WORK AUTHORIZATION # CM2096-WA15 NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS RFQ/BID NO. NC13-033

Consultant:	S2L, Incorporated
Contract Number:	CM2096
Contact Name:	Sam Levin, P.E.
Contact Number:	407-475-9163
Email:	Slevin@s2Li.com

CURRENT WORK AUTHORIZATION										
Project Short Title: Br	yceville Landfill Stabilizat	ion Study								
		CONTRACT OVERVI	EW							
		Total of Previous Authorizations	\$691,322.33							
Date Submitted	07/11/2016	Adjustments/Change Orders	\$4,843.09							
Amount	\$32,864.76	This Work Authorization	\$32,864.76							
Scheduled Completion	150 days from 10/10/16	Current Contract Total	\$729,030.18							

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:

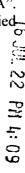
S2Li and their Sub-consultant (The Colinas Group (TCG)) will prepare and submit a Landfill Stabilization Study and Report for the Bryceville Landfill to FDEP in accordance to the Landfill's permit conditions and Chapter 62-701.620(6), Florida Administrative Code (F.A.C.) with the scope of services, attached hereto as Attachment "A".

ARTICLE 2. Time Schedule

It is anticipated that the services will be provided within five months which includes time for the County to receive and S2Li to review any final correspondents from FDEP in January/February 2017 provided the County provides a NTP by October 10, 2016

ARTICLE 3. Budget

The cost estimate to conduct the Work as described in the above listed Scope of Services is \$32,864.76. A detailed breakdown for each task in conjunction with the estimated labor hours, contract labor rates, and expenses are included in Exhibit 1 of Attachment "A". 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, Consultant agrees that:

AGREED TO BY: S2L, INCORPORATED

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.

Print Name: Samuel B. Levin

President

BY:

Title: _____

	Date:	July 12, 20	10
DECOMMENDED AND ADDROY	m ny	NAGGAH COL	TATUNAZ
RECOMMENDED AND APPROV	(FD BY)	SASSAY CUL	NIY:
Public Works Director:	_	100	6008
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Contract Management :	7	~	251
<i>G</i>	D	avid J. Pensant	e, Procurement Manager
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County Manager		THE	
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APPROVED by the County Coordina	ator, desig	gnee for the BO	ARD OF COUNTY
COMMISSIONERS, the day of			
ACCOUNT NO.: 01364534-53100	00 \$:	32,864.76	
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F116/17 57/20/1			

Preparation of a Landfill Stabilization Report for the Bryceville Landfill

County Contract Number: CM2096-WA15 S2Li Project Number: 16-675

BACKGROUND

In February 1997, Nassau County ("County") received closure certification from Florida Department of Environmental Protection ("FDEP" or "Department") for its closed Bryceville Landfill ("Landfill"). At that point, the Landfill entered into long-term care ("LTC"). The duration of LTC for the Landfill is 20 years unless extended due to landfill site-specific issues. During this LTC period, the County has been:

- · conducting water quality testing and reporting;
- conducting landfill gas measurements (no longer required for this landfill site property);
- maintaining a stormwater management system;
- mowing the surface of the landfill property;
- · maintaining a vegetative cover and soil and erosion control; and
- continuing other miscellaneous operational and maintenance items required for a closed facility.

On February 15, 2012, FDEP issued the County a Solid Waste LTC Renewal Permit (Permit No. 0066724-006-SF) with a County requested 7-year term that sets the conditions for LTC at the Landfill. The existing LTC permit for the Landfill is scheduled to expire on February 15, 2018. The existing permit requires that a renewal application to continue LTC be submitted to FDEP by December 15, 2017. Before the end of the permit term and for the reason of a County requested 7-year permit term, the preparation of a Landfill Stabilization Report is required to be submitted to the Department by December 29, 2016 to address any County or FDEP related action or approach such as that provided in FDEP's February 20, 2016, "Guidance Document SWM-04.45 – LTC at Solid Waste Disposal Facilities" prior to the end of the current permit term.

This Work Authorization will provide for the preparation and submission of a Landfill Stabilization Study and Report for the Bryceville Landfill to FDEP in accordance to the Landfill's permit conditions and Chapter 62-701.620(6), Florida Administrative Code (F.A.C.). 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

Task 1 - Preparation of a Water Quality Technical Report

The Technical Report will present and evaluate semi-annual groundwater and surface water monitoring data collected at the landfill over the period extending from Summer (June) 2007 through Fall (October) 2016 and encompassing 10 years (20 sampling events) of semi-annual monitoring data. A concise Executive Summary of findings, conclusions and recommendations for permit modifications derived from the water quality monitoring evaluation will be presented in the Technical Report. The Technical Report will address each of the evaluation criteria presented in Rule 62-701.510(8)(b) F.A.C. and in the Water Quality Monitoring Plan Implementation Schedule (MPIS) made part of the Landfill's long-term-care permit. It is assumed that no Well Inventory Map Update is required.

The Technical Report will address, but may not be limited to, the information requirements listed in Rule 62-701.510(8)(b), F.A.C. to include:

- Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected, including hydrographs for all monitor wells;
- b. Trend analyses of any monitoring parameters consistently detected;
- c. Comparisons among shallow, middle and deep zone wells;
- d. Comparisons between background water quality and the water quality in detection and compliance wells;
- e. Correlations between related parameters such as total dissolved solids and specific conductance;
- f. Discussion of erratic and/or poorly correlated data;
- g. An interpretation of the ground water contour maps, including an evaluation of ground water flow rates, and;
- h. An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.

The Technical Report will provide recommendations for modification of the current FDEP landfill Water Quality Monitoring Plan (February 15, 2012) to include consideration of retirement of specific monitoring wells, deletion of specific monitoring parameters and, if warranted by evaluation of long-term monitoring results, retirement of the Monitoring Plan and cessation of routine monitoring for the Bryceville Closed Landfill.

Deliverables: Water Quality Technical Report for County Review

Task 2 - Landfill Stabilization Study and Report

<u>Subtask 2.1 - Draft Document Preparation.</u> The S2Li Team will prepare a draft report to assess landfill stability in accordance with Chapter 62-701.620 (6), F.A.C. The following criteria will be addressed and assessed in the report as to meeting stability requirements and will include the evaluation results, conclusions and recommendations:

- Water quality conditions as required by Chapter 62-701.510(8)(b);
- Landfill gas generation, emission, and migration;
- Landfill surface subsidence activity;
- Condition of vegetative cover related to soil and erosion control and barrier layer effectiveness;
 and

Storm water management system function.

The report document will be provided in digital form and is expected to be organized at follows:

- Signed and Sealed Cover Page
- Transmittal Letter
- Introduction
- Background
- Site History
- Existing Conditions with Respect to Stabilization Criteria
 - a. Water Quality Technical Report
 - b. Subsidence
 - c. Barrier Layer Effectiveness
 - d. Stormwater Management
 - e. Gas Production and Management
- Summary of Existing Conditions Meeting Landfill Stability Criteria
- Conclusions
- Recommendations
- Exhibit 1 Water Quality Technical Report

<u>Subtask 2.2 - County Review</u>. The S2Li Team will prepare and submit to the County a draft report for review and comment. S2Li will meet via conference call with the County as needed to discuss any staff comments. The S2Li Team will incorporate final comments received from the County associated with S2Li's scope of services then will prepare an updated draft report for submittal to FDEP.

Deliverables: Draft Report for County Review

<u>Subtask 2.3 - FDEP Draft Report Submittal</u>. After incorporating any County comments, the updated draft report will be submitted to FDEP by December 1, 2017 for their review and comment. This allows time to incorporate any comments to the report's conclusions and recommendations sections before the actual report's December 29, 2016 due date. No in-person meetings in FDEP's offices in Jacksonville is expected or provided under this scope of services.

<u>Subtask 2.4 - FDEP Final Report Submittal</u>. After incorporating any additional County and/or FDEP comments, the S2Li Team will submit a final draft report for County review and upon approval by the County, the report will be submitted to FDEP by December 29, 2016.

Deliverables: Draft Report for FDEP, Final Report Submission to FDEP.

Task 3 - FDEP's Requests for Additional Information (RAI)

Should any questions or minor requested changes be received from FDEP whether it is a part of the review of the draft or final report submittals, the S2Li Team, with the assistance of the County, will modify the report, and/or prepare responses, as appropriate, within the required time period. The County understands that the level of effort for RAI response cannot be determined beforehand, and that the budget for Task 3 is based on an educated guess of the level of effort that will be required. The level of effort to be expended for this task is limited to the fee estimate for this task. If additional investigations, analyses, testing, design, or research are required to provide satisfactory responses to FDEP, beyond the fee estimate of this Task 3, S2Li Team will perform the additional work effort only after receipt of written

approval from the County. The S2Li Team will review any responses, permit updates, or any other related correspondents from FDEP and provide any comments to the County.

Deliverables: Formal and informal RAI responses and review of correspondents from FDEP.

SCHEDULE

- County Approval to Proceed by October 10, 2016;
- A draft report document is to be submitted to County staff for review by November 22, 2016. The County is expected to provide comments to S2Li within ten days after receiving the draft report;
- After addressing and incorporating County staff comments, the draft document is to be submitted to FDEP by December 7, 2016;
- Assuming timely comments and meeting arrangements with FDEP, the final report is to be submitted to FDEP by December 29, 2016 or earlier; and
- Total expected time period for this work authorization is five months which includes time for the County to receive and S2Li to review any final correspondents from FDEP in January/February 2017.

SCOPE OF SERVICES - COUNTY ASSUMPTIONS

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

- Permit application fee if not completely waived;
- Previous water quality results information provided by the County's outside laboratory and technical reports from other consultants;
- Any requested changes to the existing permit's specific conditions, and
- Review and provide comments to any correspondences from FDEP.

Some of the information may have already been received, so the S2Li Team will work with County staff to ensure that S2Li has received all of the information.

COST ESTIMATE

The cost estimate to conduct the Work as described in the above listed Scope of Services is \$32,864.76. 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. 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.

D:\Projects\Nassua County\Permitting\Closure Renewal Brysceville Lofton Creek\Stabilization Reports\Bryceville\Proposal\NC Bryceville Stabilization Report FINAL—07-07-16.docx

July 7, 2016

Total Project Costs

S2Li Fee Estimate

EXHIBIT 1 Preparation of a Landfill Stabilization Report

S2Li No. County No. 16-675

No. CM2096-WA15

Bryceville Landfill

Nassau County, Florida

LABOR	DESCRIPTION	Project Dir./ Principal \$225.00	Regional Manager/ QC Officer \$208.88	Principal Engineer \$171.38	Senior Engineer \$122.51	Associate Engineer \$47.47	CAD Technician \$47.47	Office Manager \$68.46	TOTAL HOURS	SUBTOTAL LABOR
1	Preparation of a Water Quality Technical Report	2	6	0	0	0	0	2	10	\$1,840.20
2	Landfill Stabilization Study and Report	13	48	0	0	0	0	12	73	\$13,772.76
	- Draft Document Preparation	8	32					6	46	\$8,894.92
	- County Review	2	4					2	8	\$1,422.44
	- FDEP Draft Report Submittal	2	4					2	8	\$1,422.44
	- FDEP Final Report Submittal	1	8					2	11	\$2,032.96
3	FDEP RAIs and Questions	2	8	0	0	0	0	1	11	\$2,189.50
	SUBTOTALS:	17	62	0	0	0	0	15	94	\$ 17,802.46
EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)		The Colinas Group (see			SUBTOTAL EXPENSES
TASK	DESCRIPTION						attached)			-
1	Preparation of a Water Quality Technical Report	\$ -	\$ -	\$ -		\$ -	\$ 14,296.80			\$ 14,296.80
2	Landfill Stabilization Study and Report	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -			\$ -
3	FDEP RAIs and Questions	\$ -	\$ -	\$ -		\$ -	\$ 765.50			\$ 765.50
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 15,062.30	\$ -	\$ -	\$> 15,062.30

	COST SUMMARY					
TASK	DESCRIPTION	SUBTOTAL S2Li LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK TOTAL		
1	Preparation of a Water Quality Technical Report	\$ 1,840.20	\$ 14,296.80	\$ 16,137.00		
2	Landfill Stabilization Study and Report	\$ 13,772.76	\$ -	\$ 13,772.76		
3	3 FDEP RAIs and Questions		\$ 765.50	\$ 2,955.00		
Т	DTALS	\$ 17,802.46	\$ 15,062.30	\$ 32,864.76		

Attachment - The Colinas Group Fee Estimate - Subconsultant

Preparation of a Landfill Stabilization Report

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S2Li No.

16-675

County No. CM2096-WA15

Bryceville Landfill Nassau County, Florida

LABOR TASK DESCRIPTION			LABOR CATEGORY AND RATE																
		Cons	Principal Consultant \$145.60		Senior drogeologist \$117.60	Staff Hydrogeologist \$86.20		Env. Field Technician \$84.15		Draftperson/ CAD \$60.00		Clerk/ Word Process.					TOTAL HOURS	1	OTAL
IASK	DESCRIPTION	314	.80	 	\$117.00	\$80.20	\dashv	\$84.15	<u>N</u>	\$60.00	1- 3:	7.50			-				
1	Preparation of a Water Quality Technical Report	2	1		48	48		0		12		8	0	0	0	0	140	\$14,	296.80
2	Landfill Stabilization Study and Report	(0	0		0		0		0 0		0.	0		0	\$0.00	
	- Draft Document Preparation																0		
	- County Review								1								0		\$0.00
	- FDEP Draft Report Submittal																0		
	- FDEP Final Report Submittal																0		
3	FDEP RAIs and Questions				0	0		0	T	0		1					6	\$	765.50
	SUBTOTALS:	2)		48	48		0		12		9	0	0	0	0	146	\$ 15,	062.30
EXPENS	EES	Vel	eld icle 'day)		Lab Testing (est.)	Equipment Rental (est.)		Parts (est.)	Ī				Subcon- tractors (est.)						OTAL
TASK	DESCRIPTION		,										,===,						
1	Preparation of a Water Quality Technical Report	\$	-	\$	-	5	.	\$ -	\$		\$		\$ -					\$	-
2	Landfill Stabilization Study and Report	\$	-	\$	-	\$.	\$.	\$	-	\$	-	\$ -					\$	-
3	FDEP RAIs and Questions	\$		5	•	\$.	\$ -	\$	-	\$	-	\$ -	l]			\$	-
	SUBTOTALS:	\$	-	\$	-	\$		\$ -	\$	•	\$	-	\$ -					\$	-
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Nassau County Engineering Services Department 96161 Nassau Place Yulee, Florida 32097

J. Scott Herring, P.E. Public Works Director

September 12, 2016

Sent via email: slevin@s2li.com

Sam Levin, P.E. President S2L, Inc. 531 Versailles Drives, Suite 202 Maitland, Florida 32751-7301

Subject:

Notice to Proceed

Bryceville Landfill Stabilization Report

Contract No. CM2096-WA15

Dear Mr. Levin,

This letter shall serve as the official Notice to Proceed for the Bryceville Landfill Stabilization Report, Work Authorization No. 15. The effective date of the Notice to Proceed is hereby established as October 1, 2016.

All work must be conducted in accordance with the agreement referenced above.

If you have any questions, please do not hesitate to contact me.

Sincerely,

Becky Hiers-Bray, P.E.

Engineer III

Cc:

Scott Herring, Public Works Director

David Pensante, Contracts Manager

Omar Smith, S2Li