

Attachment "A"
Scope of Services

FDEP Semi-Annual Water Quality Monitoring Services
(Sampling, Laboratory Analyses, and Reporting Services)
for the
West Nassau and Lofton Creek Closed Landfills
Fall 2019 through Spring 2020 Sampling Events

Nassau County
S2L, Inc.'s Contract and Work Authorization Number: CM2685-WA06
S2Li Project Number: 19-844

Work Authorization Service Period: Fiscal Year 2020 (October 1, 2019 through September 30, 2020)

This Work Authorization will provide sampling, testing and reporting services by S2L, Incorporated ("S2Li") and The Colinas Group ("TCG") (S2Li's hydrogeological subconsultant) collectively known as the "S2Li Project Team" for the West Nassau and Lofton Creek Landfills in accordance to the respective landfill's water quality Monitoring Plan Implementation Schedules ("MPIS") within the permits for each site. As an additional services option, the S2Li Project Team will also sample and analyze the water quality at the wells along Meadowfield Bluff Road and provide the results for County documentation. Under the scope of services for this Work Authorization, S2Li Project Team will perform the following:

SCOPE OF SERVICES

S2Li Project Team will provide qualified professional labor to complete groundwater and surface water sampling, laboratory analyses and reporting to support Nassau County in compliance with Florida Department of Environmental Protection ("FDEP" or "Department") permit conditions and the requirements of FDEP Rule 62-701, FAC. S2Li Project Team will prepare two (2) Semi-Annual Water Quality Monitoring Reports each for the West Nassau and Lofton Creek landfills over the coming fiscal year period (October 1, 2019 through September 30, 2020). S2Li Project Team will use groundwater level measurements and field and laboratory results from analyses of collected groundwater and surface water samples to complete the semi-annual FDEP data reporting requirements.

The Semi-Annual Monitoring Reports will be prepared in accordance with the requirements of FDEP Rule 62-701.510(8)(a) and the landfill's current FDEP MPIS. The Semi-Annual Monitoring Reports will include, but may not be limited to:

- a. Facility basic information, sample collection dates, and laboratory analyses dates;
- b. Original laboratory report results, QA/QC notations for analytical results, method detection limits, applicable water quality standards and STORET code numbers for all parameters analyzed;
- c. Tabulated water level and field parameter measurement data;
- d. Map showing monitoring locations for groundwater and surface water monitoring points with identification numbers;
- e. Water level measurements and measuring point elevations at each monitoring point reported to a precision of 0.01 feet NGVD;

- f. Updated groundwater contour maps for the upper and lower monitoring zones, with contour intervals no greater than 1 foot, indicating groundwater elevations and direction of groundwater flow;
- g. Summary of any water quality standards or criteria that are exceeded, and;
- h. Electronic Data Delivery (EDD) prepared in FDEP ADaPT format.

S2Li Project Team will complete two semi-annual monitoring and reporting events each for the West Nassau Closed Landfill and the Lofton Creek Closed Landfill with expected sampling to be conducted in the Fall (October) 2019 and Spring (April) 2020. Water quality monitoring reports will be prepared in draft form for review and comment by Nassau County and, on approval, will be submitted to the FDEP through the Department's ESSA website. Electronic copies of the original submittal will be transmitted to Nassau County to complete each monitoring event.

Optional Additional Scope of Services for Lofton Creek Landfill

Nassau County may desire to monitor water quality from time to time at four (4) existing monitoring wells located along Meadowfield Bluffs Road located to the west of the Lofton Creek Closed Landfill. At the County's direction, S2Li Project Team will sample these wells one time during the time of the spring sampling event of the Lofton Creek Landfill monitoring wells, analyze the samples in the laboratory and prepare a letter report presenting monitoring results with recommendations for further actions, if any, on the part of Nassau County. Analysis will include those listed in the landfill's FDEP MPIS for testing at facility background monitoring wells.

SCHEDULE

Work under the Scope of Services provided above will begin upon receipt of the signed Work Authorization. It is estimated that it will take approximately 30 days to complete and deliver the draft Semi-Annual Water Quality Monitoring Reports from the time of receipt of laboratory analytical results. S2Li Project Team will prepare one (1) draft copy of each report for review and approval of Nassau County. Upon approval from Nassau County, S2Li Project Team will prepare the final report and submit the electronic data deliverable in ADaPT format to the FDEP Tallahassee Office and Nassau County.

Work under the Scope of Services provided below will begin October 1, 2019 and run through this service period ending September 30, 2020.

COST ESTIMATE

A detailed breakdown of costs for completion of semi-annual water quality monitoring activities at both landfills is provided on the attached Cost Summary Sheet. Annual costs for field sampling, laboratory analyses and report preparation for submittal to the FDEP in accordance with landfill closure permit requirements are provided in the attachment to this proposal.

Costs for groundwater analyses include the addition of tests for Boron and Hydrogen Sulfide at specific monitoring wells at the West Nassau and Lofton Creek landfills to meet anticipated upcoming FDEP rule revisions for monitoring at unlined Class I landfills. S2Li Project Team will include both parameters for sampling in the first semi-annual monitoring event following the date of final and official rule revision by the FDEP. Laboratory analysis costs (\$40/sample) for Boron and Hydrogen Sulfide together are included in the Cost Summary Sheet.

Potential costs for re-sampling of groundwater and surface water are provided for rare instances where an original sample analysis confirmation is considered advisable. Costs are presented as Contingent DW/SW Resampling in the Cost Sheet Summary. Resampling of any monitoring well or surface water station will only occur with prior approval from Nassau County.

The cost estimate to conduct the Work as described in the above-listed Scope of Services is **\$56,071.62** including the optional additional services for Lofton Creek Landfill. 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 Project Team. 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.

H:\PROPOSALS AND MISC CORRESPONDENCE\Nassau County\Water Quality MPIS Sampling, testing and reporting\NC Water Quality Testing and Reporting _OES.sbl.docx

August 5, 2019

EXHIBIT 1

FDEP Semi-Annual Water Quality Monitoring Services
West Nassau and Lofton Creek Closed Landfills
Sampling, Laboratory Analyses, and Reporting
Fall 2019 through Spring 2020
Nassau County, Florida

Total Project Costs

SZLI Fee Estimate

SZLI No. 19-844

County No. CM2685-WA06

LABOR		LABOR CATEGORY AND RATE										TOTAL HOURS	SUBTOTAL LABOR
		Project Dir./ Principal	Regional Manager/ QC Officer	Principal Engineer	Senior Engineer	Project Engineer	Associate Engineer/CADD	Field Technician	Office Manager				
TASK	DESCRIPTION	\$250.00	\$232.25	\$190.26	\$137.09	\$97.92	\$74.21	\$52.38	\$76.24				
1	West Nassau Landfill	2	12	0	0	0	0	0	6	20	\$3,744.44		
2	Lofton Creek Landfill	2	12	0	0	0	0	0	6	20	\$3,744.44		
3	Meadowfield Buff Road (Optional Additional Services for Lofton Creek Landfill)	0	2	0	0	0	0	0	1	3	\$540.74		
	SUBTOTALS:	4	26	0	0	0	0	0	13	43	\$8,029.62		
EXPENSES		Field Vehicle (\$100/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)	The Colinas Group (Attachment)					SUBTOTAL EXPENSES		
TASK	DESCRIPTION												
1	West Nassau Landfill	\$ -	\$ -	\$ -		\$ 23,936.00	\$ -				\$ 23,936.00		
2	Lofton Creek Landfill	\$ -	\$ -	\$ -		\$ 21,126.00	\$ -				\$ 21,126.00		
3	Meadowfield Buff Road (Optional Additional Services for Lofton Creek Landfill)					\$ 2,980.00					\$ 2,980.00		
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -	\$ 48,042.00	\$ -		\$ -	\$ -	\$ 48,042.00		

COST SUMMARY

TASK	DESCRIPTION	SZLI LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK
1	West Nassau Landfill	\$ 3,744.44	\$ 23,936.00	\$ 27,680.44
2	Lofton Creek Landfill	\$ 3,744.44	\$ 21,126.00	\$ 24,870.44
3	Meadowfield Buff Road (Optional Additional Services for Lofton Creek Landfill)	\$ 540.74	\$ 2,980.00	\$ 3,520.74
	TOTALS	\$ 8,029.62	\$ 48,042.00	\$ 56,071.62

17%
23%
① 01362534-531000 - \$21,313.93
② 01361534-531000 - \$6,966.51
③ 01363534-531000 - \$8,371.18
56,071.62

THE COLINAS GROUP, INC.
HYDROGEOLOGISTS & ENGINEERS

August 2, 2019

Mr. Omar Smith, P.E.
S2L, Inc.
531 Versailles Drive
Suite 202
Maitland, Florida 32751

Subj: Proposal for Hydrogeological Services
Nassau County Closed Landfills
FDEP Semi-Annual Water Quality Monitoring Reporting
Fall 2019 through Spring 2020
TCG Proposal No. P-583

Dear Mr. Smith:

The Colinas Group, Inc. (TCG) is pleased to submit this proposal and fee/cost estimate to complete the following Scope of Services for hydrogeological services in support of regulatory compliance actions for Nassau County's West Nassau Closed Class I Landfill and Lofton Creek Closed Class I Landfill for the period Fall 2019 through Spring 2020.

SCOPE OF SERVICES

TCG will provide qualified professional labor to complete groundwater and surface water sampling, laboratory analyses and reporting to support Nassau County in compliance with Florida Department of Environmental Protection (FDEP) permit conditions and the requirements of FDEP Rule 62-701, FAC. TCG will prepare two (2) **Semi-Annual Water Quality Monitoring Reports** each for the West Nassau and Lofton Creek landfills over the coming one-year period. TCG will use groundwater level measurements and field and laboratory results from analyses of collected groundwater and surface water samples to complete the semi-annual FDEP data reporting requirements

The Semi-Annual Monitoring Reports will be prepared in accordance with the requirements of FDEP Rule 62-701.510(8)(a) and the landfill's current FDEP Monitoring Plan Implementation Schedule (MPIS). The Semi-Annual Monitoring Reports will include, but may not be limited to:

- a. Facility basic information, sample collection dates and laboratory analyses dates;
- b. Original laboratory report results, QA/QC notations for analytical results, method detection limits, applicable water quality standards and STORET code numbers for all parameters analyzed;
- c. Tabulated water level and field parameter measurement data;
- d. Map showing monitoring locations for groundwater and surface water monitoring points with identification numbers;
- e. Water level measurements and measuring point elevations at each monitoring point reported to a precision of 0.01 feet NGVD;
- f. Updated groundwater contour maps for the upper and lower monitoring zones, with contour intervals no greater than 1 foot, indicating groundwater elevations and direction of groundwater flow;
- g. Summary of any water quality standards or criteria that are exceeded, and;
- h. Electronic Data Delivery (EDD) prepared in FDEP ADaPT format.

TCG will complete one calendar year of Florida Department of Environmental Protection (FDEP) semi-annual monitoring and reporting events for the West Nassau Closed Landfill and the Lofton Creek Closed Landfill to include: Fall (October) 2019 and Spring (April) 2020. Water quality monitoring reports will be prepared in draft for review and comment by S2Li and Nassau County and, on approval, will be submitted to the FDEP through the Department's ESSA website. Electronic copies of the original submittal will be transmitted to S2Li to complete the monitoring event.

TCG proposes to complete the above Scope of Services on a not-to-exceed fee basis in accordance with our personnel standard hourly rates. A summary of professional labor fees and subcontract laboratory costs to complete the work tasks is presented below:

Semi-Annual Monitoring and Reporting (One-Year)

West Nassau Landfill

TCG Professional Labor	\$ 7,300.00
Laboratory Direct Costs	<u>16,636.00</u>
Sub-Total	\$ 23,936.00

Lofton Creek Landfill

TCG Professional Labor	\$ 7,260.00
Laboratory Direct Costs	<u>13,866.00</u>
Sub-Total	\$ 21,126.00

TOTAL FEES AND COSTS \$ 45,062.00

Nassau County may desire to monitor water quality from time to time at four (4) existing monitoring wells located along Meadowfield Bluffs Road located to the west of the Lofton Creek Closed Landfill. TCG, at the direction of S2L, Inc., will sample these wells, analyze the samples in the laboratory and prepare a letter report presenting monitoring results with recommendations for further actions, if any, on the part of Nassau County. Analytes will include those listed in the landfill's FDEP Monitoring Plan Implementation Schedule for testing at facility background monitoring wells.

A summary of professional labor fees and laboratory costs to complete this "on-request" task is presented below:

Optional Monitoring and Reporting (per event) for Meadowfield Bluffs Road

TCG Professional Labor	\$ 950.00
Laboratory Direct Costs	\$ 2,030.00
TOTAL FEES AND COSTS	\$ 2,980.00

A detailed breakdown of costs for completion of semi-annual water quality monitoring activities at both landfills is provided on the attached Cost Summary Sheet. Annual costs for field sampling, laboratory analyses and report preparation for submittal to the FDEP in accordance with landfill closure permit requirements are provided in the attachment to this proposal.


Costs for groundwater analyses include the addition of tests for Boron and Hydrogen Sulfide at specific monitoring wells at the West Nassau and Lofton Creek landfills to meet anticipated upcoming FDEP rule revisions for monitoring at unlined Class I landfills. TCG will include both parameters for sampling in the first semi-annual monitoring event following the date of final and official rule revision by the FDEP. Laboratory analysis costs (\$40/sample) for boron and Hydrogen Sulfide together are included in the Cost Summary Sheet.

Potential costs for re-sampling of groundwater and surface water are provided for rare instances where an original sample analysis confirmation is considered advisable. Costs are presented as Contingent DW/SW Resampling in the Cost Sheet Summary. Resampling of any monitoring well or surface water station will only occur with prior approval from both S2L, Inc. and Nassau County.

We estimate approximately 30 days to complete and deliver the draft Semi-Annual Water Quality Monitoring Reports from the time of receipt of laboratory analytical results. TCG will prepare one (1) draft copy of each report for review and approval of S2Li and Nassau County. Upon approval from S2Li, TCG will prepare the final report and submit the electronic data deliverable (EDD) in ADaPT format to the FDEP Tallahassee Office and S2Li.

We trust this proposal is 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 being of service to S2LI and to Nassau County.

Very truly yours,
THE COLINAS GROUP, INC.

A handwritten signature in black ink, appearing to read 'R. Potts, Jr.', with a stylized flourish at the end.

Richard L. Potts, Jr., P.G
Principal Consultant
FL P.G. Reg. No

COST SUMMARY SHEET

SEMI-ANNUAL WATER QUALITY MONITORING AT NASSAU COUNTY CLOSED LANDFILLS 2019 - 2020

TASK 1: WEST NASSAU LANDFILL						
Item	Field Component		Schedule	Cost per Event	Events/Yr.	Annual Cost
1	Field Sampling Groundwater and Surface Water		Semi-Annual	\$1,825.00	2	\$ 3,650.00
Item	Analytical Component	Schedule	Cost/Sample	Samples/Event	Events/Yr.	Annual Cost
2	Groundwater Analysis	Semi-Annual	\$ 255.00	7	2	\$ 3,570.00
3	Groundwater Analysis (+BH2S)	Semi-Annual	\$ 295.00	9	2	\$ 5,310.00
4	Surface Water Analysis	Semi-Annual	\$ 528.00	1	2	\$ 1,056.00
5	GW Equipment Blanks	Semi-Annual	\$ 295.00	1	2	\$ 590.00
6	Groundwater Trip Blanks	Semi-Annual	nc	1	2	\$ -
7	Surface Water Trip Blanks	Semi-Annual	nc	1	2	\$ -
8	GW Duplicate Samples	Semi-Annual	\$ 295.00	1	2	\$ 590.00
9	Contingent GW Resampling	Semi-Annual	\$ 480.00	1	2	\$ 960.00
10	Contingent SW Resampling	Semi-Annual	\$ 455.00	1	2	\$ 910.00
Item	Reporting Component		Schedule	Cost/Event	Events/Yr.	Annual Cost
11	WQMP Report Preparation and FDEP Submittal		Semi-Annual	\$ 3,650.00	2	\$ 7,300.00
WEST NASSAU LANDFILL TOTAL					\$	23,936.00
TASK 2: LOFTON CREEK LANDFILL						
Item	Field Component		Schedule	Cost per Event	Events/Yr.	Annual Cost
12	Field Sampling Groundwater		Semi-Annual	\$ 1,900.00	2	\$ 3,800.00
12	Field Sampling Surface Water		Semi-Annual	\$ 300.00	2	\$ 600.00
Item	Analytical Component	Schedule	Cost/Sample	Samples/Event	Events/Yr.	Annual Cost
14A	MW-1S	Semi-Annual	\$ 126.00	1	2	\$ 252.00
114B	MW-1I	Semi-Annual	\$ 126.00	1	2	\$ 252.00
14C	MW-3S	Semi-Annual	\$ 60.00	1	2	\$ 120.00
14D	MW-4S	Semi-Annual	\$ 60.00	1	2	\$ 120.00
14E	MW-4I	Semi-Annual	\$ 60.00	1	2	\$ 120.00
14F	MW-5S	Semi-Annual	\$ 120.00	1	2	\$ 240.00
14G	MW-6S	Semi-Annual	\$ 60.00	1	2	\$ 120.00
14H	MW-7S	Semi-Annual	\$ 120.00	1	2	\$ 240.00
14I	MW-7I	Semi-Annual	\$ 126.00	1	2	\$ 252.00
14J	MW-9S	Semi-Annual	\$ 126.00	1	2	\$ 252.00
14K	MW-9I	Semi-Annual	\$ 126.00	1	2	\$ 252.00
14L	MW-10S	Semi-Annual	\$ 60.00	1	2	\$ 120.00
14M	MW-10I	Semi-Annual	\$ 120.00	1	2	\$ 240.00
14N	MW-13S	Semi-Annual	\$ 126.00	1	2	\$ 252.00
14O	MW-13I	Semi-Annual	\$ 126.00	1	2	\$ 252.00
14P	MW-15S	Semi-Annual	\$ 60.00	1	2	\$ 120.00
14Q	MW-16I	Semi-Annual	\$ 120.00	1	2	\$ 240.00
14R	MW-18S	Semi-Annual	\$ 120.00	1	2	\$ 240.00
14S	MW-18I	Semi-Annual	\$ 120.00	1	2	\$ 240.00
14T	Surface Water Analysis	Semi-Annual	\$ 528.00	3	2	\$ 3,168.00
14U	GW Equipment Blanks	Semi-Annual	\$ 126.00	1	2	\$ 252.00
14V	GW Trip Blanks	Semi-Annual	nc	1	2	\$ -
14W	SW Trip Blanks	Semi-Annual	nc	1	2	\$ -
14X	GW Duplicate Samples	Semi-Annual	\$ 126.00	1	2	\$ 252.00
14Y	Contingent GW Resampling	Semi-Annual	\$ 480.00	1	2	\$ 960.00
14Z	Contingent SW Resampling	Semi-Annual	\$ 455.00	1	2	\$ 910.00
Item	Reporting Component		Schedule	Cost per Event	Events/Yr.	Annual Cost
15	WQMP Preparation and FDEP Submittal		Semi-Annual	\$ 3,630.00	2	\$ 7,260.00
LOFTON CREEK LANDFILL TOTAL					\$	21,126.00

TASK 3: MEADOWFIELD BLUFFS ROAD (OPTIONAL)						
Item	Field Component		Schedule	Cost per Event	Events/Yr.	Per Event Cost
16	Field Sampling Groundwater		On Demand	\$ 850.00	TBD	\$ 850.00
Item	Analytical Component	Schedule	Cost/Sample	Samples/Event	Event/Yr.	Per Event Cost
17	Groundwater Analyses	On Demand	\$ 295.00	4	TBD	\$ 1,180.00
Item	Reporting Component		Schedule	Cost per Event	Events/Yr.	Per Event Cost
18	Report Preparation and County Submittal		On Demand	\$ 950.00	TBD	\$ 950.00
MEADOWFIELD BLUFFS ROAD TOTAL						\$ 2,980.00

WATER QUALITY MONITORING COST SUMMARY

Nassau County Landfills Water Quality Monitoring and Reporting		Annual Cost Summary	
	West Nassau Landfill	\$	23,936.00
	Lofton Creek Landfill	\$	21,126.00
	Meadowfield Bluffs Road (Optional)	\$	2,980.00
	TOTAL ANNUAL COST	\$	48,042.00

Operating Expenditures Detail

[illegible]

WN Phase II New PC & Closure
01362534

Operating Expenditures Detail

[illegible]

Operating Expenditures Detail

Lofton Creek P
01363534

[illegible]



Attachment B

Proposed Loaded Billing Rates for 2019/2020 for Services Provided by S2Li on Behalf of Nassau County

Contract Position	Hourly Rates
Project Director/Principal-in-Charge	\$250.00 ✓
Regional Manager/QC Officer	\$232.25 ✓
Principal Engineer	\$190.26
Senior Engineer	\$137.09
Project Engineer	\$ 97.92
Associate Engineer/CADD	\$ 74.21
Field Technician	\$ 52.38
Office Manager	\$ 76.24 ✓

1. Billing rate based on applying a 10% profit to S2Li's breakeven multiplier. Project Director was capped at \$250.00 per hour.
2. Rates include typical expenses such as reproduction, travel costs (except for field vehicle), lodging, and printing. Any other extraordinary direct expenses shall be negotiated on a case by case basis and will be identified in the Work proposal.
3. Subconsultant costs and parts purchased on the County's behalf will be billed as pass-through costs with no profit or markup added by S2Li in addition to actual costs.
4. Field vehicle (truck) will be billed at \$100/day.

THE COLINAS GROUP

Mr. Omar Smith, P.E.
S2L, Inc.
529 Versailles Drive, Suite 202
Maitland, FL 32751

April 4, 2019

Subj: Professional Hydrogeologic Services Fee Schedule
S2L, Inc - Nassau County Continuing Contract for Engineering Services

Dear Mr. Levin:

The Colinas Group, Inc. (TCG) herein presents our proposed Professional Services Fee Schedule for hydrogeologic services that may be required from time to time in support of specific projects assigned to S2Li by Nassau County:

**S2L, Inc. / Nassau County
Continuing Professional Engineering Services Contract Support
April 4, 2019**

Personnel Classification	Billing ^{1/} Rate
Principal Consultant/Project Manager (PG)	\$ 152.80
Sr. Hydrogeologist (PG)	\$ 123.50
Staff Hydrogeologist	\$ 90.50
Environmental Field Technician	\$ 88.35 ^{2/}
Draftsperson/CAD Operator	\$ 62.00
Clerk/Word Processor	\$ 39.50

^{1/}. Billing Rates include typical expenses such as mileage, reproduction and communication costs.

^{2/}. Billing Rate includes mileage, field-testing instrument rental and water sampling supplies.

^{3/}. As required, on a project-by-project basis, specialized field investigation equipment rental and subcontract drilling and well construction services will be billed as pass through costs with no profit or other fees added to actual cost.

The above billing rates will remain in force throughout the duration of S2Li's contract term with Nassau County.

Very truly yours,
THE COLINAS GROUP, INC.

Richard L. Potts, Jr., P.G
Principal Consultant
FL P.G. Reg. No.1113