

**WORK AUTHORIZATION # CM2096-WA10
NASSAU COUNTY
BOARD OF COUNTY COMMISSIONERS
RFQ/BID NO. NC13-033**

15 AUG -6 AM 10:30

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: Final Design of the Leachate Storage Tank System Repairs & Improvements			
CONTRACT OVERVIEW			
		Total of Previous Authorizations	\$459,451.73
Date Submitted	07-28-15	Adjustments/Change Orders	\$13,682.18
Amount	\$23,064.21	This Work Authorization	\$23,064.21
Scheduled Completion	Approx. 8 months	Current Contract Total	\$496,198.12

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 engineering and consulting services for the final design of the leachate storage tank system repairs and improvements, in accordance with the scope of services, attached hereto as Attachment "A".

ARTICLE 2. Time Schedule

S2Li shall begin upon receipt of the fully executed work authorization. It is anticipated that the design services described herein will be provided over a two (2) month period and bidding/construction administration services will be provided over a four (4) to six (6) month period. Project completion approximately eight (8) months.

ARTICLE 3. Budget

The cost estimate to conduct the Work as described in the Scope of Services is \$23,064.21. A detailed breakdown for each tasks with the estimated labor hours and expense are included in the Exhibit 1 of Attachment "A". Costs incurred will be invoiced on a time and material basis.

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:

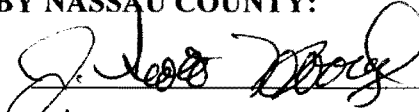
Unless detailed herein, all drawings, data, electronic files and other information required for this Work Authorization has been accepted by Consultant. Specifically, all electronic files have been reviewed and accepted for the purposes of this Work assignment. Any additional information, including detailed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

AGREED TO BY:

BY: 
Print Name: Samuel B. Levin
Title: President
Date: 8/3/15

RECOMMENDED AND APPROVED BY NASSAU COUNTY:

Director of Public Works:



Contract Management:

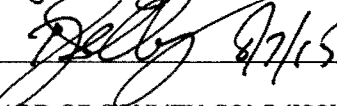
Charlotte Young

Office of Management & Budget:



County Manager:

8/3/15

 8/3/15

APPROVED by the County Manager, designee for the BOARD OF COUNTY COMMISSIONERS, the ___ day of _____, 2015

ACCOUNT NO.: 70362534-563920 SWTNK

Scope of Services

Preparation of Technical Bidding Documents
for a
Leachate Storage System Improvements

West Nassau Class I Landfill

County Contract Number: CM2096-WA10

S2Li Project Number: 15-601

July 28, 2015

Nassau County would like to implement repairs and improvements to address storage tank and piping deficiencies. Deficiencies include those noted in an inspection report prepared by Tank Industry Consultants (TIC) dated September 19, 2013, as well as other items whose implementation will improve facility operation and maintenance. The County has asked S2L, Incorporated (S2Li) to prepare the design and technical bidding documents for use by the County in soliciting bids from interested contractors to repair the leachate storage tanks and perform other ancillary improvements. S2Li has also been asked to assist in the review of the bids, and to perform periodic observation during the construction process, testing, and startup demonstration of the leachate tank loading system and related controls.

The new piping will allow the County to generally maintain the current operation; however, the operation of filling the tanks from tanker trucks will be eliminated, thereby simplifying the piping systems. At this time, it is anticipated that the project will include the following major items:

1. Replacement of the piping, valves and appurtenances (including re-design of the routing).
2. Recoating of the three tanks (including testing of the existing coating for the presence of lead).
3. Re-inspection of the tanks (as part of the specifications/contract documents).
4. Minor repairs to the concrete containment area (primarily joint sealant)
5. Modifications to improve operation, including:
 - a. Sump pump replacement with flexible hose connection for easy removal;
 - b. Tank liquid level measurement system repairs (i.e. internal cabling and new tape scale);
 - c. Locking panel for electrical control switch;
 - d. Motor operator for the control valve at the tanker truck location;
 - e. New influent flow meter; and
 - f. Pump suction and discharge pressure gauge (isolation seal).

The truck loading pump will be re-used; consequently, replacement or rehabilitation of these items is not included in this scope of services.

The scope of services, compensation, and schedule are presented below:

SCOPE OF SERVICES

The scope of services is divided into the following major tasks:

1. Design Phase Services;
2. Bidding Assistance Phase Services;
3. Construction Phase Services; and
4. Startup Demonstration and Operations Verification.

Since this is a replacement project (i.e. maintenance), electrical engineering services are not anticipated. Electrical work associated with reconnecting the pump and controls, and a new motor operator in accordance with current electrical code, will be made the responsibility of the contractor and electrical subcontractor. If significant upgrades are required for code compliance, the services of an electrical engineer may need to be engaged. Upgrades for purposes of code compliance are not anticipated.

At this time, neither electrical, structural nor geotechnical engineering services are anticipated and are not included in the scope of services.

TASK 1 – DESIGN PHASE SERVICES

S2Li will provide engineering and consulting services for the final design of the leachate storage tank system repairs and improvements. Final design drawings and specifications will include process mechanical and control details necessary for bidding and construction. It is anticipated that Nassau County Purchasing will provide front end bidding documents and conduct the bidding process.

- 1.1 **Field Measurements and Data Gathering:** Obtain field and design information from Nassau County. One site visit is included in this Task.
- 1.2 **System Evaluation:** As part of the design, S2Li will identify (to a limited extent) improvement options and recommendations, including modifications to the existing piping and other changes to simplify piping and operations.

In addition, S2Li will test the coating on each tank (readily accessible from outside the tank's internal location and exterior) for lead-based paint using a commercially available testing kit. The tests will determine if lead based paint is present (or not) in the locations tested, so it is only an indication of the presence of lead-based paint in the entire system.

This information will be presented in a brief letter report for review and comment by Nassau County and S2Li prior to developing the design drawings and specifications.

- 1.3 **Designs Drawings:** Based on the System Evaluation letter report, prepare mechanical design drawings as necessary for bidding and construction. The drawings and details are anticipated to include:

1. Demolition - Existing Piping System;
2. Tank and Piping- Plan and Sections;
3. Piping Schematic and Details; and
4. Tank Refurbishment (recoating and repairs in accordance with TIC recommendations).

1.4 **Specifications:** Develop technical specifications for the piping systems and tank refurbishment, as well as Division 1 specifications (based upon previous projects). Front-end documents (i.e. Division 00, General and Supplemental Conditions) will be provided by Nassau County, and S2Li will update/modify the documents for this project.

1.5 **Draft and Final Documents:** Draft design documents will be provided for review by the County at approximately the 80% to 90% completion level. Comments will be incorporated into the Final Design documents. An estimate of the probable costs for the contractor's work will be prepared.

TASK 2 – BIDDING ASSISTANCE PHASE SERVICES

S2Li will provide services under this task to attend the pre-bid conference and to respond to questions from potential bidders related to clarification of design concepts and obtaining quotes from suppliers. Additionally, the S2Li Team will review the bids and provide the County with S2Li's recommendation for the lowest, qualified, responsible bidder.

TASK 3 – CONSTRUCTION PHASE SERVICES

S2Li will assist with review of shop drawings, responding to design clarifications, perform one site visit and prepare record drawings, as described below.

3.1 **Shop Drawings/Substitutions:** Review shop drawings and other data for conformance with the design concept and Contract Documents. The review of approximately five submittals is included in this task.

3.2 **Interpretations and Clarifications:** When requested in writing, provide necessary interpretations and clarifications of the Contract Documents. To the extent possible, information will be based on existing documents and will utilize 8½" x 11" sketches and written descriptions. The fee estimate is based on the receipt of three requests for information (RFIs).

3.3 **Inspection:** Conduct one on-site inspection, and develop a deficiency list ("Punch List").

3.4 **Inspection Report:** The technical specifications will require the contractor to provide the services of a qualified inspector to prepare a report on the condition of the tanks to serve as the 3-year inspection report required under Chapter 62-701.400(6)(c)9., Florida Administrative Code. The contractor will be required to address any deficiencies found by the inspector until the inspector is satisfied that all items have been addressed for the final report.

3.5 **Record Drawings:** Prepare record drawings based on as-built drawings provided by the contractor.

Task 4 - STARTUP DEMONSTRATION AND OPERATIONS VERIFICATION

After final completion of construction, the S2Li Team will assist County personnel with:

1. Confirmation of Punch List items completion; and
2. System start-up and verification of operational controls and equipment.

PROJECT SCHEDULE

It is anticipated that the design services described above will be provided over a two month period and bidding/construction administration services will be provided over a four to six month period.

COMPENSATION

The cost estimate to conduct the Work as described in the above listed Scope of Services is \$23,064.21. A detailed breakdown for each task in conjunction with the estimated labor hours and expenses are included in the attached Exhibit 1 with S2Li subconsultant's information provided on Attachment 1 of Exhibit 1. Costs will be on a time and material basis. The County will be notified when the overall project budget is nearing its limit.

July 28, 2015

EXHIBIT 1

S2Li No. 15-601
 County No. CM2096-WA10

Total Project Costs
 S2Li Fee Estimate

Preparation of Technical Bidding Documents
 Leachate Storage System Improvements
 West Nassau Class I Landfill
 Nassau County, Florida

LABOR		LABOR CATEGORY AND RATE							TOTAL HOURS	SUBTOTAL LABOR
		Project Dir./ Principal	Regional Manager/ QC Officer	Principal Engineer	Senior Engineer	Associate Engineer	CAD Technician	Office Manager		
TASK	DESCRIPTION	\$225.00	\$208.88	\$171.38	\$122.51	\$47.47	\$47.47	\$68.46		
1	Design Phase Services	2	12	0	0	0	0	2	16	\$3,093.48
2	Bidding Assistance Phase Services	0	4	0	0	0	0	1	5	\$903.98
3	Construction Phase Services	2	8	0	0	0	0	2	12	\$2,257.96
4	Startup Demonstration and Operations Verification	0	4	0	0	0	0	1	5	\$903.98
SUBTOTALS:		4	28	0	0	0	0	6	38	\$7,159.40

EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)	PRW Group, LLC. (see Attachment 1)				SUBTOTAL EXPENSES
TASK	DESCRIPTION									
1	Design Phase Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$10,701.46			\$ 10,701.46
2	Bidding Assistance Phase Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$1,647.86			\$ 1,647.86
3	Construction Phase Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$3,021.97			\$ 3,021.97
4	Startup Demonstration and Operations Verification	\$ -	\$ -	\$ -	\$ -	\$ -	\$533.52			\$ 533.52
SUBTOTALS:		\$ -	\$ -	\$ -	\$ -	\$ -	\$15,904.81	\$0	\$0	\$ 15,904.81

COST SUMMARY				
TASK	DESCRIPTION	SUBTOTAL S2Li LABOR	SUBTOTAL EXPENSES including Subconsultants	TASK TOTAL
1	Design Phase Services	\$ 3,093.48	\$ 10,701.46	\$ 13,794.94
2	Bidding Assistance Phase Services	\$ 903.98	\$ 1,647.86	\$ 2,551.84
3	Construction Phase Services	\$ 2,257.96	\$ 3,021.97	\$ 5,279.93
4	Startup Demonstration and Operations Verification	\$ 903.98	\$ 533.52	\$ 1,437.50
TOTALS		\$ 7,159.40	\$ 15,904.81	\$ 23,064.21

July 28, 2015

**Preparation of Technical Bidding Documents
Leachate Storage System Improvements
West Nassau Class I Landfill
Nassau County, Florida**

S2Li No. 15-601
County No. CM2096-WA10

Attachment 1 - PRW Group, LLC. Fee Estimate - Subconsultant

LABOR		LABOR CATEGORY AND RATE							TOTAL HOURS	SUBTOTAL LABOR
		Sr. Project Manager \$133.38	CADD/Technician 1 \$59.48					Admin. Assistance 1 \$38.07		
TASK	DESCRIPTION									
1	Design Phase Services	48	71					2	121	\$10,701.46
2	Bidding Assistance Phase Services	10	4					2	16	\$1,647.86
3	Construction Phase Services	19	5					5	29	\$3,021.97
4	Startup Demonstration and Operations Verification	4	0					0	4	\$533.52
	SUBTOTALS:	0	80					0	170	\$15,904.81

EXPENSES		Field Vehicle (\$90/day)	Lab Testing (est.)	Equipment Rental (est.)	Parts (est.)			Subcontractors (est.)			SUBTOTAL EXPENSES
TASK	DESCRIPTION										
1	Design Phase Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
2	Bidding Assistance Phase Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
3	Construction Phase Services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
4	Startup Demonstration and Operations Verification	\$ -									\$ -
	SUBTOTALS:	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
TOTAL											\$15,904.81