

PART II - CODE OF ORDINANCES

CHAPTER 23 - STORMWATER MANAGEMENT

Article III. - Stormwater Control

Sec. 23-20. Title, Purpose, Application.

- a. The provisions of this article shall constitute and be known as the "Stormwater Control Ordinance of Fayetteville, North Carolina".
- b. The purpose of this article is to protect, maintain, and enhance the public health, safety, and general welfare by establishing minimum requirements and procedures to control the adverse effects of the increase in stormwater quantity and the stormwater runoff quality associated with both future land development and consideration of existing developed land within the City of Fayetteville. Proper management of the quantity and quality of stormwater runoff will minimize damage to public and private property, prevent personal damage and bodily harm, ensure a functional drainage system, reduce the effects of development on land and stream channel erosion, promote the attainment and maintenance of water quality standards, enhance the local environment associated with the drainage system, reduce local flooding, and maintain as nearly as possible the predeveloped runoff characteristics of the area, and facilitate economic development while mitigating associated flooding and drainage impacts. Additionally, the purpose of this article is to comply with the post construction stormwater requirements as per the city's NPDES stormwater discharge permit.
- c. Further, the Federal Water Pollution Control Act of 1972 ("Clean Water Act") and federal Phase II Stormwater Rules promulgated under it, as well as rules of the North Carolina Environmental Management Commission promulgated in response to federal Phase II requirements, compel certain urbanized areas, including this jurisdiction, to adopt minimum stormwater controls such as those included in this article.
- d. The application of this article and the provisions expressed herein, shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other powers granted by state statute. In addition, if site characteristics indicate that complying with these minimum requirements will not provide adequate designs or protection for local property or residents, it is the designer's responsibility to exceed the minimum requirements as necessary. The city engineer or designee shall be responsible for the coordination and enforcement of the provisions of this article.
- e. Compliance with all applicable local, state, and federal regulations and permits shall be the responsibility of the applicant. Other stormwater regulations to consider when complying with this article include, but are not limited to, the following:
 1. Water supply watershed regulations, [Chapter 29](#) of this Code of Ordinances;
 2. Federal wetland permits;
 3. Water quality certifications; and
 4. Sediment and erosion control requirements.

(*Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013*)

Effective on: 11/18/2013

Sec. 23-21. Definitions.

For the purpose of this article, the following terms, phrases, and words, and their derivatives, shall have the meaning given herein:

Adequate channel shall mean a natural or manmade channel or pipe which is capable of conveying the runoff from the design storm events without flooding existing structures or causing property damage.

Effective on: 11/18/2013

Best management practice (BMP) shall mean a wide range of management procedures, schedules of activities, prohibitions on practices, and other management practices which have been demonstrated to effectively control the quality and/or quantity of stormwater runoff and which are compatible with the planned land use.

Effective on: 11/18/2013

Built-upon area shall mean 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 pervious or partially pervious paving material to the extent that the paving material absorbs water or allows water to infiltrate through the paving material.

Effective on: 11/18/2013

City shall mean the City of Fayetteville, North Carolina.

Effective on: 11/18/2013

City clerk shall mean the City Clerk of the City of Fayetteville, North Carolina, or his/her designee.

Effective on: 11/18/2013

City council shall mean the duly elected Governing Body of the City of Fayetteville, North Carolina.

Effective on: 11/18/2013

City engineer shall mean the City Engineer of the City of Fayetteville, North Carolina, or his/her designee.

Effective on: 11/18/2013

City engineering and infrastructure department shall mean the Engineering and Infrastructure Department of the City of Fayetteville, North Carolina.

Effective on: 11/18/2013

City manager shall mean the City Manager of the City of Fayetteville, North Carolina, or his/her designee.

Effective on: 11/18/2013

Cross-drain culvert shall mean a structure designed to convey a watercourse under a roadway, railway, pedestrian walk, or through an embankment.

Effective on: 11/18/2013

Design report shall mean the report that accompanies the stormwater design plan and includes data used for engineering analysis, results of all analysis, design and analysis calculations (including results obtained from computer programs), and other engineering data that would assist the city engineer in evaluating proposed stormwater management facilities.

Effective on: 11/18/2013

Design storm events shall mean the frequency storm used for the design of stormwater management facilities.

Effective on: 11/18/2013

Designer shall mean a registered professional who is permitted to prepare plans and studies required by this article.

Effective on: 11/18/2013

Detention structure shall mean a permanent stormwater management structure whose primary purpose is to temporarily store stormwater runoff and release the stored runoff at controlled rates.

Effective on: 11/18/2013

Developed land use conditions shall mean the land use conditions according to the current city land use map or proposed site plan. Also, the conditions which exist following the completion of the land disturbing activity in terms of topography, vegetation, land use and rate, quality, volume or direction of stormwater runoff.

Effective on: 11/18/2013

Development shall (to the extent permitted by law) mean any of the following actions undertaken by a public or private individual or entity:

1. All land altering activities associated with the division of a lot, tract, or parcel of land into two or more lots plots, sites, tracts, parcels or other divisions by plan or deed;
2. The construction, installation, or alteration of a structure, impervious surface, or drainage facility;
3. Any land change including, without limitation to, clearing, tree removal, grubbing, stripping, dredging, grading, excavating, transporting and filling of land; or
4. Adding, removing, exposing, excavating, leveling, grading, digging, burrowing, dumping, piling, dredging, or otherwise disturbing the soil, vegetation, and mud, sand or rock of a site.

Effective on: 11/18/2013

Easement shall mean a grant or reservation by the owner of land for the use of such land by others for a specific purpose or purposes, and which must be included in the conveyance of land affected by such easement.

Effective on: 11/18/2013

Erosion shall mean the process by which ground surface is worn away by the action of wind and/or water.

Effective on: 11/18/2013

Exemption shall mean those development activities that are not subject to the stormwater requirements contained in this article.

Effective on: 11/18/2013

Existing land use condition shall mean the land use conditions existing at the time the design plans are submitted for approval.

Effective on: 11/18/2013

FEMA-designated floodplain shall mean the 100-year floodplain shown on the most current FEMA flood insurance rate map or flood boundary and floodway map. This shall include both the detailed 100-year floodplain which shows a 100-year flood elevation and the approximate 100-year floodplain.

Effective on: 11/18/2013

Functional maintenance shall mean any action necessary to preserve stormwater management facilities in proper working condition, in order to serve the intended purposes set forth in this article, and to prevent structural failure of such facilities. Functional maintenance shall not include actions taken solely for the purpose of enhancing the aesthetics aspects associated with stormwater management facilities.

Effective on: 11/18/2013

Grading shall mean excavating, filling (including hydraulic fill), or stockpiling of earth material, or any combination thereof, including the land in its excavated or filled condition.

Effective on: 11/18/2013

Impervious shall mean the condition of being impenetrable by water.

Effective on: 11/18/2013

Imperviousness shall mean the degree to which a site is impervious.

Effective on: 11/18/2013

Infiltration shall mean the passage or movement of water into the soil subsurface.

Effective on: 11/18/2013

Interior culvert shall mean a culvert that is not located under a roadway, railway, or pedestrian walk.

Effective on: 11/18/2013

Maintenance (as relates to BMPs or other stormwater management facilities). See "functional maintenance" or "routine maintenance".

Effective on: 11/18/2013

100-year frequency storm shall mean a storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in one 100 years. It also may be expressed as an exceedance probability with a one percent chance of being equaled or exceeded in any given year.

Effective on: 11/18/2013

On-site stormwater management shall mean the design and construction of a facility necessary to control stormwater runoff within and for a single development.

Effective on: 11/18/2013

One-year frequency storm shall mean a storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in one year. It also may be expressed as an exceedance probability with a 100 percent chance of being equaled or exceeded in any given year.

Effective on: 11/18/2013

Predevelopment conditions shall mean those which existed on the site at the time this article became effective.

Effective on: 11/18/2013

Preliminary plat shall mean the preliminary plat of a subdivision submitted pursuant to the subdivision regulations of the city.

Effective on: 11/18/2013

Pervious pavement shall mean concrete and asphalt paving materials that allow for infiltration of stormwater into a storage area with void spaces that provide temporary storage.

Effective on: 11/18/2013

Record drawings shall mean a set of engineering or site drawings that delineate the specific permitted stormwater management facility(ies) as actually constructed.

Effective on: 11/18/2013

Redevelopment shall mean 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.

Effective on: 11/18/2013

Regional stormwater management shall mean the design and construction of a facility necessary to control stormwater runoff for more than one development.

Effective on: 11/18/2013

Regulated floodplain shall mean the floodplain area designated by FEMA regulations or designated by the city.

Effective on: 11/18/2013

Retention structures shall mean a permanent structure whose primary purpose is to permanently store a given volume of stormwater runoff. Release of the given volume is by infiltration and/or evaporation.

Effective on: 11/18/2013

Routine maintenance shall mean any action to enhance the aesthetics aspects associated with stormwater management facilities. Routine maintenance shall include actions such as grass cutting, trash removal, and landscaping.

Effective on: 11/18/2013

Site shall mean any lot, plot, parcel or tract of land.

Effective on: 11/18/2013

Stormwater design plan shall mean the set of drawings and other documents that comprise all of the information and specifications for the drainage systems, structures, concepts and techniques that will be used to control stormwater as required by this article. Also included are the supporting engineering calculations and results of any computer analysis.

Effective on: 11/18/2013

Stormwater management shall mean the collection, conveyance, storage, treatment and disposal of stormwater runoff in a manner to minimize accelerated channel erosion, increased flood damage, and/or degradation of water quality and in a manner to enhance and ensure the public health, safety, and general welfare which shall include a system of vegetative or structural measures, or both, that control the increased volume and rate of stormwater runoff caused by manmade changes to the land.

Effective on: 11/18/2013

Stormwater management facilities shall mean those structures and facilities that are designed for the collection, conveyance, storage, treatment and disposal of stormwater runoff into and through the drainage system. This includes all stormwater quantity and quality facilities.

Effective on: 11/18/2013

Stormwater runoff shall mean the direct response of a watershed to precipitation and includes the surface and subsurface runoff that enters a ditch, stream, storm drain, or other concentrated flow during and following precipitation.

Effective on: 11/18/2013

Subdivision shall mean that which is defined in [Chapter 25](#), Subdivisions, of this Code of Ordinances; and [G.S. 160A-376](#).

Effective on: 11/18/2013

Ten-year frequency storm shall mean a storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in ten years. It may also be expressed as an exceedance probability with a ten percent chance of being equaled or exceeded in any given year.

Effective on: 11/18/2013

Thoroughfare shall mean all numbered routes and all roads with four or more travel lanes.

Effective on: 11/18/2013

25-year frequency storm shall mean a storm that is capable of producing rainfall expected to be equaled or exceeded on the average of once in 25 years. It may also be expressed as an exceedance probability with a four percent chance of being equaled or exceeded in any given year.

Effective on: 11/18/2013

Variance shall mean the modification of the minimum stormwater management requirements for specific circumstances where strict adherence of the requirements would result in practical difficulties or undue hardship and not fulfill the intent of this article.

Effective on: 11/18/2013

Water quality shall mean those characteristics of stormwater runoff that relate to the physical, chemical, biological, or radiological integrity of water.

Effective on: 11/18/2013

Water quantity shall mean those characteristics of stormwater runoff that relate to the rate and volume of the stormwater runoff to downstream areas resulting from land disturbing activities.

Effective on: 11/18/2013

Watershed shall mean the drainage area contributing stormwater runoff to a single point.

Effective on: 11/18/2013

Wetland shall mean those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include swamps, marshes, bogs, and similar areas as determined by the U.S. Army Corps of Engineers.

Effective on: 11/18/2013

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-22. Scope of Article.

- a. No person shall develop any land without having provided for appropriate stormwater management measures that control or manage stormwater runoff, in compliance with this article, unless exempted in section 23-24 below.
- b. The provisions of this article shall apply throughout the incorporated areas in the City of Fayetteville, North Carolina.
- c. The city engineering and infrastructure department shall be responsible for the coordination and enforcement of the provisions of this article, and shall have the authority to enforce this article in accordance with the enforcement provisions.
- d. The application of this article and the provisions expressed herein shall be the minimum stormwater management requirements and shall not be deemed a limitation or repeal of any other local requirements authorized by state statute. Where other requirements are more stringent those shall apply. This article does not eliminate the necessity for obtaining other permits as may be required by other governmental entities.
- e. This article shall apply to both public and privately owned or maintained drainage systems, and stormwater management facilities.
- f. *Map.* The provisions of this article shall apply within the areas designated on the map titled "Stormwater Map of Fayetteville, North Carolina", which is adopted simultaneously herewith. The stormwater map and all explanatory matter contained thereon accompanies and is hereby made a part of this article.

The stormwater map shall be kept on file by the city engineer and shall be updated to take into account changes in the land area covered by this article and the geographic location of all stormwater management facilities permitted under this article. In the event of a dispute, the applicability of this article to a particular area of land shall be determined by reference to the North Carolina Statutes, the North Carolina Administrative Code, and local zoning and jurisdictional boundary ordinances.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-23. Powers of the Department.

- a. The city engineering and infrastructure department shall have the power to administer and enforce all regulations and procedures adopted to implement this article, including the right to maintain an action or procedure in any court of competent jurisdiction to compel compliance with or restrain any violation of this article, and to enforce the provisions of this article in accordance with its enforcement provisions.

b. The city engineering and infrastructure department can:

1. Administer, coordinate, and oversee design, construction, and operation and maintenance of city stormwater facilities and conveyances;
2. Implement or oversee implementation of development standards and guidelines;
3. Determine the manner in which stormwater facilities should be operated;
4. Inspect private systems which discharge to a public drainage system;
5. Require compliance with maintenance requirements;
6. Advise the other city departments on issues related to stormwater;
7. Protect facilities and properties controlled by the city and prescribe how they are used by others; and
8. Require proposed developments, not exempt from this article, to comply with the terms of this article.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-24. Exemptions from Requirements.

The following development activities are exempt from the provisions of this article and the requirements of providing stormwater management measures. Even if exempt from this article, the following as well as all development activity is not allowed to divert water to adjacent property to cause a nuisance and/or property damage and should comply with the intent of this article.

1. Construction or improvement of a single-family residence (single-family residence - separately built) or their accessory buildings that is separately built and not part of multiple construction or a subdivision development approved under this article and that cumulatively disturbs less than one acre. If included in a subdivision plan, all development activities must follow the stormwater management plan that has been approved for the subdivision.
2. New developments that do not include more than 20,000 square feet of impervious area in total and that cumulatively disturb less than one acre.
3. Redevelopment or new construction to existing development that does not include more than 5,000 square feet of new impervious area and that cumulatively disturbs less than one acre.
4. Land disturbing activities for agricultural uses.
5. Land disturbing activities undertaken on forest land for the production and harvesting of timber and timber products where all of the following occur:
 - a. The growing of trees;
 - b. The harvesting of timber, leaves, or seeds;
 - c. The regeneration of either timely replanting of trees or natural generation;
 - d. The application of applicable "best management practices", including the N.C. Department of Environment and Natural Resources "Forest Practice Guidelines Related to Water Quality"—Title 15A North Carolina Administrative Code subchapter 11, sections 1.010—.0209 and all successor documents; and
 - e. A forest management plan is prepared or approved either by a professional forester registered in the State of North Carolina or by the Division of North Carolina Forest Resources. Copies of the forest management plan shall be provided to the city upon request.
6. Land disturbing activities for which a permit is required under the Mining Act of 1972; [G.S. Ch. 74, Article 7](#)
7. Projects which commenced prior to the application of this article, such as:
 - a. Approved subdivisions and site plans. However, if the approved subdivision or site plan is modified or changed after the effective date of this article, the proposed development would have to comply with all requirements of this article in its entirety.

- b. Projects which have an outstanding unexpired valid building permit in compliance with either [G.S. 160A-422](#) or [G.S. 153A-357](#) or have an outstanding unexpired valid soil erosion permit in compliance with [G.S. 160A-458](#); provided that, upon application of any impervious surfaces, the exemption based on a valid soil erosion permit shall not apply.
- c. Projects which have obtained a state permit, such as landfills and land application of residuals.
- d. Projects which have continuing vested rights in compliance with [G.S. 160A-385.1](#) or [G.S. 153A-344.1](#).

Phased developments do not constitute separate developments and the total area of all phases will be used to determine exemption requirements.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-25. Scope of Stormwater Design Plans.

- a. The following items relate to the general scope of plans required by this article:
 - 1. In developing plans for subdivisions, individual lots in a residential development shall not be considered to be separate development activities and shall not require individual permits. Instead the subdivision development, as a whole, shall be considered to be a single development activity. Hydrologic parameters that reflect the ultimate subdivision development shall be used in all engineering calculations.
 - 2. For developments that have different planned phases of development, if all phases are covered by the approved stormwater design plan, one permit will be given for the entire development so that new permits will not be needed for each phase of development.
- b. In subdivisions, lots should generally be graded in such a manner that surface runoff does not cross more than two lots before it is collected in a system of open channels, closed conduits, or a combination of both.
- c. For all development activities, concentrated stormwater runoff leaving a development site must be discharged directly into a well-defined, natural or manmade off-site receiving channel or pipe. If the receiving channel or pipe is found to be inadequate, the developer must incorporate measures to either improve the receiving channel or pipe to an adequate condition, or detain/retain runoff on the site to a level that can be accommodated by the receiving channel or pipe. Newly constructed channels or pipes shall be designed as adequate channels or pipes.

The development site should be designed to maximize the amount of rainfall that infiltrates into the soils and minimize the amount of direct flow into public drainage facilities, adjoining streets, waterbodies, watercourses, and wetlands, to the extent feasible.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-26. Stormwater Design Plans and Approval Process.

- a. Unless granted an exemption from this article, a stormwater design plan (as part of the construction plans) for each development activity shall be submitted for review by the city engineer for the entire development activity, or any portion thereof. If granted an exemption from this article, those development activities are still required to submit a stormwater design plan for review by the city engineer to ensure that all other city minimum requirements have been satisfied.
- b. *Permit required.* A stormwater permit is required for all development and redevelopment unless exempt pursuant to this article. A permit may only be issued subsequent to a properly submitted and reviewed permit application, pursuant to the administrative manual.
- c. *Consultation meeting.* A land owner or developer may request a consultation meeting with the city engineer to review and discuss the stormwater management system to be utilized in a proposed development project. The purpose of the meeting(s) is to discuss any questions for 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 commences.

- d. All stormwater design plans as required by this article shall be submitted to the city engineering and infrastructure department for review and approval. The applicant shall submit three copies of the final plans. Within 30 calendar days from and after receipt of the plans, the city engineer shall issue a decision approving, rejecting, or conditionally approving the plans with modifications. The review and approval time frames for all subsequent submittals on the same plans, if required, shall be 15 calendar days.
- e. All preliminary plats of the development shall be consistent with the stormwater design plan required in subsection (a) of this section.
- f. Should any stormwater design plan involve any stormwater management facilities or land to be dedicated to public use, the same information shall also be submitted for review and approval to the department having jurisdiction over the land or other appropriate departments or agencies identified by the city engineer for review and approval. This stormwater design plan shall serve as the basis for all subsequent construction.
- g. A stormwater design plan shall not be considered approved without the inclusion of an approval stamp with a signature and date on the plans. The stamp of approval on the plans is solely an acknowledgement of satisfactory compliance with the requirements of these regulations. The approval stamp does not constitute a representation or warranty to the applicant or any other person concerning the safety, appropriateness, or effectiveness of any provision, or omission from the stormwater design plan.
- h. Following approval of stormwater design plans, an owner shall have a vested right to develop the property in accordance with the conditions of approval for two years. Extensions or renewals of the plan approvals may be granted by the city engineer upon written request by the person responsible for the development activity.
- i. All requirements for sites located in water supply watersheds as set forth in the Code of Ordinances must be met. In addition, all state and/or federal requirements such as U.S. Army Corps of Engineers wetland permits must be met, if required.
- j. *Administrative manual.* For applications required under this article, the city engineering and infrastructure department shall compile the application requirements, submission schedule, fee schedule, a copy of this article, and information on how and where to obtain the latest version of the "Stormwater Best Management Practices Manual" as provided by the North Carolina Division of Water Quality in an Administrative Manual, which shall be made available to the public.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-27. Plan Requirements.

Stormwater design plans shall include as a minimum the following:

1. A vicinity map indicating a north arrow, scale, boundary lines of the site, and other information necessary to locate the development site.
2. The maximum scale shall be one inch equals 100 feet.
3. The existing and proposed topography of the development site except for individual lot grading plans in single-family subdivisions. Profiles of proposed streets in single-family subdivisions shall be provided showing existing and proposed grades.
4. Physical improvements on the site, including present development and proposed development.
5. Location, dimensions, elevations, and characteristics of all existing and proposed stormwater management facilities.
6. Stormwater design plans shall include designation of all easements needed for inspection and emergency maintenance of the stormwater management facilities along with those easements needed for the maintenance of the drainage system conveying public water. As a minimum, easements shall have the following characteristics:

- a. Provide adequate access to all stormwater management facilities for inspection and emergency maintenance. Provide a minimum 20-foot permanent maintenance access easement from a public or private right-of-way to all stormwater management facilities. Provide a minimum ten-foot permanent drainage easement around the perimeter of all stormwater management facilities. The perimeter shall be the edge of facilities such as sand filters or bioretention areas. For wet and dry extended detention basins and similar facilities, the perimeter shall be the top of bank where the stormwater is stored. Any fences constructed around such facilities shall be outside of the ten-foot permanent drainage easement.
- b. Provide adequate access to all parts of the public drainage system and structures.
- c. Provide a minimum 20-foot easement for closed pipe systems. The required easement width shall be computed as follows:

$\text{Width} = 10 \text{ feet} + (\text{the diameter or total outside width for multiple pipes}) + (2 \text{ times the invert depth}).$

The easement width should be rounded to the nearest five-foot increment.

Drainage easements associated with culverts should be centered over the culvert but may be offset as long as a minimum of ten feet is provided on both sides.

- d. Provide easements centered on watercourses with the minimum widths based on the following:

Easement Widths for Open Channels	
Drainage Area, acres	Easement Width, feet
< 10 acres	10 feet on each side
10 to < 25 acres	20 feet on each side
25 to < 50 acres	30 feet on each side
50 to < 100 acres	40 feet on each side
> 100 acres	Greater of the floodway width or 50 feet

- e. Restriction on easements shall include prohibiting all fences without gates and structures which would interfere with access to the easement areas and/or the maintenance function of the drainage system. If an obstruction (fence, wall, landscaping, etc.) is located in a drainage easement and inhibits access to the drainage system, the city shall remove the obstruction as necessary but will not be obligated to replace it.
7. In subdivisions where a stormwater management facility serves more than one lot, the facility shall be located on a separate lot that is owned by the homeowner association. This lot shall have a minimum frontage of 20 feet.
 8. The stormwater design plan shall include all engineering calculations needed to design the system and associated structures including existing and developed velocities, peak rates of discharge, and hydrographs of stormwater runoff at all existing and proposed points of discharge from the site.
 9. Description of site conditions around points of all surface water discharge including vegetation and method of flow conveyance from the development activity.
 10. Construction and design details for structural controls.
 11. If there are FEMA-designated floodplains, they must be shown. All construction in the FEMA-designated floodplain must conform to [Chapter 12](#), Flood Damage Prevention, of this Code of Ordinances. A separate floodplain submittal may be required.
 12. A plan for maintenance of privately owned stormwater management facilities shall be included as part of the stormwater design plan which as a minimum shall specify the following:
 - a. Types of maintenance activities which should be anticipated so that the proposed drainage system and stormwater management facilities will operate as designed.
 - b. The frequency and amount of maintenance that should be anticipated.
 - c. The equipment that will be required to perform the needed maintenance.

- d. Name, address, and telephone number of the party responsible for maintenance.

Section 23-39 outlines the requirements for the operation and maintenance agreement which must be executed on all privately owned stormwater management facilities. The city shall provide a standard agreement for this purpose.

13. Any existing wetlands on the property shall be delineated on both the stormwater design plan as well as the final plat.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-28. Plan Hydrologic Criteria.

- a. The hydrologic criteria to be used for the stormwater design plans shall be as follows:

Description	Design Storm
Permanent storage facilities	1 and 10
Roadway inlets	5-year
Swales	10-year
Storm drainage systems	10-year
Open channels	25-year
Culverts (subdivision streets)	25-year
Culverts (thoroughfare roads)	50-year
Emergency spillways	100-year
Energy dissipaters	Same as outlet system

- b. All hydrologic analysis will be based on land use conditions as specified in section 23-29, below.
- c. For the design of storage facilities, a secondary outlet device or emergency spillway shall be provided to discharge the excess runoff in such a way that no danger of loss of life or facility failure is created.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-29. Plan Land Use Conditions Criteria.

For all stormwater management facilities, a hydrologic-hydraulic study shall be done showing how the drainage system will function with the proposed facilities. For such studies the following land use conditions shall be used.

1. For the design of the facility outlet structure, use developed land use conditions for the area within the proposed development and existing land use conditions for upstream areas draining to the facility.
2. For any analysis of flood flows downstream from the proposed facility, use existing land use conditions for all downstream areas.
3. All stormwater management facilities, emergency spillways shall be checked using the 100-year storm and routing flows through the facility and emergency spillways. For this analysis, developed land use conditions representing ultimate build-out conditions shall be used for all areas draining to the facility.
4. The effects of existing upstream detention facilities can be considered in the hydrologic-hydraulic study only if such facilities have been constructed and maintained, as detention facilities, as required by this article.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-30. Plan Wetlands Criteria.

Wetland areas shall not be disturbed until documentation is provided to the city engineer to show that the applicant has received approval from the U.S. Army Corps of Engineers regarding appropriate permits and approval of development activities. Stormwater design plans shall not be approved until this documentation has been provided to the city engineer. The city does have the option of providing conditional approval of the stormwater design plans that stipulate the documentation shall be provided prior to any disturbance of wetland areas.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-31. Minimum Stormwater Quantity Control Requirements.

- a. Install stormwater management facilities to limit the one-year and ten-year developed peak discharge rates to predeveloped peak discharge rates or to the amount that can be accommodated by the receiving downstream drainage system, whichever is more restrictive.
- b. Watersheds that have well documented water quantity problems may have more stringent, or modified, design criteria [such as controlling the 25-year developed peak discharge rate to the predeveloped peak discharge rate] determined by the city engineer that is responsive to the specific needs of that watershed.
- c. Stormwater management facilities may include both structural and nonstructural elements. Natural swales and other natural runoff conduits shall be retained where practicable.
- d. Stormwater design plans can be rejected by the city engineer if they incorporate structures and facilities that are not easily maintained.
- e. The drainage system and all stormwater management structures within the city (including both public and private portions) will be designed to the same engineering and technical criteria and standards. The design and construction must be sealed by a registered professional (as outlined in section 23-35) as meeting or exceeding public drainage system standards. The city engineering and infrastructure department's review will be the same whether the portion of the drainage system will be under public or private control or ownership.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-32. Minimum Stormwater Quality Control Requirements.

- a. *General standards.* All development and redevelopment to which this article applies shall comply with the standards of this section.
- b. *Development standards for low-density projects.* Low-density projects shall comply with each of the following standards:
 1. No more than two dwelling units per acre or 24 percent built-upon area.
 2. Stormwater runoff from the development shall be transported from the development by vegetated conveyances to the maximum extent practicable.
 3. Built-upon area shall be at a minimum of 30 feet landward of all perennial and intermittent surface waters draining less than or equal to 640 acres. Built-upon area shall be at a minimum of 75 feet landward of all perennial and intermittent surface waters draining greater than 640 acres. This distance shall be measured from the top of bank on both sides of the perennial and intermittent surface waters. For all perennial and intermittent surface waters, constructed BMPs shall be located at a minimum of 30 feet landward. 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 may 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 of water quality approved methodology.

4. 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 development and redevelopment maintains the site consistent with the approved project plans.
 5. A project with an overall density at or below the low-density thresholds, 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.
- c. *Development standards for high-density projects.* A project not consistent with the requirements for a low-density project may be permitted as a high-density project and shall implement stormwater control measures that comply with each of the following standards:
1. 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.
 2. High-density projects must discharge the storage volume at a rate equal to or less than the predevelopment discharge rate for the one year, 24-hour storm.
 3. 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).
 4. 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.
 5. General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c).
 6. Built-upon area shall be at a minimum of 50 feet landward of all perennial and intermittent surface waters draining less than or equal to 640 acres. Built-upon area shall be at a minimum of 75 feet landward of all perennial and intermittent surface waters draining greater than 640 acres. This distance shall be measured from the top of bank on both sides of the perennial and intermittent surface waters. For all perennial and intermittent surface waters, constructed BMPs shall be located at a minimum of 30 feet landward. 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 may 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 of water quality approved methodology.
 7. 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 development and redevelopment maintains the site consistent with the approved project plans.
- d. *Standards for stormwater control measures.*
1. *Evaluation according to contents of Stormwater Best Management Practices Manual.* All stormwater control measures and stormwater treatment practices required under this article shall be evaluated by the city engineer according to the policies, criteria, and information, including technical specifications and standards and the specific design criteria for each stormwater practice, in the latest version of the "Stormwater Best Management Practices Manual" as provided by the North Carolina Division of Water Quality. The city engineer shall determine whether proposed BMPs will be adequate to meet the requirements of this article.

2. *Determination of adequacy; presumptions and alternatives.* Stormwater treatment practices that are designed, constructed, and maintained in accordance with the criteria and specifications in the latest version of the "Stormwater Best Management Practices Manual" as provided by the North Carolina Division of Water Quality will be presumed to meet the minimum water quality and quantity performance standards of this article. Whenever an applicant proposes to utilize a practice or practices not designed and constructed in accordance with the criteria and specifications in the latest version of the "Stormwater Best Management Practices Manual" as provided by the North Carolina Division of Water Quality, the applicant shall have the burden of demonstrating that the practice(s) will satisfy the minimum water quality and quantity performance standards of this article. The city engineer may require the applicant to provide the documentation, calculations, and examples necessary for the city engineer to determine whether such an affirmative showing is made.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-33. Approval and Permit Requirements.

- a. No final site plan or subdivision plan approval shall be issued or modified without the following items:
 1. An approved stormwater design plan;
 2. An executed operation and maintenance agreement, if required, in accordance with section 23-39
 3. The posting of an installation performance guarantee, if required, in accordance with section 23-41
 4. An approved erosion control plan, if applicable;
 5. Right of entry given to the city for city personnel to enter property for emergency maintenance if necessary; and
 6. Any off-site easements needed.
- b. No final certificate of occupancy permit shall be issued pursuant to Chapter 7 of this Code of Ordinances or final plat approved without the following:
 1. All final inspection requirements as per section 23-37 are met;
 2. The posting of an installation performance guarantee, if required, in accordance with section 23-41
 3. Receipt of record drawings as outlined in section 23-37; and
 4. A recorded operation and maintenance agreement, if required, in accordance with section 23-39
- c. All land clearing, construction, development and drainage shall be done in accordance with the approved stormwater design plan or previously approved revisions.
- d. Submittal and/or approval of stormwater design plans does not preclude the applicant from obtaining all other necessary permits and compliance with appropriate regulations including, but not limited to, the following:
 1. Water supply watershed regulations, Chapter 29 of this Code of Ordinances;
 2. Federal wetland permits;
 3. Water quality certifications; and
 4. Sediment and erosion control requirements.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-34. Building Permit or Street Plan Approval Suspension and Revocation.

- a. The following conditions shall represent grounds for suspension and/or revocation for building permit(s) and/or street plan approval(s):

1. Any violation(s) of the conditions of the stormwater design plan approval;
 2. Construction not in accordance with the approved plans;
 3. Approval of a stormwater design plan has not been obtained;
 4. Noncompliance with correction notice(s); or
 5. The existence of an immediate danger in a downstream area.
- b. If one or more of these conditions are found, a written notice of violation shall be served upon the owner or authorized representative and the time in which to correct the deficiencies shall be specified. The notice shall set forth the measures necessary to achieve compliance with the plan. Correction of these violations must be started immediately or the owner shall be deemed in violation of this article.
 - c. If appropriate remedial actions as outlined in the written notice are not completed within the specified time period, a building permit or street plan approval will be suspended or revoked within seven days. The suspension or revocation will then be in force until the development is in compliance with this article.
 - d. If a violation of this article is occurring that will cause significant damage to downstream property or structures, the city engineer can issue an immediate suspension or revocation.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-35. Professional Registration Requirements.

- a. Stormwater design plans and design reports that are incidental to the overall or ongoing site design shall be prepared, and stamped/sealed by a qualified registered professional engineer, land surveyor or landscape architect, using acceptable engineering standards and practices. All other stormwater design plans and design reports shall be prepared, and stamped/sealed by a qualified registered professional engineer, using acceptable engineering standards and practices.
- b. The engineer, surveyor, or landscape architect shall perform services only in areas of his/her competence, and shall undertake to perform engineering or land surveying assignments only when qualified by education and/or experience in the specific technical field. In addition, the engineer, surveyor, or landscape architect must verify that the plans have been designed in accordance with this article and the standards and criteria stated or referred to in this article.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-36. Fees.

The initial fees associated with the operation of this article shall be set annually by city council as part of the annual budget ordinance, or by an amendment thereto. If no amendment to the prior year's fees is proposed or adopted by city council as part of the budget ordinance, then the prior year's fees shall continue in full force and effect. A list of the fees proposed at the enactment of this article for plan review and other fees associated with this article may be obtained from the city engineering and infrastructure department.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-37. Construction and Inspection.

- a. The owner or his representative shall notify the city engineer before commencing any work to implement the stormwater design plan, at key milestones noted during plan approval, and upon completion of the work.

- b. Any portion of the construction which does not comply with the stormwater design plan shall be promptly corrected by the permittee.
- c. The city engineer will notify the person responsible for the development activity in writing when violations are observed describing the following:
 - 1. Nature of the violation;
 - 2. Required corrective actions; and
 - 3. The time period for violation correction.
- d. A final inspection shall be conducted by the city engineer upon completion of the work included in the approved stormwater design plan to determine if the completed work is constructed in accordance with the plan.
- e. The permittee shall provide record drawings signed and sealed by a registered professional (as outlined in section 23-35) to be submitted upon completion of the stormwater management facilities included in the stormwater design plan. The record drawings shall be referenced to North Carolina State Plane Coordinates and shall be provided in hard copy form as well as a digital file which is compatible with the city's software. The registered professional shall state on the record drawings that:
 - 1. The facilities have been constructed as shown on the record drawings; and
 - 2. The facilities meet the approved stormwater design plan and specifications.
- f. As a minimum, the record drawings shall contain the following:
 - 1. Mark through and redraw drainage structures when the as-built location deviates more than ten feet horizontally from the location indicated on the plans.
 - 2. Show all drainage structures, pipe inverts, and rim elevations.
 - 3. Show distances between drainage structures on the plan view as well as the profile.
 - 4. Show the final design specifications for all stormwater management facilities and the field location, size, depth, and planted vegetation of all measures, controls, and devices, as installed.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-38. Ownership and Maintenance of Stormwater Management Facilities.

- a. All stormwater management facilities shall be privately owned and maintained unless the city accepts the facility for city ownership and maintenance. The owner thereof shall grant to the city a right of entry which allows for inspection and emergency repair, in accordance with the terms of the operation and maintenance agreement set forth in section 23-39, hereof.
- b. Single-family residential stormwater management facilities accepted for maintenance. The city shall accept functional maintenance responsibility of structural stormwater management facilities that are installed pursuant to this article following a warranty period of one year from the date of record-drawing certification described in section 23-37, or from the date the facility ceases to function as an erosion control measure and starts to function as a stormwater management facility, whichever is later, provided the stormwater management facility:
 - 1. Only serves a single-family detached residential development or townhomes all of which have public street frontage;
 - 2. Is satisfactorily maintained during the one-year warranty period by the owner or designee;
 - 3. Meets all the requirements of this article;
 - 4. Includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection, maintenance, repair, or reconstruction; and
 - 5. Prior to the release of the installation performance guarantee as outlined in section 23-41(b), the developer shall pay into a maintenance fund used to maintain such facilities in the future an amount equal

to 20 percent of the initial construction cost of the stormwater management facilities related to detention ponds or other BMPs constructed to meet the requirements of this article.

The city engineer must receive an application for transfer of maintenance responsibilities for the structural stormwater management facility along with the stormwater design plan submittal.

- c. The person responsible for maintenance of any stormwater management facility installed pursuant to this article and not covered under subsection (b) above, shall submit to the city engineer an 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. The inspection report shall contain all of the following:
 1. The name and address of the landowner;
 2. The recorded book and page number of the lot of each stormwater management facility;
 3. A statement that an inspection was made of all stormwater management facilities;
 4. The date the inspection was made; and
 5. A statement that all inspected stormwater management facilities are performing properly and are in compliance with the terms and conditions of the approved maintenance agreement required by this article.

All inspection reports shall be on forms supplied by the city engineer. An original inspection report shall be provided to the city engineer beginning one year from the date of record-drawing certification and each year thereafter on or before the date of the record-drawing certification.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-39. Operation and Maintenance Agreement.

- a. *In general.* At the time record drawings are provided to the city engineer as described in section 23-37 and prior to final approval of a project for compliance with this article, but in all cases prior to placing the stormwater management facilities into service, the applicant or owner of the site must execute an operation and maintenance agreement that shall be binding on all current and subsequent owners of the site, portions of the site, and lots or parcels served by the stormwater management facility. Failure to execute an operation and maintenance agreement within the timeframe specified by the city engineer may result in assessment of penalties as specified in section 23-46. For single-family residential subdivisions, the original owner or applicant shall have primary responsibility for carrying out the provisions of the maintenance agreement for a period of one year from the date of record-drawing certification described in section 23-37, or for a period of one year from the date the facility ceases to function as an erosion control measure and starts to function as a stormwater management facility, whichever is later. At the end of the one-year timeframe, the stormwater management facility shall be inspected as outlined in section 23-41 in order to release the performance guarantee. Once the stormwater management facility has passed inspection, primary responsibility for carrying out the provisions of the maintenance agreement shall be transferred to a homeowners' association, property owners' association, or similar entity. In cases where the city is accepting functional maintenance responsibility, such responsibility shall be transferred to the city once the stormwater management facility has passed inspection. A homeowners' association, property owners' association, or similar entity shall still be responsible for routine maintenance such as mowing the grass and picking up litter.
 1. The operation and maintenance agreement shall require the owner or owners to maintain, repair, and, if necessary, reconstruct the stormwater management facility, and shall state the terms, conditions, and schedule of maintenance for the stormwater management facility. In addition, it shall grant to the city a right of entry in the event that the city engineer has reason to believe it has become necessary to inspect, monitor, maintain, repair, or reconstruct the stormwater management facility; however, in no case shall the right of entry, of itself, confer an obligation on the city to assume responsibility for the stormwater management facility.

2. The operation and maintenance agreement must be approved by the city engineer prior to final approval, and it shall be referenced on the final plat and shall be recorded with the Cumberland County Register of Deeds upon final plat approval. A copy of the recorded maintenance agreement shall be given to the city engineer within 14 days following its recordation.
- b. *Special requirement for homeowners' and other associations.* For all stormwater management facilities required pursuant to this article and that are to be or are owned and maintained by a homeowners' association, property owners' association, or similar entity in a single-family residential subdivision, the required operation and maintenance agreement shall include all of the following provisions:
 1. Acknowledgment that the association shall continuously operate and maintain the stormwater control and management facilities.
 2. Establishment of an escrow account, which can be spent solely for sediment removal, structural, biological or vegetative replacement, major repair, or reconstruction of the stormwater management facilities. If stormwater management facilities are not performing adequately or as intended or are not properly maintained, the city, in its sole discretion, may remedy the situation, and in such instances the city 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 stormwater management facilities.
 3. Both developer and homeowners' association contributions shall fund the escrow account. Prior to the release of the installation performance guarantee as outlined in section 23-41(b), the developer shall pay into the escrow account an amount equal to 15 percent of the initial construction cost of the stormwater management facilities. Two-thirds of the total initial construction cost shall be deposited into the escrow account within the first five years and the full amount shall be deposited within ten years following initial construction of the stormwater management facilities. 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 escrow account budget.
 4. The percent of developer contribution and lengths of time to fund the escrow account may be varied by the city depending on the design and materials of the stormwater control and management facility.
 5. Granting to the city a right of entry to inspect, monitor, maintain, repair, and reconstruct stormwater management facilities.
 6. Allowing the city to recover from the association and its members any and all costs the city expends to maintain or repair the stormwater management facilities or to correct any operational deficiencies. Failure to pay the city all of its expended costs, after 45 days' written notice, shall constitute a breach of the agreement. In case of a deficiency, the city 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, in case of a deficiency. Interest, collection costs, and attorney fees shall be added to the recovery.
 7. A statement that this agreement shall not obligate the city to maintain or repair any stormwater management facilities, and the city shall not be liable to any person for the condition or operation of stormwater management facilities.
 8. A statement that this agreement shall not in any way diminish, limit, or restrict the right of the city to enforce any of its ordinances as authorized by law.
 9. A provision indemnifying and holding harmless the city for any costs and injuries arising from or related to the stormwater management facility, unless the city has agreed in writing to assume the maintenance responsibility for the stormwater management facility and has accepted dedication of any and all rights necessary to carry out that maintenance.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-40. Inspection Program.

- a. Inspections and inspection programs by the city 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, and material or water in stormwater management facilities; and evaluating the condition of stormwater management facilities.
- b. If the owner or occupant of any property refuses to permit such inspection, the city engineer 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 city engineer while carrying out his or her official duties.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-41. Performance Guarantee for Installation.

- a. *Commercial developments.*
 1. *Shall be required.* The city shall require the submittal of a performance guarantee or bond with surety, cash escrow, letter of credit or other acceptable legal arrangement prior to issuance of a permit in order to ensure that the stormwater management facilities are installed by the permit holder as required by the approved stormwater design plan.
 2. *Amount.* The amount of an installation performance guarantee shall be equal to at least 75 percent of the total estimated construction cost of the stormwater management facilities approved under the permit. The installation performance guarantee shall remain in place until at least one year after final approval.
 3. *Use of performance guarantee.*
 - a. *Forfeiture provisions.* The performance guarantee 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 article, approvals issued pursuant to this article, or an operation and maintenance agreement established pursuant to this article.
 - b. *Default.* Upon default of the owner to construct, maintain, repair and, if necessary, reconstruct any stormwater management facility in accordance with the applicable permit or operation and maintenance agreement, the city engineer shall obtain and use all or any portion of the guarantee 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.
 - c. *Costs in excess of performance guarantee.* If the city takes action upon such failure by the applicant or owner, the city may collect from the applicant or owner the difference between the amount of the reasonable cost of such action and the amount of the guarantee held, in addition to any other penalties or damages due.
 - d. *Refund.* No sooner than one year after final approval, the applicant may petition the city to release the value of the performance guarantee. Upon receipt of such petition, the city engineer shall inspect the stormwater management facility to determine whether the controls are performing as designed and intended. The city engineer shall present the petition, inspection report, and recommendations to the director of the city engineering and infrastructure department.
 1. If the director of the city engineering and infrastructure department approves the report and accepts the petition, the city may release the installation performance guarantee upon execution by the applicant of an indemnification agreement in favor of the city which shall be a covenant upon the property and run with the land.
 2. If the director of the city engineering and infrastructure department does not accept the report and rejects the petition, the director of the city engineering and infrastructure department shall provide

the applicant with instruction to correct any deficiencies and all steps necessary for the release of the installation performance guarantee.

b. *Single-family residential subdivisions.*

1. *Shall be required.* The city shall require the submittal of a performance guarantee or bond with surety, cash escrow, letter of credit or other acceptable legal arrangement prior to approval of a final plat in order to ensure that the stormwater management facilities are installed by the permit holder as required by the approved stormwater design plan.
2. *Amount.* The amount of an installation performance guarantee shall be equal to at least 100 percent of the total estimated construction cost of converting the erosion control measure to the stormwater management facilities approved under the permit. The installation performance guarantee shall remain in place until at least one year after the facility starts to function as a stormwater management facility.
3. *Use of performance guarantee.*
 - a. *Forfeiture provisions.* The performance guarantee 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 article, approvals issued pursuant to this article, or an operation and maintenance agreement established pursuant to this article.
 - b. *Default.* Upon default of the owner to construct, maintain, repair and, if necessary, reconstruct any stormwater management facility in accordance with the applicable permit or operation and maintenance agreement, the city engineer shall obtain and use all or any portion of the guarantee 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.
 - c. *Costs in excess of performance guarantee.* If the city takes action upon such failure by the applicant or owner, the city may collect from the applicant or owner the difference between the amount of the reasonable cost of such action and the amount of the guarantee held, in addition to any other penalties or damages due.
 - d. *Refund.* No sooner than one year after final approval as outlined in section 23-39, the applicant may petition the city to release the value of the performance guarantee. Upon receipt of such petition, the city engineer shall inspect the stormwater management facility to determine whether the controls are performing as designed and intended. The city engineer shall present the petition, inspection report, and recommendations to the director of the city engineering and infrastructure department.
 1. If the director of the city engineering and infrastructure department approves the report and accepts the petition, the city may release the installation performance guarantee upon execution by the applicant of an indemnification agreement in favor of the city which shall be a covenant upon the property and run with the land.
 2. If the director of the city engineering and infrastructure department does not accept the report and rejects the petition, the director of the city engineering and infrastructure department shall provide the applicant with instruction to correct any deficiencies and all steps necessary for the release of the installation performance guarantee.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-42. Notice to Owners; Deed Recordation and Indications on Plat.

The applicable operations and maintenance agreement pertaining to every stormwater management facility shall be referenced on the final plat and shall be recorded with the Cumberland County Register of Deeds upon final plat approval. If no subdivision plat is recorded for the site, then the operations and maintenance agreement shall be recorded with the Cumberland County Register of Deeds so as to appear in the chain of title of all subsequent purchasers under generally accepted searching principles. For condominiums, the operations and maintenance agreement shall be recorded with the association documents.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-43. Records of Installation and Maintenance Activities.

The owner of each stormwater management facility shall keep records of inspections, maintenance, and repairs for at least five years from the date of creation of the record of inspection and shall submit the same upon reasonable request to the city engineer.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-44. Variances from Requirements.

- a. The city council may grant a variance from the requirements of this article if:
 1. There are exceptional circumstances applicable to the site such that strict adherence to the provisions of this article will result in unnecessary hardship and not fulfill the intent of this article;
 2. The variance is in harmony with the general purpose and intent of this article; and
 3. In granting this variance, water quality has been protected, public safety and welfare has been assured, and substantial justice has been done.
- b. A written request for a variance shall be submitted to the city clerk and shall state the specific variance sought and the reasons, with supporting data, for their granting. The request shall include descriptions, drawings, calculations and any other information that is necessary to evaluate the proposed variance.
- c. The city engineer will conduct a review of the request for a variance and submit a report to the city council.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-45. Appeals.

The disapproval or required modification of any proposed stormwater design plan, or the determination by the city of noncompliance, or failure to maintain shall entitle the aggrieved person to appeal this decision or lack of action to the city council. Such appeal must be made in writing to the city clerk and the city manager within 15 days of written notice of disapproval or modification of a stormwater design plan, or determination of either noncompliance or failure to maintain or within 30 days of the receipt of a notice of assessment of a civil penalty, made or rendered by the city engineer in the enforcement of this article.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-46. Enforcement.

- a. *General.*
 1. *Authority to enforce.* The provisions of this article shall be enforced by the city engineer, his or her designee, or any authorized agent of the city. Whenever this section refers to the city engineer, it includes his or her designee as well as any authorized agent of the city.
 2. *Violation unlawful.* Any failure to comply with an applicable requirement, prohibition, standard, or limitation imposed by this article, or the terms or conditions of any permit or other development or

redevelopment approval or authorization granted pursuant to this article, is unlawful and shall constitute a violation of this article.

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, practice, or condition in violation of this article 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 article, or fails to take appropriate action, so that a violation of this article 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 section, 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 article, or fails to take appropriate action, so that a violation of this article 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 article, 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 certificate of occupancy.* The city engineer 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. This remedy shall not apply to buildings in a single-family residential subdivision.
 - b. *Disapproval of subsequent permits and development approvals.* As long as a violation of this article continues and remains uncorrected, the city engineer or other authorized agent may withhold, and the city council may disapprove, any request for permit or development approval or authorization provided for by this article or the zoning, subdivision, and/or building regulations, as appropriate, for the land on which the violation occurs.
 - c. *Injunction, abatements, etc.* The city engineer, with the written authorization of the city 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 article. Any person violating this article shall be subject to the full range of equitable remedies provided in the general statutes or at common law.
 - d. *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 [G.S. 160A-193](#), the city engineer, with the written authorization of the city manager, may cause the violation to be corrected and the costs to be assessed as a lien against the property.
 2. *Civil penalties.*
 - a. *Violations of article.* A violation of any of the provisions of this article or rules or other orders adopted or issued pursuant to this article may subject the violator to a civil penalty. A civil penalty may be assessed from the date the violation occurs. No penalty shall be assessed until the person alleged to be in violation has been notified of the violation. Refusal to accept the notice or failure to notify the city

engineer of a change of address shall not relieve the violator's obligation to comply with this article or to pay such a penalty.

- b. *Amount of penalty.* The civil penalty for each violation of this article may be up to the maximum allowed by law. Each day of continuing violation shall constitute a separate violation. In determining the amount of the civil penalty, the city engineer shall consider any relevant mitigating and aggravating factors including, but not limited to, the effect, if any, of the violation; the degree and extent of harm caused by the violation; the cost of rectifying the damage; whether the violator saved money through noncompliance; whether the violator took reasonable measures to comply with this article; whether the violation was committed willfully; whether the violator reported the violation to the city engineer; and the prior record of the violator in complying or failing to comply with this article or any other post construction article or law. The city engineer is authorized to vary the amount of the per diem penalty based on criteria specified in the administrative manual and based on relevant mitigating factors. Civil penalties collected pursuant to this article shall be credited to the city's general fund as nontax revenue.
 - c. *Notice of assessment of civil penalty.* The city engineer shall determine the amount of the civil penalty and shall notify the violator of the amount of the penalty and the reason for assessing the penalty. This notice of assessment of civil penalty shall be served by any means authorized under [G.S. 1A-1, Rule 4](#), and shall direct the violator to either pay the assessment or file an appeal within 30 days of receipt of the notice as specified in subsection (2)e., below.
 - d. *Failure to pay civil penalty assessment.* If a violator does not pay a civil penalty assessed by the city engineer within 30 days after it is due, or does not request a hearing as provided in subsection (2)e., below, the city engineer shall request the initiation of a civil action to recover the amount of the assessment. The civil action shall be brought in Cumberland County Superior Court or in any other court of competent jurisdiction. A civil action must be filed within three years of the date the assessment was due. An assessment that is appealed is due at the conclusion of the administrative and judicial review of the assessment.
 - e. *Appeal of remedy or penalty.* The issuance of a notice of assessment of a civil penalty by the city engineer shall entitle the responsible party or entity to an appeal before the city council if such person submits written demand for an appeal hearing to the city clerk within 30 days of the receipt of a notice of assessment of a civil penalty. The demand for an appeal shall be accompanied by a filing fee as established by city council. The appeal of a notice of assessment of a civil penalty shall be conducted as described in section 23-45 of this article.
3. *Criminal penalties.* A violation of this article may be enforced as a misdemeanor subject to the maximum fine permissible under North Carolina law.
- c. *Procedures.*
 1. *Authority to inspect.* The city engineer shall have the authority, upon presentation of proper credentials, to enter and inspect any land, building, structure, or premises to ensure compliance with this article, or rules or orders adopted or issued pursuant to this article, and to determine whether the activity is being conducted in accordance with this article and the approved stormwater design plan, and whether the measures required in the plan are effective. No person shall willfully resist, delay, or obstruct the city engineer while the city engineer is inspecting or attempting to inspect an activity under this article.
 2. *Notice of violation and order to correct.* When the city engineer finds that any building, structure, or land is in violation of this article, the city engineer shall notify in writing the responsible person/entity. The notification shall indicate the nature of the violation, contain the address or other description of the site upon which the violation occurred or is occurring, order the necessary action to abate the violation, and give a deadline for correcting the violation. The notice shall, if required, specify a date by which the responsible person/entity must comply with this article, and advise that the responsible person/entity is subject to remedies and/or penalties or that failure to correct the violation within the time specified will subject the responsible person/entity to remedies and/or penalties as described in this section of this article. In determining the measures required and the time for achieving compliance, the city engineer shall take into consideration the technology and quantity of work required, and shall set reasonable and attainable time limits. The city engineer may deliver the notice of violation and correction order

personally, by the Fayetteville Police, 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 city engineer may take appropriate action under this article to correct and abate the violation and to ensure compliance with this article.

3. *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 city engineer 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 city engineer may extend the time limit as is reasonably necessary to allow timely correction of the violation, up to, but not exceeding 60 days. The city engineer may grant 30-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 article. The city engineer 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.
4. *Enforcement after time to correct.* After the time has expired to correct a violation, including any extension(s) if authorized by the city engineer, the city engineer shall determine if the violation is corrected. If the violation is not corrected, the city engineer may act to impose one or more of the remedies and penalties authorized by this article.
5. *Emergency enforcement.* If delay in correcting a violation would seriously threaten the effective enforcement of this article or pose an immediate danger to the public health, safety, or welfare, then the city engineer may order the immediate cessation of a violation. Any person so ordered shall cease any violation immediately. The city engineer may seek immediate enforcement, without prior written notice, through any remedy or penalty authorized by this article.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-47. Relationship to Other Laws, Regulations, and Private Agreements.

- a. *Conflict of laws.* This article is not intended to modify or repeal any other ordinance, rule, regulation or other provision of law. The requirements of this article are in addition to the requirements of any other article, rule, regulation or other provision of law. Where any provision of this article 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 for human or environmental health, safety, and welfare shall control.
- b. *Private agreements.* This article is not intended to revoke or repeal any easement, covenant, or other private agreement. However, where the regulations of this article are more restrictive or impose higher standards or requirements than such an easement, covenant, or other private agreement, the requirements of this article shall govern. Nothing in this article shall modify or repeal any private covenant or deed restriction, but such covenant or restriction shall not legitimize any failure to comply with this article. In no case shall the city be obligated to enforce the provisions of any easements, covenants, or agreements between private parties.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-48. Severability.

If any term, requirement, or provision of this article or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this article or the application of such terms, requirements and provisions to persons or circumstances other than those to which it is held invalid or unenforceable, shall not be affected thereby and each term, requirement or provision of this article shall be valid and be enforced to the fullest extent permitted by law.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013

Sec. 23-49. Effective Date.

This article shall become effective on January 1, 2009.

(Ord. No. S2008-020, § 1, 10-27-2008; Ord. No. S2012-002, § 1, 2-13-2012 ; Ord. No. S2013-003, § 1, 3-25-2013 ; Ord. No. S2013-013, § 1, 6-10-2013)

Effective on: 11/18/2013