

CS-17-160

**WORK AUTHORIZATION # CM2096-WA27
NASSAU COUNTY
BOARD OF COUNTY COMMISSIONERS
RFQ/BID NO. NC13-033**

RCVD COUNTY MGR
22 FEB '18 AM 11:29

Consultant:	S2L, Incorporated
Contract Number:	CM2096
Contact Name:	Omar E. Smith, P.E., V.P.
Contact Number:	407-475-9163
Email:	osmith@s2Li.com

CURRENT WORK AUTHORIZATION			
Project Short Title: Groundwater Monitoring Well Abandonment Services for Lofton Creek			
		CONTRACT OVERVIEW	
		Total of Previous Authorizations	\$1,380,254.55
Date Submitted	2/12/18	Adjustments/Change Orders	(\$13,403.63)
Amount	\$33,148.56	This Work Authorization	\$33,148.56
Scheduled Completion	45 days	Current Contract Total	\$1,399,999.48

This Work Authorization is to the AGREEMENT between Nassau County and the Consultant known as the Continuing Contract for Professional Engineering Services – Solid Waste Landfills and Other Related Ancillary Facilities for Nassau County, Florida, dated April 16, 2014. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

S2Li will provide professional services required to abandon certain groundwater monitoring wells and piezometers at the Lofton Creek landfill in accordance with St. Johns River Water Management District (SJRWMD) regulations, pursuant to the scope of services, attached hereto as Attachment "A".

ARTICLE 2. Time Schedule

Total expected time period for completion is 45 days from the notice to proceed.

ARTICLE 3. Budget

The cost estimate to conduct the Work as described in the Scope of Services is \$33,148.56. Costs incurred shall be on a time and material basis. Detailed breakdown of estimated cost attached as Exhibit 1.


Article 4. Other Provisions

The Services covered by this Work Authorization will be performed in accordance with the provisions set forth in the AGREEMENT referenced above and any of its attachments or schedules. Additional terms or contract provisions whether submitted purposely or inadvertently, shall have no force or effect. This Work Authorization will become a part of the referenced AGREEMENT when executed by both parties.

In presenting this Work Authorization, Consultant agrees that:

Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed scope of services are attached.

AGREED TO BY:

BY: 
S2L, Incorporated
Print Name: Samuel B. Levin
Title: President
Date: February 15, 2018

RECOMMENDED AND APPROVED BY NASSAU COUNTY:

Public Works Director:

Contract Management:

Office of Management & Budget
CEL 2.23.18

County Manager:

APPROVED by the County Manager, designee for the BOARD OF COUNTY
COMMISSIONERS, the 8th day of March, 2018.

ACCOUNT NO.: 01363534-531000

Attachment "A"

Scope of Services

Groundwater Monitoring Well Abandonment Services

for the

Lofton Creek Landfill

County Contract Number: CM2096-WA27
S2Li Project Number: 18-781

BACKGROUND

On January 24, 2018, the Florida Department of Environmental Protection ("FDEP") issued a permit modification ("Permit") of Nassau County's ("County") Lofton Creek Landfill ("Landfill") which among other things modified the Landfill's Water Quality Monitoring Plan ("Plan"). This monitoring plan reduced the number of wells requiring to be monitored. A total of 26 wells and piezometers have been removed from the Plan. Appendix 3, Item 1.g. of the permit requires that, within 60 days of permit issuance, all piezometers and wells not a part of the permitted groundwater monitoring plan be plugged and abandoned, in accordance with St. Johns River Water Management District Rule 40C-3.531.

This Work Authorization provides for the services required to abandon certain groundwater monitoring wells and piezometers at the Lofton Creek Landfill in accordance with St. Johns River Water Management District (SJRWMD) regulations. Under the scope of services for this Work Authorization, S2L, Incorporated (S2Li) and its subconsultant, The Colinas Group ("TCG") (collectively known as the "S2Li Team") will perform the following:

SCOPE OF SERVICES

S2Li Team will provide the services of a Florida-licensed Water Well Contractor (Environmental Drilling Service, Inc.) to conduct the well abandonment process. Plugging and abandonment of existing monitoring wells at the County's closed Landfill will be performed in accordance with the requirements of Chapter 62-701, F.A.C., Rule 62-532.500(4), Florida Administrative Code (F.A.C.) and SJRWMD District Rule 40C-3.531.

S2Li Team has identified monitoring wells to be plugged and abandoned at the Landfill based on information available on the FDEP Oculus website related to routine semi-annual monitoring activities. Twenty-Six existing monitoring wells and piezometers have been identified to be abandoned at the Landfill. A Schedule of Monitoring Wells, including reported total depths for individual wells, is presented in Attachment A to the scope of services provided by TCG.

Upon notice to proceed, the S2Li Team will prepare and submit a written request to FDEP in accordance to the Permit's Appendix 3, Item 1.g. to obtain written approval to proceed with the abandonment actions as described below.

A total of 26 monitoring wells are fitted with above-grade casing risers, metal well covers/locks and concrete well pads as indicated on Attachment A to the scope of services prepared by TCG. These above-

ground structures will be dismantled and removed from the site for proper disposal. The S2Li Team will measure and record total well depth at each well prior to abandonment.

Above-grade well casings will be cut-off and the wells filled with neat cement from the well bottom back to land surface. Placement of neat cement will proceed using a tremie pipe to eliminate the possibility of grout-bridging and to confirm complete filling from bottom to top by grout returns to land surface.

Debris, including concrete well pads, well covers, pipe and grout waste, created by the abandonment process, will be removed from the site and transported for disposal at a permitted waste disposal facility. The S2Li Team will direct and oversee the abandonment procedures, confirm complete grouting and prepare DEP Well Abandonment Form 62-532.900(2), F.A.C. for each monitoring well abandoned.

A Site Map will be prepared depicting locations of abandoned monitoring wells. S2Li Team will prepare a Well Abandonment package suitable for submission to the FDEP and provide one electronic copy of the submittal documents to the County to complete this project.

Deliverables: Well Abandonment Package.

SCHEDULE

Total expected time period for this work authorization is 45 days from the notice to proceed.

SCOPE OF SERVICES - COUNTY ASSUMPTIONS

It has been assumed that the County will perform, provide or make available the following:

- Access into the Landfill;
- Prior to field activities, removal of any salvageable materials e.g. locks.

COST ESTIMATE

The cost estimate to conduct the Work as described in the above listed Scope of Services is **\$33,148.56**. A detailed breakdown for each task in conjunction with the estimated labor hours, contract labor rates, and expenses are included in the attached Exhibit 1 for the S2Li Team. A 15% contingency to the drilling contractor was added to the fee estimate to cover any additional costs associated with additional drill depths, weather delays, difficult access issues, etc. This contingency will only be used if necessary. Costs incurred will be invoiced on a time and material basis. The County will be notified when the overall project budget is nearing its limit.

February 12, 2018

Total Project Costs

S2Li Fee Estimate

EXHIBIT 1

S2Li No.

18-781

County No.

CM2096-WA27

Groundwater Monitoring Well Abandonment

Lofton Creek Landfill

Nassau County, Florida

LABOR		LABOR CATEGORY AND RATE								TOTAL HOURS	SUBTOTAL LABOR
		Project Dir./ Principal \$225.00	Regional Manager/ QC Officer \$208.88	Principal Engineer \$171.38	Senior Engineer \$122.51	Project Engineer \$81.81	Associate Engineer \$47.47	CAD Technician \$47.47	Office Manager \$68.46		
TASK	DESCRIPTION										
	Monitoring Well Abandonment	2	24	0	0	0	0	0	4	30	\$ 5,736.96
	SUBTOTALS:	2	24	0	0	0	0	0	4	30	\$ 5,736.96

EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)			The Colinas Group (see attached)	Drilling & Field Contingencies		SUBTOTAL EXPENSES
TASK	DESCRIPTION										
	Monitoring Well Abandonment	\$ -	\$ -	\$ -			\$ -	\$ 25,011.60	\$ 2,400.00		\$ 27,411.60
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -		\$ -	\$ 25,011.60	\$ 2,400.00	\$ -	\$ 27,411.60

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL S2Li LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK TOTAL
	Monitoring Well Abandonment	\$ 5,736.96	\$ 27,411.60	\$ 33,148.56
TOTALS		\$ 5,736.96	\$ 27,411.60	<u>\$ 33,148.56</u>

Attachment - The Colinas Group Fee Estimate - Subconsultant

Groundwater Monitoring Well Abandonment
Lofton Creek Landfill
Nassau County, Florida

County No. CM2096-WA27

LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Principal Consultant \$145.60	Senior Hydrogeologist \$117.60	Staff Hydrogeologist \$86.20	Env. Field Technician \$84.15	Draftperson/ CAD \$60.00	Clerk/ Word Process. \$37.50						
TASK	DESCRIPTION												
	Monitoring Well Abandonment	12	24	40	0	6	4	0	0	0	0	86	\$ 8,527.60
	SUBTOTALS:	12	24	40	0	6	4	0	0	0	0	86	\$ 8,527.60
EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)		Subcon- tractors (est.)						SUBTOTAL EXPENSES
							(see attached)						
	Monitoring Well Abandonment	\$ 360.00	\$ -	\$ -	\$ -	\$ -	\$ 16,124.00	\$ -					\$ 16,484.00
	SUBTOTALS:	\$ 360.00	\$ -	\$ -	\$ -	\$ -	\$ 16,124.00	\$ -					\$ 16,484.00
	TOTAL											\$25,011.60	

THE COLINAS GROUP, INC.

HYDROGEOLOGISTS & ENGINEERS

February 3, 2018

Mr. Omar Smith, P.E.

S2L, Inc.

531 Versailles Drive, Suite 202

Maitland, Florida 32751

Subj: Proposal for Hydrogeological Services

Monitoring Well/Piezometer Abandonment

Lofton Creek Closed Landfill (Nassau County)

TCG Proposal No. P-572(rev1)

Dear Mr. Edwards:

The Colinas Group, Inc. (TCG) is pleased to submit this proposal and fee estimate to complete the following Scope of Services for completion of proper abandonment of selected groundwater monitoring wells and piezometers at the Lofton Creek Closed Landfill and preparation of Well Abandonment Reports for submission to the Florida Department of Environmental Protection (FDEP).

SCOPE OF SERVICES

TCG will provide qualified professional labor and the services of a Florida-licensed Water Well Contractor to complete plugging and abandonment of existing monitoring wells at Nassau County's closed Lofton Creek Landfill in accordance with the requirements of Chapter 62-701, F.A.C., Rule 62-532.500(4), F.A.C. and St. Johns River Water Management District Rule 40C-3.531.

TCG has identified monitoring wells to be plugged abandoned at the landfill from information available on the FDEP Oculus website related to routine semi-annual monitoring activities. We have identified twenty-six (26) existing monitoring wells and piezometers to be abandoned at the landfill. A Schedule of Monitoring Wells, including reported total depths for individual wells, is presented on Attachment A.

Upon notice to proceed from S2Li, TCG will prepare and deliver a written request to the FDEP, in accordance with Item 1.g of the landfill's Water Quality Monitoring Plan, for approval to proceed with well abandonment actions as described below.

Each of the monitoring wells/piezometers are fitted with above-grade casing risers, metal well covers/locks and concrete well pads as indicated on Attachment A. These above-ground structures will be dismantled and removed from the site.

TCG will measure and record total well depth at each well prior to abandonment. Above-grade well casings will be cut-off and the wells filled with neat cement from the well bottom back to land surface. Placement of neat cement will proceed using a tremie pipe to eliminate the possibility of grout-bridging and to confirm complete filling from bottom to top by grout returns at land surface. Debris, including concrete well pads, well covers, pipe and grout waste, created by the abandonment process will be removed from the site and transported for disposal at a permitted waste disposal facility.

TCG will direct and oversee abandonment procedures, confirm complete grouting and prepare FDEP Well Abandonment Form 62-532.900(2), F.A.C. for each monitoring well abandoned. A Site Map will be prepared depicting locations of abandoned monitoring wells. We will prepare a Well Abandonment Report package suitable for submission to the FDEP and provide one electronic copy of the submittal documents to S2L, Inc. to complete this project.

ESTIMATED FEES AND COSTS

TCG proposes to complete the above Scope of Services on a not-to-exceed fee basis in accordance with the personnel standard hourly rates identified in our Professional Services Contract for Nassau County with S2L, Inc.

A breakdown of man-hours and estimated fees and costs for completion of the monitoring facility abandonment is provided below. TCG will contract with Environmental Drilling Service, Inc. (EDS) to complete the well abandonment process. A quote received from EDS for completion of the abandonments is attached.

Estimated Professional Labor Fee

Principal Consultant	12 Hours @ \$145.60/Hour.....	\$ 1,747.20
Sr. Hydrogeologist	24 Hours @ \$117.60/Hour.....	2,822.40
Staff Hydrogeologist	40 Hours @ \$ 86.20/Hour.....	3,448.00
Draftsperson	6 Hours @ \$ 60.00/Hour.....	360.00
Clerk/Word Proc.	4 Hours @ \$ 37.50/Hour.....	150.00

Direct Costs

Field Vehicle	4 Days @ \$90.00/Day.....	\$ 360.00
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TOTAL ESTIMATED FEES AND COSTS: \$ 8,887.60

LICENSED WATER WELL CONTRACTOR COST: \$ 16,124.00

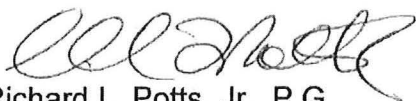
TOTAL ESTIMATED FEES AND COSTS: \$ 25,011.60

PROJECT COMPLETION

We have tentatively scheduled our water well contractor to begin abandonment of the wells on March 19, 2018. The contractor estimates four (4) working days to complete the work in the field. We estimate approximately fifteen (15) days from completion to prepare and deliver the well abandonment reports for the Lofton Creek Closed Landfill suitable for submission to the FDEP Northeast District Office.

I trust this proposal and attached fee and cost estimate are suitable for your budget and contracting needs. If you have any questions or require further information, please do not hesitate to contact me at your convenience. We look forward to the successful and timely completion of this assignment for S2L, Inc. and Nassau County.

Very truly yours,
THE COLINAS GROUP, INC.



Richard L. Potts, Jr., P.G.
Principal Consultant/Project Manager
Fl. P.G. Reg. No.1113

ATTACHMENT A

SCHEDULE OF MONITORING WELLS LOFTON CREEK CLOSED LANDFILL NASSAU COUNTY, FLORIDA

No.	Well I.D.	Total Well Depth* (ft.)	No.	Well I.D.	Total Well Depth* (ft.)
1.	MW-1D	99	14.	MW-8i	55
2.	MW-2S	19	15.	MW-8D	97
3.	MW-2i	56	16.	MW-9D	97
4.	MW-2D	97	17.	MW-10D	97
5.	MW-3i	54	18.	MW-12S	20
6.	MW-3D	97	19.	MW-12i	50
7.	MW-4D	97	20.	MW-12D	82
8.	MW-5i	44	21.	MW-13D	97
9.	MW-5D	93	22.	MW-15D	97
10.	MW-6i	50	23.	MW-18D	97
11.	MW-6D	97	24.	MW-19S	18
12.	MW-7D	97	25.	MW-19i	55
13.	MW-8S	20	26.	MW-19D	97

* Well depths are reported by others.

** All well casings are 2" PVC.

ENVIRONMENTAL DRILLING SERVICE, INC.
 4712 OLD WINTER GARDEN ROAD
 ORLANDO, FL 32811

QUOTATION

Quote Number: 17759
 Quote Date: Jan 25, 2018
 Page: 1

Voice: 407 295 3532
 Fax: 407 296 3957

Quoted To:

Colinas Group Inc.
 377 Maitland Ave
 Suite 2012
 Altamonte Springs, FL 32701

Customer ID	Good Thru	Payment Terms	Sales Rep
COLINAS	2/24/18	Net 30 Days	

Quantity	Item	Description	Unit Price	Amount
		Nassau Co Lofton Creek Closed Landfill Well Abandonment		
		Scope of work: Properly abandon 26-2" wells with a total depth of 1879', remove/dispose of pads. Assume difficult access conditions at 4 well clusters		
		Estimated time to complete: 4 days		
1,879.00		per ft. 2" well abandonment	6.00	11,274.00
26.00		each, pad removal	75.00	1,950.00
1.00	Mob	Mobilization	500.00	500.00
2.00	PD	Per Diem, per crew, per night	200.00	400.00
1.00		each, Hydrant/water set-up charge	500.00	500.00
10.00		per hour, difficult access/fence tear down(est./as needed)	150.00	1,500.00
			Subtotal	16,124.00
			Sales Tax	
			TOTAL	16,124.00

NASSAU COUNTY CONTRACT MANAGEMENT

CONTINUING CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES - SOLID WASTE LANDFILLS AND OTHER RELATED ANCILARY FACILITIES

S2L, INCORPORATED

CONTRACT NO. CM2096

WA#	PROJECT NAME	APPROVAL DATE	ORIGINAL FEE	CHANGE ORDERS	CONTRACT FEE	STATUS	ACTUAL COST	DIFFERENTIAL
01	Operation, Monitoring, Maintenance and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill		\$ 101,250.04	\$ -	\$ 101,250.04	Completed	\$ 100,922.38	\$ (327.66)
02	Preparation of a Title V Air Permit Renewal Application for the West Nassau Class I Landfill		\$ 20,399.06	\$ -	\$ 20,399.06	Completed	\$ 19,916.71	\$ (482.35)
03	Preparation of a 2014 Landfill Financial Assurance Report		\$ 15,906.20	\$ -	\$ 15,906.20	Completed	\$ 15,590.06	\$ (316.14)
04	Preparation of an Inward Gradient Analysis and Meeting with FDEP for the West Nassau Class I Landfill		\$ 24,329.98	\$ 14,009.84	\$ 38,339.82	Completed	\$ 37,446.13	\$ (893.69)
05	Operation, Monitoring, Maintenance and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill		\$ 174,387.83	\$ -	\$ 174,387.83	Completed	\$ 166,317.75	\$ (8,070.08)
06	Preparation of Technical Bidding Documents for a Flare Station Blower Replacement Landfill Gas Collection and Control System West Nassau Class I Landfill		\$ 25,925.39	\$ 3,362.12	\$ 29,287.51	In progress	\$ 29,287.51	\$ -
07	Well No. 2i Investigation at the Bryceville Landfill	02/05/15	\$ 6,499.93	\$ -	\$ 6,499.93	Completed	\$ 5,900.88	\$ (599.05)
08	Preparation of a Permit Application for Long-Term Care Renewal for the West Nassau Class 1 Landfill		\$ 77,546.42	\$ -	\$ 77,546.42	Completed	\$ 77,156.79	\$ (389.63)
09	Preparation of a 2015 Landfill Financial Assurance Report for Landfills		\$ 13,206.88	\$ -	\$ 13,206.88	Completed	\$ 11,756.61	\$ (1,450.27)
10	Leachate Storage Tank System Repairs & Maintenance		\$ 23,064.21	\$ -	\$ 23,064.21	In progress	\$ 23,064.21	\$ -
11	Operation, Monitoring, Maintenance and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill; FY15/16		\$ 176,237.83	\$ -	\$ 176,237.83	Completed	\$ 161,008.57	\$ (15,229.26)
12	Preparation of a 2016 Landfill Financial Assurance Report for submittal to FDEP		\$ 13,686.56	\$ -	\$ 13,686.56	Completed	\$ 12,458.85	\$ (1,227.71)

NASSAU COUNTY CONTRACT MANAGEMENT

CONTINUING CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES - SOLID WASTE LANDFILLS AND OTHER RELATED ANCILARY FACILITIES

S2L, INCORPORATED

CONTRACT NO. CM2096

WA#	PROJECT NAME	APPROVAL DATE	ORIGINAL FEE	CHANGE ORDERS	CONTRACT FEE	STATUS	ACTUAL COST	DIFFERENTIAL
13	Preparation of Technical Documents for Groundwater and Surface Water Monitoring at Nassau County's Landfills		\$ 8,555.66	\$ -	\$ 8,555.66	Completed	\$ 7,295.84	\$ (1,259.82)
14	Prepare a draft air construction permit application using the FDEP's (EPSAP) with attachments for one (1) newly installed emergency generator and one (1) newly installed landfill flare replacement blower.		\$ 10,326.34	\$ -	\$ 10,326.34	Completed	\$ 9,173.65	\$ (1,152.69)
15	Preparation of a Water Quality Technical Report Landfill Stabilization Report for the Bryceville Landfill		\$ 32,864.76	\$ -	\$ 32,864.76	In progress	\$ 32,864.76	\$ -
16	Preparation of a Landfill Stabilization Report for the Lofton Creek Landfill		\$ 45,924.72	\$ -	\$ 45,924.72	In progress	\$ 45,924.72	\$ -
17	Operation, Monitoring, Maintenance, and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill		\$ 176,868.55	\$ -	\$ 176,868.55	In progress	\$ 176,868.55	\$ -
18	Preparation of a 2017 Landfill Financial Assurance Report for submittal to FDEP		\$ 11,291.68	\$ -	\$ 11,291.68	In progress	\$ 11,291.68	\$ -
19	Groundwater Monitoring Well Abandonment Services for the Bryceville Landfill		\$ 13,594.00	\$ 2,000.00	\$ 15,594.00	Completed	\$ 14,216.76	\$ (1,377.24)
20	Preparation of an Intermediate Permit Modification for the Lofton Creek landfill		\$ 35,460.12		\$ 35,460.12	In progress	\$ 35,460.12	\$ -
21	Preparation of Revisions to the Storm Water Pollution Prevention Plan and Spill Prevention Control and Countermeasures Plan		\$ 22,913.00		\$ 22,913.00	In progress	\$ 22,913.00	\$ -
22	Operation, Monitoring, Maintenance, and Reporting for the Landfill Gas Collection and Control System at the West Nassau Class I Landfill; FY2017/2018		\$ 176,868.55		\$ 176,868.55	In progress	\$ 176,868.55	\$ -
23	Miscellaneous On-call Services' FY2017/2018		\$ 15,000.00		\$ 15,000.00	In progress	\$ 15,000.00	\$ -

NASSAU COUNTY CONTRACT MANAGEMENT

CONTINUING CONTRACT FOR PROFESSIONAL ENGINEERING SERVICES - SOLID WASTE LANDFILLS AND OTHER RELATED ANCILARY FACILITIES
 S2L, INCORPORATED
 CONTRACT NO. CM2096

WA#	PROJECT NAME	APPROVAL DATE	ORIGINAL FEE	CHANGE ORDERS	CONTRACT FEE	STATUS	ACTUAL COST	DIFFERENTIAL
24	Installation of Five Landfill Gas Replacement Wells at West Nassau Landfill		\$ 124,998.84		\$ 124,998.84	In progress	\$ 124,998.84	\$ -
25	Inward Gradient Measurements and Evaluation for the West Nassau Landfill		\$ 22,482.96		\$ 22,482.96	Pending	\$ 22,482.96	\$ -
26	Preparation of the 2017 Landfill Financial Assurance Report		\$ 10,665.04		\$ 10,665.04	Pending	\$ 10,665.04	\$ -
27	Groundwater Monitoring Well Abandonment Services for the Lofton Creek Landfill		\$ 33,148.56		\$ 33,148.56	Pending	\$ 33,148.56	\$ -
			\$ 1,413,403.11	\$ 19,371.96	\$ 1,432,775.07		\$ 1,399,999.48	\$ (32,775.59)

CURRENT CONTRACT VALUE:

\$ 1,399,999.48