

# **Town of Rolesville Stormwater Ordinance**

Table of Contents
-------------------

<b><i>Town of Rolesville Stormwater Ordinance .....</i></b>	<b><i>1</i></b>
<b><i>SECTION 1: GENERAL PROVISIONS .....</i></b>	<b><i>6</i></b>
(A) <b><i>Title .....</i></b>	<b><i>6</i></b>
(B) <b><i>Authority.....</i></b>	<b><i>6</i></b>
(C) <b><i>Findings.....</i></b>	<b><i>6</i></b>
(D) <b><i>Purpose .....</i></b>	<b><i>6</i></b>
(1) <b><i>General.....</i></b>	<b><i>6</i></b>
(2) <b><i>Specific .....</i></b>	<b><i>6</i></b>
(E) <b><i>Applicability and Jurisdiction.....</i></b>	<b><i>7</i></b>
(1) <b><i>General.....</i></b>	<b><i>7</i></b>
(2) <b><i>Exemptions .....</i></b>	<b><i>7</i></b>
(3) <b><i>No Development or Redevelopment Until Compliance and Permit.....</i></b>	<b><i>8</i></b>
(4) <b><i>Map.....</i></b>	<b><i>8</i></b>
(F) <b><i>Interpretation .....</i></b>	<b><i>8</i></b>
(1) <b><i>References to Statutes, Regulations, and Documents .....</i></b>	<b><i>8</i></b>
(G) <b><i>North Carolina Stormwater Best management Practices Design Manual.....</i></b>	<b><i>8</i></b>
(1) <b><i>Reference to Design Manual .....</i></b>	<b><i>8</i></b>
(2) <b><i>Relationship of Design Manual to Other Laws and Regulations .....</i></b>	<b><i>8</i></b>
(H) <b><i>Relationship to Other Laws, Regulations and Private Agreements .....</i></b>	<b><i>9</i></b>
(1) <b><i>Conflict of Laws .....</i></b>	<b><i>9</i></b>
(2) <b><i>Private Agreements.....</i></b>	<b><i>9</i></b>
(I) <b><i>Severability .....</i></b>	<b><i>9</i></b>
(J) <b><i>Effective Date and Transitional Provisions .....</i></b>	<b><i>9</i></b>
(1) <b><i>Effective Date .....</i></b>	<b><i>9</i></b>
(2) <b><i>Final Approvals, Complete Applications.....</i></b>	<b><i>9</i></b>
(3) <b><i>Violations Continue .....</i></b>	<b><i>10</i></b>
<b><i>SECTION 2: DEFINITIONS.....</i></b>	<b><i>11</i></b>
<b><i>Terms Defined.....</i></b>	<b><i>11</i></b>
<b><i>Built-upon Area (BUA) .....</i></b>	<b><i>11</i></b>
<b><i>Density.....</i></b>	<b><i>11</i></b>
<b><i>Department.....</i></b>	<b><i>11</i></b>

<b>Design Manual.....</b>	<b>11</b>
<b>Development .....</b>	<b>11</b>
<b>Division.....</b>	<b>11</b>
<b>Flood Protection Zone .....</b>	<b>11</b>
<b>High-Density Project .....</b>	<b>11</b>
<b>Impervious Area.....</b>	<b>11</b>
<b>Larger Common Plan of Development or Sale .....</b>	<b>12</b>
<b>Low-Density Project .....</b>	<b>12</b>
<b>Non-structural BMP .....</b>	<b>12</b>
<b>One-year, 24-hour Storm .....</b>	<b>12</b>
<b>Owner.....</b>	<b>12</b>
<b>Perennial or Intermittent Surface Waters.....</b>	<b>12</b>
<b>Permeable Pavement .....</b>	<b>12</b>
<b>Redevelopment .....</b>	<b>13</b>
<b>Riparian Buffer Zone .....</b>	<b>13</b>
<b>Stormwater Administrator .....</b>	<b>13</b>
<b>Stormwater Management Practice.....</b>	<b>13</b>
<b>Structural BMP .....</b>	<b>13</b>
<b>Substantial Progress .....</b>	<b>13</b>
<b>Two-year, 24-hour Storm.....</b>	<b>13</b>
<b>Ten-year, 24-hour Storm.....</b>	<b>13</b>
<b>Ultra Low-Density Project .....</b>	<b>13</b>
<b><i>SECTION 3: ADMINISTRATION AND PROCEDURES.....</i></b>	<b><i>15</i></b>
<b><i>(A) Review and Decision-Making Entities .....</i></b>	<b><i>15</i></b>
<b><i>(1) Stormwater Administrator .....</i></b>	<b><i>15</i></b>
<b><i>(B) Review Procedures .....</i></b>	<b><i>15</i></b>
<b><i>(1) Permit Required; Must Apply for Permit .....</i></b>	<b><i>15</i></b>
<b><i>(2) Effect of Permit .....</i></b>	<b><i>15</i></b>
<b><i>(3) Authority to File Applications .....</i></b>	<b><i>16</i></b>
<b><i>(4) Establishment of Application Requirements, Schedule, and Fees .....</i></b>	<b><i>16</i></b>
<b><i>(5) Submittal of Complete Application.....</i></b>	<b><i>16</i></b>
<b><i>(6) Review .....</i></b>	<b><i>17</i></b>
<b><i>(C) Applications for Approval.....</i></b>	<b><i>17</i></b>

(1)	Concept Plan and Consultation Meeting .....	17
(2)	Stormwater Management Permit Application .....	18
(D)	<i>Approvals</i> .....	19
(1)	Effect of Approval .....	19
(2)	Time Limit/Expiration .....	19
(E)	<i>Appeals</i> .....	19
(1)	Right of Appeal .....	19
(2)	Filing of Appeal and Procedures .....	19
(3)	Review by Superior Court .....	20
	<b>SECTION 4: STANDARDS</b> .....	21
(A)	<i>Standards Based on Project Density</i> .....	21
(1)	Development Standards for Ultra Low-Density and Low-Density Projects .....	21
(2)	Maximum Curve Number after Development .....	22
(3)	Target Curve Number Credits .....	22
(4)	Development Standards for High-Density Projects .....	23
(B)	<i>General Standards</i> .....	25
(1)	Downstream Impact Analysis .....	25
(2)	Standards for Stormwater Control Measures .....	26
(3)	Additional Stormwater Management Measures .....	27
(4)	Dedication of BMPS, Facilities & Improvements .....	27
(5)	Low Impact Development Project Classifications .....	27
(F)	<i>Onsite Wastewater</i> .....	28
	<b>SECTION 5: COMPLETION OF IMPROVEMENTS and Maintenance</b> .....	29
(A)	<i>Performance Security for Installation and Maintenance of Improvements</i> .....	29
(1)	Form and Amount of Installation Performance Security .....	29
(2)	Form and Amount of Maintenance Performance Security .....	29
(3)	Uses of Performance Security for Installation .....	29
(4)	Uses of Performance Security for Maintenance .....	30
(B)	<i>As-Built Plans and Final Approval</i> .....	31
(C)	<b>MAINTENANCE OF IMPROVEMENTS</b> .....	31
(1)	Maintenance Required .....	31
(2)	Parties Responsible for Maintenance of Structural BMPs .....	31
(3)	Maintenance Plan .....	32

(4)	Maintenance Agreement .....	32
(5)	Maintenance Easement.....	32
(6)	Annual Maintenance Inspection and Report .....	32
(D)	<i>INSPECTION PROGRAM</i> .....	33
(E)	<i>Signage</i> .....	33
(F)	<i>Records of Installation and Maintenance Activities</i> .....	33
(G)	<i>Nuisance</i> .....	33
	<b>SECTION 6: ENFORCEMENT AND VIOLATIONS</b> .....	34
(A)	<i>General</i> .....	34
(1)	Authority to Enforce.....	34
(2)	Violation Unlawful .....	34
(3)	Each Day a Separate Offense.....	34
(4)	Responsible Persons/Entities.....	34
(b)	Responsibility for Land or Use of Land.....	34
(B)	<i>Remedies and Penalties</i> .....	35
(1)	Remedies .....	35
(2)	Civil Penalties .....	36
(3)	Criminal Penalties.....	36
(C)	<i>Procedures</i> .....	36
(1)	Initiation/Complaint .....	36
(2)	Inspection.....	36
(3)	Notice of Violation and Order to Correct.....	36
(4)	Extension of Time .....	37
(5)	Enforcement After Time to Correct.....	37
(6)	Emergency Enforcement .....	37
(7)	Variances .....	37
	<b>SECTION 7: Illicit Discharges</b> .....	39
(A)	<i>Illicit Discharges and Connections</i> .....	39
(1)	Illicit Discharges.....	39
(2)	Illicit Connections .....	40
(3)	Spills .....	40
(4)	Nuisance .....	41

## **SECTION 1: GENERAL PROVISIONS**

### **(A) TITLE**

This ordinance shall be officially known as “The Post-Construction Stormwater Ordinance.” It is referred to herein as “this ordinance.”

### **(B) AUTHORITY**

The Town Board is authorized to adopt this ordinance pursuant to North Carolina law, including but not limited to Article 14, Section 5 of the Constitution of North Carolina; the Charter of the Town of Rolesville; North Carolina General Statutes 143-214.7 and rules promulgated by the Environmental Management Commission thereunder; Session Law 2004-163; Chapter 160A, §§ 174, and 185.

### **(C) FINDINGS**

It is hereby determined that:

Development and Redevelopment alter the hydrologic response of local watersheds and increase stormwater runoff rates and volumes, flooding, soil erosion, stream channel erosion, nonpoint and point source pollution, and sediment transport and deposition, as well as reducing groundwater recharge;

These effects can be managed and minimized by applying proper design and well-planned controls to manage stormwater runoff from Development sites.

Further, the Federal Water Pollution Control Act of 1972 (“Clean Water Act”) and federal Phase II Stormwater Rules promulgated under it compel the town to adopt minimum stormwater controls such as those included in this ordinance.

Therefore, the town establishes this set of water quality and quantity regulations to meet the requirements of state and federal law regarding control of stormwater runoff and discharge.

### **(D) PURPOSE**

#### **(1) General**

The purpose of this ordinance is to protect, maintain and enhance the public health, safety, environment and general welfare by establishing minimum requirements and procedures to control the adverse effects of increased post-Development stormwater runoff and nonpoint and point source pollution associated with new Development and Redevelopment as well as illicit discharges into municipal stormwater systems.

#### **(2) Specific**

This ordinance seeks to meet its general purpose through the following specific objectives and means:

- (i) Requiring 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 to reduce flooding, streambank erosion, nonpoint and point source pollution;

- (ii) Establishing minimum post-Development stormwater management standards and design criteria for the regulation and control of stormwater runoff quantity and quality;
- (iii) Encouraging the use of better management and site design practices, such as the use of vegetated conveyances for stormwater and the preservation of greenspace, riparian buffers and other conservation areas to the maximum extent practicable;
- (iv) Establishing provisions for the long-term responsibility for and maintenance of Structural and nonstructural Stormwater Best Management Practices (BMPs) to ensure that they continue to function as designed, are maintained appropriately, and pose no threat to public safety;
- (v) Establishing administrative procedures for the submission, review, approval and disapproval of stormwater management plans, for the inspection of approved projects, and to assure appropriate long-term maintenance.
- (vi) Managing flooding and downstream impacts with an awareness of impending regional growth.

## **(E) APPLICABILITY AND JURISDICTION**

### **(1) General**

Beginning with and subsequent to its effective date, this ordinance shall be applicable to all Development and Redevelopment, including, but not limited to, site plan applications, subdivision applications, and grading applications, unless exempt pursuant to Subsection (2) of this Section, Exemptions.

### **(2) Exemptions**

Development that cumulatively disturbs less than 20,000 square feet and is not part of a larger common plan of Development or Sale is exempt from the provisions of this ordinance. This exemption does not relieve any Development from Neuse Buffer Rules or other applicable federal, state or local laws.

Redevelopment that cumulatively disturbs less than 20,000 square feet and is not part of a Larger Common Plan of Development or Sale is exempt from the provisions of this ordinance. This exemption does not relieve any Development from Neuse Buffer Rules or other applicable federal, state or local laws.

Development and Redevelopment that disturb less than 20,000 square feet are not exempt if such activities are part of a larger common plan of or sale, even though multiple, separate or distinct activities take place at different times on different schedules.

Activities that are exempt from permit requirements of Section 404 of the federal Clean Water Act as specified in 40 CFR 232 (primarily, ongoing farming and forestry activities) are exempt from the provisions of this ordinance.

**(3) No Development or Redevelopment Until Compliance and Permit**

No Development or Redevelopment shall occur except in compliance with the provisions of this ordinance or unless exempted. No Development for which a permit is required pursuant to this ordinance shall occur except in compliance with the provisions, conditions, and limitations of the permit.

**(4) Map**

The provisions of this ordinance shall apply within the areas designated as the municipal incorporated area and extraterritorial jurisdiction on the town's Official Zoning Map, which is adopted simultaneously herewith. The Zoning Map shall be kept on file by the town and shall be amended from time to time to include changes in the land area covered by this ordinance. In the event of a dispute, the applicability of this ordinance to a particular area of land or BMP shall be determined by reference to the North Carolina Statutes, the North Carolina Administrative Code, and local zoning and jurisdictional boundary ordinances.

**(F) INTERPRETATION**

**(1) References to Statutes, Regulations, and Documents**

Whenever reference is made to a resolution, ordinance, statute, regulation, manual (including the North Carolina Stormwater Best Management Practices Manual, hereinafter "the Design Manual"), or document, it shall be construed as a reference to the most recent edition of such that has been finalized and published with due provision for notice and comment, unless otherwise specifically stated. See Section 3.8 of the Town of Rolesville Unified Development Ordinance.

**(G) NORTH CAROLINA STORMWATER BEST MANAGEMENT PRACTICES DESIGN MANUAL**

**(1) Reference to Design Manual**

The Stormwater Administrator or his or her designee shall use the policy, criteria, and information, including technical specifications and standards, in the Design Manual as the basis for decisions about stormwater permits and about the design, implementation and performance of Structural and non-structural stormwater BMPs.

The Design Manual includes a list of acceptable stormwater treatment practices, including specific design criteria for each stormwater practice. Stormwater treatment practices that are designed, constructed, and maintained in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards of the Phase II laws.

**(2) Relationship of Design Manual to Other Laws and Regulations**

If the specifications or guidelines of the Design Manual are more restrictive or apply a higher standard than other laws or regulations, that fact shall not prevent application of the specifications or guidelines in the Design Manual.



**(H) RELATIONSHIP TO OTHER LAWS, REGULATIONS AND PRIVATE AGREEMENTS**

**(1) Conflict of Laws**

This ordinance is not intended to modify or repeal any other ordinance, rule, regulation or other provision of law. The requirements of this ordinance are in addition to the requirements of any other ordinance, rule, regulation or other provision of law. Where any provision of this ordinance imposes restrictions different from those imposed by any other ordinance, rule, regulation or other provision of law, whichever provision is more restrictive or imposes higher protective standards shall control.

**(2) Private Agreements**

This ordinance is not intended to revoke or repeal any easement, covenant, or other private agreement. However, where the regulations of this ordinance are more restrictive or impose higher standards or requirements than such an easement, covenant, or other private agreement, the requirements of this ordinance shall govern. Nothing in this ordinance shall modify or repeal any private covenant or deed restriction, but such covenant or restriction shall not legitimize any failure to comply with this ordinance. In no case shall the town be obligated to enforce the provisions of any easements, covenants, or agreements between private parties.

**(I) SEVERABILITY**

If the provisions of any section, subsection, paragraph, subdivision or clause of this ordinance shall be adjudged invalid by a court of competent jurisdiction, such judgment shall not affect or invalidate the remainder of any section, subsection, paragraph, subdivision or clause of this ordinance.

**(J) EFFECTIVE DATE AND TRANSITIONAL PROVISIONS**

**(1) Effective Date**

This Ordinance shall take effect on \_\_\_\_\_, 200\_\_.

**(2) Final Approvals, Complete Applications**

All Development and Redevelopment projects for which complete and full applications were submitted and accepted as complete by the town prior to the effective date of this ordinance and which remain valid, unexpired, unrevoked and not otherwise terminated at the time of Development or Redevelopment shall be exempt from complying with all provisions of this ordinance dealing with the control and/or management of post-construction runoff, but shall be required to comply with all other applicable provisions.

A phased Development plan shall be deemed approved prior to the effective date of this ordinance if it has been approved by all necessary government units, it remains valid, unexpired, unrevoked and not otherwise terminated, and it shows:

- (a) For the initial or first phase of Development: the type and intensity of use for a specific parcel or parcels. This shall include, at a minimum, the boundaries of the project and a subdivision plan that has been approved.

- (b) For any subsequent phase of Development: sufficient detail showing that implementation of the requirements of this ordinance to that phase of Development would require a material change in that phase of the plan.

**(3) Violations Continue**

Any violation of provisions existing on the effective date of this ordinance shall continue to be a violation under this ordinance and be subject to penalties and enforcement under this ordinance unless the use, Development, construction, or other activity complies with the provisions of this ordinance.

## **SECTION 2: DEFINITIONS**

### **TERMS DEFINED**

When used in this Ordinance, the following words and terms shall have the meaning set forth in this section, unless other provisions of this Ordinance specifically indicate otherwise.

#### ***Built-upon Area (BUA)***

That portion of a Development project that is covered by impervious or partially impervious surface including, but not limited to, buildings, pavement and gravel areas such as roads, parking lots, and paths; and recreation facilities such as tennis courts. “Built-upon Area” does not include a wooden slatted deck, the water area of a swimming pool, or Permeable Pavement that meets the standards outlined in the North Carolina Division of Water Quality Stormwater Best Management Practices Manual.

#### ***Density***

The calculation of the total Impervious Area of a project divided by the total project area. Surface water bodies shall be included in calculations of project Density.

#### ***Department***

The North Carolina Department of Environment and Natural Resources.

#### ***Design Manual***

The North Carolina Department of Environment and Natural Resources, Division of Water Quality Stormwater Best Management Practices Manual approved for use in Phase II jurisdictions by the Department for the proper implementation of the requirements of the federal Phase II stormwater program. All references herein to the Design Manual are to the latest published edition or revision.

#### ***Development***

Any land-disturbing activity that increases the amount of built-upon area or that otherwise decreases the infiltration of precipitation into the soil.

#### ***Division***

The Division of Water Quality in the North Carolina Department of Environment and Natural Resources.

#### ***Flood Protection Zone***

The FEMA 100-year floodplain as identified on the current Flood Insurance Rate Map (FIRM) published by FEMA.

#### ***High-Density Project***

A project is a High-Density Project if it has more than 24 percent Built-upon Area (BUA) based on total project acreage for all residential and non-residential Development. Any project that exceeds the low-Density threshold for Built-upon Area.

#### ***Impervious Area***

Impervious Areas are those surfaces which prevent the infiltration of or impede the rate of infiltration of stormwater into the soil as compared with the natural conditions prior to Development. Common Impervious Areas include, but are not limited to, compacted surfaces used for pedestrian and vehicular travel or parking and other surfaces which prevent or impede the natural infiltration of stormwater runoff that existed prior to Development.

***Larger Common Plan of Development or Sale***

Any area where multiple separate and distinct construction or land-disturbing activities will occur under one plan. A plan is any announcement or piece of documentation (including but not limited to a sign, public notice or hearing, sales pitch, advertisement, loan application, drawing, permit application, zoning request, subdivision application or computer design) or physical demarcation (including but not limited to boundary signs, lot stakes, or surveyor markings) indicating that construction activities may occur on a specific plot.

***Low-Density Project***

A project is a Low-Density Project if it has more than 15 percent Built-upon Area (BUA) and no more than 24 percent Built-upon Area (BUA) based on total project acreage for all residential and non-residential Development.

A project with an overall Density at or below the relevant low-Density threshold, but containing areas with a Density greater than the overall project Density, may be considered Low Density as long as the project meets or exceeds the post-construction model practices for Low-Density Projects and locates the higher Density in upland areas and away from surface waters and drainageways to the maximum extent practicable.

***Non-structural BMP***

A practice that is intended to reduce the impacts of stormwater runoff by minimizing pollution at the source and that is not a physical device constructed to control or treat stormwater runoff. Examples of Non-Structural BMPs include reducing Impervious Areas, making use of existing natural features and systems, reforestation, and cluster Development.

***One-year, 24-hour Storm***

The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in 12 months and with a duration of 24 hours.

***Owner***

The legal or beneficial Owner of land, including but not limited to a mortgagee or vendee in possession, receiver, executor, trustee, or long-term or commercial lessee, or any other person or entity holding proprietary rights in the property or having legal power of management and control of the property. "Owner" shall include long-term commercial tenants; management entities, such as those charged with or engaged in the management of properties for profit; and every person or entity having joint ownership of the property.

***Perennial or Intermittent Surface Waters***

A Perennial or Intermittent Surface Water shall be deemed present if the feature is approximately shown on either the most recent version of the soil survey map prepared by the Natural Resources Conservation Service of the United States Department of Agriculture (USDA) or the most recent version of the 1:24,000 scale (7.5 minute) quadrangle topographic maps prepared by the United States Geologic Survey (USGS). An exception to this requirement shall be allowed when surface waters are not present in accordance with the provisions of 15A NCAC 2B .0233 (3)(a) or similar site-specific determination made using Division-approved methodology.

***Permeable Pavement***

An alternative to conventional concrete and asphalt paving materials that allows for infiltration of storm water into a storage area, with void spaces that provide temporary storage.

***Redevelopment***

Any Development on previously-developed land, other than a rebuilding activity that results in no net increase in Built-upon Area and provides equal or greater stormwater control than the previous Development.

***Riparian Buffer Zone***

Any area extending 50 feet landward of all Perennial and Intermittent Surface Waters.

***Stormwater Administrator***

The official assigned by the Town Manager, including the official's duly authorized agent or delegate, charged with the administration and enforcement of this ordinance, which includes but is not limited to the responsibility to make decisions about stormwater permits, the design, implementation and performance of structural and Non-structural BMPs; to make determinations and render interpretations of this ordinance; to establish application requirements and schedules; to enforce the provisions of this ordinance, and to designate appropriate other person(s) who shall carry out the powers and duties of the Stormwater Administrator.

***Stormwater Management Practice***

Any practice designed to reduce the impacts of stormwater runoff, including both Structural and Non-structural BMPs.

***Structural BMP***

A physical device designed to trap, settle out, or filter pollutants from stormwater runoff; to alter or reduce stormwater runoff velocity, amount, timing, or other characteristics; to approximate the pre-Development hydrology on a developed site; or to achieve any combination of these goals. Structural BMP includes physical practices such as constructed wetlands, vegetative practices, filter strips, grassed swales, and other methods installed or created on real property.

***Substantial Progress***

For the purposes of determining whether sufficient progress has been made on an approved plan, one or more of the following construction activities toward the completion of a site or subdivision plan shall occur: obtaining a grading permit and conducting grading activity; or installation and approval of on-site infrastructure; or obtaining a building permit for the construction and approval of a building foundation. "Substantial Progress" for purposes of determining whether an approved plan is null and void is not necessarily the same as "substantial expenditures" used for determining vested rights pursuant to applicable law.

***Two-year, 24-hour Storm***

The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in two years and with a duration of 24 hours.

***Ten-year, 24-hour Storm***

The surface runoff resulting from a 24-hour rainfall of an intensity expected to be equaled or exceeded, on average, once in 10 years and with a duration of 24 hours.

***Ultra Low-Density Project***

A project is an Ultra Low-Density Project if it has 15 percent or less Built-upon Area (BUA) based on total project acreage for all residential and non-residential Development. A project with an overall Density at or below the relevant ultra low-Density threshold, but containing areas with a Density greater than the overall project Density, may be considered ultra low-Density as long as the project meets or exceeds the post-construction model practices for Ultra Low-Density Projects and locates the higher

Density in upland areas and away from surface waters and drainageways to the maximum extent practicable.

## **SECTION 3: ADMINISTRATION AND PROCEDURES**

### **(A) REVIEW AND DECISION-MAKING ENTITIES**

#### **(1) Stormwater Administrator**

##### **(a) Designation**

A Stormwater Administrator shall be designated by the Town Board to administer and enforce this ordinance.

##### **(b) Powers and Duties**

In addition to the powers and duties that may be conferred by other provisions of the Code of the Town of Rolesville and other laws, the Stormwater Administrator shall have the following powers and duties under this ordinance:

- i. To review and approve, approve with conditions, or disapprove applications for approval of plans pursuant to this ordinance.
- ii. To make determinations and render interpretations of this ordinance.
- iii. To enforce the provisions of this ordinance in accordance with its enforcement provisions.
- iv. To maintain records, maps, forms and other official materials as they relate to the adoption, amendment, enforcement, and administration of this ordinance.
- v. To designate appropriate other person(s) who shall carry out the powers and duties of the Stormwater Administrator.
- vi. To take any other action necessary to administer the provisions of this ordinance.

### **(B) REVIEW PROCEDURES**

#### **(1) Permit Required; Must Apply for Permit**

A stormwater permit is required for all Development and Redevelopment unless exempt pursuant to this ordinance. A permit may only be issued subsequent to a properly submitted and reviewed permit application, pursuant to this section.

#### **(2) Effect of Permit**

A stormwater permit shall govern the design, installation, and construction of stormwater management and control practices on the site, including Structural BMPs and elements of site design for stormwater management other than Structural BMPs.

The permit is intended to provide a mechanism for the review, approval, and inspection of the approach to be used for the management and control of stormwater for the Development or Redevelopment site consistent with the requirements of this ordinance, whether the approach consists of Structural BMPs or other techniques such as low-impact or low-Density design. The permit does not continue in existence indefinitely after the completion of the project;

rather, compliance after project construction is assured by the maintenance provisions of this ordinance.

**(3) Authority to File Applications**

All applications required pursuant to this Code shall be submitted to the Stormwater Administrator by the Owner or the Owner's duly authorized agent.

**(4) Establishment of Application Requirements, Schedule, and Fees**

**(a) Application Contents and Form**

The Stormwater Administrator shall establish requirements for the content and form of all applications and shall amend and update those requirements from time to time. At a minimum, the stormwater permit application shall describe in detail how post-Development stormwater runoff will be controlled and managed, the design of all stormwater facilities and practices, and how the proposed project will meet the requirements of this ordinance.

**(b) Submission Schedule**

The Stormwater Administrator shall establish a submission schedule for applications. The schedule shall establish deadlines by which complete applications must be submitted for the purpose of ensuring—that there is adequate time to review applications, and that the various stages in the review process are accommodated.

**(c) Permit Review Fees**

Permit review fees as well as policies regarding refund of any fees upon withdrawal of an application shall be established and may be amended and updated from time to time.

**(d) Administrative Manual**

For applications required under this Code, the Stormwater Administrator shall compile the requirements and information on how and where to obtain the Design Manual in an Administrative Manual, which shall be made available to the public.

**(5) Submittal of Complete Application**

Applications shall be submitted to the Stormwater Administrator pursuant to the application submittal schedule in the form established by the Stormwater Administrator, along with the appropriate fee established pursuant to this section.

An application shall be considered a complete submittal only when it contains all elements of a complete application pursuant to this ordinance and the Wake County Erosion and Sedimentation Control regulations, if applicable, along with the appropriate fee. If the Stormwater Administrator finds that an application is incomplete, the applicant shall be notified of the deficient elements and shall be provided with an opportunity to submit a complete application. However, the submittal of an incomplete application shall not suffice to meet a deadline contained in the submission schedule established above.



## **(6) Review**

Within 30 working days after a complete application is submitted, the Stormwater Administrator shall review the application and determine whether the application complies with the standards of this ordinance.

### **(a) Approval**

If the Stormwater Administrator finds that the application complies with the standards of this ordinance and the Wake County Erosion and Sedimentation Control regulations, if applicable, the Stormwater Administrator shall approve the application. The Stormwater Administrator may impose conditions of approval as needed to ensure compliance with this ordinance. The conditions shall be included as part of the approval.

### **(b) Fails to Comply**

If the Stormwater Administrator finds that the application fails to comply with the standards of this ordinance and the Wake County Erosion and Sedimentation Control regulations, if applicable, the Stormwater Administrator shall notify the applicant and shall indicate how the application fails to comply. The applicant shall have an opportunity to submit a revised application.

### **(c) Revision and Subsequent Review**

A complete revised application shall be reviewed by the Stormwater Administrator within 15 working days after its re-submittal and shall be approved, approved with conditions or disapproved.

If a revised application is not re-submitted within six months from the date the applicant was notified, the application shall be considered withdrawn, and a new submittal for the same or substantially the same project shall be required along with the appropriate fee for a new submittal.

## **(C) APPLICATIONS FOR APPROVAL**

### **(1) Concept Plan and Consultation Meeting**

Before a stormwater management permit application is deemed complete, the Stormwater Administrator or developer may request a consultation on a concept plan for the post-construction stormwater management system to be utilized in the proposed Development. This consultation meeting should take place at the time of the preliminary plan of subdivision or other early step in the Development process. The purpose of this meeting is to discuss the post-construction stormwater management measures necessary for the proposed project, as well as to discuss and assess constraints, opportunities and potential approaches to stormwater management designs before formal site design engineering is commenced. Local watershed plans, the Zebulon and Rolesville Open Space and Greenway Master Plan, the Framework Plan (as described in the Town of Rolesville Comprehensive Plan), and other relevant resource protection plans should be consulted in the discussion of the concept plan.

To accomplish this goal, the following information should be included in the concept plan, which should be submitted in advance of the meeting:

(a) Existing Conditions / Proposed Site Plans

Existing conditions and proposed site layout sketch plans, which illustrate at a minimum: existing and proposed topography; Perennial and Intermittent streams; mapping of predominant soils from soil surveys (if available); boundaries of existing predominant vegetation; proposed limits of clearing and grading; and location of existing and proposed roads, buildings, parking areas and other impervious surfaces.

(b) Natural Resources Inventory

A written and graphic inventory of natural resources at the site and surrounding area as it exists prior to the commencement of the project. This description should include a discussion of soil conditions, forest cover, geologic features, topography, wetlands, and native vegetative areas on the site, as well as the location and boundaries of other natural feature protection and conservation areas such as lakes, ponds, floodplains, stream buffers, Flood Protection Zones, and other setbacks (e.g., drinking water well setbacks, septic setbacks, etc.). Particular attention should be paid to environmentally sensitive features that provide particular opportunities or constraints for Development and stormwater management.

(c) Stormwater Management System Concept Plan

A written and graphic concept plan of the proposed post-Development stormwater management system including: preliminary selection and location of proposed structural stormwater controls; low-impact design elements; location of existing and proposed conveyance systems such as grass channels, swales, and storm drains; flow paths; location of floodplain/floodway limits; relationship of site to upstream and downstream properties and drainages; and preliminary location of any proposed stream channel modifications, such as bridge or culvert crossings.

**(2) Stormwater Management Permit Application**

(a) Purpose

The stormwater management permit application shall detail how post-Development stormwater runoff will be controlled and managed and how the proposed project will meet the requirements of this ordinance, including Section 3, Standards.

(b) Downstream Impact Analysis

As part of the permit application, all Development and Redevelopment shall perform a Downstream Impact Analysis as specified in Section 4.B.1.

(c) Plan Certification

All such plans shall be prepared by a qualified registered North Carolina professional engineer, surveyor, soil scientist or landscape architect, and the engineer, surveyor,

soil scientist or landscape architect shall perform services only in their area(s) of competence, and shall verify that the design of all stormwater management facilities and practices meets the submittal requirements for complete applications, that the designs and plans are sufficient to comply with applicable standards and policies found in the Design Manual, and that the designs and plans ensure compliance with this ordinance.

The submittal shall include all of the information required in the submittal checklist established by the Stormwater Administrator. Incomplete submittals shall be treated pursuant to Section 3.B.4.

## **(D) APPROVALS**

### **(1) Effect of Approval**

Approval authorizes the applicant to go forward with only the specific plans and activities authorized in the permit. The approval shall not be construed to exempt the applicant from obtaining other applicable approvals from local, state, and federal authorities.

### **(2) Time Limit/Expiration**

An approved plan shall become null and void if the applicant fails to make Substantial Progress on the site within one year after the date of approval. The Stormwater Administrator may grant a single, one-year extension of this time limit, for good cause shown, upon receiving a written request from the applicant before the expiration of the approved plan.

In granting an extension, the Stormwater Administrator may require compliance with standards adopted since the original application was submitted unless there has been substantial reliance on the original permit and the change in standards would infringe the applicant's vested rights.

## **(E) APPEALS**

### **(1) Right of Appeal**

Any aggrieved person affected by any decision, order, requirement, or determination relating to the interpretation or application of this ordinance made by the Stormwater Administrator, may file an appeal to the town's designated Appeal Board within 30 days.

### **(2) Filing of Appeal and Procedures**

Appeals shall be taken within the specified time period by filing a notice of appeal and specifying the grounds for appeal on forms provided by the town. The Stormwater Administrator shall transmit to the town's designated Appeal Board all documents constituting the record on which the decision appealed from was taken.

The hearing conducted by the town's designated Appeal Board shall be conducted in the nature of a quasi-judicial proceeding with all findings of fact supported by competent, material evidence.

### **(3) Review by Superior Court**

Every decision of the town's designated Appeal Board shall be subject to Superior Court review by proceedings in the nature of certiorari. Petition for review by the Superior Court shall be filed with the Clerk of Superior Court within thirty (30) days after the latter of the following:

- (a) The decision of the town's designated Appeal Board is filed; or
- (b) A written copy of the decision is delivered to every aggrieved party who has filed a written request for such copy with the (Chair or Secretary of the board that will hear appeals) at the time of its hearing of the case.

## **SECTION 4: STANDARDS**

### **(A) STANDARDS BASED ON PROJECT DENSITY**

#### **(1) Development Standards for Ultra Low-Density and Low-Density Projects**

Ultra Low-Density Projects and Low-Density Projects shall comply with each of the following standards, in addition to the General Standards found in subsection B in this section:

- (a) Stormwater runoff from the Development shall be transported from the Development by vegetated conveyances to the maximum extent practicable.
- (b) All Development and Redevelopment shall be located outside the Riparian Buffer Zone and the Flood Protection Zone. These Zones shall be in accordance with the following provisions:
  - i. Except where other applicable buffer standards are more restrictive, the Riparian Buffer Zone shall extend a minimum of 50 feet landward of all Perennial and Intermittent Surface Waters. The most restrictive standards shall apply.
  - ii. The Riparian Buffer Zone shall remain undisturbed unless otherwise permitted by this section.
  - iii. The Flood Protection Zone shall extend throughout the FEMA 100-year floodplain as identified on the current Flood Insurance Rate Map (FIRM) published by FEMA. The Flood Protection Zone shall remain undisturbed unless otherwise permitted by this section.
  - iv. No Development or Redevelopment is permitted within the Riparian Buffer Zone or the Flood Protection Zone except for stream bank or shoreline restoration or stabilization, water dependent structures, and public or private projects such as road crossings and installations, utility crossings and installations, and greenways, where no practical alternatives exist.
  - v. Permitted activities within the Riparian Buffer Zone and the Flood Protection Zone shall minimize impervious coverage, direct runoff away from surface waters to achieve diffuse flow, and maximize the utilization of Non-structural BMPs.
  - vi. Where the Riparian Buffer Zone and the Flood Protection Zone both are present adjacent to surface waters, the more restrictive shall apply.
- (c) The approval of the stormwater permit shall require an enforceable restriction on property usage that runs with the land, such as a recorded deed restriction or protective covenants, to ensure that future owners maintain the site consistent with the approved project plans.
- (d) No Development or Redevelopment shall contribute a nitrogen export load exceeding 3.6 pounds per acre per year. Development and Redevelopment to which this ordinance applies that achieve classification as LID Projects in accordance with

Section 3.B.5 shall have the option of offsetting their nitrogen export load limitations by paying monies to the North Carolina Riparian Buffer Restoration Fund based on the latest fee adopted by the State. Development and Redevelopment to which this ordinance applies that do not apply for or achieve classification as LID projects in accordance with subsection B.5 in this section shall not have the option of offsetting their nitrogen export load limitations. In calculating the nitrogen export, the applicant must use the known footprint method.

- (e) For Low-Density Projects only, structural and Non-structural BMPs shall be used to ensure there is no net increase in peak flow leaving the site from the pre-Development conditions for the 1-year, 24-hour storm. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- (f) General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c), as explained in the Design Manual;
- (g) Developers must manage runoff so that after Development the site will not exceed the Target Curve Numbers in the table in subsection A.3 of this Section.
- (h) Ultra Low-Density Projects and Low-Density Projects may be eligible for target curve number credits, as described in subsection B, below.

## (2) Maximum Curve Number after Development

Developers must manage runoff so that after Development the site will not exceed the following composite curve numbers, in accordance with procedures specified in the United States Department of Agriculture, Natural Resource Conservation Service, Technical Release 55, *Urban Hydrology for Small Watersheds*.

Project Density	Maximum Composite Curve Number, by Soil Group			
	A	B	C	D
Ultra-Low	43	63	76	81
Low	48	66	78	83
High	N/A	N/A	N/A	N/A

## (3) Target Curve Number Credits

### (a) Purpose

The purpose of establishing a stormwater credit system is to provide incentives to implement better site design and locate new Development in a manner that causes less impact to aquatic resources. Certain Development practices reduce the generation of stormwater from the site; thereby reducing the size and cost of stormwater storage. In addition, these practices can provide partial removal of many pollutants. The credit system directly translates into cost savings and better protection of water resources.

(b) Disconnected Impervious Surfaces

Disconnected impervious surfaces, included permeable pavers, are encouraged. Runoff from these disconnected surfaces must be spread over pervious areas as sheet flow. As a credit, these disconnected impervious surfaces will be assigned the lower curve number specified by procedures of the United States Department of Agriculture, Natural Resources Conservation Service, Technical Release 55, Urban Hydrology for Small Watersheds.

(c) Reforestation

The planting of trees and shrubs is encouraged as a means of reducing runoff. As a credit for such practices, reforested areas in dedicated open space will be assigned the curve number for woods in good condition per procedures in the United States Department of Agriculture, Natural Resources Conservation Service (NRCS), Technical Release 55, Urban Hydrology for Small Watersheds. Areas planted with trees or shrubs must meet the following standards to qualify for the credit.

i. Tree/Shrub Density and Spacing

Planted trees or shrubs must meet the minimum Density and spacing standards of the NRCS, as specified in the Field Office Technical Guide. Existing trees or shrubs may be used toward meeting the planting standard.

ii. Mulching

An initial application of mulch is required for the area designated for reforestation. Mulching must meet applicable standards of the NRCS, as specified in the Field Office Technical Guide. Existing groundcover may be used toward meeting the mulching standard.

(d) Cluster, Conservation and Open Space Subdivisions

Cluster, conservation and open space subdivisions are encouraged. In applying curve number calculations to such developments, calculations must take into account the lots' proportionate share of right-of-way and permanent open space.

(e) Calculations Regarding Ponds, Lakes, and Streams

Surface water bodies may not be assigned a curve number for impervious surfaces. Instead, such water bodies will be removed from calculations so that developments are not penalized for their presence. Surface water bodies shall be included in calculations of project Density.

**(4) Development Standards for High-Density Projects**

High-Density Projects shall implement stormwater control measures that comply with each of the following standards, in addition to the General Standards found in subsection B of this Section:

- (a) The measures shall control and treat runoff from the first inch of rain. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- (b) All structural stormwater treatment systems used to meet these requirements shall be designed to have a minimum of 85 percent average annual removal for Total Suspended Solids (TSS).
- (c) No Development or Redevelopment shall contribute a nitrogen export load exceeding 3.6 pounds per acre per year. Development and Redevelopment to which this ordinance applies that achieve classification as LID Projects in accordance with subsection B.5 shall have the option of offsetting their nitrogen export load limitations by paying monies to the North Carolina Riparian Buffer Restoration Fund based on the latest fee adopted by the State. Development and Redevelopment to which this ordinance applies that do not apply for or achieve classification as LID projects in accordance with subsection B.4 shall not have the option of offsetting their nitrogen export load limitations.
- (d) Structural and Non-structural BMPs shall be used to ensure there is no net increase in peak flow leaving the site from the pre-Development conditions for the 1-year, 24-hour storm. Runoff volume drawdown time shall be a minimum of 48 hours, but not more than 120 hours.
- (e) General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c), as explained in the Design Manual;
- (f) All Development and Redevelopment shall be located outside the Riparian Buffer Zone and the Flood Protection Zone. These Zones shall be in accordance with the following provisions:
  - i. Except where other applicable buffer standards are more restrictive, the Riparian Buffer Zone shall extend a minimum of 50 feet landward of all Perennial and Intermittent Surface Waters. The most restrictive standards shall apply.
  - ii. The Riparian Buffer Zone shall remain undisturbed unless otherwise permitted by this section.
  - iii. The Flood Protection Zone shall extend throughout the FEMA 100-year floodplain as identified on the current Flood Insurance Rate Map (FIRM) published by FEMA. The Flood Protection Zone shall remain undisturbed unless otherwise permitted by this section.
  - iv. No Development or Redevelopment is permitted within the Riparian Buffer Zone or the Flood Protection Zone except for stream bank or shoreline restoration or stabilization, water dependent structures, and public or private projects such as road crossings and installations, utility crossings and installations, and greenways, where no practical alternatives exist.
  - v. Permitted activities within the Riparian Buffer Zone and the Flood Protection Zone shall minimize impervious coverage, direct runoff away from surface waters to achieve diffuse flow, and maximize the utilization of Non-structural BMPs.



vi. Where the Riparian Buffer Zone and the Flood Protection Zone both are present adjacent to surface waters, the more restrictive shall apply.

- (g) The approval of the stormwater permit shall require an enforceable restriction on property usage that runs with the land, such as recorded deed restrictions or protective covenants, to ensure that future Development and Redevelopment maintains the site consistent with the approved project plans. Buffer widths and locations shall be clearly delineated on all plans, final plat, and as-builts.

**(B) GENERAL STANDARDS**

**(1) Downstream Impact Analysis**

The downstream impact analysis must be performed in accordance with the “ten percent rule,” and a copy of the analysis must be provided with the permit application. The purpose of the downstream impact analysis is to determine if the project will cause any impacts on flooding or channel degradation downstream of the project site. The analysis must include the assumptions, results and supporting calculations to show safe passage of post-Development design flows downstream. This analysis shall be performed at the outlet(s) of the site, and downstream at each tributary junction to the point(s) in the conveyance system where the area of the portion of the site draining into the system is less than or equal to 10 percent of the total drainage area above that point.

The typical steps in the application of the 10 percent rule are:

- (a) Using a topographic map, determine the point downstream where the proposed site equals 10 percent of the total drainage area, called the 10 percent point. Identify all tributary junctions between the downstream site boundary and the 10 percent point. All points identified, as well as the outlet of the site, are known as 10 percent rule comparison points.
- (b) Using a hydrologic model with existing land uses, determine the pre-Development peak runoff rate (cfs) for the 10-year design storm event at each comparison point.
- (c) Insert the proposed site design and proposed BMPs into the land uses and determine the post-Development peak runoff rate for the 10-year design storm at each comparison point.
- (d) If the post-Development peak discharge rate is equal to or less than pre-Development conditions at all comparison points, no further analysis is required.
- (e) If the 10-year post-Development peak discharge rate is greater than the pre-Development peak discharge rate at any comparison point, then one of the following actions must be taken:
  - i. Revise the site plan for the proposed site to incorporate better use of natural features, design additional structural control facilities, reduce impervious cover, or alter timing of peak flows to lower post-Development flows at each comparison point to pre-Development levels.

- ii. Obtain a flow easement from downstream property owners through the 10 percent point where the post-Development peak discharge rate is higher than the pre-Development peak discharge rate.
- iii. Work with the town to determine other acceptable approaches to reduce the peak discharge rate for the 10-year storm.

For further information on the 10 percent rule, refer to the Stormwater Manual, available online.

## **(2) Standards for Stormwater Control Measures**

### **(a) Evaluation According to Contents of Design Manual**

All stormwater control measures and stormwater treatment practices (or BMPs) required under this ordinance shall be evaluated by the Stormwater Administrator according to the policies, criteria, and information, including technical specifications and standards and the specific design criteria for each stormwater practice, in the Design Manual. The Stormwater Administrator shall determine whether proposed BMPs will be adequate to meet the requirements of this ordinance.

### **(b) Determination of Adequacy; Presumptions and Alternatives**

Stormwater treatment practices that are designed, constructed, and maintained in accordance with the criteria and specifications in the Design Manual will be presumed to meet the minimum water quality and quantity performance standards of this ordinance. Whenever an applicant proposes to utilize a practice or practices not designed and constructed in accordance with the criteria and specifications in the Design Manual, the applicant shall have the burden of demonstrating that the practice(s) will satisfy the minimum water quality and quantity performance standards of this ordinance. The Stormwater Administrator may require the applicant to provide the documentation, calculations, and examples necessary for the Stormwater Administrator to determine whether such an affirmative showing is made.

### **(c) Separation from Seasonal High Water Table**

For BMPs that require a separation from the seasonal high-water table, the separation shall be provided by at least 12 inches of naturally occurring soil above the seasonal high-water table.

### **(d) Changes to Stormwater Plan Based on Emerging Technologies**

Subject to the standards of this ordinance and other applicable law, a developer, in conjunction with the Development's lot owners, may submit an application to revise the approved stormwater plan so as to use new technologies or best management practices not available when the original stormwater plan was approved. Innovative technologies may be used on a demonstration basis for a period of one year while simultaneously collecting data on the effectiveness of the technology according to its design. If at the end of the demonstration period the technology is not performing

according to its intended design functions as judged by the Stormwater Administrator, the developer must retrofit the site with a standard technology.

### **(3) Additional Stormwater Management Measures**

In some cases, the Stormwater Administrator may require more stringent stormwater management measures where it is determined that additional measures are required to protect water quality and maintain existing and anticipated uses of these waters or to minimize off-site damage from stormwater runoff in accordance with the purpose of this ordinance as defined in Section 1.D.

### **(4) Dedication of BMPS, Facilities & Improvements**

The town may elect to accept dedication of any existing or future stormwater management facility for maintenance, provided such facility meets all the requirements of this ordinance and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

### **(5) Low Impact Development Project Classifications**

- (a) All Development or Redevelopment to which this ordinance applies may be submitted for classification as a Low Impact Development (LID) Project.
- (b) Classification as a Low Impact Development Project requires that the Development mimic the pre-developed hydrologic conditions defined as woods in good condition for the 2-year, 24-hour storm, within 10 percent. The pre-developed conditions shall include: its hydrologic balance, frequency distribution of high flows; magnitude, frequency, and duration of low flows; groundwater recharge (or infiltration), and flow length and pattern. The conditions shall be measured through the comparison between measures of the pre-developed and developed conditions including: total runoff volume, time of concentration, curve number, and peak discharge. Mimicry of the pre-developed hydrologic conditions may be achieved through such techniques as the minimization of disturbed areas and the use of on-lot distributed retention storage as described in more detail on Wake County's Stormwater Web Site under Low Impact Development.
- (c) The following techniques must be used to achieve LID classification:
  - i. Natural site design in consultation with the town;
  - ii. Site buildings, roads, and other land disturbance in the least environmentally-sensitive areas, preserving steep slopes, naturally well-draining soils, and other hydrologically valuable features undisturbed;
- (d) In addition, one of the following two techniques must be used to achieve LID classification:
  - i. Bio-retention systems;
  - ii. On-site infiltration;

- (e) In addition, at least two of the following techniques must be used to achieve LID classification:
  - i. Retention of 50 percent of vegetated area, including open space, landscaping, or forests;
  - ii. Use of Permeable Pavement for all private driveways, private roads, sidewalks, and parking areas in accordance with the North Carolina Stormwater Best Management Practices Design Manual;
  - iii. Installation of one rain cistern per lot or three rain barrels per lot;
  - iv. Installation of vegetated roofs;
  - v. Increasing all buffers in the Riparian Buffer Zone or the Flood Protection Zone, whichever is greater, by 50 feet, in accordance with Section 4.A.1.b for Low-Density and Ultra Low-Density Projects and Section 4.A.4.f for High-Density Projects.
  - vi. Use of reclaimed water for all buildings in accordance with State and local laws.
  - vii. Use of innovative LID techniques subject to the approval of the town.
- (f) For Development and Redevelopment projects achieving classification as LID Projects, the Stormwater Administrator shall reduce or waive the stormwater permit fee if stipulated in the fee schedule duly adopted by the applicable governing board.
- (g) Upon collaboration with the Planning Board, the Stormwater Administrator may develop and apply an expedited review schedule for Development or Redevelopment projects achieving classification as LID Projects. Such a review schedule will depend upon the continued availability of local government resources to conduct expedited reviews.

**(F) ONSITE WASTEWATER**

Onsite wastewater disposal systems shall be operated and maintained in accordance with the *Regulations Governing Sewage Treatment and Disposal Systems in Wake County (Regulations)* adopted by the Wake County Board of Human and Environmental Services and enforced by Wake County. Onsite systems shall be inspected, permitted, repaired and/or professionally operated in accordance with the *Regulations* and in a manner to prevent adverse impacts to surface water and groundwater. The Town of Rolesville and WCES shall collaborate on identification of areas of high risk for system failures and associated need for environmental surveys, system repairs and possible service by municipal utilities.

## **SECTION 5: COMPLETION OF IMPROVEMENTS AND MAINTENANCE**

### **(A) PERFORMANCE SECURITY FOR INSTALLATION AND MAINTENANCE OF IMPROVEMENTS**

The town may, at its discretion, require the submittal of a performance bond, letter of credit from, or cash escrow account with a local bank prior to issuance of a permit. If improvements are not installed prior to approval of a record plat, the town shall require the submittal of a performance bond, letter of credit from, or cash escrow account with a local bank prior to issuance of a permit. This performance security is required in order to ensure that the Structural BMPs are:

- (a) installed by the permit holder as required by the approved stormwater management plan, and/or
- (b) maintained by the Owner as required by the operation and maintenance agreement.

#### **(1) Form and Amount of Installation Performance Security**

The amount of an installation performance security must equal at least 125 percent of the estimated cost of the required improvements, including project management costs that have not been installed by the time of Record Plat submittal.

#### **(2) Form and Amount of Maintenance Performance Security**

The amount of a maintenance performance security must be at least 125 percent of the total estimated construction cost of the Structural BMPs approved under the permit.

#### **(3) Uses of Performance Security for Installation**

##### **(a) Forfeiture Provisions**

The performance security shall contain forfeiture provisions for failure, after proper notice, to complete work within the time specified, or to initiate or maintain any actions which may be required of the applicant or Owner in accordance with this ordinance, approvals issued pursuant to this ordinance, or an operation and maintenance agreement established pursuant to this ordinance.

##### **(b) Default**

Upon default of the Owner to construct, maintain, repair and, if necessary, reconstruct any Structural BMP in accordance with the applicable permit or operation and maintenance agreement, the Stormwater Administrator shall obtain and use all or any portion of the security to make necessary improvements based on an engineering estimate. Such expenditure of funds shall only be made after requesting the Owner to comply with the permit or maintenance agreement. In the event of a default triggering the use of installation performance security, the town shall not return any of the unused deposited cash funds or other security, which shall be retained for maintenance.

(c) Costs in Excess of Performance Security

If the town takes action upon such failure by the applicant or Owner or property owners' association, the town may collect from the applicant or Owner or property owners' association the difference between the amount of the reasonable cost of such action and the amount of the security held, in addition to any other penalties or damages due.

(d) Refund

Within 60 days of the final approval, the installation performance security shall be refunded to the applicant or terminated, except any amount attributable to the cost (plus 25 percent) of landscaping installation and ongoing maintenance associated with the BMPs covered by the security. Any such landscaping shall be inspected one year after installation with replacement for compliance with the approved plans and specifications and, if in compliance, the portion of the financial security attributable to landscaping shall be released.

**(4) Uses of Performance Security for Maintenance**

(e) Forfeiture Provisions

The performance security shall contain forfeiture provisions for failure, after proper notice, to complete work within the time specified, or to initiate or maintain any actions which may be required of the applicant or Owner in accordance with this ordinance, approvals issued pursuant to this ordinance, or an operation and maintenance agreement established pursuant to this ordinance.

(f) Default

Upon default of the Owner to construct, maintain, repair and, if necessary, reconstruct any Structural BMP in accordance with the applicable permit or operation and maintenance agreement, the Stormwater Administrator shall obtain and use all or any portion of the security to make necessary improvements based on an engineering estimate. Such expenditure of funds shall only be made after requesting the Owner to comply with the permit or maintenance agreement. In the event of a default triggering the use of installation performance security, the town shall not return any of the unused deposited cash funds or other security, which shall be retained for maintenance.

(g) Costs in Excess of Performance Security

If the town takes action upon such failure by the applicant or Owner or property owners' association, the town may collect from the applicant or Owner or property owners' association the difference between the amount of the reasonable cost of such action and the amount of the security held, in addition to any other penalties or damages due.

**(B) AS-BUILT PLANS AND FINAL APPROVAL**

Upon completion of a project, the applicant shall certify that the completed project is in accordance with the approved stormwater management plans and designs, and shall submit actual “as built” plans in both digital file (1 copy) and mylar formats (3 mylars) for all stormwater management facilities or practices after final construction is completed.

The plans shall show the final design specifications for all stormwater management facilities and practices and the field location, size, depth, and planted vegetation of all measures, controls, and devices, as installed. The designer of the stormwater management measures and plans shall certify, under seal, that the as-built stormwater measures, controls, and devices are in compliance with the approved stormwater management plans and designs and with the requirements of this ordinance. A final inspection and approval by the Stormwater Administrator shall occur before the release of any performance securities.

No certificate of compliance or occupancy shall be issued without final as-built plans and a final inspection, or performance guarantees, and approval by the Stormwater Administrator.

**(C) MAINTENANCE OF IMPROVEMENTS**

**(1) Maintenance Required**

All structural and Non-structural BMPs must be maintained so they will continue to serve their intended functions.

**(2) Parties Responsible for Maintenance of Structural BMPs**

- (a) The developer must maintain structural and Non-structural BMPs until accepted by a property owners’ association or lot Owner. All Structural BMPs required for residential subdivisions, including those on individual lots, must be accepted for maintenance by a property owners’ association. The developer must disclose which party will be responsible for continued maintenance on the record plat and on the stormwater management plan.
- (b) Before improvements are accepted for maintenance by the property owners’ association or lot Owner, the developer or the developer’s engineer or other representative, as authorized by Statute, must certify to the property owners’ association or lot Owner and to the town that improvements are complete and functioning as designed.
- (c) If a property owners’ association or similar legal entity is to be responsible for the maintenance and control of BMPs, it shall be established so that it has clear legal authority to maintain and exercise control over, including the power to compel contributions from subdivision property owners to cover their proportionate shares of the costs associated with the maintenance of the BMPs. Such association shall be established prior to approval of the final plat.
- (d) Documents providing for the establishment of a homeowners’ association or similar legal entity in accord with this ordinance shall be approved by the Stormwater Administrator before any plat is recorded.

### **(3) Maintenance Plan**

- (a) The developer must record, and reference on the record plat, a maintenance plan that instructs the property owners' association or lot Owner about the annual maintenance tasks and associated costs for at least a 20-year period.
- (b) It will be the responsibility of the property owners' association or lot Owner to update the maintenance plan at least every 10 years in perpetuity.

### **(4) Maintenance Agreement**

- (a) The developer must record, and reference on the record plat, a maintenance agreement, or restrictive covenant that sets forth the property owners' association's or lot Owner's continuing responsibilities for maintenance, including specifying how cost will be apportioned among lot owners served.
- (b) The maintenance agreement must provide that the association and its individual members are jointly and severally liable for maintenance.
- (c) The maintenance agreement shall grant to the town a right of entry in the event that the Stormwater Administrator has reason to believe it has become necessary to inspect, monitor, maintain, repair or reconstruct the structural and Non-structural BMPs; however, in no case shall the right of entry, of itself, confer an obligation on the town to assume responsibility for the structural and Non-structural BMPs.

### **(5) Maintenance Easement**

The developer must record easements for access, maintenance and inspections by any property owners' association and by the town.

### **(6) Annual Maintenance Inspection and Report**

- (a) The person or entity responsible for maintenance of any structural and Non-structural BMPs installed pursuant to this ordinance shall submit to the Stormwater Administrator an annual inspection report from one of the following persons performing services only in their area of competence: a qualified registered North Carolina professional engineer, surveyor, landscape architect, soil scientist, aquatic biologist, or person certified by the North Carolina Cooperative Extension Service for stormwater treatment practice inspection and maintenance.
- (b) Annual inspection reports are due by June 30 of each year. The first annual report is due by June 30 following one year after approval of the as-built plan. For Structural BMPs located on properties subject to property owners' association agreements, the property owners' association is responsible for collecting and submitting information on all individual lot Structural BMPs installed pursuant to this ordinance on an annual basis. The inspection report shall contain all of the following:

The name and address of the land Owner; the recorded book and page number of the lot of each structural and Non-structural BMPs; a statement that an inspection was made of all structural and Non-structural BMPs; the date the inspection was made; a



statement that all inspected structural and Non-structural BMPs are performing properly and are in compliance with the terms and conditions of the approved maintenance agreement required by this ordinance; and the original signature and seal of the engineer, surveyor, or landscape architect.

- (c) All inspection reports shall be on forms supplied by the Stormwater Administrator. An original inspection report shall be provided to the Stormwater Administrator by the first day of July following the issuance of a certificate of occupancy. Subsequent annual reports shall be due on the first day of July each year.

**(D) INSPECTION PROGRAM**

Inspections and inspection programs by the town may be conducted or established on any reasonable basis, including but not limited to routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to, reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in BMPs; and evaluating the condition of BMPs.

If the Owner or occupant of any property refuses to permit such inspection, the Stormwater Administrator shall proceed to obtain an administrative search warrant pursuant to G.S. 15-27.2 or its successor. No person shall obstruct, hamper or interfere with the Stormwater Administrator while carrying out his or her official duties, including inspections on private property. Refusal of Owner or occupant of any property to permit such inspection is a violation of this ordinance.

**(E) SIGNAGE**

Where appropriate in the determination of the Stormwater Administrator to assure compliance with this ordinance, Structural BMPs shall be posted with a conspicuous sign stating who is responsible for required maintenance and annual inspection. The sign shall be maintained so as to remain visible and legible.

**(F) RECORDS OF INSTALLATION AND MAINTENANCE ACTIVITIES**

The Owner of each Structural BMP shall keep records of inspections, maintenance, and repairs for at least five years from the date of creation of the record and shall submit the same upon reasonable request to the Stormwater Administrator.

**(G) NUISANCE**

The Owner of each stormwater BMP, whether structural or Non-structural BMP, shall maintain it so as not to create or result in a nuisance condition.

## **SECTION 6: ENFORCEMENT AND VIOLATIONS**

### **(A) GENERAL**

#### **(1) Authority to Enforce**

The provisions of this ordinance shall be enforced by the Stormwater Administrator, his or her designee, or any authorized agent of the town. Whenever this section refers to the Stormwater Administrator, it includes his or her designee as well as any authorized agent of the town.

#### **(2) Violation Unlawful**

Any failure to comply with an applicable requirement, prohibition, standard, or limitation imposed by this ordinance, or the terms or conditions of any permit or other Development or Redevelopment approval or authorization granted pursuant to this ordinance, is unlawful and shall constitute a violation of this ordinance.

#### **(3) Each Day a Separate Offense**

Each day that a violation continues shall constitute a separate and distinct violation or offense.

#### **(4) Responsible Persons/Entities**

Any person who erects, constructs, reconstructs, alters (whether actively or passively), or fails to erect, construct, reconstruct, alter, repair or maintain any structure, BMP, practice, or condition in violation of this ordinance shall be subject to the remedies, penalties, and/or enforcement actions in accordance with this section. Persons subject to the remedies and penalties set forth herein may include any architect, engineer, builder, contractor, developer, agency, or any other person who participates in, assists, directs, creates, causes, or maintains a condition that results in or constitutes a violation of this ordinance, or fails to take appropriate action, so that a violation of this ordinance results or persists; or an Owner, any tenant or occupant, or any other person, who has control over, or responsibility for, the use or Development of the property on which the violation occurs.

For the purposes of this article, responsible person(s) shall include but not be limited to:

##### **(a) Person Maintaining Condition Resulting In or Constituting Violation**

An architect, engineer, builder, contractor, developer, agency, or any other person who participates in, assists, directs, creates, causes, or maintains a condition that constitutes a violation of this ordinance, or fails to take appropriate action, so that a violation of this ordinance results or persists.

##### **(b) Responsibility for Land or Use of Land**

The Owner of the land on which the violation occurs, any tenant or occupant of the property, any person who is responsible for stormwater controls or practices pursuant to a private agreement or public document, or any person, who has control over, or responsibility for, the use, Development or Redevelopment of the property.

**(B) REMEDIES AND PENALTIES**

The remedies and penalties provided for violations of this ordinance, whether civil or criminal, shall be cumulative and in addition to any other remedy provided by law, and may be exercised in any order.

**(1) Remedies**

**(a) Withholding of a Building Permit**

The Stormwater Administrator or other authorized agent may refuse to issue a building permit for a building or other improvements constructed or being constructed on any Development site and served by the Structural BMP in question until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

**(b) Withholding of Certificate of Occupancy**

The Stormwater Administrator or other authorized agent may refuse to issue a certificate of occupancy for the building or other improvements constructed or being constructed on the site and served by the stormwater practices in question until the applicant or other responsible person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violations described therein.

**(c) Disapproval of Subsequent Permits and Development Approvals**

As long as a violation of this ordinance continues and remains uncorrected, the Stormwater Administrator or other authorized agent may withhold, and the Board of Commissioners may disapprove, any request for permit or Development approval or authorization provided for by this ordinance or the zoning and subdivision ordinances for the land on which the violation occurs.

**(d) Injunction, Abatements, etc.**

The Stormwater Administrator, with the written authorization of the Town Manager, may institute an action in a court of competent jurisdiction for a mandatory or prohibitory injunction and order of abatement to correct a violation of this ordinance. Any person violating this ordinance shall be subject to the full range of equitable remedies provided in the General Statutes or at common law.

**(e) Correction as Public Health Nuisance, Costs as Lien, etc.**

If the violation is deemed dangerous or prejudicial to the public health or public safety and is within the geographic limits prescribed by North Carolina G.S. § 160A-193, the Stormwater Administrator, with the written authorization of the Town Manager, may cause the violation to be corrected and the costs to be assessed as a lien against the property.

(f) **Stop Work Order**

The Stormwater Administrator may issue a stop work order to the person(s) violating this ordinance. The stop work order shall remain in effect until the person has taken the remedial measures set forth in the notice of violation or has otherwise cured the violation or violations described therein. The stop work order may be withdrawn or modified to enable the person to take the necessary remedial measures to cure such violation or violations.

**(2) Civil Penalties**

Violation of this ordinance may subject the violator to a civil penalty to be recovered in a civil action in the nature of a debt if the violator does not pay the penalty within 30 days after notice of the violation is issued by the Stormwater Administrator. Civil penalties may be assessed up to the full amount of penalty to which the Town of Rolesville is subject for violations of its Phase II Stormwater permit, or if no Phase II Stormwater permit exists for the jurisdiction, civil penalties may be assessed up to the full amount allowed by law.

**(3) Criminal Penalties**

Violation of this ordinance may be enforced as a misdemeanor subject to the maximum fine permissible under North Carolina law. A civil penalty may be assessed from the date of the violation.

Each day of a continuing violation constitutes a separate violation.

**(C) PROCEDURES**

**(1) Initiation/Complaint**

Whenever a violation of this ordinance occurs, or is alleged to have occurred, any person may file a written complaint. Such complaint shall state fully the alleged violation and the basis thereof, and shall be filed with the Stormwater Administrator, who shall record the complaint. The complaint shall be investigated promptly by the Stormwater Administrator.

**(2) Inspection**

The Stormwater Administrator shall have the authority, upon presentation of proper credentials, to enter and inspect any land, building, structure, or premises to ensure compliance with this ordinance.

**(3) Notice of Violation and Order to Correct**

When the Stormwater Administrator finds that any building, structure, or land is in violation of this ordinance, the Stormwater Administrator shall notify, in writing, the property Owner or other person violating this ordinance. The notification shall indicate the nature of the violation, contain the address or other description of the site upon which the violation is occurring, order the necessary action to abate the violation, and give a deadline for correcting the violation. If civil penalties are to be assessed, the notice of violation shall also contain a statement of the civil penalties to be assessed, the time of their accrual, and the time within which they must be paid or be subject to collection as a debt.

The Stormwater Administrator may deliver the notice of violation and correction order personally, by the Code Enforcement Officer, by certified or registered mail, return receipt requested, or by any means authorized for the service of documents by Rule 4 of the North Carolina Rules of Civil Procedure.

If a violation is not corrected within a reasonable period of time, as provided in the notification, the Stormwater Administrator may take appropriate action under this ordinance to correct and abate the violation and to ensure compliance with this ordinance.

#### **(4) Extension of Time**

A person who receives a notice of violation and correction order, or the Owner of the land on which the violation occurs, may submit to the Stormwater Administrator a written request for an extension of time for correction of the violation. On determining that the request includes enough information to show that the violation cannot be corrected within the specified time limit for reasons beyond the control of the person requesting the extension, the Stormwater Administrator may extend the time limit as is reasonably necessary to allow timely correction of the violation, up to, but not exceeding 14 days. The Stormwater Administrator may grant 7-day extensions in addition to the foregoing extension if the violation cannot be corrected within the permitted time due to circumstances beyond the control of the person violating this ordinance. The Stormwater Administrator may grant an extension only by written notice of extension. The notice of extension shall state the date prior to which correction must be made, after which the violator will be subject to the penalties described in the notice of violation and correction order.

#### **(5) Enforcement After Time to Correct**

After the time has expired to correct a violation, including any extension(s) if authorized by the Stormwater Administrator, the Stormwater Administrator shall determine if the violation is corrected. If the violation is not corrected, the Stormwater Administrator may act to impose one or more of the remedies and penalties authorized by this ordinance.

#### **(6) Emergency Enforcement**

If delay in correcting a violation would seriously threaten the effective enforcement of this ordinance or pose an immediate danger to the public health, safety, or welfare, then the Stormwater Administrator may order the immediate cessation of a violation. Any person so ordered shall cease any violation immediately. The Stormwater Administrator may seek immediate enforcement, without prior written notice, through any remedy or penalty authorized by this article.

#### **(7) Variances**

- (a) Any person may petition the town for a variance granting permission to use the person's land in a manner otherwise prohibited by this ordinance. To qualify for a variance, the petitioner must show all of the following:
  - (i) Unnecessary hardships would result from strict application of this ordinance.
  - (ii) The hardships result from conditions that are peculiar to the property, such as the location, size, or topography of the property.

- (iii) The hardships did not result from actions taken by the petitioner.
- (iv) The requested variance is consistent with the spirit, purpose, and intent of this ordinance; will secure public safety and welfare; and will preserve substantial justice.
- (b) The town may impose reasonable and appropriate conditions and safeguards upon any variance it grants.
- (c) Statutory exceptions

Notwithstanding subdivision (a) of this section, exceptions from the Riparian Buffer Zone and Flood Protection Zone requirements as well as the deed restrictions and protective covenants requirements shall be granted in any of the following instances:

- i. When there is a lack of practical alternatives for a road crossing, railroad crossing, bridge, airport facility, or utility crossing as long as it is located, designed, constructed, and maintained to minimize disturbance, provide maximum nutrient removal, protect against erosion and sedimentation, have the least adverse effects on aquatic life and habitat, and protect water quality to the maximum extent practicable through the use of BMPs.
- ii. When there is a lack of practical alternatives for a stormwater management facility; a stormwater management pond; or a utility, including, but not limited to, water, sewer, or gas construction and maintenance corridor, as long as it is located 15 feet landward of all Perennial and Intermittent Surface Waters and as long as it is located, designed, constructed, and maintained to minimize disturbance, provide maximum nutrient removal, protect against erosion and sedimentation, have the least adverse effects on aquatic life and habitat, and protect water quality to the maximum extent practicable through the use of BMPs.
- iii. A lack of practical alternatives may be shown by demonstrating that, considering the potential for a reduction in size, configuration, or Density of the proposed activity and all alternative designs, the basic project purpose cannot be practically accomplished in a manner which would avoid or result in less adverse impact to surface waters.

## **SECTION 7: ILLICIT DISCHARGES**

### **(A) ILLICIT DISCHARGES AND CONNECTIONS**

#### **(1) Illicit Discharges**

No person shall cause or allow the discharge, emission, disposal, pouring, or pumping directly or indirectly to any stormwater conveyance, the waters of the State, or upon the land in manner and amount that the substance is likely to reach a stormwater conveyance or the waters of the State, any liquid, solid, gas, or other substance, other than stormwater; provided that non-stormwater discharges associated with the following activities are allowed and provided that they do not significantly impact water quality:

- (a) Water line flushing;
- (b) Landscape irrigation;
- (c) Diverted stream flows;
- (d) Rising ground waters;
- (e) Uncontaminated ground water infiltration (as defined at 40 CFR 35.2005(20));
- (f) Uncontaminated pumped ground water;
- (g) Discharges from potable water sources;
- (h) Foundation drains;
- (i) Air conditioning condensation;
- (j) Irrigation water;
- (k) Springs;
- (l) Water from crawl space pumps;
- (m) Footing drains;
- (n) Lawn watering;
- (o) Individual residential car washing;
- (p) Flows from riparian habitats and wetlands;
- (q) Dechlorinated swimming pool discharges;
- (r) Street wash water; and
- (s) Other non-stormwater discharges for which a valid NPDES discharge permit has been approved and issued by the State of North Carolina, and provided that any such

discharges to the municipal separate storm sewer system shall be authorized by the town.

Prohibited substances include but are not limited to: oil, anti-freeze, chemicals, animal waste, paints, garbage, and litter.

## **(2) Illicit Connections**

- (a) Connections to a stormwater conveyance or stormwater conveyance system that allow the discharge of non-stormwater, other than the exclusions described in subsection (A) above, are unlawful. Prohibited connections include, but are not limited to: floor drains, waste water from washing machines or sanitary sewers, wash water from commercial vehicle washing or steam cleaning, and waste water from septic systems.
- (b) Where such connections exist in violation of this section and said connections were made prior to the adoption of this provision or any other ordinance prohibiting such connections, the property Owner or the person using said connection shall remove the connection within one year following the effective date of this ordinance. However, the one-year grace period shall not apply to connections which may result in the discharge of hazardous materials or other discharges which pose an immediate threat to health and safety, or are likely to result in immediate injury and harm to real or personal property, natural resources, wildlife, or habitat.
- (c) Where it is determined that said connection:
  - i. May result in the discharge of hazardous materials or may pose an immediate threat to health and safety, or is likely to result in immediate injury and harm to real or personal property, natural resources, wildlife, or habitat, or
  - ii. Was made in violation of any applicable regulation or ordinance, other than this section;

The Stormwater Administrator shall designate the time within which the connection shall be removed. In setting the time limit for compliance, the Stormwater Administrator shall take into consideration:

- i. The quantity and complexity of the work,
- ii. The consequences of delay,
- iii. The potential harm to the environment, to the public health, and to public and private property, and
- iv. The cost of remedying the damage.

## **(3) Spills**

Spills or leaks of polluting substances released, discharged to, or having the potential to released or discharged to the stormwater conveyance system, shall be contained, controlled,



collected, and properly disposed. All affected areas shall be restored to their preexisting condition.

Persons in control of the polluting substances immediately prior to their release or discharge, and persons owning the property on which the substances were released or discharged, shall immediately notify the Rolesville Fire Chief of the release or discharge, as well as making any required notifications under state and federal law. Notification shall not relieve any person of any expenses related to the restoration, loss, damage, or any other liability which may be incurred as a result of said spill or leak, nor shall such notification relieve any person from other liability which may be imposed by state or other law.

#### **(4) Nuisance**

Illicit discharges and illicit connections which exist within the planning jurisdiction of the Town of Rolesville are hereby found, deemed, and declared to be dangerous or prejudiced to the public health or public safety and are found, deemed, and declared to be public nuisances. Such public nuisances shall be abated in accordance with the procedures set forth in sections 10-106 and 10-107 of the Code of the Town of Rolesville.