



# HAYWOOD COUNTY BOARD OF COMMISSIONERS

## AGENDA REQUEST

***Must be presented to the County Manager's Office  
NO LATER THAN 5 P.M. FRIDAY THE WEEK BEFORE THE MEETING***

DATE OF REQUEST: July 8, 2015

FROM: DBF

MEETING DATE REQUESTED: July 20, 2015

*Regular meetings: First (1<sup>st</sup>) Monday of the month at 9:00 am  
Third (3<sup>rd</sup>) Monday of the month at 5:30 pm*

SUBJECT: Bunnell Lammons Engineering (BLE) Contracts for 2015 - 2016

REQUEST: Haywood County is seeking approval of four contracts for BLE for ongoing services at the Francis Farm Landfill (FFLF):

Contract for Well Abandonment and Installation	\$64,700.00
Contract for Water Quality Monitoring Plan	10,000.00
Contract for Statistical Analysis of Ground Water	5,000.00
Contract for Landfill Gas Monitoring Plan	4,000.00

BACKGROUND: Bunnell Lammons Engineering has been one of engineering partners the County has used at FFLF and White Oak Landfill. BLE developed the overall groundwater well installation plan and statistical analysis of the data for submittal to NCDENR since 2009.

IMPLEMENTATION PLAN: Solid Waste Administrator will oversee contracts and continued project at FFLF.

FINANCIAL IMPACT STATEMENT: The costs of the contracts were included in the 2015-2016 budgets.

SUPPORTING ATTACHMENTS: YES  NO  HOW MANY? 14

LIST: \_\_\_\_\_  
\_\_\_\_\_

**If yes, one ORIGINAL ATTACHMENT, and 14 copies, copied front and back side of pages, stapled and three-hole punched must accompany the agenda request**

PowerPoint Presentation: YES  NO

PERSON MAKING PRESENTATION AT MEETING: David B Francis

TITLE: Solid Waste Administrator

PHONE NUMBER: 356-2602

E-MAIL: dbfrancis@haywoodnc.net

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THIS SECTION FOR OFFICE USE ONLY

Received (Date/Time): \_\_\_\_\_

County Manager / Clerk to the Board Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

In an effort to save paper, attachments should be copied on both front and back sides.

**BLE**  
**BUNNELL-LAMMONS ENGINEERING, INC.**  
**GEOTECHNICAL, ENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS**

April 2, 2015

Office of the County Manager  
215 N. Main Street  
Waynesville, NC 28786

Attention: Mr. David B. Francis  
Solid Waste and Tax Administrator

Subject: **Contract for Statistical Analysis of Groundwater Quality Data & Sampling Report Preparation (Fiscal Year 2016)**  
Closed Francis Farm Landfill  
Haywood County, North Carolina  
BLE Project No. J15-1957-47 [August 2015 Event]  
BLE Project No. J15-1957-48 [February 2016 Event]  
BLE Contract Number P15-0287

Dear Mr. Francis:

Bunnell-Lammons Engineering, Inc. (BLE) is pleased to submit this contract to Haywood County to provide hydrogeological consulting services associated with the closed Francis Farm Landfill. This proposal addresses the statistical analysis of groundwater quality data and reporting of groundwater and surface water quality data, as set forth by the North Carolina Department of Environment Natural Resources, Division of Waste Management (DWM). Included herein is a brief description of the background project information, a general description of our contract scope of services with related fee estimate, and authorization information.

### **BACKGROUND INFORMATION**

The closed Francis Farm Landfill in Haywood County requires semi-annual groundwater and surface water monitoring and reporting. The Francis Farm Landfill has 30 groundwater monitoring wells (MW-1A, MW-2A, MW-3A, MW-4 through MW-14, MW-14D, MW-15, MW-16, MW-16D, MW-17, MW-18, MW-19, MW-19D, MW-20, MW-20D, MW-21, MW-23D and MW-22 through MW-25) and 4 surface water monitoring points (US-1, DS-1, DS-2, & DS-3) which are sampled every February and August. We understand that sampling and laboratory analytical services are provided by a laboratory under direct contract with Haywood County. The statistical analysis of the water quality data and reporting was performed by others prior to 2007 and has been performed by BLE from 2007 to the present.



## SCOPE OF SERVICES

The objective of this project is to perform statistical analysis of groundwater quality data and to prepare concise reports of the results obtained for each semi-annual sampling event over the contract period. We understand that the laboratory will provide the necessary field and laboratory data to BLE. The statistical analysis and the groundwater flow rate/direction calculations will be performed in accordance with Section .1632 of North Carolina's Solid Waste Management Rules (T15A NCAC 13B). Rule .1632(j) states that a report must be prepared after each sampling event which includes the following:

- field observations related to the condition of the monitoring wells;
- field data;
- laboratory data;
- statistical analysis;
- sampling methodologies;
- quality assurance and quality control data;
- information on the groundwater flow direction;
- calculations of the groundwater flow rate;
- a notice of constituents that exceed groundwater standards or show a statistically significant increase over the background levels for each well; and
- any other pertinent information related to the sampling event.

The analysis and reporting will be performed in accordance with North Carolina's currently promulgated Solid Waste Management Rules, Section .1632(g), (h), & (i) and Section .1632(d)(2), as discussed below in the following five tasks:

**Task 1:** We will collect digital and analog copies of the water quality data from the laboratory and update our existing digital database for analysis. We have assumed that, at a minimum, a hard copy and digital copy (in DWM ED format) of the semi-annual lab reports for each event will be provided by the laboratory.

**Task 2:** For each event, we will select one of the following statistical methods to evaluate the groundwater quality data from the site as described in Rule .1632(g):

- a parametric analysis of variance (ANOVA) followed by multiple comparisons procedures to identify statistically significant evidence of contamination;
- a parametric ANOVA based on ranks followed by multiple comparisons procedures to identify statistically significant evidence of contamination;
- a tolerance or prediction interval procedure;
- a control chart approach that gives control limits for each constituent; or
- another statistical method that meets the performance standards of Rule .1632(g).



Any statistical method chosen to evaluate the groundwater quality data will comply with the performance standards outlined in Rule .1632(h). Techniques for performing these types of statistical analyses have been described in EPA documents<sup>1</sup>.

Data management will be performed using a computer-based interactive database management system or similar computer based system. The database management system will facilitate the storage and retrieval of information according to pre-defined relationships thus promoting expeditious analysis of the data. Using this type system, the existing database can easily be amended with new data after each sampling event and new statistical results calculated.

**Task 3:** We will determine if a statistically significant increase over background concentrations exists for each constituent. Our analysis will only consider parameters that apply to the landfill unit in accordance with Rule .1632(i).

**Task 4:** We will provide information regarding the groundwater flow directions at the site in accordance with Rule .1632(d)(2). A map will be prepared which includes groundwater equipotential lines and flow direction arrows.

**Task 5:** We will prepare a report in accordance with Rule .1632(i) for each sampling event including the statistical analysis of the groundwater data, a potentiometric surface map, the groundwater flow directions, along with the sampling information provided by the field sampling contractor.

### QUALITY ASSURANCE/QUALITY CONTROL MEASURES

As part of BLE's quality assurance/quality control (QA/QC) measures, documents are reviewed prior to submittal to a client. Our QA/QC review is designed to provide accurate and concise reports, which are in compliance with DWM regulations. A Senior Hydrogeologist will perform the above scope of services. The review process will include: 1) a second Hydrogeologist checking each statistical analysis and potentiometric map for accuracy; and 2) a Senior or Principal Hydrogeologist reviewing the text of the report, and spot checking the statistical analysis and potentiometric surface map. Signatures of two professional geologists and/or engineers on submittals from BLE will indicate that appropriate QA/QC has been performed for data reduction, analysis, and reporting.

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<sup>1</sup> *Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance*, Office of Resource Conservation and Recovery, Program Implementation and Information Division, US EPA, EPA 530-R-09-007, dated March 2009.



**FEE ESTIMATE**

We understand that Haywood County has requested that we prepare this contract for their 2016 fiscal year. This proposal covers the second semi-annual event of the 2015 calendar year through the first semi-annual event of the 2016 calendar year.

Statistical analysis and reporting of a lump sum per sampling event as specified in the table below. This budget includes the statistical analysis data reduction, groundwater flow velocity calculations, and report preparation for each semi-annual sampling event.

<b>Contract Year (2016 Fiscal Year)</b>	<b>Francis Farm Landfill (Sampled February &amp; August)</b>	<b>Term Totals</b>
Event 1	August 2015 - \$2,500	<b>2016 Fiscal Year Total: \$5,000</b>
Event 2	February 2016 - \$2,500	

**SCHEDULE**

The written reports can be prepared and submitted to the Haywood County within 4-6 weeks after receipt of the groundwater quality and other necessary data.

**AUTHORIZATION**

As our written authorization for the above scope of services, please execute the attached acceptance sheet and return the acceptance copy of this contract to BLE.

Any exceptions to this contract or special requirements not covered in the contract should be attached to the returned acceptance copy for the mutual consideration of both parties. Please note that the Terms and Conditions are a part of this contract. Any Purchase Order issued to authorize this project should reference this document (P15-0287).



Contract for Statistical Analysis of Groundwater Quality Data & Reporting  
Francis Farm Landfill, Haywood County, North Carolina

April 2, 2015  
BLE Contract Number P15-0287

We appreciate the opportunity to serve as your hydrogeological consultant at this site. If you have any questions, please do not hesitate contacting us at (864) 288-1265.

Sincerely,  
**BUNNELL-LAMMONS ENGINEERING, INC.**

Andrew W. Alexander, P.G.  
Senior Hydrogeologist

Mark S. Preddy, P.G.  
Senior Hydrogeologist

CC: Mr. Mark Cathey, P.E. -- McGill Associates, PA

Attachments: Fee Schedule  
Contract Terms and Conditions

*e:\awa\active projects\mcgill\haywood county lf\proposals\p14-0569 fflf gw stats fy15\contract for fflf gw stats fy15 p14-0569.docx*

**FEE SCHEDULE**

**2015 Schedule of Fees**  
**Bunnell-Lammons Engineering, Inc.**

<b>Personnel</b>	<b>Hourly Rate</b>
Engineering/Environmental Technician I .....	\$45.00
Engineering/Environmental Technician II.....	\$55.00
Engineering/Environmental Technician III .....	\$65.00
Staff Engineer/Geologist/Scientist .....	\$90.00
Project Engineer/Geologist/Scientist.....	\$115.00
Senior Engineer/Geologist/Scientist.....	\$120.00
Chief Engineer/Geologist/Scientist .....	\$140.00
Principal Engineer/Geologist/Scientist.....	\$165.00
Administrative Support.....	\$50.00
Drafting.....	\$60.00

<b>Expense and Subcontract</b>	<b>Rate</b>
Mileage .....	\$0.75 per mile*
Miscellaneous Expenses (shipping, printing, consumable supplies, etc.) .....	Cost plus 15%
Digital Camera, per day .....	\$10.00
Color Laser Prints, per page.....	\$2.00
Monitoring Well Sampling Kit (including bailer, rope & decontamination supplies), each ....	\$25.00
PVC Bailer Sampling Kit, (including bailer, rope & decontamination supplies), each .....	\$35.00
Gloves-Vinyl or Latex, pair .....	\$0.50
Gloves-Nitrile, pair.....	\$3.00
Water Level Meter, per day .....	\$25.00
Turbidity Meter, per day.....	\$35.00
pH Test Equipment / Supplies, per day .....	\$25.00
Conductivity / Temperature Probe, per day .....	\$25.00
Submersible Sump Pump, per day .....	\$50.00
½ HP Well Pump, per day .....	\$50.00
High Flow Well Development Pump, per day .....	\$25.00
Low Flow Purge Pump with Battery, per day.....	\$25.00
Product Interface Probe, per day .....	\$50.00
Generator, per day .....	\$65.00
Organic Meter (PID or FID), per day .....	\$100.00
Slug Test Transducer and Data Logger with software, per day .....	\$150.00
Survey Equipment, per day .....	\$35.00

\*Subcontracts (drilling, laboratory and analysis, etc.)..... Cost plus 15%

\*Unit rates for items not listed will be billed on a per project basis.

\*Mileage charges may be adjusted based on fuel costs.

*Schedule (L)*

**ACCEPTANCE SHEET WITH  
TERMS AND CONDITIONS**



**BUNNELL-LAMMONS ENGINEERING, INC.**

6004 Ponders Court  
Greenville, South Carolina 29615

Phone (864) 288-1265  
Fax (864) 288-4430

**ACCEPTANCE SHEET**

The purpose of this sheet is to obtain your written authorization for our services and confirm the terms and conditions under which these services are provided as shown below.

Compensation for services rendered will be based on the attached schedule of fees (or as otherwise indicated below) which are part of this work authorization. If we are requested to modify the scope of work at your request or determine during the execution of the work that a modification of scope is required, we will promptly seek and confirm in writing a mutually agreeable revision of the scope of work and associated charges. All testing will be performed in accordance with the applicable specifications unless otherwise noted and test results apply only to the materials actually tested.

Project Name and Proposal Number: Contract for Groundwater Statistical Analysis and Reporting  
BLE Contract No. P15-0287

Project Location: Francis Farm Landfill  
Haywood County, North Carolina

**FOR PAYMENT OF CHARGES:** (to the account of)

Firm: \_\_\_\_\_ Attention: \_\_\_\_\_

Address: \_\_\_\_\_

City, State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

**WORK AUTHORIZED BY:**

Signature \_\_\_\_\_ Date \_\_\_\_\_

Print Name and Title - *Signatory warrants his/her authority to bind the entity represented here.*

Company Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

**SPECIAL INSTRUCTIONS:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## TERMS AND CONDITIONS

1. **SERVICES TO BE PROVIDED.** Bunnell-Lammons Engineering, Inc., through and by its officers, employees and subcontractors, (hereinafter BLE) is an independent consultant and agrees to provide Client, for its sole benefit and exclusive use, consulting services set forth in our proposal. No third party beneficiaries are intended by this agreement.

2. **PAYMENT TERMS.** Client agrees to pay BLE's invoice upon receipt. If payment is not received within 30 days from the Client's receipt of invoice, Client agrees to pay a service charge on the past due amount at the greater of 1% per month or the allowable legal rate, including reasonable attorney's fees and expenses if BLE's fee is collected through an attorney. No deduction shall be made from invoice on account of liquidated damages unless expressly included in the Agreement. After five days prior notice to Client, BLE may suspend services until paid on any project where payment of invoiced amounts not reasonably in dispute is not received by BLE within 60 days of Client's receipt of BLE's invoice. Invoices will be sent approximately monthly for the services performed.

3. **STANDARD OF CARE.** BLE will perform its services using that degree of care and skill ordinarily exercised under similar conditions by reputable members of BLE's profession practicing in the same or similar locality at the time of service. **NO OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE OR INTENDED BY OUR PROPOSAL OR BY OUR ORAL OR WRITTEN REPORTS.**

4. **INSURANCE.** BLE maintains insurance coverage as follows:

- a. Worker's Compensation Insurance.
- b. Employers Liability Insurance.
- c. Commercial General Liability Insurance.
- d. Professional Errors and Omission.

Certificates of Insurance can be provided upon acceptance of this agreement and upon request.

5. **PROFESSIONAL LIABILITY.** For additional consideration from BLE of \$10,00, receipt of which is hereby acknowledged, Client agrees that BLE's liability, and that of its officers, directors, employees, agents and subcontractors, to Client or any third party due to any negligent professional acts, errors or omissions or breach of contract by BLE will be limited to an aggregate of \$50,000 or BLE's total charges, whichever is greater. If Client prefers to have higher limits of professional liability, BLE agrees to increase the aggregate limit, up to a maximum of \$100,000, upon Client's written request at the time of accepting our proposal, provided Client agrees to pay an additional consideration of 5% of total charges, or \$500, whichever is greater. The additional charge for the higher liability limit is because of the greater risk assumed by BLE and is not a charge for additional professional liability insurance. This limitation shall not apply to the extent prohibited by law.

6. **SITE OPERATIONS.** Client will arrange for right-of-entry to the property for the purpose of performing project management, studies, tests and evaluations pursuant to the agreed services. Client represents that it possesses necessary permits and licenses required for its activities at the site.

BLE's field personnel are trained to initiate field testing, drilling and/or sampling within a reasonable distance of each designated location. BLE's field personnel will avoid hazards or utilities which are visible to them at the site. If BLE is advised in writing of the presence or potential presence of underground or above ground obstructions, such as utilities, we will give special instructions to our field personnel. BLE is not responsible for any damage or loss due to undisclosed or unknown surface or subsurface conditions owned by Client or third parties, except to the extent such damage or loss is a result of BLE's negligence.

BLE will take reasonable precautions to minimize damage to the property caused by its operations. Unless otherwise stated in BLE's proposal, BLE's charges do not include cost of restoration due to any related damage which may result. If Client requests BLE to repair such damage, BLE will do so at an appropriate additional cost.

Field tests or boring locations described in BLE's report or shown on sketches are based on specific information furnished by others or estimates made in the field by BLE personnel. Such dimensions, depths or elevations should be considered as approximations unless otherwise stated in BLE's proposal or report.

7. **FIELD REPRESENTATIVE.** The presence of BLE or its subcontractor's field personnel, either full-time or part-time, may be for the purpose of providing project administration, assessment, observation and/or field testing of specific aspects of the project as authorized by Client. Should a contractor(s) not retained by BLE be involved in the project, Client will advise such contractor(s) that BLE's services do not include supervision or direction of the means, methods or actual work of the contractor(s), its employees or agents. Client will also inform contractor that the presence of BLE's field representative for project administration, assessment, observation or testing will not relieve the contractor of its responsibilities for performing the work in accordance with the plans and specifications.

If a contractor (not a subcontractor of BLE) is involved in the project, Client agrees, in accordance with generally accepted construction practices, that the contractor will be solely and completely responsible for working conditions on the job site, including security and safety of all persons and property during performance of the work, and compliance with all Client safety requirements and OSHA regulations. These requirements will apply continuously and will not be limited to normal working hours. It is agreed that BLE will not be responsible for job or site safety or security on the project, other than for BLE's employees and subcontractors, and that BLE does not have the duty or right to stop the work of the contractor.

8. **UNFORESEEN CONDITIONS OR OCCURRENCES.** It is possible that unforeseen conditions or occurrences may be encountered at the site which could substantially alter the necessary services or the risks involved in completing BLE's services. If this occurs, BLE will promptly notify and consult with Client, but will act based on BLE's sole judgment where risk to BLE personnel is involved. Possible actions could include:

- a. Complete the original Scope of Services in accordance with the procedures originally intended in BLE's proposal, if practicable in BLE's judgment;
- b. Agree with Client to modify the Scope of Services and the estimate of charges to include study of the unforeseen conditions or occurrences, with such revision agreed to in writing;
- c. Terminate the services effective on the date specified by BLE in writing.

9. **SAMPLE DISPOSAL.** Test specimens or samples generally are consumed or substantially altered during testing and any remnants are disposed of immediately upon completion of tests. Remaining drilling samples and other specimens are disposed of 30 days after submission of BLE's report. In the event that test samples contain toxic or hazardous constituents as defined by applicable law, upon completion of any testing and temporary storage by BLE and per Client's stated preference, BLE will return such samples to Client for proper disposal.

10. **WASTE DISPOSAL.** If Client requests BLE to containerize drilling wastes and/or fluids produced by BLE's activity ("Wastes"), Client will provide a secure temporary storage location at or near the project site to prevent tampering with such containerized Wastes. Non-hazardous Wastes will be disposed of by BLE for an additional charge at an appropriately licensed facility. Any hazardous Wastes will be disposed of under manifest executed by Client at any properly licensed facility selected by Client with BLE's assistance. At no time will BLE take title to such hazardous Wastes.

11. **\*CLIENT DISCLOSURE.** Client agrees to advise BLE upon execution of this Agreement of any hazardous substance or any condition, known or that reasonably should be known by Client, existing in, on, or near the site that presents a potential danger to human health, the environment, or BLE's equipment. Client agrees to provide BLE continuing related information as it becomes available to the Client. By virtue of entering into this Agreement or providing services hereunder, BLE does not assume control of or responsibility as an operator or otherwise for the site or the person(s) in charge of the site, or undertake responsibility for reporting to any federal, state or local public agencies any conditions at the site that may present a potential danger to public health, safety or the environment. Client agrees under advice of its counsel to notify the appropriate federal, state or local public agencies as required by law; or otherwise to disclose, in a timely manner, any information that may be necessary to prevent damage to human health, safety, or the environment.

12. **\*ENVIRONMENTAL INDEMNITY.** In connection with toxic or hazardous substances or constituents and to the maximum extent permitted by law, for separate and valuable consideration of \$1,00, Client agrees to defend, hold harmless and indemnify BLE from and against any and all claims, liabilities, or judgments, except to the extent finally determined as being caused by BLE's negligence or willful misconduct, resulting from:

- a. Client's violation of any federal, state, or local statute, regulation or ordinance relating to the management or disposal of toxic or hazardous substances or constituents;
- b. Client's undertaking of or arrangement for the handling, removal, treatment, storage, transportation or disposal of toxic or hazardous substances or constituents found or identified at the site;
- c. Toxic or hazardous substances or constituents introduced at the site by Client or third persons before, during or after the completion of BLE's services;
- d. Allegations that BLE is a handler, generator, operator, treater, storer, transporter, or disposer unless expressly retained by Client for such services under the Resource Conservation and Recovery Act of 1976 as amended or any other similar federal, state or local regulation or law due to the BLE's services; or,



e. Any third party suit or claim for damages against BLE alleging strict liability, personal injury (including death) or property damage from exposure to or release of toxic or hazardous substances or constituents at or from the project site before, during or after completion of BLE's services under this Agreement.

13. \*EQUIPMENT CONTAMINATION. BLE will endeavor to clean its laboratory and field equipment which may become contaminated in the conduct of our services. Occasionally, such equipment cannot be completely decontaminated because of the type of hazards encountered. If this occurs, it will be necessary to dispose of the equipment in a manner similar to that indicated for hazardous samples or waste and to charge Client for the loss. Client agrees to pay the fair market value of any such equipment and reasonable disposal costs.

14. DOCUMENTS. BLE will furnish Client the agreed upon number of written reports and supporting documents. These instruments of services are furnished for Client's exclusive internal use and reliance, use of Client's counsel, use of Client's qualified bidders (design services only) and for regulatory submittal in connection with the project or services provided for in this Agreement, but not for advertising or other type of distribution, and are subject to the following:

a. All documents generated by BLE under this Agreement shall remain the sole property of BLE. Any unauthorized use or distribution of BLE's work shall be at Client's and recipient's sole risk and without liability to BLE. BLE may retain a confidential file copy of its work product and related documents.

b. If Client desires to release, or for BLE to provide, our report(s) to a third party not described above for that party's reliance, BLE will agree to such release provided we receive written acceptance from such third party to be bound by acceptable terms and conditions similar to this Agreement (e.g. Secondary Client Agreement). Reports provided for disclosure of information only will not require separate agreement. Client acknowledges and agrees to inform such third party that BLE's report(s) reflects conditions only at the time of the study and may not reflect conditions at a later time. Client further acknowledges that such request for release creates a potential conflict of interest for BLE and by this request Client waives any such claim if BLE complies with the request.

c. Client agrees that all documents furnished to Client or Client's agents or designees, if not paid for, will be returned upon demand and will not be used by Client or any other entity for any purpose whatsoever. Client further agrees that documents produced by BLE pursuant to this Agreement will not be used for any project not expressly provided for in this Agreement without BLE's prior written approval.

d. Client shall furnish documents or information reasonably within Client's control and deemed necessary by BLE for proper performance of our services. BLE may rely upon Client-provided documents in performing the services required under this Agreement; however, BLE assumes no responsibility or liability for their accuracy. Client-provided documents will remain the property of Client, but BLE may retain one confidential file copy as needed to support its report.

e. Upon Client's request, BLE's work product may be provided on magnetic media. By such request, Client agrees that the written copy retained by BLE in its files, with at least one written copy provided to Client, shall be the official base document. BLE makes no warranty or representation to Client that the magnetic copy is accurate or complete, but will correct in good faith any omissions or errors brought to BLE's attention by Client. Any modifications of such magnetic copy by Client shall be at Client's risk and without liability to BLE. Such magnetic copy is subject to all other conditions of this Agreement.

15. CLAIMS. The parties agree to attempt to resolve any dispute without resort to litigation, including use of mediation, prior to filing of any suit. However, in the event a claim results in litigation, and the claimant does not prevail at trial, then the claimant shall pay all costs incurred in pursuing and defending the claim, including reasonable attorney's fees.

16. OPINIONS OF COST. If requested, BLE will use its best efforts and experience on similar projects to provide realistic opinions or estimates of costs for remediation or construction as appropriate based on reasonably available data, BLE's designs or BLE's recommendations. However, such opinions are intended primarily to provide information on the order of magnitude or scale of such costs and are not intended for use in firm budgeting or negotiation unless specifically agreed otherwise, in writing with BLE. Client understands actual costs of such work depend heavily on regional economics, local construction practices, material availability, site conditions, weather conditions, contractor skills, and many other factors beyond BLE's control.

17. TESTIMONY. Should BLE or any BLE employee be compelled by law to provide testimony or other evidence by any party, whether at deposition, hearing, or trial, in relation to services provided under this Agreement, and BLE is not a party in the dispute, then BLE shall be compensated by Client for the associated reasonable expenses and labor for BLE's preparations and testimony at appropriate unit rates. To the extent the party

compelling the testimony ultimately provides BLE such compensation, Client will receive a credit or refund on any related double payments to BLE.

18. CONFIDENTIALITY. BLE will maintain as confidential any documents or information provided by Client and will not release, distribute or publish same to any third party without prior permission from Client, unless compelled by law or order of a court or regulatory body of competent jurisdiction. Such release will occur only after prior notice to Client.

19. GOVERNING LAW. This Agreement shall be governed in all respects by the laws of the State of North Carolina.

20. PRIORITY OVER FORM AGREEMENT/PURCHASE ORDERS. The Parties agree that the provisions of these terms and conditions shall control over and not be superseded by any provisions of any other documents or writings and may be amended only by written instrument signed by both Client and BLE. Client may issue purchase orders to BLE to satisfy Client's purchasing requirements. It is agreed that the terms and conditions included in such purchase orders shall be considered deleted in their entirety and such terms and conditions shall be void.

21. SURVIVAL. All provisions of this Agreement for indemnity or allocation of responsibility or liability between Client and BLE shall survive the completion of the services and the termination of this Agreement.

22. SEVERABILITY. In the event that any provision of this Agreement is found to be unenforceable under law, the remaining provisions shall continue in full force and effect.

23. ASSIGNMENT. This Agreement may not be assigned by either party without the prior permission of the other.

24. CONSIDERATION. The parties agree that the charges for BLE's services are sufficiently adjusted to include any specific consideration payable to Client under these terms and conditions.

25. INTEGRATION. This Agreement, the attached documents and those incorporated herein constitute the entire Agreement between the parties and cannot be changed except by a written instrument signed by both parties.

\*Applies only if toxic or hazardous substances or constituents are anticipated or encountered.

END OF DOCUMENT

**BLE**  
**BUNNELL-LAMMONS ENGINEERING, INC.**  
**GEOTECHNICAL, ENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS**

April 14, 2015

Office of the County Manager  
215 N. Main Street  
Waynesville, NC 28786

Attention: Mr. David B. Francis  
Solid Waste and Tax Administrator

Subject: **Contract for a Well Abandonment and Installation**  
Closed Francis Farm Landfill  
Haywood County, North Carolina  
BLE Contract Number P15-0307

Dear Mr. Francis:

Bunnell-Lammons Engineering, Inc. (BLE) is pleased to submit this contract to Haywood County to provide hydrogeological consulting services associated with the closed Francis Farm Landfill. The purpose of the scope of services is to abandon 8 groundwater monitoring wells and 10 landfill gas monitoring wells and to install 10 new landfill gas monitoring wells.

Included herein is a brief description of the background project information, a general description of our contract scope of services with related fee estimate, and authorization information.

**BACKGROUND INFORMATION**

The closed Francis Farm Landfill in Haywood County requires semi-annual groundwater and surface water monitoring and reporting. The Francis Farm Landfill has 30 groundwater monitoring wells (MW-1A, MW-2A, MW-3A, MW-4 through MW-14, MW-14D, MW-15, MW-16, MW-16D, MW-17, MW-18, MW-19, MW-19D, MW-20, MW-20D, MW-21, MW-23D and MW-22 through MW-25) and 4 surface water monitoring points (US-1, DS-1, DS-2, & DS-3) which are sampled every February and August. Landfill gas monitoring and reporting is also performed at the site as part of post-closure care. The Francis Farm Landfill has 13 landfill gas monitoring wells (MM-1 through MW-13) and 5 structure monitoring points (SM-1a, SM-1b, SM-1c, SM-2, & SM-3) which are monitored quarterly in accordance with the facility plan.

We understand that ongoing maintenance of the existing soil cap is scheduled for late 2015 and permanent improvements are currently scheduled for late 2016. Several of the existing groundwater monitoring wells and landfill gas monitoring wells will be abandoned and new landfill gas monitoring wells will be installed as part of the improvements. A new WQMP and LFGMP will be required to document changes to the facility's monitoring infrastructure. The new WQMP and LFGMP will be part of an application for permit modifications which will be prepared by McGill Associates (McGill). BLE has submitted contracts to Haywood County for development and submittal of the WQMP and LFGMP.



As part of the planning for the upcoming soil cap maintenance and permanent improvements, McGill, Haywood County, and BLE developed a conceptual plan for well abandonment and installation. The conceptual plan was submitted to the DWM on March 30, 2015 and discussed in a conference call between Ms. Elizabeth Werner of the DWM and Mr. Andrew Alexander and Mr. Mark Preddy of BLE on March 31, 2015. The conceptual plan was conditionally approved by the DWM in a letter to Haywood County dated March 31, 2015. Final approval of the plan will be granted upon review and approval of the aforementioned WQMP and LFGMP by the DWM. The work proposed herein is compliant with the DWM approved conceptual plan. However, some modification of the scope and budget may be necessary after DWM approval of the final WQMP and LFGMP, if significantly different from the approved conceptual plan.

### SCOPE OF SERVICES

The proposed drilling services will be performed as described herein. The scheduling of the mobilization and drilling services will be coordinated with McGill and Haywood County. The proposed scope of services is as follows:

- BLE will mobilize an ATV-mounted hollow-stem auger drilling rig and drill crew to perform the required well abandonments and installations. Haywood County will be responsible for clearing all locations for access of our drill rig. This includes but is not limited to clearing, tree cutting, road building, and subsurface utility clearance.
- BLE will abandon eight (8) groundwater monitoring wells and ten (10) landfill gas monitoring wells using the following methodology. The well's pad and cover will be demolished and removed from the well head. The well's casing and screen will be pulled from the borehole via drill rig winch. The resulting borehole will be grouted to the surface with a 5% bentonite-cement. If the casing and screen cannot be pulled, the well head will be excavated 2 feet below ground surface and the well casing will be cut at depth. The remaining well casing and screen will be grouted in place with a 5% bentonite-cement. The actual construction details of several of the wells is unknown and we have estimated the total depths for those wells for this project. We estimate that up to 817 linear feet of groundwater monitoring and landfill gas well require abandonment.
- BLE will install ten (10) landfill gas monitoring wells. The wells will be installed at the locations approved and permitted (as applicable) by the DWM. The depth of the proposed monitoring wells will be designed to monitor the vadose zone above the groundwater or bedrock elevation. The well will be constructed with a screened interval spanning from 5 feet above the target depth (groundwater or bedrock, whichever is shallower) to within 5 feet of the ground surface. Based on site-specific data, we have assumed 295 linear feet of well installation is required for this project. However, final well depths will be based on drilling conditions encountered at each location.



Based the data evaluated, we anticipate the following surface completions, bollards, screen length, and maximum total well depth at the proposed monitoring well locations:

Proposed Well	Surface Completion	Bollards	Screen Length (feet)	Max. Total Depth (est. feet bgs)
MM-14	Stickup	3	75	80
MM-15	Stickup	3	10	15
MM-16	Stickup	3	10	15
MM-17	Stickup	3	10	15
MM-18	Stickup	3	10	15
MM-19	Stickup	3	10	15
MM-20	Stickup	3	20	25
MM-21	Flushmount	None	40	45
MM-22	Flushmount	None	45	50
MM-23	Flushmount	None	15	20

- BLE will provide periodic oversight during the drilling operation by a North Carolina licensed geologist. The wells will include a surface completion consisting of a 3 by 3 foot by 4-inch thick concrete pad with a lockable steel flushmount or stickup cover. The monitoring well's location and elevation will be surveyed and the data provided by McGill working directly for Haywood County under separate contract. Locks will be provided by Haywood County.
- Based on soil samples collected during the drilling and on the driller's log, BLE will prepare boring and well construction logs. North Carolina well abandonment and installation records will be prepared and submitted as required. A well installation report will be prepared and a North Carolina licensed geologist will certify the report. The report will be submitted to McGill, Haywood County and to the DWM.



### **ASSUMPTIONS AND SPECIAL CONSIDERATION**

The scope of service does not include disposal of any demolition materials which BLE will transport and place on the ground for storage on the Francis Farm Landfill property at a location selected by Haywood County. We have assumed that drill cuttings may be spread on the ground at each drilling location. Haywood County should contract for the collection, loading, transportation, and disposal of the waste by a disposal contractor (if required), or BLE can provide these services at additional cost, if requested.

BLE will make reasonable efforts to avoid any damages to existing landscaping, above ground infrastructure, and existing underground utilities; however, BLE will not be responsible for damages to utilities, which are not marked or clearly identified. BLE must be provided with reasonably unencumbered access to the drilling locations on site. We have assumed that Haywood County will perform all restorative landscaping. BLE can provide these services at cost plus 15%, if requested.

We have assumed that McGill (under direct contract with the County) will provide the services of a North Carolina registered surveyor to survey all well locations for horizontal and vertical control, referenced to mean sea level. The survey data will be provided to BLE in AutoCAD and Excel format for preparation of maps and logs required by the DWM.

### **ESTIMATED FEE**

BLE will complete the scope of services outlined in this proposal for an estimated fee of **\$64,700**. The above estimated fee is effective for a period of six months from the date of this proposal and includes up to 817 linear feet of well abandonment and 295 linear feet of drilling and well installation. No contingency is included for services beyond the scope of this proposal or for additional drilling footage, if required.

**\*Any additional required drilling, well installation, and/or casing installation will be performed at a unit rate of \$95 per linear foot. We will verbally notify Haywood County if additional footage is required.**

We have assumed that the sites and drilling locations are accessible by an ATV-mounted drilling rig and that drilling at the locations can be performed by hollow stem auger drilling. Additionally, we have assumed that Haywood County will assist with drill rig ingress and egress, if required, and that roadway infrastructure capable of supporting the drilling rig will be in place prior to our arrival.



**SCHEDULE**

Based on our present schedule, we can begin work on this project within two weeks after receiving your authorization to proceed. Our anticipated implementation schedule is shown below:

Boring Layout	1 day
Drilling and Well Abandonment / Installation	1 week
Surveying *Others*	4 weeks
Reporting **	<u>2 weeks</u>
Project Completion	7.5 weeks

\*\* Reporting will be completed after we receive the survey data.

**AUTHORIZATION**

As our written authorization for the above scope of services, please execute the attached acceptance sheet and return the acceptance copy of this contract to BLE.

Any exceptions to this contract or special requirements not covered in the contract should be attached to the returned acceptance copy for the mutual consideration of both parties. Please note that the Terms and Conditions are a part of this contract and have previously been reviewed and approved by Haywood County's legal counsel. Any Purchase Order issued to authorize this project should reference this document (P15-0307).

We appreciate the opportunity to serve as your hydrogeological consultant at this site. If you have any questions, please do not hesitate contacting us at (864) 288-1265.

Sincerely,  
**BUNNELL-LAMMONS ENGINEERING, INC.**

Andrew W. Alexander, P.G.  
Senior Hydrogeologist

Mark S. Preddy, P.G.  
Senior Hydrogeologist

CC: Mr. Mark Cathey, P.E. -- McGill Associates, PA

Attachments: Fee Schedule  
Contract Terms and Conditions

*e:\awa projects\mcgill\haywood county lf\proposals\p15-0307 fflf well abandon & install fy16\contract for fflf well abandonment and install p15-0307.docx*

**FEE SCHEDULE**

**2015 Schedule of Fees  
Bunnell-Lammons Engineering, Inc.**

<b>Personnel</b>	<b>Hourly Rate</b>
Engineering/Environmental Technician I .....	\$45.00
Engineering/Environmental Technician II .....	\$55.00
Engineering/Environmental Technician III .....	\$65.00
Staff Engineer/Geologist/Scientist .....	\$90.00
Project Engineer/Geologist/Scientist .....	\$115.00
Senior Engineer/Geologist/Scientist .....	\$120.00
Chief Engineer/Geologist/Scientist .....	\$140.00
Principal Engineer/Geologist/Scientist .....	\$165.00
Administrative Support .....	\$50.00
Drafting .....	\$60.00

<b>Expense and Subcontract</b>	<b>Rate</b>
Mileage .....	\$0.75 per mile*
Miscellaneous Expenses (shipping, printing, consumable supplies, etc.) .....	Cost plus 15%
Digital Camera, per day .....	\$10.00
Color Laser Prints, per page .....	\$2.00
Monitoring Well Sampling Kit (including bailer, rope & decontamination supplies), each .....	\$25.00
PVC Bailer Sampling Kit, (including bailer, rope & decontamination supplies), each .....	\$35.00
Gloves-Vinyl or Latex, pair .....	\$0.50
Gloves-Nitrile, pair .....	\$3.00
Water Level Meter, per day .....	\$25.00
Turbidity Meter, per day .....	\$35.00
pH Test Equipment / Supplies, per day .....	\$25.00
Conductivity / Temperature Probe, per day .....	\$25.00
Submersible Sump Pump, per day .....	\$50.00
½ HP Well Pump, per day .....	\$50.00
High Flow Well Development Pump, per day .....	\$25.00
Low Flow Purge Pump with Battery, per day .....	\$25.00
Product Interface Probe, per day .....	\$50.00
Generator, per day .....	\$65.00
Organic Meter (PID or FID), per day .....	\$100.00
Slug Test Transducer and Data Logger with software, per day .....	\$150.00
Survey Equipment, per day .....	\$35.00

\*Subcontracts (drilling, laboratory and analysis, etc.)..... Cost plus 15%

\*Unit rates for items not listed will be billed on a per project basis.

\*Mileage charges may be adjusted based on fuel costs.

*Schedule (L)*

**ACCEPTANCE SHEET WITH  
TERMS AND CONDITIONS**



**BUNNELL-LAMMONS ENGINEERING, INC.**

6004 Ponders Court  
Greenville, South Carolina 29615

Phone (864) 288-1265  
Fax (864) 288-4430

**ACCEPTANCE SHEET**

The purpose of this sheet is to obtain your written authorization for our services and confirm the terms and conditions under which these services are provided as shown below.

Compensation for services rendered will be based on the attached schedule of fees (or as otherwise indicated below) which are part of this work authorization. If we are requested to modify the scope of work at your request or determine during the execution of the work that a modification of scope is required, we will promptly seek and confirm in writing a mutually agreeable revision of the scope of work and associated charges. All testing will be performed in accordance with the applicable specifications unless otherwise noted and test results apply only to the materials actually tested.

Project Name and Proposal Number: Contract for Well Abandonment and Installation  
BLE Contract No. P15-0307

Project Location: Francis Farm Landfill  
Haywood County, North Carolina

**FOR PAYMENT OF CHARGES:** (to the account of)

Firm: \_\_\_\_\_ Attention: \_\_\_\_\_

Address: \_\_\_\_\_

City, State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

**WORK AUTHORIZED BY:**

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Print Name and Title - *Signatory warrants his/her authority to bind the entity represented here.*

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip Code

**SPECIAL INSTRUCTIONS:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## TERMS AND CONDITIONS

1. **SERVICES TO BE PROVIDED.** Bunnell-Lammons Engineering, Inc., through and by its officers, employees and subcontractors, (hereinafter BLE) is an independent consultant and agrees to provide Client, for its sole benefit and exclusive use, consulting services set forth in our proposal. No third party beneficiaries are intended by this agreement.

2. **PAYMENT TERMS.** Client agrees to pay BLE's invoice upon receipt. If payment is not received within 30 days from the Client's receipt of invoice, Client agrees to pay a service charge on the past due amount at the greater of 1% per month or the allowable legal rate, including reasonable attorney's fees and expenses if BLE's fee is collected through an attorney. No deduction shall be made from invoice on account of liquidated damages unless expressly included in the Agreement. After five days prior notice to Client, BLE may suspend services until paid on any project where payment of invoiced amounts not reasonably in dispute is not received by BLE within 60 days of Client's receipt of BLE's invoice. Invoices will be sent approximately monthly for the services performed.

3. **STANDARD OF CARE.** BLE will perform its services using that degree of care and skill ordinarily exercised under similar conditions by reputable members of BLE's profession practicing in the same or similar locality at the time of service. NO OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE OR INTENDED BY OUR PROPOSAL OR BY OUR ORAL OR WRITTEN REPORTS.

4. **INSURANCE.** BLE maintains insurance coverage as follows:

- a. Worker's Compensation Insurance.
- b. Employers Liability Insurance.
- c. Commercial General Liability Insurance.
- d. Professional Errors and Omission.

Certificates of insurance can be provided upon acceptance of this agreement and upon request.

5. **PROFESSIONAL LIABILITY.** For additional consideration from BLE of \$10.00, receipt of which is hereby acknowledged, Client agrees that BLE's liability, and that of its officers, directors, employees, agents and subcontractors, to Client or any third party due to any negligent professional acts, errors or omissions or breach of contract by BLE will be limited to an aggregate of \$50,000 or BLE's total charges, whichever is greater. If Client prefers to have higher limits of professional liability, BLE agrees to increase the aggregate limit, up to a maximum of \$100,000, upon Client's written request at the time of accepting our proposal, provided Client agrees to pay an additional consideration of 5% of total charges, or \$500, whichever is greater. The additional charge for the higher liability limit is because of the greater risk assumed by BLE and is not a charge for additional professional liability insurance. This limitation shall not apply to the extent prohibited by law.

6. **SITE OPERATIONS.** Client will arrange for right-of-entry to the property for the purpose of performing project management, studies, tests and evaluations pursuant to the agreed services. Client represents that it possesses necessary permits and licenses required for its activities at the site.

BLE's field personnel are trained to initiate field testing, drilling and/or sampling within a reasonable distance of each designated location. BLE's field personnel will avoid hazards or utilities which are visible to them at the site. If BLE is advised in writing of the presence or potential presence of underground or above ground obstructions, such as utilities, we will give special instructions to our field personnel. BLE is not responsible for any damage or loss due to undisclosed or unknown surface or subsurface conditions owned by Client or third parties, except to the extent such damage or loss is a result of BLE's negligence.

BLE will take reasonable precautions to minimize damage to the property caused by its operations. Unless otherwise stated in BLE's proposal, BLE's charges do not include cost of restoration due to any related damage which may result. If Client requests BLE to repair such damage, BLE will do so at an appropriate additional cost.

Field tests or boring locations described in BLE's report or shown on sketches are based on specific information furnished by others or estimates made in the field by BLE personnel. Such dimensions, depths or elevations should be considered as approximations unless otherwise stated in BLE's proposal or report.

7. **FIELD REPRESENTATIVE.** The presence of BLE or its subcontractor's field personnel, either full-time or part-time, may be for the purpose of providing project administration, assessment, observation and/or field testing of specific aspects of the project as authorized by Client. Should a contractor(s) not retained by BLE be involved in the project, Client will advise such contractor(s) that BLE's services do not include supervision or direction of the means, methods or actual work of the contractor(s), its employees or agents. Client will also inform contractor that the presence of BLE's field representative for project administration, assessment, observation or testing will not relieve the contractor of its responsibilities for performing the work in accordance with the plans and specifications.

If a contractor (not a subcontractor of BLE) is involved in the project, Client agrees, in accordance with generally accepted construction practices, that the contractor will be solely and completely responsible for working conditions on the job site, including security and safety of all persons and property during performance of the work, and compliance with all Client safety requirements and OSHA regulations. These requirements will apply continuously and will not be limited to normal working hours. It is agreed that BLE will not be responsible for job or site safety or security on the project, other than for BLE's employees and subcontractors, and that BLE does not have the duty or right to stop the work of the contractor.

8. **UNFORESEEN CONDITIONS OR OCCURRENCES.** It is possible that unforeseen conditions or occurrences may be encountered at the site which could substantially alter the necessary services or the risks involved in completing BLE's services. If this occurs, BLE will promptly notify and consult with Client, but will act based on BLE's sole judgment where risk to BLE personnel is involved. Possible actions could include:

- a. Complete the original Scope of Services in accordance with the procedures originally intended in BLE's proposal, if practicable in BLE's judgment;
- b. Agree with Client to modify the Scope of Services and the estimate of charges to include study of the unforeseen conditions or occurrences, with such revision agreed to in writing;
- c. Terminate the services effective on the date specified by BLE in writing.

9. **SAMPLE DISPOSAL.** Test specimens or samples generally are consumed or substantially altered during testing and any remnants are disposed of immediately upon completion of tests. Remaining drilling samples and other specimens are disposed of 30 days after submission of BLE's report. In the event that test samples contain toxic or hazardous constituents as defined by applicable law, upon completion of any testing and temporary storage by BLE and per Client's stated preference, BLE will return such samples to Client for proper disposal.

10. **WASTE DISPOSAL.** If Client requests BLE to containerize drilling wastes and/or fluids produced by BLE's activity ("Wastes"), Client will provide a secure temporary storage location at or near the project site to prevent tampering with such containerized Wastes. Non-hazardous Wastes will be disposed of by BLE for an additional charge at an appropriately licensed facility. Any hazardous Wastes will be disposed of under manifest executed by Client at any properly licensed facility selected by Client with BLE's assistance. At no time will BLE take title to such hazardous Wastes.

11. **\*CLIENT DISCLOSURE.** Client agrees to advise BLE upon execution of this Agreement of any hazardous substance or any condition, known or that reasonably should be known by Client, existing in, on, or near the site that presents a potential danger to human health, the environment, or BLE's equipment. Client agrees to provide BLE continuing related information as it becomes available to the Client. By virtue of entering into this Agreement or providing services hereunder, BLE does not assume control of or responsibility as an operator or otherwise for the site or the person(s) in charge of the site, or undertake responsibility for reporting to any federal, state or local public agencies any conditions at the site that may present a potential danger to public health, safety or the environment. Client agrees under advice of its counsel to notify the appropriate federal, state or local public agencies as required by law; or otherwise to disclose, in a timely manner, any information that may be necessary to prevent damage to human health, safety, or the environment.

12. **\*ENVIRONMENTAL INDEMNITY.** In connection with toxic or hazardous substances or constituents and to the maximum extent permitted by law, for separate and valuable consideration of \$1.00, Client agrees to defend, hold harmless and indemnify BLE from and against any and all claims, liabilities, or judgments, except to the extent finally determined as being caused by BLE's negligence or willful misconduct, resulting from:

- a. Client's violation of any federal, state, or local statute, regulation or ordinance relating to the management or disposal of toxic or hazardous substances or constituents;
- b. Client's undertaking of or arrangement for the handling, removal, treatment, storage, transportation or disposal of toxic or hazardous substances or constituents found or identified at the site;
- c. Toxic or hazardous substances or constituents introduced at the site by Client or third persons before, during or after the completion of BLE's services;
- d. Allegations that BLE is a handler, generator, operator, treater, storer, transporter, or disposer unless expressly retained by Client for such services under the Resource Conservation and Recovery Act of 1976 as amended or any other similar federal, state or local regulation or law due to the BLE's services; or,



e. Any third party suit or claim for damages against BLE alleging strict liability, personal injury (including death) or property damage from exposure to or release of toxic or hazardous substances or constituents at or from the project site before, during or after completion of BLE's services under this Agreement.

13. \*EQUIPMENT CONTAMINATION. BLE will endeavor to clean its laboratory and field equipment which may become contaminated in the conduct of our services. Occasionally, such equipment cannot be completely decontaminated because of the type of hazards encountered. If this occurs, it will be necessary to dispose of the equipment in a manner similar to that indicated for hazardous samples or waste and to charge Client for the loss. Client agrees to pay the fair market value of any such equipment and reasonable disposal costs.

14. DOCUMENTS. BLE will furnish Client the agreed upon number of written reports and supporting documents. These instruments of services are furnished for Client's exclusive internal use and reliance, use of Client's counsel, use of Client's qualified bidders (design services only) and for regulatory submittal in connection with the project or services provided for in this Agreement, but not for advertising or other type of distribution, and are subject to the following:

a. All documents generated by BLE under this Agreement shall remain the sole property of BLE. Any unauthorized use or distribution of BLE's work shall be at Client's and recipient's sole risk and without liability to BLE. BLE may retain a confidential file copy of its work product and related documents.

b. If Client desires to release, or for BLE to provide, our report(s) to a third party not described above for that party's reliance, BLE will agree to such release provided we receive written acceptance from such third party to be bound by acceptable terms and conditions similar to this Agreement (e.g. Secondary Client Agreement). Reports provided for disclosure of information only will not require separate agreement. Client acknowledges and agrees to inform such third party that BLE's report(s) reflects conditions only at the time of the study and may not reflect conditions at a later time. Client further acknowledges that such request for release creates a potential conflict of interest for BLE and by this request Client waives any such claim if BLE complies with the request.

c. Client agrees that all documents furnished to Client or Client's agents or designees, if not paid for, will be returned upon demand and will not be used by Client or any other entity for any purpose whatsoever. Client further agrees that documents produced by BLE pursuant to this Agreement will not be used for any project not expressly provided for in this Agreement without BLE's prior written approval.

d. Client shall furnish documents or information reasonably within Client's control and deemed necessary by BLE for proper performance of our services. BLE may rely upon Client-provided documents in performing the services required under this Agreement; however, BLE assumes no responsibility or liability for their accuracy. Client-provided documents will remain the property of Client, but BLE may retain one confidential file copy as needed to support its report.

e. Upon Client's request, BLE's work product may be provided on magnetic media. By such request, Client agrees that the written copy retained by BLE in its files, with at least one written copy provided to Client, shall be the official base document. BLE makes no warranty or representation to Client that the magnetic copy is accurate or complete, but will correct in good faith any omissions or errors brought to BLE's attention by Client. Any modifications of such magnetic copy by Client shall be at Client's risk and without liability to BLE. Such magnetic copy is subject to all other conditions of this Agreement.

15. CLAIMS. The parties agree to attempt to resolve any dispute without resort to litigation, including use of mediation, prior to filing of any suit. However, in the event a claim results in litigation, and the claimant does not prevail at trial, then the claimant shall pay all costs incurred in pursuing and defending the claim, including reasonable attorney's fees.

16. OPINIONS OF COST. If requested, BLE will use its best efforts and experience on similar projects to provide realistic opinions or estimates of costs for remediation or construction as appropriate based on reasonably available data, BLE's designs or BLE's recommendations. However, such opinions are intended primarily to provide information on the order of magnitude or scale of such costs and are not intended for use in firm budgeting or negotiation unless specifically agreed otherwise, in writing with BLE. Client understands actual costs of such work depend heavily on regional economics, local construction practices, material availability, site conditions, weather conditions, contractor skills, and many other factors beyond BLE's control.

17. TESTIMONY. Should BLE or any BLE employee be compelled by law to provide testimony or other evidence by any party, whether at deposition, hearing, or trial, in relation to services provided under this Agreement, and BLE is not a party in the dispute, then BLE shall be compensated by Client for the associated reasonable expenses and labor for BLE's preparations and testimony at appropriate unit rates. To the extent the party

compelling the testimony ultimately provides BLE such compensation, Client will receive a credit or refund on any related double payments to BLE.

18. CONFIDENTIALITY. BLE will maintain as confidential any documents or information provided by Client and will not release, distribute or publish same to any third party without prior permission from Client, unless compelled by law or order of a court or regulatory body of competent jurisdiction. Such release will occur only after prior notice to Client.

19. GOVERNING LAW. This Agreement shall be governed in all respects by the laws of the State of North Carolina.

20. PRIORITY OVER FORM AGREEMENT/PURCHASE ORDERS. The Parties agree that the provisions of these terms and conditions shall control over and not be superseded by any provisions of any other documents or writings and may be amended only by written instrument signed by both Client and BLE. Client may issue purchase orders to BLE to satisfy Client's purchasing requirements. It is agreed that the terms and conditions included in such purchase orders shall be considered deleted in their entirety and such terms and conditions shall be void.

21. SURVIVAL. All provisions of this Agreement for indemnity or allocation of responsibility or liability between Client and BLE shall survive the completion of the services and the termination of this Agreement.

22. SEVERABILITY. In the event that any provision of this Agreement is found to be unenforceable under law, the remaining provisions shall continue in full force and effect.

23. ASSIGNMENT. This Agreement may not be assigned by either party without the prior permission of the other.

24. CONSIDERATION. The parties agree that the charges for BLE's services are sufficiently adjusted to include any specific consideration payable to Client under these terms and conditions.

25. INTEGRATION. This Agreement, the attached documents and those incorporated herein constitute the entire Agreement between the parties and cannot be changed except by a written instrument signed by both parties.

\*Applies only if toxic or hazardous substances or constituents are anticipated or encountered.

END OF DOCUMENT



**BUNNELL-LAMMONS ENGINEERING, INC.**  
GEOTECHNICAL, ENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS

April 2, 2015

Office of the County Manager  
215 N. Main Street  
Waynesville, NC 28786

Attention: Mr. David B. Francis  
Solid Waste and Tax Administrator

Subject: **Contract for a Water Quality Monitoring Plan**  
Closed Francis Farm Landfill  
Haywood County, North Carolina  
BLE Contract Number P15-0288

Dear Mr. Francis:

Bunnell-Lammons Engineering, Inc. (BLE) is pleased to submit this contract to Haywood County to provide hydrogeological consulting services associated with the closed Francis Farm Landfill. This proposal addresses a requirement for a Water Quality Monitoring Plan (WQMP) in general accordance with North Carolina Rules for Solid Waste Management, 15A NCAC 13B .0601, and .1630 through .1637 (groundwater), and 15A NCAC 13B .0602 (surface water) as set forth by the North Carolina Department of Environment Natural Resources, Division of Waste Management (DWM).

Included herein is a brief description of the background project information, a general description of our contract scope of services with related fee estimate, and authorization information.

### **BACKGROUND INFORMATION**

The closed Francis Farm Landfill in Haywood County requires semi-annual groundwater and surface water monitoring and reporting. The Francis Farm Landfill has 30 groundwater monitoring wells (MW-1A, MW-2A, MW-3A, MW-4 through MW-14, MW-14D, MW-15, MW-16, MW-16D, MW-17, MW-18, MW-19, MW-19D, MW-20, MW-20D, MW-21, MW-23D and MW-22 through MW-25) and 4 surface water monitoring points (US-1, DS-1, DS-2, & DS-3) which are sampled every February and August.

We understand that ongoing maintenance of the existing soil cap is scheduled for late 2015 and permanent improvements are currently scheduled for late 2016. Several of the existing groundwater monitoring wells will be abandoned as part of the improvements. A new WQMP will be required to document changes to the facility's monitoring infrastructure. The new WQMP will be part of an application for permit modifications which will be prepared by McGill Associates (McGill).



## SCOPE OF SERVICES

The objective of this project is to prepare a WQMP which will include procedures and locations for groundwater, and surface water monitoring as required by the following North Carolina Department of Environment and Natural Resources (DENR) Solid Waste Management Rules:

- Groundwater – *North Carolina Rules for Solid Waste Management, 15A NCAC 13B Rules .0601, and .1630 through .1637.*
- Surface Water – *North Carolina Rules for Solid Waste Management, 15A NCAC 13B Rule .0602.*

The WQMP will be developed to detect and quantify contamination, as well as to measure the effectiveness of engineered disposal systems. The groundwater and surface water monitoring networks for this site will be designed to provide continuity for monitoring of known releases and to gauge the effectiveness of planned remedial measures. This scope of work also includes a discussion of anticipated changes to the facility's monitoring infrastructure with the DWM and negotiations with the DWM on potential replacement well locations and abandonment and installation procedures. The locations of the existing and/or replacement groundwater and surface water monitoring points will be specified in the EMP.

### **Groundwater -- NCAC 13B Rules .0601, and .1630 through .1637**

BLE will prepare a WQMP which will include the following elements for groundwater:

- Monitoring Well Network
- Changes in Groundwater Elevations
- Monitoring Well Construction
- Monitoring Well Development
- Maintenance and Recordkeeping
- Monitoring Well Abandonment
- Detection Monitoring Program
  1. Sampling Frequency
  2. Establishment of Background Data
  3. Evaluation of Detection Monitoring Data
- Assessment Monitoring Program
- Groundwater Sampling Methodology
  1. Sample Collection
    - a) Sampling Frequency
    - b) Static Water Elevations
    - c) Well Evacuation
    - d) Sample Collection
    - e) Decontamination
  2. Sample Preservation and Handling
  3. Chain-of-Custody Program
    - a) Sample Labels
    - b) Sample Seal
    - c) Field Logbook



- d) Chain-of-Custody Record
- 4. Analytical Procedures
- 5. Quality Assurance and Quality Control Program
- Statistical Methods

**Surface Water -- NCAC 13B Rule .0602**

BLE will prepare a WQMP which will include the following elements for surface water:

- Sampling Locations
- Monitoring Frequency
- Surface Water Sampling Methodology
  1. Sample Collection
    - a) Dipper Method
    - b) Direct Method
    - c) Decontamination
  2. Sample Preservation and Handling
  3. Chain-of-Custody Program
    - a) Sample Labels
    - b) Sample Seal
    - c) Field Logbook
    - d) Chain-of-Custody Record
  4. Analytical Procedures
  5. Quality Assurance and Quality Control Program

**Groundwater & Surface Water Reporting -- NCAC 13B Rules .1631, .1633, and .1634**

BLE will prepare a plan for reporting of water quality monitoring infrastructure changes and findings:

- Groundwater Monitoring Well Installation and Abandonment
- Water Quality Reports

**FEE ESTIMATE**

Our charges for the proposed Scope of Services will be computed from actual quantities of work performed at the unit rates shown on the attached Fee Schedule. We propose to complete this project on a time and materials basis. Our estimated fee for the scope outlined above is **\$10,000**.



Contract for a Water Quality Monitoring Plan  
Francis Farm Landfill, Haywood County, North Carolina

April 2, 2015  
BLE Contract Number P15-0288

### SCHEDULE

Based on our present schedule, we can begin work on this project within two weeks after we receive your authorization to proceed. The anticipated project can be completed in 6 weeks assuming that the project does not have delays beyond our control. This schedule does not include review time by Haywood County, McGill or the DENR.

### AUTHORIZATION

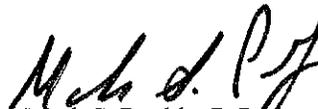
As our written authorization for the above scope of services, please execute the attached acceptance sheet and return the acceptance copy of this contract to BLE.

Any exceptions to this contract or special requirements not covered in the contract should be attached to the returned acceptance copy for the mutual consideration of both parties. Please note that the Terms and Conditions are a part of this contract and have previously been reviewed and approved by Haywood County's legal counsel. Any Purchase Order issued to authorize this project should reference this document (P15-0288).

We appreciate the opportunity to serve as your hydrogeological consultant at this site. If you have any questions, please do not hesitate contacting us at (864) 288-1265.

Sincerely,  
**BUNNELL-LAMMONS ENGINEERING, INC.**

  
Andrew W. Alexander, P.G.  
Senior Hydrogeologist

  
Mark S. Preddy, P.G.  
Senior Hydrogeologist

CC: Mr. Mark Cathey, P.E. -- McGill Associates, PA

Attachments: Fee Schedule  
Contract Terms and Conditions

*e:\awa projects\mcgill\haywood county lf\proposals\p15-0288\fflf wqmp\contract for fflf wqmp p15-0288.docx*

**FEE SCHEDULE**

**2015 Schedule of Fees  
Bunnell-Lammons Engineering, Inc.**

<b>Personnel</b>	<b>Hourly Rate</b>
Engineering/Environmental Technician I .....	\$45.00
Engineering/Environmental Technician II.....	\$55.00
Engineering/Environmental Technician III .....	\$65.00
Staff Engineer/Geologist/Scientist .....	\$90.00
Project Engineer/Geologist/Scientist.....	\$115.00
Senior Engineer/Geologist/Scientist.....	\$120.00
Chief Engineer/Geologist/Scientist .....	\$140.00
Principal Engineer/Geologist/Scientist.....	\$165.00
Administrative Support.....	\$50.00
Drafting.....	\$60.00

<b>Expense and Subcontract</b>	<b>Rate</b>
Mileage .....	\$0.75 per mile*
Miscellaneous Expenses (shipping, printing, consumable supplies, etc.) .....	Cost plus 15%
Digital Camera, per day .....	\$10.00
Color Laser Prints, per page.....	\$2.00
Monitoring Well Sampling Kit (including bailer, rope & decontamination supplies), each ....	\$25.00
PVC Bailer Sampling Kit, (including bailer, rope & decontamination supplies), each .....	\$35.00
Gloves-Vinyl or Latex, pair .....	\$0.50
Gloves-Nitrile, pair.....	\$3.00
Water Level Meter, per day .....	\$25.00
Turbidity Meter, per day.....	\$35.00
pH Test Equipment / Supplies, per day .....	\$25.00
Conductivity / Temperature Probe, per day .....	\$25.00
Submersible Sump Pump, per day .....	\$50.00
½ HP Well Pump, per day .....	\$50.00
High Flow Well Development Pump, per day .....	\$25.00
Low Flow Purge Pump with Battery, per day .....	\$25.00
Product Interface Probe, per day .....	\$50.00
Generator, per day .....	\$65.00
Organic Meter (PID or FID), per day .....	\$100.00
Slug Test Transducer and Data Logger with software, per day .....	\$150.00
Survey Equipment, per day .....	\$35.00

\*Subcontracts (drilling, laboratory and analysis, etc.)..... Cost plus 15%

\*Unit rates for items not listed will be billed on a per project basis.

\*Mileage charges may be adjusted based on fuel costs.

*Schedule (L)*

**ACCEPTANCE SHEET WITH  
TERMS AND CONDITIONS**



**BUNNELL-LAMMONS ENGINEERING, INC.**

6004 Ponders Court  
Greenville, South Carolina 29615

Phone (864) 288-1265  
Fax (864) 288-4430

**ACCEPTANCE SHEET**

The purpose of this sheet is to obtain your written authorization for our services and confirm the terms and conditions under which these services are provided as shown below.

Compensation for services rendered will be based on the attached schedule of fees (or as otherwise indicated below) which are part of this work authorization. If we are requested to modify the scope of work at your request or determine during the execution of the work that a modification of scope is required, we will promptly seek and confirm in writing a mutually agreeable revision of the scope of work and associated charges. All testing will be performed in accordance with the applicable specifications unless otherwise noted and test results apply only to the materials actually tested.

**Project Name and Proposal Number:** Contract for Water Quality Monitoring Plan  
BLE Contract No. P15-0288

**Project Location:** Francis Farm Landfill  
Haywood County, North Carolina

**FOR PAYMENT OF CHARGES:** (to the account of)

Firm: \_\_\_\_\_ Attention: \_\_\_\_\_

Address: \_\_\_\_\_

City, State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

**WORK AUTHORIZED BY:**

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Print Name and Title - *Signatory warrants his/her authority to bind the entity represented here.*

\_\_\_\_\_  
Company Name

\_\_\_\_\_  
Address

\_\_\_\_\_  
City State Zip Code

**SPECIAL INSTRUCTIONS:** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## TERMS AND CONDITIONS

1. **SERVICES TO BE PROVIDED.** Bunnell-Lammons Engineering, Inc., through and by its officers, employees and subcontractors, (hereinafter BLE) is an independent consultant and agrees to provide Client, for its sole benefit and exclusive use, consulting services set forth in our proposal. No third party beneficiaries are intended by this agreement.

2. **PAYMENT TERMS.** Client agrees to pay BLE's invoice upon receipt. If payment is not received within 30 days from the Client's receipt of invoice, Client agrees to pay a service charge on the past due amount at the greater of 1% per month or the allowable legal rate, including reasonable attorney's fees and expenses if BLE's fee is collected through an attorney. No deduction shall be made from invoice on account of liquidated damages unless expressly included in the Agreement. After five days prior notice to Client, BLE may suspend services until paid on any project where payment of invoiced amounts not reasonably in dispute is not received by BLE within 60 days of Client's receipt of BLE's invoice. Invoices will be sent approximately monthly for the services performed.

3. **STANDARD OF CARE.** BLE will perform its services using that degree of care and skill ordinarily exercised under similar conditions by reputable members of BLE's profession practicing in the same or similar locality at the time of service. **NO OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE OR INTENDED BY OUR PROPOSAL OR BY OUR ORAL OR WRITTEN REPORTS.**

4. **INSURANCE.** BLE maintains insurance coverage as follows:

- a. Worker's Compensation Insurance.
- b. Employers Liability Insurance.
- c. Commercial General Liability Insurance.
- d. Professional Errors and Omission.

Certificates of Insurance can be provided upon acceptance of this agreement and upon request.

5. **PROFESSIONAL LIABILITY.** For additional consideration from BLE of \$10,000, receipt of which is hereby acknowledged, Client agrees that BLE's liability, and that of its officers, directors, employees, agents and subcontractors, to Client or any third party due to any negligent professional acts, errors or omissions or breach of contract by BLE will be limited to an aggregate of \$50,000 or BLE's total charges, whichever is greater. If Client prefers to have higher limits of professional liability, BLE agrees to increase the aggregate limit, up to a maximum of \$100,000, upon Client's written request at the time of accepting our proposal, provided Client agrees to pay an additional consideration of 5% of total charges, or \$500, whichever is greater. The additional charge for the higher liability limit is because of the greater risk assumed by BLE and is not a charge for additional professional liability insurance. This limitation shall not apply to the extent prohibited by law.

6. **SITE OPERATIONS.** Client will arrange for right-of-entry to the property for the purpose of performing project management, studies, tests and evaluations pursuant to the agreed services. Client represents that it possesses necessary permits and licenses required for its activities at the site.

BLE's field personnel are trained to initiate field testing, drilling and/or sampling within a reasonable distance of each designated location. BLE's field personnel will avoid hazards or utilities which are visible to them at the site. If BLE is advised in writing of the presence or potential presence of underground or above ground obstructions, such as utilities, we will give special instructions to our field personnel. BLE is not responsible for any damage or loss due to undisclosed or unknown surface or subsurface conditions owned by Client or third parties, except to the extent such damage or loss is a result of BLE's negligence.

BLE will take reasonable precautions to minimize damage to the property caused by its operations. Unless otherwise stated in BLE's proposal, BLE's charges do not include cost of restoration due to any related damage which may result. If Client requests BLE to repair such damage, BLE will do so at an appropriate additional cost.

Field tests or boring locations described in BLE's report or shown on sketches are based on specific information furnished by others or estimates made in the field by BLE personnel. Such dimensions, depths or elevations should be considered as approximations unless otherwise stated in BLE's proposal or report.

7. **FIELD REPRESENTATIVE.** The presence of BLE or its subcontractor's field personnel, either full-time or part-time, may be for the purpose of providing project administration, assessment, observation and/or field testing of specific aspects of the project as authorized by Client. Should a contractor(s) not retained by BLE be involved in the project, Client will advise such contractor(s) that BLE's services do not include supervision or direction of the means, methods or actual work of the contractor(s), its employees or agents. Client will also inform contractor that the presence of BLE's field representative for project administration, assessment, observation or testing will not relieve the contractor of its responsibilities for performing the work in accordance with the plans and specifications.

If a contractor (not a subcontractor of BLE) is involved in the project, Client agrees, in accordance with generally accepted construction practices, that the contractor will be solely and completely responsible for working conditions on the job site, including security and safety of all persons and property during performance of the work, and compliance with all Client safety requirements and OSHA regulations. These requirements will apply continuously and will not be limited to normal working hours. It is agreed that BLE will not be responsible for job or site safety or security on the project, other than for BLE's employees and subcontractors, and that BLE does not have the duty or right to stop the work of the contractor.

8. **UNFORESEEN CONDITIONS OR OCCURRENCES.** It is possible that unforeseen conditions or occurrences may be encountered at the site which could substantially alter the necessary services or the risks involved in completing BLE's services. If this occurs, BLE will promptly notify and consult with Client, but will act based on BLE's sole judgment where risk to BLE personnel is involved. Possible actions could include:

- a. Complete the original Scope of Services in accordance with the procedures originally intended in BLE's proposal, if practicable in BLE's judgment;
- b. Agree with Client to modify the Scope of Services and the estimate of charges to include study of the unforeseen conditions or occurrences, with such revision agreed to in writing;
- c. Terminate the services effective on the date specified by BLE in writing.

9. **SAMPLE DISPOSAL.** Test specimens or samples generally are consumed or substantially altered during testing and any remnants are disposed of immediately upon completion of tests. Remaining drilling samples and other specimens are disposed of 30 days after submission of BLE's report. In the event that test samples contain toxic or hazardous constituents as defined by applicable law, upon completion of any testing and temporary storage by BLE and per Client's stated preference, BLE will return such samples to Client for proper disposal.

10. **WASTE DISPOSAL.** If Client requests BLE to containerize drilling wastes and/or fluids produced by BLE's activity ("Wastes"), Client will provide a secure temporary storage location at or near the project site to prevent tampering with such containerized Wastes. Non-hazardous Wastes will be disposed of by BLE for an additional charge at an appropriately licensed facility. Any hazardous Wastes will be disposed of under manifest executed by Client at any properly licensed facility selected by Client with BLE's assistance. At no time will BLE take title to such hazardous Wastes.

11. **\*CLIENT DISCLOSURE.** Client agrees to advise BLE upon execution of this Agreement of any hazardous substance or any condition, known or that reasonably should be known by Client, existing in, on, or near the site that presents a potential danger to human health, the environment, or BLE's equipment. Client agrees to provide BLE continuing related information as it becomes available to the Client. By virtue of entering into this Agreement or providing services hereunder, BLE does not assume control of or responsibility as an operator or otherwise for the site or the person(s) in charge of the site, or undertake responsibility for reporting to any federal, state or local public agencies any conditions at the site that may present a potential danger to public health, safety or the environment. Client agrees under advice of its counsel to notify the appropriate federal, state or local public agencies as required by law; or otherwise to disclose, in a timely manner, any information that may be necessary to prevent damage to human health, safety, or the environment.

12. **\*ENVIRONMENTAL INDEMNITY.** In connection with toxic or hazardous substances or constituents and to the maximum extent permitted by law, for separate and valuable consideration of \$1.00, Client agrees to defend, hold harmless and indemnify BLE from and against any and all claims, liabilities, or judgments, except to the extent finally determined as being caused by BLE's negligence or willful misconduct, resulting from:

- a. Client's violation of any federal, state, or local statute, regulation or ordinance relating to the management or disposal of toxic or hazardous substances or constituents;
- b. Client's undertaking of or arrangement for the handling, removal, treatment, storage, transportation or disposal of toxic or hazardous substances or constituents found or identified at the site;
- c. Toxic or hazardous substances or constituents introduced at the site by Client or third persons before, during or after the completion of BLE's services;
- d. Allegations that BLE is a handler, generator, operator, treater, storer, transporter, or disposer unless expressly retained by Client for such services under the Resource Conservation and Recovery Act of 1976 as amended or any other similar federal, state or local regulation or law due to the BLE's services; or,



e. Any third party suit or claim for damages against BLE alleging strict liability, personal injury (including death) or property damage from exposure to or release of toxic or hazardous substances or constituents at or from the project site before, during or after completion of BLE's services under this Agreement.

13. \*EQUIPMENT CONTAMINATION. BLE will endeavor to clean its laboratory and field equipment which may become contaminated in the conduct of our services. Occasionally, such equipment cannot be completely decontaminated because of the type of hazards encountered. If this occurs, it will be necessary to dispose of the equipment in a manner similar to that indicated for hazardous samples or waste and to charge Client for the loss. Client agrees to pay the fair market value of any such equipment and reasonable disposal costs.

14. DOCUMENTS. BLE will furnish Client the agreed upon number of written reports and supporting documents. These instruments of services are furnished for Client's exclusive internal use and reliance, use of Client's counsel, use of Client's qualified bidders (design services only) and for regulatory submittal in connection with the project or services provided for in this Agreement, but not for advertising or other type of distribution, and are subject to the following:

a. All documents generated by BLE under this Agreement shall remain the sole property of BLE. Any unauthorized use or distribution of BLE's work shall be at Client's and recipient's sole risk and without liability to BLE. BLE may retain a confidential file copy of its work product and related documents.

b. If Client desires to release, or for BLE to provide, our report(s) to a third party not described above for that party's reliance, BLE will agree to such release provided we receive written acceptance from such third party to be bound by acceptable terms and conditions similar to this Agreement (e.g. Secondary Client Agreement). Reports provided for disclosure of information only will not require separate agreement. Client acknowledges and agrees to inform such third party that BLE's report(s) reflects conditions only at the time of the study and may not reflect conditions at a later time. Client further acknowledges that such request for release creates a potential conflict of interest for BLE and by this request Client waives any such claim if BLE complies with the request.

c. Client agrees that all documents furnished to Client or Client's agents or designees, if not paid for, will be returned upon demand and will not be used by Client or any other entity for any purpose whatsoever. Client further agrees that documents produced by BLE pursuant to this Agreement will not be used for any project not expressly provided for in this Agreement without BLE's prior written approval.

d. Client shall furnish documents or information reasonably within Client's control and deemed necessary by BLE for proper performance of our services. BLE may rely upon Client-provided documents in performing the services required under this Agreement; however, BLE assumes no responsibility or liability for their accuracy. Client-provided documents will remain the property of Client, but BLE may retain one confidential file copy as needed to support its report.

e. Upon Client's request, BLE's work product may be provided on magnetic media. By such request, Client agrees that the written copy retained by BLE in its files, with at least one written copy provided to Client, shall be the official base document. BLE makes no warranty or representation to Client that the magnetic copy is accurate or complete, but will correct in good faith any omissions or errors brought to BLE's attention by Client. Any modifications of such magnetic copy by Client shall be at Client's risk and without liability to BLE. Such magnetic copy is subject to all other conditions of this Agreement.

15. CLAIMS. The parties agree to attempt to resolve any dispute without resort to litigation, including use of mediation, prior to filing of any suit. However, in the event a claim results in litigation, and the claimant does not prevail at trial, then the claimant shall pay all costs incurred in pursuing and defending the claim, including reasonable attorney's fees.

16. OPINIONS OF COST. If requested, BLE will use its best efforts and experience on similar projects to provide realistic opinions or estimates of costs for remediation or construction as appropriate based on reasonably available data, BLE's designs or BLE's recommendations. However, such opinions are intended primarily to provide information on the order of magnitude or scale of such costs and are not intended for use in firm budgeting or negotiation unless specifically agreed otherwise, in writing with BLE. Client understands actual costs of such work depend heavily on regional economics, local construction practices, material availability, site conditions, weather conditions, contractor skills, and many other factors beyond BLE's control.

17. TESTIMONY. Should BLE or any BLE employee be compelled by law to provide testimony or other evidence by any party, whether at deposition, hearing, or trial, in relation to services provided under this Agreement, and BLE is not a party in the dispute, then BLE shall be compensated by Client for the associated reasonable expenses and labor for BLE's preparations and testimony at appropriate unit rates. To the extent the party

compelling the testimony ultimately provides BLE such compensation, Client will receive a credit or refund on any related double payments to BLE.

18. CONFIDENTIALITY. BLE will maintain as confidential any documents or information provided by Client and will not release, distribute or publish same to any third party without prior permission from Client, unless compelled by law or order of a court or regulatory body of competent jurisdiction. Such release will occur only after prior notice to Client.

19. GOVERNING LAW. This Agreement shall be governed in all respects by the laws of the State of North Carolina.

20. PRIORITY OVER FORM AGREEMENT/PURCHASE ORDERS. The Parties agree that the provisions of these terms and conditions shall control over and not be superseded by any provisions of any other documents or writings and may be amended only by written instrument signed by both Client and BLE. Client may issue purchase orders to BLE to satisfy Client's purchasing requirements. It is agreed that the terms and conditions included in such purchase orders shall be considered deleted in their entirety and such terms and conditions shall be void.

21. SURVIVAL. All provisions of this Agreement for indemnity or allocation of responsibility or liability between Client and BLE shall survive the completion of the services and the termination of this Agreement.

22. SEVERABILITY. In the event that any provision of this Agreement is found to be unenforceable under law, the remaining provisions shall continue in full force and effect.

23. ASSIGNMENT. This Agreement may not be assigned by either party without the prior permission of the other.

24. CONSIDERATION. The parties agree that the charges for BLE's services are sufficiently adjusted to include any specific consideration payable to Client under these terms and conditions.

25. INTEGRATION. This Agreement, the attached documents and those incorporated herein constitute the entire Agreement between the parties and cannot be changed except by a written instrument signed by both parties.

\*Applies only if toxic or hazardous substances or constituents are anticipated or encountered.

END OF DOCUMENT



**BUNNELL-LAMMONS ENGINEERING, INC.**  
GEOTECHNICAL, ENVIRONMENTAL AND CONSTRUCTION MATERIALS CONSULTANTS

April 2, 2015

Office of the County Manager  
215 N. Main Street  
Waynesville, NC 28786

Attention: Mr. David B. Francis  
Solid Waste and Tax Administrator

Subject: **Contract for a Landfill Gas Monitoring Plan**  
Closed Francis Farm Landfill  
Haywood County, North Carolina  
BLE Contract Number P15-0289

Dear Mr. Francis:

Bunnell-Lammons Engineering, Inc. (BLE) is pleased to submit this contract to Haywood County to provide environmental consulting services associated with the closed Francis Farm Landfill. This proposal addresses a requirement for a Landfill Gas Monitoring Plan (LFGMP) in general accordance with North Carolina Rules for Solid Waste Management, 15A NCAC 13B .1626(4) as set forth by the North Carolina Department of Environment Natural Resources, Division of Waste Management (DWM).

Included herein is a brief description of the background project information, a general description of our contract scope of services with related fee estimate, and authorization information.

### **BACKGROUND INFORMATION**

The closed Francis Farm Landfill in Haywood County requires landfill gas monitoring and reporting as part of post-closure care. The Francis Farm Landfill has 13 landfill gas monitoring wells (MM-1 through MW-13) and 5 structure monitoring points (SM-1a, SM-1b, SM-1C, SM-2, & SM-3) which are monitored quarterly in accordance with the facility plan.

We understand that ongoing maintenance of the existing soil cap is scheduled for late 2015 and permanent improvements are currently scheduled for late 2016. Additionally, as of December 2014 the county has purchased all properties surrounding the landfill to expand the facility boundary and compliance limits for landfill gas. Several of the existing landfill gas monitoring wells will be abandoned and new wells installed as part of the improvements. A new LFGMP will be required to document changes to the facility's monitoring infrastructure. The new LFGMP will be part of an application for permit modifications which will be prepared by McGill Associates (McGill).



## SCOPE OF SERVICES

The objective of this project is to prepare a LFGMP which will include procedures and locations for landfill gas monitoring as required by the following North Carolina Department of Environment and Natural Resources (DENR) Solid Waste Management Rules and in general accordance with the State's landfill gas monitoring guidance:

- Landfill Gas – *North Carolina Rules for Solid Waste Management, 15A NCAC 13B Rule .1626(4).*
- *NCDENR – DWM, Solid Waste Section, Landfill Gas Monitoring Guidance* dated November 2010.

The LFGMP will be developed to detect and quantify landfill gas as well as to measure the effectiveness of engineered landfill gas mitigation systems. This scope of work also includes a discussion of anticipated changes to the facility's monitoring infrastructure with the DWM and negotiations with the DWM on potential replacement well locations and abandonment and installation procedures. The locations of the existing and/or replacement landfill gas monitoring points will be specified in the LFGMP.

### **Landfill Gas -- NCAC 13B Rules .1626(4)**

BLE will prepare a landfill gas (methane) monitoring plan (LFGMP) which will include the following elements for landfill gas:

- Monitoring Network Design and Phasing of Installation
- Monitoring Probe Design and Construction
- Monitoring Schedule
- Quality Assurance and Quality Control Procedures
- Monitoring Procedures for Structures
- Monitoring Procedures for Landfill Gas Monitoring Wells
- Landfill Gas Safety Guidelines
- Reporting
  1. Landfill Gas Monitoring Well Installation Reports
  2. Evaluation and Reporting of Landfill Gas Monitoring Results

## FEE ESTIMATE

Our charges for the proposed Scope of Services will be computed from actual quantities of work performed at the unit rates shown on the attached Fee Schedule. We propose to complete this project on a time and materials basis. Our estimated fee for the scope outlined above is **\$4,000**.



Contract for a Landfill Gas Monitoring Plan  
Francis Farm Landfill, Haywood County, North Carolina

April 2, 2015  
BLE Contract Number P15-0289

### SCHEDULE

Based on our present schedule, we can begin work on this project within two weeks after we receive your authorization to proceed. The anticipated project can be completed in 6 weeks assuming that the project does not have delays beyond our control. This schedule does not include review time by Haywood County, McGill or the DENR.

### AUTHORIZATION

As our written authorization for the above scope of services, please execute the attached acceptance sheet and return the acceptance copy of this contract to BLE.

Any exceptions to this contract or special requirements not covered in the contract should be attached to the returned acceptance copy for the mutual consideration of both parties. Please note that the Terms and Conditions are a part of this contract and have previously been reviewed and approved by Haywood County's legal counsel. Any Purchase Order issued to authorize this project should reference this document (P15-0289).

We appreciate the opportunity to serve as your hydrogeological consultant at this site. If you have any questions, please do not hesitate contacting us at (864) 288-1265.

Sincerely,  
BUNNELL-LAMMONS ENGINEERING, INC.

  
Andrew W. Alexander, P.G.  
Senior Hydrogeologist

  
Mark S. Preddy, P.G.  
Senior Hydrogeologist

CC: Mr. Mark Cathey, P.E. -- McGill Associates, PA

Attachments: Fee Schedule  
Contract Terms and Conditions

e:\lawa projects\mcgill\haywood county lf\proposals\p15-0289 fflf lfgmp\contract for fflf lfgmp p15-0289.docx

**FEE SCHEDULE**

**2015 Schedule of Fees**  
**Bunnell-Lammons Engineering, Inc.**

<u>Personnel</u>	<u>Hourly Rate</u>
Engineering/Environmental Technician I .....	\$45.00
Engineering/Environmental Technician II .....	\$55.00
Engineering/Environmental Technician III .....	\$65.00
Staff Engineer/Geologist/Scientist .....	\$90.00
Project Engineer/Geologist/Scientist .....	\$115.00
Senior Engineer/Geologist/Scientist .....	\$120.00
Chief Engineer/Geologist/Scientist .....	\$140.00
Principal Engineer/Geologist/Scientist .....	\$165.00
Administrative Support .....	\$50.00
Drafting .....	\$60.00

<u>Expense and Subcontract</u>	<u>Rate</u>
Mileage .....	\$0.75 per mile*
Miscellaneous Expenses (shipping, printing, consumable supplies, etc.) .....	Cost plus 15%
Digital Camera, per day .....	\$10.00
Color Laser Prints, per page .....	\$2.00
Monitoring Well Sampling Kit (including bailer, rope & decontamination supplies), each ....	\$25.00
PVC Bailer Sampling Kit, (including bailer, rope & decontamination supplies), each .....	\$35.00
Gloves-Vinyl or Latex, pair .....	\$0.50
Gloves-Nitrile, pair .....	\$3.00
Water Level Meter, per day .....	\$25.00
Turbidity Meter, per day .....	\$35.00
pH Test Equipment / Supplies, per day .....	\$25.00
Conductivity / Temperature Probe, per day .....	\$25.00
Submersible Sump Pump, per day .....	\$50.00
½ HP Well Pump, per day .....	\$50.00
High Flow Well Development Pump, per day .....	\$25.00
Low Flow Purge Pump with Battery, per day .....	\$25.00
Product Interface Probe, per day .....	\$50.00
Generator, per day .....	\$65.00
Organic Meter (PID or FID), per day .....	\$100.00
Slug Test Transducer and Data Logger with software, per day .....	\$150.00
Survey Equipment, per day .....	\$35.00

\*Subcontracts (drilling, laboratory and analysis, etc.)..... Cost plus 15%

\*Unit rates for items not listed will be billed on a per project basis.

\*Mileage charges may be adjusted based on fuel costs.

*Schedule (L)*

**ACCEPTANCE SHEET WITH  
TERMS AND CONDITIONS**



**BUNNELL-LAMMONS ENGINEERING, INC.**  
 6004 Ponders Court  
 Greenville, South Carolina 29615

Phone (864) 288-1265  
 Fax (864) 288-4430

**ACCEPTANCE SHEET**

The purpose of this sheet is to obtain your written authorization for our services and confirm the terms and conditions under which these services are provided as shown below.

Compensation for services rendered will be based on the attached schedule of fees (or as otherwise indicated below) which are part of this work authorization. If we are requested to modify the scope of work at your request or determine during the execution of the work that a modification of scope is required, we will promptly seek and confirm in writing a mutually agreeable revision of the scope of work and associated charges. All testing will be performed in accordance with the applicable specifications unless otherwise noted and test results apply only to the materials actually tested.

**Project Name and Proposal Number:** Contract for Landfill Gas Monitoring Plan  
BLE Contract No. P15-0289

**Project Location:** Francis Farm Landfill  
Haywood County, North Carolina

**FOR PAYMENT OF CHARGES:** (to the account of)

Firm: \_\_\_\_\_ Attention: \_\_\_\_\_

Address: \_\_\_\_\_

City, State: \_\_\_\_\_ Zip Code: \_\_\_\_\_ Phone Number: \_\_\_\_\_

Fax Number: \_\_\_\_\_

**WORK AUTHORIZED BY:**

Signature \_\_\_\_\_ Date \_\_\_\_\_

Print Name and Title - *Signatory warrants his/her authority to bind the entity represented here.*

Company Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

**SPECIAL INSTRUCTIONS:** \_\_\_\_\_

\_\_\_\_\_  
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## TERMS AND CONDITIONS

1. **SERVICES TO BE PROVIDED.** Bunnell-Lammons Engineering, Inc., through and by its officers, employees and subcontractors, (hereinafter BLE) is an independent consultant and agrees to provide Client, for its sole benefit and exclusive use, consulting services set forth in our proposal. No third party beneficiaries are intended by this agreement.

2. **PAYMENT TERMS.** Client agrees to pay BLE's invoice upon receipt. If payment is not received within 30 days from the Client's receipt of invoice, Client agrees to pay a service charge on the past due amount at the greater of 1% per month or the allowable legal rate, including reasonable attorney's fees and expenses if BLE's fee is collected through an attorney. No deduction shall be made from invoice on account of liquidated damages unless expressly included in the Agreement. After five days prior notice to Client, BLE may suspend services until paid on any project where payment of invoiced amounts not reasonably in dispute is not received by BLE within 60 days of Client's receipt of BLE's invoice. Invoices will be sent approximately monthly for the services performed.

3. **STANDARD OF CARE.** BLE will perform its services using that degree of care and skill ordinarily exercised under similar conditions by reputable members of BLE's profession practicing in the same or similar locality at the time of service. NO OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE OR INTENDED BY OUR PROPOSAL OR BY OUR ORAL OR WRITTEN REPORTS.

4. **INSURANCE.** BLE maintains insurance coverage as follows:

- a. Worker's Compensation Insurance.
- b. Employers Liability Insurance.
- c. Commercial General Liability Insurance.
- d. Professional Errors and Omission.

Certificates of insurance can be provided upon acceptance of this agreement and upon request.

5. **PROFESSIONAL LIABILITY.** For additional consideration from BLE of \$10.00, receipt of which is hereby acknowledged, Client agrees that BLE's liability, and that of its officers, directors, employees, agents and subcontractors, to Client or any third party due to any negligent professional acts, errors or omissions or breach of contract by BLE will be limited to an aggregate of \$50,000 or BLE's total charges, whichever is greater. If Client prefers to have higher limits of professional liability, BLE agrees to increase the aggregate limit, up to a maximum of \$100,000, upon Client's written request at the time of accepting our proposal, provided Client agrees to pay an additional consideration of 5% of total charges, or \$500, whichever is greater. The additional charge for the higher liability limit is because of the greater risk assumed by BLE and is not a charge for additional professional liability insurance. This limitation shall not apply to the extent prohibited by law.

6. **SITE OPERATIONS.** Client will arrange for right-of-entry to the property for the purpose of performing project management, studies, tests and evaluations pursuant to the agreed services. Client represents that it possesses necessary permits and licenses required for its activities at the site.

BLE's field personnel are trained to initiate field testing, drilling and/or sampling within a reasonable distance of each designated location. BLE's field personnel will avoid hazards or utilities which are visible to them at the site. If BLE is advised in writing of the presence or potential presence of underground or above ground obstructions, such as utilities, we will give special instructions to our field personnel. BLE is not responsible for any damage or loss due to undisclosed or unknown surface or subsurface conditions owned by Client or third parties, except to the extent such damage or loss is a result of BLE's negligence.

BLE will take reasonable precautions to minimize damage to the property caused by its operations. Unless otherwise stated in BLE's proposal, BLE's charges do not include cost of restoration due to any related damage which may result. If Client requests BLE to repair such damage, BLE will do so at an appropriate additional cost.

Field tests or boring locations described in BLE's report or shown on sketches are based on specific information furnished by others or estimates made in the field by BLE personnel. Such dimensions, depths or elevations should be considered as approximations unless otherwise stated in BLE's proposal or report.

7. **FIELD REPRESENTATIVE.** The presence of BLE or its subcontractor's field personnel, either full-time or part-time, may be for the purpose of providing project administration, assessment, observation and/or field testing of specific aspects of the project as authorized by Client. Should a contractor(s) not retained by BLE be involved in the project, Client will advise such contractor(s) that BLE's services do not include supervision or direction of the means, methods or actual work of the contractor(s), its employees or agents. Client will also inform contractor that the presence of BLE's field representative for project administration, assessment, observation or testing will not relieve the contractor of its responsibilities for performing the work in accordance with the plans and specifications.

If a contractor (not a subcontractor of BLE) is involved in the project, Client agrees, in accordance with generally accepted construction practices, that the contractor will be solely and completely responsible for working conditions on the job site, including security and safety of all persons and property during performance of the work, and compliance with all Client safety requirements and OSHA regulations. These requirements will apply continuously and will not be limited to normal working hours. It is agreed that BLE will not be responsible for job or site safety or security on the project, other than for BLE's employees and subcontractors, and that BLE does not have the duty or right to stop the work of the contractor.

8. **UNFORESEEN CONDITIONS OR OCCURRENCES.** It is possible that unforeseen conditions or occurrences may be encountered at the site which could substantially alter the necessary services or the risks involved in completing BLE's services. If this occurs, BLE will promptly notify and consult with Client, but will act based on BLE's sole judgment where risk to BLE personnel is involved. Possible actions could include:

- a. Complete the original Scope of Services in accordance with the procedures originally intended in BLE's proposal, if practicable in BLE's judgment.
- b. Agree with Client to modify the Scope of Services and the estimate of charges to include study of the unforeseen conditions or occurrences, with such revision agreed to in writing.
- c. Terminate the services effective on the date specified by BLE in writing.

9. **SAMPLE DISPOSAL.** Test specimens or samples generally are consumed or substantially altered during testing and any remnants are disposed of immediately upon completion of tests. Remaining drilling samples and other specimens are disposed of 30 days after submission of BLE's report. In the event that test samples contain toxic or hazardous constituents as defined by applicable law, upon completion of any testing and temporary storage by BLE and per Client's stated preference, BLE will return such samples to Client for proper disposal.

10. **WASTE DISPOSAL.** If Client requests BLE to containerize drilling wastes and/or fluids produced by BLE's activity ("Wastes"), Client will provide a secure temporary storage location at or near the project site to prevent tampering with such containerized Wastes. Non-hazardous Wastes will be disposed of by BLE for an additional charge at an appropriately licensed facility. Any hazardous Wastes will be disposed of under manifest executed by Client at any properly licensed facility selected by Client with BLE's assistance. At no time will BLE take title to such hazardous Wastes.

11. **\*CLIENT DISCLOSURE.** Client agrees to advise BLE upon execution of this Agreement of any hazardous substance or any condition, known or that reasonably should be known by Client, existing in, on, or near the site that presents a potential danger to human health, the environment, or BLE's equipment. Client agrees to provide BLE continuing related information as it becomes available to the Client. By virtue of entering into this Agreement or providing services hereunder, BLE does not assume control of or responsibility as an operator or otherwise for the site or the person(s) in charge of the site, or undertake responsibility for reporting to any federal, state or local public agencies any conditions at the site that may present a potential danger to public health, safety or the environment. Client agrees under advice of its counsel to notify the appropriate federal, state or local public agencies as required by law; or otherwise to disclose, in a timely manner, any information that may be necessary to prevent damage to human health, safety, or the environment.

12. **\*ENVIRONMENTAL INDEMNITY.** In connection with toxic or hazardous substances or constituents and to the maximum extent permitted by law, for separate and valuable consideration of \$1.00, Client agrees to defend, hold harmless and indemnify BLE from and against any and all claims, liabilities, or judgments, except to the extent finally determined as being caused by BLE's negligence or willful misconduct, resulting from:

- a. Client's violation of any federal, state, or local statute, regulation or ordinance relating to the management or disposal of toxic or hazardous substances or constituents;
- b. Client's undertaking of or arrangement for the handling, removal, treatment, storage, transportation or disposal of toxic or hazardous substances or constituents found or identified at the site;
- c. Toxic or hazardous substances or constituents introduced at the site by Client or third persons before, during or after the completion of BLE's services;
- d. Allegations that BLE is a handler, generator, operator, treator, storer, transporter, or disposer unless expressly retained by Client for such services under the Resource Conservation and Recovery Act of 1976 as amended or any other similar federal, state or local regulation or law due to the BLE's services; or,



e. Any third party suit or claim for damages against BLE alleging strict liability, personal injury (including death) or property damage from exposure to or release of toxic or hazardous substances or constituents at or from the project site before, during or after completion of BLE's services under this Agreement.

13. \*EQUIPMENT CONTAMINATION. BLE will endeavor to clean its laboratory and field equipment which may become contaminated in the conduct of our services. Occasionally, such equipment cannot be completely decontaminated because of the type of hazards encountered. If this occurs, it will be necessary to dispose of the equipment in a manner similar to that indicated for hazardous samples or waste and to charge Client for the loss. Client agrees to pay the fair market value of any such equipment and reasonable disposal costs.

14. DOCUMENTS. BLE will furnish Client the agreed upon number of written reports and supporting documents. These instruments of services are furnished for Client's exclusive internal use and reliance, use of Client's counsel, use of Client's qualified bidders (design services only) and for regulatory submittal in connection with the project or services provided for in this Agreement, but not for advertising or other type of distribution, and are subject to the following:

a. All documents generated by BLE under this Agreement shall remain the sole property of BLE. Any unauthorized use or distribution of BLE's work shall be at Client's and recipient's sole risk and without liability to BLE. BLE may retain a confidential file copy of its work product and related documents.

b. If Client desires to release, or for BLE to provide, our report(s) to a third party not described above for that party's reliance, BLE will agree to such release provided we receive written acceptance from such third party to be bound by acceptable terms and conditions similar to this Agreement (e.g. Secondary Client Agreement). Reports provided for disclosure of information only will not require separate agreement. Client acknowledges and agrees to inform such third party that BLE's report(s) reflects conditions only at the time of the study and may not reflect conditions at a later time. Client further acknowledges that such request for release creates a potential conflict of interest for BLE and by this request Client waives any such claim if BLE complies with the request.

c. Client agrees that all documents furnished to Client or Client's agents or designees, if not paid for, will be returned upon demand and will not be used by Client or any other entity for any purpose whatsoever. Client further agrees that documents produced by BLE pursuant to this Agreement will not be used for any project not expressly provided for in this Agreement without BLE's prior written approval.

d. Client shall furnish documents or information reasonably within Client's control and deemed necessary by BLE for proper performance of our services. BLE may rely upon Client-provided documents in performing the services required under this Agreement; however, BLE assumes no responsibility or liability for their accuracy. Client-provided documents will remain the property of Client, but BLE may retain one confidential file copy as needed to support its report.

e. Upon Client's request, BLE's work product may be provided on magnetic media. By such request, Client agrees that the written copy retained by BLE in its files, with at least one written copy provided to Client, shall be the official base document. BLE makes no warranty or representation to Client that the magnetic copy is accurate or complete, but will correct in good faith any omissions or errors brought to BLE's attention by Client. Any modifications of such magnetic copy by Client shall be at Client's risk and without liability to BLE. Such magnetic copy is subject to all other conditions of this Agreement.

15. CLAIMS. The parties agree to attempt to resolve any dispute without resort to litigation, including use of mediation, prior to filing of any suit. However, in the event a claim results in litigation, and the claimant does not prevail at trial, then the claimant shall pay all costs incurred in pursuing and defending the claim, including reasonable attorney's fees.

16. OPINIONS OF COST. If requested, BLE will use its best efforts and experience on similar projects to provide realistic opinions or estimates of costs for remediation or construction as appropriate based on reasonably available data, BLE's designs or BLE's recommendations. However, such opinions are intended primarily to provide information on the order of magnitude or scale of such costs and are not intended for use in firm budgeting or negotiation unless specifically agreed otherwise, in writing with BLE. Client understands actual costs of such work depend heavily on regional economics, local construction practices, material availability, site conditions, weather conditions, contractor skills, and many other factors beyond BLE's control.

17. TESTIMONY. Should BLE or any BLE employee be compelled by law to provide testimony or other evidence by any party, whether at deposition, hearing, or trial, in relation to services provided under this Agreement, and BLE is not a party in the dispute, then BLE shall be compensated by Client for the associated reasonable expenses and labor for BLE's preparations and testimony at appropriate unit rates. To the extent the party

compelling the testimony ultimately provides BLE such compensation, Client will receive a credit or refund on any related double payments to BLE.

18. CONFIDENTIALITY. BLE will maintain as confidential any documents or information provided by Client and will not release, distribute or publish same to any third party without prior permission from Client, unless compelled by law or order of a court or regulatory body of competent jurisdiction. Such release will occur only after prior notice to Client.

19. GOVERNING LAW. This Agreement shall be governed in all respects by the laws of the State of North Carolina.

20. PRIORITY OVER FORM AGREEMENT/PURCHASE ORDERS. The Parties agree that the provisions of these terms and conditions shall control over and not be superseded by any provisions of any other documents or writings and may be amended only by written instrument signed by both Client and BLE. Client may issue purchase orders to BLE to satisfy Client's purchasing requirements. It is agreed that the terms and conditions included in such purchase orders shall be considered deleted in their entirety and such terms and conditions shall be void.

21. SURVIVAL. All provisions of this Agreement for indemnity or allocation of responsibility or liability between Client and BLE shall survive the completion of the services and the termination of this Agreement.

22. SEVERABILITY. In the event that any provision of this Agreement is found to be unenforceable under law, the remaining provisions shall continue in full force and effect.

23. ASSIGNMENT. This Agreement may not be assigned by either party without the prior permission of the other.

24. CONSIDERATION. The parties agree that the charges for BLE's services are sufficiently adjusted to include any specific consideration payable to Client under these terms and conditions.

25. INTEGRATION. This Agreement, the attached documents and those incorporated herein constitute the entire Agreement between the parties and cannot be changed except by a written instrument signed by both parties.

\*Applies only if toxic or hazardous substances or constituents are anticipated or encountered.

END OF DOCUMENT