

June 8, 2022

Proposal No. 202201289

Mr. Caleb Sinclair, Director

Rowan County Department of Environmental Management
1102 N Long Street Extension
East Spencer, North Carolina 28039

REVISED PROPOSAL FOR PROFESSIONAL ENVIRONMENTAL CONSULTING SERVICES FOR THE 2022-2023 FISCAL YEAR

Dear Caleb,

In preparation for fiscal year 2022 - 2023 (FY 22-23), Golder Associates NC, Inc., a member of WSP (Golder), is pleased to submit this revised proposal for the continuation of environmental program management services for the three landfills owned and/or operated by Rowan County (the County), North Carolina (NC). These services are a continuation of services covered under our January 7, 2021, submittal in response to the County's December 21, 2020, *Request for Qualifications*. As you know, the County is responsible for annual water quality monitoring at the closed unlined municipal solid waste (MSW) facility (NC Solid Waste Permit No. 80-01), as well as semi-annual water quality monitoring at the closed construction and demolition (C&D) landfill and the active MSW facility (NC Solid Waste Permit No. 80-03). In addition, quarterly methane monitoring is required for permit 80-03.

Golder proposes to be responsible for managing and coordinating field, laboratory, and routine reporting activities associated with the County's environmental monitoring programs at the closed and active landfills to ensure compliance with the applicable NC general statutes, NC Solid Waste Management Rules (NCSWMR), the facility permits, and in adherence with project scope and schedule (describe in detail below). This proposal includes the fees associated with services related to routine annual/semi-annual water quality sampling and reporting at the active and closed landfills, quarterly landfill gas monitoring and reporting at the active MSW and closed C&D landfill, as well as general consulting services (budget which has been historically used to cover unscheduled issues such as special waste acceptance, verification sampling, minor alternate source demonstrations, well redevelopment, etc.).

SCOPE AND SCHEDULE

Based on the services provided in the previous fiscal year (July 1, 2022 through June 30, 2023) and our understanding of the site monitoring requirements, we are proposing the following activities for FY 22-23:

Task 100: Active MSW and Closed C&D Landfill Water Quality Monitoring and Reporting (Active Site – NC SWP # 80-03)

Phase 100 activities consist of coordinating and performing the water quality monitoring (which includes the sampling of groundwater, surface water, and leachate) and associated reporting at the active MSW landfill and closed C&D landfill located at 789 Campbell Road in Woodleaf, NC. As presented, the water quality monitoring at these facilities is performed semi-annually (typically in January and July) as required by the NCSWMR. Golder proposes to continue sampling during January and July to take advantage of reduced laboratory rates during these months. The following monitoring and reporting tasks are included based on the current approved Water Quality Monitoring Plan (WQMP) for the MSW and C&D facilities.

Field Work: Sampling and Analysis

The sampling and analysis scope-of-work consists of the following activities:

- The gauging of static water levels in 24 groundwater monitoring wells during each semi-annual water quality monitoring event at the active MSW landfill and closed C&D landfill.
- The low-flow sampling (utilizing dedicated bladder pumps), the recording of stabilization parameters (in accordance with industry standards), and the laboratory analysis of each sample for NC Appendix I constituents (in accordance with the *Detection Monitoring Program* detailed in 15A NCAC 13B .1633) in 15 groundwater monitoring wells during each semi-annual water quality monitoring event at the active MSW landfill.
- The low-flow sampling (utilizing dedicated bladder pumps), the recording of stabilization parameters (in accordance with industry standards), and the laboratory analysis of each sample for NC Appendix I plus C&D list constituents (in accordance with the *Monitoring Plans and Requirements for C&DLF Facilities* detailed in 15A NCAC 13B .0544) and 1,4-dioxane at groundwater wells MW-17 and MW-19R will be analyzed. The samples from MW-18R will be analyzed for NC Appendix I plus detected Appendix II parameters plus C&D list constituents and 1,4-dioxane in accordance with Assessment Monitoring Work Plan approved by NC Department of Environmental Quality (DEQ) on January 20, 2022. Also, a pore-water sample (PWS-1) will be collected from the stream bed south of MW-18R2 during the 1st semi-annual water quality monitoring event of 2023 for analysis of NC Appendix I Volatile Organic Compounds (VOCs) per the January 18, 2022, *Assessment Monitoring Work Plan*.
- The collection of a groundwater sample, the recording of water quality parameters, and the laboratory analysis of each sample for NC Appendix I constituents (in accordance with the *Detection Monitoring Program* detailed in 15A NCAC 13B .1633) from one underdrain outfall during each semi-annual water quality monitoring event at the active MSW landfill.
- The collection of surface water samples, the recording of water quality parameters, and the laboratory analysis of each sample for NC Appendix I constituents from 5 locations during each semi-annual water quality monitoring event at the active MSW and closed C&D landfill. The sample for the C&D unit (SW-5) will also be analyzed for 1,4-dioxane during each event.
- The collection of a leachate sample, the recording of water quality parameters, and the laboratory analysis of the sample for NC Appendix I constituents plus chemical oxygen demand (COD), biological oxygen demand (BOD), phosphate, nitrate, and sulfate. Annually during the first semi-annual event, the leachate is also analyzed for 1,4-dioxane.

- The collection of a field blank using laboratory de-ionized water for the laboratory analysis of NC Appendix I constituents plus tetrahydrofuran (THF), 1,4-dioxane, mercury, iron, and manganese.
- The analysis of a trip blank for NC Appendix I volatile organic compounds (VOCs) plus tetrahydrofuran.
- The completion of a visual inspection and the documentation of the inspection results on a *Well Condition Summary Form* which documents the conditions of each monitoring well and other relevant site features during each monitoring event.

As presented, during each water quality monitoring event, Golder will record field measurements (e.g., water quality or stabilization parameters) including pH, specific conductance or conductivity, temperature, dissolved oxygen, oxidation reduction potential, and turbidity. After collection of each sample, the sample bottles will be placed in a cooler on ice and tracked under a chain-of-custody until their delivery at the laboratory. Golder proposes to continue to utilize Environmental Conservation Laboratories (ENCO) located in Cary, NC for laboratory services.

Prior to use each day, the water quality meter, turbidity meter, and any additional field equipment utilized will be calibrated in the field in accordance with the manufacturer's specifications. Calibration information will be recorded on an equipment calibration log. As outlined in the facility WQMP the upgradient groundwater monitoring wells and upstream surface monitoring locations will be purged and sampled prior to the collection of samples from downgradient (or downstream) monitoring locations to mitigate the potential for cross-contamination. In addition, field equipment will be decontaminated between each sampling location.

Golder will maintain copies field notes, field information logs, well inspection summary forms, calibration logs, and chain-of-custody forms on file for future reference, and will incorporate copies of the field information logs, well inspection forms, and chain-of-custody forms into the semi-annual water quality monitoring reports.

Reporting:

Following the receipt of the laboratory analytical results, Golder will review the laboratory-provided quality assurance and quality control (QA/QC) data and qualify relevant data as appropriate in accordance with published US Environmental Protection Agency (US EPA) protocols or applicable NC DEQ guidance. After reviewing the laboratory data for completeness and QA/QC, Golder will assess the data (using statistics if necessary) and advise the County of any potential detections of concern by comparing the results to the applicable water quality standards. Should verification sampling be deemed necessary, Golder will provide scope, schedule, and fees and propose to complete the verification sampling under our general consulting phase (included as Phase 300).

Following receipt of the complete data package (inclusive of any potential verification sampling activities), Golder will prepare a *Semi-Annual Water Quality Monitoring Report*, which will be submitted in draft form to the County for review and comment prior to final submission to NC DEQ. As required by the NCSWMRs, each *Semi-Annual Water Quality Monitoring Report* will contain:

- A discussion of field activities and statistical evaluation methods
- A summary table of laboratory analytical results
- A summary table of statistical evaluations (any evaluations required for the active MSW and closed C&D facilities based on exceedances of applicable water quality standards)

- A summary table of static water level measurements
- A site location and potentiometric groundwater surface contour map which will include the direction of groundwater flow and an evaluation of the rate of groundwater flow (for the active MSW and closed C&D landfills)
- Documentation of field activities (including the field information logs)
- Statistical evaluation worksheets (if required)
- The laboratory certificates-of-analysis and chain-of-custody forms
- Conclusions and recommendations (as applicable).

As presented, upon approval of the County, a Golder licensed professional geologist in the State of North Carolina will complete and seal the required electronic data submittal form prior to submitting the *Semi-Annual Water Quality Monitoring Report* to the NC DEQ. The final deliverable provided to the NC DEQ will include the report text, tables, figures, field information logs, laboratory certificates-of-analysis and completed chain-of-custody forms, and any required statistical evaluations, along with required electronic data deliverables. Should a *14-Day Notification of Exceedance of a Groundwater Standard* or an *Alternate Source Demonstration* (ASD) be deemed necessary Golder will again provide scope, schedule, and fees and propose to complete the work under our general consulting phase (Phase 300) or if the proposed fees exceed those remaining in the general consulting phase Golder will provide the County with a new proposal to complete the work.

Task 101: Closed MSW Landfill Water Quality Monitoring and Reporting (Closed Site – NC SWP # 80-01)

Phase 101 activities consist of coordinating and performing the water quality monitoring (which includes the sampling of groundwater and surface water) and associated reporting at the closed MSW landfill located off National Guard Road in Salisbury, NC next to the Mid-Carolina Regional Airport (RUQ). As presented, the water quality monitoring at this facility is performed annually (typically in July) as required by the NCSWMR. Golder proposes to continue sampling during July to take advantage of reduced laboratory rates during this month. The following monitoring and reporting tasks are included based on the applicable NCSWMRs.

Field Work: Sampling and Analysis

The sampling and analysis scope-of-work consists of the following activities:

- The gauging of static water levels in 5 groundwater monitoring wells during the annual water quality monitoring event at the closed MSW landfill.
- The purging and sampling of 5 groundwater monitoring wells, the recording of water quality parameters during purging and at the time of sampling, and the laboratory analysis of each sample for NC Appendix I VOCs, Resource Conservation and Recovery Act (RCRA) metals, and 1,4-dioxane during the annual water quality monitoring event. Purging of these groundwater monitoring wells prior to sampling will consist of the evacuation of three well volumes prior to sampling per industry standard techniques and US EPA guidelines.
- The collection of surface water samples, the recording of water quality parameters, and the laboratory analysis of each sample for NC Appendix I VOCs, RCRA metals, and 1,4-dioxane from 2 locations during the annual water quality monitoring event at the active MSW and closed C&D landfill.

- The collection of a field blank using laboratory de-ionized water for the laboratory analysis of NC Appendix I VOCs and RCRA metals.
- The analysis of a trip blank for NC Appendix I VOCs.
- The completion of a visual inspection and the documentation of the inspection results on a *Well Condition Summary Form* which documents the conditions of each monitoring well and other relevant site features during the annual monitoring event.

As presented, during each water quality monitoring event, Golder will record field measurements (e.g., water quality or stabilization parameters) including pH, specific conductance or conductivity, temperature, dissolved oxygen, oxidation reduction potential, and turbidity. After collection of each sample, the sample bottles will be placed in a cooler on ice and tracked under a chain-of-custody until their delivery at the laboratory. As presented, Golder proposes to continue to utilize ENCO located in Cary, NC for laboratory services.

Prior to use each day, the water quality meter, turbidity meter, and any additional field equipment utilized will be calibrated in the field in accordance with the manufacturer's specifications. Calibration information will be recorded on an equipment calibration log. As outlined in the facility WQMP the upgradient groundwater monitoring wells and upstream surface monitoring locations will be purged and sampled prior to the collection of samples from downgradient (or downstream) monitoring locations to mitigate the potential for cross-contamination. In addition, field equipment will be decontaminated between each sampling location.

Golder will maintain copies field notes, field information logs, well inspection summary forms, calibration logs, and chain-of-custody forms on file for future reference, and will incorporate copies of the field information logs, well inspection forms, and chain-of-custody forms into the annual water quality monitoring reports.

Reporting:

Following the receipt of the laboratory analytical results, Golder will review the laboratory-provided QA/QC data and qualify relevant data as appropriate in accordance with published US EPA protocols or applicable NC DEQ guidance. After reviewing the laboratory data for completeness and QA/QC, Golder will assess the data (using statistics if necessary) and advise the County of any potential detections of concern by comparing the results to the applicable water quality standards. Should verification sampling be deemed necessary, Golder will provide scope, schedule, and fees and propose to complete the verification sampling under our general consulting phase (included as Phase 300).

Following receipt of the complete data package (inclusive of any potential verification sampling activities), Golder will prepare an *Annual Water Quality Monitoring Report*, which will be submitted in draft form to the County for review and comment prior to final submission to NC DEQ. The *Annual Water Quality Monitoring Report* will contain:

- A discussion of field activities and statistical evaluation methods (if applicable)
- A summary table of laboratory analytical results
- A summary table of statistical evaluations (if applicable)
- A summary table of static water level measurements
- A site location map showing the location of each sampling point

- Documentation of field activities (including the field information logs)
- Statistical evaluation worksheets (if required)
- The laboratory certificates-of-analysis and chain-of-custody forms
- Conclusions and recommendations (as applicable).

As presented, upon approval of the County, a Golder licensed professional geologist in the State of North Carolina will complete and seal the required electronic data submittal form prior to submitting the *Annual Water Quality Monitoring Report* to the NC DEQ. The final deliverable provided to the NC DEQ will include the report text, tables, figures, field information logs, laboratory certificates-of-analysis and completed chain-of-custody forms, and any required statistical evaluations, along with required electronic data deliverables. Should an ASD be deemed necessary Golder will again provide scope, schedule, and fees and propose to complete the work under our general consulting phase (Phase 300) or if the proposed fees exceed those remaining in the general consulting phase Golder will provide the County with a new proposal to complete the work.

Task 200: Quarterly Landfill Gas Monitoring and Reporting

Phase 200 activities will include the coordination and performance of four quarterly landfill gas monitoring events and the completion of the associated report for each monitoring event as required by 15A NCAC 13B .1626 (for the MSW landfill), 15A NCAC 13B .0544 (for the C&D landfill), and the current NC solid waste permit. The tasks included in this phase are detailed below.

Field Work:

The quarterly landfill gas monitoring event will include the following:

- Compliance monitoring at the active MSW landfill which consists of the monitoring of 7 landfill gas probes (or methane monitoring wells) and 2 on-site structures (the maintenance shop and scale-house) for the presence of methane and carbon dioxide (the main components of landfill gas) as well as for oxygen and balanced gas (or nitrogen) as required by the NCSMRs and the applicable NC DEQ guidance.
- Compliance monitoring at the closed C&D landfill which consists of the monitoring of 1 landfill gas probe for the presence of methane, carbon dioxide, oxygen, balanced gas, and hydrogen sulfide as required by the NCSMRs and the applicable NC DEQ guidance.
- In addition to the compliance monitoring at the active MSW landfill, 4 additional assessment monitoring landfill gas probes are monitored. The assessment landfill gas probes are also monitored for the presence of methane, carbon dioxide, oxygen, and balanced gas.

Golder proposes to conduct each landfill gas monitoring event utilizing a GEM 5000 (or equivalent instrument) capable of measuring methane, carbon dioxide, oxygen, and balanced gas as a percentage in air and hydrogen sulfide in parts-per-million (ppm). A calibration form for the GEM 5000 will be obtained from the vendor and the instrument will be calibrated in the field prior to each use. Field notes will be taken during the calibration process and the vendor calibration form and the field calibration notes as well as pertinent weather conditions including general weather, barometric pressure, wind direction, temperature, and humidity will be recorded and incorporated into each *Quarterly Landfill Gas Monitoring Report*.

Reporting:

As presented, a *Quarterly Landfill Gas Monitoring Report* will be completed after the conclusion of each quarterly monitoring event. The format for this report will be a letter including attachments such as the boundary gas probe monitoring log, a landfill gas monitoring location map, and the required NC DEQ environmental monitoring form for data submission. Regulation only requires a 7-day notification if methane is detected above the lower explosive limit (i.e., above 5% methane per volume in air) in the landfill gas boundary probes or above 25% of the lower explosive limit (LEL) in an onsite structure. Upon approval from the County, a Golder licensed professional geologist in the State of North Carolina will complete and seal the required electronic data submittal form prior to submitting the *Quarterly Landfill Gas Monitoring Report* to the NC DEQ only if required. Otherwise, reports will be submitted to the County including a hard copy for the facility records.

Should methane be detected above 25% of the LEL in an on-site structure Golder will notify the facility manager and recommend evacuation of the building and notification of the fire department. Following detection of methane in boundary probes during the July 2013 landfill gas monitoring event the on-site structures have been equipped with continuous explosive gas monitoring devices so this scenario is unlikely. If methane is detected above the LEL in a boundary probe Golder will assist the County in perusing an appropriate course of action and will re-monitor the probe within 7-days implementing a remedy. The remedy implementation planning, re-monitoring, or any additional assessment will be performed under the general consulting phase (Phase 300). Should an addendum to the *Landfill Gas Remediation Plan* be deemed necessary Golder will provide scope, schedule, and fees and propose to complete the work under our general consulting phase (Phase 300) or if the proposed fees exceed those remaining in the general consulting phase Golder will provide the County with a new proposal to complete the work.

Task 300: General Consulting Services

As presented, Phase 300 is proposed to provide a readily available billing phase for time and materials allocated by Golder personnel as directed by Rowan County on potential out-of-scope items specific to this project, but not included in the preceding activity phases. These activities will be performed on an as-needed basis and only after obtaining prior approval from Rowan County. These items may include but are not limited to:

- On-site general operational consulting, as requested, including the review of special waste analytical data
- Conduct verification sampling
- Respond to NC DEQ requests for additional information regarding previously submitted ASDs
- Prepare 14-day notifications for groundwater standard exceedances
- Conduct well re-development and/or dedicated pump repair activities
- Complete an ASD, Addendum to Landfill Gas Remediation Plan, etc.
- Other as needed environmental consulting for the County.

HEALTH, SAFETY, SECURITY, & ENVIRONMENT (HSSE)

As part of Golder's corporate HSSE policy we are required to prepare (or in this case update) our site-specific Health and Safety and Environmental Plan (HASEP) prior to mobilization to the site. The HASEP will be consistent with our standards for completing field work at similar facilities in the US, along with the site-specific

information or training that may be required by Rowan County. The HASEP will identify known hazards associated with the site conditions and the work to be performed via the use of risk register. Known hazards such as slips, trips, falls, inclement weather, biological and chemical hazards, driving off-road, and hazards associated with project specific equipment will be recorded and appropriate controls will be implemented to eliminate or mitigate risk. Appropriate engineering controls, administrative controls, or personal protective equipment will be utilized to minimize hazards which cannot be eliminated. At a minimum, a job-safety analysis will be performed prior to commencing work or when conditions change, and safety tailgate meetings will be conducted at the beginning of each day before work begins. At a minimum each of our field team members have received training in first-aid, CPR, AED, and blood borne pathogens, are current with their OSHA 40-Hour HAZWOPER training and have completed the OSHA 10-Hour Construction Safety Training.

PROPOSED FEES

A summary of the proposed project phase budgets is presented in the table below and detailed breakdowns can be provided upon request. The proposed fees for Phase 100, 101, 200 will be billed on a lump sum basis. These phases will be invoiced upon completion of field work for each event and based on a percent complete basis. Fees include a 5% increase from our 2021-2022 fees based on increases in labor and equipment costs (i.e., 5% 12-month running average consumer price index adjustment). As presented, Phase 300 will be invoiced on a time-and-material basis after receiving prior approval from Rowan County. Phase 300 will be invoiced in accordance with the 2022 Golder Associates NC, Inc. rate schedule which has been included as Attachment 1 to this proposal.

As presented, Golder proposes to continue to subcontract ENCO in Cary, NC to perform the required laboratory analyses associated with this project. Note that an increase in laboratory analytical fees is included in our proposed fees. Golder proposes to continue to conduct two of the quarterly landfill gas monitoring events in conjunction with the semi-annual water quality monitoring at the active MSW and closed C&D landfills to reduce the overall number of trips made to the site, reducing cost for the County.

Phase and Description:	Estimated Fee:
Phases to be invoiced on a lump sum basis:	
Phase 100: Active MSW and Closed C&D Landfill Monitoring and Reporting	\$29,500
Phase 101: Closed MSW Landfill Monitoring and Reporting	\$5,700
Phase 200: Quarterly Landfill Gas Monitoring and Reporting	\$4,300
Phases to be invoiced on a time and materials basis:	
Phase 300: General Environmental Consulting	\$10,000
Annual Total:	\$49,500

ASSUMPTIONS AND LIMITATIONS

Golder has prepared this proposal and provided this quotation based on the following assumptions:

- The proposed fees related to water quality monitoring have been prepared with the assumption that the active MSW and monitoring wells MW-17 & MW-19R at the closed C&D landfill will remain in the detection monitoring program during FY 22-23 and no additional assessment monitoring points are added to the monitoring network for the C&D facility.
- As presented, Golder has prepared these estimated fees based on ENCO's increased laboratory analytical fees.
- As presented, Golder assumes that two of the quarterly methane monitoring events will be completed in conjunction with the semi-annual water quality monitoring at the active MSW and closed C&D landfill.
- Golder assumes that Rowan County will provide or share any and all updated site drawings, updated topographic information, etc. in AutoCAD (or compatible) format.
- Fees do not include any additional groundwater assessment activities that may be required for the closed landfill (e.g., additional well installation), nor any significant ASD responses (i.e., field investigations) that may be required for the active landfill.
- As presented, Golder has provided a general environmental consulting budget which has been utilized in the past to address out-of-scope items related to other phases of this project. Golder has proposed to continue to utilize this task during the FY 22-23 for items presented in the section above.
- As we submit this proposal, the world is still in the midst of the Covid-19 health crises and we believe there is an increased risk for potential schedule impacts. Our schedule is based on operating in a normal environment. The Golder team continues to adjust our workflow logistics and our design teams are working remotely in a very effective manner. However, be aware that schedule impacts from elements such as field services delays, permitting agencies, laboratory delays, and key staff illness that neither Golder nor Rowan County have control over are more likely in the current environment. We will communicate proactively, clearly identify project issues as they arise and work with Rowan County to develop a plan to deal with any issues.

CLOSING

We appreciate this opportunity to continue to serve Rowan County and we look forward to continuing our partnership. As you are aware, these services are a continuation of services covered under our January 7, 2021, submittal in response to the County's December 21, 2020, *Request for Qualifications*. We propose to conduct the services (described in detail above) in accordance with our existing terms and conditions in our agreement with Rowan County dated October 10, 2017 and our 2022 GANCI professional rate schedule (attached to this proposal). To authorize Golder to proceed with these activities, please sign and return a copy of the attached proposal acceptance form. Should you have any questions or require additional information, please contact the undersigned at (336) 852-4903.

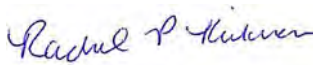
Please be aware that Golder has been acquired by and is now a Member of the WSP family of companies. Golder remains as a legal entity and is the proposed contracting entity for this proposal. We are in the process of

integrating the resources of our companies. Correspondence for this proposal should continue to be addressed to the undersigned.

Sincerely,
Golder Associates NC, Inc.



Darren Cox
Staff Environmental Scientist



Rachel P. Kirkman, PG
Principal and Senior Consultant

DC/RPK/dc

Attachments: 2022 WSP SE EE Rate Schedule
Terms and Conditions
Proposal Acceptance Form

[https://golderassociates.sharepoint.com/sites/163204/project files/1 proposal and project management/2022-2023/fy22-23 proposal rowan county.docx](https://golderassociates.sharepoint.com/sites/163204/project%20files/1%20proposal%20and%20project%20management/2022-2023/fy22-23%20proposal%20rowan%20county.docx)



PROPOSAL ACCEPTANCE FORM TERMS AND CONDITIONS (EARTH & ENVIRONMENT)

PROPOSAL NUMBER: 202201289

RE: ENVIRONMENTAL CONSULTING SERVICES PROPOSAL FOR ROWAN COUNTY LANDFILLS

WOODLEAF, NORTH CAROLINA (Continuation of Services from 12-21-20 RFQ)

SUBMITTED this 1st day of June, 20²².

BY: Rachel P. Kirkman, PG

for CONSULTANT, defined as: Golder Associates NC, Inc. (GANCI)

The Proposal dated June 1, 2022, attached hereto and the Master Agreement for Consulting Services between GANCI and Rowan County, (dated 10/10/2017), comprise the entire agreement between GANCI and Client

ACCEPTED this ____ day of ____, 20__.

BY: _____
(Authorized Representative's Signature on Behalf of **Client**)

NAME: (Print or Type) _____

TITLE: (Print or Type) _____

FOR: Client Name and Address (Print or Type)

Mr. Caleb Sinclair, Director

Rowan County Department of Environmental Management

1102 N. Long Street Extension, East Spencer, North Carolina 28039

Phone: _____ Fax: _____ E-mail: _____

Please address invoices to:	Please address deliverables and notices to:
ATTN:	ATTN:

BY: _____
(Authorized Representative's Signature on Behalf of Golder Associates NC, Inc. (G

NAME: (Print or Type) _____

TITLE: (Print or Type) _____



**Preferred Rate Schedule
for WSP Earth & Environment
US Southeast Region
Effective January 1, 2022**

Invoices from WSP Earth & Environment include all labor charges, other direct costs, and costs associated with in-house services. Charges include only those services directly attributable to the execution of the work. Time spent when traveling in the interest of the work will be charged in accordance with the hourly rates. Rates for professional services related to expert testimony, including time spent in depositions and the preparation and presentation of testimony, are available upon request.

Labor charges are based upon standard hourly billing rates for each category of staff. The billing rates include costs for salary, payroll taxes, insurance associated with employment, benefits (including holiday, sick leave, and vacation), administrative overheads, and profit. Rates by labor category are as follows:

Billing Level	Personnel Category	Hourly Rate (U.S.\$)
A-06	Admin Support	74
A-07	Staff Admin Support	95
A-08	Senior Admin Support	109
T-05	Technician	76
T-06	Staff Technician	86
T-07	Project Technician	96
T-09	Sr. Technician/Construction Manager	111
T-06	Draftsperson	86
T-08	Project Draftsperson	105
T-09	Senior Draftsperson	111
T-10	Senior CAD Designer	121
P-7	Engineer/Scientist	94
P-8	Staff Engineer/Scientist	114
P-9	Project Engineer/Scientist	134
P-10	Senior Project Engineer/Scientist	153
X-11	Senior Engineer/Scientist	175
X-12	Senior Consultant	199
X-13	Practice/Program Leader	218
X-14/15	Senior Practice/Program Leader	237

Other direct costs, including materials, expenses, and subcontractor costs will be invoiced at cost plus a minimum general and administrative fee of 10%.

A 5% office service fee will be added to the total labor costs to cover direct project non-labor office costs including mail, telephone, fax transmissions, as well as reasonable and customary in-house photocopying and document production. Final document and drawings printing and copying will be billed at the following rates:

SERVICE	RATE
Photocopies	\$0.10/page
Plotter	\$0.55/sq.ft.

Rates for laboratory services and use of equipment owned by WSP will be provided upon request.



GOLDER ASSOCIATES NC, INC. (Golder)
TERMS AND CONDITIONS

1. CLIENT DEFINITION

CLIENT as used herein shall include and apply to all parties equally, be they individuals, corporations, partnerships, associations, government agencies, or other entities, whether acting alone or collectively as a group where the services of this Agreement are being provided to, or on behalf of, the group.

2. STANDARD OF CARE

Services performed by GOLDER will be conducted in a manner consistent with that level of care and skill ordinarily exercised by other members of the engineering and science professions currently practicing under similar conditions subject to the time limits and financial, physical or any other constraints applicable to the Services. No warranty, express or implied is made.

3. INVOICES AND PAYMENT TERMS

GOLDER will submit monthly invoices to CLIENT and a final bill upon completion of Services. CLIENT shall notify GOLDER within ten (10) days of receipt of invoice of any dispute with the invoice. CLIENT and GOLDER will promptly resolve any disputed items. Payment on undisputed invoice amounts is due upon receipt of invoice by CLIENT and is past due thirty (30) days from the date of the invoice. CLIENT agrees to pay a finance charge of one and one-half percent (1-1/2%) per month, or the maximum rate allowed by law, on past due accounts. If payment remains past due sixty (60) days from the date of the invoice, then GOLDER shall have the right to suspend all work under this Agreement, without prejudice. CLIENT will pay all reasonable demobilization and other suspension costs. CLIENT agrees to pay attorneys' fees, legal costs and all other collection costs incurred by GOLDER in pursuit of past due payments.

Where the cost estimate for the scope of Services is "not to exceed" a specified sum, GOLDER shall notify CLIENT before each limit is exceeded, and shall not continue to provide Service beyond such limit unless CLIENT authorizes an increase in the amount of the limitation. If a "not to exceed" limitation is broken down into budgets for specific tasks, the task budget may be exceeded without CLIENT authorization as long as the total limitation is not exceeded.

4. CHANGES

CLIENT and GOLDER recognize that it may be necessary to modify the scope of Services, the schedule,

and/or the cost estimate proposed in this Agreement. Such changes shall change the scope of Services, schedule, and/or the cost, as may be equitable under the circumstances. GOLDER shall notify CLIENT in a timely manner when it has reason to believe a change to the Agreement is warranted. GOLDER shall prepare a Change Order request outlining the changes to the scope, schedule, and/or cost of the project. CLIENT has a duty to promptly consider the Change Order request and advise GOLDER in a timely manner in writing on how to proceed. If after a good faith effort by GOLDER to negotiate modifications to the scope of Services, the schedule, and/or the cost estimate, an agreement has not been reached with the CLIENT, then GOLDER shall have the right to terminate this Agreement upon written notice to the CLIENT.

5. DELAYS AND FORCE MAJEURE

If site conditions prevent or inhibit performance of Services or if unrevealed hazardous waste materials or conditions are encountered, Services under this Agreement may be delayed. Any such delays, and any delays caused by CLIENT and its subcontractors, consultants, agents, officers, directors and employees, shall extend the contract completion date and GOLDER shall be paid for Services performed to the delay commencement date plus reasonable delay charges. Delay charges shall include personnel and equipment rescheduling and/or reassignment adjustments and all other related costs incurred including but not limited to, labor and material escalation, and extended overhead costs, attributable to such delays. Delays within the scope of this Article shall, at the option of either party, make the Agreement subject to renegotiation or to termination.

CLIENT shall not hold GOLDER responsible for damages or delays in performance caused by acts of God, acts and/or omissions of Federal, State and local governmental authorities and regulatory agencies or other events which are beyond the reasonable control of GOLDER. For this purpose, such acts or events shall include, but not be limited to, storms, floods, epidemics, war, riot, strikes, lockouts or other industrial disturbances, and inability with reasonable diligence to supply personnel, information, or material to the project. Should such acts or events occur, it is agreed that GOLDER shall use reasonable efforts to overcome all difficulties arising and to resume as soon as reasonably possible the normal pursuit and schedule of the Services covered by this Agreement. Delays in excess of thirty (30) days within the scope of this Article shall, at the option of either party, make this Agreement subject to termination or to renegotiation.

6. DATA AND INFORMATION

CLIENT shall provide to GOLDER all the reports, data, studies, plans, specifications, documents and other information which are relevant to the Services. GOLDER shall be entitled to rely upon the reports, data, studies, plans, specifications, documents and other information provided by CLIENT or others in performing the Services and, GOLDER assumes no responsibility or liability for the accuracy or completeness of such. CLIENT waives any claim against GOLDER, and agrees to defend, indemnify and hold GOLDER harmless from any claim or liability for injury or loss allegedly arising from errors, omissions, or inaccuracies in reports, data, studies, plans, specifications, documents or other information provided to GOLDER by CLIENT. GOLDER will not be responsible for any interpretations or recommendations generated or made by others, which are based, whole or in part, on GOLDER's data, interpretations or recommendations.

7. PROFESSIONAL WORK PRODUCT

The Service provided by GOLDER is intended for one time use only. All documents, including but not limited to, reports, plans, designs, boring logs, field data, field notes, laboratory test data, calculations, and estimates (the "Documents") and all electronic media prepared by GOLDER are considered its professional work product. GOLDER retains all rights to its professional work product. Copies of Documents shall be provided to CLIENT upon written request and at CLIENT's expense. GOLDER shall retain these Documents for a period of two (2) years following submission of its report, during which period they will be made available to CLIENT at all reasonable times.

CLIENT acknowledges that electronic media is susceptible to unauthorized modification, deterioration, and incompatibility and therefore CLIENT cannot rely upon the electronic media version of GOLDER's professional work product. CLIENT understands that the professional work product is not intended or represented by GOLDER to be suitable for reuse by any party, including, but not limited to, the CLIENT, its employees, agents, subcontractors or subsequent owners on any extension of a specific project not covered by this Agreement or on any other project, whether CLIENT's or otherwise, without GOLDER's prior written permission. CLIENT agrees that any reuse unauthorized by GOLDER will be at CLIENT's sole risk and that CLIENT will defend, indemnify and hold GOLDER harmless from any loss or liability resulting from the reuse, misuse or negligent use of the professional work product.

8. INDEPENDENT JUDGMENTS OF CLIENT

If the Services include the collection of samples and data relative to CLIENT's contemplated purchase or

sale of certain property, then GOLDER performs the Services with CLIENT's understanding of the Subsurface Risk. GOLDER will not be responsible for the independent conclusions, interpretations, interpolations and/or decisions of CLIENT, or others, which are the result of this effort. GOLDER does not undertake any Services which would result in any recommendation, advice or direction by GOLDER as to whether CLIENT should or should not proceed to purchase or sell the site in question, but it is understood that CLIENT intends to utilize the data provided by GOLDER to make its own independent judgment in this respect.

9. INSURANCE AND INDEMNITY

GOLDER maintains and shall continue to maintain during the performance of this Agreement its standard insurance coverages as follows:

- Workers' Compensation insurance in compliance with statutory limits
- Employers' liability with the following limits:
Each Accident \$1,000,000
- Business Automobile Liability with the following limits:
Combined Single Limit \$1,000,000
- Commercial General Liability with the following limits:
Each Occurrence \$1,000,000
General Aggregate \$2,000,000
- Professional Liability insurance with the following limits:
Any One Claim \$1,000,000
Policy Aggregate \$3,000,000

CLIENT shall not require GOLDER to sign any document or perform any Service which in the judgment of GOLDER would risk the availability or increase the cost of its professional or general liability insurance.

CLIENT shall, at all times, defend, indemnify and save harmless GOLDER and its subcontractors, consultants, agents, officers, directors and employees from and against all claims, damages, losses and expenses, including but not limited to reasonable attorneys' fees, court and arbitration costs, arising out of or resulting from the Services of GOLDER, inclusive of claims made by third parties, or any claims against GOLDER arising from the acts, errors or omissions of CLIENT, its employees, agents, contractors and subcontractors. To the fullest extent permitted by law, such indemnification shall apply regardless of strict liability of GOLDER. Such indemnification shall not apply to the extent such claims, damages, losses or expenses are finally determined to result from GOLDER's negligence.

GOLDER shall, at all times, indemnify and save harmless CLIENT and its officers, directors, agents and employees from and against all claims, damages, losses

and expenses arising from personal injury, death, or damage to third-party property to the extent directly attributable to the negligent acts, errors or omissions of GOLDER.

10. LIMITATION OF LIABILITY

CLIENT shall immediately notify GOLDER of any deficiencies or suspected deficiencies arising directly or indirectly from GOLDER's negligent acts, errors or omissions. Failure by CLIENT to notify GOLDER shall relieve GOLDER of any further responsibility and liability for such deficiencies. CLIENT and GOLDER agree that all liability arising directly or indirectly from this Agreement or the Services of GOLDER shall expire ~~no later than one (1) year from the date of GOLDER's acts, errors, or omissions or prior to the last date as allowed in the applicable statute of limitation, whichever occurs first in time.~~

For and in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, which the CLIENT recognizes is sufficient and reasonable, CLIENT agrees to limit the liability of GOLDER, its employees, officers, directors, agents, consultants and subcontractors to CLIENT, its employees, officers, directors, agents, consultants and subcontractors, whether in contract, tort, or otherwise, which arises from GOLDER's acts, errors or omissions, such that the total aggregate liability of GOLDER to all those named shall not exceed \$50,000 or GOLDER's total fee for the Services rendered under this Agreement, whichever is greater.

Neither party shall be responsible to the other for lost revenues, lost profits, cost of capital, claims of customers, or other special, indirect, consequential or punitive damages.

11. RIGHT OF ENTRY

CLIENT will provide for the right of entry for GOLDER, its subcontractors, and all necessary equipment in order to complete the Services under this Agreement. If CLIENT does not own the site, CLIENT must obtain permission for GOLDER to enter the site and perform the Services. While GOLDER will take all reasonable precautions to minimize any damage to the property, it is understood by CLIENT that in the normal course of work some surface damage may occur, the restoration of which is not part of this Agreement.

12. SUBSURFACE RISKS

Special risks occur whenever engineering or related disciplines are applied to identify subsurface conditions. Even a comprehensive sampling and testing program implemented in accordance with a professional Standard of Care may fail to detect certain conditions. The environmental, geologic, geotechnical, geochemical and hydrogeologic conditions that GOLDER interprets to

exist between sampling points may differ from those that actually exist. Furthermore, CLIENT recognizes that passage of time, natural occurrences, direct or indirect human intervention at or near the site may substantially alter discovered conditions.

In the prosecution of the Services, GOLDER will take all reasonable precautions to avoid damage or injury to subsurface structures or utilities. CLIENT agrees to defend, indemnify and hold GOLDER harmless for any damage to subsurface structures or utilities and for any impact this damage may cause, except to the extent the damage is directly attributable to the negligence of GOLDER.

Subsurface sampling may result in unavoidable contamination of certain subsurface areas not known to be previously contaminated such as, but not limited to, a geologic formation, the groundwater, or other hydrous body. GOLDER will adhere to the Standard of Care during the conduct of any subsurface investigation. Because subsurface sampling is a necessary aspect of the work which GOLDER may perform on CLIENT's behalf, CLIENT waives any claim against GOLDER, and agrees to defend, indemnify and hold GOLDER harmless from any claim or liability for injury or loss which may arise as a result of alleged cross-contamination caused by any subsurface investigation. CLIENT further agrees to compensate GOLDER for any time spent or expenses incurred by GOLDER in defense of any such claim, in accordance with GOLDER's prevailing fee schedule and expense reimbursement policy.

13. DISPOSAL OF SAMPLES, MATERIALS AND CONTAMINATED EQUIPMENT

All uncontaminated samples obtained pursuant to this Agreement remain the property and responsibility of CLIENT. These soil and rock samples or other specimens will be disposed of 60 days after submission of the report. Upon written request, GOLDER will store samples for longer periods of time or transmit the samples to CLIENT for a mutually acceptable charge.

All contaminated samples and materials (containing or potentially containing hazardous constituents), soil cuttings, contaminated water, and/or other environmental wastes obtained pursuant to this Agreement remain the property and responsibility of CLIENT and shall be returned to CLIENT for proper disposal. All laboratory and field equipment that cannot readily and adequately be cleansed of its hazardous contaminants shall become the property and responsibility of CLIENT. All such equipment shall be charged and turned over to CLIENT for proper disposal. Alternate arrangements to turn such equipment, materials and/or samples directly over to a licensed hazardous waste disposal facility may be made at CLIENT's direction and expense. It is understood and agreed that GOLDER is not, and has no responsibility

as, a handler, generator, operator, treator, storer, arranger, transporter, or disposer of hazardous or toxic substances, waste or materials found or identified at the site. CLIENT agrees to indemnify and hold GOLDER harmless from and against all loss, damage, expense, and claims arising out of the disposal of all such samples, materials and equipment.

14. CONTROL OF WORK AND JOB-SITE SAFETY

GOLDER shall be responsible only for its activities and that of its employees and subcontractors. GOLDER's Services under this Agreement are performed for the sole benefit of the CLIENT and no other entity shall have any claim against GOLDER because of this Agreement or the performance or nonperformance of Services hereunder. GOLDER will not direct, supervise or control the work of other consultants and contractors or their subcontractors. GOLDER does not guarantee the performance of, and shall have no responsibility for, the acts or omissions of any other contractor, subcontractor, supplier or other entities furnishing materials or performing any work on the project.

Insofar as job site safety is concerned, GOLDER is responsible only for the health and safety of its employees and subcontractors. Nothing herein shall be construed to relieve CLIENT or any other consultants or contractors from their responsibilities for maintaining a safe job site. GOLDER shall not advise on, issue directions regarding, or assume control over safety conditions and programs for others at the job site. Neither the professional activities of GOLDER, nor the presence of GOLDER or its employees and subcontractors, shall be construed to imply that GOLDER controls the operations of others or has any responsibility for job site safety.

15. PUBLIC RESPONSIBILITY

CLIENT has a duty to conform to applicable codes, standards, regulations and ordinances, with regard to public health and safety. While GOLDER performs the Services it will endeavor to alert CLIENT to any matter of which GOLDER becomes aware and believes requires CLIENT's immediate attention to help protect public health and safety, or which GOLDER believes requires CLIENT to issue a notice or report to certain public officials, or to otherwise conform with applicable codes, standards, regulations or ordinances. If CLIENT decides to disregard GOLDER's recommendations in these respects, GOLDER shall employ its best judgment in deciding whether or not it should notify public officials. If CLIENT decides to disregard GOLDER's recommendations, GOLDER shall have the right to immediately terminate this Agreement upon written notice to the CLIENT.

16. NOTIFICATION AND DISCOVERY OF HAZARDOUS MATERIALS

Prior to commencing the Services, CLIENT shall furnish to GOLDER all documents and information known to CLIENT that relate to the identity, location, quantity, nature or characteristics of any hazardous materials or suspected hazardous materials, on or under the site. CLIENT hereby warrants that, if it knows or has any reason to assume or suspect that hazardous materials may exist at the project site, it has so informed GOLDER.

CLIENT recognizes that hazardous materials or suspected hazardous materials may be discovered on the project site property or on any adjacent property to the site. CLIENT recognizes that it is CLIENT's responsibility, and not GOLDER's, to inform the Owner of any affected property not owned by CLIENT of such discovery. CLIENT also recognizes that any such discovery may result in a significant reduction of the property's value. CLIENT waives any claim against GOLDER and agrees to defend, indemnify and hold harmless GOLDER from any claim or liability for injury or loss of any type arising from the discovery of hazardous materials or suspected hazardous materials on CLIENT's property or on property not owned by CLIENT. CLIENT agrees that discovery of unanticipated hazardous materials shall constitute a changed condition for which GOLDER shall be fairly compensated.

17. NOTICES

All notices required or permitted to be given hereunder, shall be deemed to be properly given if delivered in writing by hand, facsimile machine, e-mail, or express courier addressed to CLIENT or GOLDER, as the case may be, at the addresses set forth below, with postage thereon fully prepaid if sent by mail or express courier.

All notices, correspondence, deliverables, and invoices shall be submitted to CLIENT as indicated below:
Environmental Management
2727 Old Concord Road, Suite D
Salisbury, NC 28146

Attn: Kathryn Jolly

All notices and correspondence shall be submitted to GOLDER as indicated below:

Golder Associates NC, Inc.
4900 Koger Boulevard, Suite 140
Greensboro, NC 27407
Attn: Rachel Korman, P.G.

The CLIENT's authorized representative hereby represents that he has read and understands the paragraphs entitled Insurance and Indemnity and Limitation of Liability, which deal with the allocation of risk between the CLIENT and GOLDER.

18. TERMINATION

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with terms hereof. Such termination shall not be effective if that substantial failure has been remedied before expiration of the period specified in the written notice, such period shall not be less than seven (7) calendar days. In the event of termination, GOLDBER shall be paid for services performed to the termination notice date, reasonable termination expenses, and a portion of its anticipated profits not less than the percentage of the contract services performed as of the termination notice date. GOLDBER may complete such analyses and records as are necessary to complete their files and may also complete a report on the Services performed to the date of notice of termination or suspension. The expenses of termination or suspension shall include all direct costs of GOLDBER in completing such analyses, records and reports.

Any extension of this Agreement is subject to the Board of Commissioners' appropriation of necessary funds. Should such Board not appropriate the necessary funds, this Agreement shall be considered terminated.

19. DISPUTES

All disputes, claims, and causes one party makes against the other, at law or otherwise, including third party or "pass-through" claims for indemnification and/or contribution, shall be initiated, determined, and resolved by arbitration in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association, and judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

In the event that one party makes a claim against the other, at law or otherwise, and then fails to prove such claim, then the prevailing party shall be entitled to all costs, including attorneys' fees incurred in defending against the claim.

20. CLIENT LITIGATION

If GOLDBER is requested to produce documents, witnesses or general assistance pursuant to a litigation, arbitration or mediation in support of CLIENT litigation to which GOLDBER is not an adverse party, CLIENT shall reimburse GOLDBER for all direct expenses and time in accordance with GOLDBER's current rate schedule.

21. CONFIDENTIALITY

GOLDBER shall endeavor to keep confidential all data and information which is marked confidential and furnished to GOLDBER by CLIENT under this Agreement. GOLDBER's confidentiality obligations

shall not apply if such data or information is within the public domain, previously known to GOLDBER, obtained from third parties without violating any confidentiality agreement, required to be produced by GOLDBER pursuant to any law, subpoena, or court order or required by GOLDBER in the defense of any claim. GOLDBER may use and publish the CLIENT's name and give a general description of the Services rendered by GOLDBER for the purpose of informing other clients and potential clients of GOLDBER's experience and qualifications.

22. INTELLECTUAL PROPERTY

All rights to patents, trademarks, copyrights, and trade secrets owned by GOLDBER (hereinafter "Intellectual Property") as well as any modifications, updates or enhancements to said Intellectual Property during the performance of the Services remain the property of GOLDBER, and GOLDBER does not grant CLIENT any right or license to such Intellectual Property. GOLDBER shall use reasonable efforts to provide the Services without infringing on any valid patent or copyright and without the use of any confidential information that is the property of others, unless GOLDBER or its agents, employees or subcontractors are licensed or otherwise have the right to use and dispose of such information. GOLDBER shall also use reasonable efforts to inform the CLIENT of any patent infringement that may be reasonably expected to result from the Services. However, reasonable efforts of GOLDBER shall not include a duty to conduct or prepare a patent or copyright search and/or opinion. If GOLDBER performs its Services in a manner consistent with the above, then to the fullest extent permitted by law, CLIENT shall indemnify, defend and hold harmless then GOLDBER and its officers, directors, agents and employees against all liability, cost, expense, attorneys' fees, claims, loss or damage arising from any alleged or actual patent or copyright infringement resulting from the Services under this Agreement.

23. MISCELLANEOUS

a) This Agreement supersedes all other agreements, oral or written, and contains the entire agreement of the parties. No cancellation, modification, amendment, deletion, addition, waiver or other change in this Agreement shall have effect unless specifically set forth in writing signed by the party to be bound thereby. Titles in this Agreement are for convenience only.

b) This Agreement shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns provided that it may not be assigned by either party without consent of the other. It is expressly intended and agreed that no third party beneficiaries are created by this Agreement, and that the rights and remedies provided herein shall inure only to the benefit of the parties to this Agreement.

o) No waiver of any right or remedy in respect of any occurrence on one occasion shall be deemed a waiver of such right or remedy in respect of such occurrences on any other occasion.

d) All representations and obligations (including without limitation the obligation of CLIENT to indemnify GOLDER in Article 10 and the Limitation of Liability in Article 11) shall survive indefinitely the termination of the Agreement.

e) Any provision, to the extent it is found to be, unlawful or unenforceable shall be stricken without affecting any other provision of the Agreement, so that the Agreement will be deemed to be a valid and binding agreement enforceable in accordance with its terms.

f) All questions concerning the validity and operation of this Agreement and the performance of the obligations imposed upon the parties hereunder shall be governed by the laws of North Carolina, unless the law of another jurisdiction must apply for this Agreement to be enforceable.

g) The term of this Agreement will expire on June 30, 2008, after which it may be extended for 1-year periods by agreement between the parties and appropriation of necessary funds by the Board.

Rowan County
A North Carolina Governmental Unit

BY:

William K. Cowan, Manager

10/10/07

Date

Attested:

Carolyn Athey, Clerk to the Board



Golder Associates NC, Inc.

BY:

Brian Pollin, P.E., Associate

10/22/07

Date

THIS INSTRUMENT HAS BEEN PREAUDITED IN THE MANNER REQUIRED BY THE LOCAL GOVERNMENT BUDGET AND FISCAL CONTROL ACT.

Patricia E. Nechick
FINANCE DIRECTOR