



STORMWATER DESIGN MANUAL

Public Services Department

December 2021

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1 Introduction

1.1 General

The Town of Leland (Town) Stormwater Design Manual is intended to present pertinent information related to stormwater management for new development and redevelopment of parcels within the Town of Leland and the Town's Planning & Extraterritorial Jurisdiction (ETJ). More specifically, this manual describes the Town's stormwater management policy, the permitting process, design standards, construction recommendations, project close out, and maintenance. In addition to that information, copies of all the forms required for the stormwater management permit application process and ongoing operation and maintenance are included in this manual. This manual is intended to be used in tandem with the Town's Stormwater Ordinance. This Design Manual and the Town's stormwater ordinance should be used to guide stormwater management design, construction, and operation and maintenance activities within the Town. All questions related to stormwater management in the Town should be directed to the stormwater administrator. The stormwater administrator has the authority to enforce the provisions of the stormwater ordinance and has the power to make final decisions on conflicts. The stormwater administrator can be reached by contacting Leland Town Hall. The information presented herein is intended to simplify the design, review, and maintenance processes for stormwater management systems in the Town of Leland.

1.2 Relationship to Ordinance

The Town's Stormwater Ordinance is found in Article III of Chapter 26 in the *Code of Ordinances, Town of Leland, North Carolina* (Code). This manual does not take precedence over the Code; the Code shall be the final rule as it relates to stormwater management in the Town. This manual is intended to be a guide to assist with application of the ordinance and should be utilized in tandem with the ordinance and as a reference by all parties who hold a stake in the Town's management of stormwater.

1.3 State of North Carolina Stormwater Design Manual

In addition to this design manual, the North Carolina Department of Environmental Quality (NCDEQ) provides a stormwater design manual to the public for guidance on how to meet state stormwater rules. Information included in that manual will be referenced by the Town in their ordinance and design manual. The NCDEQ *Stormwater Design Manual* can be used as a reference for projects within the Town of Leland to improve stormwater management and provide a level of continuity to landowners and developers. The NCDEQ manual will be utilized by the Town to help meet the objectives of the Town's stormwater policy. A copy of the NCDEQ *Stormwater Design Manual* is available for download from the NCDEQ's website.

1.4 Definitions

Where stated in the requirements, the following definitions shall apply.

Culvert	A single run of pipe or conduit open at each end.
Impervious Surface	Surfaces that are highly resistant to absorption of water.
Runoff	The rainfall which runs off the land into the waterway.
Runoff Coefficient	Ratio of runoff to rainfall.

Time of Concentration	The time necessary for the water to flow from the most remote point in the drainage basin along the watercourse to the point of design.
Velocity	The mean velocity of flow, measured in feet per second.

2 Stormwater Management Policy

2.1 Purpose

The purpose of the Town's stormwater ordinance is to protect, maintain and enhance the public health, safety, environment, and general welfare by establishing requirements and procedures to control the adverse effects of increased post development stormwater runoff and non-point and point source pollution associated with new development and redevelopment, as well as illicit discharges into municipal stormwater systems. Proper management of construction related and post-development stormwater runoff will minimize damage to public and private property and infrastructure; safeguard the public health, safety, and general welfare; and protect water and aquatic resources.

2.2 Objectives

The Town's stormwater management policy, as described in the Town's stormwater ordinance, seeks to accomplish the following:

- Establish decision-making processes for new development and redevelopment that protect the integrity of watersheds and preserve the health of water resources
- Require that new development and redevelopment:
 - maintain the pre-development hydrologic response in their post development state as nearly as practicable for the applicable design storm
 - reduce flooding, stream bank erosion, non-point and point source pollution and increases in stream temperature
 - maintain the integrity of stream channels and aquatic habitats
- Establish stormwater management standards and design criteria to regulate and control post-development stormwater runoff quantity and quality
- Establish design and review criteria for the construction, function, and use of stormwater control measures (SCMs) that may be used to meet the post-development stormwater management standards
- Encourage the use of better management and site design practices, such as the preservation of green space, riparian buffers, and other conservation areas to the maximum extent practicable
- Establish provisions for long-term responsibility for and maintenance of SCMs to ensure that they continue to function as designed, are maintained appropriately, and pose no threat to public safety
- Establish administrative procedures:
 - for the submission, review, approval, and disapproval of stormwater management plans
 - for the inspection of approved projects
 - to ensure long-term maintenance
- Control illicit discharges into the municipally maintained stormwater system
- Control erosion and sedimentation from construction activities

2.2.1 Off-Site Stormwater Flow

To prevent adverse impacts from proposed development the Town requires the evaluation of impacts at the discharge point of proposed developments as part of the permitting process. Designers will be required to evaluate stormwater conditions at the discharge point related to stability in the receiving

channel and/or existing downstream flooding as deemed necessary by the stormwater administrator. Please refer to Division 3 in the Town's stormwater ordinance for additional information.

2.2.2 Stream Flow through Culverts

Flow through culverts crossing public and private streets is required to be evaluated and designed per North Carolina Department of Transportation (NCDOT) standards as part of the Town's stormwater management policy. Improper sizing or lack of sizing of culverts can lead to severe ponding problems that are costly to fix and difficult to remedy. Please refer to Section 5.0 of this manual and the Town's stormwater ordinance for additional information.

2.2.3 Conveyance of Public Stormwater Across Private Property

Designers are required to evaluate flows generated from upstream of their sites and accommodate those flows in their stormwater conveyance system and stormwater control measure design or provide an adequate by-pass conveyance for upstream flows through the site. In addition, designers are required to analyze the impacts to the receiving conveyances at the point of discharge for a proposed project. Please refer to Division 3 in the Town's stormwater ordinance for additional information.

2.2.4 Maintenance Easements

Owners will be required to record maintenance easements for proposed SCMs and execute an operation and maintenance agreement as part of the stormwater management permit application. The owner will be responsible for maintaining all SCM's associated with the proposed project. The Town has authority to access SCM's through the maintenance easement and make necessary repairs if the owner has not followed appropriate maintenance provisions. Any work completed by the Town will be required to be reimbursed by the owner or fines will be levied. Please refer to Section 8.7 of this manual for additional information.

2.2.5 Cooperatively Funded Stormwater Projects

The Town of Leland will review requests for joint funding of stormwater projects within the Town. The entity requesting joint funding must clearly demonstrate how the proposed project will assist the Town in more effectively managing stormwater and meeting the objectives of the Town's stormwater ordinance. Please contact the stormwater administrator for more information regarding these types of projects.

2.2.6 Low Impact Development (LID)

The Town of Leland allows and encourages owners/developers and designers to implement stormwater LID practices on all projects located within the Town's jurisdiction. The Town defines stormwater LID according to the definition provided to the public by NCDEQ. Please refer to NCDEQ's website for information regarding LID including requirements and guidance on specific practices that can be applied to a proposed site to meet stormwater LID requirements. Contact the stormwater administrator during the planning phase of a project if the owner/developer is interested in utilizing stormwater LID practices to discuss site specific goals and constraints.

2.3 Applicability and Jurisdiction

The Town's stormwater ordinance applies within the corporate limits of the Town and the Town's Planning & Zoning Extraterritorial Jurisdiction (ETJ), as shown in a map maintained by the Town Clerk. In addition, all development and redevelopment projects must comply with the Town's stormwater ordinance unless they are exempt under one of the criteria outlined in the Town's Ordinance. Refer to Division 1 in the Town's stormwater ordinance for specific details regarding applicability.

3 Stormwater Management Permitting Procedure

3.1 Applicability

All development or redevelopment projects, regardless of project type and density, need to consider stormwater management early during the design phase. Owners and design professionals must consider the effects development/redevelopment will have on stormwater at a site. Even if projects are exempt from the regulations listed in the Town's stormwater ordinance, the owner and design professional must work to mitigate the effects of stormwater runoff that a proposed development/redevelopment project may create. Projects that are pursuant to the requirements of the Town's stormwater ordinance must apply for and be issued a stormwater management permit prior to any construction taking place, in addition to any other permits required for development/redevelopment. Exempt projects, as described in Division 1 of the Town's stormwater ordinance, will not be required to have a stormwater management permit.

3.2 Required Documentation

It is recommended that owners and design professionals contact the Town and schedule a predevelopment meeting prior to the submission of any permit applications. Although not required, this meeting can help identify project-specific constraints at an early stage in the design process. A complete stormwater management application consists of all documents listed in Section VI of the stormwater management permit application. The required documents are also listed below.

- One (1) original copy of the executed stormwater management permit application form
- One (1) original copy of the executed deed restrictions and protective covenants form (if applicable)
- One (1) original copy of the executed operation and maintenance agreement and copies of the project specific inspection forms
- Permit application processing fee made payable to the Town of Leland
- One (1) copy of the stormwater management narrative and supporting calculations
- One (1) copy of any applicable soils report
- One (1) copy of sealed plans and specifications
- One (1) digital copy of all documents and plans included in the submittal

Additionally, in order for a project closure to proceed properly, specific close out documents must also be received by the Town. Refer to Section 7 for detailed information regarding project close out.

3.3 Review Procedures

The Town will review complete stormwater management permit applications on a first come, first served basis. Applicants should ensure that all applicable sections of an application and all required attachments are complete prior to submitting to the Town. Incomplete applications will not be reviewed and will be returned to the applicant, delaying the review process. Please refer to Division 2 in the Town's stormwater ordinance for additional information regarding permit application reviews.

3.4 Existing Permits

Revisions to existing stormwater permits become necessary when alterations at a site substantially change how stormwater is managed. The changes to an existing permit as a result of site modifications will be handled by the original permitting authority. Please refer to Division 2 in the Town's stormwater ordinance for additional information regarding existing permits.

4 Stormwater Management Design Standards

4.1 Project Types

The Town of Leland requires all designers to complete project density and built-upon area calculations as part of the stormwater management permit application. Based on the results of these calculations a project density classification can be determined. Specific design standards related to the project density can be found in Division 3 in the Town's Stormwater Ordinance. In addition to project density, designers will also need to determine NCDEQ surface water classifications in the vicinity of the proposed project site. Certain surface water classifications carry specific stormwater management design standards with them that must be implemented for a proposed project.

4.2 Water Quality Standards

All projects, regardless of project density, shall treat the runoff from all surfaces generated by 1½ inches of rain. Runoff drawdown time shall be a minimum of 48 hours, but not more than 120 hours.

4.3 Water Quantity Standards

All development or redevelopment activities, regardless of project density, shall control the post-development peak discharge rate of the two-year, ten-year, and twenty-five-year storm events in order to not exceed the predevelopment peak runoff discharge rate for the same storm events. This can be achieved via the use of one or more approved SCM's. A compensatory design approach is allowable if the discharge points are conveyed to the same receiving stream and the discharge also complies with limitations on downstream impacts. Approval of compensatory treatment as part of a development permit is to the discretion of the Town.

4.4 Stormwater Control Measures Design

Some projects may require the use of one or more stormwater control measures to meet the requirements set forth by the Town. In those instances, SCMs shall be designed in accordance with the minimum design criteria (MDC) set forth in the NCDEQ *Stormwater Design Manual*. If SCMs designed to meet NCDEQ requirements are also intended to address Town water quality standards, the design shall include provisions to prevent hydraulic overload of the SCM that may re-entrain or short-circuit captured pollutants. Please refer to Division 3 in the Town's stormwater ordinance for a detailed description of where to find the MDC in the *North Carolina Administrative Code (NCAC)*.

4.5 Calculations Guidance

All calculations related to stormwater for a proposed project must be completed as described in the NCDEQ *Stormwater Design Manual* and associated design aids shall be included in the stormwater management permit application package. Any questions related to approved calculation methods should be directed to the stormwater administrator.

5 Piping and Culvert Design Standards

5.1 Introduction

The following design standards should be followed unless the designer requests and receives approval for alternative designs from the stormwater administrator or designee.

All calculations related to stormwater for a proposed project must be completed as described in the NCDEQ *Stormwater Design Manual* and associated design aids shall be included in the stormwater management permit application package. Any questions related to approved calculation methods should be directed to the stormwater administrator.

5.2 Culvert and Piped Drainage Systems

Culverts crossing residential and collector streets shall be designed in accordance with the latest NCDOT standards, which at a minimum must pass the 25-year design storm. Culverts crossing all major thoroughfares shall be designed at a minimum to pass the 100-year design storm.

Catch basins in streets may be designed for gutter spread using the 2-year storm with a 5 minute time of concentration and the remainder of the system is designed for the 10 year storm assuming each inlet captures 100 percent of the flow (to provide additional capacity for future additions to the system and off-site drainage). Inlet capacity at sags, where relief by curb overflow is not provided, shall allow for debris blockage by providing twice the required computed opening for the 2-year storm.

Storm drainage pipes in the Town-maintained rights-of-way shall be reinforced concrete with a minimum diameter of 15 inches or Type S or Type D double walled HDPE pipe with a minimum size of 15 inches. All reinforced concrete pipe used within Town maintained rights-of-way shall be Class III or higher and all Type S or Type D HDPE pipe shall meet the NCDOT standards.

Minimum cover for pipes within the right of way (ROW) shall be provided based on the following table:

MINIMUM PIPE CLEARANCE FROM INVERT TO SUBGRADE	
<u>Pipe Size (in.)</u>	<u>Clearance distance (ft.)</u>
15	2.50
18	2.75
24	3.30
30	3.60
36	4.50
42	5.00
48	5.50
54	6.00
60	6.50

Minimum cover for pipes outside of the ROW is 1 foot.

Minimum pipe slope is 0.5%. Maximum slopes for concrete pipe and HDPE pipe is 12.0%. Greater slopes may be approved by the Town Engineer upon submittal of appropriate detailed structural designs and other supporting documentation. Where storm drainage lines cross or are parallel to water or sewer mains, appropriate clearances shall meet NCDEQ requirements.

5.3 Catch Basins, Curb Inlets, and Drop Inlets

Catch basins or curb inlets in the roadway shall be placed in such a way that the spread for the 2-year storm does not exceed one half of a lane width on 2 or 3 lane streets and one lane width on wider streets. When the typical section includes a full shoulder or parking lane, no encroachment into the travel lane will be allowed. Inlets shall be provided at sags, up-grade of intersections, up-grade of super-elevation crossovers, and where driveways would discharge more than 3 cfs into a street for the 10-year storm.

Standard inlets meeting the Town of Leland Standard Details shall be used for all streets to be maintained by the Town unless an alternative is specifically requested and approved by the Town Engineer. Where streets are to be maintained by the State, other inlets (acceptable to the State) may be used. No flow greater than 3 cfs, for the 10-year storm, should be discharged into the street at any one point. Inlets should be provided to capture runoff and carry flow into the drainage system before it reaches the right of way.

No concentrated flow shall be discharged across walkways. Provisions are to be made through piping or other means to carry the flow under the walkway. All structures shall allow for access to the storm drainage system with a grate, manhole ring and cover, or a lid capable of being removed. No "blind boxes" are permitted.

- A. Maximum pipe lengths permitted without some type of structure providing access

<u>Diameter</u>	<u>Maximum Pipe Length</u>
48 inches or greater	400 feet
Less than 48 inches	300 feet

- B. Minimum drops in inlets, junction boxes and other structures

Change in alignment:

0 - 45 degrees.....	0.1 foot
45 - 90 degrees.....	0.2 foot

- C. Maximum change in pipe size without means of access
Catch basin or drop inlet required when the storm drainage pipe changes size.
- D. Decrease in pipe size
Only permitted with detailed study and special provisions for maintenance.

Headwalls or flared end sections plus an appropriate velocity dissipater will be required at the end of all culvert systems (excluding driveway pipes) based on the following table:

Pipe Size	End Treatment for Culverts
18" or less	FES or headwall on upstream end only*
24" to 48"	FES or headwall on upstream and downstream ends*
Greater than 48"	Headwall on upstream and downstream ends
Multiple culverts greater than 18"	Headwalls required on upstream and downstream ends

*Headwalls are required if the skew exceeds 75 to 105 deg.

5.4 Swales, Ditches, and Other Open Channels

All open watercourses including swales and ditches except V swales shall be graded to a maximum 6-foot bottom width with side slopes of 3 foot horizontal to 1 foot vertical, graded to prevent erosion, and be in accordance with the NCDOT Standard Details. Erosion control devices such as matting or straw will be required to protect the side slopes until a sufficient ground cover or other permanent means of erosion control is established. The unlined open watercourses may not have a velocity of greater than 2 feet per second. The liner must be approved in advance by the stormwater administrator.

Where a change in the alignment of man-made open channels is required, a minimum radius of 4 times the top width of the channel is recommended. Where no other options are available, sharper changes in alignment may be allowed under the following conditions:

- 20 - 45 degrees Bank stabilization must be provided according to tractive force analysis.
- >45 degrees Same as for above but in addition, freeboard equal to or greater than 1/2 of the Q10 depth of flow must be provided, utilizing berms or other appropriate means to increase depth of the channel.

5.5 Easements

Drainage easements are required for any development that involves more than one lot. This includes commercial developments without parcels, phased developments, and other developments with surrounding land under the same ownership as the tract being developed.

Drainage easements shall be provided for all pipe drainage systems, all new or existing open channels or watercourses that carry water from public rights of way or convey water from adjoining property across the developing property and at other locations deemed appropriate by the stormwater administrator.

Drainage easements, containing only storm drainage facilities, should be centered over the pipe or watercourse with minimum widths based on the following:

Easement Widths for Piped Drainage Systems:

Easement Width = the greater of 20' or 10' + the diameter or total outside width for multiple culverts + 2 x invert depth (rounded to the nearest 5 feet).

Easement Widths for Open Channels:

<u>Drainage Area</u>	<u>Easement width*</u>
<10 acres	10' on each side
10 - <25 acres	20' on each side
25 - <50 acres	30' on each side
50 - <100 acres	40' on each side
>100 acres	the greater of the floodway width or 50'

*Note: Widths shall be determined from the top of the bank or centerline if no banks are discernible.

Following construction and prior to acceptance by the Town for maintenance, all permanent drainage easements must be recorded with the Brunswick County Register of Deeds. The easement maps should be based on field surveys and the drainage structure located to ensure that the drainage structure or watercourse is centered within the easement (unless specifically offset). Where this is not possible, a note shall be added to recorded plats establishing that easements are to be centered over the pipe or channel.

All drainage easements shall be designed to tie into existing easements, existing watercourses, or to other appropriate locations when possible.

6 Construction

6.1 Standards

All stormwater improvements shall be constructed in accordance with Town of Leland or NCDOT Roadway Standard Drawings. Please specify these drawings, or equals that have been approved by the Town, on all engineering plans related to a proposed project.

6.2 Construction Procedures for Stormwater Control Measures

Please refer to Part A in the NCDEQ *Stormwater Design Manual* for guidance on construction considerations for SCMs. In addition to being properly sized and maintained, SCMs must be constructed using appropriate design criteria that include, but not limited to, equipment usage, water management, and stabilization, as these are critical to ensure intended function is realized. The information included in the construction procedures should be communicated to the contractor by the owner's engineer and be monitored by regular inspections.

7 Project Close Out

7.1 Close Out Process

Upon completion of a project, and before any certificate of occupancy or certificate of zoning compliance shall be granted, the applicant shall certify that the completed project is in accordance with approved stormwater management plans and designs and shall submit as-built plans for all stormwater management facilities or practices to the stormwater administrator.

7.2 Close Out Documents

Please refer to Division 2 in the Town's stormwater ordinance for detailed information regarding the required documents that must be submitted for close out of a project. All required operation and maintenance forms and documents must be approved by the stormwater administrator prior to releases of stormwater performance securities and certificates of occupancy or certificates of zoning compliance.

7.3 As-Builts Record Drawing Requirements

The as-built plans shall show final design specifications for all stormwater management facilities and practices, as well as the field location, size, depth, and planted vegetation as prescribed for all measures, controls, and devices, as installed. A registered North Carolina professional engineer shall prepare a signed and sealed certification stating that all as-built stormwater measures, controls, and devices have been constructed consistent with the approved stormwater management plans and designs. The note "As-Built Record Drawing" shall be clearly placed on all sheets.

7.4 Digital As-Built Requirements

A digital copy of the as-built plans shall be submitted by the owner. The digital format of the as-built shall be in ESRI GIS shapefile (.shp) format on a USB flash drive, CD, DVD, or file-sharing site. The shapefiles must include appropriately annotated stormwater pipes, structures, culverts, conveyances, and SCM's associated with the project in accordance with Town of Leland as-built shapefile requirements. All annotations shall be provided in an attribute table. The Town will review the digital as-built and contact the owner if there are any issues with the digital as built data.

8 Stormwater Measures Operation and Maintenance

8.1 Responsibility

The owner shall maintain and operate SCMs to preserve and continue their function in controlling stormwater quality and quantity at the degree or amount of function for which the SCM was designed. Until the transference of the stormwater permit through the Town or State is completed the original owner or applicant shall have primary responsibility for carrying out the provisions of the maintenance agreement. The owner or legally bound transferee will have sole responsibility for maintaining the SCMs. The Town will not be responsible for completing SCM maintenance. Maintenance items shall be described in an operation and maintenance agreement that details the requirements for each individual SCM. A maintenance easement at each SCM is also required for Town access. Please see the NCDEQ *Stormwater Design Manual* for maintenance easement requirements.

8.2 Acceptable Entities

An acceptable entity shall be responsible for maintenance of the stormwater management system. The Town recognizes the following entities as acceptable:

- Governmental units and private corporations
 - If the entity is a governmental unit or private corporation, written proof shall be supplied in an appropriate form stating that the entity will operate and maintain the facilities.
- Non-profit corporations including homeowners' associations, property owners' associations, condominium associations or associations of unit owners
 - The property owner or developer as applicant for site plan or subdivision plat approval is normally not acceptable as a responsible entity, especially when the property is to be sold to various third parties. However, the property owner may be acceptable if the property will be retained by the owner and will be rented, leased, or operated by the owner. The property owner shall supply evidence acceptable to the Town that they will operate and maintain the stormwater improvements.

8.3 Powers

If a homeowner's association, property owner's association, or association of unit owners is proposed for maintenance of the facilities, the applicant shall submit draft articles of incorporation, declarations of protective covenants, deed restrictions, declarations of unit ownership, or by-laws.

The association shall have the general power to:

- Own and convey property
- Operate and maintain common property
- Establish rules and regulations
- Assess members and enforce assessments
- Sue and be sued
- Contract for services to provide operation and maintenance

All lot owners, all homeowners, or unit owners shall be members of the association and the association shall exist in perpetuity

8.4 Maintenance Claims

The articles of incorporation, declaration of protective covenants, deed restrictions, declaration of unit ownership, or by-laws shall set forth the following:

- That it is the responsibility of the association to operate and maintain that portion of the stormwater management system not maintained by the Town. A description specifying the areas of responsibility shall be included. These areas also shall be indicated on the subdivision plat or on the site plan on non-subdivision projects.
- A maintenance plan with schedules and work.
- A statement that those areas to be maintained by the association are owned by the association or that they are common areas or common property.
- The method of assessment and collection for operation and maintenance costs of the stormwater management system.
- The declaration of covenants shall be in effect for a minimum of 25 years with provisions for renewal in accordance with the law.

8.5 Phased Development

If a property owner's association or association of unit owners is proposed for a development that will be constructed in phases or that will be added to in the future; the organization shall be created with the ability to accept future phases into the organization in order to ensure the continued operation and maintenance of the stormwater management system for the development.

8.6 General Maintenance Guidelines

All maintenance requirements shall be met to ensure the functionality of a stormwater system. Maintenance requirements for each individual stormwater control measure shall be outlined in an operation and maintenance agreement that is executed by the owner and remains with the property. Please utilize NCDEQ's O&M EZ Form to create an operation and maintenance agreement for a project.

8.7 Enforcement and Penalties

If maintenance requirements for the stormwater management system are not met the Town has the right to enforce the maintenance provisions for the system and levy penalties on the responsible party. Please refer to Division 5 in the Town's stormwater ordinance for detailed information regarding enforcement and penalties.

9 Fees and Forms

- 9.1 Stormwater Management Fee Schedule
- 9.2 Stormwater Management Permit Application (LSW101)
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STORMWATER MANAGEMENT FEE SCHEDULE



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

STORMWATER FEE SCHEDULE

Stormwater fees are calculated using the acreage contained in the Stormwater Project Area Boundary.
Acreages will be rounded up to the next full acre.

Residential Stormwater Permit Application	\$250 per acre (\$5000 cap)
Non-Residential Stormwater Permit Application	First 0-10 acres \$500 per acre Next 11-20 acres \$400 per acre Next 21-30 acres \$300 per acre Next 31-40 acres \$200 per acre Remaining acres \$100 per acre (\$15,000 cap)
Resubmission Fee (after first resubmission)	\$200
Permit Transfer Fee	\$505
Stormwater Performance Security Application Fee	\$150
Stormwater Performance Security Renewal Fee	\$100
Stormwater Performance Security Reduction / Release Fee	\$500

There will be no refund of any fees once a complete application has been submitted.

STORMWATER MANAGEMENT PERMIT APPLICATION (LSW101)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

OFFICE USE ONLY		
Date Received	Fee Paid	Permit Number

I. GENERAL INFORMATION

1. Applicants Name (Specify the name of the corporation, individual, etc. who owns the project):

2. Print Owner/Signing Official's Name and Title (Person legally responsible for the facility and compliance):

3. Mailing Address for Person Listed in Item 2: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____ Mobile: (_____) _____ Fax: (_____) _____

Email: _____

4. Project Name (Subdivision, facility, or establishment name. This should be consistent with the project name on plans, specifications, letters, operation, and maintenance agreements, etc.):

5. Location of Project (Street address): _____

City: _____ Zip: _____

6. Directions to Project (From nearest major intersection): _____

7. Latitude: _____ ° _____ ' _____ " N Longitude: _____ ° _____ ' _____ " W

8. Contact Person who can answer questions about the project:

Name: _____ Telephone Number: (_____) _____

Email: _____

II. PERMIT INFORMATION:

1. Specify whether the project is (check one): New Renewal Modification

2. If this application is being submitted as the result of a renewal or modification to an existing permit, list the existing permit number _____ and its issue date (if known) _____

3. Specify the type of project (check all that apply):
 Low Density High Density Redevelopment Residential Commercial

III. PROJECT INFORMATION

1. In the space below, summarize how stormwater will be treated. Also attach a detailed narrative (one to two pages) describing the stormwater management for this project.

2. Stormwater runoff from this project drains to the _____ River Basin.

3. Total Property Area: _____ acres 4. Total Coastal Wetlands Area: _____ acres

5. Total Property Area (3) – Total Coastal Wetlands Area (4) = Total Project Area** : _____ acres

6. (Total Impervious Surface Area / Total Project) x 100 = Project Built Upon Area (BUA): _____ %

7. How many drainage areas does the project have? _____

8. Complete the following information for each drainage area. If there are more than two drainage areas in the project, attach an additional sheet with the information for each area provided in the same format below. For High Density Projects, complete the table with one drainage area for each engineered stormwater device.

Basin Information	Drainage Area 1	Drainage Area 2
Receiving Stream Name		
Stream Class and Index Number		
Total Drainage Area (sf)		
On-Site Drainage Area (sf)		
Off-Site Drainage Area (sf)		
Existing Impervious* Area (sf)		
Proposed Impervious* Area (sf)		
% Impervious* Area (total)		

Impervious* Surface Area	Drainage Area 1	Drainage Area 2
On-Site Buildings (sf)		
On-Site Streets (sf)		
On-Site Parking (sf)		
On-Site Sidewalks (sf)		
Other On-Site (sf)		
Off-Site (sf)		
Total (sf):		

**Impervious area is defined as the built upon area including but not limited to buildings, roads, parking areas, sidewalks, gravel areas, etc. Total Project Area shall be calculated to exclude Coastal Wetlands from use when calculating the built upon area percentage calculation. This is the area to calculate overall percent project built upon area (BUA).*

9. How was the off-site impervious listed above derived? _____

IV. DEED RESTRICTIONS AND PROTECTIVE COVENANTS

The property restrictions and protective covenants in the form listed below, are required to be recorded for all subdivisions, outparcels, and future development prior to the sale of any lot. If lot sizes vary significantly, a table listing each lot number, size and the allowable built-upon area for each lot must be provided as an attachment.

Form LSW102 Covenants

By signing this application, you certify that the recorded property restrictions and protective covenants for this project shall include all applicable items required in the above form, that the covenants will be binding on all parties and persons claiming under them, that they will run with the land, that the required covenants cannot be changed or deleted without concurrence from the Town of Leland, and that they will be recorded prior to the sale of any lot.

V. SUPPLEMENTAL FORMS

The applicable stormwater management permit supplemental form(s) listed below must be submitted for each BMP specified for this project. Contact the Town of Leland at (910) 371-3390 for the status and availability of these forms. Forms can also be downloaded from the North Carolina Department of Environmental Quality’s website <https://deq.nc.gov/about/divisions/energy-mineral-land-resources/energy-mineral-land-permit-guidance/stormwater-bmp-manual/forms>

Detention Basin	Dry Extended Detention Basin Supplement
Proprietary Systems	Stormfilter Proprietary Systems Supplement
Rainwater Harvesting	Rainwater Harvesting Supplement
Wet Detention Basin	Wet Detention Basin Supplement
Infiltration Basin	Infiltration Basin Supplement
Infiltration Trench	Underground Infiltration Trench Supplement
Bioretention Cell	Bioretention Cell Supplement
Level Spreader	Level Spreader/Filter Strip/Restored Riparian Buffer Supplement
Wetland	Stormwater Wetland Supplement
Grassed Swale	Grassed Swale Supplement
Sand Filter	Sand Filter Supplement
Permeable Pavement	Permeable Pavement Supplement
Low Density	Low Density Supplement
Off-Site System	Off-Site System Supplement

VI. SUBMITTAL REQUIREMENTS

Only complete application packages will be accepted and reviewed by the Town of Leland. A complete package includes all of the items listed below.

- Please indicate that you have provided the following required information by initialing in the space provided next to each item.

	<u>Initials</u>
▪ <i>Original and one copy</i> of the Stormwater Management Permit Application Form	_____
▪ <i>Original and one copy</i> of the Deed Restrictions and Protective Covenants Form (If required as per Part IV above)	_____
▪ <i>Original</i> of the applicable Supplemental Form(s) and O&M agreement(s) for each BMP	_____
▪ Permit application processing fee (see Fee Schedule) payable to the Town of Leland	_____
▪ Calculations and detailed narrative description of stormwater treatment/management	_____
▪ Copy of any applicable soils report	_____

- Two copies of plans and specifications (sealed, signed, and dated), including: _____
 - Development/Project name
 - Engineer and firm
 - Legend
 - North arrow
 - Scale
 - Revision number & date
 - Mean high water line
 - Dimensioned property/project boundary
 - Location map with named streets or NCSR numbers
 - Original contours, proposed contours, spot elevations, finished floor elevations
 - Details of roads, drainage features, collection systems, and stormwater control measures
 - Wetlands delineated, or a note on plans that none exist
 - Existing drainage (including off-site), drainage easements, pipe sizes, runoff calculations
 - Drainage areas delineated
 - Vegetated buffers (where required)

- An electronic copy of all above mentioned forms, documents, and plans _____

VII. AGENT AUTHORIZATION

If you wish to designate authority to another individual or firm so that they may provide information on your behalf (such as additional information requests), please complete this section. (Ex. Designing engineer or firm)

Designated Agent (Individual or Firm): _____

Mailing Address: _____

City: _____ State: _____ Zip: _____

Phone: (_____) _____ Mobile: (_____) _____ Fax: (_____) _____

Email: _____

VIII. APPLICANT'S CERTIFICATION

I, *(print or type name of person listed in General Information, Item 2)* _____, certify that the information included on this Permit Application Form is, to the best of my knowledge, correct and that the project will be constructed in conformance with the approved plans, that the required deed restrictions and protective covenants will be recorded, and that the proposed project complies with the requirements of 15A NCAC 2H .1000.

Printed Name: _____

Signature: _____ Date: _____

DEED RESTRICTIONS AND PROTECTIVE COVENANTS AGREEMENT (LSW102)



102 Town Hall Drive, Leland, NC 28451
 www.townofleland.com

Public Services Department
 Phone 910-371-0148 Fax 910-371-1073

For All Development Requiring a Stormwater Management Permit

In accordance with Chapter 26, the Stormwater Management Regulations for the Town of Leland, deed restrictions and protective covenants are required for projects where lots will be subdivided and sold. Deed restrictions and protective covenants are necessary to ensure that the development maintains a "built-upon" area consistent with the Stormwater Management Permit. This must be referenced on all final plats recorded for the area covered under the permit.

I, _____, acknowledge, affirm, and agree by my signature below, that I will record deed restrictions and covenants that meet the following stipulations prior to the sale of any lot:

1. The following covenants are intended to ensure ongoing compliance with Town of Leland Stormwater Management Permit Number _____, as issued by the Stormwater Management Division under Chapter 26 of the Town Code.
2. The Town of Leland and State of North Carolina are made beneficiaries of these covenants to the extent necessary to maintain compliance with the stormwater management permit.
3. These covenants are to run with the land and be binding on all persons and parties claiming under them.
4. The covenants pertaining to stormwater may not be altered or rescinded without the express written consent of the Town of Leland Stormwater Management Division.
5. Alteration of the drainage as shown on the approved plan may not take place without the concurrence of the Town of Leland Stormwater Management Division.
6. The maximum allowable built-upon area per lot is _____square feet. This allotted amount includes any built-upon area constructed within the lot property boundaries, and that portion of the right-of-way between the front lot line and the edge of the pavement. Built upon area includes, but is not limited to, structures, asphalt, concrete, gravel, brick, stone, slate, coquina and parking areas, but does not include raised, open wood decking, or the water surface of swimming pools.

OR, if the proposed built-upon areas per lot will vary, please REPLACE #6 above with the following:

6. The maximum built-upon area per lot, in square feet, is as listed below:

Lot #	BUA	Lot #	BUA	Lot #	BUA	Lot #	BUA
_____	_____	_____	_____	_____	_____	_____	_____

This allotted amount includes any built-upon area constructed within the lot property boundaries, and that portion of the right-of-way between the front lot line and the edge of the pavement. Built upon area includes, but is not limited to, structures, asphalt, concrete, gravel, brick, stone, slate, coquina, and parking areas, but does not include raised, open wood decking, or the water surface of swimming pools.

7. Built-upon area in excess of the permitted amount will require a permit modification. For Low Density Projects this may require modification to a High Density Project.
8. All runoff from the built-upon areas on the lot must drain into the permitted system. This may be accomplished through a variety of means including roof drain gutters which drain to the street, grading the lot to drain toward the street, or grading perimeter swales to collect the lot runoff and directing them into a component of the stormwater collection system. Lots that will naturally drain into the system are not required to provide these additional measures (NOT APPLICABLE TO LOW DENSITY PROJECTS).
9. In the case of a lot within CAMA's regulated AEC, where the Division of Coastal Management calculates a different maximum allowable built-upon area for that lot than is shown herein, the governing maximum built-upon area for that lot shall be the more restrictive of the two.
10. Filling in or piping of any vegetative conveyances (ditches, swales, etc.) associated with the Stormwater Management Permit, except for average driveway crossings, is strictly prohibited by any persons.
11. Each lot will maintain a 50 foot (30 foot for redevelopment) wide vegetated buffer between all impervious areas and surface water.
12. All roof drains shall terminate at least 50 foot from the mean high-water mark of surface waters.
13. The Operations and Maintenance Agreements recorded on Deed Book _____ Page _____ will be followed for all structural stormwater BMP's permitted under Town of Leland Stormwater Management Permit Number _____.
14. The Town of Leland and State of North Carolina shall have a right of entry to inspect, monitor, maintain, repair, or reconstruct the permitted structural BMP's; however, in no case shall the right of entry, of itself, confer an obligation on the Town of Leland or State of North Carolina to assume responsibility for said BMP. Any costs incurred to the Town of Leland pursuant to this shall be fully reimbursed.
15. A provision indemnifying and holding harmless the Town of Leland for any costs and injuries arising from or related to the structural BMP, unless the Town of Leland has agreed in writing to assume the maintenance responsibility for the BMP and has accepted dedication of any and all rights necessary to carry out that maintenance.

Special Requirements for High Density Commercial Developments with Out-parcels

1. The runoff from all built-upon area within the out-parcel or future development area must be directed into the permitted stormwater control system.
2. The connection from the out-parcel's collection system into the stormwater control shall be made such that short-circuiting of the system does not occur.
3. For those out-parcels or future development areas whose ownership is not retained by the permittee, the new owner shall submit a separate offsite stormwater permit application to the Town of Leland and receive a permit prior to construction.

Special Requirements for Low Density Commercial Projects

1. Each lot, whose ownership is not retained by the permittee, shall submit a separate stormwater permit application to the Town of Leland and receive a permit prior to construction. The application shall demonstrate compliance with the maximum BUA limit and the low density requirements set forth in Chapter 26 of the Town Code. Lots whose ownership is retained by the permittee shall be submitted as modifications to the original permit.

Special Requirements for Low Density Projects with Curb Outlet Swales

1. This project proposes a curb outlet system. Each designated curb outlet swale shown on the approved plan must be maintained at a minimum of 100' long with 5:1 (H:V) side slopes or flatter, have a longitudinal slope no steeper than 5%, carry the flow from a 10 year storm in a non-erosive manner, and maintain a dense vegetated cover.
2. Filling in, piping or altering any designated 5:1 curb outlet swale associated with the development is prohibited by any persons.

Special Requirements for Home Owners Associations, Property Owners Associations, and other Associations

1. Acknowledgment that the association shall continuously operate and maintain the stormwater control and management facilities.
2. Establishment of an escrow account with the Town of Leland, which can be spent solely for sediment removal, structural, biological or vegetative replacement, major repair, or reconstruction of the structural BMPs. If structural BMPs are not performing adequately or as intended or are not properly maintained, the Town of Leland, in its sole discretion, may remedy the situation, and in such instances the Town of Leland shall be fully reimbursed from the escrow account. Escrowed funds may be spent by the association for sediment removal, structural, biological or vegetative replacement, major repair, and reconstruction of the structural BMPs, provided that the Town of Leland shall first consent to the expenditure.
 - a. Both developer contribution and annual sinking funds shall fund the escrow account. Prior to plat recordation or issuance of construction permits, whichever shall first occur, the developer shall pay into the escrow account an amount equal to fifteen (15) per cent of the initial construction cost of the structural BMPs. Two-thirds (2/3) of the total amount of sinking fund budget shall be deposited into the escrow account within the first five (5) years and the full amount shall be deposited within ten (10) years following initial construction of the structural BMPs. Funds shall be deposited each year into the escrow account. A portion of the annual assessments of the association shall include an allocation into the escrow account. Any funds drawn down from the escrow account shall be replaced in accordance with the schedule of anticipated work used to create the sinking fund budget.
 - b. The percent of developer contribution and lengths of time to fund the escrow account may be varied by the Town of Leland depending on the design and materials of the stormwater control and management facility.

3. Allowing the Town of Leland to recover from the association and its members any and all costs the Town of Leland expends to maintain or repair the structural BMPs or to correct any operational deficiencies. Failure to pay the Town of Leland all of its expended costs, after forty-five days written notice, shall constitute a breach of the agreement. In case of a deficiency, the Town of Leland shall thereafter be entitled to bring an action against the association and its members to pay or foreclose upon the lien hereby authorized by the agreement against the property, or both. Interest, collection costs, and attorney fees shall be added to the recovery.
4. This agreement shall not obligate the Town of Leland to maintain or repair any structural BMPs, and the Town of Leland shall not be liable to any person for the condition or operation of structural BMPs.
5. This agreement shall not in any way diminish, limit, or restrict the right of the Town of Leland to enforce any of its ordinances as authorized by law.

Printed Name: _____

Signature: _____

Date: _____

I, _____, a Notary Public in the
State of _____, County of _____,

do hereby certify that _____ personally appeared
before me this the _____ day of _____, 20____, and acknowledge
the due execution of the foregoing instrument. Witness my hand and official seal,

SEAL

Signature

My Commission expires _____

STORMWATER MANAGEMENT PERMIT TRANSFER FORM (LSW103)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

OFFICE USE ONLY		
Date Received	Fee Paid	Permit Number

Pursuant to [15A NCAC 02H.1045](#) and other applicable statues as reference within

Only complete applications packages will be accepted and reviewed. This form and the required items (with original signatures) must be sent to Town Hall.

After this application is accepted, the Town will conduct a compliance inspection and report any deficiencies to the current permittee and/or the proposed permittee. Per the Town stormwater rules and the Town stormwater permit conditions, the permit shall not be transferred until:

1. the current permittee resolves all non-compliance issues identified in the inspection report;
2. the current permittee negotiates a resolution with the proposed permittee (in writing and signed by both entities. The negotiated resolution must identify the necessary actions, the responsible party(ies), and the timelines to correct the deficiencies. The site must either be found in compliance or a copy of the negotiated resolution must be submitted prior to the transfer of the permit.); or
3. in the case where a transfer falls under [G.S. 143-214.7\(c2\)](#) (see also SL 2011-256), the proposed permittee resolves all non-compliance issues upon acquiring the permit.

Signature requirements for the named signing official (for current and proposed permittee) must meet the following:

- Corporation - a principal executive officer of at least the level of vice-president;
- Limited Liability Company (LLC) - the designated manager; (Documentation from the NC Secretary of State or other official documentation must be provided that states the titles and positions held by the person who signed the application (pursuant to 02H.1040) that shows they have legal authority to sign for the LLC)
- Municipality - a ranking official or duly authorized employee;
- Partnership or limited partnership - the general partner;
- Sole proprietor;
- The signature of the consultant or other agent shall be accepted on this permit transfer application only if accompanied by a letter of authorization signed by one of the signatories noted above, as applicable.

A. GENERAL INFORMATION

1. Town Stormwater Permit Number: _____
2. Project name: _____
Is this an updated project name from the current permit? Yes No
3. Reason for the permit transfer request:

B. PERSON(S) WHO HAVE SIGNED THIS FORM (select only one response below)

1. **Both the current and proposed permittees**

2. **Only the current permittee of a condominium or planned community** (skip Part F & G).

In accordance with [G.S. 143-214.7\(c2\)](#) (see also SL 2011-256), this type of transfer is allowed only when all of the following items can be truthfully checked:

- Any common areas related to the operation and maintenance of the stormwater management system have been conveyed to the unit owners' association or owners' association in accordance with the declaration;
- The declarant has conveyed at least fifty percent (50%) of the units or lots to owners other than a declarant (provide documentation per submittal requirements below);
- The stormwater management system is in compliance with the stormwater permit.

3. **Only the proposed permittee** (skip Part D below).

In accordance with [G.S. 143-214.7\(c5\)](#) (see also SL 2013-121), this type of transfer is allowed only when all of the following items can be truthfully checked:

- a. The proposed permittee is either (select one of the following):
 - The successor-owner who holds title to the property on which the permitted activity is occurring or will occur;
 - The successor-owner who is the sole claimant of the right to engage in the permitted activity.
- b. The current permittee is (select at least one of the following, but all that apply):
 - A natural person who is deceased.
 - A partnership, Limited Liability Corporation, corporation, or any other business association that has been dissolved
 - A person who has been lawfully and finally divested of title to the property on which the permitted activity is occurring or will occur.
 - A person who has sold the property on which the permitted activity is occurring or will occur.
 - Other (please explain): _____
- c. The proposed permittee agrees to the following requirements (all must be selected):
 - There will be no substantial change in the permitted activity.
 - The permit holder shall comply with all terms and conditions of the permit until such time as the permit is transferred.
 - The successor-owner shall comply with all terms and conditions of the permit once the permit has been transferred.

C. SUBMITTAL REQUIREMENTS

Please mark "Y" to confirm the items are included with this form. Please mark "X" if previously provided. If not applicable or not available, please mark N/A.:

- _____ 1. A processing fee of five hundred and five dollars (\$505.00).
- _____ 2. Two hard copies (with original signatures) and one electronic copy of this completed form and the required items.
- _____ 3. For proposed permittees that are corporations or LLC's, documentation from the NC Secretary of State demonstrating that the proposed permittee is a legal and viable entity able to conduct business in North Carolina.
- _____ 4. If Part B, Items 1 or 3 of this form is selected, the signed and notarized applicable O&M agreement(s) from the proposed permittee, as required by the permit.
- _____ 5. Legal documentation that the property has transferred to the proposed permittee (such as a recorded deed for the property, uncompleted development and/or common areas) or legal documentation demonstrating that the proposed permittee is the sole claimant of the right to engage in the permitted activity.
- _____ 6. If required by the permit and if the project has been built, a signed, sealed and dated certification document from a licensed professional stating that the stormwater management system has been inspected and that it has been built and maintained in accordance with the approved plans.
- _____ 7. A copy of the recorded covenants and deed restrictions, if required by the permit. If the project has been built, documentation that the maximum allowed per lot built-upon area or the maximum allowed total built-upon area has not been exceeded. If the project has not been built, the new owner shall provide a signed agreement to submit final recorded deed restrictions and protective covenants.
- _____ 8. If transferring under [G.S. 143-214.7\(c2\)](#) (i.e., Part B, Item 2 of this form is selected), documentation verifying that 50% or more of the lots have been conveyed to individuals (not builders). Copies of the deeds of conveyance or a chart listing the lot number, lot address, owner's name, conveyance date and deed book and page number are acceptable.
- _____ 9. If transferring under [G.S. 143-214.7\(c5\)](#) (i.e., Part B, Item 3 of this form is selected), provide legal documentation supporting the dissolution of the corporation or documentation supporting the current permittee was lawfully and finally divested of title of the property.
- _____ 10. A copy of the lease agreement if the proposed permittee is the lessee.
- _____ 11. A copy of the pending sales agreement if the proposed permittee is the purchaser.
- _____ 12. A copy of the development agreement if the proposed permittee is the developer.

D. CURRENT PERMITTEE INFORMATION AND CERTIFICATION *Please be sure to provide Email.*

1. Current Permit Holder's Company Name/Organization: _____
2. Signing Official's Name: _____
3. Signing Official's Title: _____
4. Mailing Address: _____
City: _____ State: _____ ZIP : _____
5. Street Address: _____
City: _____ State: _____ ZIP : _____
6. Phone: (____) _____ Email: _____

I, _____, the current permittee, am submitting this application for a transfer of ownership for the above listed stormwater permit under the General Statute and Session Law identified on Page 1 of this application. I hereby notify the Town of the sale or other legal transfer of the property/project and/or the stormwater system associated with this permit. I have provided a copy of the following documents to the proposed permittee named in this application form: *(select all that apply)*

- the most recent permit;
- the designer's certification for each SCM;
- any recorded deed restrictions, covenants, common areas, drainage easements or plats;
- the approved plans and/or approved as-built plans;
- the approved operation and maintenance agreement;
- past maintenance records from the previous permittee (where required);
- a copy of the most recent inspection report;

I further attest that this application and request for a permit transfer is accurate and complete to the best of my knowledge. I attest that I have provided all of the required items per the law to transfer this permit. I understand that if all required parts of this request are not completed or if all required supporting information and attachments listed above are not included, this request package will be returned as incomplete I assign all rights and obligations as permittee to the proposed permittee named below. I understand that this request to transfer the permit may not be approved by the Town unless and until the facility is in compliance with the permit.

Signature: _____ Date: _____

I, _____, a Notary Public for the State of _____, County of _____, do hereby certify that _____ personally appeared before me this the _____ day of _____, 20____, and acknowledge the due execution of the forgoing instrument. Witness my hand and official seal,

(Notary Seal)

Notary Signature: _____

My commission expires: _____

E. PROPOSED PERMITTEE INFORMATION

1. The proposed permittee is the:

- Property owner** (Also complete Part F.)
- Home Owners Association (HOA), Property Owners Association (POA), or Unit Owner Association (UOA)** (Also complete Part F.)
- Lessee** - Attach a copy of the lease agreement. Both the lessee and the property owner will appear on the permit as co-permittees. If the lease is terminated, responsibility for the permit reverts to the property owner. (Also complete Parts F & G.)
- Purchaser** - Attach a copy of the pending sales agreement. The permit will require submission of a copy of the recorded deed after the purchase has taken place. If the purchase agreement is cancelled the permit reverts to the property owner. (Also complete Parts F & G.)
- Developer** - Attach a copy of the development agreement. Both the developer and the property owner will appear on the permit as co-permittees. If the development agreement is terminated, responsibility for the permit reverts to the property owner. (Also complete Parts F & G.)

2. Proposed permittee name (check one of the following and provide the name):

- Corporation, LLC, Partnership, Municipality name: _____
- HOA / POA / UOA name: _____
- Sole Proprietor

3. Proposed permittee contact information:

Please be sure to provide Email.

- a. Signing Official's Name: _____
- b. Signing Official's Title: _____
- c. Mailing Address: _____
City: _____ State: _____ ZIP : _____
- d. Street Address: _____
City: _____ State: _____ ZIP : _____
- e. Phone: (____) _____ Email: _____

4. If there is a Management Entity that manages the property for an HOA, POA or UOA, please provide:

Please be sure to provide Email.

- a. Management Company or Business name: _____
- b. Contact Name: _____ Title: _____
- c. Mailing Address: _____
- d. City: _____ State: _____ ZIP: _____
- e. Phone: (____) _____ Email: _____

F. PROPOSED PERMITTEE CERTIFICATION

I, _____, hereby notify the Town that I have acquired through sale, lease, development agreement, or other legal transfer, the project/property covered by the stormwater management permit and/or the responsibility for constructing and/or operating and maintaining the permitted stormwater management system. I acknowledge and attest that I have received a copy of: *(select all that apply)*:

- the most recent permit;
- the designer’s certification for each SCM;
- any recorded deed restrictions, covenants, common areas, drainage easements or plats;
- the approved plans and/or approved as-built plans;
- the approved operation and maintenance agreement;
- past maintenance records from the previous permittee (where required);
- a copy of the most recent inspection report;

Check here if the proposed permittee agrees to be the entity responsible for addressing any compliance issues outlined in the Compliance Inspection Report. If checked, the proposed permittee must provide a written document statement, with a “plan of action and schedule” addressed to this office stating that they will bring the project into compliance upon receipt of the transferred permit. This written “plan of action and schedule” must be received by the Division before the Division will transfer the permit.

I have reviewed the permit, approved plans and other documents listed above, and I acknowledge that I will comply with the terms and conditions of the permit. I will construct the project’s built-upon area as shown on the approved plans; and I will {construct}, operate and maintain the approved stormwater management system pursuant to the requirements listed in the permit and in the operation and maintenance agreement.

Signature: _____ Date: _____

I, _____, a Notary Public for the State of _____, County of _____, do hereby certify that _____ personally appeared before me this the _____ day of _____, 20____, and acknowledge the due execution of the forgoing instrument. Witness my hand and official seal,

(Notary Seal)

Notary Signature: _____

My commission expires: _____

G. PROPERTY OWNER INFORMATION AND CERTIFICATION

Fill out this section only if the property owner is different from the proposed permittee. The permit will revert to the property owner if the purchase agreement, development agreement or lease expires or is terminated.

Company Name/Organization: _____

Signing Official's Printed Name: _____

Signing Official's Title: _____

Mailing Address: _____

City: _____ State: _____ ZIP : _____

Phone: (____) _____ Email: _____

I, _____, hereby certify that I currently own the property identified in this permit transfer document and acknowledge that the Proposed Permittee listed in Part F will be purchasing the property, developing the property on my behalf, and/or leasing the property from me. A copy of the purchase agreement, development agreement or the lease agreement, which names the party responsible for the construction and/or operation and maintenance of the stormwater system, has been provided with the permit transfer request.

I agree to notify the Town within 30 days if there are any changes to the purchase, developer or lease agreements and will submit the applicable completed and signed Permit Information Update Form or Permit Transfer Application Form to address these changes. As the legal property owner, I acknowledge, understand, and agree by my signature below, that the permit will revert to me and I will be responsible for complying with the Town Stormwater permit if the property purchase, lease, or developer agreement/contract is cancelled or defaults. I understand that any individual or entity found to be in noncompliance with the provisions of the stormwater management permit or the stormwater rules, is subject to enforcement action as set forth in NC General Statute (NCGS) 143, Article 21.

Signature of the property owner _____ Date: _____

I, _____, a Notary Public for the State of _____, County of _____, do hereby certify that _____ personally appeared before me this the _____ day of _____, 20____, and acknowledge the due execution of the forgoing instrument. Witness my hand and official seal,

(Notary Seal)

Notary Signature: _____

My commission expires: _____

STORMWATER PERMIT NAME/ ADDRESS CHANGE FORM (LSW104)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

A. NEW PERMIT INFORMATION

Town Stormwater Permit Number: _____

Are you updating (check all that apply):	If so, please provide the updated information:
<input type="checkbox"/> Project name	_____
<input type="checkbox"/> Corporation Name ¹	_____
<input type="checkbox"/> Permit Contact Name ^{2,3}	_____
<input type="checkbox"/> Permit Contact Title	_____
<input type="checkbox"/> Mailing Address ³	_____
<input type="checkbox"/> Phone number	_____
<input type="checkbox"/> Email address	_____

¹ Provide documentation such as a Name Change / Merger filed with the NCSOS.

² Provide supporting documentation such as NCSOS filing. The permit contact's position must be in accordance with [15A NCAC 02H .1040\(1\)](#).

³ If more than one point of contact or mailing address is being changed, please attach a separate sheet.

B. CERTIFICATION OF PERMITTEE

I, _____, the current permittee, hereby notify DEMLR that I am making the changes as listed in Section A above. I further attest that this application for an update to the permit information currently on file is accurate and complete to the best of my knowledge.

Signature: _____ Date: _____

I, _____, a Notary Public for the State of _____,

County of _____, do hereby certify that _____

personally appeared before me this the _____ day of _____, 20____, and acknowledge the due execution of the forgoing instrument. Witness my hand and official seal,

(Notary Seal)

Notary Signature: _____

My commission expires: _____

PERFORMANCE SECURITY APPLICATION (LSW105)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Fee (non-refundable): \$150 New
 \$100 Renewal

Surety Type: Cash Bond
 Letters of Credit Issuing Bank: _____
Issuing Guarantor: _____

Length of Agreement: _____ year(s)
(minimum one year)

Completed applications must be submitted with processing fee, paid by the application deadline, no later than 21 days prior to the next regularly scheduled meeting of Leland Town Council, and before issuance of a Town stormwater permit. This will allow staff and the Town of Leland's Public Services Department to complete the evaluation of the estimated number of quantities. Submission of this application is not a guarantee of approval.

Developer's Information

Developer: _____

Contact Name: _____

Mailing Address: _____

Business Phone: _____ Mobile Phone: _____

Applicant's Email: _____

Site Information

Site Name: _____ Latitude: _____ Longitude: _____

Subdivision Name (if applicable): _____ Phase #: _____ Section #: _____

Stormwater Permit Number (if applicable): _____ Map Book: _____ Map Page: _____

Description of improvements (quantity and type of SCMs): _____

Engineer's Information

Company: _____

Contact Name: _____

Mailing address: _____

Business phone: _____ Mobile Phone: _____ Fax: _____

Engineer's email: _____

Stormwater Control Measure (SCM) Improvements To Be Covered

Type of SCM(s):

- Bioretention Cell Dry Pond Green Roof Infiltration System Level Spreader Swale
- Wet Pond Stormwater Wetland Vegetative Filter Strip Permeable Pavement

Number of SCM: _____

Cost to complete improvements \$ _____
(Include administration, inspection, and engineering fees.)

25% mark-up per Sec 26-162(d)(4) \$ _____

Total Amount (cost X 1.25) \$ _____

The following must be attached to this application to be considered a complete submission:

- A map of the project with SCM locations and summary that the performance guarantee will cover. Include street names and lot numbers (if applicable).
- A list of estimated quantities and cost estimates by a certified engineer with proof of engineering seal.

The above statements and information contained in this application and attachments are in all respects true, complete, and correct to the best of my knowledge and belief.

Engineer's Printed Name _____ Date _____

Engineer's Signature _____

Certification

I certify that I am authorized to make this application, that the information provided is correct to the best of my knowledge, and that I am authorized to grant, and do grant, permission to local town officials and engineering services to enter on the property described above for the purpose of inspections. I understand that if this application is approved, that failure to meet any conditions of the approval shall result in the revocation of any permit(s) based upon this certificate.

Applicant's Printed Name _____ Date _____

Applicant's Signature _____

ANNUAL SCM INSPECTION REPORT COVER SHEET (SCM101)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

The Town of Leland Stormwater Management Ordinance (Chapter 26) requires that structural control measures (SCM's) be inspected annually to ensure they are being maintained properly and are functioning as originally designed and intended.

A. GENERAL INFORMATION

Use only one Cover Sheet per site with as many specific SCM Inspection Report attachments as needed. Please include digital photographs of the site and SCM's as applicable.

Project: _____	Inspection Date: _____
Permit Number: _____	Weather Conditions: _____
SCM Owner: _____	Inspection Company: _____
Mailing Address: _____	Mailing Address: _____
Phone #: (____) _____	SCM Inspector Name: _____
Fax #: (____) _____	Inspector Phone #: (____) _____
Deed Book & Page: _____	Receiving Stream: _____

B. INSPECTION REPORT ATTACHMENTS

The listed forms below are the Structural Control Measure Inspection Reports to be completed for this particular site. Please use one form per SCM on site and submit all forms together with this Cover Sheet (SCM101) as one singular report. Also, document the number of each SCM found at each site in the spaces below.

		Number of SCM's at this site
Form SCM102	Infiltration System	_____
Form SCM103	Bioretention Cell	_____
Form SCM104	Wet Pond	_____
Form SCM105	Stormwater Wetland	_____
Form SCM106	Permeable Pavement	_____
Form SCM107	Sand Filter	_____
Form SCM108	Rainwater Harvesting	_____
Form SCM109	Green Roof	_____
Form SCM110	Level Spreader-Filter Strip	_____
Form SCM111	Disconnected Impervious Surface	_____
Form SCM112	Treatment Swale	_____
Form SCM113	Dry Pond	_____

C. INSPECTION RESULTS

FAIL

- If any one item on the inspection form is coded as 'Work Needed', then the entire SCM Inspection fails.
- If a site has multiple SCM's and one fails inspection, this cover sheet is marked as 'FAIL' until all items on SCM's pass inspection.

Note: Applicable SCM Inspection Reports and confirmatory digital photographs summarizing required repairs must be completed within 60 days of a failed preliminary report. It is strongly encouraged that the inspector be part of the repair and maintenance process in a QA/QC role in order to ensure that the repairs are being performed properly.

PASS

Note: A passed inspection form should be signed, stamped, and sealed below by the appropriate Professional and submitted to the Town on or before the established inspection due date. Attach all applicable SCM Inspection Reports and confirmatory digital photographs accordingly.

D. PROFESSIONAL CERTIFICATION (Registered North Carolina professional engineer, surveyor, or landscape architect):

To be completed only when all SCM's at this site are functional with no outstanding maintenance issues.

I, _____, as a duly registered _____ in the State of North Carolina attest that a thorough inspection has been completed for ALL structural control measure that are associated with this particular site. All inspected structural control measures are performing as designed and intended and are in compliance with the terms and conditions of the approved operation and maintenance agreements required by the Town of Leland.

Signature: _____

SEAL

Date: _____

ANNUAL SCM INSPECTION REPORT INFILTRATION SYSTEM (SCM102)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

GRASS FILTER STRIP / PRETREATMENT AREA

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Bare soil/erosion gullies		
Vegetation length (too short/too long)		
Other (describe)		

FLOW DIVERSION STRUCTURE

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Structure Condition		
Other (describe)		

TRENCH / BASIN / MAIN TREATMENT AREA

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Side Slope Erosion		
Invasive Vegetation		
Ponding (>3 days after storm)		
Other (describe)		

OUTLET DEVICE(s)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Joint failure/loss of joint material		
Leaking Device		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT

BIORETENTION CELL (SCM103)



102 Town Hall Drive, Leland, NC 28451
 www.townofleland.com

Public Services Department
 Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
 NP = Not a Problem WN = Work Needed

INLET DEVICE(S)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Displacement of fabric/rip rap		
Pipe Condition		
Other (describe)		

PRETREATMENT AREA

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Erosion/gullies present		
Invasive Vegetation		
Flow bypassing pretreatment		
Other (describe)		

PERIMETER

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Bare soils/erosion gullies		
Other (describe)		

BIORETENTION CELL

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Overgrown vegetation		
Plants are dead/diseased/dying		
Invasive vegetation		
Mulch is broken down/floated away		
Low soil pH/heavy metals accumulation		
Tree stakes/wires present (>6 months after planting)		
Other (describe)		

UNDERDRAIN, FILTER FABRIC ELEMENT, OUTLET SYSTEM

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Joint failure/loss of joint material		
Leaking Device		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT WET POND (SCM104)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____
(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable	M = Monitor (potential for future problem)
NP = Not a Problem	WN = Work Needed

INLET DEVICE(S)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Displacement of fabric/rip rap		
Pipe Condition		
Other (describe)		

EMBANKMET

Assessment	Code	Explanation
Erosion and/or loss of dam material		
Shrubs/Trees present		
Animal Burrows		
Soft spots or boggy areas		
Other (describe)		

*The Town of Leland highly recommends that a dam specialist be consulted regarding established trees growing on a dam. The SCM owner may choose to leave the trees on the dam provided they are not adversely affecting the SCM functionality or creating a nuisance. However, the Town assumes no liability for any future damage caused by the trees remaining on the dam.

FOREBAY

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Side Slope Erosion		
Invasive Vegetation		
Other (describe)		

VEGETATED SHELF / MAIN TREATMENT AREA

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Visual pollution/muddiness		
Plants are dead/diseased/dying		
Vegetation length (too short/long)		
Bare soil/erosion gullies		
Invasive vegetation (%)		
Algae cover (%)		
Other (describe)		

OUTLET DEVICE(S)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Joint failure/loss of joint material		
Leaking Device		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT STORMWATER WETLAND (SCM105)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

INLET DEVICE(s)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Displacement of fabric/rip rap		
Pipe Condition		
Other (describe)		

FOREBAY

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Side Slope Erosion		
Invasive Vegetation		
Other (describe)		

EMBANKMET / MICROPOOL

Assessment	Code	Explanation
Erosion and/or loss of dam material		
Shrubs/Trees present (embankment)		
Animal Burrows (embankment)		
Accumulation: Vegetation/Debris/Sediment (micropool)		
Invasive Vegetation (micropool)		
Other (describe)		

*The Town of Leland highly recommends that a dam specialist be consulted regarding established trees growing on a dam. The SCM owner may choose to leave the trees on the dam provided they are not adversely affecting the SCM functionality or creating a nuisance. However, the Town assumes no liability for any future damage caused by the trees remaining on the dam.

DEEP POOL, SHALLOW WATER, SHALLOW LAND AREAS

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Shallow land flooded (>5 days after storm)		
Plants are dead/diseased/dying		
Vegetation length (too short/long)		
Bare soil/erosion gullies		
Invasive vegetation (%)		
Algae cover (%)		
Other (describe)		

OUTLET DEVICE(s)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Joint failure/loss of joint material		
Leaking Device		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT PERMEABLE PAVEMENT (SCM106)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

PERIMETER

Assessment	Code	Explanation
Bare soil/erosion gullies		
Vegetative area drains toward pavement		
Other (describe)		

SURFACE OF PAVEMENT

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Invasive Vegetation		
Pavement Condition		
Ponding (>3 days after storm)		
Education Sign Condition		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT SAND FILTER (SCM107)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

PERIMETER

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Bare soil/erosion gullies		
Vegetation length (too short/too long)		
Other (describe)		

FLOW DIVERSION STRUCTURE

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Structure Condition		
Other (describe)		

FILTER BED / UNDERDRAIN SYSTEM

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Erosion		
Invasive Vegetation		
Ponding (>24 hours after storm)		
Other (describe)		

OUTLET DEVICE(S)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Device Condition		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT RAINWATER HARVESTING (SCM108)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

ENTIRE SYSTEM

Assessment	Code	Explanation
Damaged/Leaking Component		
Other (describe)		

ROOF AREA & GUTTER SYSTEM

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Rainwater bypassing gutter system		
Other (describe)		

CISTERN

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Algae Growth (%)		
Mosquitoes present		
Other (describe)		

PUMP & FILTER

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Pump Condition		
Other (describe)		

OVERFLOW PIPE

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Device Condition		
Erosion at outlet area		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT GREEN ROOF (SCM109)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

GUTTERS, DRAINS, SPOUTS

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Device Condition		
Other (describe)		

TREATMENT AREA

Assessment	Code	Explanation
Substantial loss of growing media and plant materials		
Invasive Vegetation		
Plants are dead/diseased/dying		
Ponding on media		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT LEVEL SPREADER / FILTER STRIP (SCM110)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____
(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

INLET/FLOW DIVERSION STRUCTURE

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Rip rap location/condition		
Structural Condition		
Other (describe)		

FILTER STRIP

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Plants are dead/diseased/dying		
Vegetation length (too short/long)		
Bare soil/erosion gullies		
Invasive Vegetation		
Other (describe)		

SWALE & LEVEL SPREADER

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Level Lip Condition		
Erosion/flow bypassing level spreader		
Trees/Shrubs present in swale or downstream side of spreader		
Other (describe)		

BYPASS CHANNEL

Assessment	Code	Explanation
Bare soil/erosion gullies		
Turf Reinforcement Condition		
Displacement of rip rap		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT

DISCONNECTED IMPERVIOUS SURFACE (SCM111)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____
(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable	M = Monitor (potential for future problem)
NP = Not a Problem	WN = Work Needed

INLET/CONTRIBUTING IMPERVIOUS SURFACE (GUTTER SYSTEM, ROADWAYS, PARKING LOTS, ETC.)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Flow bypassing gutter system		
Impervious Surface Condition		
Other (describe)		

VEGETATIVE RECEIVING AREA

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Bare soil/erosion gullies		
Vegetation length (too short/too long)		
Trees/Shrubs present		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT TREATMENT SWALE (SCM112)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

SWALE

Assessment	Code	Explanation
Accumulation: Trash/Debris/Sediment		
Bare soil/erosion gullies		
Vegetation length (too short/too long)		
Grass is dead/diseased/dying		
Invasive Vegetation		
Inlet Damage		
Outlet Damage		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

ANNUAL SCM INSPECTION REPORT

DRY POND (SCM113)



102 Town Hall Drive, Leland, NC 28451
www.townofleland.com

Public Services Department
Phone 910-371-0148 Fax 910-371-1073

Project Name: _____

Inspection Date: _____

Permit Number: _____

SCM Location: _____

SCM ID #: _____

(As labeled on Town-approved Plans)

This SCM is currently:

acting as a temporary sediment collection device OR a permanent SCM

CODE KEY:

N/A = Not Applicable M = Monitor (potential for future problem)
NP = Not a Problem WN = Work Needed

INLET DEVICE(S)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Displacement of fabric/rip rap		
Pipe Condition		
Other (describe)		

EMBANKMET

Assessment	Code	Explanation
Erosion and/or loss of dam material		
Shrubs/Trees present		
Animal Burrows		
Soft spots or boggy areas		
Other (describe)		

*The Town of Leland highly recommends that a dam specialist be consulted regarding established trees growing on a dam. The SCM owner may choose to leave the trees on the dam provided they are not adversely affecting the SCM functionality or creating a nuisance. However, the Town assumes no liability for any future damage caused by the trees remaining on the dam.

FOREBAY

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Side Slope Erosion		
Invasive Vegetation		
Other (describe)		

MAIN TREATMENT AREA

Assessment	Code	Explanation
Accumulation: Vegetation/Debris/Sediment		
Standing water (>5 days after storm)		
Plants are dead/diseased/dying		
Vegetation length (too short/long)		
Bare soil/erosion gullies		
Invasive vegetation (%)		
Other (describe)		

OUTLET DEVICE(S)

Assessment	Code	Explanation
Obstruction: Vegetation/Debris/Sediment		
Erosion/Undercutting		
Joint failure/loss of joint material		
Leaking Device		
Other (describe)		

MISCELLANEOUS

Assessment	Code	Explanation
Trash/Debris		
Access		
Vandalism		
Fence Condition		
Signage		
Other (describe)		

PHOTOGRAPHS Attach digital photographs of the site and structural control measure(s) including a caption describing the photo.

ADDITIONAL COMMENTS

Inspector Initials: _____

