

# CITY OF HIGH POINT

## AGENDA ITEM



**Title:** Kersey Valley MSW Landfill Phase 6 Engineering Services

**From:** Robby Stone – Public Services Director

**Meeting Date:** August 1, 2022

**Public Hearing:** N/A

**Advertising Date:** N/A

**Advertised By:** N/A

**Attachments:** Attachment A – Engineering Services Proposal

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### **PURPOSE:**

The City budgeted for the expansion of the Kersey Valley MSW Landfill for continued disposal of municipal solid waste. Plans and permitting have been approved through regulatory agencies. The design engineer will provide services relating to construction documents, bid procurement and construction services including engineering and construction administration, construction quality assurance, construction certification, and reports for the duration of the project.

### **BACKGROUND:**

The City of High Point operates a municipal solid waste landfill for disposal of household trash and other household waste. The current disposal area is rapidly filling up and the expansion of the additional cell (6) will accommodate the current rate of disposal until approximately 2026.

### **BUDGET IMPACT:**

Funds are available in the FY 2022-23 budget.

### **RECOMMENDATION / ACTION REQUESTED:**

The Public Services Department recommends approval and asks for the Council to award the Engineering Services to Smith Gardner, Inc. in the amount of \$319,000.



July 13, 2022

Mr. Robby Stone, P.E.  
Director  
City of High Point - Department of Public Services  
211 South Hamilton Street  
High Point, NC 27260

**RE: City of High Point - Solid Waste Management  
Engineering Services Proposal  
MSWLF - Phase 6 Bid Procurement and Construction Services**

Dear Robby:

Smith Gardner, Inc. (S+G) is pleased to provide this proposal for engineering services to be performed by S+G pertaining to the construction of the Phase 6 municipal solid waste management (MSW) landfill unit.

The following presents our proposed scope of services, schedule, and budget.

## **SCOPE OF SERVICES**

Our proposed Scope of Services is provided as **Attachment A**. This scope outlines S+G's approach in providing the required services. The Scope of Services is divided into phases and tasks including:

- 1.0 Construction Documents and Bid Procurement
  - 1.1 Construction Documents
  - 1.2 Bid Procurement
- 2.0 Construction Services
  - 2.1 Construction Administration & Engineering
  - 2.2 Construction Quality Assurance (CQA) (Field Services & Conformance Testing)
  - 2.3 Construction Certification and CQA Report

Each task includes a description of the task objective, S+G activities, task deliverables, key understandings, planned meetings, and information and services provided by others.

## **SCHEDULE**

S+G is prepared to begin work on the initial phase of work immediately upon the City's authorization. S+G estimates that the project can be ready for bid in early September 2022 and that the start date could be prior to year-end. The anticipated schedule and budget for construction assumes a 210 day (7-month) construction schedule.

Mr. Robby Stone, P.E.

July 13, 2022

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## BUDGET

S+G proposes to undertake the above scope on a time and materials basis for a total not to exceed budget of \$319,000 as itemized below. The referenced **Table 1** provides a detailed cost estimate for each major task. Please also refer to S+G's standard fee schedule provided as **Attachment B**.

1.0 Construction Documents and Bid Procurement (see <b>Table 1</b> )	\$44,500
2.0 Construction Services (see <b>Table 1</b> )	\$245,000
Subtotal	\$290,000
<i>Contingency (10%):</i>	<i>\$29,000</i>
<b>Total:</b>	<b>\$319,000</b>

S+G will keep the City informed of our budget status and will not exceed the proposed budget without prior approval. Note that it is assumed that unused budget from earlier tasks will be available for ensuing tasks.

Smith Gardner, Inc. is pleased to be of continued service to the City of High Point. If you should have any questions, or require additional information, please contact us at your earliest convenience.

Sincerely,  
**SMITH GARDNER, INC.**

DocuSigned by:  
  
3369FBA008BB445...  
Stacey A. Smith, P.E.  
President, Senior Engineer  
[stacey@smithgardnerinc.com](mailto:stacey@smithgardnerinc.com)

DocuSigned by:  
  
5B6B31996A674D7...  
Pieter K. Scheer, P.E.  
Vice President, Senior Engineer  
[pieter@smithgardnerinc.com](mailto:pieter@smithgardnerinc.com)

Attachments: Table 1  
Attachment A - Scope of Services  
Attachment B - S+G Fee Schedule



Date: 7/13/2022  
By: PKS

**City of High Point - Kersey Valley MSW Landfill**  
**Phase 6 Construction**  
**Table 1: Services Estimate - Summary**

Task	Description	Cost	Totals
1.0	<b>Construction Documents &amp; Bid Procurement</b>		<b>\$44,500</b>
	S+G:	\$37,900	
	Subcontractors*:		
	Design Engineering, Inc. (Electrical):	\$6,600	
2.0	<b>Construction Services</b>		<b>\$245,500</b>
2.1	<b>Construction Administration &amp; Engineering</b>		
	S+G:	\$53,900	
	Subcontractors*:		
	Design Engineering, Inc. (Electrical):	\$6,600	
2.2	<b>CQA (Field Services &amp; Conformance Testing)</b>		
	S+G:	\$32,000	
	Subcontractors*:		
	Geotechnics, Inc. (CQA Field Services):	\$116,500	
	Geotechnics, Inc. (CQA Conformance Testing):	\$27,500	
2.3	<b>Construction Certification &amp; CQA Report</b>		
	S+G:	\$9,000	
Subtotal:			\$290,000
Contingency (10%):			\$29,000
<b>Total Estimated Services:</b>			<b>\$319,000</b>

\*Subcontractor and Conformance Testing Costs include 10% Markup.



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**Attachment A**

**Scope of Services**

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## A. Scope of Services

The following Scope of Services outlines S+G's approach in providing the proposed engineering, construction administration, Construction Quality Assurance (CQA), and related services. This Scope of Services is divided into Phases and Tasks as follows.

- 1.0 Construction Documents and Bid Procurement
  - 1.1 Construction Documents
  - 1.2 Bid Procurement
- 2.0 Construction Services
  - 2.1 Construction Administration & Engineering
  - 2.2 Construction Quality Assurance (CQA) (Field Services & Conformance Testing)
  - 2.3 Construction Certification and CQA Report

### 1.0 Construction Documents and Bid Procurement

The task elements under this phase will provide for: the necessary documents for the construction of the landfill unit and associated infrastructure/features; will provide for obtaining bids for construction; and will provide for assisting the City in contract negotiations.

#### 1.1 Construction Documents

**Objective:** To prepare final construction drawings and specifications (Construction Documents) to assist the City in advertising for and obtaining bids for construction.

**S+G Activities:** In this task, S+G will produce the Construction Documents for use in receiving bids from contractors. The Construction Documents will include:

- Drawings and Specifications to Address:
  - Site Clearing, Drainage and Erosion Control Facilities
  - Fill Area Subgrade Preparation
  - Liner System Material and Installation
  - Leachate Collection System Piping and Bedding
  - Access Road Construction
  - Electrical Work Associated with Leachate Pumps
  - Other Components, as Necessary
- Other Construction Documents Necessary to Bid and Enter into a Formal Construction Contract including:
  - Advertisement
  - Bid Form(s)
  - Contract
  - Standard Forms
  - General Conditions
  - General Specifications, etc.

S+G will prepare and submit to the City an opinion of probable construction cost based on the information contained in the Construction Documents.

**Task Deliverables:** Copies of Construction Documents will be submitted to the City for review and approval at the 90% completion stage and at time of bid. Construction Cost Estimate.

## A. Scope of Services

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<b>Key Understandings:</b>	<p>The permit application documents will be modified to make construction-level documents. Construction documents will meet the City's requirements.</p> <p>S+G will incorporate revisions to the Construction Documents requested by City staff as appropriate.</p>
<b>Planned Meetings:</b>	One (1) meeting, one-half day duration, with City staff at the 90% completion stage.
<b>Information and Services Provided By Others:</b>	Review of documents by City staff.

### 1.2 Bid Procurement

<b>Objective:</b>	To select a contractor to complete the proposed construction.
<b>S+G Activities:</b>	<p>Prepare an advertisement of the construction contract.</p> <p>Issue for bid the Contract Documents and addenda (drawings, specifications, etc.).</p> <p>Assist the City with coordinating and presiding over a pre-bid meeting to respond to technical questions.</p> <p>Assist the City in evaluating bids or proposals and in assembling and awarding the contract.</p> <p>Consult with and advise the City as to the acceptability of subcontractors proposed by the prime contractor.</p> <p>Consult with and advise the City as to the acceptability of substitute materials and equipment proposed by the contractor(s).</p>
<b>Task Deliverables:</b>	<p>S+G will provide Construction Documents to all interested contractors.</p> <p>Technical memorandum evaluating each contractor or subcontractor regarding the acceptability of their bid or proposal. Prepared bid tabulation sheets.</p>
<b>Key Understandings:</b>	S+G may charge contractors a non-refundable fee to cover reproduction and handling costs for each set of bidding documents requested. City staff will be responsible for final contractor and subcontractor selection.
<b>Planned Meetings:</b>	Three (3) meetings, one-half day duration each, with City staff including attendance of pre-bid conference, bid opening, and awarding of contracts.
<b>Information and Services Provided By Others:</b>	Availability of City personnel.

## **A. Scope of Services**

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### **2.0 Construction Services**

Included in this phase is the required construction administration, engineering, construction monitoring, and certification/documentation tasks for this project.

#### **2.1 Construction Administration & Engineering**

**Objective:** To perform construction administration and associated engineering activities and report to the City regarding progress made in fulfilling the terms of the construction contracts and to perform minor engineering evaluations.

**S+G Activities:** Attend and preside at a pre-construction conference.

Review Contractor submittals (product information, shop drawings, samples, etc.) and proposed substitutes from the contractor to verify compliance with the Contract Documents.

Prepare field and change orders as required.

Schedule and conduct construction progress meetings with the City and the contractor (typically monthly during active construction).

Review and certify contractor pay applications (typically monthly).

Prepare progress reports (typically monthly and included as part of progress meeting minutes).

**Task Deliverables:** Field orders, change orders, processed submittals, and processed pay applications as necessary. Progress reports.

**Key Understandings:** Work done under this task will be coordinated closely with **Task 2.2** below.

**Planned Meetings:** Progress meetings with S+G, the City, and contractor(s).

**Information and Services Provided**

**By Others:** Availability of City personnel.

#### **4.2 Construction Quality Assurance (CQA) (Field Services & Conformance Testing)**

**Objective:** To perform the necessary monitoring and testing of the construction to meet the requirements of the project CQA plan as approved by the NC Department of Environmental Quality Division of Waste Management (NCDWM).

**S+G Activities:** Provide a field representative on-site during periods of major construction including:

- Earthwork construction
- Subgrade preparation

## A. Scope of Services

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- Installation of the liner system
- Installation of the leachate collection and management system.

S+G will administer and oversee the Construction Quality Assurance (CQA) testing program for placement of earthworks and geosynthetics. This work will consist of density, permeability, and other tests at a sufficient frequency to satisfy the NCDWM requirements. S+G will subcontract to Geotechnics or other acceptable geotechnical firm to provide for soil materials testing and a full-time technician during placement of earthworks and other portions of the work as needed. S+G will subcontract to Geotechnics or other accredited geosynthetics lab for testing of geosynthetics.

**Task Deliverables:** In the event that an unexpected occurrence affects progress status, an interim progress status report will be prepared for the City.

**Key Understandings:** S+G is prepared to respond within 24 clock hours to unexpected occurrences.

The total construction period has been assumed to be no longer than 210 days.

**Planned Meetings:** Site visits for this task will be coordinated with **Task 2.1** above.

**Information and Services Provided**

**By Others:** Construction Quality Assurance testing and oversight (as required) provided by Geotechnics (or other acceptable firm) as a subcontractor to S+G. Availability of City representative to attend progress meetings.

### 4.3 Construction Certification and CQA Report

**Objective:** To prepare and submit to the City and the NCDWM a CQA Report documenting and certifying the quality of construction activities.

**S+G Activities:** Upon completion of construction, S+G will prepare and submit to the City and the NCDWM a CQA Report containing:

- A comprehensive narrative report
  - Site visit reports from Engineering and CQA personnel
  - A series of color photographs of major project features
  - Results of all CQA and CQC testing
  - Documentation of any failed test results, descriptions of procedures used to correct the improperly installed material, and results of all retesting performed
  - Documentation of design modifications, if any
  - Record drawings (by Contractor's Surveyor)
- Certification by the Project Engineer that construction was completed in accordance with:
  - The Project Specifications
  - The CQA Plan
  - The conditions of the permit to construct

## **A. Scope of Services**

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- The requirements of applicable Solid Waste Rules
- Acceptable engineering practices.

Upon review of this document by the City, S+G will submit to the NCDWM for approval. S+G will provide all necessary responses, data, and input for the NCDWM approval.

**Task Deliverables:** CQA Report

**Key Understandings:** S+G will compile and review all construction documentation produced by the contractor's Quality Control agent(s) and surveyor, the Owner's Quality Assurance agent (if any), and S+G's field representatives into a comprehensive CQA Report for submittal to the NCDWM.

**Planned Meetings:** One meeting, one-half day duration, with the NCDWM as needed or requested to present and discuss the CQA Report.

**Information and Services Provided By Others:** Availability of City staff.

## **A. Scope of Services**

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**Attachment B**

**S+G Fee Schedule**



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**2022 FEE SCHEDULE**
**Staff Professional**

**President**, Senior Engineer - Stacey A. Smith, P.E.\*\*  
**Vice President**, Senior Project Manager - John M. Gardner, P.E.\*\*  
**Vice President**, Senior Engineer - Pieter K. Scheer, P.E.\*\*  
**Vice President**, Senior Geologist - C. Kevin Anderson, P.G.\*\*  
**Vice President**, Senior Hydrogeologist - Joan A. Smyth, P.G.\*\*  
**Principal**, Senior Project Manager - W. Michael Brinckek, P.E.\*\*  
**Principal**, Senior Project Engineer - Gregory G. Mills, P.E.\*\*  
**Principal**, Senior Civil Designer - Christopher T. Jones\*\*  
Senior Project Manager – Jon M. Dietz, Ph.D.  
Senior Project Manager – Gregory T. Farrell, P.E.  
Senior Geologist – Bobby J. Wolf, P.G.  
Senior Surveyor – William T. "Ty" Robbins II, P.L.S.  
Senior Scientist - Matthew S. Lamb\*\*  
Senior Project Engineer - John R. Fearrington, P.E.\*\*  
Senior Project Engineer - Spencer W. Hollomon, P.E.\*\*  
Project Engineer – Jesse C. Li, P.E.  
GIS Analyst – Jason D. McMahon, GISP\*\* (UAS)  
Management Consultant – D. Scott Bost  
Project Geologist – Clyde A. L. "CAL" Easter, P.G.  
Project Geologist - Seth C. Rickerts, P.G.  
Staff Engineer – Matthew M.A.C. "Mac" Jones, EI  
Civil Designer – Robert V. Maynard  
Field Services Manager - Byron S. Hackney\*\*  
Field Services Manager - Britt P. Ransom\*\* (AAI)  
Staff Engineer – Lou J. Krasuski@@  
Construction Manager – Troy D. Mitchell\*\* (UAS)  
CAD Designer – L. Hal Blevins, III  
Environmental Technician – Joshua C. Rue  
Environmental Technician – Kyle M. Bonnett  
Environmental Technician – Daniel J. Pantaleo  
Staff Technician  
Systems Administrator - Sam T. Spencer \*\* (UAS)  
Clerical/Administrative Secretary  
Survey Crew (with equipment)  
Expert Witness/Legal Services

**Reproduction Expenses**

Small Format (B size or smaller)	Black & White
	Color
Large Format (C size or larger)	

**Equipment  
Expenses & Fees**

Direct Project Expenses

**Hourly Billing Rates\***

\$250/hour  
\$235/hour  
\$225/hour  
\$185/hour  
\$180/hour  
\$200/hour  
\$140/hour  
\$140/hour  
\$200/hour  
\$180/hour  
\$175/hour  
\$170/hour  
\$150/hour  
\$140/hour  
\$140/hour  
\$125/hour  
\$125/hour  
\$125/hour  
\$120/hour  
\$115/hour  
\$115/hour  
\$115/hour  
\$115/hour  
\$110/hour  
\$110/hour  
\$100/hour  
\$85/hour  
\$75/hour  
\$75/hour  
\$50/hour  
\$100/hour  
\$50/hour  
\$150/hour  
Negotiated

see Rate Sheet

Cost + 10%

\* Rates are subject to review annually.

\*\*Employee Owner

\*\*\*Accredited Asbestos Inspector (AAI) Services

\*\*FAA Small Unmanned Aircraft Systems (UAS) Certificate &amp; NC Commercial UAS Operator Permit Holder

@@Federal Reference Method 9 Visible Emissions Evaluator

+\$15/hour to rate

+\$15/hour to rate

+\$15/hour to rate

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