Agenda Request For:

June 26, 2000

Department:

Solid Waste

Fund:

Solid Waste

Action requested and recommendation:

Consideration of proposal for preparation of FY 2000 Closure and Long Term Care Cost Estimates for the West Nassau, Bryceville, and Lofton Creek Landfills from Golder Associates.

**Funding Source:** 

70341534-531302

Financial/Economic Impact to Future Years Budgeting Process or Effect on Citizens:

State requirement of permit to show financial requirements. Is this action consistent with the Nassau County Comprehensive Land Use Plan?

N/A

Reviewed by:

Legal

Finance

Coordinator Walkelessed

**APPROVED** 

DATE 6/26/00 JHB

### Golder Associates Inc.

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



993-3928.25

### VIA FACSIMILE AND U.S. MAIL

May 31, 2000

Nassau County Board of County Commissioners P.O. Box 1010 3163 Bailey Road Fernandina Beach, Florida 32035

Attn:

Mr. Walter D. Gossett County Coordinator

RE:

PROPOSAL FOR PREPARATION OF FY 2000 CLOSURE AND LONG-TERM CARE COST ESTIMATES FOR THE WEST NASSAU, BRYCEVILLE, AND LOFTON CREEK LANDFILLS, AND REMAINING CAPACITY AND FILL TIME ESTIMATES FOR THE ACTIVE WEST NASSAU CLASS I LANDFILL NASSAU COUNTY, FLORIDA

Dear Mr. Gossett:

As requested at a meeting with you on May 9, 2000, Golder Associates Inc. (Golder) has prepared this proposal to the Nassau County Board of County Commissioners (Board) for the preparation of the Fiscal Year (FY) 2000 Closure and Long-Term Care Cost Estimates for the West Nassau (both closed and active Class I), Bryceville, and Lofton Creek Landfills located in Nassau County, Florida. Also included in the proposed scope of services is an estimate of the remaining capacity (airspace) and fill time available in the current active portion of the West Nassau Class I Landfill.

The closure cost and remaining capacity estimates for the active West Nassau Class I Landfill will be based on the revised final cover design submitted with the permit renewal application to the Florida Department of Environmental Protection (FDEP) in December 1999, and the revised subgrade contours for Cells 7, 9, 11, and 13 submitted to the FDEP on May 25, 2000. Golder understands that approval of the application is pending and that the draft permit and notice of agency action will be issued by the FDEP in mid-June 2000.

This proposal assumes that the up-to-date (2000) topographic contour map of the West Nassau Landfill will be provided to Golder by the County in a timely manner. We understand that the County is currently in the process of selecting a contractor for this purpose and that the aerial survey is scheduled for June 2000. We have also assumed that the new topographic contour map will be provided in AutoCAD® Release 14 format.

This proposal describes the scope of services for this project, along with a schedule and cost estimate for completing the work as described herein. S2L, Incorporated (S2Li) will work as a

subconsultant to Golder in preparing the cost estimates and calculating the remaining capacity and fill time for the active landfill.

### SCOPE OF WORK

The scope of work is divided into four separate tasks, each of which is discussed in detail below.

## Task 1 - Inspection of Existing Facilities

Task 1 will consist of a field inspection of the closed landfill facilities (Old West Nassau, Bryceville, and Lofton Creek Landfills) to evaluate the existing conditions and to determine if there are any additional repair and maintenance costs that were not identified during previous updates to the long-term care estimates. The County's records of actual costs incurred during the past year for long-term care of these landfills will be reviewed to determine if adjustments to the long-term care estimates are required. It is assumed that the inspections of all three facilities will all be accomplished in one day.

This task will also include a limited review of the groundwater monitoring data from the three closed landfills (Old West Nassau, Bryceville, and Lofton Creek) collected in the last year to assure that the appropriate water quality data is being collected and the reporting criteria are being met. It is assumed that no change in groundwater quality has occurred since the last submittal and that no change in the groundwater monitoring plan is required.

# Task 2 - Remaining Capacity and Fill Time Estimates

Task 2 will include an estimate of the remaining capacity (in-place volume) and timeline for filling of the active West Nassau Class I Landfill. Specifically, this task will include the following:

- Review and check the aerial survey contractor's calculations for the landfill volume depleted since the last survey (July 1999) using the topographic contour maps from 1999 and 2000;
- Estimate the in-place waste density in the landfill over the past year based on the volume depleted between the 1999 and 2000 aerial surveys, and the disposal tonnage recorded by the County over the same period;
- Determine the additional capacity to be realized from the change in the proposed final contours submitted with the permit renewal application in December 1999, and from the lowering of the subgrade in Cells 7, 9, 11, and 13 submitted to the FDEP on May 25, 2000;
- Determine the remaining available capacity and estimated fill time available in the currently constructed portion of the active landfill, prior to construction of Cells 7, 9, 11, and 13, which are currently scheduled to be completed by December 2000; and
- Determine the remaining available capacity in the landfill between the 2000 topographic survey and the final design grades of the landfill, as proposed in the permit renewal application.

# Task 3 - Prepare Annual Estimates for FDEP

Task 3 will include an update of the closure and long-term care cost estimates for the West Nassau (both closed and active Class I), Bryceville, and Lofton Creek Landfills. The long-term care cost estimates for the three closed landfills will be adjusted to account for any changes to the projected maintenance, repair, and monitoring costs identified during Task 1. The cost estimates will also be reviewed and updated to account for inflation as well as a reduction in the remaining long-term care period since the previous estimates were submitted to the FDEP for 1999. The FDEP will be contacted to obtain the latest inflation factors and the County's demonstrated escrow balances for each site to determine any surpluses or deficits.

The closure and long-term care cost estimates for the active West Nassau Class I Landfill will be revised to reflect proposed changes to the final cover, surface water management, and gas management systems submitted with the permit renewal application in December 1999, and in accordance with applicable permit conditions listed in the new permit as issued by the FDEP. These estimates will include the cost to close the facility in accordance with the closure plan approved by the FDEP, and the cost to maintain the site for the 30-year post-closure period.

The updated cost estimates will be prepared using FDEP forms for Solid Waste Management Facility Financial Assurance. These estimates will be submitted in draft form to the County for review and approval. The final package will then be signed and sealed by a Professional Engineer registered in the State of Florida and forwarded to the FDEP and the County.

## Task 4 - Prepare Annual Estimates for County Finance Department

Task 4 will include the updated closure and long-term care cost estimates generated under Tasks 1 through 3, in addition to the following:

- Estimate of the total landfill capacity of the active West Nassau Class I Landfill used for all the years the landfill has been operating and projected through September 30, 2000; and
- Prepare detailed information required to assist the County Finance Department with the 1999/2000 fiscal year audits.

# **SCHEDULE**

The draft package containing the updated closure and long-term care cost estimates for all of the County landfills, as well as the remaining capacity and fill time estimates for the active West Nassau Class I Landfill, will be submitted to the County within 30 days of approval of this proposal by the Board. This schedule assumes that the updated 2000 topographic contour map in AutoCAD format is made available to Golder by the County's surveyor at least two weeks prior to submittal of the draft document. Golder/S2Li will finalize the documents and submit the final package to the FDEP and the County within one week of receipt of any comments from the County on the draft package. The schedule as currently envisioned will provide sufficient time to submit the updated cost estimates to the FDEP by the September 1 deadline specified in Chapter 62-701.630(4)(a).

#### **COST ESTIMATE**

Golder's cost estimate to complete this work is \$19,185 based on the scope of services as outlined above. A detailed breakdown of this cost estimate is presented in Table 1, which is attached to this letter. Golder proposes to perform this work on a cost reimbursable not-to-exceed basis in accordance with the labor and unit rates listed in Table 1. The County will only be billed actual hours and expenses incurred on the project for work within the agreed scope of work. Subconsultant work billed by S2Li will not be marked-up by Golder. Direct expenses will be marked-up 10 percent for administrative purposes. Photocopies, computer and CADD time will be billed at the unit rates listed in Table 1. 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.

A copy of S2Li's cost estimate is also attached to provide a breakdown of the subcontractor costs listed in Table 1. It should be noted that the costs listed under Tasks 3 and 4 in S2Li's estimate have been combined into Task 3 of Table 1, and their cost for Task 5 in listed under Task 4 of Table 1.

### **TERMS AND CONDITIONS**

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

Golder appreciates this opportunity to provide engineering services to Nassau County. If you have any questions regarding this proposal, please do not hesitate to call.

Very truly yours,

GOLDER ASSOCIATES INC.

Francis T. Adams, P.E. Senior Project Manager

cc:

Mr. Robert P. McIntyre, Nassau County Solid Waste Director

Mr. Omar E. Smith, P.E., S2Li (Atlanta)

TABLE 1
Cost Estimate
FY2000 Closure/Long-Term Care Cost Estimates
West Nassau, Bryceville, and Lofton Creek Landfills
Nassau County, Florida

					LABOR C	ATEGORY A	ND RATE						
LABO	)R	Principal	Associate	Senior Pr. Mgr.	Senior Engineer	Project Engineer	Staff Engineer I	Staff Engineer II	Drafting	Technician	Clerical	TOTAL HOURS	SUBTOTAL LABOR
TASK	DESCRIPTION	\$130	\$110	\$105	\$95	\$75	\$60	\$45	\$45	\$40	\$40		
1	Inspect Existing Facilities	o	10	0	o	8	0	2	۰ ا	0	2	22	\$1,870
2	Remaining Capacity and Fill Time	0	4	0	0	0	0	2	2	0	2	10	
3	Prepare Annual Estimate for FDEP	0	4	0	0	0	0	0	0	٥ ا	2	6	\$520
4	Prepare Annual Estimate for Count	0	2	0	0	0	0	0	0	0	2	4	\$300
	TOTALS:	0	20	0	0	8	0	4	2	0	8	42	\$3,390

	NSES	Field Vehicle (day)	Per Diem (day)	Commun- ications (est.)	Vehicle Mileage (mile)	Shipping/ Postage (est.)	Lab Testing (est.)	Office Computer (hr)	AutoCAD Computer (hr)	Photo- copying (each)	Field Equipment (est.)	Subcon- tractors (est.)	SUBTOTAL EXPENSES
TASK	DESCRIPTION	\$75	\$25		\$0.325			\$10	\$20	\$0.15			
1	Inspect Existing Facilities	0	o	\$0	0	\$25	\$0	o	0	200	<b>\$4</b> 5	\$2,345	\$2,445
2	Remaining Capacity and Fill Time	0	0	\$0	0	\$20	\$0	2	2	100	\$0	\$7,349	\$7,444
3	Prepare Annual Estimate for FDEP	0	o	\$0	0	\$25	\$0	2	0	400	\$0	\$4,965	\$5,070
4	Prepare Annual Estimate for Count	0	0	\$0	0	\$15	\$0	2	0	100	\$0	\$786	\$836
	TOTALS:	\$0	\$0	\$0	\$0	\$85	\$0	\$60	\$40	\$120	\$45	\$15,445	\$15,795

	COST SUMMARY											
TASK	DESCRIPTION	SUBTOTAL LABOR	SUBTOTAL EXPENSES	TASK TOTAL								
1	Inspect Existing Facilities	\$1,870	\$2,445	\$4,315								
2	Remaining Capacity and Fill Time	\$700	\$7,444	\$8,144								
3	Prepare Annual Estimate for FDEP	\$520	\$5,070	\$5,590								
4	Prepare Annual Estimate for County	\$300	\$836	\$1,136								
	TOTALS	\$3,390	\$15,795	\$ <u>19,185</u>								

Client	Golder/Nassau County	Budget Estimate	Multip
Project Name	Engineering Services-FY2000 Closing & LTC Cost Estimates	S2L, incorporated	Labor
Project Number	00-077		Direct
Date of Estimate	22-May-00		Prof.

Budget Estimate	Multipliers:	<u></u> _
32L, Incorporated	Labor	1.00
	Directs	1.10
	Prof. Associates	1.10

Date of Estimate	22-Way-00					L	FIUI. ASSUCIALES	1.10
LABOR CATEGORY	TASK 1 Existing Facilities Inspections	TASK 2 Update Capacity and Timeline Estimates	TASK 3 Coordination w/FDEP	TASK 4 FDEP Closing/ LTC Estimate	TASK 5 County Finance Documentation	_	TOTAL HOURS	MULTIPLIED LABOR \$
Project QC Officer	2	2		2			6	\$930
Senior Project Manager	12	28	2	24	4	[	70	\$9,450
Sr. Engineer		5		8			13	\$1,300
Associate Engineer		8	tatatetetetetetetetetistististististististist				8	\$520
CADD		26					26	
Secretary	8 ::::::::::::::::::::::::::::::::::::	4		4	4		20	\$900
SUBTOTAL HOURS	22	73	2	38	8	0	143	<b>\$</b> C
SUBTOTAL LABOR \$	\$2,290		1					\$14,400
						<u>-</u>		
TOTAL LABOR HOURS	22	73	2	\$38	\$8	0	143	
TOTAL LABOR COSTS	\$2,290	\$6,590	\$270	\$4,530	\$720	\$0		\$14,400
	TASK 1	TASK 2	TASK 3	TASK 4	TASK 5			
ITEM	Existing	Update	Coordination		County		TOTAL	MULTIPLIFD

ITEM DESCRIPTION	TASK 1 Existing Facilities Inspections	TASK 2 Update Closure Estimate	TASK 3 Coordination w/FDEP	TASK 4 FDEP Closing/ LTC Estimate	TASK 5 County Finance Documentation	TOTAL	MULTIPLIED DIRECTS \$
Transportation						<b>5</b> 0	
Telephone Reproductions/Graphics CADD	\$50	<b>\$5</b> 0 <b>\$</b> 390		\$100		\$0 \$200 \$390	\$429
Computer Shipping/Molling		\$200		\$50	\$10	\$200 \$60	\$1.15.45.45.45.45.45.45.45.45.45.45.45.45.45
Shipping/Mailing Misc		\$50		<b>450</b>	\$10 \$50	\$60 \$100 \$0	\$66 \$110 \$0
						\$0 \$0	

TOTAL DIRECT COSTS	\$50	\$690	\$0	\$150	\$60	\$0	\$950	
MULTIPLIED DIRECT	\$55		\$0	\$165	\$66	\$0		\$1,045
TOTAL \$/TASK	\$2,345	\$7,349	\$270	\$4,695	\$786	\$0	TOTAL SVCS	\$15,445