



Town of Hope Mills
Stormwater Post-Construction
Administrative Manual

Updated December 2011

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Section 1-Introduction

Purpose

The purpose of this Administrative Manual is to provide guidance and information to staff of the Town of Hope Mills, contractors and developers, and the general public for the implementation and administration of the Stormwater Management Ordinance.

Impacts of Stormwater on Water Quality

Stormwater runoff from developed areas is a major source of water pollution and water quality degradation. Development and redevelopment alter the hydrologic response of the Town's watersheds and increase stormwater runoff rates and volumes, flooding, soil erosion, stream channel erosion, nonpoint and point source pollution, and sediment transport and deposition, as well as reducing groundwater recharge.

These changes in stormwater runoff contribute to increased quantities water pollutants and alterations in hydrology that are harmful to public health and safety as well as to the natural environment. These effects can be managed and minimized by applying proper design and well-planned controls to manage stormwater runoff from development sites.

Stormwater Administrator

The person responsible for administering and enforcing the Stormwater Management Ordinance is called the Stormwater Administrator. The powers and duties of the Stormwater Administrator as specified in the Post-Construction Stormwater Article of the Stormwater Management Ordinance are as follows:

- (1) To review and approve, approve with conditions, or disapprove applications for approval of plans pursuant to the Phase II Post-Construction Stormwater Article of the Stormwater Management Ordinance.
- (2) To make determinations and render interpretations of the article.
- (3) To establish application requirements and schedules for submittal and review of applications and appeals, to review and make recommendations to the Town Board of Commissioners on applications for development or redevelopment approvals.
- (4) To enforce the provisions of the article in accordance with its enforcement provisions.
- (5) To maintain records, maps, forms and other official materials as relate to the adoption, amendment, enforcement, and administration of the article.
- (6) To provide expertise and technical assistance to the Town Board of Commissioners, upon request.
- (7) To designate appropriate other person(s) who shall carry out the powers and duties of the Stormwater Administrator.
- (8) To take any other action necessary to administer the provisions of the article.

The contact information for the Stormwater Administrator is:

Town of Hope Mills

5770 Rockfish Rd.

Hope Mills, NC 28348

Telephone: (910) 424-4555 ext 3517

Fax: (910) 424-4902

Website: www.townofhopemills.com

Section 2-Stormwater Management Ordinance

The Stormwater Management Ordinance can be found in Chapter 67 of the Town of Hope Mills Code of Ordinances.

It can be found online at:

<http://library.municode.com/index.aspx?clientID=12974&stateID=33&statename=North%20Carolina>

Section 3-The Design Manual

The standards used for the design and construction of all stormwater drainage structures and/or stormwater BMP facilities shall be in accordance with the “Town of Hope Mills Stormwater Design Standards”, the Design Manual, and shall be subject to the requirements of Chapter 67 Stormwater Management of the Town of Hope Mills Code of Ordinances.

The Town of Hope Mills Design Manual refers to the most current version of the North Carolina Stormwater BMP Manual developed by the N.C. Department of Environment and Natural Resources (NCDENR). The Design Manual contains approved stormwater treatment practices (also called best management practices or BMPs), including the specific design criteria for each stormwater practice. A copy of the Design Manual is kept on file with the Stormwater Administrator or can be found at: <http://portal.ncdenr.org/web/wq/ws/su/bmp-manual>

Stormwater treatment practices that are designed and constructed in accordance with the design and sizing criteria contained in the Design Manual shall be presumed to meet the minimum water quality performance standards of the Stormwater Management Ordinance and the federal Phase II Stormwater Rules. Failure to construct stormwater treatment practices in accordance with these criteria may subject the violator to a civil penalty as described in the Stormwater Management Ordinance.

Section 4-Stormwater Management Permit Application Process

A Stormwater Management Permit is required for all development and redevelopment unless exempt pursuant to the Town of Hope Mills Stormwater Management Ordinance. A permit may only be issued subsequent to a properly submitted and reviewed permit application.

Stormwater Management Permit Application Process

A concept plan/consultation meeting is **HIGHLY RECOMMENDED** prior to submittal of any Stormwater Management Permit applications.

1. The applicant must submit a complete Stormwater Management Permit Application and permit fee to the Town of Hope Mills Stormwater Administrator.
2. Within 30 days, the Stormwater Administrator will review the application and site plan for compliance with the Town's Post-Construction Stormwater Management requirements. Comments and requirements for correction will be sent to the applicant.
3. The applicant has 180 calendar days to submit a revised application and corrected plans to the Stormwater Administrator. If a revised application is not re-submitted within 180 calendar days from the date the applicant was notified of plan and/or application deficiencies, the application shall be considered withdrawn, and a new submittal for the same or substantially the same project will be required along with the appropriate fee.
4. Within 30 days of resubmittal, the Stormwater Administrator will review the application and plan for compliance with the Town's Post-Construction Stormwater Management requirements. If deficiencies are found again, comments shall be submitted to the applicant and the plan review process will continue until the plans are approved.
5. Once the plans are approved by the Stormwater Administrator, all supporting documentation has been submitted, and any additional requirements have been met, the Stormwater Administrator will send written notification to the applicant of Stormwater Management Permit Approval.

To receive a Stormwater Management Permit, the following must be received and approved by the Stormwater Administrator:

1. Complete Stormwater Management Permit Application (Town Form)
2. 2 complete sets of plans
3. 1 set of calculations
4. Operation and Maintenance Agreement(s) (Town Form)
5. BMP Maintenance Plan(s) with map (Town Form)
6. BMP Supplement (NC DWQ Form)
7. Deed Restrictions and Protective Covenants (Town Form)
8. Soils Report
9. NPDES Erosion and Sedimentation control permit
10. 401/404 permits (as required)
11. Installation Performance Security (performance security or bond with surety, cash escrow, or letter of credit.

The permit is valid until the project is complete or two (2) years from issuance of permit. If no substantial progress has been made on the site within the two-year period, the permit and plan approval shall become null and void and a new application shall be required to develop the site. The completion of the project, including the installation of BMPs, may take longer than two (2) years in which case the permit shall remain in effect until the project is completed.

All applications should be submitted to:
Town of Hope Mills Stormwater Department
Attn: Stormwater Administrator
5770 Rockfish Road
Hope Mills, NC 28348

Section 5-Stormwater Management Permit Application Fee

The Stormwater Management Permit application fee is:

\$200 Base permit fee + \$100 per acre or portion thereof.

Section 6-Installation Performance Security

The purpose of a performance security is to provide The Town of Hope Mills with financial resources to complete required improvements in the event of developer default. There are three (3) types of sureties used by the Town, including:

- Surety Bond: A contract among at least three (3) parties, including the principal (developer), obligee (Town of Hope Mills) and the surety (bonding company) who ensures that the principal's obligations shall be performed.
- Letter of Credit: A document issued mostly by a financial institution which provides an irrevocable payment undertaking to a beneficiary against complying documents as stated in the credit. The letter of credit is issued through a credited, full service bank.
- Cash Bond: A certified check made out to the Town of Hope Mills or a Company Check made out to the Town of Hope Mills.

Performance installation security approval process:

1. The developer shall provide a written list of work and cost estimates to be performed to the Stormwater Administrator. This list must be signed and sealed by a qualified registered North Carolina professional engineer.
2. The developer shall secure the performance security using the forms provided by the Town. If a Letter of Credit is to be used, the bank shall use the Bank Wording provided and the developer shall complete the Letter of Credit-Installation form.
3. The amount of an installation performance security shall be the total estimated construction cost of the BMPs approved under the permit, plus 25%.
4. The developer shall provide the Stormwater Administrator with the original performance security form.
5. All performance securities shall be filed in a fire proof file cabinet. Performance securities shall be kept in place until all infrastructures are complete and final stormwater approval has been issued.
6. The performance security shall remain in place until at least 60 days after final approval. In cases where the facility initially functions as an erosion control measure, the installation performance security shall remain in place until at least 60 days after the facility starts to function as a stormwater management facility.
7. An application for Bond Release Form must be completed by the developer and provided to the Stormwater Administrator before the performance security can be released.

Section 7-Final Site Approval Process

After construction of approved development with an approved Stormwater Management Permit is complete, the following is required in order to receive a Certificate of Occupancy and/or the release of performance installation securities:

1. Final Plat with associated easements for approval-see language requirements
2. Copies of recorded final plat with associated easements, recorded Operation and Maintenance agreement, recorded BMP Plan with map, and recorded Deed Restrictions and Covenants
3. As-built plans
4. Engineer certification with BMP Compliance Checklist
5. Digital As-built plans

The Final Plat

The final plat must contain the language as required in the Final Plat checklist.

Approval process:

One black line copy of the final plat is to be submitted for review to the location indicated below.

Town of Hope Mills
Stormwater Administrator
5770 Rockfish Rd.
Hope Mills, NC 28348

Final plat mylars must be signed by the Cumberland County Planning Department and Town of Hope Mills Town Manager prior to recordation with the Cumberland County Register of Deeds.

Final plats will not be approved until a copy of the recorded Operation and Maintenance Agreement and BMP Maintenance Plan have been received by the Stormwater Administrator.

Engineer Certification and As-Built Plans

The responsible party as identified in the Stormwater Management Permit shall certify that the completed project is constructed in accordance with the approved plans and specifications and shall submit "as-built" plans for all BMP(s) after final construction is completed. As-built plans (1 copy) shall be prepared by a qualified registered North Carolina professional surveyor or engineer and shall show the final design specifications for all BMPs, including the field location, size, depth, etc. The as-built plans shall also show the location and size of all and water quality buffers. After reviewing the as-built plans, the design engineer shall certify, under seal, that the BMPs are in compliance with the approved plans and specifications and with the requirements of the Stormwater Management Ordinance.

The design engineer shall submit the as-built plans, engineer certification, and BMP Final Compliance checklist to the Stormwater Administrator. This checklist shall verified by the Stormwater Administrator through field inspections and file reviews.

All as-builts are to be submitted to:

Town of Hope Mills
Attn: Stormwater Administrator
5770 Rockfish Rd.
Hope Mills, NC 28348

Upon receipt, the Stormwater Administrator shall review the as-builts for accuracy and completeness.

Final as-built plans, designer certification, and final inspection and approval by the Stormwater Administrator are required before a project is determined to be in compliance with the Ordinance. At the discretion of the Stormwater Administrator, certificates of occupancy may be withheld pending receipt of as-built plans and the completion of a final inspection and approval of a project.

Process for Submittal of Digital Records

Following approval of as-builts by the Stormwater Administrator, a digital submittal of the as-builts is required prior to final approval of the project for compliance with Stormwater Management Ordinance requirements and the release of performance securities and certificates of occupancy.

All digital submittals must be made to:
Town of Hope Mills Stormwater Department
Attn: Stormwater Administrator
5770 Rockfish Road
Hope Mills, NC 28348

Digital Submittals of As-Builts

The applicant shall provide the digital submittal of the as-builts to the Stormwater Administrator as a separate CAD (*.dwg) file created from latest version of AutoCAD available. Digital submittals shall be made via CD-R, DVD, or email.

All digital as-built record drawings must be referenced using the North Carolina State Plane Coordinate System (NAD_1983_StatePlane_North_Carolina_FIPS_3200_Feet) and the North American Datum 1983 (D_North_American_1983). This spatial reference shall be clearly noted and verified by town staff upon submittal.

A CAD drawing of the coversheet for the project shall be provided based on NC GRID with all BMPs shown. For this as-built digital submittal, NAD 1983 (tied to the North Carolina State Plane Coordinate System) shall be the projection delivery format and each submission and shall include the following layers:

- Name, location, size, and elevation (NAVD 88) of the BMPs actually constructed.
- Appropriate as-built BMP Inset Table
- Location and elevation (NAVD 88) of stormwater infrastructure inlets
- Location and elevation (NAVD 88) of stormwater infrastructure outlets
- Open space polygons

The locations for BMP's, and storm drainage system inlets and outlets shall be supplied as North Carolina State Plane X- and Y-coordinates. The title block and engineers seal / signature do not need to be submitted electronically.

The Stormwater Administrator shall send written notification of final approval of the project for compliance with Post-Construction Stormwater Article requirements to the applicant, Cumberland County Planning Department, and Hope Mills Inspections Department.

Section 8-Operation and Maintenance Agreements

Prior to final approval of any BMP design plans and the issuance of the Stormwater Management Permit, an Operation and Maintenance Agreement must be submitted and approved by the Stormwater Administrator for each BMP. The Operation and Maintenance Agreement forms are provided by the Town of Hope Mills. These forms are provided in two (2) formats, with one designed for use when BMPs are owned and maintained by homeowner's associations and the other for use in the case of single ownership such as in the case of a commercial development.

A BMP Maintenance Plan must be attached as an addendum to the Operation and Maintenance Agreement which identifies the specific maintenance activities to be performed for each BMP.

Following approval of the Operation and Maintenance Agreement and BMP Maintenance Plan by the Stormwater Administrator, the document shall be signed by the Stormwater Administrator and returned to responsible party who also signs the document, has it notarized, and then recorded at the Cumberland County Register of Deeds Office with the corresponding approved Plat . Within fourteen (14) days of recordation, the original recorded document shall be provided to the Stormwater Administrator. Certificates of occupancy shall not be released until a copy of this recorded document is provided.

Description of Maintenance Requirements

The Operation and Maintenance Agreement requires that each BMP be inspected by a qualified registered North Carolina professional engineer, landscape architect, or person certified by the North Carolina Cooperative Extension Service for stormwater treatment practice inspection and maintenance on an annual basis. An inspection report must be completed for each BMP indicating the status of each item inspected and any maintenance that was conducted. The inspection report must be completed on the form provided by the Town. The first inspection report is due to the Stormwater Administrator within one (1) calendar year from the date of as-built certification and each calendar year thereafter. The inspector shall certify on the Maintenance and Inspection Form that the BMP has been inspected and that at the time of the inspection the BMP was/was not performing properly and was/was not in compliance with the terms and conditions of the approved Operation and Maintenance Agreement and BMP Maintenance Plan required by the Phase II Post-Construction Stormwater Article.

Within two (2) weeks following the completion of inspection and maintenance activities, the owner of the BMP shall forward the signed and certified Maintenance and Inspection Form to the Stormwater Administrator at the address below. If an escrow account is required by the Operation and Maintenance Agreement, documentation of escrow account activity must be attached to the Maintenance and Inspection Form submitted to the Stormwater Administrator in the form of a bank statement which includes the current balance, as well as deposits and withdrawals for the previous 12 months.

If any of the maintenance items indicated on the Form are found to be unsatisfactory, corrective actions must be completed and documented on the Form or attached pages. Inspection forms submitted to the Stormwater Administrator shall be placed in the BMP file. The owner of the BMP shall keep records of inspections, maintenance, and repairs for at least five (5) years from the date of creation of the record and shall submit the same upon reasonable request to the Stormwater Administrator.

Stormwater Management Permit Step by Step Application Process

A consultation meeting is HIGHLY RECOMMENDED prior to the submittal of any Stormwater Management Plans. There is no charge for any consultation meeting. A consultation meeting is a valuable tool for the developer and design engineer as it provides an opportunity to discuss the development, the stormwater infrastructure, any potential problems and issues, and the application process prior to any actual submittals.

1. Submit complete Stormwater Management Application Packet----A complete packet includes **every item** in the submittal checklist.
The Town of Hope Mills uses a combination of NC DWQ Forms and Town Forms please use the CORRECT form as noted on the submittal checklist. Submittal of incorrect forms will delay the application process
2. After approval, a written list of work and cost estimates for each BMP. This list must be signed and sealed by a qualified registered North Carolina professional engineer.
3. Submit a performance installation security in the amount of the approved cost estimate plus 25%.
4. Receive approved Stormwater Management Permit.
5. Begin Construction-staff will perform spot inspections during construction
6. Complete construction and perform final inspection.
7. Submit Final plat with associated easements, hard copy as built plans, and Final BMP Compliance Certification and BMP Compliance Checklist forms for approval.
8. Submit recorded final plat, recorded Operation and Maintenance Agreements with BMP plan(s), completed and sealed BMP Compliance Certification and Checklist, recorded Deed restrictions and protective covenants, and digital as-built plans.
9. Receive final approval.
10. 60 days after final approval is received, the developer/property owner may apply for the release of performance securities. It is the responsibility of the developer/property owner to apply for their release-the Stormwater Department will not send notice.