

POST CONSTRUCTION STORM WATER ORDINANCE

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20.1 OVERVIEW

20.1.1 TITLE

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

20.1.2 AUTHORITY

The Town of Davidson 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; North Carolina General Statutes 143-214.7 and rules promulgated by the Environmental Management Commission thereunder; Session Law 2004-163; Chapter 160A, §§ 174, 185.

20.1.3 FINDINGS

It is hereby determined that:

Development and redevelopment alter the hydrologic response of local watersheds and increase storm water runoff rates and volumes, flooding, soil erosion, stream channel erosion, non-point source pollution, and sediment transport and deposition, as well as reduce groundwater recharge;

These changes in storm water runoff contribute to increased quantities of water-borne pollutants and alterations in hydrology which are harmful to public health and safety as well as to the natural environment; and

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

Further, the Federal Water Pollution Control Act of 1972 (“Clean Water Act”) and federal Phase II Storm Water 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 the Town of Davidson, to adopt the minimum storm water controls such as those included in this ordinance.

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

20.1.4 PURPOSE

(A) 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-construction storm water runoff and non-point source pollution associated with new development and redevelopment. It has been determined that proper management of construction-related and post-construction storm water runoff will minimize damage to public and private property and infrastructure, safeguard the public health, safety, and general welfare, and protect water and aquatic resources.

(B) Specific

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

- (1) Establishing decision-making processes for development that protect the integrity of watersheds and preserve the health of water resources;
- (2) Minimizing changes to the pre-development hydrologic response for new development and redevelopment in their post-construction state in accordance with the requirements of this ordinance for the applicable design storm in order to reduce flooding, streambank erosion, and non-point and point source pollution, as well as to maintain the integrity of stream channels, aquatic habitats and healthy stream temperatures;
- (3) Establishing minimum post-construction storm water management standards and design criteria for the regulation and control of storm water runoff quantity and quality;
- (4) Establishing design and review criteria for the construction, function, and use of structural storm water control facilities that may be used to meet the minimum post-construction storm water management standards;
- (5) Establishing criteria for the use of better management and site design practices, such as the preservation of greenspace and other conservation areas;

- (6) Establishing provisions for the long-term responsibility for and maintenance of structural and nonstructural storm water best management practices (BMPs) to ensure that they continue to function as designed, are maintained appropriately, and pose minimum risk to public safety; and
- (7) Establishing administrative procedures for the submission, review, approval and disapproval of storm water management plans, for the inspection of approved projects, and to assure appropriate long-term maintenance.

20.1.5 APPLICABILITY AND JURISDICTION

(A) General

The requirements of this article shall apply to all developments and redevelopments within the corporate limits or in the extraterritorial jurisdiction of the Town of Davidson, unless one of the following exceptions applies to the development or redevelopment as of July 1, 2007:

- (1) Master Plan approved;
- (2) Zoning use application submitted and accepted for review for uses that do not require a building permit;
- (3) Certificate of Building Code Compliance issued by the proper governmental authority;
- (4) Valid building permit issued pursuant to G.S. § 153A-344 or G.S. § 160A-385(b)(i), so long as the permit remains valid, unexpired, and unrevoked;
- (5) Common law vested right established (e.g., the substantial expenditure of resources (time, labor, money) based on a good faith reliance upon having received a valid governmental approval to proceed with a project); and/or
- (6) A conditional zoning district (including those districts which previously were described variously as conditional district, conditional use district, parallel conditional district and parallel conditional use district) approved prior to the effective date of this article/ordinance, provided formal plan submission has been made and accepted for review either prior to five years from the effective date of this ordinance in the case of conditional zoning districts approved on or after June 11, 2001, or prior to two years from the effective date of this ordinance in the case of conditional zoning districts approved prior to June 11, 2001, and provided such plans encompass either a minimum of 25 percent of the area of the project, or any phase of a project so long as such phase is part of a project that includes project-wide water quality requirements to achieve 85 percent TSS removal from developed areas. If no such formal plan submission occurs within the above-described five-year or two-year time frames, the requirements of this ordinance shall be applied to the project, except for total phosphorus removal, undisturbed open space and buffer requirements not in effect at the time of the approval of the conditional zoning district, all of which do not apply. Any changes to a conditional zoning district necessary to comply with the requirements of this ordinance shall be made through administrative amendment and not through a rezoning.

(B) Exemptions

The requirements of this article shall not apply within the corporate limits or in the extraterritorial jurisdiction with respect to the following types of development or redevelopment activities:

- (1) Residential development that cumulatively disturbs less than one acre and cumulatively creates less than 24 percent built upon area based on lot size or the lot is less than 20,000 square feet (lot must have been described by metes and bounds in a recorded deed prior to the effective date of the ordinance and can not be part of a larger development);
- (2) Commercial and industrial development that cumulatively disturbs less than one acre and cumulatively creates less than 20,000 square feet of built upon area (built upon area includes gravel and other partially impervious materials);
- (3) Redevelopment of transit station areas, distressed business districts and brownfields as designated by the Planning Director for the Town of Davidson and conditional planning areas with approval by the Town of Davidson Board of Commissioners, which do not result in a net increase in built upon area and that provide greater or equal storm water control than the previous development; and
- (4) Redevelopment that disturbs less than 20,000 square feet, is not part of a larger development, does not decrease existing storm water controls and renovation and/or construction costs (excluding trade fixtures) do not exceed 100 percent of the tax value of the property; and
- (5) Activities 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).

(C) 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.

(D) Map

The provisions of this ordinance shall apply within the areas designated on the map titled "Post-Construction Ordinance Map of the Town of Davidson, North Carolina" (hereafter referred to as the "Post-Construction Ordinance Map"), which is adopted simultaneously herewith. The Post-Construction Ordinance Map and all explanatory matter contained thereon accompanies and is hereby made a part of this ordinance. The Post-Construction Ordinance Map shall be kept on file by the Storm Water Administrator or designee (hereinafter referred to as the "Storm Water Administrator") and shall be updated to take into account changes in the land area covered by this ordinance and the geographic location of all structural BMPs permitted under 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 appeal through the Storm Water Administrator

20.1.6 INTERPRETATION

(A) Meaning and Intent

All provisions, terms, phrases, and expressions contained in this ordinance shall be construed according to the general and specific purposes set forth in Section 104, Purpose. If a different or more specific meaning is given for a term defined elsewhere in the Town of Davidson Planning Ordinance, the meaning and application of the term in this ordinance shall control for purposes of application of this ordinance.

(B) Text Controls in Event of Conflict

In the event of a conflict or inconsistency between the text of this ordinance and any heading, caption, figure, illustration, table, or map, the text shall control.

(C) Authority for Interpretation

The Storm Water Administrator has authority to interpret this ordinance. Any person may request an interpretation by submitting a written request to the Storm Water Administrator who shall respond in writing within 30 days. The Storm Water Administrator shall keep on file a record of all written interpretations of this ordinance.

(D) References to Statutes, Regulations, and Documents

Whenever reference is made to a resolution, ordinance, statute, regulation, manual (including the Design and Administrative Manuals), 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.

(E) Computation of Time

The time in which an act is to be done shall be computed by excluding the first day and including the last day. If a deadline or required date of action falls on a Saturday, Sunday, or holiday observed by the Town of Davidson, the deadline or required date of action shall be the next day that is not a Saturday, Sunday or holiday observed by the Town of Davidson. References to days are calendar days unless otherwise stated.

(F) Delegation of Authority

Any act authorized by this ordinance to be carried out by the Storm Water Administrator of the Town of Davidson may be carried out by his or her designee.

(G) Usage

(1) Mandatory and Discretionary Terms

The words “shall,” “must,” and “will” are mandatory in nature, establishing an obligation or duty to comply with the particular provision. The words “may” and “should” are permissive in nature.

(2) Conjunctions

Unless the context clearly indicates the contrary, conjunctions shall be interpreted as follows: The word “and” indicates that all connected items, conditions, provisions or events apply. The word “or” indicates that one or more of the connected items, conditions, provisions or events apply.

(3) Tense, Plurals, and Gender

Words used in the present tense include the future tense. Words used in the singular number include the plural number and the plural number includes the singular number, unless the context of the particular usage clearly indicates otherwise. Words used in the masculine gender include the feminine gender, and vice versa.

(H) Measurement and Computation

Lot area refers to the amount of horizontal land area contained inside the lot lines of a lot or site.

20.1.7 DESIGN MANUAL

(A) Reference to Design Manual

The Storm Water Administrator shall use the policy, criteria, and information, including technical specifications and standards, in the Design Manual as the basis for decisions about storm water management permits and about the design, implementation and performance of structural and non-structural storm water BMPs.

The Design Manual includes a list of acceptable storm water treatment practices, including the specific design criteria for each storm water practice. Storm water treatment practices that are designed and constructed in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards of this ordinance and the Phase II laws. Failure to construct storm water treatment practices in accordance with these criteria may subject the violator to a civil penalty as described in Section 20.7 of this ordinance.

(B) 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.

(C) Changes to Standards and Specifications

Standards, specifications, guidelines, policies, criteria, or other information in the Design Manual in affect at the time of acceptance of a complete application shall control and shall be utilized in reviewing the application and in implementing this ordinance with regard to the application.

(D) Amendments to Design Manual

The Design Manual may be updated and expanded from time to time, based on advancements in technology and engineering, improved knowledge of local conditions, or local monitoring or maintenance experience.

Prior to amending or updating the Design Manual, proposed changes shall be generally publicized and made available for review, and an opportunity for comment by interested persons shall be provided.

20.1.8 RELATIONSHIP TO OTHER LAWS, REGULATIONS AND PRIVATE AGREEMENTS**(A) 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, and 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 for human or environmental health, safety, and welfare, shall control.

(B) 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 easement, covenant, or other private agreement, then 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 of Davidson be obligated to enforce the provisions of any easements, covenants, or agreements between private parties.

20.1.9 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.

20.1.10 EFFECTIVE DATE AND TRANSITIONAL PROVISIONS**(A) Effective Date**

This ordinance shall take effect on July 1, 2007.

(B) Violations Continue

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

20.2 ADMINISTRATION AND PROCEDURES

20.2.1 REVIEW AND DECISION MAKING ENTITIES

(A) Storm Water Administrator

(1) Designation

The Mecklenburg County Water Quality Program Manager has been designated as the Storm Water Administrator by the Town of Davidson Board of Commissioners for the purpose of administering and enforcing this ordinance.

(2) Powers and Duties

In addition to the powers and duties that may be conferred by other provisions of the Town of Davidson Planning Ordinance and other laws, the Storm Water Administrator shall have the following powers and duties under this ordinance:

- (a) To review and approve or disapprove applications submitted pursuant to this ordinance.
- (b) To make determinations and render interpretations of this ordinance.
- (c) To establish application requirements and schedules for submittal and review of applications and appeals.
- (d) To enforce this ordinance in accordance with its enforcement provisions.
- (e) To maintain records, maps, and official materials as relate to the adoption, amendment, enforcement, or administration of this ordinance.
- (f) To provide expertise and technical assistance upon request to the Town of Davidson Board of Commissioners and the Storm Water Advisory Committee (SWAC).
- (g) To designate appropriate other person(s) who shall carry out the powers and duties of the Storm Water Administrator.
- (h) To provide information and recommendations relative to variances and information as requested by SWAC in response to appeals.
- (i) To take any other action necessary to administer the provisions of this ordinance.

20.2.2 REVIEW PROCEDURES

(A) Permit Required; Must Apply for Permit

A storm water management 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, reviewed and approved permit application, pursuant to this Section. The content and form of the permit shall be established by the Storm Water Administrator.

(B) Effect of Permit

A storm water management permit shall govern the design, installation, and construction of storm water management and control practices on the site, including structural BMPs and elements of site design for storm water 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 storm water 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. Compliance after project construction is assured by the maintenance provision of this ordinance.

(C) Authority to File Applications

All applications required pursuant to this ordinance shall be submitted to the Storm Water Administrator by the land owner or the land owner's duly authorized agent or anyone having interest in the property by reason of a written contract with the owner.

(D) Establishment of Application Requirements, Schedule, and Fees

(1) Application Contents and Form

The Storm Water 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 storm water management permit application shall describe in detail how post-construction storm water runoff will be controlled and managed, the design of all storm water facilities and practices, and how the proposed project will meet the requirements of this ordinance.

(2) Submission Schedule

The Storm Water 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.

(3) Permit Review Fees

The Town of Davidson shall establish permit review fees as well as policies regarding refund of any fees upon withdrawal of an application, and may amend and update the fees and policies from time to time.

(4) Administrative Manual

For applications required under this ordinance, the Storm Water Administrator shall compile into an Administrative Manual the application requirements, submittal checklist, submission schedule, fee schedule, maintenance agreements, a copy of this ordinance, and where to obtain the Design Manual, as well as other information and materials necessary for the effective administration of this ordinance. This Administrative Manual shall be made available to the public.

(E) Submittal of Complete Application

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

An application shall be considered as timely submitted only when it contains all elements of a complete application pursuant to this ordinance, along with the appropriate fee. If the Storm Water 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.

(F) Review

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

(1) Approval

If the Storm Water Administrator finds that the application complies with the standards of this ordinance, the Storm Water Administrator shall approve the application and issue a storm water management permit to the applicant. The Storm Water Administrator may impose conditions of approval as needed to ensure compliance with this ordinance. The conditions shall be included in the permit as part of the approval.

(2) Fails to Comply

If the Storm Water Administrator finds that the application fails to comply with the standards of this ordinance, the Storm Water 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.

(3) Revision and Subsequent Review

A complete revised application shall be reviewed by the Storm Water 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 sixty (60) calendar days 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.

20.2.3 APPLICATIONS FOR APPROVAL

(A) Concept Plan and Consultation Meeting

Before a storm water management permit application is submitted, the Storm Water Administrator or land owner or the land owner's duly authorized agent or anyone having interest in the property by reason of a written contract with the owner may request consultation(s) on a concept plan for the post-construction storm water management system to be utilized in the proposed development project. This consultation meeting(s) should take place at the time of the preliminary plan of the subdivision or other early step in the development process. The purpose of this meeting(s) is to discuss the post-construction storm water management measures necessary for the proposed project, as well as to discuss and assess constraints, opportunities and potential approaches to storm water management designs before formal site design engineering is commenced. Local watershed plans and other relevant resource protection plans may be consulted in the discussion of the concept plan.

At the time of concept plan submittal, the following information should be included in the concept plan, which should be submitted in advance of the meeting as specified in the Administrative Manual:

(1) 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; boundaries of existing predominant vegetation and proposed limits of clearing and grading; proposed Undisturbed Open Space area; and location of existing and proposed roads, buildings, parking areas and other impervious surfaces.

(2) Natural Resources Inventory

A written or graphic inventory of the 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 and other setbacks (e.g., drinking water well setbacks, septic system setbacks, etc.). Particular attention should be paid to environmentally-sensitive features that provide particular opportunities or constraints for development.

(3) Storm Water Management System Concept Plan

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

(B) Storm Water Management Permit Application

The storm water management permit application shall detail how post-construction storm water runoff will be controlled and managed and how the proposed project will meet the requirements of this ordinance, including Section 20.3, Standards. All such plans submitted with the application shall be prepared by a registered North Carolina professional engineer or landscape architect. The engineer or landscape architect shall perform services only in their area of competence, and shall verify that the design of all storm water 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 Storm Water Administrator. Incomplete submittals shall be treated pursuant to Section 20.2.2(E).

(C) As-Built Plans and Final Approval

The applicant shall certify that the completed project is in accordance with the approved storm water management plans and designs, and shall submit actual “as- built” plans for all storm water management facilities or practices after final construction is completed. Failure to provide approved as-built plans within the time frame specified by the Storm Water Administrator may result in assessment of penalties as specified in Section 20.7, Violations and Enforcement. At the discretion of the Storm Water Administrator, performance securities or bonds may be required for storm water management facilities or practices until as-built plans are approved.

As-built plans shall show the final design specifications for all storm water management facilities and practices and the field location, size, depth, and planted vegetation of all measures, controls, and devices, as installed, and location and size of all Undisturbed Open Space areas and tree plantings. The designer of the storm water management measures and plans shall certify, under seal, that the as-built storm water measures, controls, and devices are in compliance with the approved storm water management plans and designs and with the requirements of this ordinance.

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

20.2.4 APPROVALS

(A) Effect of Approval

Approval authorizes the applicant to go forward with only the specific plans and activity 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.

(1) Time Limit/Expiration

A Storm Water Management Permit and accompanying plan approved under the provisions of this ordinance shall remain valid for a period of three years from the date of approval. If no work on the site in furtherance of the plan has commenced within the three-year period, the permit and plan approval will become null and void and a new application will be required to develop the site. If work on the site in furtherance of the plan has commenced that involves any utility installations or street improvements except grading, the permit and plan shall remain valid and in force and the project may be completed in accordance with the approved plan.

20.2.5 APPEALS AND VARIANCES

(A) Powers and Duties of the Storm Water Advisory Committee

The Storm Water Advisory Committee, hereinafter referred to as SWAC, shall have the following powers and duties:

(1) Administrative Review

To hear and decide appeals according to the procedures set forth in this Section, where it is alleged there is an error in any order, decision, determination, or interpretation made by the Storm Water Administrator in the enforcement of this ordinance, including assessments of remedies and/or penalties.

(2) Variances

To grant variances in specific cases from the terms of this ordinance according to the standards and procedures herein.

(B) Petition to SWAC for Appeal or Variance

An appeal may be initiated by any aggrieved person affected by any decision, order, requirement, or determination relating to the interpretation or application of this ordinance. A petition for variance from the requirements of this ordinance may be initiated by the owner of the affected property, an agent authorized in writing to act on the owner's behalf, or a person having written contractual interest in the affected property.

(1) Filing of Notice of Appeal

A notice of appeal shall be filed with the Storm Water Administrator contesting any order, decision, determination or interpretation within 30 working days of the day of the order, decision, determination or interpretation made or rendered by the Storm Water Administrator in the enforcement of this ordinance, including assessments of remedies and penalties. SWAC may waive or extend the 30 day deadline only

upon determining that the person filing the notice of appeal received no actual or constructive form of notice of the order, decision, determination or interpretation being appealed. The notice filed with the Storm Water Administrator shall be accompanied by a nonrefundable filing fee as established by SWAC as well as a list of adjoining properties including tax parcel numbers and the name and address of each owner. Failure to timely file such notice and fee shall constitute a waiver of any rights to appeal under this ordinance.

Upon receipt of a notice of appeal, the Storm Water Administrator shall transmit to SWAC copies of all administrative papers, records, and other information regarding the subject matter of the appeal.

The filing of such notice shall stay any proceedings in furtherance of the contested action, except the Storm Water Administrator may certify in writing to SWAC that because of facts stated in the certificate, a stay imposes an imminent peril to life or property or would seriously interfere with the enforcement of this ordinance. SWAC shall then review such certificate and may override the stay of further proceedings.

(2) Filing a Variance Petition

A petition for variance, in the form prescribed by SWAC, shall be filed with the Storm Water Administrator accompanied by a nonrefundable filing fee as established by SWAC as well as a list of adjoining properties including tax parcel numbers and the name and address of each owner. Upon receipt of a variance petition, the Storm Water Administrator shall transmit to SWAC copies of all information regarding the variance.

(3) Notice and Hearing

SWAC shall, in accordance with the rules adopted by it for such purposes, hold public hearings on any appeal or variance petition which comes before it. SWAC shall, prior to the hearing, mail written notice of the time, place and subject of the hearing to the person or persons filing the notice of appeal or variance petition, to the owners of the subject property and to the owners of property adjacent to the subject property. The hearing shall be conducted in the nature of a quasi-judicial proceeding with all findings of fact supported by competent, material evidence.

(4) Standards for Granting an Appeal

SWAC shall reverse or modify the order, decision, determination or interpretation under appeal only upon finding an error in the application of this ordinance on the part of the Storm Water Administrator. In modifying the order, decision, determination or interpretation, SWAC shall have all the powers of the Storm Water Administrator from whom the appeal is taken.

If SWAC finds that a violation of this ordinance has occurred, but that in setting the amount of the penalty the Storm Water Administrator has not considered or given appropriate weight to either mitigating or aggravating factors, SWAC shall either decrease or increase the per day civil penalty within the range allowed by this ordinance. Any decision of SWAC that modifies the amount of a civil penalty shall

include, as part of the findings of fact and conclusions of law, findings as to which mitigating or aggravating factors exist and the appropriate weight that should have been given to such factors by the Storm Water Administrator in setting the amount of the civil penalty levied against the Petitioner.

(5) Standards for Granting a Variance

Before granting a variance, SWAC shall have made all the following findings:

- (a) Unnecessary hardships would result from the strict application of this ordinance.
- (b) The hardships result from conditions that are peculiar to the property, such as the location, size or topography of the property.
- (c) The hardships did not result from actions taken by the petitioner.
- (d) 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.

(6) Variance Conditions

SWAC may impose reasonable and appropriate conditions and safeguards upon any variance it grants.

(7) Action by SWAC

SWAC bylaws will determine the number of concurring votes needed to grant an appeal or request for variance. SWAC shall grant or deny the variance or shall reverse, affirm or modify the order, decision, determination or interpretation under appeal by recording in the minutes of the meeting the reasons that SWAC used and the findings of fact and conclusions of law made by SWAC to reach its decision.

(8) Rehearing

SWAC shall refuse to hear an appeal or variance petition which has been previously denied unless it finds there have been substantial changes in the conditions or circumstances relating to the matter.

(C) Review by Superior Court

Every decision of SWAC 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 later occurring of the following:

- (1) The decision of SWAC is filed; or
- (2) A written copy thereof is delivered to every aggrieved party who has filed a written request for such copy with SWAC at the time of its hearing of the case.

20.3 STANDARDS

20.3.1 GENERAL STANDARDS

All development and redevelopment to which this ordinance applies shall comply with the standards of this section.

20.3.2 WATERSHED DISTRICTS

Standards for development and redevelopment vary depending on the watershed district in which a project is located as described in the "Post-Construction Ordinance Map of the Town of Davidson, North Carolina," which is adopted simultaneously herewith as described in Section 105(C). The Town of Davidson is divided into the following watershed districts for purposes of this ordinance.

(A) Catawba District

That area of land that drains to Lake Norman in the Town of Davidson, including all creeks and tributaries.

(B) Yadkin District

That area of land that drains to the Yadkin River basin in the Town of Davidson, including all creeks and tributaries.

20.3.3 DEVELOPMENT STANDARDS FOR THE CATAWBA DISTRICT

(A) Development Standards For Low Density Projects

Any drainage area within a project in the Catawba District is considered low density when said drainage area has less than or equal to 12 percent built upon area as determined by the methodology established in the Design Manual. Such low-density projects shall comply with each of the following standards.

(1) Vegetated Conveyances

Storm water runoff from the development shall be transported from the development by vegetated conveyances to the maximum extent practicable.

(2) Stream Buffers

The Stream Buffer requirements apply in the Catawba District as described in Section 21 of the Town of Davidson Planning Ordinance as do the buffers described for the Watershed Protection Overlay District contained in Section 17. When there is a conflict between buffer requirements, the more stringent always applies. In addition, intermittent and perennial streams within the project boundary shall be delineated by a certified professional using US Army Corps of Engineers and NC Division of Water Quality methodology and shall be shown in the storm water management permit application along with all buffer areas. All perennial and intermittent streams draining less than 50 acres shall have a minimum 30-foot vegetated buffer including a 10-foot zone adjacent to the bank. No structures can be placed in this 30-foot buffer. Disturbance of the buffer is allowed; however, any disturbed area must be revegetated and disturbance of the 10-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques as specified in

the Design Manual. All perennial and intermittent streams draining greater than or equal to 50 acres shall have a 100-foot buffer with three (3) zones, including a 30-foot streamside, 45-foot managed use and 25-foot upland. Buffer widths shall be measured horizontally on a line perpendicular to the stream, landward from the top of the bank on each side of the stream. Passive recreational uses are allowed in the buffer, including greenway trails and bicycle paths, as well as other land uses consistent with maintaining the natural topography and vegetation. In addition, the uses, exception and other provisions contained in Section 21 of the Town of Davidson Planning Ordinance shall apply in the Catawba District.

(B) Development Standards For High Density Projects

Any drainage area within a project in the Catawba District is considered high density when said drainage area has greater than 12 percent built upon area as determined by the methodology established in the Design Manual. The built upon area caps specified in the Watershed Protection Overlay District contained in the Section 17 of Town of Davidson Planning Ordinance shall apply. High-density projects shall implement storm water treatment systems that comply with each of the following standards.

(1) Storm Water Quality Treatment Volume

Storm water quality treatment systems shall treat the runoff generated from the first inch of rainfall.

(2) Storm Water Quality Treatment

All structural storm water treatment systems used to meet these requirements shall be designed to have a minimum of 85 percent average annual removal for Total Suspended Solids and 70 percent average annual removal for Total Phosphorus. Low Impact Development techniques as described in the Design Manual can be used to meet this requirement.

(3) Storm Water Treatment System Design

General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c), as explained in the Design Manual.

(4) Stream Buffers

The Stream Buffer requirements apply in the Catawba District as described in Section 21 of the Town of Davidson Planning Ordinance as do the buffers described for the Watershed Protection Overlay District contained in Section 17. When there is a conflict between buffer requirements, the more stringent always applies. In addition, intermittent and perennial streams within the project boundary shall be delineated by a certified professional using US Army Corps of Engineers and NC Division of Water Quality methodology and shall be shown in the storm water management permit application along with all buffer areas. All perennial and intermittent streams draining less than 50 acres shall have a minimum 30-foot vegetated buffer including a 10-foot zone adjacent to the bank. No structures can be placed in this 30-foot buffer. Disturbance of the buffer is allowed; however, any disturbed area must be revegetated and disturbance of the 10-foot zone adjacent to the bank shall require stream bank stabilization using bioengineering techniques as specified in the Design Manual. All perennial and intermittent streams draining greater than or equal to 50 acres shall have a 100-foot buffer with three (3) zones, including a 30-foot streamside, 45-foot managed use and 25-foot upland. Buffer widths shall

be measured horizontally on a line perpendicular to the stream, landward from the top of the bank on each side of the stream. Passive recreational uses are allowed in the buffer, including greenway trails and bicycle paths, as well as other land uses consistent with maintaining the natural topography and vegetation. In addition, the uses, exception and other provisions contained in Section 21 of the Town of Davidson Planning Ordinance shall apply in the Catawba District.

(5) Storm Water Volume Control

Storm water treatment systems shall be installed to control the volume leaving the project site at post-development for the one-year, 24-hour storm. Runoff volume drawdown time shall be a minimum of 24 hours, but not more than 120 hours.

(6) Storm Water Peak Control

For residential developments exceeding 12 percent built-upon area, peak control shall be installed for the appropriate storm frequency (i.e., 10, 25, 50 or 100-yr, 6-hr) as determined by the Storm Water Administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the Design Manual or if a downstream analysis is not performed the peak shall be controlled for the 10-yr and 25-yr, 6-hr storms. For commercial development exceeding 12 percent built-upon area, peak control shall be installed for the 10-yr, 6-hr storm and additional peak control provided for the appropriate storm frequency (i.e., 25, 50 or 100-yr, 6-hr) as determined by the Storm Water Administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the Design Manual or if a downstream analysis is not performed the peak shall be controlled for the 10-yr and 25-yr, 6-hr storms. Controlling the one-year, 24-hour volume achieves peak control for the 2-year, 6-hour storm. The emergency overflow and outlet works for any pond or wetland constructed as a storm water BMP shall be capable of safely passing a discharge with a minimum recurrence frequency as specified in the Design Manual. For detention basins, the temporary storage capacity shall be restored within 72 hours. Requirements of the Dam Safety Act shall be met when applicable.

20.3.4 DEVELOPMENT STANDARDS FOR THE YADKIN DISTRICT

(A) Development Standards For Low Density Projects

Any drainage area within a project in the Yadkin District is considered low density when said drainage area has less than or equal to 10 percent built upon area as determined by the methodology established in the Design Manual. Such low-density projects shall comply with each of the following standards.

(1) Vegetated Conveyances

Storm water runoff from the development shall be transported from the development by vegetated conveyances to the maximum extent practicable.

(2) Stream Buffers

Intermittent and perennial streams within the project boundary shall be delineated by a certified professional using US Army Corps of Engineers and NC Division of Water Quality methodology and shall be shown in the storm water management permit application along with all buffer areas. All perennial and intermittent streams

draining less than 50 acres shall have a minimum 50-foot buffer with three (3) zones, including a 20-foot streamside, 20-foot managed use and 10-foot upland. All perennial and intermittent streams draining greater than or equal to 50 acres shall have a 100-foot buffer with three (3) zones, including a 30-foot streamside, 45-foot managed use and 25-foot upland. Buffer widths shall be measured horizontally on a line perpendicular to the stream, landward from the top of the bank on each side of the stream. Passive recreational uses are allowed in the buffer, including greenway trails and bicycle paths, as well as other land uses consistent with maintaining the natural topography and vegetation. The provisions of Section 21 of the Town of Davidson Planning Ordinance shall apply in the Yadkin District, including the allowable land uses for the three (3) buffer zones as described above.

(B) Development Standards For High Density Projects

Any drainage area within a project in the Yadkin District is considered high density when said drainage area has greater than 10 percent built upon area as determined by the methodology established in the Design Manual. Such high-density projects shall implement storm water treatment systems that comply with each of the following standards:

(1) Storm Water Quality Treatment Volume

Storm water quality treatment systems shall treat the runoff generated from the first inch of rainfall.

(2) Storm Water Quality Treatment

All structural storm water treatment systems used to meet these requirements shall be designed to have a minimum of 85 percent average annual removal for Total Suspended Solids and 70 percent average annual removal for Total Phosphorus. Low Impact Development techniques as described in the Design Manual can be used to meet this requirement.

(3) Storm Water Treatment System Design

General engineering design criteria for all projects shall be in accordance with 15A NCAC 2H .1008(c), as explained in the Design Manual.

(4) Stream Buffers

Intermittent and perennial streams within the project boundary shall be delineated by a certified professional using US Army Corps of Engineers and NC Division of Water Quality methodology and shall be shown in the storm water management permit application along with all buffer areas. All perennial and intermittent streams draining less than 50 acres shall have a minimum 50-foot buffer with three (3) zones, including a 20-foot streamside, 20-foot managed use and 10-foot upland. All perennial and intermittent streams draining greater than or equal to 50 acres shall have a 100-foot buffer with three (3) zones, including a 30-foot streamside, 45-foot managed use and 25-foot upland. Buffer widths shall be measured horizontally on a line perpendicular to the stream, landward from the top of the bank on each side of the stream. Passive recreational uses are allowed in the buffer, including greenway trails and bicycle paths, as well as other land uses consistent with maintaining the natural topography and vegetation. The provisions of Section 21 of the Town of Davidson Planning Ordinance shall apply in the Yadkin District, including the allowable land uses for the three (3) buffer zones as described above.

(5) Storm Water Volume Control

Storm water treatment systems shall be installed to control the volume leaving the project site at post-development for the one-year, 24-hour storm. Runoff volume drawdown time shall be a minimum of 24 hours, but not more than 120 hours.

(6) Storm Water Peak Control

For residential developments exceeding 10 percent built-upon area, peak control shall be installed for the appropriate storm frequency (i.e., 10, 25, 50 or 100-yr, 6-hr) as determined by the Storm Water Administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the Design Manual or if a downstream analysis is not performed the peak shall be controlled for the 10-yr and 25-yr, 6-hr storms. For commercial development exceeding 10 percent built-upon area, peak control shall be installed for the 10-yr, 6-hr storm and additional peak control provided for the appropriate storm frequency (i.e., 25, 50 or 100-yr, 6-hr) as determined by the Storm Water Administrator based on a downstream flood analysis provided by the owner or designee using the criteria specified in the Design Manual or if a downstream analysis is not performed the peak shall be controlled for the 10-yr and 25-yr, 6-hr storms. Controlling the one-year, 24-hour volume achieves peak control for the 2-year, 6-hour storm. The emergency overflow and outlet works for any pond or wetland constructed as a storm water BMP shall be capable of safely passing a discharge with a minimum recurrence frequency as specified in the Design Manual. For detention basins, the temporary storage capacity shall be restored within 72 hours. Requirements of the Dam Safety Act shall be met when applicable.

20.3.5 STANDARDS FOR STORM WATER CONTROL MEASURES

(A) Evaluation According to Contents of Design Manual

All storm water control measures and storm water treatment practices (also referred to as Best Management Practices, or BMPs) required under this ordinance shall be evaluated by the Storm Water Administrator according to the policies, criteria, and information, including technical specifications, standards and the specific design criteria for each storm water best management practice contained in the Design Manual. The Storm Water Administrator shall determine whether these measures will be adequate to meet the requirements of this ordinance.

(B) Determination of Adequacy; Presumptions and Alternatives

Storm water 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 before it can be approved for use. The Storm Water Administrator may require the applicant to provide such documentation, calculations, and examples as necessary for the Storm Water Administrator to determine whether such an affirmative showing is made.

(C) Submittal of Digital Records

Upon submittal of as-built plans, the location of storm drainage pipes, inlets and outlets as well as the location of all BMPs as well as Undisturbed Open Space must be delivered to the Storm Water Administrator in the digital format specified in the Administrative Manual.

20.3.6 TOTAL PHOSPHORUS MITIGATION**(A) Purpose**

The purpose of this mitigation is to reduce the cost of complying with the 70 percent total phosphorus removal criteria for developments exceeding 50 percent built-upon area while ensuring the reduction of pollution loads and achievement of the ordinance objectives.

(B) General Description

There are two (2) total phosphorus mitigation options available to developments greater than or equal to 60 percent built-upon area, including off-site mitigation and a buy-down option as described in this Section. For developments with greater than or equal to 50 percent and less than 60 percent built-upon area, off-site mitigation only is allowed provided it occurs in the same named creek system. Both off-site and buy-down mitigation will result in the construction of retrofit BMPs in the same river basin (Catawba or Yadkin) as the mitigated site. In addition, the buy-down option is available provided the Town of Davidson has projects and/or property available for mitigation.

(C) Criteria for Off-Site Mitigation

- (1) The owner or designee of a proposed construction site that will include greater than or equal to 50 percent built upon area shall construct a BMP retrofit project designed to achieve an equivalent or greater net mass removal of total phosphorus as would be achieved by removing 70 percent of the total phosphorus from the proposed site. Off-site mitigation is allowed only for total phosphorus removal above 50 percent. On-site BMPs shall be constructed to achieve 50 percent removal of total phosphorus.
- (2) The Storm Water Administrator shall receive, review, approve, disapprove or approve with conditions an "Application for Off-Site Total Phosphorus Mitigation." The Storm Water Administrator shall design this application to include all pertinent information. This application shall be submitted with the storm water management permit application and shall at a minimum contain a description of the BMP(s) to be constructed, including their type and size as well as the pollutant removal efficiencies to be achieved. The location of the site where the BMP(s) are to be constructed shall be described, including the size of the drainage area to be treated and percentage and type of existing built upon area. The application must also include the pounds of total phosphorus being mitigated for and the pounds of total phosphorus reduced with the retrofit BMP(s). A legally valid instrument shall be submitted with the application to demonstrate that the applicant has land rights to perform the BMP retrofit on the property.

- (3) The criteria for approval of off-site total phosphorus mitigation by the Storm Water Administrator are as follows:
 - (a) BMP(s) must be constructed in accordance with 15A NCAC 2H .1008(c), as explained in the Design Manual.
 - (b) BMP(s) must be sized for the corresponding watershed area according to the Design Manual.
 - (c) BMP(s) must be inspected by the Storm Water Administrator and found to be in compliance with all approved plans and specifications prior to the release of occupancy permits for the mitigated site.
 - (d) Following approval from the Storm Water Administrator, BMP(s) may be installed and credits obtained for pounds of total phosphorus removed that can be applied to future projects. These credits can be accumulated or “banked” for a period of time as specified by the Storm Water Administrator in the Administrative Manual.
 - (e) All off-site mitigation BMPs shall be subject to the maintenance requirements as well as installation and maintenance performance securities specified in Section 20.6 of this ordinance.

(D) Criteria for Total Phosphorus Buy-Down Option

- (1) The owner or designee of a proposed construction site that will include greater than or equal to 60 percent built upon area may “buy-down” the 70 percent phosphorus removal requirement to no less than 50percent. On-site BMPs must be installed to remove the remaining total phosphorus load. The money shall be used by the Town of Davidson to purchase undisturbed open space, make infrastructure repairs and/or construct BMP retrofit projects designed to achieve an equivalent or greater net mass removal of total phosphorus as would be achieved by removing 70 percent of the total phosphorus from the proposed site.
- (2) The Storm Water Administrator shall receive, review, approve, disapprove or approve with conditions an “Application for Total Phosphorus Buy-Down.”The Storm Water Administrator shall design this application to include all pertinent information. This application shall be submitted with the storm water management permit application and shall at a minimum contain calculations showing the total load buy-down and all cost calculations as described in the Administrative Manual.
- (3) The criteria for the buy-down option are as follows:
 - (a) The buy-down option shall not be approved by the Storm Water Administrator unless projects and/or properties are available for mitigation, including BMP construction, BMP maintenance, BMP rehabilitation and stream restoration.
 - (b) There is no time constraint for the Town of Davidson to spend mitigation money; however, the Town of Davidson shall strive to spend buy-down monies in a timely and efficient manner such that a net improvement in water quality results.
 - (c) All BMPs constructed by the Town of Davidson as part of this mitigation option shall be maintained by the Town of Davidson into perpetuity.
- (4) The criteria for calculating the buy-down cost shall be provided in the Design Manual.

20.3.7 DEED RECORDATION AND INDICATIONS ON PLAT

The approval of the storm water management permit shall require an enforceable restriction on property usage that runs with the land, such as plat, recorded deed restrictions or protective covenants, to ensure that future development and redevelopment maintains the site consistent with the approved project plans. The location of all designated Undisturbed Open Space for a site shall be recorded at the Register of Deeds Office as "Undisturbed Open Space." Streams and buffer boundaries including the delineation of each buffer zone must be specified on all surveys and record plats. The applicable operations and maintenance agreement pertaining to every structural BMP shall be referenced on the final plat and shall be recorded with the Mecklenburg County Register of Deeds Office upon final plat approval. If no subdivision plat is recorded for the site, then the operations and maintenance agreement shall be recorded with the Mecklenburg County Register of Deeds Office so as to appear in the chain of title of all subsequent purchasers under generally accepted searching principles. A copy of the recorded maintenance agreement shall be provided to the Storm Water Administrator within fourteen (14) days following receipt of the recorded document. A maintenance easement shall be recorded for every structural BMP to allow sufficient access for adequate maintenance. The specific recordation and deed restriction requirements as well as notes to be displayed on final plats and deeds shall be contained in the Administrative Manual.

20.4 DEVELOPMENT AND REDEVELOPMENT MITIGATION

20.4.1 MITIGATION PAYMENT

(A) Lots Less than One Acre

Development and redevelopment on a lot less than one (1) acre in size measured in accordance with Section 106(H) that is not exempt according to Section 105(B) is allowed by right to forego meeting the requirements of this ordinance provided the Town of Davidson is paid a mitigation fee according to rates set forth in the Administrative Manual and provided such development and redevelopment are not part of a larger common plan of development or sale, even though multiple, separate or distinct activities take place at different times on different schedules.

20.4.2 CRITERIA FOR MITIGATION PAYMENT

(A) Notification to Storm Water Administrator

The buy-right mitigation option does not require approval by the Storm Water Administrator; however, notification that this right is to be exercised for a particular lot must be made prior to the issuance of any permits for the project. This notification is to be made to the Storm Water Administrator on a standard form provided in the Administrative Manual.

(B) Use of Mitigation Payment

The Town of Davidson shall use the mitigation payment to repair infrastructure (including road repairs when water quality is impacted), install water quality enhancement measures, including but not limited to BMPs, restore stream channels, purchase undisturbed open space, etc. BMP(s) installed using the mitigation payment must be constructed in accordance with 15A NCAC 2H .1008(c), as explained in the Administrative Manual. All BMPs constructed by the Town of Davidson as part of this mitigation option shall be maintained by the Town of Davidson into perpetuity.

(C) Time Frame for Use of Mitigation Payment

The Town of Davidson shall use the mitigation payment within a maximum of five (5) years of the end of the calendar year from the receipt of the payment. As an option, the Town of Davidson may elect to use up to 50 percent of the fee to purchase and plant trees within the Town of Davidson.

20.5 UNDISTURBED OPEN SPACE

20.5.1 PURPOSE

Undisturbed Open Space provides for a reduction in the negative impacts from storm water runoff through non-structural means. The combination of the structural BMPs described in Section 3 with the non-structural Undisturbed Open Space provisions described in this Section allow the objectives of this ordinance to be fulfilled.

20.5.2 GENERAL DESCRIPTION

Undisturbed Open Space is required for all development unless mitigated. The percentage of Undisturbed Open Space required depends on a project's built-upon area as described below. Undisturbed Open Space requirements can be met in stream or lake buffers, designated common areas or on individual lots for residential development (e.g., backyards, borders, etc.). Undisturbed Open Space can not be designated within rights of way, utility easements, etc. where re-disturbance could occur. Grass fields can also be used to meet Undisturbed Open Space requirements; however, the fields must be replanted in accordance with the tree planting provisions described in Section 505 (C) below. Undisturbed Open Space is preferred where it will provide maximum water quality benefit (i.e. around gullies and existing drainage areas, adjacent to streams and wetlands, around structural BMPs, etc.).

20.5.3 UNDISTURBED OPEN SPACE CRITERIA

Undisturbed Open Space requirements apply to projects as described below.

(A) Less Than 24% Built-Upon Area

A project with less than 24% built-upon area shall include as Undisturbed Open Space within the boundaries of the project a minimum of 25% of the project area.

(B) Greater Than or Equal to 24% and Less Than 50% Built-Upon Area

A project with greater than or equal to 24% and less than 50% built-upon area shall include as Undisturbed Open Space within the boundaries of the project a minimum of 17.5% of the project area.

(C) Greater Than or Equal to 50% Built-Upon Area

A project with greater than or equal to 50% built-upon area shall include as Undisturbed Open Space within the boundaries of the project a minimum of 10% of the project area.

20.5.4 UNDISTURBED OPEN SPACE DESIGNATION

The Undisturbed Open Space location shall be recorded at the Register of Deeds Office as "Undisturbed Open Space" and future disturbance is prohibited except for greenway trails with unlimited public access, Charlotte-Mecklenburg Utility lines and channel work/maintenance activities by Charlotte-Mecklenburg Storm Water Services. Other utility work may be allowed in the Undisturbed Open Space area provided it will not result in loss of Undisturbed Open Space as approved by the Town of Davidson.

20.5.5 UNDISTURBED OPEN SPACE MITIGATION

(A) Purpose

The purpose of this mitigation is to reduce the cost of complying with the Undisturbed Open Space requirement while ensuring the reduction of pollution loads and achievement of the ordinance objectives.

(B) General Description

Approved disturbance to the Undisturbed Open Space area described in Section 503 above must be off-set by an allowable form of mitigation, including on-site and off-site mitigation as well as through payment-in-lieu.

(C) Undisturbed Open Space Mitigation Criteria

(1) On-Site Mitigation

On-site mitigation shall allow the disturbance of designated Undisturbed Open Space area on a project with the fulfillment of the following criteria on the project site:

- (a) 50% increase in total Undisturbed Open Space area designation above the requirements specified in Section 503 above, except when the Undisturbed Open Space area qualifies as a "grass field" in which case the size of the required Undisturbed Open Space area remains unchanged. The portion of the Undisturbed Open Space area that is a grass field, whether or not disturbed, must be replanted with trees as specified in subsection (c) below.
- (b) Establishment of a minimum of six (6) inches of top soil to the disturbed Open Space area following the completion of construction activities. This material may be obtained from on-site when available.
- (c) Planting of a minimum of 36 trees per acre of Undisturbed Open Space area as follows:
 1. Trees shall have a minimum caliper of 1.5 inches.
 2. Trees shall be of a quality set forth by the American Standard for Nursery Stock and will be selected from a list of acceptable native species for planting in Undisturbed Open Spaces established by the Town of Davidson.
 3. Planted trees shall contain a mix of at least three (3) different species in roughly equal proportions and be "large mature shade tree species" as defined by the Town of Davidson.
 4. Trees shall be planted in accordance with specifications provided by the Town of Davidson.
 5. Trees shall be warranted for a minimum of two (2) years following planting and any dead or diseased trees must be replaced.
- (d) The area around and between trees must be stabilized using an approved vegetative ground cover and mulch.
- (e) The slope of any graded or disturbed area that is dedicated for Undisturbed Open Space can not exceed 3 to 1.
- (f) The flow of water across the Undisturbed Open Space area must be controlled to prevent soil erosion or mulch disturbance.

(2) Off-Site Mitigation

On a case by case basis and at the sole discretion of the Storm Water Administrator, the Town of Davidson may allow Undisturbed Open Space disturbance and off-site mitigation through the acceptance for ownership or conservation easement properties for the protection of Undisturbed Open Space, provided the result will be an increased protection of water quality over what would be attained through preservation of Undisturbed Open Space or on site mitigation (see Administrative Manual). This off-site mitigation shall be located in the same river basin (Catawba or Yadkin) as the mitigated site.

(3) Payment-In-Lieu of Undisturbed Open Space Dedication

Payment-in-lieu of Undisturbed Open Space dedication is only allowed for industrial and commercial developments and multi-family projects that are in excess of 50% built upon area. Payment-in-lieu shall only be allowed to the extent an approved disturbance cannot be offset by on-site mitigation as determined by the Storm Water Administrator. The following criteria shall be fulfilled for the payment-in-lieu option:

- (a) A fee shall be paid to the Town of Davidson where the property is located or its designee based on the following formula: $1.25 \times$ (appraised value of subject property including intended use without improvements). The appraised value of the subject property shall be determined by a licensed, independent real estate appraiser retained by the developer or owner. The Town of Davidson may accept the appraised value or at its discretion obtain its own appraisal. In the event the parties cannot agree on the appraised value, the two appraised values shall be averaged together to determine the final appraised value to be used in the formula above.
- (b) Payment shall be accepted by the Town of Davidson or its designee prior to land disturbing activities.
- (c) The Town of Davidson shall use the payment-in-lieu to purchase Undisturbed Open Space in the same river basin (Catawba or Yadkin) as the property to be disturbed. As an option, the Town of Davidson may elect to use up to 50 percent of the fee to purchase and plant trees within the Town. In addition, the fee may be used to repair infrastructure in the Town, including road repairs when water quality is impacted. The payment-in-lieu is to be spent within a maximum of five (5) years of the end of the calendar year from the receipt of the payment.

(D) Approval Criteria for Undisturbed Open Space Mitigation**(1) Application for Undisturbed Open Space Mitigation**

The Storm Water Administrator shall receive, review, approve, disapprove or approve with conditions an "Application for Undisturbed Open Space Mitigation." The Storm Water Administrator shall design this application to include all pertinent information, including at a minimum a "mitigation plan" describing the desired mitigation option as discussed in previous sections and an effective demonstration that all reasonable efforts have been undertaken to fulfill the Undisturbed Open Space requirement on the particular site. An application for on-site mitigation shall show the location of the restored Undisturbed Open Space on the property and the location, type and size of all trees and ground cover to be planted as well as contain a warranty statement for the trees. An off-site mitigation application shall show the location and description including acreage, etc. of the property to be used for mitigation and

contain a legally valid instrument demonstrating that the applicant has legal title to the property for transfer to the Town of Davidson. A payment-in-lieu application shall at a minimum contain the location and description of the site to be mitigated and an approved appraisal by a licensed, independent real estate appraiser

(2) Pre-Approved Undisturbed Open Space Mitigation

The following is pre-approved for on-site mitigation and does not require the submittal of an application to the Storm Water Administrator; however, these mitigation areas shall be described on the storm water management permit application.

(a) Residential, Commercial and Multifamily Uses: 25% of the required Undisturbed Open Space area as described in Section 503 above is pre-approved for on-site mitigation provided the size of mitigation area is 150% of the disturbed area. Other forms of mitigation as described above must receive approval from the Storm Water Administrator.

(b) Industrial Uses: 100% of the required Undisturbed Open Space area as described in Section 503 above is pre-approved for on-site mitigation with no increase in total required Undisturbed Open Space area. Other forms of mitigation as described above must receive approval from the Storm Water Administrator.

(E) Undisturbed Open Space Designation

All designated Undisturbed Open Space areas included as part of an approved mitigation must be recorded at the Register of Deeds Office as “Undisturbed Open Space” and any future disturbance of this area is strictly prohibited except for greenway trails with unlimited public access, Charlotte-Mecklenburg Utility lines and channel work/maintenance activities by Charlotte-Mecklenburg Storm Water Services. Other utility work may be allowed in the Undisturbed Open Space area provided it will not result in loss of Undisturbed Open Space as approved by the Town of Davidson.

20.6 MAINTENANCE

20.6.1 DEDICATION OF BMPs, FACILITIES & IMPROVEMENTS

(A) Single Family Residential BMPs Accepted for Maintenance

The Town of Davidson shall accept maintenance responsibility (as specified in the Administrative Manual) of structural BMPs that are installed pursuant to this ordinance following a warranty period of two (2) years from the date of as-built certification described in Section 203(C), provided the BMP:

- (1) Only serves a single family detached residential development or townhomes all of which have public street frontage;
- (2) Is satisfactorily maintained during the two-year warranty period by the owner or designee;
- (3) Meets all the requirements of this ordinance and the Design Manual; and
- (4) Includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection, maintenance, repair or reconstruction.

The Storm Water Administrator must receive an application for transfer of maintenance responsibilities for the structural BMP along with the storm water management permit application. The Storm Water Administrator will develop and distribute this application as a component of the Administrative Manual (see Section 202(D)(4)).

(B) Maintenance and Operation of BMPs

The owner of a structural BMP installed pursuant to this ordinance and not covered under Subsection 601(A) above shall maintain and operate the BMP so as to preserve and continue its function in controlling storm water quality and quantity at the degree or amount of function for which the structural BMP was designed.

(C) Damage or Removal of Trees

The following provisions apply to trees contained in permitted Undisturbed Open Space areas or in BMPs that are damaged or removed:

- (1) For trees damaged or removed due to natural disasters, the owner shall be required to replace the trees in accordance with the undisturbed open space mitigation criteria described in Section 505(C)(1)(c) of this ordinance within a timeframe specified by the Storm Water Administrator.
- (2) For trees damaged or removed due to reasons other than (1) above, the owner shall be required to replace the trees in accordance with the undisturbed open space mitigation criteria described in Section 505(C)(1)(c) of this ordinance within a timeframe specified by the Storm Water Administrator with the following exception, the trees shall be replaced at twice the specified density. In addition, the owner may be subject to fines as described in Section 7, Violations and Enforcement.

(D) Annual Maintenance Inspection and Report

The person responsible for maintenance of any BMP installed pursuant to this ordinance and not covered under Section 601(A) above shall submit to the Storm Water Administrator an inspection report from a qualified registered North Carolina professional engineer or landscape architect performing services only in their area of competence. All inspection reports shall be on forms supplied by the Storm Water Administrator that are contained in the Administrative Manual. An original inspection report shall be provided to the Storm Water Administrator beginning one year from the date of as-built certification and each year thereafter on or before the anniversary date of the as-built certification.

20.6.2 OPERATION AND MAINTENANCE AGREEMENT

(A) General

At the time that as-built plans are provided to the Storm Water Administrator as described in Section 203(C) and prior to final approval of a project for compliance with this ordinance, but in all cases prior to placing the BMPs in 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 structural BMP. Failure to execute an operation and maintenance agreement within the time frame specified by the Storm Water Administrator may result in assessment of penalties as specified in Section 7, Violations and Enforcement. Until the transference of all property, sites, or lots served by the structural BMP, the original owner or applicant shall have primary responsibility for carrying out the provisions of the maintenance agreement. At the discretion of the Storm Water Administrator, certificates of occupancy may be withheld pending receipt of an operation and maintenance agreement.

The operation and maintenance agreement shall require the owner or owners to maintain, repair and, if necessary, reconstruct the structural BMP, and shall state the terms, conditions, and schedule of maintenance for the structural BMP. In addition, it shall grant to the Town of Davidson a right of entry in the event that the Storm Water Administrator has reason to believe it has become necessary to inspect, monitor, maintain, repair, or reconstruct the structural BMP; however, in no case shall the right of entry, of itself, confer an obligation on the Town of Davidson to assume responsibility for the structural BMP.

Standard operation and maintenance agreements for BMPs shall be developed by the Storm Water Administrator and made available in the Administrative Manual. The operation and maintenance agreement must be approved by the Storm Water Administrator prior to plan approval, and it shall be referenced on the final plat as described in Section 308.

(B) Special Requirement for Homeowners' and Other Associations

For all structural BMPs required pursuant to this ordinance not covered under Section 601(A) above, and that are to be or are owned and maintained by a homeowners' association, property owners' association, or similar entity, the required operation and maintenance agreement shall include the provisions described in the Administrative Manual.

20.6.3 INSPECTION PROGRAM

Inspections and inspection programs by the Town of Davidson 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 Storm Water 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 Storm Water Administrator while carrying out his or her official duties.

20.6.4 PERFORMANCE SECURITY FOR INSTALLATION AND MAINTENANCE

The Town of Davidson may require the submittal of a performance security or bond with surety, cash escrow, letter of credit or other acceptable legal arrangement prior to issuance of a permit in accordance with the provisions contained in the Administrative Manual.

20.6.5 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 Storm Water Administrator.

20.6.6 MAINTENANCE EASEMENT

Every structural BMP installed pursuant to this ordinance shall be made accessible for adequate inspection, maintenance, reconstruction and repair by a maintenance easement. The easement shall be recorded as described in Section 308 and its terms shall specify who may make use of the easement and for what purposes.

20.7 VIOLATIONS AND ENFORCEMENT

20.7.1 GENERAL

(A) Authority to Enforce

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

(B) 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.

(C) Each Day a Separate Offense

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

(D) 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, as well as any 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 shall be subject to the remedies, penalties, and/or enforcement actions in accordance with this Section. For the purposes of this article, responsible person(s) shall include but not be limited to:

(1) Person Maintaining Condition Resulting In or Constituting Violation

Any 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.

(2) 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 storm water 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.

20.7.2 INSPECTIONS AND INVESTIGATIONS

(A) Authority to Inspect

The Storm Water 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, or rules or orders adopted or issued pursuant to this ordinance, and to determine whether the activity is being conducted in accordance with this ordinance and the approved storm water management plan, Design Manual and Administrative Manual and whether the measures required in the plan are effective. No person shall willfully resist, delay, or obstruct the Storm Water Administrator while the Storm Water Administrator is inspecting or attempting to inspect an activity under this ordinance.

(B) Notice of Violation and Order to Correct

When the Storm Water Administrator finds that any building, structure, or land is in violation of this ordinance, the Storm Water Administrator 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 ordinance, 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 Section 703 of this ordinance. In determining the measures required and the time for achieving compliance, the Storm Water Administrator shall take into consideration the technology and quantity of work required, and shall set reasonable and attainable time limits. The Storm Water Administrator may deliver the notice of violation and correction order personally 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 Storm Water Administrator may take appropriate action, as provided in Section 703, Remedies and Penalties, to correct and abate the violation and to ensure compliance with this ordinance.

(C) Extension of Time

A responsible person/entity who receives a notice of violation and correction order, or the owner of the land on which the violation occurs, may submit to the Storm Water 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 responsible person/entity requesting the extension, the Storm Water Administrator may extend the time limit as is reasonably necessary to allow timely correction of the violation, up to, but not exceeding 60 days. The Storm Water Administrator 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 responsible person/entity violating this ordinance. The Storm Water 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.

(D) Penalties Assessed Concurrent with Notice of Violation

Penalties may be assessed concurrently with a notice of violation for any of the following in which case 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:

- (1) Failure to submit a storm water management plan.
- (2) Performing activities without an approved storm water management plan.
- (3) Obstructing, hampering or interfering with an authorized representative who is in the process of carrying out official duties.
- (4) A repeated violation for which a notice was previously given on the same project and to the same responsible person/entity responsible for the violation.
- (5) Willful violation of this ordinance.
- (6) Failure to install or maintain best management practices per the approved plan.

(E) Authority to Investigate

The Storm Water Administrator shall have the authority to conduct such investigation as it may reasonably deem necessary to carry out its duties as prescribed in this ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting. No Person shall refuse entry or access to the Storm Water Administrator who requests entry for purpose of inspection or investigation, and who presents appropriate credentials, nor shall any Person obstruct, hamper, or interfere with the Storm Water Administrator while in the process of carrying out official duties.

The Storm Water Administrator shall also have the power to require written statements, or the filing of reports under oath as part of an investigation.

(F) Enforcement After Time to Correct

After the time has expired to correct a violation, including any extension(s) if authorized by the Storm Water Administrator, the Storm Water Administrator shall determine if the violation is corrected. If the violation is not corrected, the Storm Water Administrator may act to impose one or more of the remedies and penalties authorized by Section 703.

(G) 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 Storm Water Administrator may order the immediate cessation of a violation. Any Person so ordered shall cease any violation immediately. The Storm Water Administrator may seek immediate enforcement, without prior written notice, through any remedy or penalty specified in Section 703.

20.7.3 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.

(A) Remedies

(1) Withholding of Certificate of Occupancy

The Storm Water 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 storm water 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.

(2) Disapproval of Subsequent Permits and Development Approvals

As long as a violation of this ordinance continues and remains uncorrected, the Storm Water Administrator or other authorized agent may withhold, and the Town of Davidson may disapprove, any request for permit or development approval or authorization provided for by this ordinance or the zoning, subdivision, and/or building regulations, as appropriate for the land on which the violation occurs.

(3) Injunction, Abatements, etc.

The Storm Water Administrator, with the written authorization of the Davidson 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.

(4) 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 Storm Water Administrator, with the written authorization of the Davidson Town Manager, may cause the violation to be corrected and the costs to be assessed as a lien against the property.

(5) Restoration of Areas Affected by Failure to Comply

By issuance of an order of restoration, the Storm Water Administrator may require a Person who engaged in a land development activity and failed to comply with this ordinance to restore the waters and land affected by such failure so as to minimize the detrimental effects of the resulting pollution. This authority is in addition to any other civil penalty or injunctive relief authorized under this ordinance.

(B) Civil Penalties

(1) Violations of Ordinance

A violation of any of the provisions of this ordinance or rules or other orders adopted or issued pursuant to this ordinance 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 except as provided in Section 702(D) of this ordinance in which case the penalty is assessed concurrently with a notice of violation. Refusal to accept the notice or failure to notify the Storm Water Administrator of a change of address shall not relieve the violator’s obligation to comply with the ordinance or to pay such a penalty.

(2) Amount of Penalty

The maximum civil penalty for each violation of this ordinance is \$27,500.00. Each day of continuing violation shall constitute a separate violation. In determining the amount of the civil penalty, the Storm Water Administrator 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 ordinance; whether the violation was committed willfully; whether the violator reported the violation to the Storm Water Administrator; and the prior record of the violator in complying or failing to comply with this ordinance or any other post-construction ordinance or law. The Storm Water Administrator 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 ordinance shall be credited to the Town of Davidson’s general fund as non-tax revenue.

(3) Notice of Assessment of Civil Penalty

The Storm Water Administrator 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 Section 703(C) below.

(4) Failure to Pay Civil Penalty Assessment

If a violator does not pay a civil penalty assessed by the Storm Water Administrator within 30 Days after it is due, or does not request a hearing as provided in Section 703(C), the Storm Water Administrator shall request the initiation of a civil action to recover the amount of the assessment. The civil action shall be brought in Mecklenburg County Superior Court or in any other court of competent jurisdiction. A civil action must be filed within three (3) 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.

(5) Appeal of Remedy or Penalty

The issuance of an order of restoration and/or notice of assessment of a civil penalty by the Storm Water Administrator shall entitle the responsible party or entity to an appeal before the Storm Water Advisory Committee (SWAC) if such Person submits written demand for an appeal hearing to the Clerk of SWAC within 30 days of the receipt of an order of restoration and/or notice of assessment of a civil penalty. The demand for an appeal shall be accompanied by a filing fee as established by SWAC. The appeal of an order of restoration and/or notice of assessment of a civil penalty shall be conducted as described in Section 205 of this ordinance.

(C) Criminal Penalties

Violation of this ordinance may be enforced as a misdemeanor subject to the maximum fine permissible under North Carolina law.

20.8 DEFINITIONS

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.

1. **Administrative Manual**

A manual developed by the Storm Water Administrator and distributed to the public to provide information for the effective administration of this ordinance, including but not limited to application requirements, submission schedule, fee schedule, maintenance agreements, criteria for mitigation approval, criteria for recordation of documents, inspection report forms, requirements for submittal of bonds, a copy of this ordinance, and where to obtain the Design Manual.

2. **Best Management Practices (BMPs)**

A structural management facility used singularly or in combination for storm water quality and quantity treatment to achieve water quality protection goals.

3. **Buffer**

A natural or vegetated area through which storm water runoff flows in a diffuse manner so that the runoff does not become channelized and which provides for infiltration of the runoff and filtering of pollutants.

4. **Buffer Widths**

Viewed aerially, the stream buffer width is measured horizontally on a line perpendicular to the surface water, landward from the top of the bank on each side of the stream.

5. **Buffer Zones**

Areas of the buffer with varying widths, uses and vegetative targets.

6. **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 or the water area of a swimming pool.

7. **Commercial Development**

Any development that is not residential development as defined herein.

8. **Design Manual**

The storm water design manual shall be approved for use in the Town of Davidson by the North Carolina Department of Environment and Natural Resources and shall be at least as stringent as the storm water design manual approved for use in Phase II jurisdictions by the Department for the proper implementation of the requirements of the federal Phase II storm water program. All references herein to the Design Manual are to the latest published edition or revision.

9. **Development**

New development created by the addition of built upon area to land void of built upon area as of the effective date of this ordinance.

10. Disturbance

Any use of the land by any person or entity which results in a change in the natural cover or topography of the land.

11. Drainage Area

That area of land that drains to a common point on a project site.

12. Floodplain

The low, periodically-flooded lands adjacent to streams. For land use planning purposes, the regulatory floodplain is usually viewed as all lands that would be inundated by the Regulatory Flood.

13. Grass Field

Land on which grasses and other herbaceous plants dominate and trees over six feet in height are sparse or so widely scattered that less than five percent (5%) of the land area is covered by a tree canopy.

14. Industrial Uses

Land used for industrial purposes only. Commercial (or other non-industrial) businesses operating on industrially-zoned property shall not be considered an industrial use.

15. Larger common plan of development or sale

Any contiguous 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 public notice or hearing, drawing, permit application, zoning request, or site 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.

16. Low Impact Development (LID)

The integration of site ecology and environmental goals and requirements into all phases of urban planning and design from the individual residential lot level to the entire watershed.

17. Mitigation

Actions taken either on-site or off-site as allowed by this ordinance to offset the impacts of a certain action.

18. Multifamily

A group of two or more attached, duplex, triplex, quadruplex, or multi-family buildings, or a single building of more than 12 units constructed on the same lot or parcel of land under single ownership, and planned and developed with a unified design of buildings and coordinated common open space and service areas in accordance with the requirements of Chapter 9 (of the Zoning Ordinance) for the zoning district in which it is located.

19. Non-Point Source (NPS) Pollution

Forms of pollution caused by sediment, nutrients, organic and toxic substances originating from land use activities and carried to lakes and streams by surface runoff.

20. Owner

The legal or beneficial owner of land, including but not limited to a fee owner, 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. A secured lender not in possession of the property does not constitute an owner, unless the secured lender is included within the meaning of "owner" under another description in this definition, such as a management entity.

21. Person(s)

Any individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, interstate body, or other legal entity.

22. Redevelopment

Rebuilding activities on land containing built upon area as of the effective date of this ordinance.

23. Residential Development

A development containing dwelling units with open yards on at least two sides where land is sold with each dwelling unit.

24. Storm Water Administrator

The position of Mecklenburg County Water Quality Program Manager that has been designated by the Town of Davidson Board of Commissioners to administer and enforce this ordinance.

25. Storm Water Advisory Committee (SWAC)

The Charlotte-Mecklenburg Storm Water Advisory Committee as established by joint resolutions of the Charlotte City Council, Mecklenburg County Board of Commissioners and the Towns of Cornelius, Davidson, Huntersville, Matthews, Mint Hill and Pineville, together with any amendments thereto.

26. Storm Water Management Permit

A permit required for all development and redevelopment unless exempt pursuant to this ordinance, which demonstrates compliance with this ordinance.

27. S.W.I.M.

An acronym for the Surface Water Improvement and Management initiative by the Mecklenburg County Board of Commissioners for the purpose of restoring the quality and usability of Mecklenburg County's surface water resources. The S.W.I.M. initiative resulted in the adoption of county wide buffers on streams that are termed S.W.I.M. Buffers.

28. Top Of Bank:

The landward edge of the stream channel during high water or bankfull conditions at the point where the water begins to overflow onto the floodplain.

29. Topsoil:

Natural, fertile soil capable of sustaining vigorous plant growth that is of uniform composition throughout with an admixture of subsoil, has an acidity range of pH 5.5 - 7.0.

30. Total Phosphorus (TP)

A nutrient that is essential to the growth of organisms but when it occurs in high enough concentrations it can negatively impact water quality conditions. Total phosphorus includes both dissolved and suspended forms of reactive phosphorus, acid hydrolyzable phosphorus and organic phosphorus as measured by Standard Method 4500-P.

31. Total Suspended Solids (TSS)

Total suspended matter in water which includes particles collected on a filter with a pore size of 2 microns as measured by Standard Method 2540-D, which is commonly expressed as a concentration in terms of milligrams per liter (mg/l) or parts per million (ppm).

32. Townhomes

Attached dwellings developed side by side where land is sold with each unit.

33. Undisturbed Open Space

Land that consists of natural areas containing trees and other natural shrubs consisting of either undisturbed areas or disturbed areas that have been replanted in accordance with the criteria established in this ordinance.