INFORMAL CONTRACT AND GENERAL CONDITIONS

FOR

Henderson County

Stream Restoration of Mill Pond Creek at Rugby Middle School
3345 Haywood Road
Hendersonville, NC 28791

SCOPE OF WORK

The project is construction work consisting of approximately 1,000 linear feet of restoration using natural channel design procedures in order to improve the stream's overall water quality and habitat and an add alternate of 550 linear feet of streambank stabilization. The work will include grading, hauling, replanting the streambank and riparian zone using native species, restoration of disturbed areas and practicing proper sediment and erosion control.

NOTICE TO BIDDERS

Sealed bid for this work will be received by:

Henderson County Soil & Water Conservation District
Attn: Rachel Smith
61 Triple Springs Rd.
Hendersonville, NC 28792

until 3:00 PM, on June 5, 2015 and immediately thereafter publicly opened and read aloud. Complete plans and specification and contract documents can be obtained from

Henderson County Soil & Water Conservation District
Attn: Rachel Smith
Rachel.smith2@nc.nacdnet.net

Contractors are hereby notified that they must have proper license under the State laws governing their respective trades and that North Carolina General Statute 87 will be observed in receiving and awarding contracts. General Contractors must have general license classification for Highway or Unclassified.

No bid may be withdrawn after the opening of bids for a period of 30 days. The Owner reserves the unqualified rights to award a contract to the lowest responsible, responsive bidder, taking into consideration quality, performance, and the time specified in the bids for the performance of the contract, to reject any or all bids and to waive informalities. Bids shall be made only on the BID/ACCEPTANCE form provided herein with all blank spaces for bids properly filled in and all signatures properly executed.

Please note on the envelope –

Bid: Attn: Rachel E. Smith
Stream Restoration of Mill Pond Creek at Rugby Middle School June 4, 2015
(Contractor, contact information including address and phone)
(License Number)

Addenda for this project can be viewed at the SWCD website: http://www.hendersoncountync.org/soil/grantprojects.html. Updates, questions and answers and any other changes or clarifications will be made available on this SWCD website no later than May 28, 2015 at 4:30PM.

Pre-Bid Meeting

A mandatory pre-bid meeting will be held at 10:00 AM on May 22, 2015 at the project location specified below. The address for Rugby Middle School is 3345 Haywood Road, Hendersonville, NC 28791. Please meet at the softball field to the right of the entrance.
BID/ACCEPTANCE FORM
For
Stream Restoration of Mill Pond Creek at Rugby Middle School
3345 Haywood Road, Hendersonville, NC 28791

We are in receipt of Addendum _________1 ________2 _________3 _________4

The undersigned, as bidder, proposes and agrees if this bid is accepted to contract with the Henderson County Soil and Water Conservation District for the furnishing of all materials, equipment, and labor necessary to complete the construction of the work described in these documents in full and complete accordance with plans, specifications, and contract documents, and to the full and entire satisfaction of Henderson County and the Henderson County Soil and Water Conservation District for the sum of:

**BASE BID (Includes Reach B):**

**ADD ALTERNATE (Includes Reach A):**

**UNIT PRICES**

All quantities on plans are estimates only. Contractor is responsible for determining quantities for items in his base bid and alternates. The items listed below in the UNIT PRICE ITEMS are to be included in the base bid and alternates at quantities listed below. Payment for the following Unit Price items will be based upon actual quantities as determined by the Owner or his representative when making final payment.

<table>
<thead>
<tr>
<th>Item#</th>
<th>Description</th>
<th>Unit</th>
<th>Unit Price ($)</th>
<th>Quantity</th>
<th>Extended Price($)</th>
<th>Quantity</th>
<th>Extended Price($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Silt Fence, installed and maintained</td>
<td>LF</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Seeding, permanent</td>
<td>acre</td>
<td>1.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Seeding, temporary</td>
<td>acre</td>
<td>1.1</td>
<td>0.3</td>
<td>0.3</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Trees, installed</td>
<td>EA</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Small Trees/Shrubs, installed</td>
<td>EA</td>
<td>2700</td>
<td>1400</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Livestakes, installed</td>
<td>EA</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

**TOTAL OF UNIT PRICE ITEMS INCLUDED IN:**

<table>
<thead>
<tr>
<th>BASE BID</th>
<th>ADD ALTERNATE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
Respectively submitted this _______________ day of ________________________________ 20__

__________________________________________
\(\text{Contractor’s Name}\)

Federal ID#: ________________________________  By: ________________________________

Witness: ________________________________  Title: ________________________________

(Owner, partner, corp. Pres. Or Vice President)

Address: ________________________________

(Proprietorship or Partnership)

Attest: (corporation)  Email Address: ________________________________

__________________________________________
\(\text{Corporate Seal}\)

By: ________________________________  License #: ________________________________

Title: ________________________________

(Corporation, Secretary./Ass’t Secretary.)

__________________________________________

ACCEPTED by Henderson County
Through the
Henderson County Soil and Water Conservation District

(Agency/Institution)

Total amount of accepted by the owner, included base bid and bid alternates: ________________________________

BY: ________________________________ TITLE: ________________________________
ATTACHMENTS TO THIS BID

The following documents are attached to and made a condition of this Bid/Contract:

A. General Conditions

B. Supplementary General Conditions

C. Plan sheets titled (incorporated by reference do not attach to Bid): Stream Restoration of Mill Pond Creek Sheet No. 1 through 8 dated April 30, 2015

D. Sediment and Erosion Control Plans to be incorporated with an Addendum.

E. All Addenda posted through May 28, 2015 (incorporated by reference do not attach to Bid)

F. Contractor Qualification Statement
   a) Please attach a document describing projects, similar in nature to this one, which have been completed by the Bidder within the past 5 years. Include at least the following information: project name, project owners name, project cost, short description and a person we can call about the project – include their phone number and email address.
   b) List key personnel who will be working on this project. Describe some relevant prior projects and/or training they have completed and include a way to contact them.
   c) Feel free to attach any other information that helps document the Bidder is qualified to do this project. Some examples may be certificates from trainings, classes, etc.

G. See Henderson County Insurance and Bond Requirements posted under General Information at http://ww2.hendersoncountync.org/rfp/index for the following:
   a) Insurance (if appropriate) per Article 11. Attach proof of insurance to Bid.
   b) Bonds (if appropriate) per Article 12 (NA, No bonds required for this project)
   c) For Disadvantaged Business Enterprise requirements, see Minority Business Participation Guidelines posted under General Information at http://ww2.hendersoncountync.org/rfp/index

H. Contractors with 25 or more employees as defined in Article 2 of Chapter 64 of the NC General Statues must verify compliance with the E-verify, NCGS 160A-20.1(b).
GENERAL CONDITIONS

1. GENERAL

It is understood and agreed that by submitting a bid that the Contractor has examined these contract documents, drawings and/or specifications and has visited the site of the Work, and has satisfied himself relative to the Work to be performed.

2. DEFINITIONS

Owner: "Owner" shall mean, Henderson County through Henderson County Soil and Water Conservation District.

Contractor: "Contractor" shall mean the entity that will provide the services for the Owner.

Designer: The designer(s) are those referred to within this contract, or their authorized representatives. The Designer(s), as referred to herein, shall mean architect and/or engineer responsible for preparing the project plans and specifications. They will be referred to hereinafter as if each were of the singular number, masculine gender.

Contract Documents: “Contract Documents” shall consist of the Notice to Bidders; General Conditions of the Contract; special conditions if applicable; Supplementary General Conditions; the drawing and specifications, including all bulletins, addenda or other modifications of the drawings and specifications incorporated into the documents prior to their execution; the bid; the contract; the performance bond if applicable; and insurance certificates. All of these items together form the contract.

3. INTENT AND EXECUTION OF DOCUMENTS

The drawings and specifications are complementary, one to the other. That which is shown on the drawings or called for in the specifications shall be as binding as if it were both called for and shown. The intent of the drawings and specifications is to establish the scope of all labor, materials, transportation, equipment, and any and all other things necessary to provide a complete job. In case of discrepancy or disagreement in the Contract Documents, the order of precedence shall be: Form of Contract, specifications, large-scale detail drawings, small-scale drawings.

In such cases where the nature of the work requires clarification by the Designer/Owner, the Designer/Owner shall furnish such clarification. Clarifications and drawings shall be consistent with the intent of the Contract Documents, and shall become a part thereof.

4. AS-BUILT MARKED-UP CONSTRUCTION DOCUMENTS

Contractor shall provide one complete set of legible “as-built” marked-up construction drawings and specifications recording any and all changes made to the original design during the course of construction. In the event no changes occurred, submit construction drawings and specifications set with notation “No Changes.” The Designer/Owner must receive “As-built” marked-up construction drawings and specifications before the final pay request can be processed.

5. SUBMITTAL DATA

The Contractor awarded the contract shall submit all specified submittals to the Owner/Designer. A minimum number of copies as specified by the owner, of all required submittal data pertaining to construction, performance and general dimensional criteria of the components listed in the technical specifications shall be submitted. No material or equipment shall be ordered or installed prior to written approval of the submittals by the Designer/Owner. Failure to provide submittal data for review on equipment listed in the technical specifications will result in removal of equipment by the Contractor at his expense if the equipment is not in compliance with the specifications.

6. SUBSTITUTIONS

In accordance with the provisions of G.S. 133-3, material, product, or equipment substitutions proposed by the bidders to those specified herein can only be considered during the bidding phase until five (5) days prior to the receipt of bids or by the date specified in the pre bid conference, when submitted to the Designer with sufficient data to confirm material,
product, or equipment equality. Proposed substitutions submitted after this time will be considered only as potential change order.

Submittals for proposed substitutions shall include the following information:

a. Name, address, and telephone number of manufacturer and supplier as appropriate.

b. Trade name, model or catalog designation.

c. Product data including performance and test data, reference standards, and technical descriptions of material, product, or equipment. Include color samples and samples of available finishes as appropriate.

d. Detailed comparison with specified products including performance capabilities, warranties, and test results.

e. Other pertinent data including data requested by the Designer to confirm product equality.

If a proposed material, product, or equipment substitution is deemed equal by the Designer to those specified, all bidders of record will be notified by Addendum.

7. WORKING DRAWINGS AND SPECIFICATIONS AT THE JOB SITE

The contractor shall maintain, in readable condition at his job site one complete set of working drawings and specifications for his work including all shop drawings. Such drawings and specifications shall be available for use by the owner, designer or his authorized representative.

The contractor shall maintain at the job site, a day-to-day record of work-in-place that is at variance with the contract documents. Such variations shall be fully noted on project drawings by the contractor and submitted to the designer upon project completion and no later than 30 days after acceptance of the project.

8. MATERIALS, EQUIPMENT, EMPLOYEES

a. The contractor shall, unless otherwise specified, supply and pay for all labor, transportation, materials, tools, apparatus, lights, power, fuel, heat, sanitary facilities, water, scaffolding and incidentals necessary for the completion of his work, and shall install, maintain and remove all equipment of the construction, other utensils or things, and be responsible for the safe, proper and lawful construction, maintenance and use of same, and shall construct in the best and most workmanlike manner, a complete job and everything incidental thereto, as shown on the plans, stated in the specifications, or reasonably implied therefrom, all in accordance with the contract documents.

b. All materials shall be new and of quality specified, except where reclaimed material is authorized herein and approved for use. Workmanship shall at all times be of a grade accepted as the best practice of the particular trade involved, and as stipulated in written standards of recognized organizations or institutes of the respective trades except as exceeded or qualified by the specifications.

c. Upon notice, the contractor shall furnish evidence as to quality of materials.

d. Products are generally specified by ASTM or other reference standard and/or by manufacturer's name and model number or trade name. When specified only by reference standard, the Contractor has the option of using any product and manufacturer combination listed. However, the contractor shall be aware that the cited examples are used only to denote the quality standard of product desired and that they do not restrict bidders to a specific brand, make, manufacturer or specific name; that they are used only to set forth and convey to bidders the general style, type, character and quality of product desired; and that equivalent products will be acceptable. Request for substitution of materials, items, or equipment shall be submitted to the designer for approval or disapproval; the designer prior to the opening of bids shall make such approval or disapproval. Alternate materials may be requested after the award if it can clearly be demonstrated that it is an added benefit to the owner and the designer and owner approves.
e. The designer is the judge of equality for proposed substitution of products, materials or equipment.

f. If at any time during the construction and completion of the work covered by these contract documents, the language, conduct, or attire of any workman of the various crafts be adjudged a nuisance to the owner or designer, or if any workman be considered detrimental to the work, the contractor shall order such parties removed immediately from grounds.

g. The Contractor shall cooperate with the designer and the owner in coordinating construction activities.

h. The Contractor shall maintain qualified personnel and effective supervision at the site at all times during the project, and exercise the appropriate quality control program to ensure compliance with the project drawings and specifications. The designer is responsible for determining compliance with the drawings and specifications.

9. CODES, PERMITS AND INSPECTIONS

The Owner shall obtain all Section 404 of the Clean Water Act permits and 401 Water Quality Certifications and Isolated Wetlands/Water Permits. The Owner shall also obtain the Sediment and Erosion Control Permit. The Contractor shall obtain additional permits, if required, give all notices, and comply with all laws, ordinances, codes, rules and regulations bearing on the conduct of the work under this contract, including permits by the Owner. If the Contractor observes that the drawings and specifications are at variance therewith, he shall promptly notify the Designer in writing. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, codes, rules and regulations, and without such notice to the Owner, he shall bear all cost arising there from.

All work under this contract shall conform to the current North Carolina Building Code and other state and national codes as are applicable.

10. PROTECTION OF WORK, PROPERTY, THE PUBLIC AND SAFETY

a. The contractors shall be jointly responsible for the entire site and the building or construction of the same and provide all the necessary protections, as required by the owner or designer, and by laws or ordinances governing such conditions. They shall be responsible for any damage to the owner's property or of that of others on the job, by them, their personnel, or their subcontractors, and shall make good such damages. They shall be responsible for and pay for any damages caused to the owner. All contractors shall have access to the project at all times, except as indicated in the Supplemental General Conditions.

b. The contractor shall provide cover and protect all portions of the structure when the work is not in progress, provide and set all temporary roofs, covers for doorways, sash and windows, and all other materials necessary to protect all the work on the building, whether set by him, or any of the subcontractors. Any work damaged through the lack of proper protection or from any other cause, shall be repaired or replaced without extra cost to the owner.

c. No fires of any kind will be allowed inside or around the operations during the course of construction without special permission from the designer and owner.

d. The contractor shall protect all trees and shrubs designated to remain in the vicinity of the operations by building substantial boxes around it. He shall barricade all walks, roads, etc., as directed by the designer to keep the public away from the construction. All trenches, excavations or other hazards in the vicinity of the work shall be well barricaded and properly lighted at night.

e. The contractor shall provide all necessary safety measures for the protection of all persons on the job, including the requirements of the A.G.C. Accident Prevention Manual in Construction, as amended, and shall fully comply with all state laws or regulations and North Carolina State Building Code requirements to prevent accident or injury to persons on or about the location of the work. He shall clearly mark or post signs warning of hazards existing, and shall barricade excavations, elevator shafts, stairwells and similar hazards. He shall protect against damage or injury resulting from falling materials and he shall maintain all protective devices and signs throughout the progress of the work.

i. In the event of emergency affecting the safety of life, the protection of work, or the safety of adjoining properties, the contractor is hereby authorized to act at his own discretion, without further authorization from anyone, to prevent such threatened injury or damage. Any compensation claimed by the contractor on account of such action shall be determined as provided for under Article 13(b).

j. Any and all costs associated with correcting damage caused to adjacent properties of the construction site or staging area shall be borne by the contractor. These costs shall include but not be limited to flooding, mud, sand, stone, debris, and discharging of waste products.

11. SUBCONTRACTS AND SUBCONTRACTORS

The Contractor is and remains fully responsible for his own acts or omissions as well as those of any subcontractor or of any employee of either. The Contractor agrees that no contractual relationship exists between the subcontractor and the Owner in regard to the contract, and that the subcontractor acts on this work as an agent or employee of the Contractor.

12. CONTRACTOR-SUBCONTRACTOR RELATIONSHIPS

The Contractor agrees that the terms of these Contract Documents shall apply equally to each Subcontractor as to the Contractor, and the Contractor agrees to take such action as may be necessary to bind each Subcontractor to these terms. The Contractor further agrees to conform to the Code of Ethical Conduct as adopted by the Associated General Contractors of America, Inc., with respect to Contractor-Subcontractor relationships. The Owner reserves the right to limit the amount of portions of work to be subcontracted as hereinafter specified.

13. CHANGES IN THE WORK AND CLAIMS FOR EXTRA COST

a. The owner may have changes made in the work covered by the contract. These changes will not invalidate and will not relieve or release the contractor from any guarantee given by him pertinent to the contract provisions. These changes will not affect the validity of the guarantee bond and will not relieve the surety or sureties of said bond. All extra work shall be executed under conditions of the original contract.

b. Except in an emergency endangering life or property, no change shall be made by the contractor except upon receipt of approved change order from the designer, countersigned by the owner authorizing such change. No claim for adjustments of the contract price shall be valid unless this procedure is followed. Should a claim for extra compensation by the contractor be denied by the designer or the owner, the contractor may pursue his claim in accordance with G.S. 143-135.3.

In the event of emergency endangering life or property, the contractor may be directed to proceed on a time and material basis whereupon the contractor shall proceed and keep accurately on such form as specified by the designer or owner, a correct account of costs together with all proper invoices, payrolls and supporting data. Upon completion of the work the change order will be prepared as outlined under either Method "c(1)" or Method "c(2)" or both.

c. In determining the values of changes, either additive or deductive, contractors are restricted to the use of the following methods:

   1. Where the extra work involved is covered by unit prices quoted in the proposal, or subsequently agreed to by the Contractor, Designer, and Owner the value of the change shall be computed by application of unit prices based on quantities, estimated or actual as agreed of the items involved, except is such cases where a quantity exceeds the estimated quantity allowance in the contract by one hundred percent (100%) or more. In such cases, either party may elect to proceed under subparagraph c (2) herein. If neither party elects to proceed under c (2), then unit prices shall apply.
2. The contracting parties shall negotiate and agree upon the equitable value of the change prior to issuance of the change order, and the change order shall stipulate the corresponding lump sum adjustment to the contract price.

d. Under Paragraph “b” and Methods “c(2)” above, the allowances for overhead and profit combined shall be as follows: all contractors (the single contracting entity (prime), his subcontractors (1st tier subs), or their sub-subcontractors (2nd tier subs, 3rd tier subs, etc.) shall be allowed a maximum of 10% on work they each self-perform; the prime contractor shall be allowed a maximum of 5% on contracted work of his 1st tier sub; 1st tier, 2nd tier, 3rd tier, etc. contractors shall be allowed a maximum of 2.5% on the contracted work of their subs.; Under Method “c(1)”, no additional allowances shall be made for overhead and profit. In the case of deductible change orders, under Method "c(2)" and Paragraph (b) above, the contractor shall include no less than five percent (5%) profit, but no allowances for overhead.

e. The term "net cost" as used herein shall mean the difference between all proper cost additions and deductions. The "cost" as used herein shall be limited to the following:

1. The actual costs of materials and supplies incorporated or consumed as part of the work;

2. The actual costs of labor expended on the project site; labor expended in coordination, change order negotiation, record document maintenance, shop drawing revision or other tasks necessary to the administration of the project are considered overhead whether they take place in an office or on the project site.

3. The actual costs of labor burden, limited to the costs of social security (FICA) and Medicare/Medicaid taxes; unemployment insurance costs; health/dental/vision insurance premiums; paid employee leave for holidays, vacation, sick leave, and/or petty leave, not to exceed a total of 30 days per year; retirement contributions; worker’s compensation insurance premiums; and the costs of general liability insurance when premiums are computed based on payroll amounts; the total of which shall not exceed thirty percent (30%) of the actual costs of labor;

4. The actual costs of rental for tools, excluding hand tools; equipment; machinery; and temporary facilities required for the work;

5. The actual costs of premiums for bonds, insurance, permit fees and sales or use taxes related to the work.

Overtime and extra pay for holidays and weekends may be a cost item only to the extent approved by the owner.

f. Should concealed conditions be encountered in the performance of the work below grade, or should concealed or unknown conditions in an existing structure be at variance with the conditions indicated by the contract documents, the contract sum and time for completion may be equitably adjusted by change order upon claim by either party made within thirty (30) days after the condition has been identified. The cost of such change shall be arrived at by one of the foregoing methods. All change orders shall be supported by a unit cost breakdown showing method of arriving at net cost as defined above.

g. Change orders shall be submitted by the contractor in writing to the owner/designer for review and approval. The contractor will provide such proposal and supporting data in suitable format. The designer shall verify correctness. Delay in the processing of the change order due to lack of proper submittal by the contractor of all required supporting data shall not constitute grounds for a time extension or basis of a claim. Within fourteen (14) days after receipt of the contractor’s accepted proposal including all supporting documentation required by the designer, the designer shall prepare the change order and forward to the contractor for his signature or otherwise respond, in writing, to the contractor’s proposal. Within seven (7) days after receipt of the change order executed by the contractor, the designer shall certify the change order by his signature, and forward the change order and all supporting data to the owner for the owner’s signature. The owner shall execute the change order, within seven (7) days of receipt.
A change order, when issued, shall be full compensation, or credit, for the work included, omitted or substituted. It shall show on its face the adjustment in time for completion of the project as a result of the change in the work.

If, during the progress of the work, the owner requests a change order and the contractor's terms are unacceptable, the owner, may require the contractor to perform such work on a time and material basis whereupon the contractor shall proceed and keep accurately on such form as specified by the Designer or owner, a correct account of cost together with all proper invoices, payrolls and supporting data. Upon completion of the work a change order will be prepared with allowances for overhead and profit per paragraph d. above and “net cost” and “cost” per paragraph e. above. Without prejudice, nothing in this paragraph shall preclude the owner from performing or to have performed that portion of the work requested in the change order.

14. ANNULMENT OF CONTRACT

If the contractor fails to begin the work under the contract within the time specified, or the progress of the work is not maintained on schedule, or the work is not completed within the time specified, or fails to perform the work with sufficient workmen and equipment or with sufficient materials to ensure the prompt completion of said work, or shall perform the work unsuitably or shall discontinue the prosecution of the work, or if the contractor shall become insolvent or be declared bankrupt or commit any act of bankruptcy or insolvency, or allow any final judgment to stand against him unsatisfied for a period of forty-eight (48) hours, or shall make an assignment for the benefit of creditors, or for any other cause whatsoever shall not carry on the work in an acceptable manner, the owner may give notice in writing, sent by certified mail, return receipt requested, to the contractor and his surety (if applicable) of such delay, neglect or default, specifying the same, and if the contractor within a period of seven (7) days after such notice shall not proceed in accordance therewith, then the owner shall, declare this contract in default, and, thereupon, the surety shall promptly take over the work and complete the performance of this contract in the manner and within the time frame specified. In the event the contractor, or the surety (if applicable) shall fail to take over the work to be done under this contract within seven (7) days after being so notified and notify the owner in writing, sent by certified mail, return receipt requested, that he is taking the same over and stating that he will diligently pursue and complete the same, the owner shall have full power and authority, without violating the contract, to take the prosecution of the work out of the hands of said contractor, to appropriate or use any or all contract materials and equipment on the grounds as may be suitable and acceptable and may enter into an agreement, either by public letting or negotiation, for the completion of said contract according to the terms and provisions thereof or use such other methods as in his opinion shall be required for the completion of said contract in an acceptable manner. All costs and charges incurred by the owner, together with the costs of completing the work under contract, shall be deducted from any monies due or which may become due said contractor and surety (if applicable). In case the expense so incurred by the owner shall be less than the sum which would have been payable under the contract, if it had been completed by said contractor, then the said contractor and surety (if applicable) shall be entitled to receive the difference, but in case such expense shall exceed the sum which would have been payable under the contract, then the contractor and the surety (if applicable) shall be liable and shall pay to the owner the amount of said excess.

15. TERMINATION FOR CONVENIENCE

a. Owner may at any time and for any reason terminate Contractor's services and work at Owner’s convenience, after notification to the contractor in writing via certified mail. Upon receipt of such notice, Contractor shall, unless the notice directs otherwise, immediately discontinue the work and placing of orders for materials, facilities and supplies in connection with the performance of this Agreement.

b. Upon such termination, Contractor shall be entitled to payment only as follows: (1) the actual cost of the work completed in conformity with this Agreement; plus, (2) such other costs actually incurred by Contractor as approved by Owner; (3) plus ten percent (10%) of the cost of the balance of the work to be completed for overhead and profit. There shall be deducted from such sums as provided in this subparagraph the amount of any payments made to Contractor prior to the date of the termination of this Agreement. Contractor shall not be entitled to any claim or claim of lien against Owner for any additional compensation or damages in the event of such termination and payment.

16. OWNER’S RIGHT TO DO WORK
If, during the progress of the work or during the period of guarantee, the contractor fails to prosecute the work properly or to perform any provision of the contract, the owner, after seven (7) days' written notice sent by certified mail, return receipt requested, to the contractor from the designer, may perform or have performed that portion of the work. The cost of the work may be deducted from any amounts due or to become due to the contractor, such action and cost of same having been first approved by the designer. Should the cost of such action of the owner exceed the amount due or to become due the contractor, then the contractor or his surety, or both, shall be liable for and shall pay to the owner the amount of said excess.

17. REQUESTS FOR PAYMENT

Contractor shall refer to the Supplemental General Conditions for specific directions on payment schedule, procedures and the name and address where to send applications for payments for this project. It is imperative that invoices be sent only to the above address in order to assure proper and timely delivery and handling.

The Designer/Owner will process all Contractor pay requests as the project progresses. The Contractor shall receive payment within thirty (30) consecutive days after Designer/Owner’s approval of each pay request. Payment will only be made for work performed as determined by the Designer/Owner.

Retainage:

a. Retainage withheld will not exceed 5% at any time.

b. The same terms apply to general contractor and subcontractors alike.

c. Following 50% completion of the project no further retainage will be withheld if the contractor/subcontractor has performed their work satisfactorily.

d. Exceptions:
   1. Owner/Contractor can reinstate retainage if the contractor/subcontractor does not continue to perform satisfactorily.
   2. Following 50% completion of the project, the owner is authorized to withhold additional retainage from a subsequent periodic payment if the amount of retainage withheld falls below 2.5%.

Final payment will be made within forty-five (45) consecutive days after acceptance of the work, receipt of marked-up “as-built” drawings and specifications and the submission both of notarized Contractor’s affidavit and final pay request. All pay requests shall be submitted to the Designer/Owner for approval.

THE CONTRACTOR’S FINAL PAYMENT AFFIDAVIT SHALL STATE: “THIS IS TO CERTIFY THAT ALL COSTS OF MATERIALS, EQUIPMENT, LABOR, SUBCONTRACTED WORK, AND ALL ELSE ENTERING INTO THE ACCOMPLISHMENT OF THIS CONTRACT, INCLUDING PAYROLLS, HAVE BEEN PAID IN FULL.”

18. PAYMENTS WITHHELD

The designer with the approval of the Owner may withhold payment for the following reasons:

a. Faulty work not corrected.

b. The unpaid balance on the contract is insufficient to complete the work in the judgment of the designer.

c. To provide for sufficient contract balance to cover liquidated damages that will be assessed.

d. The secretary of the Department of Administration may authorize the withholding of payment for the following reasons:
   i. Claims filed against the contractor or evidence that a claim will be filed.
   ii. Evidence that subcontractors have not been paid.

When grounds for withholding payments have been removed, payment will be released. Delay of payment due the contractor without cause will make owner liable for payment of interest to the contractor as provided in G.S. 143-134.1. As provided in G.S. 143-134.1(e), the owner shall not be liable for interest on payments withheld by the owner for
unsatisfactory job progress, defective construction not remedied, disputed work, or third-party claims filed against the owner or reasonable evidence that a third-party claim will be filed.

19. MINIMUM INSURANCE REQUIREMENTS

The work under this contract shall not commence until the contractor has obtained all required insurance and verifying certificates of insurance have been approved in writing by the owner. See Henderson County Insurance and Bond Requirements posted under General Information at http://ww2.hendersoncountync.org/rfp for the following:

   d) Insurance (if appropriate) per Article 11. Attach proof of insurance and submit with Bid
   e) Bonds (if appropriate) per Article 12 (NA, No bonds required for this project)

20. ASSIGNMENT

No assignment of the Contractor's obligations or the Contractor's right to receive payment hereunder shall be permitted.

21. CLEANING UP AND RESTORATION OF SITE

The Contractor shall keep the sites and surrounding area reasonably free from rubbish at all times and shall remove debris from the site from time to time or when directed to do so by the Owner. Before final inspection and acceptance of the project, the Contractor shall thoroughly clean the sites, and completely prepare the project and site for use by the Owner.

At the end of construction, the contractor shall oversee and implement the restoration of the construction site to its original state. Restoration includes but not limited to walks, drives, lawns, trees and shrubs, corridors, stairs and other elements shall be repaired, cleaned or otherwise restored to their original state.

22. GUARANTEE

The contractor shall unconditionally guarantee materials and workmanship against patent defects arising from faulty materials, faulty workmanship or negligence for a period of twelve (12) months following the final acceptance of the work and shall replace such defective materials or workmanship without cost to the owner.

Where items of equipment or material carry a manufacturer's warranty for any period in excess of twelve (12) months, then the manufacturer's warranty shall apply for that particular piece of equipment or material. The contractor shall replace such defective equipment or materials, without cost to the owner, within the manufacturer's warranty period.

Additionally, the owner may bring an action for latent defects caused by the negligence of the contractor, which is hidden or not readily apparent to the owner at the time of beneficial occupancy or final acceptance, whichever occurred first, in accordance with applicable law.

Guarantees for roofing workmanship and materials shall be stipulated in the specifications sections governing such roof, equipment, materials, or supplies.

23. STANDARDS

All manufactured items and/or fabricated assemblies subject to operation under pressure, operation by connection to an electric source, or operation involving a connection to a manufactured, natural, or LP gas source shall be constructed and approved in a manner acceptable to the appropriate State inspector which customarily requires the label or re-examination listing or identification marking of appropriate safety standard organization, such as the American Society of Mechanical Engineers for pressure vessels; the Underwriters Laboratories and/or National Electrical Manufacturers Association for electrically operated assemblies; or the American Gas Association for gas operated assemblies, where such approvals of listings have been established for the type of device offered and furnished. Further, all items furnished shall meet all requirements of the Occupational Safety and Health Act (OSHA), and State and federal requirements relating to clean air and water pollution.

All equipment and products must be independent third party tested and labeled (UL, FM, or CTS) before final connections to Owner services or utilities.
25. **EQUAL OPPORTUNITY CLAUSE**

The non-discrimination clause contained in Section 202 (Federal) Executive Order 11246, as amended by Executive Order 11375, relative to equal employment opportunity for all persons without regard to race, color, religion, sex or national origin, and the implementing rules and regulations prescribed by the secretary of Labor, are incorporated herein.

The contractor(s) agree not to discriminate against any employee or applicant for employment because of physical or mental disabilities in regard to any position for which the employee or applicant is qualified. The contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified individuals with such disabilities without discrimination based upon their physical or mental disability in all employment practices.

27. **ACCESS TO PERSONS AND RECORDS**

The State Auditor shall have access to persons and records as a result of all contracts or grants entered into by the Owner in accordance with General Statute 147-64.7. The Owner’s internal auditors shall also have the right to access and copy the Contractor’s records relating to the Contract and Project during the term of the Contract and within two years following the completion of the Project/close-out of the Contract to verify accounts, accuracy, information, calculations and/or data affecting and/or relating to Contractor’s requests for payment, requests for change orders, change orders, claims for extra work, requests for time extensions and related claims for delay/extended general conditions costs, claims for lost productivity, claims for lost efficiency, claims for idle equipment or labor, claims for price/cost escalation, pass-through claims of subcontractors and/or suppliers, and/or any other type of claim for payment or damages from Owner and/or its project representatives.

28. **GOVERNING LAWS**

This contract is made under and shall be governed by and construed in accordance with the laws of the State of North Carolina. The Contractor shall comply with all applicable federal, State and local laws, statutes, ordinances and regulations including, but not limited to, the Omnibus Transportation Act of 1991 and its implementing regulations.
SUPPLEMENTARY GENERAL CONDITIONS

TIME OF COMPLETION
The Contractor shall commence work to be performed under this Contract on June 15, 2015 and shall fully complete all work hereunder within the time specified below in the Construction Schedule.

If the Contractor is delayed at any time in the progress of his work by any act or negligence of the Owner, his employees or his separate contractor, by changes ordered in the work; by abnormal weather conditions; by any causes beyond the Contractor's control or by other causes deemed justifiable by Owner, then the contract time may be reasonably extended in a written order from the Owner upon written request from the contractor within five days following the cause for delay. Time extensions for weather delays, acts of God, labor disputes, fire, delays in transportation, unavoidable casualties or other delays which are beyond the control of the Owner do not entitle the Contractor to compensable damages for delays. Any contractor claim for compensable damages for delays is limited to delays caused solely by the owner or its agents.

The rain data maintained by the Contractor on the INSPECTION AND MONITORING RECORDS (see SEDIMENTATION POLLUTION CONTROL ACT of 1973 below) shall be the basis for determining eligible rain and impact days. Extension due to rain delays shall be approved based on one-tenth (0.1) inch per day rain intensity and shall be based on the precipitation data below (Southeast Regional Climate Center). Rain day extension will be granted for reported rain days exceeding the historical mean of rain days exceeding 0.1 inch per day for a given month. Rain day consideration is cumulative only for one month and shall not carry forward to the next month. Impact days due to weather and soils conditions shall be measured separately.

<table>
<thead>
<tr>
<th>Monthly Number of Days Precipitation &gt;= 0.1 for HENDERSONVILLE 1 NE, NC</th>
<th>½ of Jun Mean</th>
<th>Jul Mean</th>
<th>½ of Aug Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>

The Contractor shall make written request for extension of time in writing within five (5) days following cause of delay. In case of continuing cause for delay, the Contractor shall notify the Designer of the delay within five (5) days of the beginning of the delay and only one claim is necessary.

CONSTRUCTION SCHEDULE:
Time is of the essence as the project must be completed during the summer break for Rugby Middle School. Construction shall begin 06/15/2015. With the exception of the permanent seeding, live staking and other permanent buffer plantings, the project shall be completed, including demobilization and temporary seeding, by August 14, 2015. Buffer plantings and permanent seeding should be completed between November 15, 2015 and December 15, 2015.

PAYMENTS
Contractor shall submit a schedule of values as a basis for payment within seven days of Acceptance of the Contract by Henderson County Soil & Water Conservation District. Requests for Payment shall be sent to Henderson County Soil & Water Conservation, ATTN: Rachel Smith, 61 Triple Springs Rd., Hendersonville, NC 28792. Submit four copies of payment applications. Request for payment may be made on a monthly basis for work completed in the previous month. Material tickets for all vegetation installed on the site (seeding, stems, etc.) shall be supplied to the Designer with the payment request.

PROTECTION OF WORK, PROPERTY, AND THE PUBLIC
The Contractor shall take appropriate care protecting all roads, and sidewalks when crossing with equipment. All utilities and culverts/bridges shall not be disturbed unless noted otherwise on the plans. In order to protect the stream channel when the work is not in progress, the contractor shall not disturb more area in the stream channel than can be stabilized in one working day. The contractor shall, to the extent practicable, protect all portions of the project when the work is not in progress. Any work damaged through the lack of proper protection shall be required or replaced without additional cost to the owner. The reference to elevator shafts and stairwells does not apply. Persons in the job must wear appropriate safety attire and protective equipment such as: flash orange vests, helmets, and safety boots when working near moving machinery.

SUBCONTRACTS AND SUBCONTRACTORS
The general contractor shall perform with own workforce and own oversight and shall not subcontract any earthwork activities and supervision related to channel excavation and in-stream structure placement with own workforce.

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SEDIMENTATION POLLUTION CONTROL ACT of 1973
The Contractor is responsible for the installation and maintenance of an on-site rain gauge. The Contractor is responsible for proper maintenance of the **INSPECTION AND MONITORING RECORDS (Forms)** provided in the construction documents and shall record the following on the NPDES Forms: daily rain data, daily inspections of Sediment and Erosion Control devices. The Contractor shall obtain Designer certification of the Forms on a weekly basis. The Forms shall be maintained on-site with the construction documents in Site Inspection Box.

CONSTRUCTION SUPERVISION
The Contractor is required to maintain a Construction Log. The Contractor is required to attend all scheduled meetings on site. A pre-construction conference will be held, the Designer, Contractor, and Owner’s agent shall be present. Following the completion of the project and before the Contractor demobilizes, a meeting will be held with the Designer, Contractor, and Owner’s agent, and any deficiencies in the project will be addressed and corrected before Contractor demobilizes. Subcontractors shall not represent the Contractor in any of the progress conferences and other meetings called by the Designer. **The Contractor shall not initiate any excavation and channel work prior to the effective starting date shown on the Notice to Proceed.**

The Contractor is required to employ a professional land surveyor (PLS) licensed in the State of North Carolina to lay out the work and to establish benchmarks Specifications which shall not be disturbed and where direct instrument sights may be taken by the Designer. The Construction Survey will be performed by Contractor and shall include setting a construction baseline and offset with grading information.

ADDITIONAL GUARANTEE
Contractor guarantees an 80% survival rate for one year from the day of installation for all riparian vegetation specified to be installed on this project, excluding temporary seeding. Contractor understands this may or may not require periodic inspections through the year, replanting of some vegetation and watering and controlling invasive weeds if necessary.

UTILITIES
Contractor shall provide all temporary facilities including but not limited to toilets, dumpsters, etc. Contractor is responsible for any utilities necessary for the completion of the project.

SECURITY
Contractor shall comply with all rules provided by Rugby Middle School regarding access to the site. Following the scheduled construction, any access by the Contractor must be approved by the Henderson County Soil & Water Conservation District.

UNIT PRICES
All quantities on plans are estimates only. Contractor is responsible for determining quantities for items in his base bid and alternates. The items listed below in the UNIT PRICE ITEMS are to be included in the base bid and any alternates, at quantities listed on the bid form. Payment for the following Unit Price items will be based upon actual quantities as determined by the Owner or his representative when making final payment.

<table>
<thead>
<tr>
<th>Item#</th>
<th>Description</th>
<th>Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Silt Fence, installed and maintained</td>
<td>LF</td>
</tr>
<tr>
<td>2</td>
<td>Seeding, permanent</td>
<td>acre</td>
</tr>
<tr>
<td>3</td>
<td>Seeding, temporary</td>
<td>acre</td>
</tr>
<tr>
<td>4</td>
<td>Trees, installed</td>
<td>EA</td>
</tr>
<tr>
<td>5</td>
<td>Small Trees/Shrubs, installed</td>
<td>EA</td>
</tr>
<tr>
<td>6</td>
<td>Livestakes, installed</td>
<td>EA</td>
</tr>
<tr>
<td>7</td>
<td>Rock Cross Vane</td>
<td>EA</td>
</tr>
</tbody>
</table>

NO SMOKING POLICY

*There is to be no smoking or tobacco use on the property as Henderson County Public Schools has a tobacco free policy.*

All TECHNICAL SPECIFICATIONS are included on the plan sheets.

Informal Contract and General Conditions 15
CONTRACTOR QUALIFICATION
ATTACH COPY of NC General Contractors License HERE
ATTACH CONTRACTOR QUALIFICATION STATEMENT HERE

A. Please attach a document describing projects, similar in nature to this one, which have been completed by the Bidder within the past 5 years. Include at least the following information: project name, project owners name, project cost, short description and a person we can call about the project – include their phone number and email address.

B. List key personnel who will be working on this project. Describe some relevant prior projects and/or training they have completed and include a way to contact them.

C. Feel free to attach any other information that helps document the Bidder is qualified to do this project. Some examples may be certificates from trainings, classes, etc.
PROOF OF INSURANCE

Please attach a copy of your proof of insurance to this page.
# INSPECTION AND MONITORING RECORDS FOR ACTIVITIES UNDER STORMWATER GENERAL PERMIT NCG010000 AND SELF-INSPECTION RECORDS FOR LAND DISTURBING ACTIVITIES PER G.S. 113A-54.1

<table>
<thead>
<tr>
<th>Project Name</th>
<th>Land Quality or Local Program Project #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financially Responsible Party, (FRP) / Permittee</td>
<td>County</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INSPECTOR</th>
<th>Name</th>
<th>Employer</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Inspector Type (Mark)</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>X</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>FRP/Permittee Agent/Designee</th>
<th>Phone Number</th>
<th>Email Address</th>
</tr>
</thead>
</table>

## PART 1A: Rainfall Data

<table>
<thead>
<tr>
<th>Day / Date</th>
<th>Rain Amt (inches)</th>
<th>Daily Rainfall Required, except for Holidays or Weekends. If no rain, indicate with a “zero”</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td></td>
<td></td>
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<td>T</td>
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<td>W</td>
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<td></td>
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<tr>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sat (Optional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sun (Optional)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## PART 1B: Current Phase of Project

<table>
<thead>
<tr>
<th>Phase of Grading</th>
<th>check the applicable box(es)</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>Installation of perimeter erosion and sediment control measures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clearing and grubbing of existing ground cover</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completion of any phase of grading of slopes or fills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Installation of storm drainage facilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Completion of all land-disturbing activity, construction or development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Permanent ground cover sufficient to restrain erosion has been established</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## PART 1C: Signature of Inspector

By this signature, I certify in accordance with the NCG010000 permit & G.S. 113A-54.1 that this report is accurate and complete to the best of my knowledge.

<table>
<thead>
<tr>
<th>Financially Responsible Party / Permitee or Agent / Designee</th>
<th>Date</th>
</tr>
</thead>
</table>

## GROUND STABILIZATION TIMEFRAMES

<table>
<thead>
<tr>
<th>Site Area Description</th>
<th>Stabilization</th>
<th>Timeframe Exceptions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perimeter dikes, swales and slopes</td>
<td>7 Days</td>
<td>None</td>
</tr>
<tr>
<td>High Quality Water (HQW) Zones</td>
<td>7 Days</td>
<td>None</td>
</tr>
<tr>
<td>Slopes Steeper than 3:1</td>
<td>7 Days</td>
<td>If slopes are 10’ or less in length and are not steeper than 2:1, 14 days are allowed</td>
</tr>
<tr>
<td>Slopes 3:1 or flatter</td>
<td>14 Days</td>
<td>7 days for slopes greater than 50’ in length</td>
</tr>
<tr>
<td>All other areas with slopes flatter than 4:1</td>
<td>14 Days</td>
<td>None, except for perimeters and HQW Zones</td>
</tr>
</tbody>
</table>
### PART 2A: EROSION AND SEDIMENTATION CONTROL MEASURES

Measures must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD.

#### Erosion and Sedimentation Control Measures Inspected

<table>
<thead>
<tr>
<th>Measure ID or Location and Description</th>
<th>Operating Properly? (Y/N)</th>
<th>Any Repair or Maintenance Needed? (Y/N)</th>
<th>New Measures Installed*</th>
<th>Corrective actions should be performed as soon as possible and before the next storm event</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Proposed Dimensions (ft.)</td>
<td>Actual Dimensions (ft.)</td>
</tr>
</tbody>
</table>

*New erosion and sedimentation control measures installed since the last inspection should be documented here or by initialing and dating each measure or practice shown on a copy of the approved erosion and sedimentation control plan. List Dimensions of Measures such as Sediment Basins and Riprap Aprons.

### PART 2B: STORMWATER DISCHARGE OUTFALLS (SDOs)

SDOs must be inspected at least ONCE PER 7 CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT GREATER THAN 0.5 INCH PER 24 HOUR PERIOD.

#### Stormwater Discharge Outfalls Inspected

<table>
<thead>
<tr>
<th>Stormwater Discharge Outfall ID or Location</th>
<th>Any Visible Sedimentation in Streams, Wetlands or Outside Site Limits? (Y/N)</th>
<th>Any Increase in Stream Turbidity from Discharge? (Y/N)</th>
<th>Any Visible Erosion below SDO? (Y/N)</th>
<th>Any visible oil sheen, floating or suspended solids or discoloration? (Y/N)</th>
<th>Inspection Date</th>
<th>Report Visible Sedimentation to streams or wetlands to Land Quality within 24 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td><a href="http://portal.ncdenr.org/web/lr/division-contacts">http://portal.ncdenr.org/web/lr/division-contacts</a></td>
<td></td>
<td>Describe Actions Needed</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Corrective actions should be performed as soon as possible and before the next storm event</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### PART 2C: GROUND STABILIZATION

Must be recorded after each Phase of Grading

<table>
<thead>
<tr>
<th>Areas Where Land Disturbance Has Been Completed or Temporarily Stopped</th>
<th>Time Limit for Ground Cover 7 days or 14 days</th>
<th>Is Ground Cover Sufficient to Restrain Erosion? (Y/N)</th>
<th>Inspection Date</th>
<th>Describe Actions Needed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Informal Contract and General Conditions 20
STREAM RESTORATION OF MILL POND CREEK
SITE TOPO MAP - REACH B(STA 12+00 THRU 16+00)
HENDERSON COUNTY, NORTH CAROLINA

STATE OF NORTH CAROLINA
DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES
DIVISION OF SOIL AND WATER CONSERVATION
WESTERN HEADQUARTERS
1531 PAVIN DR, MEBANE, NC 27301
PHONE: (336) 758-9000

Call Two Business Days Before You Dig!
811
Know what’s below.
Call before you dig.
Dial 811 or 1-888-632-4949

STREAM RESTORATION Earthwork Volumes
Raw Cut Volume: 3247.83 cu yd
Raw Fill Volume: 1059.76 cu yd

STREAM LENGTH (IMPAIRED): 998 LF
STREAM LENGTH (RESTORED): 1695 LF

ROCK CROSS VANE
(GRADE CONTROL)

FOOTBALL PRACTICE FIELD

PEDESTRIAN BRIDGE

ASPHALT SIDEWALK

SOCCER FIELD

NC HWY 191
HAYWOOD R-

NC

MILL POND

9

SECTION 8 OF 8

PLANNER: sarah_dowdy
SCALE: 1 INCH = 1000 FT
DRAFTED: J. YOUNG
DATE: APRIL 25, 2016
CHECKED: B. MILLER
FONDCON: sarah_dowdy
Restored Stream Channel Data

- Water surface slope: 0.0069 feet/feet
- Pool to pool spacing: 48 feet
- Pool length: 22 feet
- Pool depth: 2.5 x riffle depth
- Radius of curvature: 24 feet
- Belt width: 30 feet

STREAM CHANNEL PROFILE
Reach "A" - Stabilization Only

STREAM CHANNEL PROFILE
Reach "B & C" - Full Restoration
ALL SLOPES GREATER THAN 2:1 SHALL BE DEPRESSED WITH HYDROSEEDING EQUIPMENT. STEEP SLOPES SHALL HAVE SEEDBED SURFACES THAT ARE 10-12 INCHES DEEP AND 8-12 INCHES APART ACROSS THE SLOPE IN WHICH THE SEED CAN LOOPE AND OPAQUE.

PLANTING MIXTURE:
- Tall Fescue: 60-80 pounds/acre
- Annual Rye: 25-30 pounds/acre

LIAND PER CONTINUUM:
- Line: 2,000 pounds/acre or 200 pounds/acre
- Fertilizer: 400 pounds/acre of 10-10-10 or equivalent

**These rates also apply when hydroseeding**

MULCHING:
- Topsoil (15) feet width of air seeder shall be collected from the chaser edge by a Konza flail chopper. Blankets shall be covered with soil before laying in accordance with the manufacturer's specifications.

REVEGETATION SURFACES MAY BE ENRICHED WITH EQUILIBRATED, OXIDIZED MULCH OR SOIL TO THE SPECIFICATIONS OF THE CONSTRUCTION SUPPLIER.

PREPARED SOIL, BEFORE INSTALLING RAMBOARDS, INCLUDING ANY NECESSARY APPLICATION OF LIME, PEATMOSS, AND SEEDS.

1. PREPARE SOIL, BEFORE INSTALLING RAMBOARDS, INCLUDING ANY NECESSARY APPLICATION OF LIME, PEATMOSS, AND SEEDS.
2. SCOUR AT THE SITE OF THE STRIP OR STREAM TO REMOVE THE MATERIALS A 6" (150MM) DEEP. 6" (150MM) OR DEEPER, OR IN DESCRIPTIONS WHERE THE MATERIALS ARE TO BE AVOIDED OR REMOVED, THE MATERIALS HALTED AND REMOVED, OR IN DESCRIPTIONS WHERE THE MATERIALS MAY BE THE COMPOSITION OF THE STREAM BED OR FLOORING OF THE HOLES.
3. TIME OF RAMBOARDS MAY BE PLACED AT OR NEAR THE SITE. RAMBOARDS WILL RAMP WITH THE APPROPRIATE HEIGHT DEPENDING ON THE SOIL TYPE TO REMOVAL THE SOIL WITH A SUFFICIENT, DEPENDABLE ANSWERABLE SOIL WITH A SUFFICIENT, DEPENDABLE ANSWABLE (TO MEET THE WATER OF THE CONSTRUCTION)
4. THE SANDS OF PALM, DRAMAS MUST BE STARTED WITH APPROPRIATE "5" (120MM) DEEP-TRIMMED. RAMBOARDS MUST BE PLACED IN THE SOIL DEEPLY (SPRING-TRIMMED) WITH APPROPRIATE "5" (120MM) DEEP.
5. THE SANDS OF PALM, DRAMAS MUST BE STARTED WITH APPROPRIATE "5" (120MM) DEEP-TRIMMED. RAMBOARDS MUST BE PLACED IN THE SOIL DEEPLY (SPRING-TRIMMED) WITH APPROPRIATE "5" (120MM) DEEP.

NOTE: ALL DISTURBED AREAS RESULTING FROM THIS PROJECT, INCLUDING ACCESS AND HAUL ROADS, SHALL BE VEGETATED ACCORDING TO THE SPECIFICATIONS LISTED ABOVE. TOTAL NUMBER OF LIVESTAKES REQUIRED FOR THIS PROJECT IS ESTIMATED AT 4,100.