Wall and Footing (8' H x 8" W)	LF	80	\$ 350.00	\$ 28,000.00
Start-up Support	LS	1	\$ 4,690.00	\$ 4,690.00
TOTAL CONSTRUCTION COSTS				\$ 637,978.00

Notes:

1. Mobilization and demobilization shall not exceed 5% of total.

In flare purchase

Flare Installation 2008

\$ 86,435.00

ADD 2010, 2011 ; 2012 Inflation

Adjustments

$$\$ 86,435.00 \times 1.02 \times 1.01 \times 1.01 = \$ 89,935.79$$

APPENDIX A-3

Support Documents for Long-term Care Cost Estimates

Groundwater, Leachate & Surface Water Sampling Costs

December 22, 2011

Mike,

Below is the scope of work and budget estimate for water quality monitoring at the J.E.D. Solid Waste Management (JED) facility for 2012. The work will be performed in accordance with the current Florida Department of Environmental Protection (FDEP) Solid Waste Management Facility Permit and relevant revisions to Chapter 62-701 F.A.C. (January 6, 2010).

In general, for each semi-annual event:

- Geo-Services and Consulting, LLC (GS&C) will notify FDEP a minimum of fourteen (14) calendar days prior to commencement of sampling activities.
- Groundwater samples will be collected from the thirty-three (33) monitoring wells identified in the current MPIS for sampling. The wells will be purged and sampled in accordance with the current applicable FDEP SOPs;
- Quality control (QC) samples will be collected and analyzed in accordance with the applicable FDEP SOPs;
- Surface water samples will be collected during each semi-annual event at locations SW-3 and SW-4 if flow in Bull Creek is observed. If a sample is collected the laboratory cost is \$325.00; ←
- Leachate samples will be collected from each active disposal cell in November 2012. It is anticipated that leachate samples will be collected from cells 1 through 8;
- Static water levels will be measured in all site monitoring wells and piezometers prior to purging for preparation of a groundwater contour map;
- Samples will be preserved, handled and shipped in accordance with the applicable FDEP SOPs (EPS proposes to utilize Columbia Analytical Services (CAS) for the laboratory analyses);
- Purge water will not be containerized and will be discharged to the ground surface, except for the monitoring wells with a history of exceeding the groundwater cleanup target levels (GCTL). The purge water from these wells will be discharged within an active disposal cell;
- GS&C will notify you of any damage to any of the existing monitoring wells;
- GS&C will prepare semi-annual water quality reports for submittal to FDEP. The WQ reports will be prepared in accordance with the electronic reporting requirements and will be signed and sealed by a State of Florida registered Professional Geologist. GS&C will provide FDEP with two (2) CDs containing the WQ reports. One hard copy (with an electronic copy included on the inside front cover) will be provided to you for the JED facility's site files and I will upload a pdf copy of the report onto the files anywhere website so you can download for your files. The reports will be submitted in accordance with the permit requirements.

As with semi-annual water quality monitoring previously performed at the JED facility, GS&C proposes to perform this work on a lump sum basis for each semi-annual event. The lump sum cost for the May 2012 semi-annual event would be \$25,500. The lump sum cost for the November 2012 semi-annual event would be \$30,800. The total cost for the two water quality monitoring events would be \$56,844. This total reflects a \$1,844 increase over the cost for the work performed in 2011 (\$55,000). The increase in cost is attributable to the addition of a leachate sample (Cells 7 & 8) and a slight increase in the laboratory analytical costs. The cost for re-sampling of a monitoring well (if necessary) would be \$760.

Includes leachate. See next page for breakout costs.

The cost for leachate sampling for compliance with Specific Condition 7 (of the agreement with the City of St. Cloud) would be \$1,050 per sample (lab cost & sampling). Since you collected pre and post aeration samples concurrently this year, you can just collect a post aeration sample in 2012 and use one of the leachate samples collected at Cells 1-8 for the second sample. The per unit breakout cost for the leachate samples at the cells is (labor [\$250] laboratory [\$676]) and the total equal to approximately \$926.00. We would just have to add a few analyses to one of these samples to match the parameters listed in the agreement.

If this cost estimate is acceptable, you can reply directly to this email. Please let me know if you have any questions.

Thanks again for the opportunity
Bob

Robert Thompson, P.G.

Senior Geologist

Geo-Services and Consulting, LLC

23110 State Road 54 No. 159

Lutz, Florida 33549

Phone: (813) 418-2007

thompsonrw@hotmail.com

NOTICE: This communication may contain privileged or other confidential information. If you are not the intended recipient, or believe that you have received this communication in error, please do not print, copy, retransmit, disseminate, or otherwise use the information. Also, please indicate to the sender that you have received this communication in error, and delete the copy you received. Thank you.



Other Gas/Air Monitoring Reg's.

January 30, 2012

P83-82734Q

Mr. Mike Kaiser
Waste Services, Incorporated
1501 Omni Way
St. Cloud, FL 34773

**RE: PROPOSAL FOR ENGINEERING SERVICES
2012 TITLE V PERMIT AND LANDFILL GAS SERVICES
J.E.D. SOLID WASTE MANAGEMENT FACILITY
OSCEOLA COUNTY, FLORIDA**

Dear Mr. Kaiser:

Per your request, this letter outlines Golder Associates Inc.'s (Golder's) proposed scope of work and associated costs for the above-referenced project. Golder understands that Waste Services, Inc. (WSI) requests Golder to provide assistance in various 2011 Title V Permit compliance items at the J.E.D. Solid Waste Management Facility (JED Facility).

PROJECT UNDERSTANDING, SCOPE AND COST

WSI is required to complete various reports, testing, and monitoring requirements at the JED Facility. Golder is prepared to assist WSI and our scope of work is discussed below in detail on a per task basis.

Task 1 – Semi-Annual Reports

In accordance with 40 CFR 60.757(f), an affected facility must submit semi-annual reports to the FDEP. Under this task, Golder will prepare the semi-annual reports that will include the following items:

- Value and length of time for exceedance of applicable parameters monitored under §60.756(a), (b), (c), and (d).
- Description and duration of all periods when the gas stream was diverted from the control device through a bypass line or the indication of bypass flow as specified under §60.756.
- Description and duration of all periods when the control device was not operating for a period exceeding 1 hour and length of time the control device was not operating.
- All periods when the collection system was not operating in excess of 5 days.
- The location of each exceedance of the 500 parts per million methane concentration as provided in §60.753(d) and the concentration recorded at each location for which an exceedance was recorded in the previous month.
- The date of installation and the location of each well or collection system expansion added pursuant to paragraphs (a)(3), (b), and (c)(4) of §60.755.

In addition to the above mentioned report requirements, FDEP has requested that wellfield monitoring logs be included with the report. Golder will coordinate with WSI to include these logs.

Included with the NSPS semi-annual report will be the semi-annual Startup, Shutdown, and Malfunction (SSM) Report. This report will be prepared by Golder and submitted with the NSPS Semi-Annual Report. This report will include the number of SSM events and whether or not the SSM Plan procedures were followed during the SSM event. As requested by FDEP, copies of the SSM forms should be included with this report as well. Golder will coordinate with WSI to include these forms.



In the event an applicable emission limit was exceeded and SSM Plan procedures were not followed, the SSM Plan will need to be revised to address this issue. Revisions to the SSM Plan (if required) will be covered under a separate cost proposal. Golder will perform this task for the lump sum cost of \$3,750 per report (total of \$7,500 for the two reports). The reports are due to FDEP by January 30, 2012 and July 30, 2012 for the previous six month monitoring period. Golder understands that WSI may internalize this report in the future.

Task 2 – Title V Permit Annual Reporting Support

This task includes support services for the annual Title V Permit Reporting including:

- Annual Operating Report
- Annual Emissions Fee Form
- Annual Statement of Compliance

Annual Report

Golder will prepare the Annual Operating Report (AOR) for the calendar year 2010 (due April 1, 2012). Golder will complete and submit the 2011 AOR using the EAOR FDEP electronic submittal process. Golder will perform the necessary calculations, based on data collected from the facility, to complete the AOR. This task will require the electronic signature of the responsible official (RO) to be submitted to follow-up the electronic submittal.

Annual Emissions Fee Forms

This task includes support with the preparation of the Title V Annual Emissions Fee Form for the calendar year 2011, required to be submitted by March 1, 2012. The Title V Annual Emissions Fee Form includes calculations with supporting information that determine the amount of the fee that is required to be paid annually to the FDEP for the emissions of regulated pollutants at the facility. Golder will evaluate if current conditions, as established in new permits, have affected this status and prepare the appropriate documentation. The Fee Form document will require the signature of the RO and a check from WSI to cover the cost of the emissions fee.

Annual Statement of Compliance

This task includes support with the preparation of the Title V Statement of Compliance for the calendar year 2011, required to be submitted by March 1, 2012. The Statement of Compliance documents the facility's compliance status during the previous calendar year. The Statement of Compliance requires explanations of each identified and reported noncompliance item. The Statement of Compliance must be submitted to both the FDEP and Environmental Protection Agency (EPA) and requires the signature of the RO.

Golder will provide assistance in completing the above mentioned reports and compliance submittals in this Task for the estimated cost of \$5,600. As done in previous years, Golder will assist WSI only as needed and directed by WSI.

Task 3 – Visible Emissions and Sulfur Testing

This task includes the visible emission testing of the facility's flare in accordance with the facility's Revised Title V Permit. USEPA Method 22 of 40 CFR 60 Appendix A requires a two hour observation period for visible emissions. Golder will provide an observer who meets the requirements as listed in the Revised Title V Permit and will perform the testing during the first calendar quarter of 2012. US EPA Method 22 will be followed during the visible emissions testing. Included within this task is the fifteen day notification of the testing to FDEP.

Additionally, Golder will obtain a landfill gas sample from the positive side of the blower and send it for laboratory analysis to determine the sulfur content within the landfill gas. The sample will be analyzed using ASTM D-3246-81 as done previously by Golder for WSI.

Golder will prepare a report summarizing the results from the USEPA Method 22 visible emissions observations and include the required reporting forms, as well as the results from the sulfur sampling analysis. This report must be signed by the facility's RO. Golder will coordinate with WSI to and submit the report to FDEP within 45 days of the testing/sampling date.

Golder's estimated costs to perform the visible emissions and sulfur testing is \$2,900.

Task 4 – Greenhouse Gas (GHG) Reporting Support

Under this task, Golder will prepare and submit the report associated with the calendar year 2011 GHG monitoring. USEPA requires the reporting to be completely electronic, via the Electronic Greenhouse Gas Reporting Tool (e-GGRT) website. This report includes the GHG monitoring results from 2011. As performed last year, Golder anticipates to use the Excel based tables to estimate the facility's GHG emissions. Golder will prepare and submit the report, and coordinate any required certifications. This report will be due by March 31, 2011.

Golder's will perform this service associated with GHG Reporting for the lump sum fee of \$4,200.

Table 1 below presents a summary of the costs as described above on a per task basis.

Tasks	Budget
Task 1 – Semi-Annual Reports	\$7,500 (\$3,750 each, lump sum)
Task 2 – Title V Permit Annual Reporting	\$5,600
Task 3 – Visible Emissions and Sulfur Testing	\$2,900
Task 4 – GHG Reporting Support	\$4,200 (lump sum)
TOTAL	\$20,200

AUTHORIZATION TO PROCEED

Golder will perform the Services identified in this proposal in accordance with the previously agreed to Professional Services Agreement between WSI (Omni Waste of Osceola County, LLC) and Golder (dated October 20, 2008).

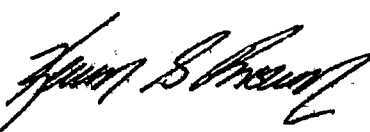
If you find this proposal acceptable, please sign the proposal acceptance form provided below and return one executed original to us indicating authorization to proceed with performance of the Services.

Golder sincerely appreciates the opportunity to provide our services to WSI at the JSWMF. If you have any questions, please feel free to give us a call.

Sincerely,

GOLDER ASSOCIATES INC.


Don E. Grigg, PE
Senior Project Engineer


Kevin S. Brown, PE
Senior Consultant and Principal

Attachments

DEG/veh

G:\Projects\0831083-821083-82734\Proposals\p83-82734Q\p83-82734Q.docx



**GOLDER ASSOCIATES INC.
PROPOSAL ACCEPTANCE FORM**

PROPOSAL NUMBER: P83-82734Q

DATE: January 30, 2012

RE: **PROPOSAL FOR ENGINEERING SERVICES
2012 TITLE V PERMIT AND LANDFILL GAS SERVICES
J.E.D. SOLID WASTE MANAGEMENT FACILITY
OSCEOLA COUNTY, FLORIDA**

Accepted by:

WASTE SERVICES, INCORPORATED

Authorized Representative

Name

Title

Date



EPG Companies Inc.

19900 County Road 81
Maple Grove, MN 55311

Phone: 763-424-2613
800-443-7426
Fax: 763-493-4812
www.epgco.com

Quote Number: 13448 Rev Num 4

Page 1 of 5

TO:

Mike Kaiser
J.E.D. Solid Waste Facility / Waste Services
Omni Waste of Osceola Cty
1501 Omni Way
St Cloud FL 34773
USA

Date: 9/20/2011
Expires: 10/20/2011
Reference: Cell 8
Site: St. Cloud, FL
SalesPerson: Jim Bailey

<u>Qty</u>	<u>Part Number / Description</u>	<u>Unit Cost</u>	<u>Your Cost</u>
PRIMARY SUMP PUMPS			
2	WSDPT 17-3 EPG SurePump, patented, stainless steel Wheeled Sump Drainer, size 6, with 5 HP, 460 V, 3PH motor, 100' of jacketed 12-4 CP motor lead, 0-11' level sensor with built-in lightning arrestor and 100' of Hytrel lead, and 100' of 3/16" stainless steel suspension cable and clamps.	\$6,354.00 EA	\$12,708.00
		Primary pump Cost.	
2	NW3SS EPG Discharge Adapter, 3" stainless steel disconnect.	\$1,300.00 EA	\$2,600.00
1	BJBP525 EPG Breakout Box, NEMA 4X non-metallic enclosure for 2 ea. motor leads, includes connection terminals.	\$165.00 EA	\$165.00
1	BJBL625B EPG Breakout Box, NEMA 4X non-metallic enclosure, junction box for 2 ea. level sensors. Includes desiccant dryer, bellows, and connection terminals.	\$350.00 EA	\$350.00
SECONDARY SUMP PUMP			
1	WSDPT 8-5 EPG SurePump, patented, stainless steel Wheeled Sump Drainer, size 4, with 1.5 HP, 460 V, 3PH motor, 100' of jacketed 14-4 CP motor lead, 0-11' level sensor with built-in lightning arrestor and 100' of Hytrel lead, and 100' of 1/8" stainless steel suspension cable and clamps. Includes 2" stainless steel discharge adapter.	\$4,405.00 EA	\$4,405.00
		Secondary pump Cost	
1	NW2SS EPG Discharge Adapter, 2", cast 316 stainless steel disconnect.	\$728.00 EA	\$728.00
1	BJBP500 EPG Breakout Box, NEMA 4X non-metallic enclosure for 1 ea. motor lead, includes connection terminals.	\$155.00 EA	\$155.00

EPG Companies Inc.

19900 County Road 81
Maple Grove, MN 55311

Phone: 763-424-2613
800-443-7426
Fax: 763-493-4812
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Quote Number: 13448 Rev Num 4

Page 2 of 5

1	BJBL600B	\$195.00 EA	\$195.00
	EPG Breakout Box, NEMA 4X non-metallic enclosure, junction box for 1 ea. level sensor. Includes desiccant dryer, bellows, and connection terminals.		

CONTROL PANEL

1	L960PT	\$17,765.00 EA	\$17,765.00
	EPG PumpMaster Control Panel, UL listed, 460 V, 3PH, NEMA 4X white powder coated stainless steel, to operate 2 ea. 5 HP primary sump pumps in lead-lag/alternating mode with LevelMaster level control meter and simulator, primary level sensor selector switch, Pump 1 or Pump 1 & 2 selector switch, 1.5 HP secondary sump pump with LevelMaster level control meter and simulator, power monitors, pump lightning arrestors, elapsed time meters, cycle counters, level sensor lightning protectors, 30A molded case circuit breaker to TVSS, red top mounted high sump level or pump fault light, 115 V power to terminals for 3 ea. 3 ea. flow meters, terminals for 4-20 mA outputs from flow meters (future monitoring & control use), and pump run output contacts. Includes external mount ~1.5KVA stainless steel encapsulated transformer.		

Total amount quoted \$ 39,071.00

LCRS Cleaning - JED 5-yr Permit
Renewal. Cells 1-6.

FLORIDA JETCLEAN

**HIGH PRESSURE WATER JETTING - EXPLOSION PROOF INSPECTION
PIPE LOCATING - NO DIG REPAIRS - VACUUM TRUCK SERVICES**

19019 Fern Meadow Loop
Lutz, FL 33558
www.floridajetclean.com

TEL : 800-226-8013
FAX : 813-926-4616

PROPOSAL

DATE : 2/7/2012
TO : Michael Kaiser- OMNI Waste Services
FROM : Ralph Calistri (floridajetclean@yahoo.com)
SUBJECT : Proposal LCS Pipe Jetcleaning at JED Oak Hammock Landfill

Thank you for your inquiry. We confirm our capability and interest in carrying out this work for OMNI Waste Services at the Oak Hammock Landfill.

FLORIDA JETCLEAN specializes in leachate collection system maintenance and inspection, and has developed a considerable amount of specific expertise in this field over the last 20+ years. Our company has worked at an extensive number of landfills in Florida, Georgia, the Carolinas, Delaware, and westward to Arkansas. We have worked with most engineering companies active in this field, and have also fostered excellent working relationships with the regulatory authorities. We use modified jetting equipment designed to achieve extended pipe distances found in landfill environments and **our explosion proof camera equipment complies with all OSHA and regulatory mandates for methane piping.** Substantial references are available on request.

Based on our telephone conversation we propose as follows:

High-pressure water-jetting (4,000 PSI) of roughly 10,900' of 4" / 6" HDPE leachate collection piping at the above location (including FDEP report) \$ 6,950.00

Subject to:

- An adequate, no charge, water supply for jetcleaning via hydrant or water truck.
- 2 wheel drive vehicle access within 10'-15' of each cleanout
- Continuity of access allowing work to be carried out on a single mobilization
- Exposed and opened cleanouts at ground level
- Payment : Net 30 days

Regards,

Ralph Calistri - Florida Jetclean - 800-226-8013

Average cost Cells 1-6 = \$ 6,950.00 / 6 = \$ 1,158.33/cell
Total Cost Cells 1-8 = \$ 1,158.33 (8) = \$ 9,266.64

November 7, 2011

Mr. Mike Kaiser
WSI
A Progressive Waste Solutions Company
1099 Miller Drive
Altamonte Springs, Florida 32701

GW-22 Abandonment &
Replacement

Re: MW-22 (A-C) Abandonment/Replacement
Omni Waste of Osceola County, LLC
1501 Omni Way
St. Cloud, Florida 34773

Dear Mr. Kaiser:

Geo-Services and Consulting, LLC (GS&C) in accordance with your request has prepared the attached cost estimate for proper abandonment and subsequent replacement of monitoring well cluster MW-22 at the referenced facility. Monitoring well cluster MW-22 is currently located within the boundaries of a future disposal cell and needs to be abandoned in accordance with Florida Department of Environmental Protection (FDEP) rules. GS&C has tentatively scheduled the abandonment work for **Thursday November 10** (first available day for the driller). Scheduling of the drilling activities for replacement of the monitoring well cluster is pending completion of current construction work. The drilling activities will be performed by a Florida licensed driller and will acquire the required permits in advance of mobilizing to the site.

GS&C understands that Omni Waste in accordance with Rule 62.701.501(3)(d)6 F.A.C. will provide the proper notifications to the FDEP in advance of performance of this work.

Monitoring Well Abandonment

Monitoring well cluster MW-22 consists of three 2-inch diameter wells, A, B and C Zone (15, 35 and 65 feet below land surface [bls]). The shallowest of the monitoring wells (A Zone) will be removed from the subsurface and the location will be abandoned using Portland Type I grout from the point of collapse to land surface.

Because of concerns relative to the potential for puncture of future landfill liner, the remaining monitoring wells (B and C Zone) will be abandoned using the following procedure;

- The remaining wells will be abandoned using Portland Type 1 grout placed from the bottom up through tremie pipe to approximately ten feet bls, then
- Over-drill using hollow stem augers to approximately ten feet bls thereby removing remaining PVC well material, finally

- Prior to removal of the hollow stem augers, Portland Type 1 grout will be poured, filling the augers to land surface.

Monitoring Well Installation

Subsequent to completion of the current construction work, monitoring well cluster MW-22 will be replaced. The monitoring well cluster will be re-located to the western landfill perimeter berm adjacent to the southwest corner of Cell 8. Because of the placement of fill material which will increase the current elevation by approximately 10 feet, the monitoring wells will be installed approximately ten feet deeper (25, 45 and 75 feet bls).

The monitoring wells will be installed using hollow stem augers. Prior to installation of the C Zone monitoring well, split spoon samples will be collected on five foot centers to total depth (4 to 6, 9 to 11, 14 to 16 feet bls, etc.) to document lithologic characteristics. The replacement wells will be constructed using materials and methods consistent with other site wells. Monitoring wells will be constructed with 10 feet of 0.06 inch machine slotted PVC well screen threaded to the required length of Schedule 40 PVC riser. The filter pack will consist of the recommended 30/45 grade silica sand which will be placed from total depth of the respective monitoring wells to approximately two feet above the screen sections. The well seals will consist of approximately one foot of bentonite and the remaining annulus will be filled with Portland Type 1 grout to land surface.

The monitoring wells will be left as stick ups which will then be retro-fitted (by WSI personnel) with blue anodized aluminum casings with lockable cast aluminum lids (provided by GS&C). Any materials (locks, well caps) which are in proper working order will be re-used. Subsequent to installation, the replacement monitoring wells will need to be surveyed by a State of Florida license surveyor. GS&C has assumed that WSI will coordinate this activity with the construction contractor.

Report Preparation and Submittal

Subsequent to completion of the monitoring well installation, GS&C will prepare one report documenting the abandonment and installation activities. A draft will be submitted to WSI for review prior to final submittal approximately ten days after completion of the drilling program and will include a photographic log, FDEP well completion form and copies of applicable permits and notifications.

Mr. Mike Kaiser
Cost Estimate-MW Abandonment/Replacement
Omni Waste
November 7, 2011
Page 3 of 3

Closure

The drilling sub-contractor (NET Inc.) has a master services agreement in place and will forward their invoice directly to WSI. GS&C will forward invoices upon completion of the individual Tasks as shown on the attached cost estimate. If there are questions or comments regarding the attached please call Mr. Robert Thompson at (813) 418-2007.

Sincerely,



Robert Thompson
Senior Geologist
Florida P.G. #2560

Attachments

**COST ESTIMATE
GS&C and NET, Inc.**

Michael Kaiser

From: Matt Orr
Sent: Tuesday, February 07, 2012 10:44 AM
To: Michael Kaiser
Subject: FW: Scan from FL-St Cloud HPLJM4345
Attachments: [Untitled].pdf

Mike,

Attached is the quote. For the mowing of the side slopes we assumed 30 acres, for all of the closed area and storm water areas as well. It works out to be \$60.00 per acre.

Thanks,

-----Original Message-----

From: Email From Scanner [<mailto:scan@wasteservicesin.com>]
Sent: Tuesday, February 07, 2012 10:41 AM
To: Matt Orr
Subject: Scan from FL-St Cloud HPLJM4345

This email was send to you from the HP LaserJet M3035 MFP network printer located in FL-St Cloud.

In order to view the attached PDF document you need to use the Adobe Acrobat Reader.

Cost Estimate
MW-22 (A-C) Abandonment/Replacement
Omni Waste of Osceola County, LLC
1501 Omni Way
St. Cloud, FL

Task 1 Monitoring Well Abandonment Oversight

Labor (including travel)	\$1,200.00
Vehicle & Expenses	\$150.00
Direct Bill Sub Fee	\$1,270.00

Average Cost / well
 $= \$2,620.00 / 3$
 $= \$873.33$

Task 1 Subtotal	\$1,350.00
Task 1 Direct Bill Subtotal	<u>\$1,270.00</u>
Total Task 1 Cost	\$2,620.00

Task 2 Monitoring Well Installation Oversight/Well Development

Labor	\$3,000.00
Vehicle & Expenses	\$450.00
Anodized Aluminum Casings	\$555.00
Direct Bill Sub Fee	\$5,835.00

Task 2 Subtotal	\$3,450.00
Task 2 Direct Bill Subtotal	<u>\$5,835.00</u>

Total Task 2 Cost \$9,285.00
(not including aluminum casings)

Task 3 Letter Report Prep and Submittal

Labor	\$2,500.00
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Task Subtotal	<u>\$2,500.00</u>
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GS&C Total	\$7,300.00
Direct Bill Total	\$7,105.00
Project Total	\$14,960.00

Average Cost / well
 $= \$11,785.00 / 3$
 $= \$3,928.33$

Poor Quality-Original

Quality Turf of Okeechobee, Inc. Estimate

Quality Turf of Okeechobee, Inc.
8731 N.E. 48th St.
Okeechobee, FL 34972

(863)634-7140
qualityturf@ymail.com

Date	Estimate #
07/05/2011	2734
Exp. Date	

Address

Florida WSI
1501 Omni Way
St. Cloud, FL 34773

Date	Activity	Quantity	Rate	Amount
07/05/2011	Mow (Bush Hog) from entrance road to landfill	1	540.00	540.00
07/05/2011	Mow (Bush Hog) closed side slopes of landfill and perimeter berms	1	1,800.00	1,800.00
07/05/2011	Weed-eating and additional mowing by the hour	40	25.00	1,000.00
07/05/2011	Transport of equipment each way	1	250.00	250.00
07/05/2011	****any extra mowing will be charged by the hour @ \$70.00 per hour****			0.00
See e-mail Attached - Math Orr Average cost/acre = \$60.00				
Total				\$3,590.00

Thank you for the opportunity. We look forward to doing business with you soon!

Accepted By: _____

Accepted Date: _____

Quality Turf of Okeechobee, Inc. _____

Accepted By _____



ACCOUNT NUMBER

16261 25416

Cell 2

TO REPORT A POWER OUTAGE:
1-800-228-8485

SERVICE ADDRESS
1501 OMNI WAY,
CELL 2/PUMP AREA

NEXT READ DATE ON OR ABOUT	DEPOSIT AMOUNT ON ACCOUNT
JAN 11 2012	100.00

METER READINGS

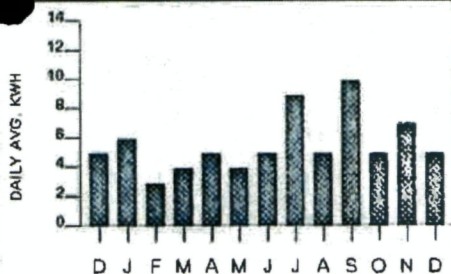
METER NO.	002654570
PRESENT (ACTUAL)	001795
PREVIOUS (ACTUAL)	001633
DIFFERENCE	000162
TOTAL KWH	162
PRESENT KW (ACTUAL)	0005.56
BASE KW	6
LOAD FACTOR	3.6%

41.86 THANK YOU

TOTAL DUE THIS STATEMENT 3

\$34.36

RECEIVED
DEC 12 2011
BY: *Pauli*



ENERGY USE

DAILY AVG. USE - 5 KWH/DAY
USE ONE YEAR AGO - 5 KWH/DAY
*DAILY AVG. ELECTRIC COST - \$.95

To report an outage, please call our outage line at 1-800-228-8485.

BILL # 4 OF 12 GRP 1368

DUE DATE

DEC 30 2011

TOTAL DUE

34.36

PLEASE ENTER
AMOUNT PAID

OMNI WASTE OF OSC CTY LLC
1501 OMNI WAY
SAINT CLOUD FL 34773 - 9177

P.O. BOX 33199
ST. PETERSBURG,
FL 33733-8199

1626125416500000003436300000000000000000000000003436301000000000009

CHAPCO FENCE, LLC

4417 13TH STREET #513

ST. CLOUD, FL 34769

Chapcofence@aol.com

Ph:407-892-6447

Fax:407-892-9765

WSI
1099 Miller Drive
Altamonte Springs, Fl 32701

Mike,

Below you will find the quote you requested for the installation of fence for the JED Landfill.

*Supply and install 3,700 lf of field fence buried 12" in the ground to the existing barb wire fence.

*Supply and install 5200 lf of new 3 strand barbwire and field fence buried 12" in the ground.

TOTAL - \$22,500

3 strand bwire - \$1.75 lf

Field Fence - \$2.65 lf

We plan on installing the field fence upside down to have the smaller holes above ground level since the holes gradually go from small too big. If you have any questions or comments please do not hesitate to give us a call.

Thanks



Jason Junnila
Chapco Fence

Leachate Disposal Costs City of St. Cloud

Michael Kaiser

From: Todd Swingle [tswingle@stcloud.org]
Sent: Thursday, March 12, 2009 6:15 PM
To: Michael Kaiser
Cc: Bob MacKichan; Mark Spafford; dfm14@dbksmn.com; Linda Jaworski
Subject: RE: JED Landfill Draft Leachate Disposal Agreement

<http://www.stcloud.org/index.asp?NID=618>

Above is a web link to the rates.

For a 2" meter as stated for the initial agreement period, the base rate is \$105.86 and the consumption charge is \$5/1,000 gallons.

For 40,000 gallons per day every day for a month, this would be 1.2 Million Gallons and the total bill would be \$6,105.86. *Cost = \$.005 / gal*

If you delivered 40,000 gallons a day 3 days a week for a month, the total would be about 520,000 gallons and the bill would be \$2,705.86. *Cost = .0052 / gal*

While we are unsure, in discussions we estimated your annual average load to be more like 6,000 gpd or 180,000 gallons per month which is \$1,005.86.

To calculate any other volumes, take the total gallons for a month, divide by 1,000, multiply by \$5 and add \$105.86.

Please let me know if you have any additional questions.

Todd

*use .01 \$ / gal
for FA Estimate*

From: Michael Kaiser [mailto:mkaiser@wasteservicesinc.com]
Sent: Thursday, March 12, 2009 5:55 PM
To: Todd Swingle
Cc: Bob MacKichan; Mark Spafford; dfm14@dbksmn.com
Subject: RE: JED Landfill Draft Leachate Disposal Agreement

Todd,

Could you please tell me what the all-in rate per gallon would be based on your rate structure if we disposed 40,000 gallons tomorrow. You have a better understanding of your rate structure than I do.

Thanks,

Mike Kaiser

Vice President, Environmental Management & Engineering, U.S.
Waste Services, Inc.
JED Solid Waste Management Facility
1501 Omni Way
St. Cloud, Florida 34773
(904) 673-0446 [Cell]
mkaiser@wsji.us

6/23/2009

Leachate Haul Rates by Stafford Trucking.

January 1, 2012

Waste Services of Florida, Inc. Fuel Clause as of January 1, 2012

CPI = 3.00%

	BASE RATES	CPI = 3.00%	NEW BASE RATES	% INCREASE	PER TON or LD INCREASE	NEW LOAD RATE
JED Leachate	\$156.75	1.03	\$161.45 per LD	13.52	\$21.83	\$183.28 per LD
Groveland TS	\$11.40	1.03	\$11.74 per Ton	22.14	\$2.60	\$14.34 per Ton
Pasco-Dade TS	\$13.78	1.03	\$14.19 per Ton	26.64	\$3.78	\$17.97 per Ton
Sanford TS	\$11.88	1.03	\$12.24 per Ton	22.14	\$2.71	\$14.95 per Ton
Sumter TS	\$13.30	1.03	\$13.70 per Ton	22.14	\$3.03	\$16.73 per Ton
Taft TS	\$8.79	1.03	\$9.05 per Ton	15.81	\$1.43	\$10.48 per Ton
Taft Compactor	\$208.13	1.03	\$214.37 per Load	15.81	\$33.89	\$248.26 per LD

PADD Rate \$3.752/gal for Lower Atlantic, refer to Contract Exhibit B for fuel matrix

$$\begin{aligned} & \$183.28 / 6000 \text{ galls} \\ & = \underline{\underline{\$.03 / \text{gallon}}} \end{aligned}$$

Waste Services
Orlando