

Golder Associates Inc.

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Jacksonville, FL USA 32256
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Fax (904) 363-3445



VIA FACSIMILE AND U.S. MAIL

March 1, 2000

993-3928.20

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

Attention: Mr. Walter D. Gossett
County Coordinator

**RE: COST PROPOSAL FOR
COMPLIANCE MONITORING WELL INSTALLATION
AND SAMPLING
WEST NASSAU CLASS I LANDFILL
NASSAU COUNTY, FLORIDA**

00 MAR -3 PM 12:05

Dear Mr. Gossett:

Golder Associates Inc. (Golder) is pleased to submit this cost proposal to the Nassau County Board of County Commissioners (Board) for professional services to assist the County in addressing groundwater detections at the West Nassau Class I Landfill in Nassau County, Florida. Golder submitted a letter on February 15, 2000 to the Florida Department of Environmental Protection (FDEP), on behalf of the Board, which outlined the plan to address the recent groundwater detections at the landfill. FDEP responded to Golder's letter in a letter dated February 24, 2000, which outlined the required actions to be taken by the County. This cost proposal includes a cost estimate to perform the initial actions indicated by FDEP's letter¹.

The required actions include the installation and sampling of three compliance monitoring wells². The FDEP letter also stipulates sampling and analyses requirements for these wells. In addition, the three monitoring wells that indicated the detections, along with the background monitoring well, are required to be sampled for specific parameters, as specified in the letter. It should be noted that this cost proposal only includes the initial sampling of the wells; these wells have either quarterly or annual sampling requirements in addition to the sampling that must be performed within 90 days of the date of receipt of the FDEP's letter by the County. We understand that the County has an existing contract with Columbia Analytical Services, Inc. (CAS), so it is assumed that Columbia will perform the initial sample analyses through this

¹ This cost proposal covers the well installation and sampling required by FDEP. A separate cost proposal is being prepared to address the preparation and submittal of a contamination assessment plan.

² Golder's February 15, 2000 letter to FDEP suggested existing wells MW-12 and MW-14 be used as compliance wells. However, FDEP's response letter dated February 24, 2000 indicated that these wells would be unacceptable as compliance wells and that three new wells, as shown in the site's permit, would be required.

contract and invoice the County directly. Golder will coordinate the sampling and analyses effort with CAS, as discussed below. The scope of services, along with the schedule, cost estimate, and terms and conditions for this cost proposal are presented below.

SCOPE OF SERVICES

Task 001 - Well Installation

Golder will contract with a drilling contractor to install the three required compliance monitoring wells. Services to be provided by the drilling contractor include well installation, well development, and construction of a protective surface casing (including locking cover, concrete pad, and bollards). The monitoring wells will be installed at locations directly across the slurry wall from each of the three detection monitoring wells that indicated detections (see Figure 1). These locations are as shown in the County's permit (Attachment 5) for future compliance well locations and will be designated C-9, C-10, and C-11 corresponding to the detection well designations. As shown on Figure 1, the wells are shown at locations that may or may not currently be accessible. Golder will make a visit to the site prior to mobilization of the driller to evaluate the well locations as shown and determine if any clearing or grading work is required. It is assumed that the County would perform any clearing or grading that is necessary prior to the scheduled mobilization of the driller.

The wells will be installed in accordance with Chapter 62-701.510(3)(d) of the Florida Administrative Code (F.A.C.) and will be constructed similar to the other monitoring wells at the landfill. One exception is that the wells will be constructed of 2-inch diameter PVC instead of 4-inch diameter PVC. It is assumed that all drill cuttings and development/purge water can be disposed on the ground adjacent to the well. Golder will provide oversight for the drilling activities, including providing a geologist to log the borings, and to monitor and document the well installation and development.

Task 002 - Well Sampling

In accordance with the requirements of the site's permit (which refers to Chapter 62-701.510, F.A.C., the affected detection wells, the background well, and the newly installed compliance wells (under Task 001) must be sampled and analyzed for specific parameters. Once the well installation under Task 001 has been completed, Golder will sample the wells and submit the samples to CAS for analyses. Golder will also perform the required field parameter analyses, as listed in the permit. A total of seven wells will be sampled. The samples will be collected in accordance with Golder's FDEP-approved Comprehensive Quality Assurance Plan (CompQAP). Quality assurance (QA) samples are also required to be collected, including one duplicate and one equipment blank. Golder will coordinate with CAS to obtain the appropriate sample containers and shuttles for the required analyses and then deliver the samples to CAS when sampling is completed. It is assumed that CAS will provide Golder with the appropriate sample containers (including the required preservatives, if any), shuttles, and chain-of-custody at no cost to Golder. It is also assumed that CAS will perform any required quality control (QC) analyses in accordance with its own FDEP-approved CompQAP. As stated above, it is assumed that the analyses will be performed by CAS under its existing contract with the County and will invoice the County directly (i.e., analyses costs are not included in this cost proposal).

Task 003 - Reporting

In accordance with the site's permit, a report on the installation of the new wells is required. This report is required to include information on the drilling and well installation procedures as well as survey data for the wells (such as top of pipe and ground surface elevations and horizontal location). Golder proposes to prepare a well installation report that would also include the results of the laboratory analyses of all the wells sampled under Task 002 and an evaluation of the data. This cost proposal does not include the preparation of any plans that would be required if the compliance wells indicated contamination.

This cost proposal assumes that the County will contract with a surveyor to survey the well locations and elevations. However, Golder will coordinate with the County's surveyor as necessary to assure that the appropriate information is collected. It is also suggested that the surveyor include in its scope to survey the locations and elevations for all monitoring wells at the landfill. As has been discussed with County staff, there is at least one well that has been extended due to road construction for which updated elevation data has not been made available to Golder. Therefore, to assure that all the survey data for wells at the site is up to date, all the wells should be surveyed.

SCHEDULE

As stated in FDEP's February 24, 2000 letter, the well installation and sampling is required to be completed within 90 days of receipt of the letter by the County. It is our understanding that this cost proposal will be presented to the Board at its scheduled meeting on March 13, 2000. Assuming approval of this scope at that meeting, we would anticipate that the well installation could be conducted during the first week of April (depending on availability of the driller and the weather) and that the well installation would take no more than two days. Golder would then sample the wells no later than the following week. Therefore, assuming the laboratory analyses would be completed within 30 days of sample receipt, the results would be available not later than May 12, 2000. Golder will prepare a draft report for the County's review within one week of receipt of the data, followed by submittal to the FDEP upon receipt of the County's comments. This schedule will meet the 90-day requirement by the FDEP.

COST ESTIMATE

Golder's cost estimate to complete this work is \$12,990 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. Direct expenses will be marked-up 10 percent for administrative purposes, and the drilling subcontractor will be marked up 5 percent. Photocopies, computer and AutoCAD 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.

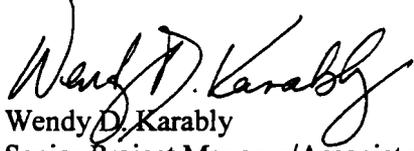
TERMS AND CONDITIONS

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 our services to Nassau County. If you have any questions regarding this cost proposal, please do not hesitate to call.

Very truly yours,

GOLDER ASSOCIATES INC.


Wendy D. Karably
Senior Project Manager/Associate

Attachment

cc: Bob McIntyre – via facsimile only

FN: G:/COMMON/ADAMS/PROPOSAL/NASSAUCO/WellProp.DOC

TABLE 1
Cost Estimate
Well Installation and Sampling
West Nassau Landfill
Callahan, Nassau County, Florida

LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Principal \$130	Associate \$110	Senior Proj. Mgr. \$105	Senior Engineer \$95	Project Engineer \$75	Staff Engineer I \$60	Staff Engineer II \$55	Drafting \$45	Technician \$40	Clerical \$40		
TASK	DESCRIPTION												
001	Well Installation	0	8	0	0	0	20	0	0	0	2	30	\$2,160
002	Well Sampling	0	4	0	0	0	12	0	0	12	0	28	\$1,640
003	Reporting	0	2	8	0	0	16	0	4	0	6	36	\$2,440
TOTALS:		0	14	8	0	0	48	0	4	12	8	94	\$6,240

EXPENSES		Field Vehicle (day) \$75	Per Diem (day) \$25	Communi- cations (est.)	Mileage (mle) \$0.33	Shipping/ Postage (est.)	Lab Testing (est.)	Office Computer (hr) \$10	AutoCAD Computer (hr) \$20	Photo- copying (each) \$0.15	Field Equipment (est.)	Subcon- tractors (est.)	SUBTOTAL EXPENSES
TASK	DESCRIPTION												
001	Well Installation	2	0	\$0	0	\$0	\$0	0	0	50	\$50	\$5,500	\$5,708
002	Well Sampling	2	0	\$0	0	\$50	\$0	0	0	50	\$550	\$0	\$758
003	Reporting	0	0	\$0	0	\$75	\$0	10	4	200	\$0	\$0	\$285
TOTALS:		\$300	\$0	\$0	\$0	\$125	\$0	\$100	\$80	\$45	\$600	\$5,500	\$6,750

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL LABOR	SUBTOTAL EXPENSES	TASK TOTAL
001	Well Installation	\$2,160	\$5,708	\$7,868
002	Well Sampling	\$1,640	\$758	\$2,398
003	Reporting	\$2,440	\$285	\$2,725
TOTALS		\$6,240	\$6,750	\$12,990

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VIA FACSIMILE AND U.S. MAIL

March 6, 2000

993-3928.20

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

Attention: Mr. Walter D. Gossett
County Coordinator

**RE: ADDENDUM TO COST PROPOSAL FOR
COMPLIANCE MONITORING WELL INSTALLATION
AND SAMPLING
WEST NASSAU CLASS I LANDFILL
NASSAU COUNTY, FLORIDA**

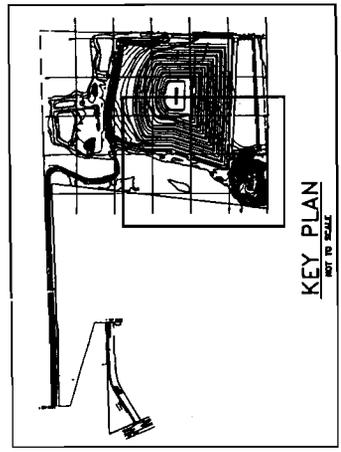
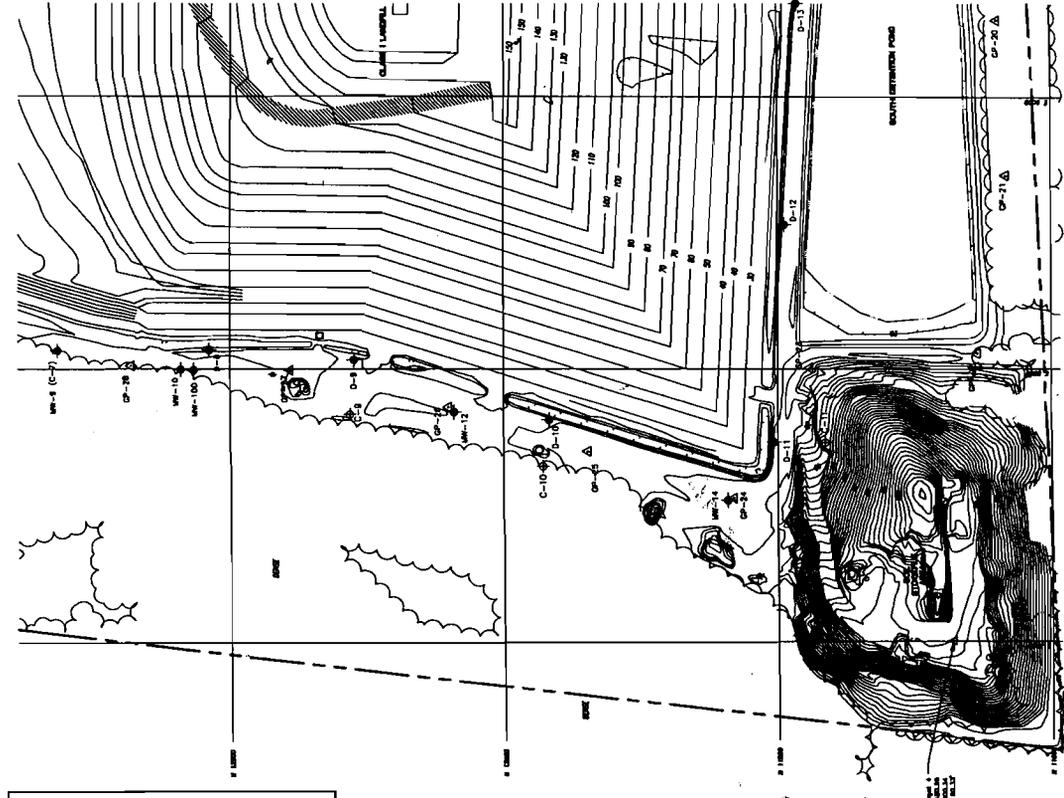
Dear Mr. Gossett:

Golder Associates Inc. (Golder) is pleased to submit this revised cost proposal to the Nassau County Board of County Commissioners (Board) for professional services to assist the County in addressing groundwater detections at the West Nassau Class I Landfill in Nassau County, Florida. Golder submitted the original cost proposal for this work to the Board on March 1, 2000. However, in discussions with the Florida Department of Environmental Protection (FDEP) on March 2, 2000, FDEP indicated that a minor modification to the permit would be required for this work. As a result, an additional task has been added to the original cost proposal to cover the costs associated with preparation and submittal of a minor modification letter. The scope of work included in this additional task is described below. Note that this is only an additional task and the other tasks are still included in the original project cost proposal. Because the tasks were set in the original proposal, we have simply added Task 004, even though the work will be conducted prior to Task 001.

Task 004 - Minor Permit Modification

Golder will prepare a letter to FDEP that provides details of the plans for monitoring well installation, including approximate well locations, drilling methods, well construction details, materials to be used, etc. This letter will serve as a request for a minor modification to the site's permit. A draft of the letter will be provided to the County for review, and upon receipt of comments, the letter will be finalized and submitted to the FDEP and the County.

0011R-6 0111:00
000110 000000



LEGEND

- (THE FOLLOWING LINES ARE NOT TO SCALE)
- PROPERTY LINE
 - LANDFILL ACCESS ROAD
 - TREE LINE
 - PAVEMENT
 - STRUCTURE
 - EDGE OF WATER
 - DESIGN CONTOUR - FINAL COVER
 - TOPOGRAPHIC CONTOUR (SCREENED FOR EXISTING TOPOGRAPHIC CONTOUR)
 - DEPRESSION CONTOUR (SCREENED FOR EXISTING TOPOGRAPHIC CONTOUR)
- (THE FOLLOWING SYMBOLS ARE NOT TO SCALE)
- CONTROL TARGET
 - UTILITY POLE
 - GP-12 Δ GAS PROBE LOCATION
 - GP-10 Δ GP-11 Δ COMPLIANCE WELL LOCATION
 - D-10 ◊ D-11 ◊ DETECTION WELL LOCATION
 - C-11 ◊ C-12 ◊ PROPOSED COMPLIANCE WELL LOCATION
- SCALE IN FEET
- 0 200 400

Golden Associates JACKSONVILLE, FLORIDA

CLIENT/PROJECT: WEST NASSAU LANDFILL

TITLE: PROPOSED COMPLIANCE WELL LOCATIONS

DATE	2/29/00	FOR NO.	983-3928
SCALE	AS SHOWN	REV. NO.	REV. 1A
FILE NO.	988-3928	SHEET NO.	1

TABLE 1

**Revised Cost Estimate
Well Installation and Sampling
West Nassau Landfill
Callahan, Nassau County, Florida**

LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Principal \$150	Associate \$110	Explor Proj Mgr. \$105	Senior Engineer \$95	Project Engineer \$75	Staff Engineer I \$60	Staff Engineer II \$55	Drafting \$45	Technician \$40	Clerical \$40		
TASK	DESCRIPTION												
001	Well Installation	0	8	0	0	0	20	0	0	0	2	30	\$2,160
002	Well Sampling	0	4	0	0	0	12	0	0	12	0	28	\$1,640
003	Reporting	0	2	8	0	0	16	0	4	0	6	36	\$2,440
004	Minor Permit Modification	0	2	2	0	0	6	0	2	0	2	14	\$960
TOTALS:		0	16	10	0	0	54	0	6	12	10	108	\$7,200

EXPENSES		Field Vehicle (day) \$75	Per Diem (day) \$25	Communications (est.)	Mileage (mile) \$0.33	Shipping/Postage (est.)	Lab Testing (est.)	Office Computer (hr) \$10	AutoCAD Computer (hr) \$20	Photocopying (each) \$0.15	Field Equipment (est.)	Subtractors (est.)	SUBTOTAL EXPENSES
TASK	DESCRIPTION												
001	Well Installation	2	0	\$0	0	\$0	\$0	0	0	30	\$50	\$5,500	\$5,708
002	Well Sampling	2	0	\$0	0	\$50	\$0	0	0	50	\$550	\$0	\$758
003	Reporting	0	0	\$0	0	\$75	\$0	10	4	200	\$0	\$0	\$285
004	Minor Permit Modification	0	0	\$0	0	\$20	\$0	4	2	50	\$0	\$0	\$108
TOTALS:		\$300	\$0	\$0	\$0	\$145	\$0	\$140	\$120	\$53	\$600	\$5,500	\$6,858

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL LABOR	SUBTOTAL EXPENSES	TASK TOTAL
001	Well Installation	\$2,160	\$5,708	\$7,868
002	Well Sampling	\$1,640	\$758	\$2,398
003	Reporting	\$2,440	\$285	\$2,725
004	Minor Permit Modification	\$960	\$108	\$1,068
TOTALS		\$7,200	\$6,858	\$14,058

MAR-05-00 11:13 FROM: GOLDER ASSOCIATES TO: [REDACTED]

10:10:06 After much discussion, it was moved by Comms.
Marshall, seconded by Commissioner Cooper and unanimously carried
approve addendum to cost proposal from Golder Associates dated
2000, Tasks 1 thru 5 in the amount of \$85,323, for preparation
construction drawings and specifications, and surface water dr
modifications for the West Nassau Class I Landfill.

It was moved by Commissioner Howard, seconded by
Commissioner Marshall and unanimously carried to a
Commissioner Marshall dated March 1, 2000 and addendum
from Golder Associates dated March 1, 2000 and addendum
2000 for compliance monitoring well installation and
Nassau Class I Landfill, Tasks 1 thru 4 in the amount
of \$14,054