

**WORK AUTHORIZATION # 24  
NASSAU COUNTY  
BOARD OF COUNTY COMMISSIONERS**

<b>Consultant:</b>	S2L, Incorporated
<b>Contract Number:</b>	CM2685
<b>Contact Name:</b>	Omar Smith, P.E., V.P.
<b>Contact Number:</b>	407-475-9163
<b>Email:</b>	osmith@s2li.com

<b>CURRENT WORK AUTHORIZATION</b>			
<b>Project Short Title: FDEP Semi-Annual Water Quality Monitoring Services</b>			
		<b>CONTRACT OVERVIEW</b>	
<b>Date Submitted</b>	8/10/21	<b>Total of Previous Authorizations</b>	\$1,163,688.60
<b>Amount</b>	\$59,822.92	<b>This Work Authorization</b>	<b>\$59,822.92</b>
<b>Scheduled Completion</b>	9/30/22	<b>Current Contract Total</b>	\$1,223,511.50

This Work Authorization is to the AGREEMENT between Nassau County and S2li, Incorporated (“Vendor”) for Continuing Contract for Professional Engineering Services-Solid Waste Landfills and Other Related Ancillary Facilities for Nassau County, Florida, dated July 26, 2019. The services to be provided under this Work Authorization are as follows:

ARTICLE 1. Services Described as:

This Authorization provides for sampling, testing, and reporting services by the Vendor and their subconsultant(s) for the West Nassau and Lofton Creek Landfills in accordance with the respective water quality Monitoring Plan Implementation Schedules (“MPIS”) within the permits for each site. As an additional services option, the Vendor and their subconsultant(s) will also sample and analyze the water quality at the wells along Meadowfield Bluff Road and provide the results to the County for documentation.

ARTICLE 2. Time Schedule

Work under the Scope of Services provided will begin October 1, 2021 and run through September 30, 2022.

ARTICLE 3. Budget

The cost estimated to perform the work as described in Attachment “A” is \$59,822.92. A detailed breakdown for each task in conjunction with the estimated labor hours, contractor labor rates, and expenses are attached as Exhibit 1. 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.

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, Vendor agrees that:

Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Vendor. 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: Sam Levin  
Print Name: Sam Levin  
Title: President  
Date: 8/31/2021

Account number(s):	01361534-531000	\$ 7,085.09
	01362534-531000	\$23,719.65
	01363534-531000	\$25,713.44
	01363534-531000	\$ 3,304.74

**RECOMMENDED AND APPROVED BY NASSAU COUNTY:**

County Engineer: *Doug Podiak* 8/31/2021  
 Department Head or Designee

Procurement: *[Signature]* 8/31/2021  
 J. Brian Simmons

Office of Management & Budget: *Megan Diehl* 8/31/2021  
 Megan Diehl

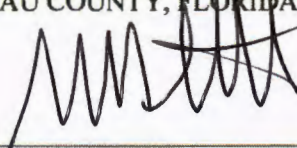
County Manager: *Taco E. Pope, AICP* 9/1/2021  
 Taco E. Pope, AICP

Ex-Officio Clerk: *See Signature Below*  
 John A. Crawford

County Attorney: *Michael S. Mullin* 9/1/2021  
 Michael S. Mullin

**APPROVED** by the BOARD OF COUNTY COMMISSIONERS, this 27th day of September, 2021.

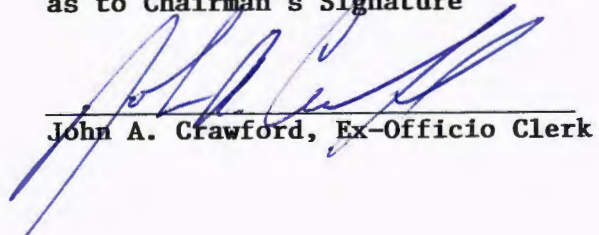
BOARD OF COUNTY COMMISSIONERS  
NASSAU COUNTY, FLORIDA



Thomas R. Ford  
Chairman

Account number(s):	01361534-531000	\$ 7,085.09
	01362534-531000	\$23,719.65
	01363534-531000	\$25,713.44
	01363534-531000	\$ 3,304.74

**ATTESTATION: Only to Authenticity  
as to Chairman's Signature**

  
 John A. Crawford, Ex-Officio Clerk

**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 2021 and Spring 2022 Sampling Events**

**Nassau County**  
**S2L, Inc.'s Contract and Work Authorization Number: CM2685-WA24**  
**S2Li Project Number: 21-941**

**Work Authorization Service Period: Fiscal Year 2022 (October 1, 2021 through September 30, 2022)**

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 for FY2022 (October 1, 2021 through September 30, 2022). 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.

Additional sampling for testing may include leachate samples collected from the French Drain pump(s) and leachate storage tanks.

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 through December) 2021 and Spring (April through June) 2022. 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, 2021 and run through this service period ending September 30, 2022.

**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.

West Nassau Landfill costs include leachate sampling and testing from one of the French Drain pump stations and one composite sample at the leachate storage tanks.

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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 **\$59,822.92** 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.

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August 6, 2021

**EXHIBIT 1**

S2Li No. 21-941  
County No. CM2685-WA24

**Total Project Costs**  
S2Li Fee Estimate

**FDEP Semi-Annual Water Quality Monitoring Services  
West Nassau and Lofton Creek Closed Landfills  
Sampling, Laboratory Analyses, and Reporting  
Fiscal Year 2022 Service Period (Fall 2021 and Spring 2022 Sampling/Reporting Events)  
Nassau County, Florida**

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 (includes 2 TCG proposals)	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 Add'l Services for Lofton Creek LF)	0	2	0	0	0	0	0	1	3	\$540.74
	<b>SUBTOTALS:</b>	<b>4</b>	<b>26</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>13</b>	<b>43</b>	<b>\$8,029.62</b>

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 (includes 2 TCG proposals)	\$ -	\$ -	\$ -		\$ 27,060.30	\$ -				\$ 27,060.30
2	Lofton Creek Landfill	\$ -	\$ -	\$ -		\$ 21,969.00	\$ -				\$ 21,969.00
3	Meadowfield Buff Road (Optional Add'l Services for Lofton Creek LF)					\$ 2,764.00					\$ 2,764.00
	<b>SUBTOTALS:</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 51,793.30</b>	<b>\$ -</b>		<b>\$ -</b>	<b>\$ -</b>	<b>\$ 51,793.30</b>

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL S2LI LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK TOTAL
1	West Nassau Landfill (includes 2 TCG proposals)	\$ 3,744.44	\$ 27,060.30	\$ 30,804.74
2	Lofton Creek Landfill	\$ 3,744.44	\$ 21,969.00	\$ 25,713.44
3	Meadowfield Buff Road (Optional Add'l Services for Lofton Creek LF)	\$ 540.74	\$ 2,764.00	\$ 3,304.74
	<b>TOTALS</b>	<b>\$ 8,029.62</b>	<b>\$ 51,793.30</b>	<b>\$ 59,822.92</b>

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CM2685-WA24

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**THE COLINAS GROUP, INC.**  
HYDROGEOLOGISTS & ENGINEERS

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August 6, 2021

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

Subj: Proposal for Hydrogeological Services  
**Semi-Annual Water Quality Monitoring and Reporting**  
**Nassau County Closed Landfills**  
TCG Proposal No. P-619

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 2021 through Spring 2022.

**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.
- 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) 2021 and Spring (April) 2022. 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	\$ 7,664.00
Laboratory Direct Costs	<u>16,804.00</u>
Sub-Total	\$ 24,468.00

**Lofton Creek Landfill**

TCG Professional Labor	\$ 7,623.00
Laboratory Direct Costs	<u>14,346.00</u>
Sub-Total	\$ 21,969.00

**TOTAL FEES AND COSTS    \$ 46,437.00**

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**

<b>TCG Professional Labor</b>	<b>\$ 950.00</b>
<b>Laboratory Direct Costs</b>	<b><u>\$ 1,814.00</u></b>
<b>TOTAL FEES AND COSTS</b>	<b>\$ 2,764.00</b>

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.

CM2685-WA24

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.**



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

**COST SUMMARY SHEET**

CM2685-WA24

**SEMI-ANNUAL WATER QUALITY MONITORING AT  
NASSAU COUNTY CLOSED LANDFILLS  
FALL 2021 - SPRING 2022**

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	\$ 612.00	1	2	\$ 1,224.00
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	\$ 3,832.00	2	\$ 7,664.00
<b>WEST NASSAU LANDFILL TOTAL</b>						<b>\$ 24,468.00</b>
TASK 2: LOFTON CREEK LANDFILL						
Item	Field Component		Schedule	Cost per Event	Events/Yr.	Annual Cost
12	Field Sampling Groundwater/Surface Water		Semi-Annual	\$ 2,200.00	2	\$ 4,400.00
Item	Analytical Component	Schedule	Cost/Sample	Samples/Event	Events/Yr.	Annual Cost
14A	MW-1S	Semi-Annual	\$ 186.00	1	2	\$ 372.00
14B	MW-1i	Semi-Annual	\$ 186.00	1	2	\$ 372.00
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	\$ 186.00	1	2	\$ 372.00
14O	MW-13i	Semi-Annual	\$ 186.00	1	2	\$ 372.00
14P	MW-15S	Semi-Annual	\$ 60.00	1	2	\$ 120.00
14Q	MW-15i	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	\$ 3,811.50	2	\$ 7,623.00
<b>LOFTON CREEK LANDFILL TOTAL</b>						<b>\$ 21,969.00</b>

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	\$ 550.00
Item	Analytical Component	Schedule	Cost/Sample	Samples/Event	Event/Yr.	Per Event Cost
17	Groundwater Analyses	On Demand	\$ 295.00	4	TBD	\$ 1,264.00
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
<b>MEADOWFIELD BLUFFS ROAD TOTAL</b>						<b>\$ 2,764.00</b>

**WATER QUALITY MONITORING COST SUMMARY**

Nassau County Landfills Water Quality Monitoring and Reporting	Annual Cost Summary
West Nassau Landfill	\$ 24,468.00
Lofton Creek Landfill	\$ 21,969.00
Meadowfield Bluffs Road (Optional)	\$ 2,764.00
<b>TOTAL ANNUAL COST</b>	<b>\$ 49,201.00</b>

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**THE COLINAS GROUP, INC.**  
HYDROGEOLOGISTS & ENGINEERS

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July 30, 2021

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

Subj: Proposal for Professional Hydrogeological Services  
Leachate Collection and Laboratory Analysis  
West Nassau Closed Landfill  
Nassau County, Florida  
TCG Proposal No. P-618

Dear Mr. Smith:

The Colinas Group, Inc. (TCG) is pleased to present this proposal to provide professional services for collection and laboratory analysis of representative landfill leachate samples from the leachate management system at the West Nassau Closed Landfill.

**Scope of Services**

TCG will collect leachate samples at a total of two (2) sampling locations: One sample from a lift station serving the perimeter underdrain around the north cell and one sample from the leachate storage tanks. TCG will measure and record certain field parameters during leachate sample collection to include the parameters listed below.

**Field parameters:**

Specific conductivity  
pH  
Dissolved oxygen  
Temperature  
Colors, sheens  
(by observation)

Collected samples will be properly prepared and stored on ice for transport to the analytical laboratory for chemical analysis. Laboratory services will be provided by Environmental Conservation Laboratories, Inc. in Jacksonville. Specific analyses to be provided by the laboratory are listed below.

Laboratory parameters:

- Total ammonia - N
  - Bicarbonate
  - Chloride
  - Iron
  - Nitrate nitrogen
  - Sodium
  - Total dissolved solids (TDS)
  - Ultraviolet transmissibility (UV254)
- Those parameters listed in 40 CFR Part 258, Appendix II.

Leachate sampling will be scheduled for completion during the next upcoming semi-annual FDEP monitoring event scheduled for November 2021.

Estimated Labor Fees and Costs

TCG proposes to complete the above Scope of Services in accordance with our current standard hourly fee schedule and a quote from our selected chemical laboratory Environmental Conservation Laboratories, Inc. for laboratory analysis. An estimate of fees and costs to complete this project is provided below as follows:

TCG Professional Labor.....	4 hours @ \$ 152.80/Hr.	= \$ 611.20
Field Sample Collection.....	4 hours @ \$ 88.35/Hr.	= <u>530.10</u>
	Sub-Total	\$ 1,141.30
Laboratory Analytical Cost.....	\$ 725.50/sample x 2 samples	= <u>\$ 1,451.00</u>
	<b>Total Fees and Costs</b>	<b>= \$ 2,592.30</b>

TCG will not exceed the above fee estimates and laboratory costs unless the Scope of Services is increased, and then only upon prior receipt of written authorization from S2Li.

Project Schedule

TCG proposes to complete leachate sampling activities in conjunction with routine semi-annual water quality monitoring sampling activities scheduled at the West Nassau Landfill during

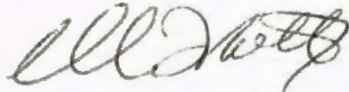
CM2685-WA24

November 2021. We estimate thirty (30) days from submission of samples to the laboratory for completion of analyses and delivery of results to S2Li.

We appreciate the opportunity to present this proposal for your consideration and look forward to being of service to S2Li and Nassau County. If you have any questions concerning this proposal please do not hesitate to contact our office at your convenience.

Very truly yours,

**THE COLINAS GROUP, INC.**



Richard L. Potts, Jr., P.G.

Principal Consultant

FL P.G. Reg. No. 1113