

REQUEST FOR BOARD ACTION

HENDERSON COUNTY BOARD OF COMMISSIONERS

MEETING DATE: July 16, 2008

SUBJECT: Clean Water Trust Fund Mini-Grant
Henderson County Stormwater Master Plan
FY 08 Strategic Plan 4.2C

ATTACHMENTS: Yes
1. Clean Water Management Trust Fund Grant Agreement
2. McGill & Associates Agreement for Engineering Services

SUMMARY OF REQUEST:

As directed by the Board in FY08 Strategic Plan 4.2C (Develop a Stormwater Management Program) and during September 19, 2007 Board Meeting, the County has applied for and been awarded the Clean Water Trust Fund Mini-Grant. The Grant Agreement is attached. Also, the Engineering Services Agreement with McGill & Associates, attached, has been developed to perform the work identified within the Grant.

According to McGill, the County's grant application was delayed due to a moratorium placed on the mini-grants while the Trust Fund revisited the guidelines and requirements. The schedule provided with the Engineering Agreement (page B-7) has creation of the Stormwater Management Ordinance by July 31, 2009. As discussed in previous Agenda Items, this ordinance will delegate the current State Stormwater Management Program to the County. This delegation is very similar to the process to implement the County's delegated Erosion Control Program.

The Grant is for \$50,000 and the local match is \$20,000. The local match for this grant has been approved in the current budget. The Agreement with McGill & Associates is for \$70,000 and will be funded by the grant and local match.

BOARD ACTION REQUESTED: Authorize the County Engineer to execute the attached Clean Water Management Trust Fund Grant Agreement and the Engineering Services Agreement with McGill & Associates to develop a County Stormwater Management Program.

Suggested Motion:

I move that the Board authorize the County Engineer to execute the attached Clean Water Management Trust Fund Grant Agreement and the Engineering Services Agreement with McGill & Associates to develop a County Stormwater Management Program.

**STATE OF NORTH CAROLINA
CLEAN WATER MANAGEMENT TRUST FUND
GRANT AGREEMENT
(STORMWATER MINIGRANT FOR MAPPING OF A DRAINAGE SYSTEM
BY A LOCAL GOVERNMENT)**

CWMTF PROJECT NO.: 2007-007

GRANTOR: NORTH CAROLINA CLEAN WATER MANAGEMENT TRUST FUND (“Fund” or “CWMTF”), an independent agency of the State of North Carolina (“State”) acting through its Board of Trustees solely in its official capacity pursuant to Article 18, Chapter 113A, of the North Carolina General Statutes (“NCGS”)

CONTRACT ADMINISTRATOR: Kevin Boyer
Clean Water Management Trust Fund
1651 Mail Service Center
Raleigh, NC 27699-1651
Phone: (919)715-8317; Fax: (919)733-6374
Email: kevin.boyer@ncmail.net

GRANT RECIPIENT: County of Henderson, a North Carolina Municipal Corporation (“Grant Recipient”)

CONTRACT ADMINISTRATOR: Marcus A. Jones
Director of Engineering and Facility Services
County of Henderson
213 1st Avenue East
Hendersonville, NC 28792
Phone: (828)694-6560; Fax: (828)698-6014
Email: majones@hendersoncountync.org

CONSULTANT CONTACT: J.P. Johns, PE, Senior Project Manager
McGill Associates, P.A.
420 E Park Ave., Ste. 305
Greenville, SC 29601
Phone: (864)235-6759; Fax: (864)235-6766
jjjohns@mcgillengineers.com

FEDERAL I.D. NUMBER: 56-6000-307 **FISCAL YEAR END DATE:** June 30

CONTRACT EFFECTIVE DATE: _____ (the “Effective Date”)

CONTRACT EXPIRATION DATE: August 31, 2009 (the “Expiration Date”)

**LATEST DATE FOR THE FUND’S RECEIPT OF GRANT
RECIPIENT’S FINAL REQUEST FOR REIMBURSEMENT:** September 14, 2009

GRANT AMOUNT: up to \$50,000 (the “Grant”)

APPROVAL DATE: Administratively approved on June 27, 2008 (the “Approval Date”) in accordance with the CWMTF Board of Trustees policy on mini-grant approvals adopted on February 19, 2007.

THIS AGREEMENT ("Agreement", "Grant Agreement", or "Contract"), is made and entered into, as of the Effective Date by and between the Fund and the Grant Recipient, both sometimes hereinafter referred to individually as a "Party" or collectively as the "Parties".

W I T N E S S E T H:

WHEREAS, Grant Recipient has submitted to the Fund an application requesting a grant of monies (hereinafter the "Grant Application") to engage in a stormwater quality minigrant project as more particularly described on Exhibit A (the "Project").

WHEREAS, the Fund is authorized by NCGS Chapter 113A, Article 18 to acquire land for riparian buffers for the purposes of providing environmental protection for surface waters and urban drinking water supplies and establishing a network of riparian greenways for environmental, educational, and recreational uses; to acquire conservation easements or other interests in real property for the purpose of protecting and conserving surface waters and urban drinking water supplies; to coordinate with other public programs involved with lands adjoining water bodies to gain the most public benefit while protecting and improving water quality; to restore previously degraded lands to reestablish their ability to protect water quality; to repair failing wastewater collection systems and wastewater treatment works if the repair is a reasonable remedy for resolving an existing waste treatment problem and the repair is not for the purpose of expanding the system to accommodate future anticipated growth of a community; to repair and eliminate failing septic tank systems, to eliminate illegal drainage connections, and to expand a wastewater collection system or wastewater treatment works if the expansion eliminates failing septic tank systems or illegal drainage connections; to finance stormwater quality projects; and to facilitate planning that targets reductions in surface water pollution.

WHEREAS, the Grant Recipient is a qualified applicant as that term is defined in NCGS §113A-254(a).

WHEREAS, the Project shall be carried out for the purposes and according to the schedule set out on Exhibit A, and pursuant to the budget set forth on Exhibit B.

WHEREAS, the Grant Recipient's application was administratively approved by the Fund on the Approval Date, and the Fund is willing to make the Grant to the Grant Recipient pursuant to the terms and conditions set forth in this Grant Agreement.

WHEREAS, the Parties desire to enter into this Grant Agreement and intend to be bound by its terms.

NOW, THEREFORE, for and in consideration of the Grant, the mutual promises each to the other made, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties mutually agree as follows:

1. **Grant Documents.** The documents described below are hereinafter collectively referred to as the "Grant Documents." In the case of conflict between any of these documents, each shall have priority over all others in the order listed below. Upon execution and delivery of this Agreement, it and the other Grant Documents and items required hereunder will constitute a

valid and binding agreement (“Grant Agreement” or “Contract”) between the Parties, enforceable in accordance with the terms thereof. The Grant Agreement constitutes the entire agreement between the Parties, superseding all prior oral and written statements or agreements. Only changes deemed non-material in type at the discretion of the Fund’s Executive Director may be made to the Grant Agreement without the consent of the Fund’s Board of Trustees.

The Grant Documents consist of:

- a. This Agreement
- b. Exhibit A – Project Description, Water Quality Benefits, Scope of Work, Conditions, and Schedule
- c. Exhibit B – Project Budget
- d. Exhibit C – CWMTF Pre-Disbursement Checklist
- e. Exhibit C.1 – *Not applicable*
- f. Exhibit C.2 – Assurances for Non-Federally Funded Contracts
- g. Exhibit D – CWMTF Form for Quarterly Progress Report and Cover Sheet for Final Report
- h. Exhibit E – CWMTF Request for Reimbursement Form
- i. Exhibit F – Reporting and Audit Requirements
- j. Exhibit G – Definitions
- k. Exhibit H – General Terms and Conditions

2. **Purpose.** The purpose of the Grant is for a stormwater minigrant project for the improvement of water quality, more particularly described on Exhibit A (the “Project”). Grant funds may not be used for the purchase of improvements or debris on any property, or for the removal of improvements or debris on any property, or for any other purpose not set forth herein. **Further, Grant funds may not be used for any eminent domain litigation or any action or expenditure related to eminent domain, unless approved by the Fund’s Board of Trustees in writing prior to the action. The Board of Trustees shall review requests to use Grant funds for eminent domain action on a case-by-case basis. The Grant Recipient shall provide such requests in writing.**

3. **Fund’s Duties.** Subject to the appropriation, allocation, and availability to CWMTF of funds for the Project, CWMTF hereby agrees to pay the Grant funds to the Grant Recipient in accordance with the payment procedures set forth herein.

4. **Grant Recipient’s Duties.** The Grant Recipient shall carry out the Project pursuant to the terms of this Contract.

5. **Contract Period.** The Fund’s commitment to disburse Grant funds under this Grant Agreement shall cease on the Expiration Date and in accordance with the schedule shown on Exhibit A. It is the responsibility of the Grant Recipient to ensure that the Project is completed by the Expiration Date. After the Expiration Date, any Grant monies remaining under this Grant Agreement will no longer be available to the Grant Recipient. **This Grant Agreement shall not be extended beyond the Expiration Date.**

6. **Fund Pre-Disbursement Requirements.** Prior to the disbursement of any Grant monies

under this Grant Agreement, the Grant Recipient shall deliver to the Fund all of the documentation described on Exhibits C, C.1 and C.2.

7. Disbursement of Grant Funds.

a. Application for Reimbursement. Disbursement of Grant funds for the Project shall be made by quarterly reimbursement of Grant Recipient's expenditures on the Project as set forth in Exhibits A and B. To obtain reimbursement, the Grant Recipient shall submit to the Fund's Contract Administrator the following documentation:

(i) A detailed narrative progress report describing the work accomplished on the Project and progress toward meeting the Project objectives, using the form shown on Exhibit D.

(ii) A completed and signed invoice form, as provided by the Fund and as shown in Exhibit E, accompanied by appropriate itemized documentation supporting all expenses claimed and that clearly identifies each expenditure for which reimbursement is claimed. The supporting documentation must be organized in a manner that clearly relates the expenses shown in the supporting documentation to the line items shown on Exhibit E. Any application for reimbursement that does not clearly identify each expenditure and relate each expenditure to the line items shown on Exhibit E will not be processed, and will be returned to the Grant Recipient for correction and re-submittal. **Grant Recipient shall identify any sales tax for which reimbursement has been or will be obtained from the State Department of Revenue, and such monies shall not be reimbursed.**

b. Limited Grant Fund Disbursement in January, June, July and December. Funds will not be disbursed during the first week of January, the last three weeks of June, the first week of July, and the last two weeks of December.

c. Certification by Engineer. At the option of the Fund, reimbursements may be made only on the certificate and seal of an appropriately qualified registered Professional Engineer, certifying that the work for which the reimbursement is requested has been completed in accordance with this Grant Agreement. However, the Fund may, at its discretion, make reimbursements without requiring such certificates, in which event the Grant Recipient shall furnish the Fund a list of and the amounts of items to be paid out of the reimbursement, or such other evidence as the Fund may require.

d. Reimbursement Based on Progress. The Grant Recipient agrees to proceed with diligence according to the schedule set out in Exhibit A and shall show appropriate progress prior to each reimbursement. Reimbursement may be withheld or delayed if Grant Recipient fails to make progress on the Project satisfactory to the Fund. Amounts withheld shall be reimbursed with subsequent reimbursements in the event that Grant Recipient is able to demonstrate an ability to resume satisfactory progress toward completion of the Project.

e. Proof of Payment. The Grant Recipient agrees to pay, as the work progresses, all bills for labor and materials for the Project, and agrees to submit to the Fund all such receipts, affidavits, canceled checks, or other evidences of payment as may be requested from time to time, and when and if requested by the Fund to furnish adequate proof of payment of all indebtedness incurred in the development of the Project.

g. CWMTF Retaining Portion of Funds Until Project Completion. The Fund will withhold payment from the Grant Recipient in the amount of \$5,000 of the Grant until the Grant Recipient has satisfactorily submitted its Final Report.

h. No Excess Costs. The Fund agrees to reimburse the Grant Recipient only for costs actually incurred by the Grant Recipient that do not exceed the funds budgeted for the Project shown on Exhibit B.

i. Costs of Project Administration. The Fund agrees to reimburse the Grant Recipient for administrative costs consisting only of labor costs for administrative work conducted exclusively on this Project. The Grant Recipient's applications to the Fund for reimbursement for Project administrative costs shall provide information that supports conformance with this requirement. The Fund considers only the following to be allowable labor costs for Project administration:

(i) Pay to payroll employees of the Grant Recipient, plus the Grant Recipient's cost of paying benefits on such pay (usually employees' pay times an audited or auditable benefits multiplier).

(ii) Pay to contract employees of the Grant Recipient (e.g., temporary office support), reimbursable at the Grant Recipient's actual cost, without application of a benefits multiplier.

(iii) Cost of professional services labor contracted by the Grant Recipient (e.g., engineering firm or consultant), reimbursable at the Grant Recipient's actual cost for that labor.

8. **Refunds and Reversion of Unexpended Funds.** The Grant Recipient shall repay to the Fund any compensation it has received that is in excess of the payment to which it is entitled herein, including any interest earned on funds granted pursuant to this Grant Agreement. Any unexpended Grant monies shall revert to the Fund upon termination of this Contract.

9. **Reporting Requirements.** Reporting requirements are set forth on Exhibit F. Reports shall be made on the form set forth on Exhibit D.

10. **Notice; Contract Administrators.** All notices, requests or other communications permitted or required to be made under this Grant Agreement or the other Grant Documents shall be given to the respective Contract Administrator. Notice shall be in writing, signed by the party giving such notice. Notice shall be deemed given three (3) business days following the date when deposited in the mail, postage prepaid, registered or certified mail, return receipt requested.

11. **Signature Warranty.** Each individual signing below warrants that he or she is duly authorized to sign this Contract for the respective party, and to bind said party to the terms and conditions of this Grant Agreement.

(The remainder of this page is intentionally left blank)

IN WITNESS WHEREOF, the Grant Recipient and the Fund have executed this Grant Agreement in four (4) originals as of the Effective Date. One (1) original shall be retained by each Party and two (2) shall be maintained on file in the offices of the North Carolina Department of Environment and Natural Resources. If there is any controversy among the documents, the document on file in the Fund's office shall control.

GRANT RECIPIENT:

By: _____
Name: _____
Title: _____

[SEAL]

ATTEST:

By: _____
Name: _____
Title: _____

APPROVED AS TO FORM:

County Attorney

FUND:

By: _____ (SEAL)
Name: Philip A. Baddour, Jr.
Title: Chairman, Board of Trustees

EXHIBIT A
CWMTF Project No. 2007S-007

Streams of the Project site: Mill Pond Creek, Upper Mud Creek, Gash Creek, and Reedy Patch Creek
Water bodies downstream: Mud Creek, French Broad River, Broad River
River Basin: French Broad
County: Henderson

Project Description:

The County of Henderson requested \$50,000 of a \$70,000 effort for planning that will improve stormwater quality in Henderson County. The Project will review ordinances, regulations, and policies; inventory stormwater systems; prepare maps of the stormwater systems; model surface hydrology and hydraulics; prepare a stormwater capital improvement plan; and prepare a stormwater master plan.

The Project site includes the following land areas:

Land Area Name	Approximate Acreage
Watershed of Mill Pond Creek upstream of South Rugby Road	1,000 acres
Watershed of Upper Mud Creek upstream of Middleton Road	3,000 acres
Watershed of Reedy Patch Creek in Edneyville/Bat Cave upstream of US 74	3,000 acres
Watershed of Gash Creek in Etowah upstream of its confluence with the French Broad River	1,500 acres
Total, watersheds	8,500 acres
Property of the Henderson County Landfill and Animal Shelter at 802 Stoney Mountain Road	125 acres
Jackson Park	200 acres
Dana Park	5 acres
East Flat Rock Park	10 acres
Etowah Park	20 acres
Westfeldt Park	15 acres
Edneyville Park	5 acres
Total, other properties	380 acres
Total, all land areas	8,880 acres

CWMTF administratively approved a grant of up to \$50,000 on June 27, 2007 in accordance with the CWMTF Board of Trustees policy on mini-grant approvals adopted on February 19, 2007.

Water Quality Benefits:

Stormwater planning will help the County reduce runoff of surface pollutants to known impaired sections of Mill Pond Creek, Upper Mud Creek, Gash Creek, Reedy Patch Creek, and the French Broad River.

Scope of Work:

1. Review ordinances, regulations, and policies. Identify goals for the County's stormwater plan. Review ordinances, regulations, and policies of Henderson County and similar communities and applicable North Carolina model stormwater ordinances. Identify actions needed to meet the goals and/or redefine the goals. Prepare a letter report of methods, findings, conclusions, and recommendations.
2. Inventory stormwater systems. Identify and mark locations of features of the Project site's natural (streams, drainage ways and wetlands) and engineered (pipes and catch basins) stormwater systems. Assess, measure, and record materials, sizes, dimensions, and condition of features of the stormwater systems. Survey locations of the stormwater systems' features in three dimensions using GPS surveying techniques. Observe and record specific streambank erosion problems, outlet structure erosion/scour issues, and general channel condition pertaining to water quality throughout the Project site.
3. Prepare maps of the stormwater systems. Download survey data to a GIS database. Prepare electronic and paper-copy maps of the stormwater systems.
4. Model surface hydrology and hydraulics. Develop models of stormwater runoff for a portion of the Project site to include the land areas given in the Project Description as the watersheds of Mill Pond Creek, Upper Mud Creek, Gash Creek, and Reedy Patch Creek. The models shall consider both existing conditions and built-out conditions within these land areas.
5. Prepare a stormwater capital improvement plan. Prepare a plan for the Project site that identifies specific programs and projects that the County of Henderson will seek to fund and implement over the next 10 years, consistent with identified goals and the County's stormwater master plan. The programs and projects identified may include; local and regional structural and non-structural water quality BMPs; improved channels for water quality improvements and conveyance; enlarged culverts and/or pipe systems for improved capacity and water quality benefits; improved channels for water quality improvements and conveyance; and land use control and/or preservation. The capital improvement plan will include capital budgets for each program/project, a timeline for each program/project, and a projection of annual capital funds needed to implement the plan. The plan also will project probable sources of the needed capital funds.
6. Prepare a stormwater master plan. Present the work conducted under this planning project, including goals, methods, findings, conclusions, and recommendations. Describe the land areas of the Project site and the existing stormwater system, identify problems and shortcomings in the existing system, and describe improvements that are needed for the system over the next 10 years.

Conditions:

1. The Grant Recipient shall submit to CWMTF a copy of each of the following work products, no later than the date noted in the Schedule below for submittal of items specified in Exhibit F, item 2: letter report of review ordinances, regulations, and policies; electronic and paper-copy maps of the stormwater system; stormwater capital improvement plan; and stormwater master plan.

2. Mapping of streams, drainageways and wetlands should be consistent with the standards established by the “Implementation Plan to Improve the Mapping and Digital Representation of Surface Waters in North Carolina” adopted by the NC Geographic Information Coordinating Council.
3. The Grant Recipient shall provide data to the North Carolina Rural Economic Development Center’s Water Resources Inventory and Data Management Project, if requested, and to the NC Geographic Information Coordinating Council’s NC One Map Project, if requested.
4. Matching funds are cash contributed by the Grant Recipient.

Schedule:

1. **Contract Expiration Date: August 31, 2009.** Complete the Project Scope of Work and submit the Project Final Report (items in Exhibit F, item 2, and as otherwise specified in Exhibit A) by this date. The Fund will not reimburse the Grant Recipient for Project costs incurred after this date.
2. **Latest Date for the Fund’s Receipt of Grant Recipient’s Final Request for Reimbursement: September 15, 2009.** The Fund must receive the Final Request for Reimbursement for the Project by this date. The Fund will not accept or process for payment any request for reimbursement received after this date. The Fund will not reimburse the Grant Recipient for costs incurred after the Contract Expiration Date.

EXHIBIT B
CWMTF Project No. 2007S-007

Project Budget

Item	CWMTF Grant Amount	Matching Funds*	Total Project Cost
Review ordinances, regulations, and policies	\$0	\$15,000	\$15,000
Inventory the stormwater systems, prepare maps of the stormwater systems, model surface hydrology and hydraulics, and prepare a stormwater capital improvement plan and a stormwater master plan	\$50,000	\$5,000	\$55,000
Total	\$50,000	\$20,000	\$70,000

* Matching funds are cash contributed by the Grant Recipient.

EXHIBIT C
CWMTF Project No. 2007-007

CWMTF Pre-Disbursement Checklist
Documents to Be Submitted Before CWMTF Can Disburse Funds

	Item	Item Description/What to Submit	When to Submit
1	Authorization to Obligate	Written authorization from the governing board or other appropriate authority stating that it agrees to the obligations of Grant Recipient set out in this Grant Agreement. [*See note below.]	Before first request for any reimbursement.
2	Matching Funds	Proof of availability of matching funds included in the Project Budget. [**See note below.]	Before first request for any reimbursement.
3	Assurances for Non-Federally Funded Contracts	Exhibit C.2.	Before first request for any reimbursement.
4	Documents in Exhibit A	Documents as detailed in Exhibit A “Conditions” as required prior to the release of CWMTF funds.	As given in Exhibit A.
5	Project Final Report	Report per Exhibit F, item 2.	Before or accompanying final request for reimbursement.

* Examples of proof of authorization to obligate include:

- Resolution of the governing board to obligate.
- Certified copy of board meeting minutes documenting giving of authority to obligate.

**Examples of proof of availability of matching funds include:

- Grants from other sources:
 - Copy of grant agreement.
 - Copy of grant award letter.
- Local agency matching funds:
 - Resolution of the governing board.
 - Budget showing allocation of matching funds to the Project, accompanied by a certified copy of board meeting minutes approving the budget or by a certified copy of board meeting minutes authorizing use of local matching funds for the Project.
 - Certified copy of board meeting minutes attesting to the use and amount of local funds for match.
 - Letters from other sources of matching funds attesting to contribution of the funds.

EXHIBIT C.1

Not Applicable

EXHIBIT C.2
ASSURANCES FOR NON-FEDERALLY FUNDED CONTRACTS

The Grant Recipient certifies that with regard to:

1. **DEBARMENT AND SUSPENSION** - To the best of its knowledge and belief that it and its principals:
 - (a) are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal, State, or local government agency;
 - (b) have not within a 3-year period preceding this Agreement been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - (c) are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - (d) have not within a 3-year period preceding this Agreement had one or more public transactions (Federal, State, or local) terminated for cause or default.

2. **LOBBYING** - To the best of his or her knowledge and belief, that:
 - (a) No Federal, State or local government appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal, State or local government agency; a member of Congress, North Carolina's General Assembly or local government body; an officer or employee of Congress, North Carolina's General Assembly or local government body, or an employee of a member of Congress, North Carolina's General Assembly or local government body, in connection with the awarding of any Federal, State or local government contract, the making of any Federal, State or local government grant, the making of any Federal, State or local government loan, the entering into of any Federal, State or local government cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal, State or local government contract, grant, loan, or cooperative agreement.
 - (b) If any funds other than Federal, State or local government appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency; a member of Congress, North Carolina's General Assembly or local government body; an officer or employee of Congress, North Carolina's General Assembly or local government body; or an employee of a member of Congress, North Carolina's General Assembly or local government body in connection with the Federal, State or local government contract, grant, loan, or cooperative agreement, the undersigned shall complete

and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

3. **DRUG-FREE WORK PLACE REQUIREMENTS** - It will comply by:

- (a) Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance is prohibited in the Grant Recipient's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
- (b) Establishing a drug-free awareness program to inform employees about -
 - (1) The dangers of drug abuse in the workplace;
 - (2) The Grant Recipient's policy of maintaining a drug-free workplace;
 - (3) Any available drug counseling, rehabilitation, and employee assistance programs; and
 - (4) The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
- (c) Making it a requirement that each employee to be engaged in the performance of the grant be given a copy of the statement required by paragraph (a) above;
- (d) Notifying the employee in the statement required by paragraph (a), above, that, as a condition of employment under the grant, the employee will -
 - (1) Abide by the terms of the statement; and
 - (2) Notify the employer of any criminal drug statue conviction for a violation occurring in the workplace no later than five days after such conviction;
- (e) Notifying the Fund within ten days after receiving notice under subparagraph (d)(2), above, from an employee or otherwise receiving actual notice of such conviction;
- (f) Taking one of the following actions, within 30 days of receiving notice under subparagraph (d)(2), above with respect to any employee who is so convicted -
 - (1) Taking appropriate personnel action against such an employee, up to and including termination; or
 - (2) Requiring such employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- (g) Making a good faith effort to continue to maintain a drug-free workplace through implementation of paragraphs (a), (b), (c), (d), (e), and (f), above.

AND

4. Will comply with the provisions of the Equal Employment Practices Act set out in Article 49A of Chapter 143 of the North Carolina General Statutes.
5. Will comply, as applicable, with the provisions of the Wage and Hour Act, Occupational Safety and Health Act of North Carolina, Controlled Substance Examination Regulation, Retaliatory Employment Discrimination, Safety and Health Programs and Committees, Workplace Violence Prevention, and other applicable provisions of Chapter 95 of the North Carolina General Statutes regarding labor standards.
6. Will comply with all applicable requirements of all other state laws, executive orders, regulations and policies governing the Fund.

As the duly authorized representative of the Grant Recipient, I hereby certify that the Grant Recipient will comply with the above certifications (Items 1 through 6):

1. Grant Recipient Name & Address:

2. Typed Name & Title of Authorized Representative:

3. Signature of Authorized Representative:

4. Date:

EXHIBIT D

CWMTF PROGRESS/FINAL REPORT FORM (see next page)



North Carolina Clean Water Management Trust Fund

Quarterly Progress Report and Cover Sheet for Final Report

Quarterly progress reports to be submitted every three months from the effective date of the contract and with each request for reimbursement.

Submit original to:

**Kevin Boyer
CWMTF
1101 Oberlin Rd., Suite 102
Raleigh, NC 27605**

Submit copy to:

**Tom Massie
CWMTF
P.O. Box 595
Sylva, NC 28779**

Check One:

Progress Report

Final Report:

In addition to this cover sheet, the final report **MUST** include all information outlined in the Final Report section of the grant contract. Refer to the contract for details.

Report Period: _____ to _____

Date Submitted: _____

CWMTF Project Number: **2007-007**

Grant Recipient: **County of Henderson**

Primary Contact: _____

Address: _____

Phone: _____

E-mail: _____

Brief Project Name/Description: **Stormwater Minigrant for Mapping of a Drainage System**

Contract Effective Date: _____

Contract Expiration Date: _____

Anticipated Completion Date: _____

Project Status (check one under each category below):

Project Schedule

- (1) _____ Project on schedule
- (2) _____ Project delayed
- (3) _____ Project canceled
- (4) _____ Project complete

Project Cost

- (1) _____ Cost unchanged
- (2) _____ Cost overrun
- (3) _____ Cost underrun

Narrative Progress Report. Provide a complete and detailed narrative status report on the project for the reporting period. Include the following (use additional pages as needed):

- Progress during the period.
- Problems encountered and resolutions.
- Next steps for the project.
- Anticipated problems or concerns.
- Other materials (photographs, charts) that demonstrate the project's status.

Signature

Date

EXHIBIT E

CWMTF INVOICE FORM (see next page)

EXHIBIT F

REPORTING AND AUDIT REQUIREMENTS

1. Progress Reports. The Grant Recipient shall submit a written detailed narrative progress report describing the work accomplished on the Project and progress toward meeting the Project objectives to the Contract Administrator of the Fund, **quarterly beginning three (3) months from the Effective Date in the format set forth on Exhibit D.**

2. Final Report. The Grant Recipient shall submit to the Contract Administrator and to the Fund's designated Field Representative a final report in accordance with the schedule shown on Exhibit A. The final report shall include:

- a. A narrative statement evaluating and summarizing the completed Project including a concise statement of the Scope of Work in Exhibit A, a detailed description of the objectives the Grant Recipient hoped to accomplish with the Project, and comparison of the objectives with accomplishments.
- b. A narrative description and evaluation of the water quality improvements achieved or are expected to be achieved as a result of this Project, referring at a minimum to the objectives given in Water Quality Benefits of Exhibit A. Include in the description and evaluation benefits provided by the Project in the context of other water quality improvement efforts in the Project's watershed.
- c. A summary of changes made to the Project Scope of Work (Exhibit A) and Project Budget (Exhibit B) and reasons for the changes.
- d. A discussion of the extent to which local partners and stakeholders participated in the Project, with respect to both funding and effort or time.
- e. A discussion of what the Grant Recipient might do differently on a similar future project (i.e., "lessons learned").
- f. Any other documents, reports or other evidence, including photographs, necessary to verify that the Project has been concluded in compliance with this Grant Agreement.
- g. A copy of the completed planning document that this Grant is funding.

If the final report is not acceptable to CWMTF, it shall be returned to the Grant Recipient for correction. Final payment will not be made until the final report is acceptable to CWMTF.

3. Project Audits. Grant Recipient agrees that the Fund and the State have the right to audit the books and records of the Grant Recipient pertaining to this Grant Agreement both during performance and for five (5) years after the completion or termination of this Grant Agreement or until all audit exceptions, if any, have been resolved, whichever is longer. The Grant Recipient shall retain complete accounting records, including original invoices, payrolls, contracts, or other documents clearly showing the nature of all costs incurred under this Grant Agreement, for that same period of time. The Grant Recipient agrees to make available at all reasonable times to the Fund all bid documents, and accurate books and records of all expenditures for costs applicable to this Grant Agreement which will facilitate the audit of the Grant Recipient's records.

4. Required Reporting for Disbursement of Special Appropriations to Non-State Entities Pursuant to NCGS §143-6.2 and 09 NCAC Subchapter 03M-Uniform Administration of State Grants. The North Carolina General Statutes and the North Carolina Administrative Code place certain reporting requirements on non-State entities that receive State funds through the disbursement of special appropriations. All such required reports shall be filed with the Fund, DENR and the Office of the State Auditor (OSA) on the forms required by the Offices of State Budget and Management (OSBM) and State Auditor. The specific reporting requirements are as follows:

(a) Reports Required.

(i) Grants Less Than \$25,000.00. If the Grant Recipient receives, uses or expends State funds in an amount less than \$25,000.00 within its fiscal year, it must comply with the reporting requirements of Title 09, Subchapter 03M of the North Carolina Administrative Code including:

- (A) A certification completed by the Grant Recipient's board of directors and management stating that the State funds were received, used or expended for the purposes for which they were granted; and
- (B) An accounting of the State funds received, used or expended.
- (C) All reporting requirements set forth in this Section 4(a)(i) shall be filed within six (6) months after the end of the Grant Recipient's fiscal year in which the State funds were received.

(ii) Grants \$25,000.00 up to \$500,000. If the Grant Recipient receives, uses or expends State funds in an amount of at least \$25,000.00 and up to \$500,000.00 within its fiscal year, it must comply with the reporting requirements of Title 09, Subchapter 03M of the North Carolina Administrative Code including:

- (A) A certification completed by the Grant Recipient's board of directors and management stating that the State funds were received, used or expended for the purposes for which they were granted;
- (B) An accounting of the State funds received, used or expended; and
- (C) A description of activities and accomplishments undertaken by the Grant Recipient with the State funds.
- (D) All reporting requirements set forth in this Section 4(a)(ii) shall be filed within six (6) months after the end of the Grant Recipient's fiscal year in which the State funds were received.

(iii) Grants Greater than \$500,000.00. A Grant Recipient that receives, uses, or expends State funds in an amount greater than \$500,000.00 within its fiscal year must comply with the reporting requirements of Title 09, Subchapter 03M of the North Carolina Administrative Code, including:

- (A) A certification completed by the Grant Recipient's board of directors and management stating that the State funds were received, used, or expended for the purposes for which they were granted;
- (B) An audit prepared and completed by a licensed Certified Public Accountant for the Grant Recipient, consistent with the reporting requirements of Title 09, Subchapter 03M of the North Carolina Administrative Code; and
- (C) A description of activities and accomplishments undertaken by the Grant

Recipient with the State funds.

(D) All reporting requirements set forth in this Section 4(a)(iii) shall be filed within nine (9) months after the end of the Grant Recipient's fiscal year in which the State funds were received.

(b) Delivery of Reports: Required reporting shall be filed by the Grant Recipient as follows:

- One copy to: North Carolina Office of the State Auditor, 20601 Mail Service Center, Raleigh, NC 27699-0601
- One copy to: DENR/Office of the Controller, 1606 Mail Service Center, Raleigh, NC 27699-1606
- One copy to: Clean Water Management Trust Fund, 1651 Mail Service Center, Raleigh, NC 27699-1651

Copies shall be mailed to the three addresses on the same date.

EXHIBIT G

DEFINITIONS

Unless indicated otherwise from the context, the following terms shall have as their meanings in this Grant Agreement the definitions set forth below. All definitions are from 09 North Carolina Administrative Code (“NCAC”) 03M.0102 unless otherwise noted. Any change to the rule or statute adopted by the authority that is the source of the definition shall be automatically incorporated herein.

- (1) "Agency" (as used in the context of the definitions below) shall mean and include every public office, public officer, or official (State or local, elected or appointed), institution, board, commission, bureau, council, department, authority or other unit of government of the State or of any county, unit, special district or other political sub-agency of government. For purposes of this Contract, agency shall mean and refer to North Carolina Clean Water Management Trust Fund.
- (2) "Audit" means an examination of records or financial accounts to verify their accuracy.
- (3) "Certification of Compliance" means a report provided by the agency to the Office of the State Auditor (“OSA”) that states that the Grant Recipient has met the reporting requirements established by 09 NCAC 03M and includes a statement of certification by the agency and copies of the Grant Recipient’s reporting package.
- (4) “Compliance Supplement” refers to the North Carolina State Compliance Supplement maintained by the State and Local Government Finance Agency within the North Carolina Department of the Treasurer that has been developed in cooperation with agencies to assist the local auditor in identifying program compliance requirements and audit procedures for testing those requirements.
- (5) "Contract" means a legal instrument that is used to reflect a relationship between the grantor, Grant Recipient, and sub-grant recipient, and is used interchangeably herein with the term “Grant Agreement.”
- (6) "Fiscal Year" means the annual operating year of the non-State entity.
- (7) "Financial Assistance" means assistance that non-State entities receive or administer in the form of grants, loans, loan guarantees, property (including donated surplus property), cooperative agreements, interest subsidies, insurance, food commodities, direct appropriations, and other assistance. Financial assistance does not include amounts received as reimbursement for services rendered to individuals for Medicare and Medicaid patient services.
- (8) "Financial Statement" means a report providing financial statistics relative to a given part of an organization's operations or status.
- (9) “Grant” means financial assistance provided by Clean Water Management Trust Fund to a Grant Recipient to carry out activities described in this Grant Agreement.
- (10) "Grant Recipient" shall have the meaning accorded to “Grantee” in NCGS §143-6.2(b): a non-State entity that receives a grant of State funds from a State agency, department, or institution but does not include any non-State entity subject to the audit and other reporting requirements of the Local Government Commission. For purposes of this Contract, Grant Recipient shall mean one of the entities identified as a party to this Contract. Likewise, Grantee shall mean a party to a deed or other instrument of

- conveyance that is vested with a real property interest by said instrument.
- (11) "Grantor" means, depending on the context, either an entity such as Clean Water Management Trust Fund that provides resources, generally financial, to another entity in order to achieve a specified goal or objective, or an entity that conveys a real property interest to a grantee.
 - (12) "Non-State Entity" has the meaning in NCGS §143-6.2(a)(1): A firm corporation, partnership, county or unit of local government, public authority, or any other person, organization, group, or governmental entity that is not a State agency, department or institution.
 - (13) "Public Authority" has the meaning in NCGS §§159-7(10) and 143-6.2(a)(3): A municipal corporation that is not a unit of local government, or a local governmental authority, board, commission, council, or agency that (i) is not a municipal corporation and (ii) operates on an area, regional, or multiunit basis, and the budgeting and accounting systems of which are not fully a part of the budgeting and accounting systems of a unit of local government.
 - (14) "Single Audit" means an audit that includes an examination of an organization's financial statements, internal controls, and compliance with the requirements of Federal or State awards.
 - (15) "Special Appropriation" means a legislative act authorizing the expenditure of a designated amount of public funds for a specific purpose.
 - (16) "State Funds" means any funds appropriated by the North Carolina General Assembly or collected by the State. State funds include federal financial assistance received by the State and transferred or disbursed to non-State entities. Both Federal and State funds maintain their identity, as they are sub-granted to other organizations. Pursuant to NCGS 143-6.2(b), the terms "State grant funds" and "State grants" do not include any payment made by the Medicaid program, the Teachers' and State Employees' Comprehensive Major Medical Plan, or other similar medical programs.
 - (17) "Sub-grant recipient" has the meaning in NCGS §143-6.2(b): a non-State entity that receives a grant of State funds from a grant recipient or from another sub-grant recipient, but does not include any non-State entity subject to the audit and other reporting requirements of the Local Government Commission.
 - (18) "Unit of Local Government" has the meaning in NCGS §§ 159-7(15) and 143-6.2(a)(2): A municipal corporation that has the power to levy taxes, including a consolidated city-county as defined by NCGS §160B-2(1), and all boards, agencies, commissions, authorities, and institutions thereof that are not municipal corporations.

EXHIBIT H

GENERAL TERMS AND CONDITIONS

A. Affirmative Covenants

1. Compliance with Laws. Grant Recipient agrees to perform and maintain the Project in compliance with all federal, state and local laws and regulations, including, without limitation, environmental, zoning and other land use laws and regulations. The Grant Recipient agrees to take reasonable steps to advise Project participants that they shall comply in the same manner.
2. No Liens. The Grant Recipient shall take such action, including, without limitation, obtaining lien waivers, as shall be reasonably necessary to avoid liens in any way related to the Project.
3. No Mitigation. Grant Recipient shall not use the Project or any portion thereof to satisfy compensation mitigation requirements under 33 U.S.C. § 1344 or N.C.G.S. 143-214.11.
4. No Pollution Credits. If the Project enables the Grant Recipient to reduce the discharge of phosphorus, nitrogen, or any other nutrient or pollutant below, or further below, applicable regulatory limits (“Pollution Credits”), Grant Recipient shall not sell, trade or give to another person or entity that percentage of any resulting credits achieved by the Project corresponding to the percentage of the Project costs provided by the Fund.
5. Right of Entry and Inspections. The Grant Recipient shall permit representatives of the Fund to visit the Project and any other premises of the Grant Recipient to examine any items purchased with the Grant funds and to review the activities of the Grant Recipient pursuant to the Grant, including books and records in any way related to the Grant or the Project.
6. Retention, Operation, Maintenance and Use. Grant Recipient agrees to complete the Project as approved by the Fund. The descriptions, purpose, schedules, scope of work and budgets set out in Exhibits A and B, and accompanying or related plans, specifications, estimates, procedures and maps submitted to the Fund by the Grant Recipient are the foundation of this Grant Agreement. Only changes deemed non-material in type at the discretion of the Executive Director may be made without the consent of the Clean Water Management Trust Fund Board of Trustees.
7. Material Modifications. Any proposed material modification of the Project shall be subject to approval by the Fund.
8. Publicity. To the extent possible, the Grant Recipient will use its best efforts to appropriately publicize the Project’s water quality benefits to the general public, local government and state representatives, including the role of the Fund in the funding and development of the Project. **At least ten (10) days prior to any planned event involving the Project, the Grant Recipient shall notify the Fund’s Public Information Officer of the event (919.733.6375).**

9. Compliance with Reporting Requirements. Grant Recipient shall comply with the reporting requirements contained herein and in NCGS §143-6.2 and 09 NCAC Subchapter 03M – Uniform Administration of State Grants, if applicable.

10. Conflicts of Interest. Grant Recipient shall at all times comply with its conflict of interest policy

11. Additional Requirements. Grant Recipient shall comply with all legal requirements applicable to the use of the Grant.

B. Representations and Warranties

In order to induce the Fund to enter into this Grant Agreement and to make the Grant as herein provided, the Grant Recipient after reasonable inquiry makes the following representations, warranties and covenants, which shall remain in effect after the execution and delivery of this Grant Agreement and any other documents required hereunder, any inspection or examinations at any time made by or on behalf of the Fund, and the completion of the Project by the Grant Recipient:

1. No Actions. There are no actions, suits, or proceedings pending, or to the knowledge of the Grant Recipient, threatened, against or affecting the Grant Recipient before any court, arbitrator, or governmental or administrative body or agency which might affect the Grant Recipient's ability to observe and perform its obligations under this Grant Agreement.

2. Validity of Grant Documents. Upon execution and delivery of items required hereunder, this Grant Agreement and the other grant documents and items required hereunder will be valid and binding agreements, enforceable in accordance with the terms thereof.

3. No Untrue Statements. Neither this Grant Agreement nor any information, certificate, statement, or other document furnished by Grant Recipient in connection with the Grant, contains any untrue statement of a material fact or omits disclosure of a material fact which affects the Project or the ability of the Grant Recipient to perform this Grant Agreement.

4. Additional Requirements. Grant Recipient shall comply with all legal requirements applicable to the use of the Grant funds.

5. Books and Records. The Grant Recipient agrees to maintain and make available to the Fund at all reasonable times all documents, books, and records of all expenditures for costs applicable to this Grant Agreement, and to submit properly certified billings for such costs on forms prescribed by the Fund and supported by detailed data sheets which will facilitate the audit of the Grant Recipient's records.

C. Termination by Mutual Consent

The Parties may terminate this Contract by mutual written consent with 60 days prior written notice to the Contract Administrators, or as otherwise provided by law.

D. Termination for Cause; Events of Default

1. Events of Default. The happening of any of the following, after the expiration of any applicable cure period without the cure thereof, shall constitute an event of default ("Event(s) of Default") by the Grant Recipient of its obligations to the Fund, and shall entitle the Fund to exercise all rights and remedies under this Grant Agreement and as otherwise available at law or equity:

(a) Default in Performance. The default by the Grant Recipient in the observance or performance of any of the terms, conditions or covenants of this Grant Agreement; provided, however, that no such default shall occur until the Grant Recipient has been given written notice of the default and 30 days to cure have elapsed.

(b) Misrepresentation. If any representation or warranty made by the Grant Recipient in connection with the Grant or any information, certificate, statement or report heretofore or hereafter made shall be untrue or misleading in any material respect at the time made.

(c) Eligibility of Grant Recipient. If Grant Recipient ceases to be qualified to receive Grant funds or is dissolved or otherwise ceases to exist.

(d) Abandonment of the Project. If Grant Recipient abandons or otherwise ceases to continue to make reasonable progress towards completion of the Project.

E. Fund's Rights and Remedies

If an Event of Default shall occur, the Fund shall have the following rights and remedies, all of which are exercisable at the Fund's sole discretion, and are cumulative, concurrent and independent rights:

1. Project Termination. If an Event of Default occurs, the Fund may, at its discretion suspend and/or terminate all obligations of the Fund hereunder. If, in the judgment of the Fund, such failure was due to no fault of the Grant Recipient, amounts required to resolve at minimum costs any irrevocable obligations properly incurred by Grant Recipient shall, in the discretion of the Fund, be eligible for assistance under this Grant Agreement.

2. Additional Remedies. If an Event of Default occurs, the Fund shall have the power and authority, consistent with its statutory authority: (a) to prevent any impairment of the Project by any acts which may be unlawful or in violation of this Grant Agreement or any other item or document required hereunder, (b) to obtain title to or otherwise preserve or protect its interest in the Project, (c) to compel specific performance of any of Grant Recipient's obligations under this Grant Agreement, (d) to obtain return of all Grant Funds, including equipment if applicable and/or (e) to seek damages from any appropriate person or entity. The Fund, or its designee, may also, at the Fund's sole discretion, continue to complete the Project, or any portion thereof deemed appropriate by the Fund, and the Grant Recipient shall cooperate in the completion of the Project. The Fund shall be under no obligation to complete the Project.

3. Nonwaiver. No delay, forbearance, waiver, or omission of the Fund to exercise any right,

power or remedy accruing upon any Event of Default shall exhaust or impair any such right, power or remedy or shall be construed to waive any such Event of Default or to constitute acquiescence therein. Every right, power and remedy given to the Fund may be exercised from time to time and as often as may be deemed expedient by the Fund.

F. Miscellaneous

1. Modification. This Grant Agreement may be rescinded, modified or amended only by written agreement executed by all parties hereto.

2. Benefit. This Grant Agreement is made and entered into for the sole protection and benefit of the Fund, the State and the Grant Recipient, and their respective successors and assigns, subject always to the provisions of paragraph F.8 of this Exhibit H. Except for the State, there shall be no third party beneficiaries to this Grant Agreement.

3. Further Assurance. In connection with and after the disbursement of Grant funds under this Grant Agreement, upon the reasonable request of the Fund, the Grant Recipient shall execute, acknowledge and deliver or cause to be delivered all such further documents and assurances, and comply with any other requests as may be reasonably required by the Fund or otherwise appropriate to carry out and effectuate the Grant as contemplated by this Grant Agreement and the purposes of the Conservation Easement.

4. Compliance by Others. The Grant Recipient shall be responsible for compliance with the terms of this Grant Agreement by any sub-grant recipient, including but not limited to, a political subdivision, public agency, or qualified non-profit organization to which funds or obligations are transferred, delegated or assigned pursuant to this Grant Agreement. Delegation by the Grant Recipient to a sub-grant recipient of any duty or obligation hereunder does not relieve the Grant Recipient of any duty or obligation created hereunder. Failure by such sub-grant recipient to comply with the terms of this Grant Agreement shall be deemed failure by the Grant Recipient to comply with the terms of this Grant Agreement. Any such delegation of duties or obligations shall be in writing, signed by the Grant Recipient and sub-grant recipient, and shall contain an affirmative covenant by the sub-grant recipient that it shall abide by the rules set forth in Title 09, Subchapter 03M of the North Carolina Administrative Code.

5. Independent Status of the Parties. The Parties are independent entities and neither this Grant Agreement nor any provision of it or any of the Grant Documents shall be deemed to create a partnership or joint venture between the Parties. Further, neither the Grant Agreement nor any of the Grant Documents shall in any way be interpreted or construed as making the Grant Recipient, its agents or employees, agents or representatives of the Fund. The Grant Recipient is and shall be an independent contractor in the performance of this Contract and as such shall be wholly responsible for the work to be performed and for the supervision of its employees. In no event shall the Fund be liable for debts or claims accruing or arising against the Grant Recipient. The Grant Recipient represents that it has, or shall secure at its own expense, all personnel required in the performance of this Contract. Such employees shall not be employees of, nor have any individual contractual relationship with, the Fund.

6. Indemnity. The Grant Recipient agrees, to the fullest extent permitted by law, to release,

defend, protect, indemnify and hold harmless the State, the Fund, its Trustees, employees and agents against claims, losses, liabilities, damages, and costs, including reasonable attorney fees, which result from or arise out of damages or injuries to persons or property caused by the negligent acts or omissions of Grant Recipient, its employees, or agents in use or management of the Project. The obligations under this Section are independent of all other rights or obligations set forth herein. This indemnity shall survive the disbursement of the Grant funds, as well as any termination of this Grant Agreement.

7. No Discrimination. The Grant Recipient shall assure that no person will be excluded from participation in, be denied the benefits of, or be subject to discrimination under any program or activity covered by this Grant Agreement solely on the grounds of race, color, age, religion, sex or national origin.

8. Binding Effect, Contract Assignable. The terms hereof shall be binding upon and inure to the benefit of the successors, assigns, and personal representatives of the parties hereto; provided, however, that the Grant Recipient may not assign this Grant Agreement or any of its rights, interests, duties or obligations hereunder or any Grant proceeds or other moneys to be advanced hereunder in whole or in part without the prior written consent of the Fund, which may be withheld for any reason and that any such assignment (whether voluntary or by operation of law) without said consent shall be void.

9. Governing Law, Construction and Jurisdiction. This Grant Agreement and the other Grant documents and all matters relating thereto shall be governed by and construed and interpreted in accordance with the laws of the State of North Carolina, notwithstanding the principles of conflicts of law. The headings and section numbers contained herein are for reference purposes only. The terms of this Grant Agreement shall be construed according to their plain meaning, and not strictly construed for or against either party hereto. The Grant Recipient hereby submits to the jurisdiction of the state and Federal courts located in North Carolina and agree that the Fund may, at its option, enforce its rights under the Grant Documents in such courts. The parties hereto intend this document to be an instrument executed under seal. The Fund and any party that is an individual, partnership or limited liability company hereby adopts the word "SEAL" following his/her signature and the name of the Fund or partnership or limited liability company as his/her/its legal seal.

10. Savings Clause. Invalidation of any one or more of the provisions of this Grant Agreement, or portion thereof, shall in no way affect any of the other provisions hereof and portions thereof which shall remain in full force and effect.

11. Additional Remedies. Except as otherwise specifically set forth herein, the rights and remedies provided hereunder shall be in addition to, and not in lieu of, all other rights and remedies available in connection with this Grant Agreement.

12. Survival. Where any representations, warranties, covenants, indemnities or other provisions contained in this Grant Agreement by its context or otherwise, evidences the intent of the parties that such provisions should survive the termination of this Grant Agreement or any Closing, the provisions shall survive any termination or Closing. Without limiting the generality of the foregoing, the parties specifically acknowledge and agree that the provisions of Exhibit H,

Exhibit I, and the conditions shown on Exhibit A shall survive any termination of this Grant Agreement as well as any Closing.

13. Incorporation of Exhibits. All exhibits attached to this Contract are fully incorporated as if set forth herein.

14. Entire Agreement. This Grant Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof. All recitals, exhibits, schedules and other attachments hereto are incorporated herein by reference.

15. Headings. The headings of the various sections of this Grant Agreement have been inserted for convenience only and shall not modify, define, limit or expand the express provisions of this Grant Agreement.

16. Time of the Essence. Time is of the essence in the performance of this Agreement.

AGREEMENT FOR ENGINEERING SERVICES

This AGREEMENT, made and entered into this the ____ day of **July, 2008**, by and between **Henderson County** (OWNER) and McGill Associates, P.A. (ENGINEER).

WHEREAS, the OWNER proposes to do certain work toward the accomplishment of the PROJECT entitled Henderson County Stormwater Master Plan and

WHEREAS, the ENGINEER desires to provide professional services in accordance with this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and benefits contained herein, it is hereby mutually understood and agreed as follows:

SECTION 1 - GENERAL SERVICES

The ENGINEER shall:

- 1.1 The ENGINEER shall, as directed by the OWNER, provide professional engineering services for the OWNER in all phases of the PROJECT; serve as OWNER's professional engineering representative for the PROJECT; and shall give professional consultation and advice to OWNER during the performance of the services hereunder.
- 1.2 The ENGINEER shall provide all personnel required in performing the PROJECT unless otherwise provided herein. All services rendered hereunder shall be performed by the ENGINEER or under his supervision and all personnel engaged in the PROJECT shall be fully qualified under North Carolina law to perform such services. None of the services covered by this Agreement shall be subcontracted without the prior approval of the OWNER.
- 1.3 The ENGINEER shall obtain and furnish, or cause to be obtained and furnished, approvals and permits from all governmental authorities having jurisdiction over the PROJECT, unless otherwise agreed to herein.
- 1.4 The ENGINEER shall seek and obtain authorization from the OWNER or the OWNER's assignee before proceeding with the PROJECT, or before performing any Additional Services as described in Section 3, or before performing any other services which would not be included in the fee for Basic Services set forth in Section 6 hereof, subject to OWNER's right to terminate as herein provided.



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- 1.5 The ENGINEER shall comply with all existing federal, state and local laws and regulations regarding equal employment opportunity. The ENGINEER is further obligated to include all requirements hereunder in any subcontract written by him in association with this Agreement.



SECTION 2 - BASIC SERVICES

2.1 SCOPE OF SERVICES

- 2.1.1 The Engineer shall provide the professional engineering services outlined in Attachment B – Project Scope of Services Stormwater Master Plan for the OWNER in all phases of the PROJECT.



SECTION 3 - ADDITIONAL SERVICES

If Authorized by the OWNER, the ENGINEER will furnish or obtain from others additional services of the following types which are not considered Basic Services under this Agreement.

- 3.1 Additional services resulting from significant changes in general scope of the PROJECT or its design including, but not limited to, changes in size, complexity, OWNER's schedule, or character of construction.
- 3.2 Revising previously approved studies, reports, design documents, drawings or specifications, when such revisions are due to causes beyond the control of the ENGINEER.
- 3.3 Preparing additional documents requested by the OWNER for work which is outside of that specifically listed in Attachment B – Project Scope of Services.
- 3.4 Services in connection with change orders to reflect changes requested by the OWNER if the resulting change in compensation for Basic Services is not commensurate with the additional services rendered.
- 3.5 Preparing to serve or serving as a witness for the OWNER in any litigation, condemnation or other legal or administrative proceeding involving the PROJECT.
- 3.6 Additional services in connection with the PROJECT, including services normally furnished by the OWNER and services not otherwise provided for in this Agreement.



SECTION 4 - OWNERS RESPONSIBILITIES

The OWNER shall:

- 4.1 Provide full information as to the requirements for the PROJECT.
- 4.2 Assist the ENGINEER by placing at disposal all available information pertinent to the PROJECT including previous documents and any other data relative to the PROJECT.
- 4.3 Furnish the ENGINEER any existing data and information for property boundary, easement, right-of-way, topographic and utility surveys; zoning and deed restriction; all of which the ENGINEER may rely upon in performing his services under this Agreement.
- 4.4 Guarantee access to and make all provisions for the ENGINEER to enter upon public and private property as required for the ENGINEER to perform the services under this Agreement.
- 4.5 Examine all studies, reports, sketches, estimates, specifications, drawings, proposals and other documents presented by the ENGINEER and render decisions and comments pertaining thereto within a reasonable time so as not to delay the services of the ENGINEER.
- 4.6 Designate a person to act as OWNER's representative with respect to the work to be performed under this Agreement; and such person shall have complete authority to transmit instructions, receive information, interpret and define OWNER's policies and decisions with respect to materials, equipment, elements and systems pertinent to the services covered by this Agreement.
- 4.7 Give prompt notice to the ENGINEER whenever the OWNER observes or otherwise becomes aware of any defect in the PROJECT.
- 4.8 Furnish, or direct the ENGINEER to provide necessary Additional Services as stipulated in Section 3 of this Agreement or other services as required.
- 4.9 Bear all costs incident to compliance with the requirements of this Section 4.



SECTION 5 - PERIOD OF SERVICES

- 5.1 Unless this Agreement has been terminated as provided in paragraph 7.1, the ENGINEER will be obligated to render services hereunder for a period which may reasonably be required for the services described herein. The ENGINEER may decline to render further services hereunder if the OWNER fails to give prompt approval of the various phases as outlined. Upon receiving a written authorization to proceed, the ENGINEER shall provide the OWNER with a written schedule of completion for the services so authorized.
- 5.2 If the PROJECT is delayed significantly for reasons, beyond the ENGINEER's control, the various rates of compensation provided for elsewhere in this Agreement shall be subject to renegotiation.
- 5.3 It is anticipated the PROJECT will begin in July of 2008 pending execution of this Agreement. The Tasks of this project are anticipated to be completed as listed in Attachment B – Scope of Services.



SECTION 6 - PAYMENT TO THE ENGINEER

6.1 PAYMENT FOR BASIC SERVICES

6.1.1 The OWNER will pay the ENGINEER for Basic Services as outlined in Section 2 an amount based on actual time spent and expenses incurred by principals and employees of the ENGINEER assigned to the PROJECT in accordance with Attachment A - Basic Fee Schedule.

6.1.2 The OWNER will pay the ENGINEER as outlined above in Paragraph 6.1.1 a lump sum fee of **\$70,000**.

6.2 PAYMENT FOR ADDITIONAL SERVICES

The OWNER will pay the ENGINEER for Additional Services as outlined in Section 3 an amount based on actual time spent and expenses incurred by principals and employees of the ENGINEER assigned to the PROJECT in accordance with Attachment A - Basic Fee Schedule, should any of these services be requested by the OWNER.

6.3 TIMES OF PAYMENT

The OWNER will make prompt monthly payments in response to the ENGINEER's monthly detailed statements for all services rendered under this Agreement.

6.4 GENERAL

6.4.1 If the OWNER fails to make any payment due the ENGINEER on account of his services and expenses within sixty (60) days after receipt of the ENGINEER's bill therefor, the ENGINEER may, after giving seven (7) days written notice to the OWNER, suspend services under this Agreement until he has been paid in full all amounts due him on account of his services and expenses.

6.4.2 If the Agreement is terminated at the completion of any phase of the Basic Services called for under Section 2, progress payment to be made to the ENGINEER on account of services rendered shall constitute total payment for services rendered. If this Agreement is terminated during any phase of the Basic Services, the ENGINEER shall be paid for services rendered on the basis of his reasonable estimate of the portion of such phase completed prior to termination. In the event of any termination, the ENGINEER will be paid for all his reasonable expenses resulting from such termination, and for any unpaid reimbursable expenses.



6.4.3 If, prior to termination of this Agreement, any work designed or specified by the ENGINEER, under Section 2, is suspended in whole or in part for more than three (3) months or is abandoned, after written notice from the OWNER, the ENGINEER shall be paid for services performed prior to receipt of such notice from the OWNER as provided in paragraph 6.4.2 for termination during any phase of his service.



SECTION 7 - GENERAL CONDITIONS

7.1 TERMINATION

- 7.1.1 In the event that the OWNER finds that it is inadvisable or impossible to continue the execution of the PROJECT; or if the ENGINEER shall fail to fulfill in a timely and proper manner his obligations under this Agreement; or, if the ENGINEER shall violate any of the covenants, agreements, or stipulations of this Agreement; or if the services called for in this Agreement are not completed within the time period specified under Section 5, or if the ENGINEER becomes subject to a voluntary or involuntary adjudication of bankruptcy or makes a general assignment for the benefit of creditors; then the OWNER has the right to terminate at any time this Agreement or any task or phase of work being performed herein by providing ten (10) days written notice to the ENGINEER of such termination and specifying the effective date of such termination; provided, however, that during such period of ten (10) days the ENGINEER shall have the opportunity to remedy such failures or violations to avoid such termination.
- 7.1.2 In the event of termination, as provided herein, the ENGINEER shall be paid for all services performed and actual expenses incurred up to the date of termination pursuant to Section 6.4.2 herein.

7.2 OWNERSHIP OF DOCUMENTS

- 7.2.1 All documents and data are and remain the property of the ENGINEER as instruments of service. The OWNER shall be provided hard and digital copies of all documents, in consideration of which the OWNER will use them solely in connection with the PROJECT, and not for resale. Re-use for extension of the PROJECT, or for new PROJECTs shall require written permission of the ENGINEER and shall entitle him to further compensation at a rate to be agreed upon by OWNER and ENGINEER at the time of such re-use.

7.3 ARBITRATION

- 7.3.1 Should any dispute arise between the parties hereto concerning this Agreement or the rights and duties of either in relation thereto, such dispute may be settled by arbitration upon agreement of the parties. Either party may request arbitration by giving written notice to the other party setting forth the dispute which the party seeks to arbitrate. Each party shall have ten (10) days from delivery of the notice to the other party within which to appoint an engineer, licensed in the State of North Carolina, to act as an arbitrator and to notify the other party in writing of the name and address of the engineer so appointed, or to notify the other party in writing of his refusal to arbitrate. In the event a party fails to notify the other party in writing of his refusal to arbitrate or



fails to appoint an arbitrator as provided herein, then the dispute shall be submitted and decided by the arbitrator who has been duly appointed. Once each party has duly appointed an arbitrator, then the arbitrator shall have thirty (30) days within which to investigate the dispute, agree on a resolution of the dispute, and provide each of the parties with a written decision signed by each of the arbitrators. The thirty (30) day period may be shortened or lengthened by agreement of the parties. In the event the arbitrators cannot agree on a resolution to the dispute within the time provided, then the arbitrators shall have an additional seven (7) days within which to appoint a third arbitrator, who shall also be an engineer duly licensed to practice in the State of North Carolina. Within twenty (20) days from the date of appointment of a third arbitrator, the arbitrators shall render a written decision to each of the parties setting forth a resolution of the dispute which has been agreed to by two of the three arbitrators. The written decision of the arbitrators shall be binding on the parties. The costs of arbitration shall be borne equally by the parties.

7.4 ESTIMATES

Since the ENGINEER has no control over the cost of labor, materials, or equipment, or over the Contractor(s)' methods of determining prices, or over competitive bidding or market conditions, any cost estimates are to be made on the basis of experience and qualifications and represent best judgement as a design professional familiar with the construction industry, but the ENGINEER cannot and does not guarantee that proposals, bids or the PROJECT construction cost will not vary from cost estimates prepared by him.

7.5 INSURANCE AND CLAIMS

7.5.1 The ENGINEER will secure and maintain such insurance as will protect him from claims under workmen's compensation acts, claims for damages because of bodily injury including personal injury, sickness, or disease, or death of any of his employees or of any person other than his employees, and from claims for damages because of injury to or destruction of tangible property including loss of use resulting therefrom. Said insurance policy or policies shall be written by a company or companies and in a form and substance approved by the OWNER prior to the policies being put into effect, and shall be in an amount not less than one million dollars (\$1,000,000).



7.6 SUCCESSORS AND ASSIGNS

The OWNER and the ENGINEER each binds himself and his partners, successors, executors, administrators and assigns to the other party of this Agreement and to the partners, successors, executors, administrators and assigns of such other party, in respect to all covenants of this Agreement; except as above, neither the OWNER nor the ENGINEER will assign, sublet or transfer his interest in this Agreement without the written consent of the other. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of any public body which may be party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than the OWNER and the ENGINEER.

7.7 ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the OWNER and ENGINEER and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented or modified by a duly executed written instrument.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement as of the day and year first written above.

McGILL ASSOCIATES, P.A.

Henderson County

By: 

By: _____

J.P. Johns, P.E.

Name: _____

SENIOR PROJECT MANAGER

Title: _____



Attachment A- Basic Fee Schedule McGill Associates, P.A.

PROFESSIONAL TITLE	Hourly Rate
Senior Project Manager	\$135.00
Project Manager	\$125.00
Project Consultant.....	\$110.00
Senior Project Engineer	\$110.00
Project Engineer	\$ 90.00
Engineering Associate	\$ 75.00
Senior Engineering Technician	\$ 80.00
Engineering Technician	\$ 70.00
Senior Planner	\$ 80.00
Property Specialist	\$ 60.00
Planner	\$ 55.00
Senior Construction Administrator	\$ 95.00
Construction Administrator	\$ 75.00
Construction Document Coordinator	\$ 50.00
Senior Construction Field Representative	\$ 65.00
Construction Field Representative	\$ 55.00
Surveying Services Manager	\$110.00
Survey/GIS Technician	\$ 55.00
Firm Principal.....	\$150.00
Finance Officer	\$ 75.00
Senior CADD Operator	\$ 65.00
CADD Operator	\$ 50.00
Clerical	\$ 40.00

I. EXPENSES

- A. Mileage - \$0.55/mile
- B. Telephone, reproduction costs, postage, overnight lodging, meals, and other incidental expense shall be a direct charge per receipts.

II. ASSOCIATED SERVICES

Associated services required by the project such as soil analysis, materials testing, etc., shall be at a cost plus ten (10) percent.



Attachment B – Project Scope of Services Henderson County Stormwater Master Plan

I. Project Overview

General

Henderson County received a Stormwater Master Plan Grant from the Clean Water Management Trust Fund to develop a comprehensive stormwater management plan. County officials are anxious to use this opportunity to implement a comprehensive, innovative, and aggressive stormwater program. This Scope of Services pertains to the engineering services associated with the Clean Water Management Trust Grant application.

II. Stormwater Master Plan Scope of Services

The Henderson County Stormwater Master Plan will:

- Assess current stormwater ordinances regulations and policies.
- Implement the requirements of the NPDES Phase II Permit including NPDES outfall inventory and illicit discharge detection and collection and assessment of existing stormwater infrastructure conditions and capacity for Henderson County facilities.
- Collect and assess existing stormwater infrastructure conditions and capacity for specific problem areas as identified by Henderson County.
- Collect and assess existing stream channel conditions for water quality degradation and capacity for specific problem areas as identified by Henderson County.
- Develop solutions for stormwater quantity issues.
- Develop solutions for stormwater quality issues.
- Create a Capital Improvements Plan (CIP) to manage current and future stormwater needs for Henderson County.

Task 1 – Creating a Stormwater Ordinance

McGill Associates will review existing Henderson County ordinances, regulations, and policies that pertain to stormwater, water quality, land development, sediment and erosion control, and flood protection. McGill Associates will review the State of North Carolina Phase II Stormwater Model Ordinance to determine which sections are applicable to Henderson County.

McGill Associates will review existing stormwater ordinances, regulations, and policies of municipalities similar to Henderson County. McGill Associates will create a matrix that will be used to compare the major components of each ordinance, regulation, and policy. Based on the information gathered and referenced in the matrix along with the input from Henderson County staff, McGill Associates will create and recommend a Stormwater Ordinance, including illicit discharge provisions as outlined in the NC Phase II Model Ordinance, which will reflect the stormwater management goals of Henderson County. The development of the Stormwater Ordinance may consolidate existing sediment and erosion control and watershed ordinances. The draft ordinance will be formatted into the Natural Resources section of the Henderson County Land Development Code.



Task 2 – Inventory of Existing Henderson County Facilities Stormwater Infrastructure

McGill Associates will create an inventory protocol for the critical stormwater infrastructure for specific Henderson County facilities as determined by Henderson County staff. McGill Associates will work cooperatively with Henderson County staff to employ proper inventory and data collection techniques and database development. Due to the size and area of the existing Henderson County stormwater infrastructure, a complete inventory will not be feasible for this project.

The County facilities to be inventoried will include the following:

- Landfill and Animal Shelter Property
- King Street Office Building
- Human Services Building Property
- Courthouse and Detention Center Property
- Historic Courthouse Property
- Garage/ Maintenance Property
- Parks
 - Jackson Park
 - Dana Park
 - East Flat Rock Park
 - Etowah Park
 - Westfelt Park
 - Edneyville Park (existing and under-construction)

Other County facilities may include the following:

- *Chamber of Commerce Building*
- *Spectrum Youth Shelter*
- *Travel and Tourism*
- *Nuckolls Building*
- *EMS Offices*
- *Libraries*
 - *Hendersonville*
 - *Etowah*
 - *Green River*
 - *Edneyville*

NPDES Outfall Inventory

In consultation with Henderson County, a standard illicit discharge collection protocol for Henderson County facilities will be created; it will be consistent with the NPDES Phase II requirements. NPDES outfall inventory will be conducted according to the following:

- Outfalls will be mapped using North Carolina State Plane grid coordinates and will be described using the attribution specified in the geospatial database created for Henderson County.
- The minimum pipe size for NPDES Outfalls collected that do not show signs of illicit discharge will be 12-inches in diameter.



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- There will be no pipe size limitation for identifying potential illicit discharges (dry weather flows, significant discoloration, significant odor, significant temperature impacts, oil, grease, suds etc.).
 - Shot placement will be on pipe inverts for NPDES outfalls.

During field data collection, the project team will be attentive to identifying severe illicit discharges. These observations will be immediately relayed to Henderson County for confirmation and any needed reconnaissance.

Task 3 – Inventory of Existing Critical Area Stormwater Infrastructure

The project team will collaborate with Henderson County to determine the critical stormwater areas and the structures to be inventoried for the stormwater master plan. The Henderson County staff will determine the critical stormwater areas of highest priority. These areas will include:

1. Mill Pond Creek (upstream of South Rugby Road)
2. Upper Mud Creek (from Berea Church Road to Middleton Road)
3. Reedy Patch Creek in Edneyville/Bat Cave (from St. Paul Rd to US 74)
4. All of Gash Creek in Etowah (on 303d list)

The inventory will include locating and attributing storm water conveyance structures such as pipes, culverts, bridges, junction boxes, catch basins, roadside ditches, drainage swales, open channel cross sections, and pipe outfalls. Inventory will be collected on pipes 12-inches in diameter and larger.

To expedite data collection procedures and to minimize the cost of the data collection, all structures will be collected with mapping grade accuracy.

Field stormwater conveyance inventory will be collected for open and closed storm drainage systems.

Open System Inventory Items

Typical open system items include, but are not limited to:

- Natural channels and swales,
- Engineered channels,
- Bridges,
- Culverts,
- Channel cross sections,
- Wetlands,
- Detention/retention ponds, and
- Stormwater quantity and quality control Best Management Practices (BMPs).

Closed System Inventory Items

Typical closed system items include, but are not limited to:

- Pipes,
- Headwalls,



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- Catch basins,
 - Junction boxes, and
 - Underground storm water control BMPs.

Streambank Erosion and Scour

In addition, field evaluations will note and document specific streambank erosion problems, outlet structure erosion/scour issues, and general channel condition throughout the watersheds being evaluated. Digital photographs will be used wherever necessary to augment documentation information on the drainage system.

Task 4 – Mapping of Stormwater System

After completing the NPDES outfall inventory and limited stormwater infrastructure inventory, McGill Associates will create a GIS compatible digital map of the structures collected. McGill Associates will present the map to Henderson County for the purpose of utilizing the geo-database for in-house GIS data management system, which can be expanded in the future.

Task 5 – Hydrologic and Hydraulic Modeling

Capital improvements and policy decisions are made through the collection of stormwater infrastructure inventory and the engineering analysis using quantity-based and quality-based models. Modeling for a Stormwater Master Plan must consider the following components to focus on water quantity and quality:

- A hydrologic model for predicting the runoff characteristics of the designated drainage areas.
- A hydraulic model for simulating the movement of stormwater through the pipes and channels and its flooding effect on properties.
- A hydraulic model for calculating shear stress values, scour velocities, and streambank erosion potential.
- A water quality model to predict and evaluate pollutant runoff and the ability of BMPs to capture and remove those pollutants.

Modeling results will be used to approximate the existing hydrology and hydraulic conditions within the critical stormwater areas determined in Task 3. This process will allow the county to validate known problems or deficiencies in existing drainage systems and identify the extent of risk these deficiencies present. Modeling also uncovers capacity issues that may be unknown.

Modeling results greatly assist the development of alternatives for remedying inadequacies in the existing drainage system. The development of recommendations will be based on either eliminating flooding or pollutant runoff or minimizing the impact caused by the current conditions.

The models developed will be used to consider current and future conditions. McGill Associates will consider the changing impacts from the 10-year probable build-out conditions in developing possible capital improvements and stormwater management strategies.



McGill Associates will conduct closed system modeling with such models as hydraulic grade line spreadsheets, HydroCAD, Hydraflow, or XP-SWMM. Open channel routing will be computed by using the US Army Corps of Engineers HEC-RAS model.

Where applicable, the modeling for the critical areas will include information that meets the nine (9) elements of Section 319 program requirements to assist in future efforts for stream restoration funding.

Task 6 – Stormwater Related Capital Improvement Plan (CIP)

The process used for developing CIP solutions and prioritizing them is as follows:

Cross Reference Deficiencies with Problems

Match identified problem areas (from the modeling in Task 5) with known complaints and areas of public health risk and safety concern, areas that are being threatened, or areas that are in need of protection. These areas will include:

1. Mill Pond Creek (upstream of South Rugby Road)
2. Upper Mud Creek (from Berea Church Road to Middleton Road)
3. Reedy Patch Creek in Edneyville/Bat Cave (from St. Paul Rd to US 74)
4. All of Gash Creek in Etowah (on 303d list)

Consider Solutions that will Foster Water Quality and Water Quantity

McGill Associates will develop alternatives that have varying levels of protection. These solutions will examine up-grading existing systems, re-designing existing systems, regional detention, structural and non-structural water quantity BMPs, structural and non-structural water quality BMPs, and rights of way. Stream restoration/enhancement/ stabilization alternatives may be used to enhance the ability of identified stream sections to properly manage storm flows and provide better biological habitats.

Analysis Process

An analysis process to support prioritization of preferred improvements will be created. Recommendations and analysis will be based on priorities identified by Henderson County. McGill Associates will work with the county in evaluating different methodologies and will develop an evaluation or decision-making tool that is fair, objective, and defensible for CIP funding. When applicable, some areas of interest for the analysis include, but are not limited to:

- Number and severity of structure/house/business flooding,
- Number and severity of road flooding,
- Age of storm drainage infrastructure,
- Number and severity of water quality impacts,
- Community impacts (for example, building, property, or aesthetic impacts),
- Private property access and impact considerations,
- Cost of existing drainage system rehabilitation,
- Cost of recommended improvements,
- Availability of follow-up funding, and



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- Current level of service provided by the existing drainage system and level of service and impacts provided by the recommendations.

Task 7 – Master Plan Document

McGill Associates will create a master plan document based on a 10-year time line. The development of the Master Plan document will include a summary of the previous tasks described herein, but also the detailing of implementation costs and schedules. Other improvements or recommendations may be non-structural in nature and can be phased accordingly to the Henderson County overall program implementation and ordinance development. Typical improvements that will be considered for implementation include:

- Enlarged culverts and/or pipe systems for improved capacity,
- Flood control structures,
- Structural and non-structural water quality BMPs,
- Improved channels for conveyance,
- Improved channels for water quality improvements, and
- Land use control and/or preservation.



V. Compensation

The entire fee for this project shall be a lump sum fee of **\$70,000**. The breakdown of fee per task is shown below.

Stormwater Master Plan	\$70,000
Task 1 – Creating a Stormwater Ordinance	\$15,000
Task 2 – Inventory of Existing County Facilities Stormwater Infrastructure	\$5,000
Task 3 – Inventory of Existing Critical Area Stormwater Infrastructure	\$12,000
Task 4 – Mapping of Stormwater System.....	\$3,000
Task 5 – Hydrologic and Hydraulic Modeling.....	\$17,000
Task 6 – Stormwater Related Capital Improvement Plan (CIP).....	\$10,000
Task 7 – Master Plan Document.....	\$8,000

VI. Schedule

It is anticipated that the project will begin in July, 2008 and be completed by July 31, 2009. The CWMTF deadline for this project is August 31, 2009. To adhere to this schedule, the tasks of this project shall be completed as follows:

Henderson County Stormwater Master Plan	July 31, 2009
Task 1 – Creating a Stormwater Ordinance	July 31, 2009
Task 2 – Inventory of County Facilities Stormwater Infrastructure.....	August 31, 2008
Task 3 – Inventory of Critical Area Stormwater Infrastructure	September 31, 2008
Task 4 – Mapping of Stormwater System.....	September 31, 2008
Task 5 – Hydrologic and Hydraulic Modeling.....	November 31, 2008
Task 6 – Stormwater Related Capital Improvement Plan (CIP).....	January 31, 2009
Task 7 – Master Plan Document.....	March 31, 2009

