

## REQUEST FOR BOARD ACTION

### HENDERSON COUNTY BOARD OF COMMISSIONERS

**MEETING DATE:** January 18, 2011

**SUBJECT:** Construction Contract  
Solid Waste Improvements

**ATTACHMENTS:** Yes

1. Recommendation Letter from McGill Engineering
2. McGill Agreement for Construction Administration
3. ECS Agreement for Materials Testing
4. Presentation on Contract Options

#### **SUMMARY OF REQUEST:**

**Construction Contract:** As recommended by McGill & Associates on the attached letter, the apparent low bid for the referenced construction contract is provided for Board approval. The proposed contract is for \$1,638,884.75 with Cooper Construction Company, Inc. Cooper Construction's bid for the entire scope of the project was \$3,446,457 with the Engineer's estimate at just over \$4.5 million. This recommendation is based on the existing Solid Waste Ordinance. With revisions to the ordinance other options are feasible and are detailed later in this memo.

The scope of this project has been reduced to within funds available within the fund balance of the Solid Waste Enterprise Fund. With the significant reduction of waste and corresponding revenue, adding debt service to the Enterprise fund's operations budget would result in increased tipping fees. The most significant reduction to the scope is the removal of the new convenience center. An option to improve the existing facility is presented below under Alternative Convenience Center Improvements.

By State Statute this project was estimated to be in the formal bidding range, and therefore, the Engineer has conducted the bid process accordingly. Additionally, the project was advertised in the local newspaper, Times-News, and posted on the County website.

Also attached for approval in conjunction with the construction is an agreement for McGill & Associates. This agreement is for \$190,240 and is to compensate them for additional services during the design of the project and for construction administration. The construction administration portion of the agreement is "hourly not to exceed" at \$122,200. With David Berry's role as the construction manager, this portion of the agreement should be notably reduced. The extent of the reduction will be determined by Mr. Berry's availability relative to the other County projects. The other portions of the agreement are lump sum and detailed in the agreement.

Another attached agreement is for ECS Carolinas, LLP to perform the materials testing and special inspections. This agreement is “hourly not to exceed” and is estimated to be under \$60,000.

The proposed budget is as follows:

Cooper Construction Contract	\$1,640,000
McGill Agreement	\$190,240
ECS Agreement	\$60,000
Duke Energy Relocation	\$12,500
Contingency	\$170,000
Total Project Budget	<b>\$2,072,740</b>

The entire project budget of \$2,072,740 will be funded from the Solid Waste Enterprise Fund which is completely separate from the County’s General Fund as well as property taxes.

**Alternative Convenience Center Improvements:**

In order to utilize the existing convenience center and separate its traffic from the scales traffic, it is possible to access the center through the Stoney Mountain Activity Center driveway. For well under \$200,000, these improvements can be made and in addition improve the driveway and parking for the Activity Center. The money allocated to address the driveway and parking at the Activity Center under the park maintenance project would be applied this option. The funding is \$22,000 which is the remainder of the \$50,000 allocation after repairing and replacing roof. The remaining funding would be from the Solid Waste Enterprise Fund.

**Other Options:**

The attached presentation, analyzes the option recommended above and three other options. The four options use either the partial scope from above which excludes the convenience center or the entire scope which includes the center. Also the options include adding flow control to the existing permit process for private haulers in the County. Flow control would require that waste (and corresponding revenue) from waste generated in Henderson County be brought to the Henderson County Facility. Currently, there is just over 20,000 tons of waste leaving the County (NCDENR annual report).

The proposed budget for the entire project is as follows:

Cooper Construction Contract	\$3,446,457
McGill Agreement	\$190,240
ECS Agreement	\$60,000
Duke Energy Relocation	\$22,375
Contingency	\$170,000
Total Project Budget	<b>\$3,889,072</b>

**BOARD ACTION REQUESTED:**

**“Cash on Hand” Option:**

Award the construction contract for the Solid Waste Improvements with the apparent low bidder Cooper Construction Company, Inc for \$1,638,884.75, approve the agreement with McGill & Associates for \$190,240, approve the agreement with ECS for \$58,111 and direct the County Engineer to develop the alternative improvements to the convenience center.

**Cash and Borrow Option:**

Award the construction contract for the Solid Waste Improvements with the apparent low bidder Cooper Construction Company, Inc for \$3,446,457, approve the agreement with McGill & Associates for \$190,240, and approve the agreement with ECS for \$58,111.

**“Cash on Hand” with Flow Control Option:**

Award the construction contract for the Solid Waste Improvements with the apparent low bidder Cooper Construction Company, Inc for \$1,638,884.75, approve the agreement with McGill & Associates for \$190,240, approve the agreement with ECS for \$58,111 and direct the County Engineer to develop the alternative improvements to the convenience center.

Also, direct the County Attorney to revise the Solid Waste Ordinance to add flow control to the waste haulers permit process for Board approval at a future meeting.

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Award the construction contract for the Solid Waste Improvements with the apparent low bidder Cooper Construction Company, Inc for \$3,446,457, approve the agreement with McGill & Associates for \$190,240, and approve the agreement with ECS for \$58,111. Also, direct the County Attorney to revise the Solid Waste Ordinance to add flow control to the waste haulers permit process for Board approval at a future meeting.

**Suggested Motions:**

**“Cash on Hand” Option:**

I move that the Board of Commissioners award the construction contract for the Solid Waste Improvements with the apparent low bidder Cooper Construction Company, Inc for \$1,638,884.75, approve the agreement with McGill & Associates for \$190,240, approve the agreement with ECS for \$58,111 and direct the County Engineer to develop the alternative improvements to the convenience center.

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I move that the Board of Commissioners award the construction contract for the Solid Waste Improvements with the apparent low bidder Cooper Construction Company, Inc for \$3,446,457, approve the agreement with McGill & Associates for \$190,240, and approve the agreement with ECS for \$58,111.

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I move that the Board of Commissioners award the construction contract for the Solid Waste Improvements with the apparent low bidder Cooper Construction Company, Inc for \$3,446,457, approve the agreement with McGill & Associates for \$190,240, and approve the agreement with ECS for \$58,111. Also, direct the County Attorney to revise the Solid Waste Ordinance to add flow control to the waste haulers permit process for Board approval at a future meeting.



January 6, 2011

Mr. Marcus A. Jones, PE  
Director, Engineering and Facilities Services  
Henderson County  
100 North King Street  
Hendersonville, North Carolina 28792

RE: Recommendation of Award  
Stoney Mountain Road Landfill  
Capital Improvements Project  
Henderson County, North Carolina

Dear Mr. Jones:

Bids for the Stoney Mountain Road Landfill, Capital Improvements Project were received and publicly opened on November 23, 2010 at 2:00 p.m. at the Henderson County Engineering Department Meeting Room, Hendersonville, North Carolina. Three (3) bids were received for the project. The following bid results were opened and read aloud:

<u>Bidder</u>	<u>Base Bid Amount</u>
Cooper Construction Company, Inc.	\$3,446,457.00
Monroe Roadways Contractors, Inc.	\$3,471,795.73*
Taylor and Murphy Construction Company, Inc.	\$3,525,670.39

\* - Corrected mathematical error on submitted Bid

McGill Associates has reviewed the bids for accuracy and completeness and a Certified Bid Tabulation form is enclosed for your files. Cooper Construction Company, Inc. of Flat Rock, North Carolina submitted the low Total Bid in the amount of \$3,446,457.00 for the Stoney Mountain Road Landfill Capital Improvements Project. We have verified that Cooper Construction Company, Inc. is properly licensed to perform the proposed work. Bid Bonds were supplied by all Bidders in the amount of 5 percent (5%) of the Total Bid and receipt of all addenda was acknowledged by the Bidders.

Based on recent meetings and discussions with you and Martin/McGill relating to solid waste finances, it is our understanding that the County has elected to reduce the scope of the 2010 CIP Construction Contract to lower the contract amount. The revised scope will include

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only the components of the originally proposed project which are necessary to promote regulatory compliance and citizens' safety, thereby reducing the funds borrowed for construction at this time. The new Convenience Center and access road have been deleted from the proposed revised scope, in favor of evaluating a new access road to serve the existing Convenience Center and address existing traffic concerns. Therefore, to summarize, the new Convenience Center, Construction/Demolition Waste Drop-Off Area, Recycling and MSW Drop-Off Area, Soil Borrow Area Grading, and Compost Area are all eliminated based on the revised scope of the proposed construction contract. The proposed construction contract does include all General contract bid items, the Scale Area Improvements, White Goods Collection Area, and Transfer Station Upgrades, with the County proposing to accept the alternate bid price for installing the Emory Top flooring in lieu of the standard concrete surface slab. Each of these components was listed separately on the Bid Schedule, which was submitted with contractors' bids. Therefore, calculating the amount of the revised construction contract is straightforward and in accordance with the Contract Documents. There are minor deletions and/or reductions in quantity for several of the individual bid items which comprise the sections of the Bid/Contract that has been included within the proposed revised scope. These changes have been highlighted in the attached "Revised Construction Contract Tabulation" spreadsheet. Based on the above-described deletions, the revised recommended contract amount is \$1,638,884.75.

Based on our review of the Bid and our prior experience with Cooper Construction, it is the opinion of McGill Associates that Cooper Construction Company is adequately qualified and capable of completing the work for this project. McGill Associates recommends that the construction contract for the Stoney Mountain Road Landfill, Capital Improvements Project be awarded to Cooper Construction Company in the revised amount of \$1,638,884.75.

McGill Associates would be glad to present our recommendation to the County Commissioners at the January 18, 2011 Board Meeting if you feel that it is necessary. Please do not hesitate to call if you have any questions or need additional information.

Sincerely,  
McGILL ASSOCIATES, P.A.



JEFFREY R. BISHOP, PE  
Director of Solid Waste Services

Enclosures



January 5, 2011

Mr. Marcus Jones, PE, Director  
Engineering and Facilities Services  
Henderson County  
100 North King Street  
Hendersonville, North Carolina 28792

RE: Revised Engineering Proposal  
Contract Administration and Construction  
Observation Services /  
Additional Engineering Services  
Solid Waste Capital Improvements – FY 2010  
Henderson County, North Carolina

Dear Marcus:

McGill Associates is pleased to submit our revised proposal for providing Construction Contract Administration and Construction Observation Services to Henderson County for the Solid Waste Capital Improvements – Fiscal Year 2010 project. This proposal is a revision to our letter dated September 16, 2010. As you are aware, we have completed the design portion of the project and bids for construction have been received and opened. The construction bids were originally received and opened on October 5, 2010. Due to several bid irregularities by the Bidders, the County elected to re-bid the construction project. The bids were received for the re-bid on November 23, 2010.

Since our original proposal dated September 16, 2010, the County has received bids for the project and has elected to reduce the scope of the construction project to address budget constraints. In addition, we understand the County plans to construct a new access road and other improvements to the existing convenience center in lieu of constructing a new center. This work is proposed to be constructed during the same time frame as the current construction project but under a separate construction contract. As a result, we have revised our scope of services and fee for Construction Administration Services to consider the reduced scope of the Capital Improvements project and to include the proposed improvements to the existing Convenience Center and Recycling Drop-Off Area. The prepared scope of services for the design and permitting associated with the Convenience Center improvements is outlined in a letter under separate cover.

As we have discussed, during the course of the design phase of the project, we have completed engineering services that were not included in our approved proposal dated December 3, 2009 in order to complete the design. Several factors have required our additional effort

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including relocation of the Convenience Center, additional requirements of the North Carolina Department of Transportation (NCDOT), and additional work at the existing Solid Waste Transfer Station. We have detailed the additional efforts below and request that these services be considered as additional services.

In addition, the County has elected to delay the design and permitting of the off-site Recycling Material Process Center. We have summarized our efforts that were completed on this facility prior to the County's decision to delay the project. We have included a proposed credit for the design services not completed for this work.

We have outlined our proposed scope of services below.

### **Contract Administration and Construction Observation Services**

Our scope of services, outlined below, is for Contract Administration and Construction Observation services for both the FY 2010 Capital Improvements and the proposed improvements to the existing convenience center. Our proposal is based on the assumption that the two construction contracts will take place during the same time period.

1. Schedule and attend a pre-construction conference with the County, Contractor, and all other applicable parties to assure discussion of all matters related to the project, including setting contract dates.
2. Periodically visit the site during construction to observe the progress and quality of the executed work to determine if the work is proceeding in accordance with the plans and specifications, and disapprove or reject any work failing to conform to the plans and specifications. The site visits include the preconstruction conferences, during construction, a final inspection, and a return site visit to observe completion of the final punch list. We have assumed an average of 12-16 hours per week for construction observation and that construction should be substantially complete in 9 months.
3. Conduct monthly construction meetings. We have estimated that there will be 12 monthly progress meetings.
4. Address construction related questions from the Contractor during the construction period.
5. Review and approve shop drawings, diagrams, illustrations, brochures, catalog data, schedules, samples, the results of tests and inspections, and other data that the site Contractor is required to submit.
6. Inform the County of necessary change orders and review all requests for change orders from the Contractor.
7. Receive and review payment requests from the Contractor, and recommend payment amounts to the County.



8. Perform final inspection of the construction and determine if the work has been completed in accordance with the contract documents.
9. Upon completion of the construction, prepare record drawings of the improvements and submit to the County.
10. Confirm proper Construction Quality Assurance (CQA) testing for the reconstructed landfill cap repair and review and submit final testing documentation to the Solid Waste Section for approval.

### **Additional Engineering Services**

#### **Relocation of the Proposed Convenience Center**

The original proposed location for the Convenience Center was on the approximate 7-acre, County-owned property located along Stoney Mountain Road. We began our design process on this site. During the early stages of design, the County elected to develop a new zoning ordinance for solid waste facilities with specific buffer requirements. The application of the buffer requirements on the original property would not allow the development of the Convenience Center on this parcel. Based on conceptual layouts, the decision was made to relocate the convenience center to the closed Tennessee Valley Authority (TVA) Landfill site. The original proposed location for the mulching/ composting and white-goods areas was also located on the TVA site. Relocation of the Convenience Center also required the mulching/ composting and white-goods areas to be relocated further back on the site. Relocation of the Convenience Center required the following additional services:

1. Additional design associated with extending the citizen access road (approximately 600 feet) from Stoney Mountain Road.
2. Re-design of access road after previously unidentified waste areas were discovered along access road route.
3. Extension of the access road required crossing a creek that was not identified on any mapping and not included in our original proposal. Delineation of the stream limits and securing the 401/404 Permitting associated with the required creek crossing (approximately 125 feet).
4. Additional storm water control design and erosion and sedimentation control permitting associated with the relocated mulching/ composting and white goods facilities (approximately 6 acres). Design included increased erosion control limits and additional storm water conveyance structures and sedimentation basins.
5. Design of leachate collection system for the municipal solid waste (MSW) concrete pads associated with the proposed Convenience Center and the proposed Recycling and MSW Drop-Off. By relocating the Convenience Center on top of the closed TVA Landfill, the Solid Waste Section required that the storm water drainage generated from the concrete pads, where MSW containers are to be located, must be collected and transported to

public sewer. Regarding the drop-off facility, municipal waste was not originally proposed to be collected at this location. Since municipal waste is now proposed to be collected at the drop-off facility and the facility is located on top of the closed MSW landfill, the storm water drainage from the concrete pads must also be collected. Our services included design and permitting for the gravity sewer and an equalization tank to transport the leachate to the existing on-site private pump station.

6. Evaluation of the existing on-site private pump station and the Animal Shelter pump station to determine if the existing pump station and force main have the capacity to accommodate the increased flow from the proposed Convenience Center and proposed Recycling and MSW Waste Drop-Off Facility.
7. Provide recommendation for on-site pump station renovations to accommodate the increased flow. We understand that County staff will complete these improvements.

#### NCDOT Permitting

As you are aware, we have been working closely with the North Carolina Department of Transportation (NCDOT) regarding the permitting of the improvements along Stoney Mountain Road and the access entrances to the facility. During preliminary discussions with NCDOT, the only proposed improvements to Stoney Mountain Road were an in-bound right turn lane and an out-bound right turn lane. In follow up discussions, NCDOT elected to participate in the funding of road improvements and a portion of the access road. They also increased the road improvement requirements to accommodate the proposed improvements. The proposed improvements now include an in-bound left turn lane and the access road must be designed and constructed to NCDOT Standards. In addition, as a condition of providing funding for this project, NCDOT required that their own forces would perform the construction and that an independent set of construction drawings and right-of-way plats be prepared to delineate their proposed construction. These revisions to the design parameters were made after our approved proposal and required the following additional services:

1. Survey of an additional 500 feet of Stoney Mountain Road to supplement our aerial topographic survey to accommodate the additional proposed improvements to Stoney Mountain Road.
2. Design of new left turn lane for full-length stacking and design speed. The left turn lane also required design of lane shift to accommodate the new lane.
3. Prepare separate drawings for NCDOT construction of the proposed scale access road and improvements to Stoney Mountain Road.
4. Prepare Right-of-Way Plat for portion of access road constructed by NCDOT.
5. Provide one-time center line and grade staking of the access road for NCDOT construction.

### Existing Solid Waste Transfer Station

One of the existing transfer stations buildings (western) is continuing to exhibit problems related to the floor drain system and structural integrity of existing concrete floor. Based on discussions with you and your staff, McGill Associates has been asked to evaluate and provide recommendations for repairing the drain system and concrete floor. Based on these discussions, we propose to provide the following services:

1. Meet with solid waste staff to discuss the problems with the existing transfer station.
2. Review available record drawings and files for the transfer station to assist in our evaluation.
3. Conduct investigative site visit to survey critical locations.
4. Evaluate the current status and provide a sound engineering solution to the problems.
5. Incorporate the proposed improvements into the existing construction bid package for the FY 2010 Capital Improvements project.

### Off-Site Recycling Material Process Center

Our original scope of work included development of construction bid documents for the construction of an off-site recycling center. As you are aware, the County elected to delay the development of the facility due to the current economic environment. Prior to this decision, McGill Associates completed the following tasks associated with this project:

1. Conducted site visits to several potential locations for the Center.
2. Prepared a Request for Proposal package for available building locations. The package was advertised for bids.
3. Addressed questions from potential bidders.
4. Attended meetings with apparent building provider to review proposed facility and construction constraints.
5. Prepared field survey of the proposed facility location.
6. Prepared detailed conceptual site plan/ building layout and cost estimate.
7. Met with recycling equipment supplier to review available options and conceptual layouts for recycling equipment.
8. Prepared a Request for Qualifications package for perspective recycling equipment suppliers. The packaged was advertised and proposals received.

Re-Bid of Construction Contract ( bids opened on November 23, 2010)

1. Assist the County in advertising, receiving, opening, and evaluating bids.
2. Restructure bid documents to address concerns of potential bidders.
3. Schedule a pre-bid conference with the County, potential bidders, Engineer, and all other applicable parties to assure discussion of all matters related to the project.
4. Consult with, and advise the County, as to the acceptability of contractors and subcontractors, and make recommendations as to the lowest responsible bidder.
5. Evaluate alternative scenarios for awarding the construction contract.
6. Revise CIP Construction Documents to eliminate the portions of the project that will not be proposed to be awarded to Cooper Construction (apparent low bidder).
7. Assist the County in the final preparation and execution of construction contracts and in checking Performance and Payment Bonds and Insurance Certificates for compliance.

**Fee Summary**

Based on the above information, we propose the following lump sum fees with the exception of the fee for Construction Contract Administration and Construction Observation. We propose to provide this service on an hourly basis with a maximum not to exceed fee. Actual costs will be computed on an hourly basis and monthly billings will be forwarded based on the actual time spent and in accordance with our attached Basic Fee Schedule. Reimbursable expenses are included in the proposed fees shown below.

<b>Construction Contract Administration and Construction Observation</b>	\$122,200.00 (Hourly, max. not to exceed)
<b>Additional Engineering Services</b>	
Relocation of Convenience Center	\$40,400.00 (Lump Sum)
NCDOT Permitting	\$31,100.00 (Lump Sum)
Existing Solid Waste Transfer Station	\$7,050.00 (Lump Sum)
Re-Bid of Construction Contract	\$15,300.00 (Lump Sum)
Credit for Off-Site Recycling Facility	<u>(\$25,810.00)</u>
<b>Total Fees</b>	<b>\$190,240.00</b>

This proposal assumes the following:

1. Above scope of services assumes a maximum 365 day construction contract period.
2. The construction for the existing convenience center will take place during the construction period for the Solid Waste Capital Improvement – FY 2010 project.

3. Any permit or stream impact fees will be paid directly by the Owner.
4. Fees for testing services (i.e. soils, concrete, etc.) during construction will be paid for directly by the Owner.
5. Fees associated with the Construction Quality Assurance testing for the landfill cap reconstruction, concrete testing, and soil testing will be performed by an independent testing firm and will be paid for directly by the Owner.

Marcus, we appreciate the opportunity to present this proposal to Henderson County for the design and construction support services related to the Solid Waste Capital Improvements – Fiscal Year 2010 project. We look forward to working with you and your staff on this very important project for Henderson County. If the above is acceptable to you, please provide the appropriate signature below and return one (1) copy for our records or we can provide a formal Engineering Agreement, if needed.

Should you have any questions or need additional information, please do not hesitate to give us a call at (828) 252-0575.

Sincerely,

McGILL ASSOCIATES, P.A.



JEFFREY R. BISHOP, PE

Director of Solid Waste Services

Attachment

ACCEPTANCE:

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_



**ECS CAROLINAS, LLP**

Geotechnical • Construction Materials • Environmental • Facilities

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NC Registered Engineering Firm F-1078

October 27, 2010

Mr. Marcus Jones, P.E.  
Henderson County  
100 North King Street  
Hendersonville, NC 28739

Re: Proposal for Construction Materials Testing Services  
Stony Mountain Road Landfill Capital Improvements  
Hendersonville, Henderson County, North Carolina  
ECS Proposal Numbers 31-1539-P

Dear Mr. Jones:

ECS Carolinas, LLP (ECS) is pleased to submit this proposal to provide construction materials testing services for the Capital Improvements projects at the Stony Mountain Road Landfill located in Henderson County, North Carolina. Our experience with similar construction projects will help us provide efficient, cost-effective construction testing and engineering consulting services. Included in this proposal is our understanding of the project background, proposed scope of services, cost estimate, fee schedule, and our authorization requirement.

### QUALIFICATIONS

ECS Carolinas, LLP is a proud local member of the greater Asheville community and the Western North Carolina region. In addition to our Asheville office, ECS operates six other branch offices in North Carolina including Hickory, Charlotte, Greensboro, Raleigh, Fayetteville, and Wilmington, and branch offices in Greenville and Charleston, South Carolina. The Carolinas region staff has more than 300 professionals including 33 registered licensed engineers with experience ranging from 5 to 35 years in practice in the fields of environmental engineering, geotechnical engineering, and construction materials testing. We have available technicians that are trained and certified in ASTM, ACI, and NCDOT testing procedures. Our metals technicians are trained and certified in both visual and nondestructive testing in accordance with AWS and ASNT recommendations. All of our technicians hold certifications in their area of expertise from nationally recognized technical societies such as ACI, NICET, and ICC. Since opening our first Carolinas office in 1993, we have executed over 50,000 construction testing, geotechnical, and environmental projects in North and South Carolina including thousands in the Western North Carolina region. The ECS Group was ranked by ENR as one of the fastest growing engineering firms in the United States for 2010.

### PROJECT BACKGROUND

Our understanding of the project is based upon our review of the construction plans developed by McGill Engineering and the project specifications including the Site Specific Construction Quality Assurance Plan (SSCQAP) dated June 2010. We understand that the current project will include relocating the scales and scale house. Construction in this area will require the removal of MSW waste from a closed area of the MSW landfill. This will compromise the

existing landfill cap, which will need to be reconstructed. Other aspects of the project include constructing a new convenience center, new MSW and recyclables drop-off area, a new C&D drop off area, a new composting and white goods area, as well as associated paved access roads. The project will also include the rehabilitation of the floor slab and floor drainage system at the Transfer Station #2 building.

We have been requested to provide a proposal and cost estimate for performing the necessary quality assurance and quality control testing as outlined in the SSCQA Plan as well as the project drawings and specifications.

### **PROJECT SERVICING AND REPORTING**

*ECS is the **only firm of our kind** with completely wireless field data transmission.* Our field personnel utilize wireless hand-held technology (specially adapted Dell Axim PDAs) that are compatible with our Nextel devices to collect, process, and return data to our engineers in the office and in turn, process daily reports. The software for this application (referred to as FRED, or Field Reporting and Electronic Distribution) was written and developed by the ECS Corporate IT Group and is not available commercially. Our use of this powerful proprietary technology typically facilitates distribution of our **reports within 12 to 24 hours of testing**. This enhanced reporting technology allows us to simultaneously communicate our testing data with all project team members, thus providing critical information to the project team in a very rapid manner and reducing the potential for costly delays associated with re-testing or deficiencies. The reports are typically emailed in PDF format to you and to those you designate, and can also be faxed or mailed as hard copies if requested. **No other company in the business can match our speed of execution.**

### **SCOPE OF SERVICES**

Based on our review of the project plans and specifications, we anticipate that the following testing and inspection services will be required. ECS will provide these services on a continuous or periodic basis, as specified in the project documents and as required for the project.

#### **Soils, Earthwork, and Underground Utilities**

- Inspect the site after topsoil and surface treatments have been stripped to verify that surficial materials and objectionable soils have been removed.
- Evaluate onsite fill soils and waste materials and provide recommendation for removal, as required.
- Evaluate exposed subgrade soils at the excavated cut level to document conformance with the project specifications.
- Perform laboratory classification testing on representative fill soils including grain size (ASTM D-422) and Atterberg limits (ASTM D-4318) to document compliance with the specifications, as well as standard Proctor tests (ASTM D-698).
- Test in-place moisture and density of fill and backfill soils to document the percent compaction achieved by the contractor. For nuclear density tests, perform alternative comparison tests using either the sand cone method (ASTM D-1556) or the drive cylinder method (ASTM D-2937).
- Monitor the earthwork operations and document that proper soil materials and placement methods are used during earth fill operations as outlined in the project specifications.
- Submit written reports detailing our activities and findings.

#### Compacted Reconstructed Soil Cap

- Monitor the excavation of exploratory test pits in the planned borrow area to evaluate the suitability for use as engineered fill and cap materials, sample proposed borrow soils, and perform necessary laboratory testing.
- Perform laboratory testing per the SSCQA Plan and the project specifications to include moisture content, grain size, Atterberg limits, standard Proctor compaction, and permeability (minimum of 3 per moisture-density curve).
- Monitor the removal of waste material from the proposed scale areas and the preparation of the subgrade to receive the reconstructed cap including biaxial geogrid, if necessary.
- Continuously monitor the placement and compaction of low permeability soils for the reconstructed cap and perform field density and field moisture testing as required by the project specifications.
- Obtain "undisturbed" thin-walled tube samples of the compacted cap and perform laboratory permeability testing as required by the project specifications.
- Submit written reports detailing our activities and findings.

#### Foundation Soils-Retaining Walls and Structures

- Monitor the excavation of foundation elements to verify proper locations, dimensions, and embedment depths.
- Inspect soils at the foundation bearing level to see that any loose/soft soils, mud, water, or debris have been removed.
- Evaluate the foundation bearing soils with respect to the design bearing pressure specified in the project drawings.
- Submit written reports detailing our activities and findings.

#### Concrete, Structural Reinforcement and Bolts

- Inspect concrete reinforcement for proper size, spacing, splicing, and location.
- Verify weldable grade of reinforcement and proper welding procedures are used for welded reinforcement connections.
- Inspect bolts to be installed in concrete prior to placement.
- Collect certificate of compliance for reinforcing materials.
- Submit written reports detailing our activities and findings.

#### Concrete Placement

- Inspect concrete formwork for shape, placement, and location.
- Monitor concrete sampling and testing procedures.
- Monitor concrete placement and curing procedures.
- Verify appropriate mix design of placed concrete.
- Per Section 03300, Part 3.15 of the specifications, ECS will sample the aggregate materials from the batch plant and perform inspection and testing of concrete materials including:
  - Gradation and fineness modulus of fine aggregate
  - Gradation and fineness modulus of coarse aggregate
  - Organic impurities in fine aggregate (colorimetric method)
  - Dry rodded unit weight of coarse aggregate
  - Specific gravity and absorption of fine and coarse aggregate
  - Check aggregate stockpiles for contamination or intermingling of aggregates
  - Check mixing equipment and trucks per ASTM C-94.
- Submit written reports detailing our activities and findings.



### Concrete Sampling and Testing

- Sample and test plastic concrete to include slump tests, air content, and temperature.
- Make concrete cylinder test specimens for compressive strength testing per specifications.
- Return test specimens to our laboratory for compression testing.
- Cure, test, and report compressive strength results for concrete cylinder test specimens.
- Submit written reports detailing our activities and findings.

### Structural Masonry

- Review submittal for site-mixed mortar and grout.
- Monitor preparation and proportioning of site-mixed mortar and grout.
- Inspect masonry joint placement and configuration, anchors, grout spaces, and verify that masonry units are placed in accordance with approved construction documents and are ready for continued construction.
- Verify proper size, type, and placement of rebar and other structural elements.
- Perform visual examination of welded rebar connections for compliance with approved construction documents.
- Monitor grout placement procedures.
- Monitor proper hot/cold weather placement procedures are utilized.
- Sample and test mortar and grout for compressive strength.
- Submit written reports detailing our activities and findings.

### Aggregate Base Course

- Observe proofrolling of soil subgrades to receive aggregate base course.
- Sample the aggregate base course material and perform laboratory Proctor testing (ASTM D-698 or AASHTO T-99) in accordance with project specifications.
- Conduct in-place density tests on base course in accordance with project specifications.
- Submit written reports detailing our activities and findings.

### Asphalt Paving

- Observe proofrolling of base course to receive paving materials.
- Monitor asphalt temperature and placement procedures for compliance with applicable NCDOT and project specifications.
- Conduct preliminary in-place nuclear density tests on asphalt paving to assist the pavement contractor in establishing an appropriate roller pattern.
- Perform nuclear density tests on compacted asphalt courses to evaluate the compaction based on a Rice theoretical maximum specific gravity provided to us by the asphalt plant.
- Submit written reports detailing our activities and findings.

*Please note that we proposed to perform fairly conventional asphalt testing consisting of density/compaction, lay down temperature, and lift thickness measurements. The project specifications reference testing in accordance with Section 7 of the NCDOT HMA/QMS Manual, however we do not propose to perform the battery of testing required by the NCDOT for this project. ECS can add additional NCDOT asphalt testing to our scope if requested.*

## **FEE ESTIMATE**

Costs for construction testing services are highly dependent on the contractor's needs and schedule. The **most important component** in determining the cost of construction testing services is **the individual unit rates** for each type of service needed. Due to the efficiencies built into our technician scheduling system along with our proprietary reporting and project management software, ECS is able to offer one of the most attractive unit rate structures in the industry. Additionally, in fairness to our clients, ECS does not charge a minimum site time for our field services.

We will invoice you for our services on a monthly basis in accordance with the Unit Rates shown on the attached Fee Schedule. Please note that the rates on the Fee Schedule match those rates already agreed upon between ECS and Henderson County for the Law Enforcement Center and Old Health Building projects.

As requested, we have also developed an estimated total cost for the above services based on our Fee Schedule, our understanding of the project plans and specifications, and our previous experience with similar projects. We understand the total duration for the compacted reconstructed cap will be three (3) weeks. We have made various assumptions regarding the schedule for the remainder of this project, as outlined below. Please note that the actual construction schedule will impact our total fees for the project.

We estimate the total cost for our services for materials testing for the Stony Mountain Road Landfill Capital Improvements project to be on the order of **\$58,111.00**.

This cost estimate is based on the following assumptions:

### **Scale Area – Cap Reconstruction**

- We assume that full-time monitoring and testing will be required for the cap reconstruction during the 3-week schedule. We estimate it will require **15 site visits** for monitoring and testing.
- At least **4 soil samples** will be obtained from the borrow area for Proctor and permeability testing. (Three permeability tests per Proctor = **12 perm samples**.)
- At least **18 permeability samples** will be required for testing the in-place cap, based on the contractor's bid quantity of 4,800 SY. (4,800SY = 43,200SF x 2' thick = 86,400CF / 5,000CF)
- We estimate it will require **5 site visits** for additional earthwork, underground utilities, site grading, and backfilling around this area.
- We estimate it will require **3 site visits** to test the scale house and inbound/outbound scale pit foundation soils.
- We estimate it will require **3 site visits** to inspect the scale house and inbound/outbound scale pit foundation reinforcement.
- We estimate it will require **3 site visits** to test concrete for building and inbound/outbound scale pit foundations.
- We estimate it will require **1 site visit** to test concrete for building foundation stem walls.
- We estimate it will require **1 site visit** to test concrete for building slab.
- We estimate it will require **2 site visits** to test masonry for building CMU bearing walls.
- We estimate it will require **3 site visits** to test concrete for concrete paving, approach pads, and miscellaneous concrete.

- We estimate it will require **12 site visits** for testing stone base, asphalt binder course, asphalt intermediate course, and asphalt surface course (assume pavements will be prepared and paved in three separate sections).

#### MSW/Recycling Drop Off

- We estimate it will require **5 site visits** for earthwork, underground utilities, site grading, and backfilling in this area.
- We estimate it will require **2 site visits** to evaluate retaining wall foundation bearing soils.
- We estimate it will require **6 site visits** to inspect reinforcement and test retaining wall concrete (assume wall will be formed and poured in *two* separate sections, with separate pours for wall footing and stem).
- We estimate it will require **1 site visit** to test concrete for the slab-on-grade.
- We estimate it will require **12 site visits** for testing stone base, asphalt binder course, asphalt intermediate course, and asphalt surface course (assume pavements will be prepared and paved in three separate sections).

#### C&D Drop Off

- We estimate it will require **3 site visits** for earthwork, underground utilities, site grading, and backfilling in this area.
- We estimate it will require **1 site visit** to test concrete for the slab-on-grade.
- We estimate it will require **4 site visits** for testing stone base, asphalt binder course, asphalt intermediate course, and asphalt surface course (assume pavements will be prepared and paved in one section).

#### Convenience Center

- We estimate it will require **10 site visits** for earthwork, underground utilities, site grading, and backfilling in this area.
- We estimate it will require **4 site visits** to evaluate retaining wall foundation bearing soils.
- We estimate it will require **12 site visits** to inspect reinforcement and test retaining wall concrete (assume wall will be formed and poured in *four* separate sections, with separate pours for wall footing and stem).
- We estimate it will require **3 site visits** to test concrete for the slab-on-grade.
- We estimate it will require **1 site visit** to test concrete for the HHW slab-on-grade.
- We estimate it will require **1 site visit** to test concrete for the attendant's building slab-on-grade.
- We estimate it will require **12 site visits** for testing stone base, asphalt intermediate course, and asphalt surface course (assume pavements will be prepared and paved in four separate sections).

#### Composting & White Goods Area

- We estimate it will require **3 site visits** for earthwork, underground utilities, site grading, and backfilling in this area.
- We estimate it will require **1 site visit** to test concrete for the composting area slab-on-grade.
- We estimate it will require **1 site visit** to test concrete for the composting staging area slab-on-grade.
- We estimate it will require **1 site visit** to test concrete for the white goods slab-on-grade.
- We estimate it will require **3 site visits** for testing stone base course.

Transfer Station #2

- We estimate it will require **2 site visits** for testing compaction of backfill for the floor drainage system in this area.
- We estimate it will require **1 site visit** to test concrete for the new surface slab.

As noted above, the actual cost of the materials testing services will be dependent upon the contractor's needs and their actual construction sequencing. Therefore, the final cost of our services may be higher or lower than the estimate provided above. We will provide you with regular Project Status Reports, which will provide near real-time updates regarding our activities and budget. If it appears that any portion of the project is progressing such that it may impact our authorized budget, we will notify you as quickly as possible. We will not exceed our authorized contract amount without your prior approval.

**AUTHORIZATION REQUIREMENTS**

If this proposal has met your expectations and you are satisfied with the proposed scope of services and Fee Schedule, you can indicate your acceptance by signing and returning the attached proposal acceptance form to us. In that case, this letter will be the agreement for our services. Additionally, your acceptance may be indicated by issuing a purchase order which references this letter. Attached to this letter, and an integral part of our proposal, are our "Terms and Conditions of Service". These conditions represent the current recommendations of the Association of Soil and Foundation Engineers, the Consulting Engineers Council, and the Geotechnical Division of the American Society of Civil Engineers.

We sincerely appreciate the opportunity to offer our services to you and Henderson County, and we look forward to working with you on this exciting project. If you have any questions about this proposal, please feel free to contact us at 828-665-2307.

Respectfully,

**ECS Carolinas, LLP**



Richard G. Adams, P.E.  
Geotechnical Services Manager



Matthew S. Fogleman, P.E.  
Asheville Branch Manager



Todd R. Tamasy, E.I.  
Construction Services Manager

cc: David Berry, David H. Berry & Associates, LLC

Attachments: CMT Cost Estimate  
2010 CMT Fee Schedule  
Proposal Acceptance Form  
Terms and Conditions of Service



200 Ridgefield Court, Suite 222  
Asheville, North Carolina 28806  
Phone: (828) 665-2307  
Fax: (828) 665-8128

Project Name:

Stony Mountain Road Landfill  
Henderson County, North Carolina

Proposal Number:

31-1539-P

Date:

October 27, 2010

### COST ESTIMATE - CONSTRUCTION MATERIALS TESTING

#### Assumptions:

#### Scale Area/Cap Reconstruction

Cap Reconstruction:	15 visits	10 hours per visit	4	Standard Proctors
Earthwork, Grading, Utils:	5 visits	8 hours per visit	2	Standard Proctors
Scale house & pit footings:	3 visits	4 hours per visit		
Scale house & pit rebar/conc.:	6 visits	6 hours per visit	5	sets of cyl. @ 5 cyl./set
Bldg stem wall rebar/conc.:	1 visits	6 hours per visit	1	sets of cyl. @ 5 cyl./set
Building slab concrete:	1 visits	4 hours per visit	1	sets of cyl. @ 5 cyl./set
Building masonry walls:	2 visits	4 hours per visit	2	sets of prisms @ 4 per set
Concrete paving:	3 visits	4 hours per visit	3	sets of cyl. @ 5 cyl./set
Pavement Base Course:	3 visits	4 hours per visit	1	Standard Proctors
Asphalt Pavements:	9 visits	6 hours per visit		

#### MSW/Recycling Drop Off

Earthwork, Grading, Utils:	5 visits	8 hours per visit	1	Standard Proctors
Retaining wall footings:	2 visits	4 hours per visit		
Retaining wall rebar/concrete:	6 visits	6 hours per visit	4	sets of cyl. @ 5 cyl./set
Slab-on-grade concrete:	1 visits	4 hours per visit	1	sets of cyl. @ 5 cyl./set
Pavement Base Course:	3 visits	4 hours per visit	0	Standard Proctors
Asphalt Pavements:	9 visits	6 hours per visit		

#### C&D Drop Off

Earthwork, Grading, Utils:	3 visits	8 hours per visit	0	Standard Proctors
Slab-on-grade concrete:	1 visits	4 hours per visit	1	sets of cyl. @ 5 cyl./set
Pavement Base Course:	1 visits	4 hours per visit	0	Standard Proctors
Asphalt Pavements:	3 visits	6 hours per visit		

#### Convenience Center

Earthwork, Grading, Utils:	10 visits	8 hours per visit	0	Standard Proctors
Retaining wall footings:	4 visits	4 hours per visit		
Retaining wall rebar/concrete:	12 visits	6 hours per visit	8	sets of cyl. @ 5 cyl./set
Slab-on-grade concrete:	3 visits	4 hours per visit	3	sets of cyl. @ 5 cyl./set
HHW slab concrete:	1 visits	4 hours per visit	1	sets of cyl. @ 5 cyl./set
Attend. Bldg. slab concrete:	1 visits	4 hours per visit	1	sets of cyl. @ 5 cyl./set
Pavement Base Course:	4 visits	4 hours per visit	0	Standard Proctors
Asphalt Pavements:	8 visits	6 hours per visit		

#### Composting and White Goods Area

Earthwork, Grading, Utils:	3 visits	8 hours per visit	0	Standard Proctors
Composting slab concrete:	1 visits	4 hours per visit	2	sets of cyl. @ 5 cyl./set
Comp. staging slab concrete:	1 visits	4 hours per visit	2	sets of cyl. @ 5 cyl./set
White goods slab concrete:	1 visits	4 hours per visit	5	sets of cyl. @ 5 cyl./set
Pavement Base Course:	3 visits	4 hours per visit	0	Standard Proctors

#### Transfer Station #2

Drain and Utility Backfill:	2 visits	8 hours per visit	0	Standard Proctors
New surface slab concrete:	1 visits	4 hours per visit	2	sets of cyl. @ 5 cyl./set



200 Ridgefield Court, Suite 222  
 Asheville, North Carolina 28806  
 Phone: (828) 665-2307  
 Fax: (828) 665-8128

Project Name: **Stony Mountain Road Landfill**  
**Henderson County, North Carolina**  
 Proposal Number: **31-1539-P**  
 Date: **October 27, 2010**

**COST ESTIMATE - CONSTRUCTION MATERIALS TESTING**

<b>Field Services:</b>	<b>Quantity</b>			<b>Unit Rate</b>	<b>Cost</b>
Sr. Project Manager:	6 visits	@	4 hours / visit	\$ 65.00 / hour	\$ 1,560.00
Engineering Technician:					
Cap Reconstruction:	15 visits	@	10 hours / visit	\$ 32.00 / hour	\$ 4,800.00
Earthwork, Grading, Utils:	28 visits	@	8 hours / visit	\$ 26.00 / hour	\$ 5,824.00
Footing tests:	9 visits	@	4 hours / visit	\$ 26.00 / hour	\$ 936.00
Rebar inspections/concrete:	25 visits	@	6 hours / visit	\$ 26.00 / hour	\$ 3,900.00
Slab concrete:	12 visits	@	4 hours / visit	\$ 26.00 / hour	\$ 1,248.00
Structural masonry:	2 visits	@	4 hours / visit	\$ 26.00 / hour	\$ 208.00
Concrete paving:	3 visits	@	4 hours / visit	\$ 26.00 / hour	\$ 312.00
Pavement Base Course:	14 visits	@	4 hours / visit	\$ 26.00 / hour	\$ 1,456.00
Asphalt Pavements:	29 visits	@	6 hours / visit	\$ 26.00 / hour	\$ 4,524.00
Cylinder/Sample Pickups:	42 visits	@	2 hours / visit	\$ 26.00 / hour	\$ 2,184.00
Mileage:	185 visits	@	40 miles / visit	\$ 0.50 / mile	\$ 3,700.00
Basic equipment:	51 visits	@		\$ - / visit	\$ -
<b>Field Services Subtotal:</b>					<b>\$ 30,652.00</b>

<b>Laboratory Testing:</b>	<b>Quantity</b>		<b>Unit Rate</b>	<b>Cost</b>
Standard Proctor	8 samples		\$ 80.00 / sample	\$ 640.00
Modified Proctor	0 samples		\$ 90.00 / sample	\$ -
Atterberg Limits	8 samples		\$ 50.00 / sample	\$ 400.00
Grain Size (% finer than #200)	8 samples		\$ 40.00 / sample	\$ 320.00
Moisture Content	8 samples		\$ 5.00 / sample	\$ 40.00
Permeability-remolded (includes Proctor)	12 samples		\$ 400.00 / sample	\$ 4,800.00
Permeability-undisturbed	18 samples		\$ 300.00 / sample	\$ 5,400.00
Lab Perm Samples-Overnight Shipping	30 samples		\$ 40.00 / sample	\$ 1,200.00
Compressive Strength Testing (prisms)	2 sets		\$ 20.00 / sample	\$ 160.00
Compressive Strength Testing (cubes)	2 sets		\$ 12.00 / sample	\$ 144.00
Compressive Strength Testing (cylinders)	40 sets		\$ 7.00 / sample	\$ 1,400.00
Concrete Aggregate Gradation (ASTM C136)	4 samples		\$ 80.00 / sample	\$ 320.00
Org. Impurities in F.A., Colorimetric (ASTM C40)	2 samples		\$ 70.00 / sample	\$ 140.00
Unit Weight and Voids in Aggregate (ASTM C29)	2 samples		\$ 80.00 / sample	\$ 160.00
Spec. Grav. & Absorption of C.A. (ASTM C127)	2 samples		\$ 90.00 / sample	\$ 180.00
Spec. Grav. & Absorption of F.A. (ASTM C128)	2 samples		\$ 90.00 / sample	\$ 180.00
<b>Laboratory Testing Subtotal:</b>				<b>\$ 15,484.00</b>

<b>Equipment Rental:</b>	<b>Quantity</b>	<b>Unit Rate</b>	<b>Cost</b>
Nuclear Density Equipment	86 rental fees	\$ 10.00 / day	\$ 860.00
<b>Equipment Rental Subtotal:</b>			<b>\$ 860.00</b>

<b>Engineering/Project Management:</b>	<b>Quantity</b>			<b>Unit Rate</b>	<b>Cost</b>
Principal Engineer	52 hours	@		\$ 95.00 / hour	\$ 4,940.00
Senior Project Manager	65 hours	@		\$ 65.00 / hour	\$ 4,225.00
Secretary	65 hours	@		\$ 30.00 / hour	\$ 1,950.00
<b>Engineering/Project Management Subtotal:</b>					<b>\$ 11,115.00</b>

**ESTIMATED TOTAL COST: \$ 58,111.00**

**ECS CAROLINAS, LLP**  
**2010 CONSTRUCTION MATERIALS TESTING FEE SCHEDULE – ASHEVILLE, NC**  
**Stony Mountain Road Landfill Capital Improvements, Henderson County, North Carolina**

**PERSONNEL**

Principal Engineer .....	\$ 95.00/hour
Senior Engineer/Construction/Field Services Manager.....	\$ 65.00/hour
Project Engineer / Project Manager.....	\$ 55.00/hour
Staff Engineer/Assistant Project Manager .....	\$ 55.00/hour
Soil or Materials Field or Lab Technician (**):	
Engineering Technician I.....	\$ 26.00/hour
Senior Engineering Technician.....	\$ 26.00/hour
Chief Engineering/ICC certified Special Inspection Technician .....	\$ 32.00/hour
Metals Technician, Shop or Field Inspection (**):	
Senior NDE Technician, (NDE Level II or CWI).....	\$ 50.00/hour
Secretary.....	\$ 30.00/hour
Transportation (Company or Private Vehicle),.....	\$ 0.50/mile
Note: Charges for engineering and technical personnel will be made for time spent in the field, in engineering analysis, in preparation and review of reports, and in portal to portal travel to the job site at .25 hr increments.	
(**) = Overtime = Standard Rate x 1.50 for services performed on holidays, Saturday, Sunday, before 7:00 AM or after 6:00 PM or exceeding 8 hours per day on weekdays.	

**LABORATORY**

Standard Proctor Method A or B (ASTM D-698) .....	\$ 80.00/each
Standard Method C (ASTM D-698) and Modified Proctor (ASTM D-1557) .....	\$ 90.00/each
Atterberg Limits (Liquid and Plastic Limit) (ASTM D-4318).....	\$ 50.00/each
Grain Size Analysis (ASTM D-422).....	\$ 40.00/each
Direct Shear Analysis (ASTM D-3080).....	\$ 500.00/each
C-U Triaxial Compression, 3 stress points w/ pore pressures (ASTM D-4767).....	\$1200.00/each
Saturated Hydraulic Conductivity, Remolded Specimens (ASTM D-5084) .....	\$ 400.00/each
Saturated Hydraulic Conductivity, Undisturbed Specimens (ASTM D-5084) .....	\$ 300.00/each
Testing of Cylinders, Cubes, and Core Specimens:	
Compressive Strength of Concrete Cylinders (ASTM C-39).....	\$ 7.00/each
Compressive Strength of Mortar Cubes (ASTM C-109).....	\$ 12.00/each
Compressive Strength of Masonry Grout (ASTM, C-1019) .....	\$ 20.00/each
Concrete Core Samples (ASTM, C-42) and Beams, (ASTM C-78) .....	\$ 30.00/each
Compressive Strength of Masonry Block Prisms, (ASTM C-1314) .....	\$ 50.00/each
Concrete Aggregate Gradation (ASTM C-136) .....	\$ 80.00/each
Organic Impurities in Fine Aggregate, colorimetric method (ASTM C-40) .....	\$ 70.00/each
Unit Weight and Voids in Aggregate (ASTM C-29) .....	\$ 80.00/each
Specific Gravity and Absorption of Coarse Aggregate (ASTM C-127).....	\$ 90.00/each
Specific Gravity and Absorption of Fine Aggregate (ASTM C-128).....	\$ 90.00/each
Asphalt, Bulk Specific Gravity (AASHTO T-166) .....	\$ 50.00/each
Asphalt Content/Aggregate Gradation (AASHTO T-308, T-30).....	\$ 250.00/each
Note: Test fee includes normal laboratory technician time, sample preparation, equipment and supplies required for each test.	

**FIELD EQUIPMENT**

Basic Field Equipment & Supplies.....	\$ No Charge
Coring Equipment with Generator .....	\$ 175.00/day
Nuclear Density Equipment .....	\$ 10.00/day
Floor Flatness Equipment (Dip Stick).....	\$ 100.00/day
Rental Equipment & Non-standard Supplies .....	Cost +15%
Sample Shipping .....	Cost +15%
Note: The above charges will be made for tests and equipment operated by ECS personnel in addition to personnel charges already listed.	

**ECS CAROLINAS, LLP  
PROPOSAL ACCEPTANCE**

Proposal No.: 31-1539-P  
Scope of Work: Proposal for Construction Materials Testing Services  
Project Name: Stony Mountain Road Landfill Capital Improvements  
Location: Henderson County, North Carolina

Client Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Please complete and return this page to ECS to indicate acceptance of this proposal and to initiate work on the above-referenced project. The Client's signature above also indicates that he/she has read or has had the opportunity to read the accompanying Terms and Conditions of Service and agrees to be bound by such Terms and Conditions of Service.

**BILLING INFORMATION**  
(Please Print or Type)

Name of Client: \_\_\_\_\_

Name of Contact Person: \_\_\_\_\_

Telephone No. Of Contact Person: \_\_\_\_\_

Party Responsible for Payment: \_\_\_\_\_

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

Person/Title \_\_\_\_\_

Department: \_\_\_\_\_

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

\_\_\_\_\_

\_\_\_\_\_

Telephone Number: \_\_\_\_\_

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

**Report Receipt Method:** \_\_\_\_\_

**E-mail Address:** \_\_\_\_\_

Client's Project or Account Number \_\_\_\_\_

Special Conditions for Invoice \_\_\_\_\_

Submittal and Approval \_\_\_\_\_



# ECS CAROLINAS, LLP

## TERMS AND CONDITIONS OF SERVICE

These Terms and Conditions of Service, including any supplements that may be agreed to, along with the accompanying Scope of Services and Professional Fees constitute the entire Agreement ["AGREEMENT"] under which Services are to be provided by ECS CAROLINAS, LLP ["ECS"] (including its employees, officers, successors and assigns) for Client ["CLIENT"] (including its employees, officers, successors and assigns).

### 1.0 INDEPENDENT CONSULTANT STATUS

1.1 Except as may be otherwise noted herein, ECS shall serve as an independent professional consultant to CLIENT and shall have control over, and responsibility for, the means and methods for providing the Services under this AGREEMENT, including the retention of Subcontractors and Subconsultants. Unless expressly stated in ECS' Scope of Services, ECS shall not serve as CLIENT'S agent or representative.

### 2.0 SCOPE OF SERVICES

2.1 It is understood that the Scope of Services, Professional Fees, and time schedule defined in the Scope of Services are based on information provided by CLIENT and/or CLIENT'S contractors and consultants. CLIENT acknowledges that if this information is not current, is incomplete or inaccurate, or if conditions are discovered that could not be foreseen by a reasonable person, the Scope of Services may change, even while the Services are in progress.

### 3.0 STANDARD OF CARE

3.1 ECS shall strive to perform its professional Services in a manner consistent with that level of skill and care ordinarily exercised by competent members of the same profession providing similar Services in the same region, under similar conditions during the same time period. No other representation, expressed or implied, and no warranty or guarantee is included or intended in this AGREEMENT, or in any ECS report, opinion, plan or other Document of Service, in connection with ECS' Services.

3.2 CLIENT understands and agrees that ECS' professional judgment must rely on the facts learned during performance of the Scope of Services. CLIENT acknowledges that such data collection is limited to the immediate area that is sampled, tested and/or observed. Consequently, CLIENT agrees that it shall not bring a claim, based upon facts subsequently learned, regarding conditions between sampling/testing points, in areas not evaluated by ECS, or which were not part of the immediate area(s) explicitly evaluated by ECS.

3.3 ECS' professional Services shall be provided in a manner consistent with sound engineering and professional practices. If a situation arises that causes ECS to believe compliance with CLIENT'S wishes could result in ECS violating applicable Laws or Regulations, or will expose ECS to claims or other charges, ECS shall so advise CLIENT. If CLIENT'S actions or inaction result in a violation of applicable Laws or Regulations, ECS shall have the right to terminate its Services in accordance with the TERMINATION provisions of this AGREEMENT.

3.4 If CLIENT decides to disregard ECS' recommendations with respect to complying with applicable Laws or Regulations, ECS shall determine if ECS is required to notify the appropriate public officials. CLIENT agrees that such determinations are ECS' sole right to make. CLIENT also agrees that ECS shall not bear liability for failing to report conditions that are CLIENT'S responsibility to report.

### 4.0 CLIENT DISCLOSURES

4.1 CLIENT shall furnish and/or shall direct CLIENT'S consultant(s) or agent(s) to furnish ECS information identifying the type and location of utility lines and other man-made objects known, suspected, or assumed beneath the Site's surface, where the Scope of Services requires ECS to penetrate the Site surface.

4.2 CLIENT shall notify ECS of any known, assumed, or suspected regulated, contaminated, or Hazardous Materials that may exist at the Site prior to ECS mobilizing to the Site. Such Hazardous Materials shall include but not be limited to any substance which poses or may pose a present or potential hazard to human health or the environment whether contained in a product, material, by-product, waste, or sample, and whether it exists in a solid, liquid, semi-solid or gaseous form ["Hazardous Materials"].

4.3 If any Hazardous Materials are discovered, or are reasonably suspected by ECS after its Services are initiated, a Changed Condition shall exist.

### 5.0 INFORMATION PROVIDED BY OTHERS

5.1 CLIENT waives any claim of liability against ECS regarding any claim for injury or loss allegedly arising from errors, omissions, or inaccuracies in documents and other information in any form provided to ECS, including such information that becomes incorporated into ECS Documents of Service.

### 6.0 CONCEALED RISKS

6.1 CLIENT acknowledges that special risks are associated with the identification of concealed conditions [i.e., subsurface conditions, conditions behind a wall, etc., that are hidden from view, are not readily apparent, or cannot be accessed for sampling/testing].

6.2 Conditions that ECS infers to exist between sampling/testing points may differ significantly from the conditions that exist at the sampling/testing points. Since some conditions can change substantially over time, the CLIENT recognizes that, because of natural occurrences or human intervention at or near the Site, actual conditions discovered through sampling/testing may be subject to rapid or gradual change.

6.3 ECS will make reasonable efforts to anticipate and identify potential concealed conditions for exploration, sampling or testing. However, CLIENT understands that such risks cannot be eliminated and agrees that the Scope of Services is that which CLIENT agrees suits CLIENT'S own risk tolerances. CLIENT may request ECS to

evaluate the risks and provide a higher level of exploration to reduce such risks, if desired or appropriate.

### 7.0 RIGHT OF ENTRY/DAMAGE RESULTING FROM SERVICES

7.1 CLIENT warrants that it possesses the authority to provide right of entry permission for the performance of ECS' Services. CLIENT hereby grants ECS and its subcontractors and/or agents, the right to enter from time to time onto the property owned by CLIENT and/or other(s) in order for ECS to perform the Scope of Services.

7.2 Except where ECS' Scope of Services explicitly includes obtaining permits, licenses, and/or utility clearances for the performance of ECS' Services, CLIENT warrants that it possesses all necessary permits, licenses and/or utility clearances for the Services to be provided by ECS.

7.3 ECS will take reasonable precautions to limit damage to the Site and Improvements during the performance of ECS' Services. CLIENT understands that use of exploration, sampling, or testing equipment may cause some damage, the correction and restoration of which is not part of this AGREEMENT, unless explicitly stated in ECS' Scope of Services, and reflected in the Professional Fees.

7.4 CLIENT agrees that it will not bring any claims for liability or for injury or loss allegedly arising from procedures associated with exploration, sampling or testing activities, or discovery of Hazardous Materials, or suspected Hazardous Materials, or ECS' findings, conclusions, opinions, recommendations, plans, and/or specifications related to discovery of contamination.

### 8.0 UNDERGROUND UTILITIES

8.1 In addition to CLIENT-furnished information regarding underground utilities, ECS shall take reasonable and locally customary precautions, possibly including contacting local public and/or private utility locating services, and/or conducting research of publicly available information, to identify underground utilities, as deemed appropriate in ECS' professional opinion. The extent of such precautions shall be at ECS' sole discretion.

8.2 CLIENT recognizes that despite due care, ECS may be unable to identify the locations of all subsurface utility lines and man-made features, and that information obtained by ECS and/or ECS' subcontractor(s) or provided to ECS from any entity may contain errors or be incomplete.

8.3 CLIENT agrees that ECS shall not be liable for damage or injury, consequential economic damages, and/or penalties resulting from damage to subterranean structures (pipes, tanks, cables, or other utilities, etc.) which are not called to ECS' attention in writing and correctly shown on the diagram(s) furnished by CLIENT or CLIENT'S consultants, or for underground features not marked, or improperly located by governmental or quasi-governmental locators, utility owners, or private utility locating services.

### 9.0 SAMPLES

9.1 Soil, rock, water, building materials and/or other samples and sampling by-products obtained from the Site are the property of CLIENT. ECS will store samples not consumed in laboratory testing for up to sixty (60) calendar days after the issuance of any document containing data obtained from those samples, unless other arrangements are mutually agreed upon in writing. Samples consumed by laboratory testing procedures will not be stored as outlined above.

9.2 Unless CLIENT directs otherwise, CLIENT authorizes ECS to dispose of CLIENT'S non-hazardous samples and sampling or testing process byproducts in accordance with applicable Laws.

### 10.0 ENVIRONMENTAL RISKS

10.1 All substances on, in, or under CLIENT'S Site, or obtained from CLIENT'S Site as samples or as byproducts of the sampling process, are and will remain CLIENT'S property.

10.2 When Hazardous Materials are known, assumed, or suspected to exist at the Site, ECS shall take appropriate precautions deemed prudent in ECS' sole and professional opinion to comply with applicable Laws and Regulations, and to reduce the risks to ECS' employees, public health, safety, and welfare, and the environment. CLIENT agrees to compensate ECS for such precautions.

10.3 When Hazardous Materials are known, assumed, or suspected to exist at the Site, ECS will handle such materials as Hazardous Materials. ECS or ECS' subcontractors will containerize and label such Materials in accordance with applicable Law, and will leave the containers on Site. CLIENT is responsible for the retrieval and lawful removal, transport and disposal of such contaminated samples, and sampling process byproducts.

10.4 Unless explicitly stated in ECS' Scope of Services, ECS shall not subcontract nor arrange for the transport, disposal, or treatment of Hazardous Materials. At CLIENT'S request, ECS may assist CLIENT in identifying appropriate alternatives for transport, off-site treatment, storage, or disposal of such substances, but CLIENT, not ECS, shall make final selection of methods and firms to provide such services. CLIENT shall sign all manifests for the disposal of substances affected by Hazardous Materials contaminants and shall otherwise exercise prudence in arranging for lawful disposal.

10.5 In those instances where ECS is expressly retained by CLIENT to assist CLIENT in the disposal of Hazardous Materials, samples, or wastes, ECS shall do so only as CLIENT'S agent (notwithstanding any other provision of this AGREEMENT to the contrary) so that ECS shall not assume the role of, nor be considered a generator, storer, transporter, or disposer of Hazardous Materials.

10.6 Subsurface sampling may result in unavoidable cross-contamination of certain subsurface areas, as when a probe or excavation/boring device moves through a contaminated zone and links it to an aquifer, underground stream, or other hydrous

body not previously contaminated, or connects an uncontaminated zone with a contaminated zone. Because sampling is an essential element of ECS' Services indicated herein, CLIENT agrees this risk cannot be eliminated. CLIENT will not hold ECS liable for such cross-contamination if ECS provides its Services in accordance with the applicable Standard of Care.

10.7 CLIENT understands that a Phase I Environmental Site Assessment (ESA) is conducted solely to permit ECS to render a professional opinion about the likelihood of the site having a Recognized Environmental Condition on, in, beneath, or near the Site at the time the Services are conducted. No matter how thorough a Phase I ESA study may be, findings derived from its conduct are highly limited and ECS cannot know or state for an absolute fact that the Site is unaffected by one or more Recognized Environmental Conditions. Given the foregoing, CLIENT'S acceptance of this AGREEMENT shall signify that CLIENT understands the limitations associated with Phase I ESAs.

#### 11.0 OWNERSHIP OF DOCUMENTS

11.1 With the exception of the copies of the ECS Documents of Service provided to the CLIENT, all documents, technical reports, letters, photos, boring logs, field data, field notes, laboratory test data, calculations, designs, plans, specifications, reports, or similar documents and estimates of any kind furnished by ECS ["Documents of Service"] maintained in any form deemed appropriate by ECS, are and remain, the property of ECS.

11.2 Any exploration, reconnaissance, data review, observations, testing, surveys or similar Services, analyses and recommendations associated with the Services shall be provided by ECS (including subcontracted Services) for the CLIENT'S sole use. CLIENT understands and agrees that any use of the Documents of Service by anyone other than the CLIENT is not permitted.

11.3 CLIENT agrees to not use ECS' Documents of Service for any other projects, or for the Project which has changed in scope, or extensions of the Project, from the details contemplated in ECS' Documents of Service. Any reuse without ECS' written consent shall be at CLIENT'S sole risk and without liability to ECS or to ECS' subcontractor(s).

11.4 CLIENT agrees that ECS' Documents of Service may not under any circumstances be altered by any party except ECS. CLIENT warrants that ECS' Documents of Service shall be used only and exactly as submitted by ECS.

11.5 Except for daily field reports and concrete test reports sent electronically by ECS to CLIENT and CLIENT'S designees, the following shall apply to all electronic files: Files in electronic media format of text, data, graphics, or other types that are furnished by ECS are furnished only for convenience, not reliance by the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies shall govern.

#### 12.0 SAFETY

12.1 CLIENT agrees that ECS is responsible solely for the basic safety of ECS' employees on the Project Site. These responsibilities shall not be inferred by any party to mean that ECS has responsibility for any portion of site safety for any reason. Unless otherwise expressly agreed to in writing, ECS' Scope of Services excludes responsibility for any aspect of site safety other than for ECS' own employees, and nothing herein shall be construed to relieve CLIENT and/or its other contractors, consultants, or other parties from their responsibility for the safety of their own employees. For active construction sites, CLIENT also agrees that the General Contractor is solely responsible for Project Site safety, and that ECS personnel rely on the safety measures provided by the General Contractor.

12.2 In the event ECS expressly assumes health and safety responsibilities for toxic or other concerns specified, the acceptance of such responsibility does not and shall not be deemed an acceptance of responsibility for any other health and safety requirements, such as those relating to excavating, trenching, shoring, drilling, backfilling, blasting, or other construction activities.

#### 13.0 CONSTRUCTION TESTING AND REMEDIATION SERVICES

13.1 CLIENT understands that construction testing and observation Services are conducted to reduce, not eliminate, the risk of problems arising during or after construction or remediation, and that provision of such Services does not create a warranty or guarantee of any type.

13.2 Monitoring and/or testing Services provided by ECS shall not in any way relieve the CLIENT'S contractor(s) from their responsibilities and obligations for the quality or completeness of construction, nor for complying with applicable Laws and codes.

13.3 The professional activities of ECS, or the presence of ECS employees and subcontractors, shall not be construed to imply ECS has any responsibility for the means, methods, techniques, sequencing of construction, or procedures of construction selected, for safety precautions and programs incidental to the Contractor's Work. Furthermore, ECS does not and shall not have or accept authority to supervise, direct, control, or stop Contractor's Work.

13.4 ECS strongly recommends that CLIENT retain ECS to provide its Services on a full time basis to lower the risk of defective or incomplete Work being installed by CLIENT'S contractor(s). If CLIENT elects to retain ECS on a part time basis for any aspect of construction monitoring and/or testing, CLIENT accepts the increased risks that a significantly lower level of construction quality may occur and that such defects may not be undetected by ECS' part time observations. Therefore CLIENT waives any and all claims against ECS related to unsatisfactory quality or performance of elements observed or tested by ECS on a part time basis.

#### 14.0 CERTIFICATIONS

14.1 CLIENT may request, or governing jurisdictions may require, ECS to provide a "certification" regarding Services provided by ECS. Any "certification" required of ECS by the CLIENT, or jurisdiction(s) having authority over some or all aspects of the Project, shall consist of ECS' inferences and professional opinions based on limited sampling, observations, tests, and/or analyses performed by ECS at discrete locations and times. ECS' "certification" shall consist of ECS' professional opinion of a condition's existence, but ECS does not guarantee that such condition exists, nor

does it relieve other parties of responsibilities or obligations such parties have. CLIENT agrees not to make resolution of any dispute with ECS or payment of any amount due to ECS in any way contingent upon ECS signing any such "certification" documents.

#### 15.0 BILLINGS AND PAYMENTS

15.1 Billings will be based on the unit rates, travel costs, and other reimbursable expenses stated in the Professional Fees. Any Estimate of Professional Fees stated in this AGREEMENT shall not be considered as a not-to-exceed or lump sum amount unless otherwise explicitly stated in this AGREEMENT.

15.2 Should ECS identify a Changed Condition, ECS shall notify the CLIENT of the Changed Condition(s) that in ECS' professional judgment require an amendment of the Professional Fees, time schedule, and/or Scope of Services. ECS and CLIENT shall promptly and in good faith negotiate an amendment to this AGREEMENT.

15.3 CLIENT recognizes that time is of the essence with respect of payment of ECS' invoices, and that timely payment is a material part of the consideration of this AGREEMENT. Payment shall be in U.S. funds drawn upon U.S. banks and in accordance with the rates and charges set forth in the Professional Fees. Invoices shall be due and payable upon receipt.

15.4 If CLIENT disputes all or part of an invoice, CLIENT shall provide ECS with written notice stating in detail the facts of the dispute within twenty-one (21) calendar days of the invoice date and agrees to pay the undisputed amount of such invoice promptly.

15.5 ECS reserves the right to charge CLIENT an additional charge of one-and-one-half (1.5) percent (or the maximum percentage allowed by Law, whichever is lower) of the invoiced amount per month for any payment received by ECS more than thirty (30) calendar days from the date of the invoice, excepting any portion of the invoiced amount in dispute and resolved in favor of CLIENT. Payment will first be applied to accrued interest and then to the unpaid principal amount. Payment of invoices shall not be subject to unilateral discounting or set-offs by CLIENT.

15.6 CLIENT agrees that its obligation to pay for the Services is not contingent upon CLIENT'S ability to obtain financing, zoning, approval of governmental or regulatory agencies, permits, final adjudication of a lawsuit in which ECS is not involved, upon CLIENT'S successful completion of the Project, settlement of a real estate transaction, receipt of payment from CLIENT'S client, or any other event. Retainage shall not be withheld from any payment, nor shall any deduction be made from any invoice on account of penalty, liquidated damages, or other sums incurred by CLIENT. It is agreed that all costs and legal fees including actual attorney's fees, and expenses incurred by ECS in enforcing any provision of the AGREEMENT, in perfecting or obtaining a lien, recovery under a bond, collecting any delinquent amounts due, or executing judgments, shall be reimbursed by CLIENT.

15.7 Payment of any invoice by the CLIENT shall be taken to mean that the CLIENT agrees to the provisions of the AGREEMENT and is satisfied with ECS' Services and is not aware of any defects in those Services, unless CLIENT has provided notice to ECS in accordance with the DEFECTS IN SERVICE provisions of this AGREEMENT.

#### 16.0 DEFECTS IN SERVICE

16.1 CLIENT and CLIENT'S personnel and contractors shall promptly inform ECS of any actual or suspected defects in ECS' Services, to help ECS take those prompt, effective measures that in ECS' opinion will help reduce or eliminate the consequences of any such defect. Corrections of defects attributable to ECS' Services shall be provided at no cost to CLIENT, except in the case that the deficiency is directly attributable to CLIENT-furnished information, CLIENT shall compensate ECS for the costs of correcting such defects.

16.2 Modifications to reports, documents and plans required as a result of jurisdictional reviews or CLIENT requests shall not be considered to be defects in Services. CLIENT shall compensate ECS for Additional Services required as a result of jurisdictional review requirements.

#### 17.0 INSURANCE

17.1 ECS represents that it and its subcontractors and subconsultants are protected by Workers Compensation insurance, and that ECS is covered by general liability, automobile and professional liability insurance policies which it deems reasonable and adequate.

17.2 ECS shall furnish certificates of insurance upon request. The CLIENT is responsible for requesting specific inclusions or limits of coverage that are not present in ECS insurance, the cost of such inclusions or coverage increases, if available, will be at the expense of the CLIENT.

#### 18.0 LIMITATION OF LIABILITY

18.1 CLIENT agrees to allocate certain of the risks associated with the Project by limiting ECS' total liability to CLIENT, subject to available insurance proceeds, arising from ECS' professional acts, errors, or omissions and for any and all causes including negligence, strict liability, breach of contract, or breach of warranty, injuries, damages, claims, losses, expenses, or claim expenses (including reasonable attorney's fees) under this AGREEMENT to the fullest extent permitted by law, as follows. For projects where ECS' Fee Estimate or proposed fees are:

18.1.1 \$10,000 or less, ECS' total aggregate liability to CLIENT shall not exceed \$5,000, or the total fee for the services rendered, whichever is greater.

18.1.2 In excess of \$10,000, ECS' total aggregate liability to CLIENT shall not exceed \$50,000, or the total fee for the services rendered, whichever is greater.

18.2 CLIENT agrees that ECS shall not be responsible for bodily injury and property damage or losses arising directly or indirectly, in whole or in part, from acts or omissions by the CLIENT, its employees, agents, staff, consultants or subcontractors or by any other person or combination of persons to the extent such injury, damage, or loss is caused by acts or omissions of CLIENT, its employees, agents, staff, consultants or subcontractors.

**19.0 INDEMNIFICATION**

19.1 ECS agrees, subject to the limitation of liability provisions of this AGREEMENT, to hold harmless and indemnify CLIENT from and against damages arising from ECS' negligent performance of its Services to the extent that such injury is found to be caused by ECS' negligent acts, errors or omissions, specifically excluding any damages caused by any third party or by the CLIENT.

19.2 To the fullest extent permitted by applicable Law, CLIENT agrees to indemnify, defend, and hold ECS harmless from and against any and all liability, claims, damages, demands, fines, penalties, costs and expenditures (including reasonable attorneys' fees and costs of litigation defense and/or settlement) ["Damages"] caused in whole or in part by the negligent acts, errors, or omissions of the CLIENT and CLIENT'S employees, agents, staff, contractors, subcontractors, consultants, and clients, provided such Damages are attributable to: (a) the bodily injury, personal injury, sickness, disease and/or death of any person; (b) injury to or loss of value to tangible personal property; or (c) a breach of this AGREEMENT, except to the extent such Damage is caused by the sole negligence or willful misconduct of ECS.

19.3 It is specifically understood and agreed that in no case shall ECS be required to pay an amount of Damages disproportional to ECS' culpability, or any share of any amount levied to recognize more than actual economic damages, subject to any limitations of liability and INDEMNIFICATION provisions contained in this AGREEMENT.

19.4 If CLIENT IS A HOMEOWNER, HOMEOWNERS' ASSOCIATION, CONDOMINIUM OWNER, CONDOMINIUM OWNER'S ASSOCIATION, OR SIMILAR RESIDENTIAL OWNER, ECS RECOMMENDS THAT LEGAL COUNSEL BE RETAINED BY CLIENT BEFORE ENTERING INTO THIS AGREEMENT TO EXPLAIN CLIENT'S RIGHTS, AND THE LIMITATIONS, AND RESTRICTIONS IMPOSED BY THIS AGREEMENT. CLIENT AGREES THAT FAILURE OF CLIENT TO RETAIN SUCH COUNSEL SHALL BE A KNOWING WAIVER OF LEGAL COUNSEL AND SHALL NOT BE ALLOWED ON GROUNDS OF AVOIDING ANY PROVISION OF THIS AGREEMENT.

19.5 If CLIENT is a residential builder or residential developer, CLIENT shall indemnify, defend and hold harmless ECS against any and all claims or demands due to injury or loss initiated by one or more homeowners, unit-owners, or their homeowners' association, cooperative board, or similar entity against CLIENT which results in ECS being brought into the dispute.

**20.0 CONSEQUENTIAL DAMAGES**

20.1 CLIENT shall not be liable to ECS and ECS shall not be liable to CLIENT for any consequential damages incurred by either due to the fault of the other, regardless of the nature of the fault, or wherever committed by the CLIENT or ECS, their employees, consultants, agents, contractors or subcontractors, or whether such liability arises in breach of contract or warranty, tort (including negligence), Statute, or any other cause of action. Consequential damages include, but are not limited to, loss of use and loss of profit.

20.2 ECS shall not be liable to CLIENT, or any entity engaged directly or indirectly by CLIENT, for any liquidated damages due to any fault, or failure to act, in part or in total by ECS, its employees, agents, or subcontractors.

**21.0 SOURCES OF RECOVERY**

21.1 All claims for damages related to the Services provided under this AGREEMENT shall be made against the ECS entity contracting with the CLIENT for the Services, and no other person or entity. CLIENT agrees that it shall not name any affiliated entity including parent, peer, or subsidiary entity or any individual officer, director, or employee of ECS, unless such claims are based on acts unrelated to the provision of Services under this AGREEMENT.

21.2 CLIENT agrees that it will not seek Damages from any individual associated with ECS as an officer, principal, partner, employee, or owner, from any and all claims or liability for injury or loss that would require such individual to relinquish personal assets to satisfy such claim.

**22.0 THIRD PARTY CLAIMS EXCLUSION**

22.1 This AGREEMENT shall not create any rights or benefits to parties other than CLIENT and ECS. No third-party shall have the right to rely on ECS' opinions rendered in connection with ECS' Services without both CLIENT'S and ECS' written consent and the third-party's agreement to be bound to the same terms and conditions contained in this AGREEMENT as CLIENT, and third-party's agreement that ECS' Scope of Services performed is adequate.

**23.0 DISPUTE RESOLUTION**

23.1 All claims, disputes or controversies ["Disputes"] arising out of, or in relation to the interpretation, application or enforcement of this AGREEMENT shall be decided as follows:

23.1.1 CLIENT and ECS agree to attend a dispute resolution meeting within fourteen (14) days of identification of a Dispute by either party. CLIENT and ECS agree to negotiate in good faith to resolve the Dispute.

23.1.2 Should negotiation fail to resolve the dispute, CLIENT and ECS agree to mediate their dispute via a mediator selected by either party, and acceptable to both parties.

23.1.3 Should mediation fail to result in resolution of the Dispute, CLIENT and ECS agree that litigation may be brought by either party.

23.2 Should third-party dispute resolution be required, through mediation or litigation, the non-prevailing party shall reimburse the prevailing party for the prevailing party's documented legal costs, in addition to whatever other judgments or settlement sums may be due. Such legal costs include, but are not be limited to, reasonable

attorney's fees, court costs, forensic consultants and expert witness fees, and other documented expenses.

23.3 Where legal action is brought by either party to resolve a dispute, the claim shall be brought and tried in the judicial jurisdiction of the county in which ECS' office contracting with the CLIENT is located. CLIENT waives the right to remove any litigation action to any other jurisdiction, unless mutually agreed to by both parties.

23.4 This AGREEMENT including all matters related to performance and remediation shall be interpreted according to the substantive Laws of the state of Virginia (but not including its choice of law rules).

**24.0 CURING A BREACH**

24.1 A party that believes the other has materially breached this AGREEMENT shall issue a written termination notice to the other, identifying the cause for termination within five (5) business days of identifying such cause. Both parties shall then bargain promptly and in good faith to cure such cause. If an acceptable cure can be achieved within fourteen (14) calendar days from the date of the termination notice, the parties shall commit their understandings to writing and termination shall not occur.

24.2 Either party may waive any right provided by this AGREEMENT in curing an actual or alleged breach; however, such waiver shall not affect future application of such provision or any other provision.

**25.0 TERMINATION**

25.1 CLIENT or ECS may terminate this AGREEMENT for breach of this AGREEMENT, or for any other reasons which may arise. In the event of termination, the party effecting termination shall so notify the other party in writing, and termination shall become effective fourteen (14) calendar days after receipt of the termination notice.

25.2 Irrespective of which party shall effect termination, or the cause therefore, ECS shall promptly render to CLIENT a final invoice and CLIENT shall immediately compensate ECS for Services rendered and costs incurred, in accordance with ECS' prevailing Fee Schedule and expense reimbursement policy. Services shall include those rendered up to the time of termination, as well as those associated with termination itself, including without limitation, demobilizing, modifying schedules, and reassigning personnel.

**26.0 TIME BAR TO LEGAL ACTION**

26.1 Unless prohibited by Law, and notwithstanding any Statute that may provide additional protection, CLIENT and ECS agree that claims by either party arising out of this AGREEMENT or the Services provided hereunder shall not be initiated more than two (2) years from the time the party knew, or should have known, of the condition giving rise to its claim, and shall under no circumstances be initiated more than three (3) years from the date of substantial completion of ECS' Services.

**27.0 ASSIGNMENT**

27.1 Except for Services normally or customarily subcontracted by ECS in the performance of its Services including, but not limited to surveyors, specialized consultants, drilling and excavating subcontractors, and testing laboratories, neither the CLIENT nor ECS may delegate, assign, sublet or transfer its duties, responsibilities or interests in this AGREEMENT without the written consent of the other party.

**28.0 SEVERABILITY**

28.1 Any provision of this AGREEMENT later held to violate a Law, Statute, or Regulation, shall be deemed void, and all remaining provisions shall continue in full force and effect. CLIENT and ECS shall endeavor to quickly replace a voided provision with a valid substitute that expresses the intent of, or at least addresses, the issues covered by the original provision.

**29.0 TITLES**

29.1 The titles used in this AGREEMENT are for general reference only and are not part of the AGREEMENT.

**30.0 SURVIVAL**

30.1 All obligations arising prior to the termination of this AGREEMENT and all provisions of this AGREEMENT allocating responsibility or liability between the CLIENT and ECS shall survive the substantial completion of Services and the termination of this AGREEMENT.

**31.0 ENTIRE AGREEMENT**

31.1 This AGREEMENT including the Scope of Services and Professional Fees and all exhibits, appendixes, and other documents appended to it, constitute the entire AGREEMENT between CLIENT and ECS. CLIENT acknowledges that all prior understandings and negotiations are superseded by this AGREEMENT. CLIENT acknowledges acceptance of these terms by submitting a CLIENT Work Authorization to ECS.

31.2 CLIENT and ECS agree that subsequent modifications to this AGREEMENT shall not be binding unless made in writing and signed by authorized representatives of both parties.

31.3 All preprinted Terms and Conditions on CLIENT'S purchase order or Work Authorization, or other service acknowledgement forms, are inapplicable and superseded by this AGREEMENT.

31.4 If CLIENT fails to provide ECS with a signed copy of this AGREEMENT or a Work Authorization, by the act of authorizing and accepting the services of ECS, CLIENT agrees to be fully bound by the terms of this AGREEMENT as if signed by CLIENT.

**< END OF TERMS AND CONDITIONS OF SERVICE >**

# Henderson County Solid Waste **Capital Improvements**

January 18, 2010

Henderson County Engineering



# Solid Waste Improvements

## Project Scope Options

- ▶ Entire CIP as bid: \$3,446,457
  - Scales Entrance & Convenience Center
  - Project Budget: \$3,889,072
  
- ▶ Partial CIP: \$1,640,000
  - Scales Entrance with improvements to existing Convenience Center and Stoney Mountain Activity Center
  - Project Budget: \$2,072,740



# Solid Waste Improvements

## Financing Options

1. “Cash on Hand”
2. Cash and Borrow
3. “Cash on Hand” with Flow Control
4. Cash and Borrow with Flow Control



# Financing Options

## Assumptions

1. Current volume of waste for next five years.
2. Construction prices from bid process
3. No allocations from General Fund
4. 21,000 Tons hauled out of County (DENR report)
5. At some point an increase in Tipping Fees will generate less revenue without Flow Control.

# Financing Options

## “Cash on Hand”

- ▶ Construct Improvements with funds available, no borrowed funds
- ▶ Scope: \$2.0 million for Scales Entrance, White Goods & Improvements to Existing Center & SMAC
- ▶ Well beyond five years before fund balance can construct new Center





# Financing Options

## Cash and Borrow

- ▶ Construct Improvements with funds available and borrow additional funds
- ▶ Scope: Entire scope, \$4.0 million total project budget
- ▶ Borrowed Funds: \$2.0 million with \$200,000 debt service annually
- ▶ Tipping Fee: \$3 to \$4 increase effective July 1



# Financing Options

## “Cash on Hand” with Flow Control

- ▶ Implement Flow Control and capture waste leaving County: additional \$200,000 to \$300,000 net revenue per year
- ▶ Scope: \$2.0 million for Scales Entrance, White Goods & Improvements to Existing Center & SMAC
- ▶ 7 to 10 years for fund balance to “recharge” enough to construct remaining project

# Financing Options

## Cash and Borrow with Flow Control

- ▶ Implement Flow Control and capture waste leaving County: additional \$200,000 to \$300,000 net revenue per year
- ▶ Scope: Entire scope, \$4.0 million total project budget
- ▶ Borrowed Funds: \$2.0 million with \$200,000 debt service annually.
- ▶ Tipping Fee: no increase needed for project

# Questions?

# Thank you

