

Agenda Request For: April 12, 2006

Department: Solid Waste Department by Administrative Services

Background: On 8/25/03, the Board approved Golder cost proposal #993-3928.48 dated 8/19/2003 entitled "Cost Proposal for Engineering Services Associated with Partial Closure and Landfill Gas System Expansion, Southwest Corner, West Nassau Landfill" which included task 2000-Construction Bid Document \$60,701 and task 3000-Bidding Process Services \$17,881. Amounts were presented as cost estimates at that time.

On February 8, 2006, the Board approved Golder cost proposal #993-3928.68 dated 1/23/06 entitled "Cost Proposal for engineering Services Permit Modification Application for Landfill Gas System Expansion and Partial Closure of the Southwest Corner, West Nassau Landfill" tasks 1000-Permit Modification \$37,633 and 2000-Address RAIs \$17,517. Cost proposal .68 did not include the preparation of a construction bid package, assistance with contractor selection, oversight during construction of system, or preparation of a certification report on the construction. Project #3928.68 replaces project 3928.48, approved 8/25/03, for costs related to the LFG expansion and SW Corner closure. \$92,719.22 of the \$169,968 of project .48 has been expended and future costs associated with the LFG expansion and SW closure will be charged against project .68.

Golder wishes now to submit a cost proposal to prepare bid documents for the Partial Closure/LFG Expansion Construction. **Golder to provide additional information before meeting, which will be distributed upon receipt.** *See 4/3/06 .68 proposal*

Financial/Economic Impact to Future Years Budgeting Process or Effect on Citizens: Capital costs and operating costs must be incorporated into the Solid Waste budget in current year and future years.

Action requested and recommendation: Consider proposal request from Golder to prepare bid documents for the Partial Closure/LFG Expansion Construction.

Is this action consistent with the Nassau County Comprehensive Land Use Plan? Public Facility Element Section 4

Funding Source: LFG Expansion portion-Vertical Escrow balance available at 3/27/06 \$1,877,381; SW Corner Closure portion-WN Active Closure Escrow balance available at 3/27/06 \$5,019,775. Liabilities totaling \$657,125.28 (account 70000000-239956 WN Vertical-Corrective) and \$4,861,251.77 (account 70000000-239955) have been accrued for costs associated with estimated LFG expansion and WN active closure costs.

APPROVED

DATE 4/12/06 *BBH*

tab D

Reviewed by:

Department Head

redd fox 3/28/06 Lee

Legal

Administrator

Finance

Administrative Services

5/3/06

Grants

Revised 09/05

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Reviewed by:

Department Head _____

Legal _____

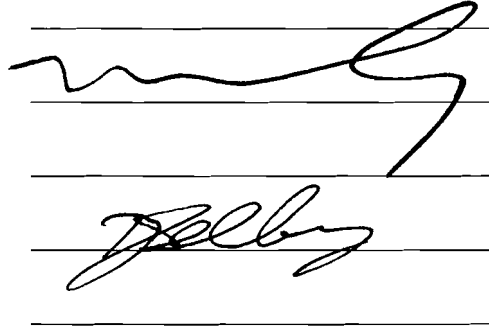
Administrator _____

Finance _____

Administrative Services _____

5/3/06

Grants _____

Handwritten signatures on horizontal lines. The first signature is a large, stylized cursive signature. The second signature is a smaller, more legible cursive signature.

Revised 09/05

COUNTY COORDINATORS
OFFICE
06 MAR 27 PM 3:31

Reviewed by:

Department Head

Lee Pittett

Legal

Administrator

Finance

Administrative Services

5/3/06

Grants

J. Kelly

Revised 09/05

4/12/06 Tab D

Golder Associates Inc.

8933 Western Way, Suite 12
Jacksonville, FL USA 32256
Telephone (904) 363-3430
Fax (904) 363-3445



VIA EMAIL ONLY

April 3, 2006

993-3928.68

West Nassau Landfill
46026 Landfill Road
Callahan, Florida 32011

Closure ~~work~~ ← \$26,000 partial closure
verticals ← \$32,610 LFG
S 4/7/06

Attention: Mr. Lee Pickett, Interim Solid Waste Director

**RE: COST PROPOSAL FOR ENGINEERING SERVICES
BID DOCUMENT PREPARATION AND BIDDING SERVICES FOR
LANDFILL GAS SYSTEM EXPANSION
AND PARTIAL CLOSURE OF THE SOUTHWEST CORNER
WEST NASSAU LANDFILL
NASSAU COUNTY, FLORIDA**

SS APR - 7 PM 3:29
SOLID WASTE DIVISIONS
OFFICE

Dear Lee:

Golder Associates Inc. (Golder) is pleased to submit this cost proposal to the Nassau County Board of County Commissioners (Board) for providing professional services associated with the landfill gas (LFG) system expansion to meet Title V regulations and with the partial closure in the southwest corner area of the West Nassau Landfill. Based on previous work for the County, the services under this cost proposal will be provided by both Golder and our teaming partner S2Li. This cost proposal includes services for the preparation of construction bidding documents and services during the contractor bidding process.

This cost proposal does not include oversight during construction of the system or preparation of a certification report on the construction. A cost proposal for that work will be provided to the Board once a construction schedule can be better estimated. The following sections include a discussion of the background on this project, the scope of services to be provided broken out by task, an estimated schedule, cost estimate, and terms and conditions. Please note that this cost proposal is presented as additional tasks to the existing cost proposal (Golder No. 993-3928.68) for the permit preparation for this work, which is ongoing.

BACKGROUND

Based on the results of testing conducted at the landfill in 2004 as required by the facility's Title V permit, the County is required to expand the existing LFG system to cover all areas of the landfill where waste has been in place more than 5 years. By the time the construction is initiated, the area required to be covered by the LFG system will include the entire active footprint of the landfill. Therefore, approximately 32 additional wells will be installed in the landfill, most of which will be in areas that are not at final grade. Also involved in this LFG system expansion is the construction of the header lines, sumps, valves, etc. associated with the system.

2016 latest annual waste analysis

APPROVED

DATE 4/12/06 BWA

In addition to the construction of the LFG expansion, Golder will request that the permit modification currently being prepared requests that the southwest corner of the active landfill be closed with a final cover system. This area of the landfill has been a source of concern with the Florida Department of Environmental Protection (FDEP) as evidenced by a series of inspections and subsequent warning letters. The concerns raised by FDEP (not strictly limited to the southwest corner) included excessive erosion, stormwater management, vegetative cover, and exposed waste. The southwest corner of the landfill remains a constant source of maintenance to control erosion and stormwater. Based on these factors, the installation of the final cover in this area (which will include drainage controls and a vegetative layer with grass cover to provide erosion control) was recommended to reduce maintenance efforts and costs. This cover system will also improve the effectiveness of the LFG system in this area of the landfill.

SCOPE OF SERVICES

Task 3000 – Construction Bid Document Preparation

Golder/S2Li will work with County staff to prepare construction bid documents for obtaining a contractor to install the LFG system expansion, regrade the slopes, and place the cover system. Golder/S2Li envisions that this work would start upon approval by the Board and just after the permit application is submitted, while it is under review by FDEP. This work will include the preparation of a package consisting of contractual language (from the County), technical specifications, and construction-level drawings. To better define the scope of services to be provided, this task has been further divided into subtasks, as detailed below.

Subtask 3001 – Construction-Level Drawings

Golder/S2Li will prepare the final design and bid plans based on the LFG system expansion permitted design, and the permitted west and southwestern slope closure permit drawings. These drawings differ from the permitting drawings, as information specifically directed to the Contractor will be added, and certain non-applicable permitting information removed.

The construction-level LFG system drawings will include a plan layout of the system, including the wells and header piping along with a control point table for the system. The phasing of the system construction will be critical, as there are differences between wells to be installed where the landfill is not to grade and areas where it is at or near grade; for those wells that are in areas to be final closed (west and southwest slope), it would be more economical to install the wells before the liner is installed, but when the landfill is at final grades. In the area to be closed, the header and system components will be installed above the liner system to facilitate future maintenance of the system components; the header and system components will be installed to drain condensate to the appropriate sump(s) at minimal depths into waste adjacent to the wells. Necessary detail sheets will also be included to allow for construction of the system wells, condensate management system and header piping.

For the partial closure cover, Golder/S2Li will prepare grading plans and details for the west and southwestern slopes up to an elevation of approximately 100 feet. As per the permitted design, two drainage terraces will be included at approximate elevations 40 and 70 feet. The sideslope of the closure slope between terraces and to the toe of slope will be maintained at 3 horizontal to 1 vertical. The proposed closure liner system will consist of a linear low density polyethylene geomembrane (FML) with a geonet above the FML as required to facilitate drainage above the liner.

Golder/S2Li will also produce stormwater drainage plans for the closure of the west and southwestern slopes of the landfill. All stormwater management collection swales, inlets, pipes, and grades will be delineated and located for construction-level drawings. Golder/S2Li will provide construction-level details for the conveyance elements required to carry the stormwater from the sideslopes to the perimeter drainage ditches as currently defined by the existing State ERP and solid waste permit design.

Golder/S2Li will submit draft construction-level drawings to the County for review and comments. Golder/S2Li will incorporate final comments from the County and finalize the construction-level drawings for use in the bid package.

Subtask 3002 – Technical Specification Preparation

Golder/S2Li will prepare technical specifications that will include detailed information on the various components of the proposed system improvements. Specifically, technical specifications will include but not be limited to:

- Earthwork;
- Linear low density polyethylene (textured) liner;
- GCL Liner;
- Geonet;
- HDPE piping (gas and condensate conveyance);
- Gas extraction wells and wellheads;
- Condensate management components (pumps and knockout stations);
- Grassing; and
- General conditions, including surveying, temporary work, submittals, odor control, waste removal and cover, etc.

The list of specifications may be revised depending on the final design of the system. Golder/S2Li will utilize soil and liner material reports as presented in the permit modification to prepare engineering calculations and determine the material specifications for the soil cover system and geonet requirements.

Golder/S2Li will submit draft technical specifications to the County for review and comments. Golder/S2Li will incorporate final comments from the County and finalize the technical specifications for use in the bid package.

Subtask 3003 – Preparation of Bid Package

Golder/S2Li will work with County staff to prepare a complete bid package for distribution to potential bidders for the project. As with previous bid package preparations with the County, Golder/S2Li will provide project-specific information for the County's contractual language and forms and review same for applicability. Additionally, Golder/S2Li will provide copies of the technical specifications and construction-level drawings to be included in the bid package. If desired, Golder/S2Li will assist County staff in compiling the bid documents for distribution. Golder/S2Li will provide a list of potential bidders for the project for the County's use. Additionally, Golder/S2Li will prepare an estimate of construction costs based upon the County-approved final design of the system and an estimated construction schedule will be prepared and submitted to the County.

Task 4000 – Bidding Process Services

Once the County receives approval of the permit modification from FDEP and the bid packages are finalized and distributed to potential bidders, Golder/S2Li will:

1. Assist the County with the solicitation of bids, including responding to questions from prospective bidders prior to the submission of bids;
2. Attend a Pre-Bid conference with representatives of the County and prospective bidders. Golder/S2Li and the County will conduct the meeting. Golder/S2Li shall prepare meeting notes, and shall respond to Bidders' questions;
3. Prepare any required addenda and submit to the County for distribution to prospective bidders;
4. Assist the County in the review of bids and the prospective bidders' credentials; and
5. Offer a recommendation as to the lowest most responsive, most responsible bidder.

SCHEDULE

Golder/S2Li will begin preparation of the bid documents upon approval of this cost proposal. Because the permit modification for this work will be under review by the FDEP, the final construction-level drawings and specifications will not be able to be completed until the permit modification is issued by FDEP, or until the majority of the issues related to the construction are resolved. The goal is to have a contractor retained by the County by mid-August, 2006 so, with time allowed for contractor preparation of bids, bid evaluations, and contract negotiations, it is anticipated that the bid documents should be ready for advertisement by June 15, 2006. It is anticipated that the contractor bidding process (after bid is advertised) should take approximately four to six weeks.

COST ESTIMATE

Golder/S2Li cost estimate to complete the work as described in the above scope of services is \$58,610. A detailed breakdown of the costs for each task and the labor and expenses estimated are included in the attached Table 1. As discussed, S2Li will be performing a portion of the work included in this cost proposal and S2Li's costs are shown in Table 1 as Subcontractor Costs. We propose to perform this work on a cost reimbursable not-to-exceed basis in accordance with labor and unit rates consistent with Golder's and S2Li's standard rates for the year 2006. The County will only be billed actual hours and expenses incurred on the project for work within the agreed scope of work. Direct expenses will be marked-up 10 percent for administrative purposes. Photocopies, computer and AutoCAD time will be billed at agreed upon unit rates. Travel and communications costs (except for specific field work) will not be billed to Nassau County as stated in our August 1998 proposal. The cost estimate will not be exceeded without prior authorization from Nassau County. It is our understanding that the source of funds for this work, as well as the future construction phase, would be two separate but established accounts. For the closure permitting, design, and construction, the fund source would be the closure escrow account that is funded each year per FDEP regulations. For the LFG system expansion permitting, design, and construction, the fund source would be the remediation account that was required to be funded by FDEP.

The cost above is for reimbursement of Golder/S2Li for the services described herein. It should be noted that the costs herein are for the bidding phases of the project and do not include any costs for Golder/S2Li nor the contractor during the construction phase.

TERMS AND CONDITIONS

This work will be performed under the Agreement for Consulting Services between Golder and the County, dated February 22, 1999.

Golder/S2Li appreciates this opportunity to provide our services to Nassau County. We hope this cost proposal includes sufficient information for you to evaluate the need for this work. If you have any questions regarding this cost proposal, please do not hesitate to call.

Sincerely,

GOLDER ASSOCIATES INC.



Wendy D. Karably
Senior Consultant/Associate

Attachment

cc: Mike Mahaney – Nassau County Administrator
Omar Smith – S2Li
Kevin Brown – Golder

TABLE 1

Cost Estimate
 Partial Closure and LFG System Expansion Bidding Services
 West Nassau Landfill
 Callahan, Nassau County, Florida

LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Principal Sr. Consult	Associate	Senior Proj. Mgr.	Senior Engineer	Project Engineer	Staff Engineer I	Staff Engineer II	Drafting	Technician	Clerical		
TASK	DESCRIPTION	\$170	\$150	\$135	\$110	\$95	\$85	\$75	\$65	\$65	\$52		
3000	Construction Bid Document Preparation	0	20	24	0	0	60	0	50	0	24	178	\$15,838
4000	Bidding Process Services	0	45	20	0	0	24	0	10	0	16	115	\$12,972
TOTALS:		0	65	44	0	0	84	0	60	0	40	293	\$28,810

EXPENSES		Field Vehicle (day) \$75	Travel/Per Diem (est.)	Communications (est.)	Mileage (mile) \$0.43	Shipping/Postage (est.)	Field Equipment incl. PPE (est.)	Office Computer (hr) \$10	AutoCAD Computer (hr) \$20	Photocopying (each) \$0.15	Drawing Reproduction (est.)	Subcontractor (\$2Li) (est.)	SUBTOTAL EXPENSES
TASK	DESCRIPTION												
3000	Construction Bid Document Preparation	0	0	\$0	0	\$100	\$0	20	50	1,500	\$1,000	\$20,000	\$22,525
4000	Bidding Process Services	0	500	\$0	0	\$100	\$0	10	10	3,500	\$350	\$6,000	\$7,275
TOTALS:		\$0	\$500	\$0	\$0	\$200	\$0	\$300	\$1,200	\$750	\$1,350	\$26,000	\$29,800

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL LABOR	SUBTOTAL EXPENSES	TASK TOTAL
3000	Construction Bid Document Preparation	\$15,838	\$22,525	\$38,363
4000	Bidding Process Services	\$12,972	\$7,275	\$20,247
TOTALS		\$28,810	\$29,800	\$58,610

Partial Closure per 4/5/06 email from Landfill open

*58,610
 26,000
 32,610*

West Nassau Class I Landfill
Landfill Capacity and Depletion Analysis - 2005
 Nassau County, Florida

Prepared By S2LI
 8/9/2005

1. Survey Information

a) 2004 Survey Flown 8/18/04		
b) 2005 Survey Flown Date 5/20/2005 (336 days)		
c) Landfill Volume Used (between 2004 and 2005 surveys)	253,128 cubic yards (cy)	
d) Recorded Tonnage Filled during report period	214,673 tons	
e) Calculated Fill Rate (CFR)	1.18 cy/ton or	1,696 lbs/cy (includes cover)
f) Calculated Average Monthly Tonnage Fill Rate	19,400 ton/month	
g) Calculated Average Monthly Volume Fill Rate	22,900 cy/month	
h) Estimated Fill Volume for FY2005	275,000 cy	
i) Estimated Fill Tonnage for FY2005	233,000 tons	

2. Landfill Usage Calculations

a) Permitted Design Capacity	4,870,000 cubic yards (cy)
b) Remaining Capacity as of 6/18/2004	1,717,000 cy
c) In-Place Volume as of 6/18/2004	3,153,000 cy
d) Additional Airspace Gained Due to LF Settlement	82,000 cy (add'l space calculated from recent aerial survey)
e) Adjusted Remaining Capacity after LF Settlement	1,799,000 cy
f) Adjusted In-Place Volume after LF Settlement	3,071,000 cy
g) Estimated Volume Used 6/18/2004 to 9/30/04 (104 days)	78,000 cy
h) In-Place Volume as of 9/30/04	3,149,000 cy
i) Calculated In-Place Capacity Remaining as of 9/30/04	1,721,000 cy
j) Estimated Volume Used 10/1/04 to 5/20/05 (7.65 months)	175,000 cy
k) Remaining Capacity as of 5/20/05	1,546,000 cy (remaining space calculated from recent aerial survey)
l) In-Place Volume as of 5/20/05	3,324,000 cy
m) Estimated Volume to be Used 5/20/05 to 9/30/2005 (133 days)	100,000 cy
n) Anticipated Fill Volume 10/1/04 to 9/30/2005	275,000 cy
o) Anticipated Remaining Capacity as of 9/30/2005	1,446,000 cy
p) Anticipated In-Place Volume as of 9/30/2005	3,424,000 cy

3. Remaining Landfill Capacity Calculations

a) Annual Filling Rate Increase=	2.5% per year	
b) Typical Fill Rate Used (TFR) =	1.36 cy/ton	1,470 lbs/cy (includes cover)(average number for last 2 years)

Fiscal Year	Design Life (Yrs)	Remaining Landfill Capacity Year No.	Estimated Annual Tonnage Landfilled	Calculated Annual CY Landfilled	Remaining Capacity (CY) as of Sept. 30	Notes:
1993	0					
1994	1					
1995	2					
1996	3					
1997	4					
1998	5					
1999	6					
2000	7					
2001	8					
2002	9					
2003	10					
2004	11				1,721,000	
2005	12	0	233,000	275,000	1,446,000	<=== 2005 Landfill Depletion and Capacity Analysis Begins
2006	13	1	205,000	279,000	1,167,000	Projection
2007	14	2	82,000	112,000	1,055,000	
2008	15	3	84,000	114,000	941,000	
2009	16	4	86,000	117,000	824,000	
2010	17	5	88,000	120,000	704,000	
2011	18	6	90,000	122,000	582,000	
2012	19	7	92,000	125,000	457,000	
2013	20	8	94,000	128,000	329,000	
2014	21	9	96,000	131,000	198,000	
2015	22	10	98,000	133,000	65,000	
2016	23	11	100,000	136,000	(71,000)	<=== 10.5 yrs Remain at FR (1.36 cy/ton, 2.5% Growth Rate) Design Life of Facility = 22.5 years

4. 2005 Financial Analysis

a) Landfill Closure Cost Estimate	\$	6,990,707	2005 Estimate (Appendix C.4)
b) Expenditures to Date for Closure Design, Permitting, & Construction	\$	76,485	
c) 2005 Adjusted Cost of Closure (CE)	\$	6,914,223	
d) Audited Balance (9/30/04) (AB04)	\$	4,883,686	from County's Outside Auditor (3/05)
e) Design Life Exhausted (DE)		12.0 years	(1993-2005)
f) Design Life of Facility (DL)		22.5 years	(1993-2016)
g) Escrow Balance Required for 2005 (EBR05) = CE X (DE/DL) =====>	\$	3,687,585	
h) Account Amount Over (Under) Funded for 2005 (AD05) = EBR05-AB04 ==>	\$	1,196,101	

Cathy Lewis

From: Karably, Wendy [Wendy_Karably@golder.com]
Sent: Thursday, April 06, 2006 1:50 PM
To: Cathy Lewis
Cc: Omar Smith; Brown, Kevin; Mehlman, Dana
Subject: RE: Golder Cost Proposal for Bid Doc Preparation

Cathy,

Omar provided the cost estimate for the partial closure component, which should be funded through the closure accounts you have established, as approximately \$3M.
The estimate for installing the LFG system, which should be able to be funded through the "contamination fund", is approximately \$740,000.
Both of these estimates include CQA and Engineering support during construction as well as certification report (s).

Let me know if you need anything else.

Wendy

From: Cathy Lewis [mailto:clewis@nassaucountyfl.com]
Sent: Wednesday, April 05, 2006 7:30 PM
To: Karably, Wendy
Cc: Omar Smith; Brown, Kevin; Mehlman, Dana; Lee Pickett; Becky Diden; Ted Selby; Michael Mahaney
Subject: RE: Golder Cost Proposal for Bid Doc Preparation
Importance: High

Do you have any idea the construction costs involved for the LFG expansion and Partial Closure portions?
Reviewing adequacy of funding within the Solid Waste fund.

Cathy Lewis
Administrative Services Department
Nassau County Board of County Commissioners
96160 Nassau Place
Yulee, FL 32097
(904)491-7370 phone ext 2807
clewis@nassaucountyfl.com
(904)321-5917 fax

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

From: Karably, Wendy [mailto:Wendy_Karably@golder.com]
Sent: Wednesday, April 05, 2006 4:05 PM
To: Cathy Lewis
Cc: Omar Smith; Brown, Kevin; Mehlman, Dana; Lee Pickett; Becky Diden; Ted Selby; Michael Mahaney
Subject: RE: Golder Cost Proposal for Bid Doc Preparation

Cathy,

Regarding the expansion of the LFG system, I understand your question and let me try to clarify what was intended and what is required. Under Title V and NSPS regulations, once you have failed the Tier II (or

4/7/2006

triggered the regulations for requiring a LFG control system), you must install a system that will control LFG in all areas of the landfill in which there is waste that has been in place for 5 years (2 years if the area is closed) regardless of the total depth of waste. At West Nassau, waste has been (or will be by the beginning of the year or so) in place for at least 5 years in all areas of the lined cells. In other words there are no new cells that have waste in place less than 5 years; the newest cells in the southeast corner started placement of waste in early 2002 (close enough that it doesn't make sense not to install wells). So, even though these areas are not near up to the vertical elevation that they will be when the landfill is full, the regulations require that controls are in place. What this likely means is that the wells that are installed this year (yes, we need to have a contractor by mid-August 2006) will need to be extended throughout the life of the landfill and more wells will need to be installed above these wells to control LFG in the higher areas of waste. Hope this helps.

Regarding the cost estimate, the easiest division would be that the costs for S2Li (under Subcontractor Costs) should go under Partial Closure and the rest (Golder labor and expenses other than Subcontractor) is for the LFG Expansion. There will be some cross-over between Golder and S2Li, but it may be a wash with respect to the division of total costs. Omar, do you agree?

Please let me know if you have any additional questions.

Thanks,

Wendy

From: Cathy Lewis [mailto:clewis@nassaucountyfl.com]

Sent: Wednesday, April 05, 2006 2:47 PM

To: Karably, Wendy

Cc: Omar Smith; Brown, Kevin; Mehlman, Dana; Lee Pickett; Becky Diden; Ted Selby; Michael Mahaney

Subject: RE: Golder Cost Proposal for Bid Doc Preparation

I have reviewed project proposal 993-3928.68 dated 4/3/06 for bidding related tasks for LFG system expansion and partial closure SW corner and have the following questions:

1. Under the BACKGROUND section page 1 you state that "... the County is required to expand the existing LFG system to cover all areas of the landfill where waste has been in place more than 5 years. By the time the construction is initiated, the area required to be covered by the LFG system will include the entire active footprint of the landfill." Based upon the latest Landfill Capacity and Depletion Analysis-2005 prepared by S2Li-Omar Smith August 2005, the active West Nassau Landfill will not be depleted until 2016. Under SCHEDULE you state "The goal is to have a contractor retained by the County by mid-August, 2006."

-If contractor is to be retained by August 2006, I would assume construction would be initiated soon after, and with landfill not be depleted until 2016, how can you conclude that "By the time construction is initiated, the area required to be covered by the LFG system will include the entire active footprint of the landfill"?

-What part the active landfill will the LFG system need to cover "where waste has been in place more than 5 years"? Should the county do a partial LFG expansion?

2. Of the \$58,610 quote for Golder's services, what amount is related to Partial Closure (SW closure) and what amount is related to LFG expansion? A different escrow funds each part: Closure funded by Active West Nassau Closure Escrow and LFG expansion funded by Vertical/Corrective action escrow.

Thanks.

Cathy Lewis

Administrative Services Department
Nassau County Board of County Commissioners
96160 Nassau Place
Yulee, FL 32097
(904)491-7370 phone ext 2807
clewis@nassaucountyfl.com
(904)321-5917 fax

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

From: Karably, Wendy [mailto:Wendy_Karably@golder.com]
Sent: Monday, April 03, 2006 4:45 PM
To: Cathy Lewis; Lee Pickett; Becky Diden
Cc: Omar Smith; Brown, Kevin; Mehlman, Dana
Subject: Golder Cost Proposal for Bid Doc Preparation

All

Attached is the cost proposal for preparation of the bidding documents for the LFG expansion and partial closure at the West Nassau Landfill. This is the second cost proposal for the April 12, 2006 Board meeting, as presented in an earlier email.

Please let me know if you have any questions.

Thanks,

Wendy

10:26 It was moved by Commissioner Marshall, seconded by Commissioner Vanzant and unanimously carried to approve the Cost Proposal for Engineering Services Bid Document Preparation and Bidding Services for Landfill Gas System Expansion and Partial Closure of the Southwest Corner West Nassau Landfill in the amount of \$58,610.00. Funding source: 70000000-239956 in the amount of \$32,610.00 and 70000000-239955 in the amount of \$26,000.00.

10:30 It was moved by Commissioner Marshall, seconded by Commissioner Vanzant and unanimously carried to approve the Cost Proposal for Preparation of Spill Prevention Control and Countermeasures Plan West Nassau Landfill in the amount of \$4993.00. Funding source: account 70341534-531000 Professional Services with transfer to appropriate Golder account within 70341534.

10:32 It was moved by Commissioner Vanzant, seconded by Commissioner Marshall and unanimously carried to approve an \$11,365.00 increase in project .59 "Assistance with Various Operational Issues" to address operational and West Nassau permit renewal issues and authorize the Vice Chairman to sign the budget transfer Solid Waste - 27 transferring the \$11,365.00 balance from Golder project .60 "Closure Permit Renewal for the Closed West Nassau Landfill" account 70361534-531322 "PS-Golder-Permit Renewal

Cathy Lewis

From: Cathy Lewis
Sent: Monday, March 27, 2006 3:03 PM
To: Mike Mullin; Michael Mahaney; Chris Lacambra; Lee Pickett
Cc: Sabrina Robertson; Becky Diden; Ted Selby
Subject: Agenda items for 4/12/06 meeting-deadline 3/27/06

Importance: High

I know this is rushed, but the following agenda items need to be presented at the 4/12/06 meeting of which the deadline is today 3/27/06. The Golder items were requested by Wendy Karably who is to provide additional information by 4/7/06 and are separate task items under the continuing contract dated 2/16/99. She requested on 3/23/06 they be placed on the next day meeting and need to be addressed before the May day meeting (5/10/06).

If you can please review and returned signed page as soon as you possibly can, I would appreciate it very much. Thanks to all.



SW 041206 mtg
equip.pdf



SW Golder #66
041206 mtg.pdf



SW Golder .68 mtg
041206.pdf



SW Golder SPCC
041206 mtg.pdf



SW Golder .59 addtl
041206.pdf...

Cathy Lewis
Administrative Services Department
Nassau County Board of County Commissioners
96160 Nassau Place
Yulee, FL 32097
(904)491-7370 phone ext 2807
clewis@nassaucountyfl.com
(904)321-5917 fax

Cathy Lewis

From: Karably, Wendy [Wendy_Karably@golder.com]
Sent: Thursday, March 23, 2006 3:20 PM
To: Cathy Lewis
Cc: Lee Pickett; Becky Diden; Mehlman, Dana; Brown, Kevin; Clister, Bill; Omar Smith; Dottellis, John
Subject: Golder Agenda Items

Cathy,

As we discussed, Golder has several items we would like to get on the agenda for the April 12, 2006 Board meeting, as follows:

- Landfill Gas to Energy Preliminary Feasibility Study Report
- ★➤➤ Cost proposal to prepare bid documents for the Partial Closure/LFG Expansion Construction
- Cost proposal for a Spill Prevention Control and Countermeasures (SPCC) Plan
- *.59 cost increase operational issue & permit renewal*

The first item is the presentation as promised at the completion of our evaluation of the information regarding the LFG at the facility and it's feasibility to be used for energy production. The second item is to get ahead on the preparation of construction bid documents so that the County can bid out the partial closure and LFG expansion construction project shortly after receiving FDEP permit approval. As you recall, the construction of the LFG system expansion must be completed and the system fully operational by March 2007. The third item is needed because the FDEP requires a SPCC Plan for facilities that maintain over 1,320 gallons of oil or petroleum based products, and it has been determined that the West Nassau Landfill maintains approximately 5,500 gallons (well over the threshold amount). *closure combined*

Also as discussed, we will have the report/cost proposals in to you at least by April 7, if not sooner for each of the above items.

Thanks for your help on getting these items on the agenda. Please contact me if you have any questions.

Wendy

NCBCC
SOLID WASTE FUND
VERTICAL ESCROW/CORRECTIVE ACTION
05/06 activity

Balance Fwd to 05/06	\$ 1,907,714
Items approved to date:	
Golder .58 proposal BCC 3/21/05	\$ (10,915)
Golder .68 proposal BCC 2/8/06	\$ (19,418)
total items apprvd to date	\$ (30,333)
Balance available at 3/27/06	\$ 1,877,381

NCBCC
SOLID WASTE FUND
WEST NASSAU ACTIVE CLOSURE ESCROW
05/06 activity

Balance Fwd to 05/06 \$ 5,055,507

Items approved to date:

Golder .68 proposal BCC 2/8/06 \$ (35,732)

total items apprvd to date \$ (35,732)

Balance available at 3/27/06 \$ 5,019,775

FUND: 470 SOLID WASTE MGMT FUND

ASSETS

		NET CHANGE FOR PERIOD	ACCOUNT BALANCE
70000000	101010	CASH	.00 * 599,307.31
70000000	102031	PETTY CASH-LANDFILL OFFICE	.00 75.00
70000000	102032	CHANGE FUND-W NASSAU LANDFILL	.00 150.00
70000000	115010	ACCOUNTS RECEIVABLE <i>9/05 interest</i>	.00 * 1,912.88
70000000	115020	DISHONORED CKS RECEIVALBE	.00 243.20
70000000	115070	ACCOUNTS RECEIVABLE-HAULERS	.00 311,046.19
70000000	121000	SPECIAL ASSESMENTS-PR YRS DELQ	.00 1,056,994.00
70000000	122004	ALLOW FOR UNCOLL-SA 2004/05	.00 -.80
70000000	122005	ALLOW FOR UNCOLL-PRIOR YEARS	.00 -833,289.00
70000000	131010	DUE FROM GENERAL FUND	.00 * 9,000.00
70000000	133000	DUE FROM OTHER GOVTS	.00 * 352,296.09
70000000	151010	INVESTMENTS-SBA	.00 * 991,290.37
70000000	151051	INV-SBA-ESCROW WN PI (OLD)	.00 100,038.98
70000000	151052	INV-SBA-ESCROW BRYCEVILLE	.00 43,535.40
70000000	151053	INV-SBA-ESCROW LOFTON CREEK	.00 89,305.71
70000000	151055	INV-SBA-ESCROW WNCL I-CLOSURE	.00 5,055,507.25
70000000	151056	INV-SBA-ESCROW WN VERTICAL	.00 1,912,765.33
70000000	151057	INV-SBA-RENEWAL * REPLACEMENT	.00 2,392,486.31
70000000	151058	INV-SBA-CAPITAL RESERVE	.00 1,636,803.99
70000000	154002	DEFERRED CHG-ISSUANCE-1999 REF	.00 68,692.61
70000000	155000	PREPAID ITEMS	.00 * 495.00
70000000	160902	SBA-DEBT SVC-1999 REFUNDING	.00 409,922.03
70000000	16191	LAND	.00 774,536.00
70000000	16291	BUILDINGS	.00 122,227.19
70000000	16391	ACCUM DEPREC-BUILDINGS	.00 -33,055.61
70000000	16392	ACCUM DEPREC-GRANT BLDGS	.00 -7,503.70
70000000	16492	WN CLASS I LANDFILL	.00 27,891,710.79
70000000	16495	WN CLOSURE	.00 7,291,647.60
70000000	16496	LOFTON CREEK CLOSURE	.00 4,828,565.40
70000000	16497	BRYCEVILLE CLOSURE	.00 1,315,707.71
70000000	16592	ACCUM DEPR-WN CLASS I	.00 -19,610,106.31
70000000	16595	ACCUM DEPR-WN CLOSURE	.00 -5,126,612.19
70000000	16596	ACCUM DEPR-LOFTON CREEK	.00 -4,828,565.40
70000000	16597	ACCUM DEPR-BRYCEVILLE	.00 -1,315,707.71
70000000	16691	EQUIPMENT	.00 2,905,798.59
70000000	16791	ACCUM DEPREC-GRANT EQUIP	.00 -413,416.85
70000000	16792	ACCUM DEPREC-EQUIPMENT	.00 -2,352,773.37
70000000	171000	ESTIMATED REVENUES	-13,514,290.00 .00
70000000	172000	REVENUE CONTROL	6,806,321.23 .00
TOTAL ASSETS			-6,707,968.77 25,641,029.99

** less 5,051,000 = 1,907,714*

LIABILITIES

70000000	201000	VOUCHERS PAYABLE	.00 * -61,370.64
70000000	202000	ACCOUNTS PAYABLE	.00 * -154,897.28
70000000	202002	A/P-REFUNDS	.00 -427.53
70000000	205504	RETAINAGE - ORGANIC WASTE TECH <i>vertical</i>	.00 -5,051.00

BOARD OF COMMISSIONERS
BALANCE SHEET FOR 2005 13

FUND: 470 SOLID WASTE MGMT FUND		NET CHANGE FOR PERIOD	ACCOUNT BALANCE	
70000000	207010	DUE TO GENERAL FUND	.00	-172,596.51
70000000	215002	ACCRUED INT-1999 BOND	.00	-53,622.74
70000000	224902	UNAMORTIZED DISC-1999 REFUND	.00	44,102.18
70000000	229010	ACCRUED COMP ABSENCES	.00	-52,990.28
70000000	232002	REVENUE BONDS-CURRENT-1999 REF	.00	-1,350,000.00
70000000	232902	REVENUE BONDS-LT-1999 REFUND	.00	-11,830,000.00
70000000	232912	UNAMORTIZED CHG-1999 REFUND	.00	188,239.59
70000000	239951	POST CLOSURE LIAB-WN CLOSE(OLD)	.00	-796,735.97
70000000	239952	POST CLOSURE LIAB-BRYCEVILLE	.00	-517,809.00
70000000	239953	POST CLOSURE LIAB-LOFTON CREEK	.00	-1,062,123.00
70000000	239954	POST CLOSURE LIAB-WN CLASS I	.00	-5,556,963.57
70000000	239955	CLOSURE LIAB-WN CLASS I	.00	-4,861,251.77
70000000	239956	WN VERTICAL-CORRECTIVE	.00	-657,125.28
TOTAL LIABILITIES			.00	-26,900,622.80

FUND BALANCE

70000000	241000	APPROPRIATIONS	13,514,290.00	.00
70000000	242000	EXPENDITURE CONTROL	-4,725,749.62	.00
70000000	248011	RESERVE FOR SINKING FUND	.00	-398,017.28
70000000	248020	RETAINED EARNINGS-ESCROWS	.00	-7,057,627.53
70000000	248030	RES FOR RENEWAL & REPLACEMENT	.00	-2,020,521.50
70000000	248031	RESERVE FOR CAPITAL RESERVE	.00	-1,172,350.46
70000000	250020	CONTRIBUTED CAPITAL-FUNDS	10,000.00	455,141.96
70000000	271000	FUND BALANCE	-2,090,571.61	-2,080,503.31
70000000	272000	RETAINED EARNINGS-UNRESERVED	.00	13,533,470.93
TOTAL FUND BALANCE			6,707,968.77	1,259,592.81
TOTAL LIABILITIES + FUND BALANCE			6,707,968.77	-25,641,029.99

** END OF REPORT - GENERATED BY CATHY LEWIS **

.68

BCE 2/5/06

Agenda Request For: February 8, 2006

Department: Solid Waste Management

Background: See Golder proposal 993-3928.68 dated 1/23/06 entitled "Cost Proposal for Engineering Services Permit Modification Application for Landfill Gas System Expansion and Partial Closure of the Southwest Corner of West Nassau Landfill."

Financial/Economic Impact to Future Years Budgeting Process or Effect on Citizens: Required by facility's Title V Air Permit. Will consider in future budgets as required.

Action requested and recommendation:

Request the Board consider approving Golder Associates cost proposal 993-3928.68 for \$55,150. Which consist of Task 1000 Permit Modification \$37,633 and Task 2000 Address RAIs \$17,517

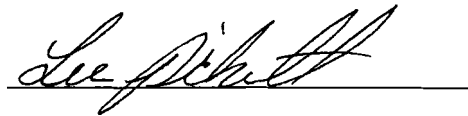
Is this action consistent with the Nassau County Comprehensive Land Use Plan? Public Facility Element Section 4

Funding Source:

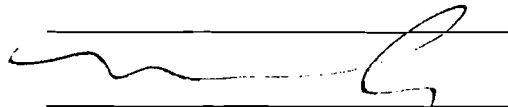
- 1.) Landfill Gas System funding source is Vertical / Corrective Action Escrow liability a/c 70000000-239956 with current accrual balance of \$657,125.28. LFG portion \$19,418 of Golder proposal & \$2,500 of permit fee.
- 2.) Partial Closure funding source is closure liability WN Class I a/c 70000000-239955 with current accrual balance of \$4,861,251.77 Closure portion of \$35,732 of Golder proposal & \$2,500 of permit fee.

Reviewed by:

Department Head



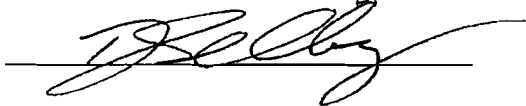
Legal



Administrator

Finance

Administrative Services



Grants

06 FEB -3 AM 10: 14

PLANNING
COUNTY COORDINATORS
OFFICE

APPROVED

DATE 2/8/06

CA

Cathy Lewis

From: Karably, Wendy [Wendy_Karably@golder.com]
Sent: Thursday, February 02, 2006 2:19 PM
To: Cathy Lewis
Cc: Ted Selby; Lee Pickett; Michael Mahaney; Sue Butler; Sabrina Robertson; Becky Diden
Subject: RE: Golder proposal 993-3928.68 dated 1/24/06

Cathy

Similar to what we did with the original partial closure permit application work order, we divided it generally along the lines as S2Li will be providing the majority of the work on the closure portion and Golder will be providing the majority of the work on the LFG portion. So, this would break down the \$55,150 as \$35,732 for closure and \$19,418 for LFG. Regarding the \$5,000 permit fee, it could go to either one, or both; if we were doing these separately, they would both require a fee of \$5,000. You could either split it down the middle or assign to one or the other.

Let me know if you need anything else.

Wendy

From: Cathy Lewis [mailto:clewis@nassaucountyfl.com]
Sent: Thursday, February 02, 2006 11:07 AM
To: Karably, Wendy
Cc: Ted Selby; Lee Pickett; Michael Mahaney; Sue Butler; Sabrina Robertson; Becky Diden
Subject: Golder proposal 993-3928.68 dated 1/24/06
Importance: High

Regarding the attached proposal to be presented at the BCC mgt of 2/8/06, I needs a breakdown of the \$55,150 between the "LFG" portion and the "active west nassau partial closure" portion. As you are aware, the LFG portion has been funded with corrective/vertical escrow funds and the active closure portion with closure escrow funds.

Also, please clarify the \$5,000 fee purpose-LFG and/or Activie partial closure? At what amount each?

Until additional information is received, I can not go further with this agenda item. Thank you and look forward to hearing from you.

<<Golder 68 proposal.pdf>>

Cathy Lewis
Administrative Services Department
Nassau County Board of County Commissioners
96160 Nassau Place
Yulee, FL 32097
(904)491-7370 phone ext 2807
(904)321-5917 fax

FUND: 470 SOLID WASTE MGMT FUND		NET CHANGE FOR PERIOD	ACCOUNT BALANCE
70000000	207010	DUE TO GENERAL FUND	.00 -172,596.51
70000000	215002	ACCRUED INT-1999 BOND	.00 -53,622.74
70000000	224902	UNAMORTIZED DISC-1999 REFUND	.00 44,102.18
70000000	229010	ACCRUED COMP ABSENCES	.00 -52,990.28
70000000	232002	REVENUE BONDS-CURRENT-1999 REF	.00 -1,350,000.00
70000000	232902	REVENUE BONDS-LT-1999 REFUND	.00 -11,830,000.00
70000000	232912	UNAMORTIZED CHG-1999 REFUND	.00 188,239.59
70000000	239951	POST CLOSURE LIAB-WN CLOSE(OLD	.00 -796,735.97
70000000	239952	POST CLOSURE LIAB-BRYCEVILLE	.00 -517,809.00
70000000	239953	POST CLOSURE LIAB-LOFTON CREEK	.00 -1,062,123.00
70000000	239954	POST CLOSURE LIAB-WN CLASS I	.00 -5,556,963.57
70000000	239955	CLOSURE LIAB-WN CLASS I	.00 -4,861,251.77
70000000	239956	WN VERTICAL-CORRECTIVE	.00 -657,125.28
TOTAL LIABILITIES		.00	-26,900,622.80
FUND BALANCE			
70000000	241000	APPROPRIATIONS	13,514,290.00 .00
70000000	242000	EXPENDITURE CONTROL	-4,725,749.62 .00
70000000	248011	RESERVE FOR SINKING FUND	.00 -398,017.28
70000000	248020	RETAINED EARNINGS-ESCROWS	.00 -7,057,627.53
70000000	248030	RES FOR RENEWAL & REPLACEMENT	.00 -2,020,521.50
70000000	248031	RESERVE FOR CAPITAL RESERVE	.00 -1,172,350.46
70000000	250020	CONTRIBUTED CAPITAL-FUNDS	.00 445,141.96
70000000	271000	FUND BALANCE	-2,080,571.61 -2,070,503.31
70000000	272000	RETAINED EARNINGS-UNRESERVED	.00 13,533,470.93
TOTAL FUND BALANCE		6,707,968.77	1,259,592.81
TOTAL LIABILITIES + FUND BALANCE		6,707,968.77	-25,641,029.99

AA

Golder Associates Inc.

8933 Western Way, Suite 12
Jacksonville, FL USA 32256
Telephone (904) 363-3430
Fax (904) 363-3445



VIA EMAIL ONLY

January 24, 2006

993-3928.68

West Nassau Landfill
46026 Landfill Road
Callahan, Florida 32011

Attention: Mr. Lee Pickett, Interim Solid Waste Director

**RE: COST PROPOSAL FOR ENGINEERING SERVICES
PERMIT MODIFICATION APPLICATION FOR
LANDFILL GAS SYSTEM EXPANSION
AND PARTIAL CLOSURE OF THE SOUTHWEST CORNER
WEST NASSAU LANDFILL
NASSAU COUNTY, FLORIDA**

2/8
AGENDA
ADDITIONAL
BACKGROUND
TO
FORROW

Dear Lee:

Golder Associates Inc. (Golder) is pleased to submit this cost proposal to the Nassau County Board of County Commissioners (Board) for providing professional services associated with the intermediate permit modification for the installation of the landfill gas (LFG) system expansion, as required by the facility's Title V Air Permit. Additionally, we have proposed to include the partial closure of the southwest corner area of the West Nassau Landfill in this permit modification. In late 2003, Golder was contracted to prepare a permit modification for partial closure of the southwest corner and a limited LFG system expansion, but this task order was not completed because of the changes that were taking place or could have taken place at the landfill. However, portions of the application work were completed and will be used for this task order.

The services under this cost proposal will be provided by both Golder and our teaming partner S2Li. This cost proposal includes the preparation and submittal of an Intermediate Permit Modification Application to the Florida Department of Environmental Protection (FDEP) and addressing comments on the application. This cost proposal does not include the preparation of a construction bid package, assistance with contractor selection, oversight during construction of the system, or preparation of a certification report on the construction. A cost proposal(s) for that work will be provided to the Board once the permit modification is finalized and a construction schedule can be better estimated. The following sections include a brief background on this project, the scope of services to be provided, an estimated schedule, cost estimate, and terms and conditions.

BACKGROUND

The initial LFG extraction system was installed as part of a contamination assessment required by FDEP to remediate groundwater contamination within the slurry wall in the southwest portion of the landfill. As planned, the gas wells installed in this area are located only on the perimeter of the landfill. The facility was also required to update its Title V Air Permit and in so doing, was required to test gas production at the landfill. The results of the testing (Tier II) indicated that a threshold was exceeded and additional regulatory requirements were imposed. This includes the installation or expansion of the LFG system to cover all areas that have had waste in place greater than 5 years. The expansion to be included in the permit modification will include the installation of the required wells and associated conveyance system. Additionally, the expansion of the system will be beneficial to the County in addressing the odor issues that have recently arisen as well as enhance the clean-up of the groundwater contamination.

Additionally, there are several factors involved in recommending that the southwest corner of the active landfill be included in this permit modification to have the area closed with the final cover system. As you are aware, this area of the landfill has been the source of concern with FDEP including excessive erosion, slope steepness, stormwater management, and exposed waste. Based on these factors, the installation of the final cover in this area (which will include drainage controls and a vegetative layer with grass cover to provide erosion control) is recommended to reduce maintenance efforts and costs.

SCOPE OF SERVICES

Task 1000 – Intermediate Permit Modification Application Preparation

Golder and S2Li will utilize the work that was conducted under the previous task order for preparing a permit modification for the partial closure. However, there are several factors that will be different in this application, either because of additional requirements (LFG expansion) or potential changes that have occurred at the landfill (slope and/or stormwater system). The LFG system expansion will cover the majority of the active area of the landfill by including the portion in which waste has been in place at least 5 years. Additionally, we will review the remainder of the active area and determine the length of time waste has been in place and determine which areas will have 5-year-old waste at or near the end of 2006. In general, the area to be partially closed covers approximately 11 acres along the western and southwestern sides of the active West Nassau Landfill; the LFG system will also be expanded within this general area. This task includes the preparation of the permit modification application, the closure design, the LFG extraction system design, submittal of a draft application to County staff for review, and submittal of the package to FDEP and addressing comments from the FDEP on the application. As stated above, we will utilize the work performed on the previous task order that initiated the partial closure. The following sections provide a brief description of the scope under this task.

Additionally, we have assumed that the County will provide the permitting fee that is required to be submitted to FDEP with the application. This fee will be \$5,000.00 to be paid directly to FDEP at the time of the submittal of the application.

Permit Application Preparation

Golder/S2Li will prepare a Solid Waste Permit Application Report as required by the Chapter 62-701, F.A.C. for the closure of the west and southwestern slopes of the landfill and the

expansion of the LFG system. Parts A, B, M, and O through T will be addressed. Facility information that was previously submitted to the Department to support the permit, and which is still valid, will not be re-submitted. Portions of the application not re-submitted will be marked "no substantial change" on the application form. The report will include the following sections from the rules:

1) Part A - General Information

Appropriate data for these sections of the permit application will be typewritten on the appropriate electronic application form.

2) Part B - Disposal Facility General Information

Appropriate data for these sections of the permit application will be typewritten on the appropriate electronic application form.

3) Part M - Water Quality and Leachate Monitoring Requirements (62-701.500, F.A.C.)

This section will be marked as "No substantial change".

4) Part O - Gas Management System (62-701.530, FAC)

1. The design of the LFG expansion will be prepared, shown within the permit application, and referenced on the application form.
2. Reference will be made to the locations of the design details and plans.
3. Remediation plan will be marked as "No substantial change".
4. LFG recovery facilities will be marked as "No substantial change" or "Not applicable". However, an updated overall design plan will be prepared to reflect the LFG collection system changes on the west and southwestern slopes.

5) Part P - Landfill Final Closure Requirements (62-701.600, F.A.C.)

1. Closure schedule requirements will be marked as "No substantial change" for the entire landfill, however a schedule for the west and southwestern slope closure will be submitted.
2. Closure permit general requirements will be prepared as discussed below.
3. Closure report will be marked as "No substantial change."
4. Closure design plans, CQA plan, and other required information will be prepared, included in the permit application, and

referenced on the application form. It is assumed that previously conducted liner testing (by Golder's geosynthetic laboratory) will be referenced and/or submitted to satisfy the testing requirements under this section of the rule. Once the soil borrow source material is identified, testing will be conducted and submitted as part of the construction certification document (under a separate task order).

5. Closure operation plan discussion will be prepared, included in the permit application, and referenced on the application form.
 6. Justification of temporary closure will be marked as "Not applicable".
- 6) Part Q - Closure Procedures (62-701.610, F.A.C.)
1. Closure inspection discussion will be marked as "No substantial change."
 2. Survey monument discussion will be marked as "Not applicable."
 3. Final survey report discussion will be prepared, included in the permit application, and referenced on the application form. The actual final survey will be prepared by the construction contractor or the County and submitted as part of the construction certification document (under a separate task order).
 4. Certification of closure discussion will be prepared, included in the permit application, and referenced on the application form. The actual preparation of the certification documents is to be prepared under a separate task order.
 5. Declaration to the public discussion will be prepared, included in the permit application, and referenced on the application form. Actual declaration will be advertised by the County at the completion of construction.
 6. Official date of closure discussion will be prepared, included in the permit application, and referenced on the application form.
 7. Use of closed landfill areas will be marked as "Not applicable" since it is an ongoing operating landfill.
 8. Relocation of waste discussion will be marked as "Not applicable".

7) Part R - Long Term Care Requirements (62-701.620, F.A.C.)

This section will be marked as "No substantial change".

8) Part S - Financial Responsibility Requirements (62-701.630, F.A.C.)

This section will be marked as "No substantial change."

9) Part T - Certification by Applicant and Engineer or Public Officer

Golder/S2Li shall include this executed form within the permit application report.

Golder/S2Li will submit to the County a draft application form, along with the various designs (as detailed in the following subtasks), for review and comments. Golder/S2Li will meet with the County as needed to discuss any staff comments. Golder/S2Li will incorporate final comments from the County and finalize the application, including all attachments.

Preparation of Closure Plans/Cap Design/Stormwater Design

Golder/S2Li will prepare the required closure plans for use in the permit application and ultimate closure construction of the west and southwestern slopes. Golder/S2Li will utilize the design concepts permitted for the landfill expansion in the year 2000. The proposed closure area includes the west and southwestern slopes of the active portion of the landfill up to an elevation of approximately 90 to 95 feet, which will include two drainage terraces at approximate elevations of 40 and 70 feet. The sideslope of the closure slope between terraces and to the toe of slope will be maintained at 3 horizontal to 1 vertical (3H:1V). The proposed closure liner system will consist of a linear low density polyethylene geomembrane (FML) with a geocomposite drainage material or geonet above the FML as required to facilitate drainage above the liner. The closure plan will include the stormwater drainage plans that will detail the mechanisms to carry the stormwater from the sideslopes to the perimeter drainage ditches as currently defined by the existing State Environmental RP and solid waste permit design. Golder/S2Li has assumed that no modification to the County's ERP will be required because no change in the runoff, landfill footprint, or final terrace collection/drainage system is anticipated.

LFG System Design Services

As a result of the Tier II testing results, the LFG system design will be expanded to cover the portion of the active area that has had waste placed at least 5 years, including the partial closure area on the west and southwestern side slopes. For this work, Golder/S2Li will review the current approved LFG management system during preparation of the permit modification to determine if changes are warranted to improve the effectiveness of the system. Information that has been accumulated to date on the existing system will be critical in determining what changes to the proposed system will be constructive in improving the system operation. Critical items that will be reviewed and/or considered include the following:

- Actual grades compared to proposed closure grades in the areas where wells are required;

- Proximity of the wells to the landfill sideslope to maximize coverage along the perimeter of the landfill; and
- A review of the condensate management system, including replacement of all existing header and lateral lines in the partial closure area with lines placed above the closure cover liner.

Once changes to the system are finalized, Golder/S2Li will develop the necessary permit drawings for the modification. The LFG management drawings will include a plan view of the system layout, including any changes to the entire landfill system, as well as necessary detail sheets. Because these plans will be the basis for the construction package, Golder will develop these drawings generally at construction level, so that only minor changes are required to prepare the construction drawings in the future.

Task 2000 – Address RAIs

Golder/S2Li will submit the application package to FDEP for consideration. Should any questions or minor requested changes be received from FDEP, Golder/S2Li, with the assistance of the County, will prepare responses within the required time period. For costing purposes, Golder/S2Li has assumed that two requests for additional information (RAIs) from FDEP will need to be addressed, and that one meeting with FDEP will be necessary.

SCHEDULE

The following presents the anticipated schedule for the work described above in the Scope of Services:

- Notice to Proceed from the County by: February 8, 2006
- Draft permit application and plans to County by: March 3, 2006
- Permit and plans submittal to FDEP by: March 10, 2006
- Expected permit approval from FDEP by: June 10, 2006*

* The schedule may need to be adjusted to reflect the time period for the permit to be reviewed and approved by FDEP.

COST ESTIMATE

Golder/S2Li cost estimate to complete the work as described in the above scope of services is \$55,150.00. A detailed breakdown of the costs for each task and the labor and expenses estimated are included in the attached Table 1. As discussed, we will be using a portion of the permit application and design that was prepared previously for the southwest corner partial closure task order. S2Li will be performing a portion of the work included in this cost proposal and S2Li's costs are shown in Table 1 as Subcontractor Costs. We propose to perform this work on a cost reimbursable not-to-exceed basis in accordance with labor and unit rates consistent with Golder's and S2Li's standard rates for the year 2006. The County will only be billed actual hours

and expenses incurred on the project for work within the agreed scope of work. Direct expenses will be marked-up 10 percent for administrative purposes. Photocopies, computer and AutoCAD time will be billed at agreed upon unit rates. Travel and communications costs will not be billed to Nassau County as stated in our August 1998 proposal. The cost estimate will not be exceeded without prior authorization from Nassau County.

The cost above is for reimbursement of Golder/S2Li for the services described herein. It should be noted that the costs herein are for completion of the permitting phase of the project only and does not include any costs for Golder/S2Li nor the contractor during the bidding and construction phase. Additionally, there are other costs that the County may incur during the implementation of this project. For example, as stated earlier, it is assumed that the County will cover the permit application fee for FDEP, which is \$5,000.00.

TERMS AND CONDITIONS

This work will be performed under the Agreement for Consulting Services between Golder and the County, dated February 22, 1999.

Golder/S2Li appreciates this opportunity to provide our services to Nassau County. We hope this cost proposal includes sufficient information for you to evaluate the need for this work. If you have any questions regarding this cost proposal, please do not hesitate to call.

Sincerely,

GOLDER ASSOCIATES INC.



Wendy D. Karably
Senior Consultant/Associate

Attachment

cc: Mike Mahaney – Nassau County Administrator
Omar Smith – S2Li
Kevin Brown – Golder

FN: G:\Projects\993\993-39\993-3928\PROPOSAL\2006 prop\2006 LFG Exp_Closure.doc

TABLE 1

**Cost Estimate
LFG System Expansion and Partial Closure Permitting
West Nassau Landfill
Callahan, Nassau County, Florida**

LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Principal Sr. Consult \$170	Associate \$150	Senior Proj. Mgr. \$135	Senior Engineer \$110	Project Engineer \$95	Staff Engineer I \$85	Staff Engineer II \$75	Drafting \$75	Technician \$55	Clerical \$55		
TASK	DESCRIPTION												
1000	Permit Modification	0	12	10	0	0	50	0	30	0	10	112	\$10,200
2000	Address RAIs	0	12	12	0	0	20	0	10	0	6	60	\$6,200
	TOTALS:	0	24	22	0	0	70	0	40	0	16	172	\$16,400

EXPENSES		Field Vehicle (day) \$75	Travel/Per Diem (est.)	Communi-cations (est.)	Mileage (mile) \$0.45	Shipping/Postage (est.)	Field Equipment incl. PPE (est.)	Office Computer (hr) \$10	AutoCAD Computer (hr) \$20	Photo-copying (each) \$0.15	Drawing Reproduction (est.)	Subcon-tractor (\$2L) (est.)	SUBTOTAL EXPENSES
TASK	DESCRIPTION												
1000	Permit Modification	0	0	\$0	0	\$200	\$0	8	30	1,500	\$1,000	\$25,328	\$27,433
2000	Address RAIs	0	0	\$0	0	\$100	\$0	0	10	750	\$500	\$10,404	\$11,317
	TOTALS:	\$0	\$0	\$0	\$0	\$300	\$0	\$80	\$800	\$338	\$1,500	\$35,732	\$38,750

TABLE 1

Cost Estimate
 LFG System Expansion and Partial Closure Permitting
 West Nassau Landfill
 Callahan, Nassau County, Florida

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL LABOR	SUBTOTAL EXPENSES	TASK TOTAL
1000	Permit Modification	\$10,200	\$27,433	\$37,633
2000	Address RAls	\$6,200	\$11,317	\$17,517
	TOTALS	\$16,400	\$38,750	<u>\$55,150</u>

\$9,600.00. Funding source: 70341534-531000 with budget transfer to new account entitled "PS-Golder- 65 U-Trap/Flare; (2) approve Golder and Associates cost proposal 993-3928.66 for Engineering Services Preliminary Assessment of Landfill Gas to Energy (LFGTE) Potential at the West Nassau Landfill in the amount of \$9,201.00 as follows: Task 1 - LFG Data Compilation and Review, \$2,375.00, Task 2 - Response to Data Gap Needs, \$3,387.00, Task 3 - Asses LFG Production Rates and Gas Qualities, \$1,398.00, and Task 4- Develop LFGTE Proformas (maximum three), \$2,042.00; (3) approve Golder and Associates cost proposal 993-3928.68 for Engineering Services Permit Modification Application for Landfill Gas System Expansion and Partial Closure of the Southwest Corner in the amount of \$55,150.00 as follows: Task 1000 - Permit Modification, \$37,633.00, and Task 2000 - Address RAIS, \$17,517.00. Funding source: 01714571-562000. Funding source(s): Landfill Gas System funding source is Vertical/Corrective Action Escrow liability a/c 70000000-239956 with LFG portion \$19,418 of Golder proposal and \$2,500.00 of permit fee, and Partial Closure funding source is closure liability West Nassau Class I a/c 70000000-239955 with Closure portion of \$35,732.00 of the Golder proposal and \$2,500.00 of permit fees; and (4) Golder and Associates cost proposal 993-3928.67 for

48

BCC 8/26/03

RECEIVED
COUNTY COORDINATOR'S
OFFICE

Golder Associates Inc.

8933 Western Way, Suite 12
Jacksonville, FL USA 32256
Telephone (904) 363-3430
Fax (904) 363-3445

03 SEP -3 AM 11:08



VIA EMAIL (to Beth McDonald) AND U.S. MAIL

August 19, 2003

993-3928.48

Nassau County
P.O. Box 456
Fernandina Beach, Florida 32034

Attention: Nassau County Management Committee:
Ms. Vickie Samus, Chairman, Board of County Commissioners
Mr. Chip Oxley, Clerk of the Court
Mr. Michael Mullin, County Attorney

RE: **COST PROPOSAL FOR ENGINEERING SERVICES
ASSOCIATED WITH PARTIAL CLOSURE AND
LANDFILL GAS SYSTEM EXPANSION
SOUTHWEST CORNER
WEST NASSAU LANDFILL
NASSAU COUNTY, FLORIDA**

RECEIVED
COUNTY COORDINATOR'S
OFFICE
03 AUG 19 PM 3:14

Dear Management Committee:

Golder Associates Inc. (Golder) is pleased to submit this cost proposal to the Nassau County Board of County Commissioners (Board) for providing professional services associated with the partial closure and landfill gas (LFG) system expansion in the southwest corner area of the West Nassau Landfill. Based on previous permitting work for the County, the services under this cost proposal will be provided by both Golder and our teaming partner S2Li. This cost proposal includes the preparation and submittal of an Intermediate Permit Modification Application to the Florida Department of Environmental Protection (FDEP), preparation of construction bidding documents, and services during the contractor bidding process. This cost proposal does not include oversight during construction of the system or preparation of a certification report on the construction. A cost proposal for that work will be provided to the Board once a construction schedule can be better estimated. The following sections include a background on this project, the scope of services to be provided broken out by task, an estimated schedule, cost estimate, and terms and conditions.

BACKGROUND

There are several factors involved in recommending that the southwest corner of the active landfill be closed with the final cover system and that the LFG system be expanded in this area. As background, this area of the landfill has been the source of concern with FDEP as evidenced by a series of inspections and subsequent warning letters in 2001. The concerns (not strictly limited to the southwest corner) included excessive erosion, stormwater management, and

APPROVED

OFFICES ACROSS ASIA, AUSTRALASIA, EUROPE, NORTH AMERICA, SOUTH AMERICA

DATE 8-25-03 JKB

exposed waste. These issues were apparently addressed to FDEP's satisfaction at the time, but the area remains a constant source of maintenance to control erosion and stormwater. Based on these factors, the installation of the final cover in this area (which will include drainage controls and a vegetative layer with grass cover to provide erosion control) is recommended to reduce maintenance efforts and costs.

Additionally, the initial LFG extraction system was installed in this area as part of a contamination assessment required by FDEP to remediate groundwater contamination within the slurry wall in this area of the landfill. As planned, the gas wells installed in this area are located only on the perimeter of the landfill. Several factors are involved in the recommendation to expand the system in this area. First, the wells in this area were installed with less screened area (less area to collect gas) because the waste was not up to grade at the time of installation. This has resulted in less gas extraction than originally intended, so additional wells would be of benefit. Second, we are aware (and have conducted an evaluation) of one well located in this area that is not functioning effectively because of perched water within the landfill; this also has resulted in less gas extraction than planned. The solution to this problem may be replacement of the well. Third, the installation of the final cover in this area will increase the need for extraction of the gas because the gas that has been escaping through the temporary cover that is in place will no longer be able to escape. Fourth, because the wells were installed before the waste was up to grade, the associated piping to convey gas and condensate is now very deep within the landfill and access for repair or maintenance is limited (if not impossible). Finally, the combination of less extraction than planned on several fronts and several operational shut-downs that allows continued gas migration out of the landfill has resulted in slower than anticipated remediation of the groundwater in this area. As a result, we believe an expansion of the system is warranted and a combination of this effort with the final closure effort is also cost effective.

SCOPE OF SERVICES

Task 1000 – Intermediate Permit Modification Preparation

In general, the area to be partially closed covers approximately 11 acres along the western and southwestern sides of the active West Nassau Landfill; the LFG system will also be expanded within this general area. This task includes the preparation of the permit modification application, the closure design, the LFG extraction system design, submittal of a draft application to County staff for review, and submittal of the package to FDEP and addressing comments from the FDEP on the application. To better define the scope of services to be provided, this task has been further divided into subtasks, as detailed below. We have assumed that the County will provide the permitting fee that is required to be submitted to FDEP with the application. This fee will be \$5,000.00 to be paid directly to FDEP at the time of the submittal of the application.

Subtask 1001 – Project Initiation Meeting

Golder/S2Li project team members will meet with County staff in Nassau County to discuss the project schedule, design considerations, permit requirements, and any contractual issues.

Subtask 1002 – Permit Application Preparation

Golder/S2Li will prepare a Solid Waste Permit Application Report as required by the Chapter 62-701, F.A.C. for the closure of the west and southwestern slopes of the landfill and the expansion of the LFG system. Parts A, B, M, and O through T will be addressed. Facility

information that was previously submitted to the Department to support the permit, and which is still valid, will not be re-submitted. Portions of the application not re-submitted will be marked "no substantial change" on the application form. The report will include the following sections from the rules:

1) Part A - General Information

Appropriate data for these sections of the permit application will be typewritten on the appropriate electronic application form.

2) Part B - Disposal Facility General Information

Appropriate data for these sections of the permit application will be typewritten on the appropriate electronic application form.

3) Part M - Water Quality and Leachate Monitoring Requirements
(62-701.500, F.A.C.)

This section will be marked as "No substantial change".

4) Part O - Gas Management System (62-701.530, FAC)

1. The design of the LFG expansion will be prepared, shown within the permit application, and referenced on the application form.

2. Reference will be made to the locations of the design details and plans.

3. Remediation plan will be marked as "No substantial change".

4. LFG recovery facilities will be marked as "No substantial change" or "Not applicable". However, an updated overall design plan will be prepared to reflect the LFG collection system changes on the west and southwestern slopes.

5) Part P - Landfill Final Closure Requirements (62-701.600, F.A.C.)

1. Closure schedule requirements will be marked as "No substantial change" for the entire landfill, however a schedule for the west and southwestern slope closure will be submitted.

2. Closure permit general requirements will be prepared as discussed below.

3. Closure report will be marked as "No substantial change."

4. Closure design plans, CQA plan, and other required information will be prepared, included in the permit application, and referenced on the application form. It is assumed that previously

conducted liner testing (by Golder's geosynthetic laboratory) will be referenced and/or submitted to satisfy the testing requirements under this section of the rule. Once the soil borrow source material is identified, testing will be conducted and submitted as part of the construction certification document (under a separate task order).

5. Closure operation plan discussion will be prepared, included in the permit application, and referenced on the application form.
 6. Justification of temporary closure will be marked as "Not applicable".
- 6) Part Q - Closure Procedures (62-701.610, F.A.C.)
1. Closure inspection discussion will be marked as "No substantial change."
 2. Survey monument discussion will be marked as "Not applicable."
 3. Final survey report discussion will be prepared, included in the permit application, and referenced on the application form. The actual final survey will be prepared by the construction contractor or the County and submitted as part of the construction certification document (under a separate task order).
 4. Certification of closure discussion will be prepared, included in the permit application, and referenced on the application form. The actual preparation of the certification documents is to be prepared under a separate task order.
 5. Declaration to the public discussion will be prepared, included in the permit application, and referenced on the application form. Actual declaration will be advertised by the County at the completion of construction.
 6. Official date of closure discussion will be prepared, included in the permit application, and referenced on the application form.
 7. Use of closed landfill areas will be marked as "Not applicable" since it is an ongoing operating landfill.
 8. Relocation of waste discussion will be marked as "Not applicable".
- 7) Part R - Long Term Care Requirements (62-701.620, F.A.C.)
- This section will be marked as "No substantial change".

8) Part S - Financial Responsibility Requirements (62-701.630, F.A.C.)

This section will be marked as "No substantial change."

9) Part T - Certification by Applicant and Engineer or Public Officer

Golder/S2Li shall include this executed form within the permit application report.

Golder/S2Li will submit to the County a draft application form, along with the various designs (as detailed in the following subtasks), for review and comments. Golder/S2Li will meet with the County as needed to discuss any staff comments. Golder/S2Li will incorporate final comments from the County and finalize the application, including all attachments.

Subtask 1003 - Preparation of Closure Plans/Cap Design/Stormwater Design

Golder/S2Li will prepare the required closure plans for use in the permit application and ultimate closure construction of the west and southwestern slopes. Golder/S2Li will utilize the design concepts permitted for the landfill expansion in the year 2000. The proposed closure area includes the west and southwestern slopes of the active portion of the landfill up to an elevation of approximately 90 to 95 feet, which will include two drainage terraces at approximate elevations of 40 and 70 feet. The sideslope of the closure slope between terraces and to the toe of slope will be maintained at 3 horizontal to 1 vertical (3H:1V). The proposed closure liner system will consist of a linear low density polyethylene geomembrane (FML) with a geocomposite drainage material or geonet above the FML as required to facilitate drainage above the liner. The closure plan will include the stormwater drainage plans that will detail the mechanisms to carry the stormwater from the sideslopes to the perimeter drainage ditches as currently defined by the existing State Environmental RP and solid waste permit design. Additionally, as permitted, a geosynthetic clay liner (GCL) will be designed to be placed in the perimeter ditch along the section to be closed. Golder/S2Li has assumed that no modification to the County's ERP will be required because no change in the runoff, landfill footprint, or final terrace collection/drainage system is anticipated.

Subtask 1004 - LFG System Design Services

Golder/S2Li will review the current approved LFG management system during preparation of the permit modification to determine if changes are warranted to improve the effectiveness of the system. Information that has been accumulated to date on the existing system will be critical in determining what changes to the proposed system will be constructive in improving the system operation. Critical items that will be reviewed and/or considered include the following:

- Actual grades compared to proposed closure grades in the areas where wells are required;
- Proximity of the wells to the landfill sideslope to maximize coverage along the perimeter of the landfill;

- A review of the condensate management system to determine if a more effective and less maintenance-intensive system can be incorporated into the design, including replacement of all existing header and lateral lines with lines placed above the closure cover liner;
- Waste and daily cover characteristics in the expansion area to determine if perched leachate could cause localized flooding of individual wells or if there are specific waste types that may effect the operation of the system; and
- Groundwater data to identify localized areas of impacts to the groundwater. This data may provide a basis for installing "control" wells located outside of the waste boundary for the purpose of controlling migration over the slurry wall.

Once changes to the system are finalized, Golder/S2Li will develop the necessary permit drawings for the modification. The LFG management drawings will include a plan view of the system layout, including any changes to the entire landfill system, as well as necessary detail sheets. Because these plans will be the basis for the construction package, Golder will develop these drawings generally at construction level, so that only minor changes are required to prepare the construction drawings under Task 2000.

Subtask 1005 – FDEP Submittal and Review

Golder/S2Li will submit the application package to FDEP for consideration. Should any questions or minor requested changes be received from FDEP, Golder/S2Li, with the assistance of the County, will prepare responses within the required time period. Golder/S2Li shall join with the County representatives in meeting with FDEP staff should such a meeting become necessary to describe the closure design and its integration with the expanded landfill gas collection system. For costing purposes, Golder/S2Li has assumed that two requests for additional information (RAIs) from FDEP will need to be addressed, and that one meeting with FDEP will be necessary.

Task 2000 – Construction Bid Document Preparation

Golder/S2Li will work with County staff to prepare construction bid documents for obtaining a contractor to regrade the slopes, place the cover system, and install the LFG system expansion. It is envisioned that this work would start after the permit application is submitted, while it is under review by FDEP. This work will include the preparation of a package consisting of contractual language (from the County), technical specifications, and construction-level drawings. To better define the scope of services to be provided, this task has been further divided into subtasks, as detailed below.

Subtask 2001 – Construction-Level Drawings

Golder/S2Li will prepare the final design and bid plans based on the permitted west and southwestern slope closure permit drawings and details and the LFG system expansion permitted design. These drawings differ from the permitting drawings, as information specifically directed to the Contractor will be added, and certain non-applicable permitting information removed.

For the partial closure cover, Golder/S2Li will prepare grading plans and details for the west and southwestern slopes up to an elevation of approximately 90 to 95 feet. As per the permitted design, two drainage terraces will be included at approximate elevations 40 and 70 feet. The sideslope of the closure slope between terraces and to the toe of slope will be maintained at 3 horizontal to 1 vertical. The proposed closure liner system will consist of a linear low density polyethylene geomembrane (FML) with a geonet above the FML as required to facilitate drainage above the liner.

Golder/S2Li will also produce stormwater drainage plans for the closure of the west and southwestern slopes of the landfill. All stormwater management collection swales, inlets, pipes, and grades will be delineated and located for construction-level drawings. Golder/S2Li will provide construction-level details for the conveyance elements required to carry the stormwater from the sideslopes to the perimeter drainage ditches as currently defined by the existing State ERP and solid waste permit design.

The construction-level LFG system drawings will include a plan layout of the system, including the wells and header piping along with a control point table for the system. The phasing of the system construction will be critical, as it would be more economical to install the wells before the liner is installed, but when the landfill is at final grades. The header and system components will be designed for installation above the liner system to facilitate future maintenance of the system components. Necessary detail sheets will also be included to allow for construction of the system wells, condensate management system and header piping.

Golder/S2Li will submit draft construction-level drawings to the County for review and comments. Golder/S2Li will incorporate final comments from the County and finalize the construction-level drawings for use in the bid package.

Subtask 2002 – Technical Specification Preparation

Consultant will prepare the technical specifications that will include detailed information on the various components of the proposed system improvements. Specifically, technical specifications will include but not be limited to:

- Earthwork;
- Linear low density polyethylene (textured) liner;
- GCL Liner;
- Geonet;
- HDPE piping (gas and condensate conveyance);
- Gas extraction wells and wellheads;
- Condensate management components (pumps and knockout stations);
- Grassing; and

- General conditions, including surveying, temporary work, submittals, odor control, waste removal and cover, etc.

The list of specifications may be revised depending on the final design of the system. Golder/S2Li will utilize soil and liner material reports as discussed in the previous section to prepare engineering calculations and determine the material specifications for the soil cover system and geonet requirements.

Golder/S2Li will submit draft technical specifications to the County for review and comments. Golder/S2Li will incorporate final comments from the County and finalize the technical specifications for use in the bid package.

Subtask 2003 – Preparation of Bid Package

Golder/S2Li will work with County staff to prepare a complete bid package for distribution to potential bidders for the project. As with previous bid package preparations with the County, Golder/S2Li will provide project-specific information for the County's contractual language and forms and review same for applicability. Additionally, Golder/S2Li will provide copies of the technical specifications and construction-level drawings to be included in the bid package. If desired, Golder/S2Li will assist County staff in compiling the bid documents for distribution. Golder/S2Li will provide a list of potential bidders for the project for the County's use. Additionally, Golder/S2Li will prepare an estimate of construction costs based upon the County-approved final design of the system and an estimated construction schedule will be prepared and submitted to the County.

Task 3000 – Bidding Process Services

Once the County receives approval of the permit modification from FDEP and the bid packages are finalized and distributed to potential bidders, Golder/S2Li will:

1. Assist the County with the solicitation of bids, including responding to questions from prospective bidders prior to the submission of bids;
2. Attend a Pre-Bid conference with representatives of the County and prospective bidders. Golder/S2Li and the County will conduct the meeting. Golder/S2Li shall prepare meeting notes, and shall respond to Bidders' questions;
3. Prepare any required addenda and submit to the County for distribution to prospective bidders;
4. Assist the County in the review of bids and the prospective bidders' credentials; and
5. Offer a recommendation as to the lowest most responsive, most responsible bidder.

SCHEDULE

The following presents the anticipated schedule for the work described above in the Scope of Services:

- Notice to Proceed from the County by: September 1, 2003
- Permit and plans submittal to FDEP by: January 30, 2004
- Expected permit approval from FDEP by: June 1, 2004*
- Project Advertisement by: July 13, 2004*
- Receive and review bids by: August 24, 2004*

* The schedule may need to be adjusted to reflect the time period for the permit to be reviewed and approved by FDEP.

COST ESTIMATE

Golder/S2Li cost estimate to complete the work as described in the above scope of services is \$169,968.00. A detailed breakdown of the costs for each task and the labor and expenses estimated are included in the attached Table 1. As discussed, S2Li will be performing a significant portion of the work included in this cost proposal and S2Li's costs are shown in Table 1 as Subcontractor Costs. We propose to perform this work on a cost reimbursable not-to-exceed basis in accordance with labor and unit rates consistent with Golder's and S2Li's standard rates for the year 2003. The County will only be billed actual hours and expenses incurred on the project for work within the agreed scope of work. Direct expenses will be marked-up 10 percent for administrative purposes. Photocopies, computer and AutoCAD time will be billed at agreed upon unit rates. Travel and communications costs will not be billed to Nassau County as stated in our August 1998 proposal. The cost estimate will not be exceeded without prior authorization from Nassau County. It is our understanding that the source of funds for this work, as well as the future construction phase, would be two separate but established accounts. For the closure permitting, design, and construction, the fund source would be the closure escrow account that is funded each year per FDEP regulations. For the LFG system expansion permitting, design, and construction, the fund source would be the remediation account that was required to be funded by FDEP.

The cost above is for reimbursement of Golder/S2Li for the services described herein. It should be noted that the costs herein are for completion of the permitting and bidding phases of the project and do not include any costs for Golder/S2Li nor the contractor during the construction phase. Additionally, there are other costs that the County may incur during the implementation of this project. For example, as stated earlier, it is assumed that the County will cover the permit application fee for FDEP, which is \$5,000.00. Additionally, if as-built information on the edge of existing liner is not available, the services of a surveyor may be required to establish a limit for the sideslope design. Potential costs for this service would likely be less than \$1,000.00 and it is assumed that these costs would be paid directly by the County.

As stated above, there are no costs herein that include the construction phase of the project. There are typical costs available for placement of a cover system. However, this project will entail more than a typical cover system construction because some waste may need to be cut from the area because of overfilling in some areas. The construction costs will be very dependent upon how much cut, regarding, and filling will be required before cover system placement will begin. Therefore, an estimate of the construction costs associated with this project will not be defensible until the cover grading design is completed. Also, the number of additional gas wells to be installed will not be able to be accurately estimated until the extent of the cover is determined in the design phase, so costing at this point would not be beneficial to the County.

It is difficult to determine at this point how the costs for this project (including construction) compare to the original closure cost estimates that have been conducted in the past for the annual financial assurance documents. Because of the potential for non-closure-typical work as described above, the design and construction costs may be higher, but the estimated costs for the financial assurance documents are somewhat conservative and do have a 10% contingency included. Additionally, performing the closure construction in phases rather than at the end of the landfill life may provide some cost savings in the long run based on the fact that construction today will likely be more economical than in the future. However, there are additional construction items that will be required for the phasing that would not be required if all constructed at the end, such as temporary drainage features at the top of the slope or other locations to temporarily divert stormwater off the slopes. There are also cost benefits that will be gained from this construction, including reduced maintenance costs.

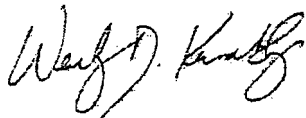
TERMS AND CONDITIONS

This work will be performed under the Agreement for Consulting Services between Golder and the County, dated February 22, 1999.

Golder/S2Li appreciates this opportunity to provide our services to Nassau County. We hope this cost proposal includes sufficient information for you to evaluate the need for this work. If you have any questions regarding this cost proposal, please do not hesitate to call.

Sincerely,

GOLDER ASSOCIATES INC.



Wendy D. Karably
Senior Consultant/Associate

Attachment

cc: Bob McIntyre – Solid Waste Director, via U.S. Mail
Omar Smith – S2Li, via U.S. Mail
Kevin Brown – Golder, via intercompany mail

FN: G:\PROJECTS\993-39\993-3928\PROPOSAL\2003 prop\LFG Exp_Closure.doc

TABLE 1

**Cost Estimate
Partial Closure and LFG System Expansion Permitting and Bidding Services
West and Southwestern Sides
West Nassau Landfill
Callahan, Nassau County, Florida**


LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Principal Sr. Consult \$145	Associate \$130	Senior Proj. Mgr. \$115	Senior Engineer \$95	Project Engineer \$85	Staff Engineer I \$75	Staff Engineer II \$65	Drafting \$55	Technician \$55	Clerical \$45		
TASK	DESCRIPTION												
1000	Permit Modification	0	20	60	0	0	75	0	60	0	16	231	\$19,145
2000	Construction Bid Document Preparation	0	16	20	0	0	75	0	40	0	24	175	\$13,285
3000	Bidding Process Services	0	40	20	0	0	24	0	16	0	12	112	\$10,720
	TOTALS:	0	76	100	0	0	174	0	116	0	52	518	\$43,150

EXPENSES		Field Vehicle (day) \$75	Travel/Per Diem (est.)	Communications (est.)	Mileage (mile) \$0.35	Shipping/Postage (est.)	Field Equipment incl. PPE (est.)	Office Computer (hr) \$10	AutoCAD Computer (hr) \$70	Photo-copying (each) \$0.15	Drawing Reproduction (est.)	Subcontractor (\$21.11 (est.))	SUBTOTAL EXPENSES
TASK	DESCRIPTION												
1000	Permit Modification	0	1200	\$0	0	\$200	\$0	16	50	1,500	\$500	\$68,956	\$72,241
2000	Construction Bid Document Preparation	0	0	\$0	0	\$100	\$0	24	35	1,000	\$800	\$45,426	\$47,416
3000	Bidding Process Services	0	400	\$0	0	\$100	\$0	12	12	3,500	\$200	\$5,976	\$7,161
	TOTALS:	\$0	\$1,600	\$0	\$0	\$400	\$0	\$520	\$1,940	\$900	\$1,500	\$120,358	\$126,818

TABLE 1

Cost Estimate
 Partial Closure and LFG System Expansion Permitting and Bidding Services
 West and Southwestern Sides
 West Nassau Landfill
 Callahan, Nassau County, Florida

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL LABOR	SUBTOTAL EXPENSES	TASK TOTAL
1000	Permit Modification	\$19,145	\$72,241	\$91,386
2000	Construction Bid Document Preparation	\$13,285	\$47,416	\$60,701
3000	Bidding Process Services	\$10,720	\$7,161	\$17,881
	TOTALS	\$43,150	\$126,818	\$169,968

Date	Action	Maker	Followup Needed	Who
8/25/03	Item being considered Approved	MM 2nd ND	Send a copy to Finance. 	Bob McIntyre Clerk Staff
Approval of cost proposal for Engineering Services Associated with Partial Closure and Landfill Gas System Expansion in the southwest corner of the West Nassau Landfill. Approved cost proposal for Engineering Services.				

Date	Action	Maker	Followup Needed	Who
8/25/03	Item being considered Approved	ND 2nd FV	Commissioner Marshall - Nay.	Clerk Staff José Deliz
Request approval to award bid to Pilman Hartenstein & Associates for consultant to evaluate Lessie Road Bridge conditions. Approved to award bid to Pilman, Hartenstein, & Associates to evaluate Lessie Road Bridge and bring back recommendation to Board.				

Date	Action	Maker	Followup Needed	Who
8/25/03	Item being considered Continued	MM 2nd ND		Attorney Chris Jackson José Deliz
Request to set public hearing dates for consideration of abandonment of easement located in lots 19 & 20, Village of Crawford and a portion of right of way of 9th Street, Village of Crawford. Approved to continue, no date given.				

Date	Action	Maker	Followup Needed	Who
8/25/03	Item being considered Approved	AA 2nd FV		Attorney Board
Consideration of request to schedule a Major Comprehensive Plan Amendment Cycle. Approved to schedule Major Comprehensive Plan Amendment Cycle for 12/8/03.				

Date	Action	Maker	Followup Needed	Who
8/25/03	Item being considered Approved	MM 2nd FV		Attorney Board
Request approval to transmit the Growth and Development Trends in Nassau Report to the Nassau County School Board. Approved to transmit the Growth and Development Trends in Nassau Report to the Nassau County School Board.				

Cathy Lewis

From: Cathy Lewis
Sent: Friday, August 29, 2003 6:54 AM
To: Melissa Ransom
Subject: FW: COST PROPOSAL TO BE PRESENTED 8/25/03 PARTIAL CLOSURE AND LFG EXPANSION-SOUTHWEST CORNER

Regarding your e-mail of yesterday, are you talking about the \$169,968? Cost proposal 3928.48 approved 8/25/03? Please read all of the below. I will need to establish accounts in two places (one for closure of wn active, and one for vertical/corrective-lfg). Don't worry about p.o.'s because as you can read below, I don't know what the split will be but I'll have to do something to put budget in. I may discuss with Chris Lacambra.

Cathy Lewis
Administrative Services Officer
Nassau County Board of County Commissioners
(904) 321-5915
clewis@nassaucountyfl.com

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

From: Karably, Wendy [mailto:WKarably@GOLDER.com]
Sent: Monday, August 25, 2003 8:25 AM
To: Cathy Lewis; Karably, Wendy
Cc: Bob McIntyre
Subject: RE: COST PROPOSAL TO BE PRESENTED 8/25/03 PARTIAL CLOSURE AND LFG EXPANSION-SOUTHWEST CORNER

I'll do my best!!

Wendy

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

From: Cathy Lewis [mailto:clewis@nassaucountyfl.com]
Sent: Saturday, August 23, 2003 8:45 AM
To: Karably, Wendy
Cc: Bob McIntyre
Subject: RE: COST PROPOSAL TO BE PRESENTED 8/25/03 PARTIAL CLOSURE AND LFG EXPANSION-SOUTHWEST CORNER

Whenever the billing is sent, can you breakout the invoices between closure and lfg? Somehow we have to allocate the costs between the two funding sources (i.e. closure escrow and corrective escrow). Thanks.

Cathy Lewis
Administrative Services Officer
Nassau County Board of County Commissioners
(904) 321-5915
clewis@nassaucountyfl.com

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

8/29/2003

From: Karably, Wendy [mailto:WKarably@GOLDER.com]
Sent: Friday, August 22, 2003 8:31 AM
To: Cathy Lewis
Subject: RE: COST PROPOSAL TO BE PRESENTED 8/25/03 PARTIAL CLOSURE AND LFG EXPANSION-SOUTHWEST CORNER

Cathy

A rough breakdown would be that the majority of the work on the SW Closure will be done by S2Li (subcontractor column on the table) and the LFG will be done by Golder. However, there is a good bit of overlap on the permitting and design work. If you need a more detailed breakdown, let me know.

Thanks,

Wendy

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

From: Cathy Lewis [mailto:clewis@nassaucountyfl.com]
Sent: Thursday, August 21, 2003 9:38 AM
To: Karably, Wendy
Subject: RE: COST PROPOSAL TO BE PRESENTED 8/25/03 PARTIAL CLOSURE AND LFG EXPANSION-SOUTHWEST CORNER

If I had read better I would have seen you have clearly stated the funding sources. So sorry. Do you have a breakdown by project/funding source, i.e. 1. SW Closure (wn closure escrow) 2. LFG (remediation/corrective escrow)? I see table 1 but it looks combined. Thanks for your time and consideration.

Cathy Lewis
Administrative Services Officer
Nassau County Board of County Commissioners
(904) 321-5915
clewis@nassaucountyfl.com

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

From: Karably, Wendy [mailto:WKarably@GOLDER.com]
Sent: Thursday, August 21, 2003 9:03 AM
To: Cathy Lewis; Karably, Wendy
Cc: Bob McIntyre; Omar Smith (E-mail)
Subject: RE: COST PROPOSAL TO BE PRESENTED 8/25/03 PARTIAL CLOSURE AND LFG EXPANSION-SOUTHWEST CORNER

Cathy

It is my understanding that the corrective action escrow should be allowed to be used for the LFG portion, but likely only that portion. The closure of the southwest corner should be able to be funded out of the closure escrow; yes it would be included in the calculation of closure costs Omar has completed.

Regarding the funding sources in the cost proposal, I thought I indicated in the COST section that the funding sources were the remediation escrow (corrective escrow) for the LFG and the closure escrow for the closure component - sorry if that wasn't clear. Should I do anything else along these lines??

Wendy

8/29/2003

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

From: Cathy Lewis [mailto:clewis@nassaucountyfl.com]

Sent: Wednesday, August 20, 2003 2:09 PM

To: Wendy Karably (E-mail)

Cc: Bob McIntyre; Omar Smith (E-mail)

Subject: COST PROPOSAL TO BE PRESENTED 8/25/03 PARTIAL CLOSURE AND LFG EXPANSION-SOUTHWEST CORNER

Regarding costs of the above for your services, \$169,968, what are the sources of payment? Specifically, can the vertical/corrective escrow be used for all or just LFG portion? The part related to closure of the SW corner, would that come from the closure escrow for the active west nassau landfill, or can corrective escrow be used? Isn't the cost of closure for the southwest corner of the active landfill part of the calculation of closure costs Omar just completed (total \$6,235,640)? The funding sources needed to be part of the approval process of this cost proposal. Thanks.

Cathy Lewis

Administrative Services Officer

Nassau County Board of County Commissioners

(904) 321-5915

clewis@nassaucountyfl.com

8/29/2003

Cathy Lewis

From: Melissa Ransom
Sent: Thursday, August 28, 2003 3:52 PM
To: Cathy Lewis
Subject: Golder

I spoke with Wendy from Golder today & she advised me that the board approved the last high dollar amount that Golder requested for various tasks. iwill need some direction from you on funding & PO's for these situations.

Thanks

Melissa Ransom

10:26 It was moved by Commissioner Marshall, seconded by Commissioner Vanzant and unanimously carried to approve the Cost Proposal for Engineering Services Bid Document Preparation and Bidding Services for Landfill Gas System Expansion and Partial Closure of the Southwest Corner West Nassau Landfill in the amount of \$58,610.00. Funding source: 70000000-239956 in the amount of \$32,610.00 and 70000000-239955 in the amount of \$26,000.00.

10:30 It was moved by Commissioner Marshall, seconded by Commissioner Vanzant and unanimously carried to approve the Cost Proposal for Preparation of Spill Prevention Control and Countermeasures Plan West Nassau Landfill in the amount of \$4993.00. Funding source: account 70341534-531000 Professional Services with transfer to appropriate Golder account within 70341534.

10:32 It was moved by Commissioner Vanzant, seconded by Commissioner Marshall and unanimously carried to approve an \$11,365.00 increase in project .59 "Assistance with Various Operational Issues" to address operational and West Nassau permit renewal issues and authorize the Vice Chairman to sign the budget transfer Solid Waste - 27 transferring the \$11,365.00 balance from Golder project .60 "Closure Permit Renewal for the Closed West Nassau Landfill" account 70361534-531322 "PS-Golder-Permit Renewal